AK OT Scope Modernization Work Group - April 22, 2025

Alaska Division of Corporations, Business and Professional Licensing
Zoom
2025-04-22 12:00 - 14:00 AKDT

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5. Diagnostic Imaging

- Document: Diagnostic ultrasound
  - Document: The role of diagnostic ultrasound in the examination of carpal tunnel syndrome: an update and systematic review
  - Document: Current and future utility of ultrasound imaging in upper extremity musculoskeletal rehabilitation: A scoping review
  - Document: Imaging. MSK OT Guidebook
  - Document: Imaging. Integrating musculoskeletal sonography into rehabilitation
  - Document: Imaging. Clinical utilization of musculoskeletal sonography involving non physician
  - Document: Exploring Occupational Therapists' Perceptions of the Usefulness of Musculoskeletal Sonography in Upper-Extremity Rehabilitation
  - Funded research studies: Musculoskeletal Sonography and Occupational Performance Laboratory (MSOP)
  - Role of Sonographic Imaging in Occupational Therapy Practice

B. Do OTs have the skill and/or educational opportunities to perform diagnostic imaging? (ie. diagnostic ultrasound, MBSS)

- Dysphagia Fellowship: Dysphagia | AOTA
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C. Do OTs have access to education to develop a skillset for ordering imaging?

Examples to guide/support drafting language:

- Document: Imaging. PT Model Practice Act (page 33)
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- Document: Imaging. Wisconsin PT xrays
- Document: Imaging. PT North Dakota (page 6)
- Document: Imaging. Utah PT
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- Review current statutory language for OTA
  - Create an initial list of statutory language needs/topics/objectives
  - Create a draft for this language

Resources:

- Document: OTA model practice act (page 5)
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7. Brainstorm

Explore additional topics/concerns

8. Action Steps

1. Diagnostic Imaging
2. Definition of OTA
3. Review scope of practice language in its entirety
4. How will we introduce this to the legislature?

9. Adjourn

The Issue Is . . .

Role of Sonographic Imaging in Occupational Therapy Practice

Shawn C. Roll

MeSH TERMS
- occupational therapy
- outcome assessment (health care)
- patient care planning
- professional role
- rehabilitation
- ultrasonography

Occupational therapy practice is grounded in the delivery of occupation-centered, patient-driven treatments that engage clients in the process of doing to improve health. As emerging technologies, such as medical imaging, find their way into rehabilitation practice, it is imperative that occupational therapy practitioners assess whether and how these tools can be incorporated into treatment regimens that are dually responsive to the medical model of health care and to the profession's foundation in occupation. Most medical imaging modalities have a discrete place in occupation-based intervention as outcome measures or for patient education; however, sonographic imaging has the potential to blend multiple occupational therapy practice forms to document treatment outcomes, inform clinical reasoning, and facilitate improved functional performance when used as an accessory tool in direct intervention. Use of medical imaging is discussed as it relates to occupational foundations and the professional role within the context of providing efficient, effective patient-centered rehabilitative care.

Roll, S. C. (2015). The Issue Is—Role of sonographic imaging in occupational therapy practice. *American Journal of Occupational Therapy, 69,* 6903360010. http://dx.doi.org/10.5014/ajot.2015.015941

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Occupational therapy practice is grounded in the provision of occupation-centered, patient-driven treatments that engage clients in the process of doing to maximize health. Concern about the profession straying from these roots has been raised for more than 3 decades (Gillen, 2013; Kielhofner, 1983; Wood, 1998). At the center of the debate are preparatory activities and other easily reimbursable interventions that are not perceived as occupation centered and that appear to mimic other professions (e.g., physical therapy).

Unfortunately, in rehabilitative care, a bottom-up focus on individual body structures and performance components is often the path of least resistance to meet efficient, cost-conscious reimbursement expectations (Fisher & Friesema, 2013). In addition, there is no easy solution to the disconnect between the field's occupation-centered foundation and the delivery of increasingly medically focused services. Consequently, as technologies such as medical imaging find their way into rehabilitation practice, it is imperative that occupational therapy practitioners assess whether and how these tools can be incorporated into treatment regimens that are dually responsive to the medical model of health care and to the foundation in occupation.

Although medical imaging as a whole may be viewed as preparatory and reductionistic, for occupational therapy practitioners to stay relevant in an environment in which other medical and rehabilitation providers increasingly use medical imaging, the question is, Is medical imaging an appropriate occupation-centered tool to be used in occupational therapy interventions? Moreover, is medical imaging a viable means for enhancing the delivery of efficient and effective care? To this end, this article discusses the use of medical imaging by rehabilitation providers and occupational therapy practitioners in the context of efficient, effective patient- and occupation-centered care. Specifically, this article highlights the utility of musculoskeletal sonographic imaging to facilitate patient engagement in occupation-centered treatments and discusses challenges and implications of integrating sonographic imaging into occupational therapy practice.

Medical Imaging in Rehabilitation

For people with neurologic, musculoskeletal, and orthopedic conditions, medical imaging for diagnosis is compulsory. MRI is used to diagnose central neurologic disorders of the brain and spinal cord, and both MRI and X ray are regularly used for diagnosing injuries of muscles, tendons, bones, and joints. In certain rehabilitation populations, follow-up MRI or X ray assessment after intervention is common to evaluate changes or improvement in tissues and structures. In addition, although during functional MRI (fMRI) and diffusion tensor imaging (DTI) the body segment being imaged must remain static, these modalities can be used to evaluate dynamic changes during and after participation in functional tasks and therapeutic activities (Cagnie et al., 2011; Lin et al., 2010; Voelbel, Genova, Chiaravalotti, & Hoptman, 2012).

These imaging modalities will continue to be important for diagnosing and building research evidence for rehabilitation interventions; however, these techniques have limited applied clinical utility for occupational therapy practitioners. MRI is expensive to obtain and operate, requires substantial training, and has numerous contraindications. X ray provides low-dose radiation to patients and is limited to evaluating bones, metal, and radioactive materials. With the exception of dynamic X ray fluoroscopy in the evaluation and treatment of swallowing disorders (Cha, Oh, & Shim, 2010), MRI, fMRI, DTI, and X ray, along with computed tomography and positron emission tomography, are primarily static medical imaging modalities. These static images have a discrete place in occupation-centered intervention for patient education and as a measurement tool.

In contrast, sonography is a dynamic medical imaging modality with broader clinical application for occupational therapy practitioners. Using a piezoelectric transducer and coupling gel, sonography sends high-frequency sound waves (i.e., vibrations) into the body. In contrast to thermal ultrasound transducers that focus the sound waves into one high-energy beam, sonography transducers send individual sound waves into the body, which do not have enough energy on their own to cause tissue heating. Once through the skin, the varied density and physiologic properties of the subcutaneous tissues alter the frequency and amplitude of the sound waves and refract and reflect portions of the sound waves back to the transducer (i.e., echoes). The altered sound waves return to the transducer and are converted into electrical impulses, and an image is created. Different tissue types (e.g., bone, muscle) are represented with various shades of gray based on the frequency, amplitude, and amount of returning echoes, and the timing and returning angle of the sound waves are used to spatially orient each structure in the image.

Sonography has numerous benefits over other medical imaging technologies. It can show real-time movement of musculoskeletal tissues in a quick, efficient, pain-free manner, with no radiation or side effects and minimal contraindications. When compared with other medical imaging equipment, sonography is affordable and portable and can produce high-definition images of exceedingly small musculoskeletal structures. Performing sonographic imaging for diagnostic purposes requires certification and, in some states, licensure (i.e., Oregon, New Jersey, New Mexico, and West Virginia). However, the use of sonography as a supplementary tool to augment routine service delivery by other, noncertified or nonlicensed professionals is not regulated. Moreover, because sonographic imaging has no direct patient bioeffects, it is not a physical agent modality (PAM; McPhee, Bracciano, & Rose, 2008); therefore, its use is not regulated by therapy licensure requirements for PAMs.

These limited regulations, combined with the ability to rapidly acquire dynamic, point-of-care images, have led to expanded use of musculoskeletal sonography beyond diagnostics. Clinical use is being reported with increasing frequency by rheumatologists (Brown et al., 2004; Cunnington, Platt, Raftery, & Kane, 2007), sports medicine practitioners (Tok, Özçakar, De Muynck, Kara, & Vanderstraeten, 2012; Yim & Corrado, 2012), physical medicine physicians (Özçakar, Tok, De Muynck, & Vanderstraeten, 2012), and orthopedic surgeons (Seagger, Bunker, & Hamer, 2011; Thomason & Cooke, 2012; Ziegler, 2010). Musculoskeletal sonography is also being incorporated into research and clinical practice by athletic trainers and physical therapy practitioners (Teyhen, 2007). Physical therapists use sonography to visualize morphological changes over time as a clinical outcome measure (Brown, 2009), to monitor tissue response to therapy as a means for clinical decision making (Callaghan, 2012), and to provide biofeedback for enhancing patient engagement and improve the precision of clinical interventions (Ariail, Sears, & Hampton, 2008; Herbert, Heiss, & Basso, 2008; Worth, Henry, & Bunn, 2007). Despite increasing use by other medical and rehabilitation providers, no evidence describes clinical use of sonographic imaging by occupational therapy practitioners.

Sonography in Occupational Therapy Practice

Sonographic imaging has the potential to blend multiple forms of intervention to document treatment outcomes and inform clinical reasoning. Additionally, as a supplementary tool in rehabilitative, preventive, and wellness interventions, sonography may be useful for facilitating patient engagement and adherence, resulting in improved occupational performance.

Outcome Measures

Clinical studies using sonography to document structural and tissue morphology changes after medication regimens, surgery, and rehabilitative interventions are rapidly expanding. In follow-up after carpal tunnel release, sonography shows a large reduction in swelling of the median nerve in the carpal tunnel (Kim, Yoon, Kim, Won, & Jeong, 2012). Similarly, sonographic imaging has been extensively used to document reduction in joint swelling and improvement in cartilage health in response to injections and medication regimens for people with arthritis (Henrotin, Hauzeur, Bruel, & Appelboom, 2012; Montecucco, Todoerti, Sakellariou, Sciré, & Caporali, 2012; Seymour et al., 2012). Although not as prolific, examples of sonographic imaging in rehabilitation exist. Sonography was used to document

increased thickness of triceps and extensor carpi radialis muscles by nearly 12% and 25%, respectively, after comprehensive functional strength training for children with cerebral palsy (Lee et al., 2013). Similarly, muscle hypertrophy has been observed with sonography after therapeutic intervention for people with spinal cord injuries (Dudley-Javoroski, McMullen, Borgwardt, Peranich, & Shields, 2010).

Although measuring objective physiological changes follows the medical model, relating these changes to patient-centered functional and occupational performance outcomes as a result of occupation-centered interventions is crucial for occupational therapy practitioners (Hocking, 2001). Point-of-care musculoskeletal sonographic imaging is positioned at the intersection of objective outcome measures and patient-reported functional performance. The association of these constructs has been explored in people with symptoms of carpal tunnel syndrome, whereby an increase in the size of the median nerve in the carpal tunnel as measured with sonographic imaging has been linked to decreased functional tolerances, even in people without a formal diagnosis (Roll, Evans, Li, Sommerich, & Case-Smith, 2013). Moreover, after intervention for people with carpal tunnel syndrome, changes in sonographic measures (e.g., reduced nerve swelling, increased muscle size) have been associated with improved occupational performance (Kim et al., 2012; Lee et al., 2013). An association between sonographic measures of morphology and functional performance has also been reported in the development of abnormal gait patterns in older women that coincided with a loss in muscle mass of adductor and quadriceps muscles (Abe et al., 2012). Given the link to functional outcomes, objective measurement of changes in tissue morphology using sonographic imaging has the potential to enrich clinical and research evidence for occupation-centered interventions.

Clinical Reasoning

In addition to capturing outcomes after an intervention, sonographic imaging could be integrated throughout the episode of care to inform clinical reasoning. Trombly (1993) suggested that a narrowly focused evaluation may assist in tailoring rehabilitation interventions, especially when the cause of an occupational limitation is not fully apparent. In this way, sonographic evaluation could assist occupational therapy practitioners in identifying the source, location, and severity of pathology that is limiting functional performance.

In a recent qualitative study, multiple instances were identified in which the use of sonographic imaging assisted in ongoing evaluation by the occupational therapists, leading to patient-specific tailored interventions (Roll, Gray, Frank, & Wolkoff, in press). One therapist indicated that imaging was beneficial for "gathering more information at the beginning of the treatment process [for patients] where the evaluation alone and the operative report don't really give a full picture of exactly what's happening" (Roll et al., in press). In one case, sonography permitted the therapist to detect nonpalpable tendon scarring in a location proximal to a surgical incision that was limiting tendon movement, a problem she likely would not have identified or addressed in her intervention had she not used imaging in her evaluation (Roll et al., in press).

This use of imaging for successful differential clinical diagnosis could drastically affect intervention effectiveness. For example, although occupational therapy practitioners often equate trigger finger with swelling of the involved flexor tendon, sonographic data have indicated that fewer than half of people with trigger finger have tendonopathy (Guerini et al., 2008). Instead, regardless of the presence of tendonopathy, nearly all people with trigger finger have a thickened pulley, limiting tendon gliding (Guerini et al., 2008; Sato, Ishii, Noguchi, & Takeda, 2012). Therefore, in patients whose functional deficits occur as a result of pulley hypertrophy, with no associated tendonopathy, conservative therapeutic interventions may not be effective. In these cases, delivery of occupational therapy intervention may be fiscally irresponsible until surgical intervention reduces impingement caused by the pulley. The utility of imaging for differentiation of tissues involved in clinical diagnoses extends to practice settings beyond orthopedics, for example, to examine hemiplegic shoulder pain (Huang, Liang, Pong, Leong, & Tseng, 2010) and secondary tendonopathies after a stroke or brain injury (Falsetti, Acciai, Carpinteri, Palilla, & Lenzi, 2010; Pong et al., 2012).

Direct Intervention

Beyond evaluation, point-of-care sonographic imaging can augment numerous biopsychosocial occupation-centered interventions. Central to imaging use in direct intervention is the opportunity for a patient to observe his or her own anatomy and pathology, a vital step in establishing a mind–body connection. As such, patient education is not limited to the use of static textbook images or models but can use real-time, dynamic images of a patient's own structures. Both pathologic and normal tissue appearance and movement can be quickly displayed by scanning a patient's affected and unaffected side. Establishing a mind–body connection through education with sonographic imaging could enhance the patient learning experience and assist in building self-determination, leading to increased engagement and overall patient adherence (Radomski, 2011).

Moreover, educating a patient using his or her own anatomy could lead to enriched patient-specific evidence discussions between the patient and practitioner, which in turn will improve self-awareness and self-calibration, pillars of successful biopsychosocial interventions (Borrell-Carrió, Suchman, & Epstein, 2004). This use of imaging is highly responsive to the call in the Patient Protection and Affordable Care Act of 2010 (Pub. L. 111–148) for patients to be actively engaged in decisions about their care and the treatment process, leading to empowerment for continued health and recovery after discharge from care.

This ability of sonographic imaging to engage and empower a patient by establishing a mind–body connection perfectly situates it as a visual biofeedback tool. Dynamic sonographic imaging can be used to enhance mental imagery and improve proper performance of therapeutic exercises and functional, occupation-centered tasks. Sonographic visual biofeedback has been primarily applied as a tool for rehabilitation of

back pain (Herbert et al., 2008; Van, Hides, & Richardson, 2006; Worth et al., 2007) and pelvic floor disorders (Ariail et al., 2008; Dietz, Wilson, & Clarke, 2001). In both cases, the biofeedback is valuable to help patients learn which muscles to use and enhances the quality of exercises. This biofeedback process could also be used to improve performance of occupational tasks (e.g., tendon travel during pinching of a key) and may supplement other mind–body and mental imagery techniques currently being used in upper-extremity rehabilitation (Nilsen, Gillen, DiRusso, & Gordon, 2012). A variety of client populations could benefit from increased understanding of their own tissue pathology and how these tissues may or may not be appropriately moving during functional tasks to enhance their occupational performance.

Prevention and Wellness

With the ability to quickly visualize and measure musculoskeletal structures, use of sonographic imaging for regular health screening is increasing. Evidence for preventive sonographic screening by physicians to monitor the development and progression of rheumatic and arthritic conditions is prolific, and literature discussing preventive screening that is relevant to occupational therapy practitioners is increasing. For people with decreased mobility, visually undetectable pressure ulcers can be identified in early stages of development using sonography to monitor internal soft tissue breakdown (Deprez, Brusseau, Fromageau, Cloutier, & Basset, 2011) or thinning of the skin over bony prominences (Yalcin, Akyuz, Onder, Unalan, & Degirmenci, 2013). Similarly, sonography has also been used to monitor joint integrity in people with paretic extremities (Tunç et al., 2012).

In contrast to inactivity, evidence supporting the use of sonography in the identification of negative tissue responses to occupational performance has also begun to grow. One group of researchers is using sonography to evaluate overuse syndromes and changes in musculoskeletal structures of the shoulder and wrist as a result of their use in wheelchair propulsion (Collinger, Impink, Ozawa, & Boninger, 2010; Impink, Collinger, & Boninger, 2011). A second research group is exploring methods for the use of sonography screening in early identification of carpal tunnel syndrome and upper-extremity work-related musculoskeletal disorders (Evans, Roll, Li, & Sammet, 2010; Evans & Sommerich, 2009; Roll, Evans, Li, Freimer, & Sommerich, 2011; Roll, Evans, Volz, & Sommerich, 2013). The growing evidence for health screening in both inactive and active people expands the relevance of sonographic imaging beyond clinic-based services to occupational therapy practitioners providing industrial and community-based services.

Challenges and Potential Pitfalls

Although sonography has the potential to enhance occupational therapy practice, its use comes with multiple challenges and potential pitfalls. It is imperative that occupational therapy practitioners consider their professional foundation and ensure beneficence when providing any client intervention. Therefore, to adequately discuss integration of medical imaging into clinical practice, one must identify the relation of imaging to occupation-centered activities and the occupational therapy scope of practice and determine implications related to the delivery of skilled, efficient, and effective services.

Occupational Foundations

Occupation-centered practice has been discussed as *occupation as ends* versus *occupation as means* (Gray, 1998). On the surface, medical imaging inherently supports occupation as ends; however, multiple opportunities are available to use imaging to augment occupational-centered treatment, that is, occupation as means (e.g., biofeedback). Sonography can be used to provide a deeper understanding of and leverage the link between body structures and occupational performance to enhance intervention. Additionally, although occupational therapy practitioners consider occupation to be essential in improving body structures and functional restoration, sonographic images can contradict this positive preconceived notion. Sonography can show the negative effects on body structures caused by the performance of repetitive, high-risk occupational tasks.

Occupational therapy practitioners use a diverse clinical toolbox and varied forms of intervention (e.g., preparatory, purposeful, and occupational) to address physical, psychological, and contextual factors and maximize occupational performance for each unique patient (American Occupational Therapy Association, 2014; Clark et al., 1991). They should avoid the use of sonography as the sole preparatory, evaluation, or outcome measurement tool because using this type of narrowly focused assessment risks neglecting important occupational performance issues (Hocking, 2001). In addition, measured improvement in tissue pathophysiology may not necessarily always relate to improved functional outcomes (Trombly, 1993). However, as a multidimensional assessment and biopsychosocial intervention tool, sonography may be a useful addition to occupational therapy's clinical toolbox. Clinical use to establish mind–body connections, to engage patients through education and dynamic biofeedback during functional activity, and to monitor for negative effects of activity performance should be priority considerations for integrating sonographic imaging into occupational therapy practice.

Professional Scope and Interprofessional Jurisdiction

Although a solid occupational theoretical foundation underlies the profession of occupational therapy, the integration of medical imaging into practice extends a historical trend of being influenced by and adopting the approaches of other professions (Gillen, 2013). However, this incorporation of other approaches is not unique to occupational therapy. Professions exist in an intermingled ecologic system in which the systemic environment constantly promotes creation, destruction, reshaping, and swapping of roles and tasks among the professions (Abbott, 1988). Technology and culture are frequent drivers of this jurisdictional creation, destruction, and redefinition (Abbott, 1988).

Together, advances in imaging technology and a rapidly changing health care environment requiring efficient, point-of-care services have prompted numerous professions to adopt imaging (i.e., sonography) into their clinical practice. Although medical imaging has long been exclusive to radiologic professions, the credentialing process for musculoskeletal sonography was recently opened to nontraditional providers (i.e., health professionals without extensive sonographic training or certification). This change demonstrates a willingness of radiologic professionals to relinquish a portion of their jurisdiction over this technology. Moreover, the use of sonographic imaging by occupational therapy practitioners for differential clinical diagnosis would not likely be viewed as an encroachment on the primary diagnostic role of the physician. Instead, complementary use of sonographic imaging by all rehabilitation team members will inform treatment planning and enhance outcomes and lead to profession-specific interventions (e.g., occupation-centered biofeedback), all of which enrich the system of professions as a whole.

Despite generating interventions unique to occupational therapy, the rapid advancement and adoption of emerging point-of-care musculoskeletal sonography by numerous providers create various blurred jurisdictional lines. Vigilance is necessary to ensure that public, legal, and workplace jurisdiction claims do not limit the ability of occupational therapy practitioners to advance patient care through integration of imaging into clinical practice (Abbott, 1988). These claims are typically manifested in scope-of-practice and licensure legislation and continuously shifting reimbursement practices.

This article does not suggest that using medical imaging to diagnose patients should be included in occupational therapy's scope of practice. However, given the potential for imaging to enhance occupation-centered treatments, it is important that access to this technology not be limited by jurisdictional claims of other professions, legal or otherwise. Similarly, as a supplementary tool for augmenting patient-centered care, it may not be appropriate for practitioners to expect individual reimbursement for the use of sonographic imaging. Instead, reimbursement requests should be based on the primary occupation-centered service being provided. When combined with increased clinical documentation reflecting the role of sonographic imaging within the occupational treatment context, research demonstrating the benefit of sonographic imaging for biofeedback and other occupation-centered interventions will strengthen any future claims for direct reimbursement or inclusion of imaging within the scope of occupational therapy practice.

Skilled Service Delivery

With any new intervention tool or technique, adequate training and competency are crucial to ensure that the delivery of efficient, effective patient care is enhanced and not hindered. Increased point-of-care clinical use has prompted an expansion of sonography training in numerous health care professional curricula. Expanded training has been most prolific in physician education, including the recent establishment of the Society of Ultrasound in Medical Education, which now hosts an annual world congress to advance sonography training in general medical education. Similarly, the Commission on Accreditation in Physical Therapy Education (2014) noted an increase in medical imaging content in physical therapy curricula after the shift to doctoral training for entry-level education.

Despite increased training within these professional curricula, establishing comprehensive proficiency in sonographic imaging could require up to 100 hr of training (Brown et al., 2004). With current extensive curriculum requirements, this quantity of applied training in medical imaging is not appropriate within master's-level occupational therapy education. However, as a requirement for doctoral-level training is considered, providing foundational knowledge of imaging techniques and establishing basic skill in reading medical images will allow practitioners to remain relevant in the technologically progressing health care system. Additionally, this basic knowledge would benefit those students who wish to develop applied competency once they are in clinical practice.

Postprofessional training in sonographic imaging is increasingly available through hands-on training workshops developed specifically for nontraditional users. Although training workshops can establish technical proficiency, substantial practice beyond didactic training is essential in establishing the clinical competency necessary to ensure efficient, effective use of sonographic imaging. Clinical competency involves comprehensive understanding of mechanical operation of the equipment; continuous evaluation of image quality; and detailed analysis of images, along with the skill to differentiate normal from pathologic characteristics.

Occupational therapy practitioners who complete training and develop clinical competency can obtain a certification in musculoskeletal sonography; however, with an intended use to supplement routine clinical practices, the credentialing process may be excessive for most practitioners. Moreover, because components of clinical competency for occupational therapy practitioners have not been established, additional research is needed to more clearly determine clinical applications and competencies that may or may not be adequately addressed by this credentialing process.

Conclusion

As the profession and individual occupational therapy practitioners contemplate clinical implementation of medical imaging, we must move forward cautiously with a focus on the delivery of efficient, effective patient-centered care. Although use of most medical imaging modalities by occupational therapy practitioners is limited, sonographic imaging has numerous potential applications for enhancing rehabilitative care as part of an occupation-centered intervention plan. First, evidence places point-of-care sonographic imaging of musculoskeletal structures at the intersection of subjective reports, objective findings, and functional performance. This convergence has important implications for improving intervention efficacy through enhanced clinical reasoning and

for advancing evidence that substantiates clinical interventions.

Second, sonography has exceptional potential to augment the biospsychosocial principles central to occupational therapy interventions. A growing body of evidence supports the use of integrative, mind–body interventions to reduce clients' length of stay in a clinical setting and speed recovery. Therefore, occupational therapy practitioners can use sonographic imaging for patient education and dynamic visual biofeedback during functional activity performance to actively engage patients and establish a mind–body connection.

Further examination of implementation strategies and development of occupation-centered imaging interventions, training models, and definitions of clinical competency are necessary to ensure that occupational therapy practitioners are adequately informed and prepared to use this technology in a manner consistent with the profession's occupational foundation while providing the efficient, effective care required by the medical system. Given careful consideration to the process, medical imaging has great potential for enhancing occupation-centered occupational therapy care. ▲

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The role of diagnostic ultrasound in the examination of carpal tunnel syndrome: an update and systematic review

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ABSTRACT

Background: Diagnostic ultrasound is becoming more available and has potential for identifying carpal tunnel syndrome (CTS), but there is a lack of consensus on optimal measurement parameters and interpretation.

Purpose: The purpose of this systematic review was to analyze and summarize recent published data evaluating measurement properties of diagnostic ultrasound for use in individuals with CTS.

Methods: Five databases were searched to identify studies reporting on diagnostic measurement in individuals ≥18 years of age. Thirty-four studies underwent critical appraisal using Center for Evidence Based Medicine guidelines for diagnostic study accuracy. Each team member independently reviewed and scored the studies and consensus was reached through discussion.

Results: Seventeen studies evaluating 21 unique nerve or tunnel measurements and 9 measurement ratios were included. Measurements of median nerve cross sectional area (CSA) taken at the carpal tunnel inlet consistently demonstrated good to excellent interrater reliability (ICC=0.83-0.93) and good intrarater reliability (r>0.81). All studies supported inlet CSA in differentiating between individuals with and without CTS. Carpal tunnel inlet CSA measurements demonstrated a moderate correlation to the Padua severity classification (r = 0.71), but this varied between studies. Diagnostic accuracy of CSA measured at the carpal tunnel inlet using diagnostic cutoff values ranging from 8.5 mm^2 to 12.6 mm^2 resulted in a range sensitivity (63%-96.9%) and specificity (67.9%-100%).

Conclusion: The US measurement most supported was the median nerve CSA measured at the carpal tunnel inlet. There was no evidence supporting the routine use of diagnostic US for individuals with suspected CTS, and no additional evidence to support replacement of electrodiagnostic studies by US. More research is needed to determine use of US for classifying CTS severity or as a differential diagnostic tool for conditions that mimic CTS.

Level of Evidence: N/A

Introduction

Carpal tunnel syndrome (CTS) is a common compression neuropathy of the median nerve at the wrist level. The lifetime prevalence, regardless of work status, is 7.8%, and it is higher for women than men (10.0% vs 5.8%)[1]. The prevalence also increases linearly with age[1]. Diagnosis of CTS is based on the presence of signs and symptoms found during a clinical exam and may or may not include electrodiagnostic studies, however, there is no single 'gold standard' test or measure for confirming the diagnosis.

Diagnostic ultrasound (US) is frequently reported in the literature as a tool used to examine the morphology of the median nerve. It can provide anatomical or structural information facilitating identification of anatomical variants and concurrent conditions such as ganglion cysts or tenosynovitis[2]. A number of me-

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dian nerve and carpal tunnel ultrasonographic measurements have been used in the assessment of individuals with CTS. A common measure is median nerve cross sectional area (CSA), a measure of nerve swelling[3]. Nerve CSA can be measured at different locations along the forearm and wrist using a direct trace method just inside the hyperechoic rim of the nerve sheath. Ultrasonography can also be used to assess median nerve and carpal tunnel dimensions, median nerve position within the tunnel (palmar displacement), and flexor retinacular (volar) bowing and thickness.

While evidence is conflicting, some authors have found moderate correlations between median nerve CSA measured at the distal wrist crease and subject height[4], weight[5], and wrist circumference[6]. In order to account for body anthropometric variations that could influence nerve CSA, ratios have been used to assess changes in median nerve morphology. Common ratios include: 1) wrist-to-forearm ratio (WFR), which is defined as the ratio between nerve CSA at a distal site, usually the pisiform or distal wrist crease, and CSA of the nerve in the forearm; 2) median-to-ulnar ratio (MUR), or the ratio of median nerve CSA to ulnar nerve CSA, measured at the wrist; and 3) flattening ratio (FR), which is determined by dividing the transverse, radial to ulnar nerve diameter (long axis) by the anterior to posterior nerve diameter (short axis). The FR can be calculated at multiple locations, similar to CSA. Diagnostic US may be beneficial for therapists in the examination of individuals with CTS because it is efficient, less invasive, and less expensive for patients than electrodiagnostic studies, and it is becoming more readily available in rehabilitation settings.

The American Academy of Orthopaedic Surgeons (AAOS) CTS Clinical Practice Guideline published in 2016 reported there was limited evidence against the routine use of US in diagnosing CTS[7]. This Guideline included studies published through February 27, 2015. The authors indicated there were conflicting results when US was compared to electrodiagnostic testing as the reference standard, variability in cutoff values for ruling CTS in and out, and a lack of consensus on the ideal location for obtaining measurements[7]. Guideline authors concluded there was a need for consensus on optimal measurement locations and diagnostic cutoff values in order for US to be considered an effective imaging modality[7]. Since then, a number of studies have provided additional reliability, validity, cutoff, sensitivity, and specificity values of median nerve and carpal tunnel measurements using diagnostic US.

The purpose of this systematic review is to examine and summarize the available data published on the measurement properties of diagnostic US in CTS since February 2015 in order to identify optimal measurement parameters. Specifically, it will describe updated data on reliability, known-group and concurrent validity, cutoff values, sensitivity, specificity, and likelihood ratios.

Methods

Search strategy

PubMed, Embase, the Cumulative Index of Nursing and Allied Health Literature, the Cochrane Library, and Academic Search Complete served as databases to identify studies to include in the review. Searches included articles published between February 27, 2015 to December 31, 2019. The February date was selected as it was the final date of inclusion of articles in the AAOS 2016 Clinical Practice Guideline. Relevant medical subheadings were identified by searching the MeSH database in PubMed and examining prior review articles for search terms. Additional terms were also determined by the research team as articles and ultrasonographic measurements were identified. Search terms included carpal tunnel syndrome, compression neuropathy, carpal tunnel, entrapment neuropathy, median neuropathy, ultrasonography, diagnostic-ultrasound, diagnostic-accuracy, cross-sectional-area, flattening-ratio, swelling-ratio, median-ulnar-ratio, wrist-forearm-ratio, palmar-displacement, sonography, and diagnostic-imaging. Boolean operators were used to connect search terms. The following is an example of a search strategy was used for PubMed:

(carpal tunnel syndrome [MeSH] OR compression neuropathy, carpal tunnel [MeSH] OR entrapment neuropathy, carpal tunnel [MeSH] OR median neuropathy, carpal tunnel [MeSH]) AND diagnostic-ultrasound AND diagnostic-accuracy.

Selection strategy

Primary studies written in the English language that examined the diagnostic accuracy of ultrasonographic median nerve or carpal tunnel measurements in individuals with CTS (ages $\geq$18) were included in the review. Study designs included cohort, case control, and cross-sectional. Systematic reviews and meta-analyses examining ultrasonographic characteristics in CTS were also included. Studies previously included in systematic reviews and meta-analyses were not included in this review. The following exclusion criteria were applied when reviewing articles: retrospective studies, narrative reviews, case studies, studies with less than 10 participants per group, conference abstracts, studies examining nerve characteristics in healthy participants or participants with diagnoses other than CTS, studies using a contralateral limb as a control, and studies that did not provide enough detail to be replicated.

Data extraction

The following data were extracted from each study: 1) reference information, 2) study design, 3) research question(s), 4) diagnostic properties evaluated, 5) sample size (hands and participants), 6) sample characteristics, 7) methodology, and 8) results including reliability, validity, and diagnostic accuracy.

Critical appraisal

Each researcher completed a critical appraisal of each article using the tool developed by the Center of Evidence Based Medicine for examining accuracy of diagnostic studies. Studies were scored on a scale of 0 to 5[8]. One point was assigned for 1) inclusion of a representative spectrum of participants, 2) all participants receiving the test of interest and the reference test, 3) blinding, 4) appropriate use and presentation of statistics, and 5) repeatability. To examine agreement between raters for the Center of Evidence Based Medicine critical appraisal tool, 5 studies were randomly selected and percent agreement between reviewers was calculated for each item. For item 1, percent agreement between the 3 raters was 87%, for item 2 percent agreement was 73%, and for items 3 through 5, percent agreement was 100%. Studies receiving a score of 2 or less from all reviewers were excluded. Studies receiving a 3 were discussed, and researchers came to consensus on whether or not to include the study. Studies receiving a score of 4 or 5 by all researchers were included in the review (Table 1). The systematic review was scored using the AMSTAR (A Measurement Tool to Assess Systematic Reviews) with a possible total of 11 points (Table 2)[9]. Interrater reliability data for the AMSTAR have previously been reported (Intraclass Correlation Coefficient [ICC] = 0.84)[10]. Score discrepancies were resolved through discussion.

Results

Results of the database searches can be found in the Fig. 1. Overall, out of 34 relevant articles, 16 original studies and one

Table 1
Article scores following critical appraisal

Study	Score					
	1[a]	2[b]	3[c]	4[d]	5[e]	Score Total
Atan 2018	0	0	1	1	1	3
Ažman 2018	1	1	0	1	1	4
Chang 2019	0	1	1	1	1	4
Deng 2018	1	1	0	1	1	4
El Habashy 2017	1	1	1	1	1	5
El Shintenaway 2018	1	0	0	1	1	3
Gonzalez-Suarez 2019	0	1	1	1	1	4
Ha 2017	0	1	1	1	1	4
Jiwa 2018	1	0	1	1	1	3
Junck 2015	0	0	1	1	1	3
Köroğlu 2019	0	1	1	1	1	4
Kutlar 2017	1	0	1	1	1	4
Lee 2016	0	1	1	1	1	4
Nkurmah 2018	0	1	1	1	1	4
Phongamwong 2017	1	1	1	1	1	5
Pimental 2018	0	1	1	1	1	4
Roghani (Sensitivity) 2018	0	1	1	1	1	4
Roghani (DX) 2018	0	1	1	1	1	4
Wessel 2019	0	1	1	1	1	4

Key: 1=Yes,0=No or Unclear
[a] Was the test evaluated in a representative spectrum of patients (I.e. all severities)?
[b] All subjects received the test of interest (US) and the reference standard.
[c] Was there an independent, blind comparison between the index test and an appropriate reference ('gold') standard of diagnosis?
[d] Were appropriate statistics presented (sensitivity, specificity, positive predictive values, negative predictive values, likelihood ratios)?
[e] Were the methods for performing the test described in sufficient detail to permit replication?

systematic review were used in the systematic review. Thirteen articles were from PubMed, 2 were from Embase, and 2 were from Academic Search Complete. Ultrasonographic measurements identified in this review included: 1) CSA at the carpal tunnel inlet and outlet, mid-canal, distal radioulnar joint (DRUJ), pronator quadratus, and forearm (various locations); 2) FR measured at the pisiform, hamate, lunate, and mid-canal; 3) carpal tunnel area; 4) median nerve circumference at the inlet, outlet, and mid-canal; 5) longitudinal (radial to ulnar) and transverse (anterior-to-posterior) median nerve diameter taken at the DRUJ, pisiform, scaphoid, and hamate; 6) flexor retinaculum thickness and bowing; 7) MUR with median nerve measures at the carpal tunnel inlet and outlet; 8) median-ulnar difference; 9) inlet CSA to outlet CSA ratio; 10) mean CSA (inlet CSA + outlet CSA/2); 11) WFR with wrist measures taken at the inlet and outlet compared to measures in the forearm; 12) wrist-to-forearm difference with wrist measures taken at the inlet and outlet; and 13) compression ratio (ratio between FR measured at the lunate to FR measured at the pisiform).

Reliability

There were four studies that provided reliability data[11-14]. (Table 3) Intraclass correlation coefficients and r-values were interpreted using values provided by Portney (excellent $\geq$0.90; good = 0.75-0.89; moderate = 0.50-0.75; and poor $\leq$ 0.49)[15]. Only one study reported intrarater reliability, and these authors provided data for a sonographer and a radiologist participating in the study[14]. Data were available for CSA of the median nerve at the carpal tunnel inlet, outlet, forearm, and the pronator quadratus; WFR; MUR; inlet-to-outlet (IO) ratio; and FR measured at the hamate. There was variability among studies on the landmark used to identify the carpal tunnel inlet. Authors used the distal wrist crease[11,13], the pisiform[12], or an area between the scaphoid tubercle and the pisiform[14]. Regardless of the landmark used, interrater reliability of the inlet CSA measurement was good to excellent (0.83-0.93) and intrarater reliability was also good for both a radiologist and a sonographer (0.81 and 0.88, respectively)[14]. The most common landmark used to identify the carpal tunnel outlet was the hamate. Interrater reliability of outlet CSA was good (0.84 and 0.86), but there were no intrarater reliability data for outlet CSA identified in this review.

There was variability in the landmarks used to assess median nerve CSA in the forearm. Jiwa et al[11] and Lee and Kim[12] recorded forearm CSA at a site 12 cm proximal to the distal wrist crease, while Junck et al[14] obtained forearm CSA at a midpoint of the measured distance between the distal wrist crease and the antecubital fossa. Interrater reliability values were inconsistent for both forearm CSA (-0.0007[11] and 0.89[14]) and WFR (0.33 to 0.85)[11,12,14], and intrarater reliability values did not exceed 0.69 for these measurements[14].

The interrater reliability of the CSA taken at the pronator quadratus was good (0.85), but intrarater reliability was poor (<0.49)[14]. Interrater reliability of the MUR measured at the distal wrist crease was poor[11]. The IO ratio and FR measured at the hamate demonstrated good interrater reliability (0.81[11] and 0.84-0.86[12], respectively), but there were no intrarater reliability data for IO or FR available in the studies included in this review.

Table 2
Systematic review scores following critical appraisal.

Systematic review	AMSTAR Score										
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]	9[i]	10[j]	11[k]
Torres-Costoso 2018	1	1	0	0	0	1	1	1	1	1	1

Key: 1=criteria is present, 0= criteria not present.
[a] Was an 'a priori' design provided?
[b] Was there duplicate study selection and data extraction?
[c] Was a comprehensive literature search performed?
[d] Was the status of publication (i.e. grey literature) used as an inclusion criterion?
[e] Was the list of included and excluded studies provided?
[f] the characteristics of the included studies provided?
[g] Was the scientific quality of the included studies assessed and documented?
[h] the scientific quality of the included studies used appropriately in formulating conclusions?
[i] the methods used to combine study findings appropriate?
[j] the likelihood of publication bias assessed?
[k] Was the conflict of interest stated?

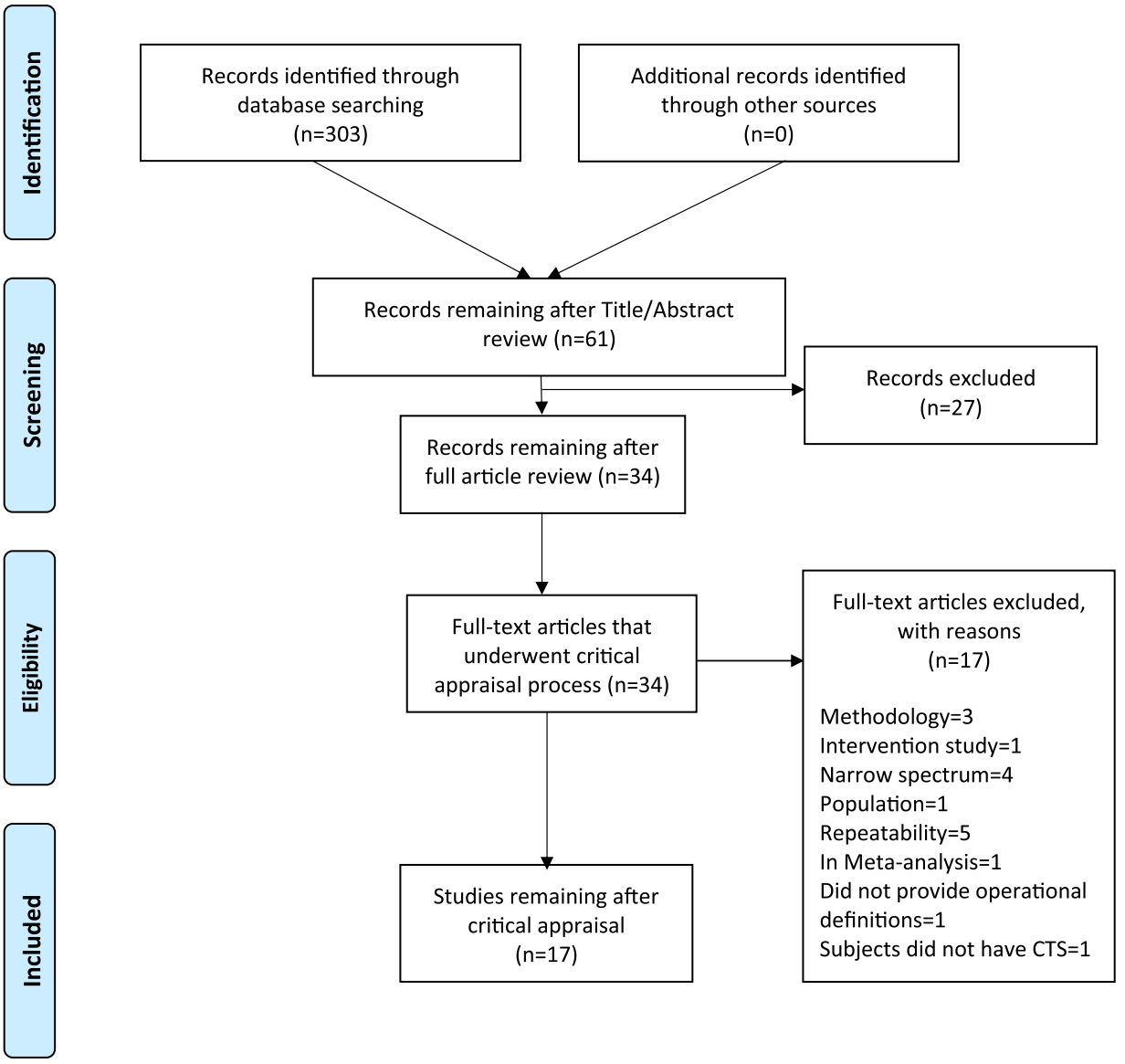

Fig. 1. Search results.

Table 3
Reliability values of sonographic measurements identified in this review.

Measurement	Study	Inter-rater reliability	Intra-rater reliability
Median nerve CSA (inlet)	Jiwa et al	ICC=0.93 ($CI_{95\%}$ 0.75, 0.98)	
	Phongamwong et al	ICC=0.93 ($CI_{95\%}$ 0.87, 0.96)	
	Junck et al	r=0.93 (P<0.0001)	Sonographer r=0.88; Radiologist r=0.81
	Lee and Kim	Using cut-off value >8.5 mm^2 ICC=0.85	
		Using cut-off value >9.0 mm^2 ICC=0.85	
		Using cut-off value >10.7 mm^2 ICC=0.87	
		Using cut-off value >15.0 mm^2ICC=0.83	
Median nerve CSA (outlet)	Jiwa et al	ICC=0.86 ($CI_{95\%}$ 0.53, 0.96)	
	Lee and Kim	Using cut-off value >12.0 mm^2 ICC=0.84	
Median nerve CSA (forearm)	Jiwa et al	ICC=0.0007 ($CI_{95\%}$ -0.60, 0.60)	
	Junck et al	r=0.89 (P<0.0001)	Sonographer r=0.67; Radiologist r=0.55
Median nerve CSA (PQ)	Junck et al	r=0.85 (P<0.0001)	Sonographer r=0.15; Radiologist r=0.49
Wrist-to-forearm ratio	Jiwa et al	ICC=0.33 ($CI_{95\%}$ -0.34, 0.78)	
	Lee and Kim	Using cut-off value ≥1.4 ICC=0.85	
	Junck et al	r=0.73 (P<0.0001)	Sonographer r=0.69; Radiologist r=0.44
Median-to-ulnar ratio	Jiwa et al	ICC=0.25 ($CI_{95\%}$ -0.41, 0.74)	
Inlet-to-outlet ratio	Jiwa et al	ICC=0.81 ($CI_{95\%}$ 0.40, 0.95)	
Flattening ratio (hamate)	Lee and Kim	Using cut-off value ≥4.2 ICC=0.86	
		Using cut-off value ≥3.4 ICC=0.84	

CI, confidence interval; CSA, cross-sectional area; ICC, intraclass correlation coefficient; PQ, pronator quadratus

Table 4
Known-group validity of sonographic measurements identified in this review.

Measurement	Study (measurement units)		CTS mean (SD)	Control mean (SD)	Mean Difference	P-value
Median nerve CSA (inlet)	Atan et al (mm^2)		14.51 (3.72)	9.33 (2.07)	5.17	<0.001
	Ažman et al (mm^2)		15.3 (5.15)	8.2 (1.43)	7.1	<0.001
	El Habashy et al (mm^2)		16.47 (4.28)	8.05 (1.49)	8.42	<0.0001
	Jiwa et al (mm^2)		14.96 (5.13)	8.37 (2.28)	6.59	<0.001
	Kutlar et al (cm^2)		0.13	0.08	0.05	<.0000
	Gonzalez-Suarez et al (cm^2)		0.08 (0.02)	0.07 (0.02)	0.01	0.02
	Köroğlu et al (cm^2)		*	*	*	<0.001
	Chang et al (mm^2)		11.3 (4.4)	8.8 (2.2)	2.5	<0.0001
Median nerve CSA (outlet)	Ažman et al (mm^2)		15.4 (5.37)	8.8 (1.74)	6.6	<0.001
	Jiwa et al (mm^2)		10.09 (3.28)	7.44 (2.09)	2.65	<0.001
	Gonzalez-Suarez et al(cm^2)		0.10 (0.03)	0.08 (0.02)	0.02	<0.01
	Köroğlu et al (cm^2)		*	*	*	<0.001
Median nerve CSA (mid-canal)	Ažman et al (mm^2)		11.6 (4.12)	8.2 (1.85)	3.4	<0.001
Median nerve CSA (DRUJ)	Chang et al (mm^2)		8.2 (2.9)	7.4 (1.7)	0.8	0.04
	Köroğlu et al (cm^2)		*	*	*	<0.001
Median Nerve CSA (PQ)	Junck et al (mm^2)	sonographer	10.6 (1.7)	9.5 (1.8)	1.1	0.68
		radiologist	11.5 (1.9)	9.8 (1.3)	1.7	0.003
Mean CSA (CSA inlet+CSA outlet/2)	Ažman et al (mm^2)		15.3 (4.04)	8.5 (1.33)	6.8	<0.001
Flattening ratio (pisiform)	Köroğlu et al		*	*	*	0.001
	Chang et al		2.5 (0.7)	2.6 (0.9)	0.1	0.64
	Lee and Kim	right	3.0 (0.8)	2.8 (0.4)	0.2	0.167
		left	3.0 (0.7)	2.7 (0.4)	0.3	0.372
Flattening ratio (hamate)	Köroğlu et al		*	*	*	0.679
	Lee and Kim	right	3.2 (0.4)	2.8 (0.4)	0.4	<0.001
		left	3.1 (0.4)	2.7 (0.4)	0.4	0.004
Flattening ratio (mid-canal)	Ažman et al		4.1 (1.63)	3.7 (1.17)	0.4	0.191
Flattening ratio (lunate)	Lee and Kim	right	2.7 (0.5)	2.7 (0.4)	0	0.609
		left	2.9 (0.5)	2.6 (0.4)	0.3	0.173
Median-to-ulnar ratio	Atan et al		3.75 (0.86)	2.72 (0.75)	1.03	<0.001
	Jiwa et al		3.10 (1.19)	1.75 (0.39)	1.35	<0.001
	Chang et al		4.1 (2.3)	2.9 (1.5)	1.2	0.0206
Inlet-to-outlet ratio	Ažman et al		1.1 (0.51)	1.0 (0.21)	0.1	0.235
	Jiwa et al		1.53 (0.61)	1.13 (0.17)	0.40	0.001
	Gonzalez-Suarez et al		0.87 (0.19)	0.93 (0.22)	-0.06	0.06
Swelling ratio	Köroğlu et al		*	*	*	<0.001
	Chang et al		1.5 (0.9)	1.2 (0.3)	0.3	0.04
Wrist-to-forearm ratio	Ažman et al		2.4 (0.79)	1.5 (.27)	0.9	<0.001
	El Habashy et al		3.07 (0.89)	1.26 (0.26)	1.81	<0.0001
	Jiwa et al		2.44 (0.77)	1.28 (0.39)	1.16	<0.001
	Gonzalez-Suarez et al		1.71 (0.63)	1.69 (0.71)	0.02	0.82
	Lee and Kim	right	1.9 (0.5)	1.1 (0.2)	0.8	<0.001
		left	1.9 (0.5)	1.1 (0.2)	0.8	<0.001
Outlet-to-forearm ratio	Ažman et al		2.4 (0.82)	1.5 (0.31)	0.9	<0.001
	Gonzalez-Suarez et al		2.01 (0.67)	1.88 (0.83)	0.13	0.32
Flexor retinacular bowing	Ažman et al (mm)		4.5 +/- 0.82	3.9 +/- 0.45	0.6	<0.001
	Köroğlu et al (mm)		*	*	*	<0.001
	Gonzalez-Suarez et al (cm)		0.21 +/- 0.11	0.21 +/- 0.19	0	0.83
Flexor retinacular thickness	Köroğlu et al	DRUJ	*	*	*	0.171
		pisiform	*	*	*	0.057
Median nerve circumference	Ažman et al (mm)	inlet	17.9 +/- 3.05	13.6 +/- 1.55	4.3	<0.001
		outlet	19.8 +/- 3.43	15.9 +/- 2.09	3.9	<0.001
		mid-canal	17.3 +/- 3.48	14.5 +/- 3.4	2.8	<0.001
Carpal tunnel area	Köroğlu et al		*	*	*	0.516
Median nerve diameter	Köroğlu et al		*	*	*	<0.001
Wrist (inlet)-to-forearm difference	Gonzalez-Suarez et al (cm)		0.03 +/- 0.03	0.02 +/- 0.06	0.01	0.16
Wrist (outlet)-to-forearm difference	Gonzalez-Suarez et al (cm)		0.03 +/- 0.06	0.05 +/- 0.03	0.02	0.01
Median-to-ulnar difference	Chang et al (mm2)		8.2 +/- 4.3	5.3 +/- 2.0	2.9	<0.0001
Compression ratio	Lee and Kim	right	1.2 +/- 0.6	1.0 +/- 0.3	0.2	0.263
		left	1.1 +/- 0.2	1.1 +/- 0.3	0	0.620

CSA, cross-sectional area; DRUJ, distal radio-ulnar joint; PQ, pronator quadratus; SD, standard deviation.
* data not reported.

Known-group validity

Data were available from 10 studies on known-group validity comparing measures from individuals with CTS to a control group (Table 4)[11,12,14,16-22]. In all studies reporting on median nerve CSA measurements taken at the DRUJ, within the canal, and at the carpal tunnel inlet and outlet showed a higher CSA in the CTS group compared to the control group ($P < .04$). The largest difference between those with and without CTS was reported by El Habashy et al[18] for the CSA measured at the carpal tunnel inlet. In their study, the CTS group had a mean CSA of 16.47 mm^2 versus the control group 8.05 mm^2 (mean difference [MD] = 8.42 mm^2). Mean CSA, MUR, swelling ratio, median nerve circumference and diameter, wrist-to-forearm CSA difference (wrist measurement taken at the outlet), and median-to-ulnar difference all showed statistically significant differences between those with and without CTS ($P < .04$). Flexor retinacular thickness, FR measured mid-canal and at the lunate, carpal tunnel area, compression ratio,

Table 5
Correlation between ultrasonographic measurements and nerve conduction parameters identified in this review.

Measurement	Study	DML (r, p-value)	DSL (r, p-value)	Motor amplitude (r, p-value)	Sensory amplitude (r, p-value)	Sensory conduction velocity (r, p-value)	Palmar-median interlatency (r, p-value)
Median nerve CSA (inlet)	El Habashy et al	0.62 (0.0001)	0.60 (0.0001)	-0.56 (0.0001)	-0.55 (0.0001)		
	El Shintenaway et al	0.58 (<0.001)	0.46 (<0.001)		-0.30 (0.027)	-0.56 (<0.001)	
Flattening ratio (pisiform)	El Shintenaway et al	0.19 (0.16)	0.29 (0.029)		-0.16 (0.24)	-0.05 (0.71)	
Flattening ratio (hamate)	El Shintenaway et al	0.24 (0.12)	-0.01 (0.95)		-0.19 (0.39)	-0.59 (0.003)	
Median-to-ulnar ratio	Jiwa et al	0.34 (0.03)					0.35 (0.04)

CSA, cross-sectional area; DML, distal motor latency; DSL, distal sensory latency.

Table 6
Correlations between severity and surgical outcome compared to ultrasonographic findings.

Measurement	Study	Severity using Padua Classification (r-value, p-value)	Severity using Bland Classification (r-value, p-value)
Median nerve CSA (inlet)	Ažman et al	0.71 (<0.001)	
	Ha et al		0.32 (0.02)
Median nerve CSA (outlet)	Ažman et al	0.61 (<0.001)	
	Ha et al		0.23 (0.09)
Median nerve CSA (mid-canal)	Ažman et al	0.45 (<0.001)	
Mean CSA (Inlet CSA + Outlet CSA/2)	Ažman et al	0.74 (<0.001)	
Flattening ratio (mid-canal)	Ažman et al	0.15 (0.021)	
Inlet-to-outlet ratio	Ažman et al	0.11 (0.10)	
Wrist-to-forearm ratio	Ažman et al	0.59 (<0.001)	
Outlet-to-forearm ratio	Ažman et al	0.47 (<0.001)	
Flexor retinacular bowing	Ažman et al	0.32 (<0.001)	
Median nerve circumference (inlet)	Ažman et al	0.66 (<0.001)	
Median nerve circumference (mid-canal)	Ažman et al	0.45 (<0.001)	
Median nerve circumference (outlet)	Ažman et al	0.53 (<0.001)	
Flexor retinacular bowing	Ažman et al	0.32 (<0.001)	

CSA, cross-sectional area; PQ, pronator quadratus; WFR, wrist-to-forearm ratio

and wrist-to-forearm difference (wrist measurement taken at the inlet) showed no significant difference between individuals with and without CTS ($P > .05$). There was conflicting evidence on all other measures (Table 4).

Concurrent validity

There were six studies that examined concurrent validity of ultrasonographic measures using a variety of reference standards including nerve conduction parameters (Table 5)[11,18,23], CTS severity grades using scales based on results of nerve conduction studies (Table 6)[17,24], and results of the Carpal Tunnel Questionnaire-Symptom Severity Scale[25]. There were no correlation coefficients between ultrasonographic measurements and reference standards that exceeded 0.74. Ažman et al[17] found the highest correlation coefficients between median nerve CSA measured at the carpal tunnel inlet and mean CSA and CTS severity using the Padua Classification (r = 0.71; $P < .001$ and r = 0.74; $P < .001$, respectively).

Wessel et al[25] examined the relationship between median nerve CSA measured at the pronator quadratus, pisiform, and hamate and scores on the Levine-Katz Symptom Severity Scale. There were no significant correlation coefficients between individual CSA measurements and Symptom Severity Scores (r <0.14; $P > .41$) These authors also examined the relationship between CSA change scores (Δ CSA: pisiform to hamate, pronator quadratus to pisiform, and pronator quadratus to hamate) and scores on the Levine Katz Symptom Severity Scale. They reported two significant correlation coefficients, but the magnitude of each was low (Δ CSA pisiform to hamate r = 0.36; $P < .05$; Δ CSA pronator quadratus to hamate r = 0.37; $P < .05$)[25].

Authors of two studies examined agreement between the presence of US findings, surgical resolution of symptoms[26], and the presence of electrodiagnostically confirmed CTS[12]. According to Pimentel et al[26], of the individuals who presented with a median nerve inlet CSA greater than 10 mm^2 prior to carpal tunnel release, 76.5% had surgical resolution of symptoms. The kappa coefficient, or level of agreement between finding a CSA >10 mm^2 (Yes/No) and having resolution of symptoms following surgery (Yes/No) was 0.42 ($P < .001$) suggesting moderate agreement. In the same study, authors reported that in individuals who had CTS confirmed through nerve conduction studies, 83.5% reported surgical resolution of symptoms ($\kappa = 0.65$; $P < .001$) Agreement between positive US findings (inlet CSA >10 mm^2) and positive nerve conduction studies was 0.232 ($P = .006$)[26].

Using cutoff values for diagnostic US extracted from the literature, Lee and Kim[12] examined the agreement between the presence of various US findings and the presence of electrodiagnostically-confirmed CTS. Authors reported fair agreement with presence of CTS and FR measured at the hamate (cutoff value ≥4.2; $\kappa = 0.38$) and moderate agreement with outlet CSA (cutoff value >12.0 mm^2; $\kappa = 0.55$), inlet CSA (cutoff >10.7 mm^2; $\kappa = 0.51$ and cutoff value >9.0 mm^2; $\kappa = 0.60$), and FR measured at the hamate (cutoff value ≥3.4; $\kappa = 0.42$). Authors found substantial agreement between electrodiagnostically-confirmed CTS and inlet CSA (cutoff value >8.5; $\kappa = 0.64$). In addition, when using a cutoff value of 1.4 for WFR, there was substantial agreement with electrodiagnostically-confirmed CTS ($\kappa = 0.71$). In this study, WFR was calculated using CSA measurements taken from the distal wrist crease and the forearm 12 cm proximal to the distal wrist crease.

Diagnostic accuracy

Several studies ($n = 11$) included in this review examined cutoff values for the optimal diagnostic accuracy of ultrasonographic measures (Table 7A and B)[11,13,28,16,17,19,21-23,26,27]. Mea-

Table 7A
Diagnostic accuracy for median nerve cross-sectional area measures at the carpal tunnel inlet and outlet.

Study	Diagnostic Accuracy of the Median Nerve CSA at the Carpal Tunnel Inlet					Diagnostic Accuracy of the Median Nerve CSA at the Carpal Tunnel Outlet				
	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR[a]	NLR	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR	NLR
Atan et al	>11.95	80.0	80.0	4.0	0.25	-	-	-	-	-
Ažman et al (overall)	>10	87.4	94.6	16.2	0.13	11	74.1	92.5	9.9	0.28
Ažman et al (clinically mild cases, n=83)	>10	94.2	89.2	8.8	0.06	-	-	-	-	-
Chang et al	>10.35	63	84	3.9	0.44	-	-	-	-	-
El-Shintenawy et al	> 9*	80.4	100.0	Infinity (or >804)	0.20	-	-	-	-	-
Jiwa et al	>10.22	93.0	89.0	8.6	0.08	-	-	-	-	-
Köroğlu et al	>12.5	88	96	22	0.13	8.5	52	85	3.47	0.56
Kutlar et al	>10	90.9	94.0	15.0	0.11	-	-	-	-	-
Phongamwong et al	>11.5	69.2	67.9	2.1	0.46	-	-	-	-	-
Pimentel et al	>10	84.6	81.8	4.7	0.19	-	-	-	-	-
Roghani et al	>8.5	96.9	93.6	15.1	0.03	11.5	72.2	53.2	1.5	0.53
Torres-Costoso et al (pooled data from systematic review)	ranged from 9-12.6	81	84	6.22	0.16	ranged from 9-10	74	76	4.63	0.25

CSA, cross-sectional area; NLR, negative likelihood ratio; PLR, positive likelihood ratio; Sn, sensitivity; Sp, specificity
cutoff values converted to mm^2 from cm^2 as appropriate.
[a] PLR/NLR calculated from sensitivity and specificity values:Calculations used: PLR = sensitivity/(1-specificity) and NLR = (1-sensitivity)/(specificity)

Table 7B
Diagnostic accuracy for median nerve cross-sectional area inlet-to-outlet ratio and flattening ratio measured at the hamate.

Study	Diagnostic Accuracy of the Median Nerve CSA Inlet-to-Outlet Ratio					Diagnostic Accuracy of the Median Nerve Flattening Ratio (measured at the hamate)				
	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR[a]	NLR	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR	NLR
El-Shintenawy et al	-	-	-	-	-	>4	91.3	100.0	Infinity	0.09
Jiwa et al	>1.27	56.0	84.0	3.5	0.52	-	-	-	-	-
Köroğlu et al	-	-	-	-	-	>3.54	28.9	92.5	3.85	0.77

CSA, cross-sectional area; NLR, negative likelihood ratio; PLR, positive likelihood ratio; Sn, sensitivity; Sp, specificity
cutoff values converted to mm^2 from cm^2 as appropriate.
[a] PLR/NLR calculated from sensitivity and specificity values:Calculations used: PLR = sensitivity/(1-specificity) and NLR = (1-sensitivity)/(specificity).

sures greater than the cutoff value indicate the presence of CTS (a positive test) and measures less than the cutoff value indicate a normal finding. Electrophysiological studies were used consistently as the reference standard to confirm or rule out the diagnosis. Sensitivity, specificity, as well as positive and negative likelihood values associated with the given cutoff value were the most commonly reported statistics. Where likelihood ratios were not given, values were calculated by the researchers. Given the numerous measures examined in these articles, diagnostic accuracy will be reported on the ultrasonographic measures that demonstrated consistent, acceptable reliability and known-group validity.

Mean cutoff values for CSA of the median nerve at the carpal tunnel inlet ranged from 8.5 mm^2 to 12.6 mm^2 (Table 7A). Sensitivity values ranged from 63% to 96.9%, while specificity values ranged from 67.9%-100%. Positive likelihood ratio values ranged from 2.1 to infinity, indicating anywhere from a small but sometimes important shift to large and conclusive shifts in pre- to post-test probability of being diagnosed with CTS given a positive test (CSA measuring at or greater than the CSA cutoff range)[29]. Negative likelihood ratio values range from 0.46-0.03 indicating small but sometimes important shifts to large and conclusive shifts of not having CTS given a negative test (CSA measuring smaller than the stated cutoff range)[29].

Four studies examined the mean cutoff values for CSA of the median nerve at the carpal tunnel outlet which ranged from 8.5-11.5 mm^2 (Table 7A)[17,21,27,28]. Sensitivity values ranged from 52%-74.1% and specificity values ranged from 53.2%-92.5%. Positive likelihood ratio values ranged from 1.5 to 9.9, indicating a range from negligible shifts to large and conclusive shifts in pre- to post-test probability of being diagnosed with CTS given a positive test. Negative likelihood ratio values range from 0.56-0.25 indicating negligible shifts to small shifts of not having CTS given a negative test[29]. Only one study reported on the accuracy of the median nerve CSA inlet to outlet ratio[11] and two studies reported the diagnostic accuracy of the flattening ratio (measured at the hamate) (Table 7B)[21,23].

Discussion

The purpose of this review was to report on measurement properties of diagnostic ultrasound in CTS published since the 2016 AAOS Clinical Practice Guideline and to determine if there is new evidence that would help in establishing recommendations for use in the clinical setting. Since publication of the AAOS Guideline, several good to high quality studies have provided additional properties on ultrasonographic measures. Only measures showing good to excellent interrater and/or intrarater reliability data identified in this review will be discussed in detail. These measures include CSA measured at the carpal tunnel inlet and outlet, the inlet-to-outlet ratio, and flattening ratio.

Inlet cross sectional area

Reliability and known-group validity of CSA measurements taken at the carpal tunnel inlet are consistently well-supported in

the literature. All studies reported good to excellent inter- and intrarater reliability using the direct trace method. These findings are consistent with prior studies examining inter- and intrarater reliability of inlet CSA[30-34]. Current findings are also consistent with interrater reliability values found in the asymptomatic population (ICC = 0.94)[5]. All studies examining known-group validity of inlet CSA support its use in differentiating between those with and without CTS[11,16-22].

Studies examined in this review reported statistically significant correlation coefficients between inlet CSA and electrodiagnostic test results; however, the highest correlation coefficient between inlet CSA and severity using the Padua scale was 0.71[17]. A limitation of this study was that it lacked researcher blinding. In a study from 2012, Kim et al[35] found a weak correlation (r = 0.43) between inlet CSA and severity using the Padua classification. Ha et al[24] used the Bland classification as the reference standard and found the correlation between inlet CSA and severity was 0.32. One reason for this difference may be that Ha et al[24] collapsed the 7-point Bland classification into an arbitrary 4-point scale. In this classification, Bland electrophysiological severity grades 1 and 2 were labeled Grade I, Bland grades 3 and 4 were regrouped into Grade II, and Bland severity grades 5 and 6 were reclassified into Grade III. Individuals with normal electrophysiological findings were labeled Grade 0.

In other studies reporting on correlations between inlet CSA and sensory conduction velocity and distal motor latency, both of which are parameters used in the Padua and Bland severity scales, the magnitude of the coefficients were lower than that reported by Azman et al[17] (-0.56[23] and -0.62[18]). Correlations between inlet CSA and sensory amplitude and distal sensory latency varied. One study included in this review reported a correlation coefficient of -0.30 between inlet CSA and sensory amplitude[23], while El Habashy et al[18] reported a moderate correlation (r = -0.55). These differences may be due to different testing protocols and interpretation of results used in different labs. In addition, the two tests, US and nerve conduction studies, are measuring different constructs. Ultrasound assesses nerve morphology while nerve conduction studies provide information on nerve function. Also, the US examiner in the Azman study was not blinded to electrodiagnostic or clinical findings.

The findings of this systematic review indicate a 3.1%-37% false negative rate and a 0-32.1% false positive rate when diagnosing CTS, using inlet CSA cutoff values between 8.5 mm^2 to 12.6 mm^2. Therefore, this test appears to be slightly better at correctly identifying CTS when the inlet CSA is at or greater than the cutoff range than it is in ruling out CTS when the test is negative. This is due to a slightly higher false negative rate. These results are consistent with the meta-analysis conducted by Torres et al[28]. Roghani et al[27] and El-Shintenawy et al[23] also reported excellent diagnostic accuracy of inlet CSA in which cutoff values were 8.5 mm^2 and 9 mm^2, respectively. Therefore, a larger cutoff value did not consistently result in greater diagnostic accuracy.

Pimentel et al[26] examined the diagnostic accuracy of both ultrasonographic measures and nerve conduction studies in females using remission of paresthesias (determined by change in Carpal Tunnel Questionnaire-Symptom Severity Scale) 4 months after surgery as the reference standard. Ultrasonographic evaluation of inlet CSA using a cutoff value of 10 mm^2 and results of standardized nerve conduction studies (sensory nerve conduction velocity and distal motor latency) demonstrated no statistically significant difference in sensitivity [US = 84.6% (95%CI: 76.2, 90.9); NCV = 92.3% (95%CI: 85.4, 96.6)], specificity [US = 81.8 (95% CI: 48.2, 97.7); NCV = 90.9 (95% CI: 58.7, 99.8)], positive likelihood ratio [US = 4.7 (95% CI: 1.3, 16.4); NCV = 10.2 (95% CI: 1.6, 65.9)], or negative likelihood ratio [US = 0.2 (95% CI: 0.1, 1.3) NCV = 0.1 (95% CI 0–0.2)]. The results of this study indicate false positive rates of 18.2% for inlet CSA using a cutoff of 10 mm^2 and 9.1% for NCV. The false negative rates of US and NCV are 15.4% and 7.7%, respectively.

Although, both diagnostic measures appear to effectively detect CTS, results of nerve conduction studies showed better agreement with postoperative resolution of symptoms at 4 months than inlet CSA. One might also expect inlet CSA to be highly correlated with CTS symptom severity. Wessel et al[25] found statistically significant correlations between symptom severity and changes in nerve CSA along the forearm and wrist; however, the magnitude of these correlations was low ($r<0.42$). This suggests that factors in addition to CSA or nerve morphology influence symptoms.

It does appear that the severity of CTS influences the diagnostic accuracy of median nerve CSA. Azman et al[17] demonstrated that in cases of mild CTS, when inlet median nerve CSA is larger than 10 mm^2, more false positives (10.8%) were noted when compared to the group of people with CTS as a whole. In mild CTS, when the inlet CSA was less than 10 mm^2, there were fewer false negatives (5.4% false negative rate). Therefore, the sensitivity of this cutoff value is better and the specificity is slightly worse in cases of mild CTS when compared to cases that are more severe.

Outlet cross sectional area

Studies included in this review showed good interrater reliability of measurements of median nerve CSA taken at the carpal tunnel outlet. However, prior reliability studies are conflicting, with reliability values ranging from 0.39 to 0.88.[32,34] All studies included in this review support the use of outlet CSA measurements to differentiate between those with and without CTS, but the studies examining correlations with severity scales based on electrodiagnostic classifications are conflicting. In comparing data on inlet and outlet CSA, there is more evidence to support the use of measuring CSA at the carpal tunnel inlet. The diagnostic accuracy values including sensitivity, specificity, and positive and negative likelihood ratios were consistently less for outlet CSA when compared to inlet CSA. This conclusion is similar to findings from two prior systematic reviews[28,36]. Torres et al[28] reported the diagnostic accuracy of inlet CSA measurements was higher than that for the outlet, and inlet CSA was more reliable.

Inlet-to-outlet ratio

The CSA IO ratio measured at the hamate showed good reliability, but this measure demonstrated conflicting evidence when comparing measurements between those with and without CTS. Azman et al[17] and Gonzalez-Suarezet al[20] reported no significant difference when comparing IO ratios in those with and without CTS, and Jiwa et al[11] reported a larger IO ratio in those with CTS, but the MD between groups was small (MD = 0.40; P = .001). There was no correlation between IO ratio and severity using the Padua classification (r = 0.11)[17]. Only one study examined the diagnostic accuracy of the IO ratio, and this measure demonstrated less diagnostic accuracy than measures of inlet CSA when using IO ratio of 1.27 as a cutoff value[11].

Flattening ratio

Median nerve FR is a measure of nerve compression. Flattening ratio measured at the hamate showed good interrater reliability in one study included in this review, but prior studies have shown conflicting results[33,34]. Ooi et al[33] reported interrater reliability values between 0.44 and 0.58, and Wang et al[34] reported the 95% confidence interval for interrater reliability ranged from 0.58

and 0.84. There was conflicting evidence on the ability of FR measured at the hamate to differentiate between those with and without CTS. Köroğlu et al[21] reported no significant difference (MD not reported; $P = .68$) while Lee and Kim[12] reported statistically significant differences when examining both right and left hands between those with and without CTS (MD 0.40; $P < .004$). The same is true for FR when measured at the pisiform level. Studies identified in this review and prior literature show there is conflicting evidence on known-group validity of FR assessed at the pisiform level[12,21,22,37,38]. Köroğlu et al[21] and Azami et al[38] reported statistically significant differences between groups. Mean values were not reported by Köroğlu et al[21], but Azami et al[38] reported the mean FR for those with CTS was 1.83 and those without was 0.88 ($P = .001$) when measured at the pisiform. Chang et al[22], Lee and Kim[12], and Roll et al[37] reported no differences between FR (pisiform) in those with CTS and those without (MDs <0.30; $P > .17$).

Median nerve compression is a primary factor in the pathogenesis of CTS, and it seems plausible that FR would be an objective measure of compression. Buchberger et al[39] reported a significantly higher FR measured at the distal tunnel, or hamate, when compared to the FR measured at the pisiform or distal radius. These authors also reported an increase in CSA at the inlet suggesting compression at the distal tunnel resulted in swelling at the proximal tunnel[39]. Findings in this review concur with evidence of a swollen median nerve captured by measuring inlet CSA, but measures of the FR were less consistent. If the measure is not taken at the site of compression, flattening may not be captured in the US assessment. Chronic nerve compression leads to a breakdown in endoneurial blood flow which results in neural edema and eventually fibroblast production and nerve scarring[40]. This is more consistent with the enlarged CSA rather than FR. The two studies that examined the diagnostic accuracy of the FR both demonstrated excellent specificity with a false positive rate of 0-7.5%; however, the false negative rate was much more variable (8.7%-71.1%)[21,23].

Some measurement properties of WFR are promising. Azman et al[17] found a moderate correlation between WFR and CTS severity, and Lee and Kim[12] showed substantial agreement between WFR >1.4 and presence of CTS as determined by electrodiagnostic testing. However, the results of this review identified issues with reliability of this measurement. This is likely due to the variability in the location from which the forearm measurement was taken and perhaps methodological difficulty in obtaining the forearm CSA measurement. The most common site used in the identified studies in this review (12 cm proximal to the wrist crease) showed the highest variability in interrater reliability (0.33-0.85). A prior study by Mhoon et al[31], who also measured forearm CSA 12 cm proximal to the distal wrist crease, showed interrater reliability equal to 0.96. While some measurement properties of WFR are acceptable, reliability and standardization of the landmarks used should be improved.

Some studies have suggested that US can be used in place of electrodiagnostic testing. Based on findings from this review, there is not enough evidence to show the two testing modalities can be used interchangeably. First, the two examinations are measuring different constructs, anatomy and function, and the magnitude of the correlations identified in the studies are moderate at best and are conflicting across some studies and measurements. Other authors have suggested using US and electrodiagnostics to complement one another[2,36]. Goldberg et al[2] suggested using US as a screening tool, but if the patient showed evidence of possible cervical radiculopathy, peripheral neuropathy, or brachial plexopathy, then the patient should proceed directly to electrodiagnostic testing for differential diagnosis. Also, some US measurements may be useful in differentiating between those with and without CTS, but there are no data on the ability of US to discriminate between CTS and pathologies that have signs and symptoms that mimic CTS.

This review was limited to data reported from 2015 to present. This was done to show new evidence that has emerged since publication of the AAOS CTS Clinical Practice Guideline. Measures that did not have recent, high-quality published data were not included in this review. For example, palmar displacement of the median nerve within the tunnel appeared in one study[11], but the authors did not provide an accurate description of how this measure was obtained, and therefore data for this measurement were not included in this review. Also, some measures with good known-group validity identified in this review were not reported on in depth because the authors were unable to identify high-quality reliability data on individuals with CTS, either from studies included in this review or in studies published prior to February 2015. For example, mean CSA (inlet CSA+outlet CSA/2), median nerve diameter, and median-to-ulnar difference may have promise, but more research is needed to establish reliability in individuals with CTS. Another limitation is that only studies in the English language were included. Additionally, it should be noted that assessor experience, equipment used, measurement parameters, and differences in reference standards were highly variable among included studies limiting the ability to identify a measurement parameter with a consistently strong body of evidence to support its use in practice. Finally, administration of EMG testing and classification patients according to electrodiagnostic findings with CTS could have affected criterion validity and thus the diagnostic accuracy values obtained among the studies.

Conclusion

Additional measurement properties studied since the AAOS Clinical Practice Guideline have been reported. Based on results of this study, the sonographic measurement most supported by evidence is median nerve CSA measured at the carpal tunnel inlet. There is no evidence to support this measure or the use of US in general as a replacement for electrodiagnostic studies. There is no additional evidence to support the use of diagnostic US on a routine basis for individuals with suspected CTS, and more research is needed to determine the ability of diagnostic US to differentiate between CTS of different severities and conditions that mimic CTS. Diagnostic US may provide additional information regarding anatomic variation and the presence of additional structures contributing to median nerve impairment. This knowledge could facilitate clinical decisions for non-surgical management by hand therapists or referral to a surgeon.

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1. The design of the study is.
   a. prospective cohort
   b. case series
   c. systematic review
   d. RCTs

2. Study scores were
   a. reached through a consensus of the team after discussion
   b. validated by computer analysis
   c. randomly reviewed by team members
   d. dictated by pre-established norms

3. CSA of the median nerve was shown to have
   a. excellent sensitivity, but poor specificity
   b. little clinical value
   c. excellent correlation to the CSA of the ulnar nerve
   d. good intrarater reliability and excellent interrater reliability

4. CSA measures were taken at the
   a. midpalmar level
   b. the level of the distal wrist crease
   c. carpal tunnel inlet
   d. carpal tunnel outlet

5. The evidence is that ultrasound should replace EMG & NCV in the evaluation of CTS
   a. true
   b. false

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The role of diagnostic ultrasound in the examination of carpal tunnel syndrome: an update and systematic review

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ABSTRACT

Background: Diagnostic ultrasound is becoming more available and has potential for identifying carpal tunnel syndrome (CTS), but there is a lack of consensus on optimal measurement parameters and interpretation.

Purpose: The purpose of this systematic review was to analyze and summarize recent published data evaluating measurement properties of diagnostic ultrasound for use in individuals with CTS.

Methods: Five databases were searched to identify studies reporting on diagnostic measurement in individuals ≥18 years of age. Thirty-four studies underwent critical appraisal using Center for Evidence Based Medicine guidelines for diagnostic study accuracy. Each team member independently reviewed and scored the studies and consensus was reached through discussion.

Results: Seventeen studies evaluating 21 unique nerve or tunnel measurements and 9 measurement ratios were included. Measurements of median nerve cross sectional area (CSA) taken at the carpal tunnel inlet consistently demonstrated good to excellent interrater reliability (ICC=0.83-0.93) and good intrarater reliability (r>0.81). All studies supported inlet CSA in differentiating between individuals with and without CTS. Carpal tunnel inlet CSA measurements demonstrated a moderate correlation to the Padua severity classification (r = 0.71), but this varied between studies. Diagnostic accuracy of CSA measured at the carpal tunnel inlet using diagnostic cutoff values ranging from 8.5 mm^2 to 12.6 mm^2 resulted in a range sensitivity (63%-96.9%) and specificity (67.9%-100%).

Conclusion: The US measurement most supported was the median nerve CSA measured at the carpal tunnel inlet. There was no evidence supporting the routine use of diagnostic US for individuals with suspected CTS, and no additional evidence to support replacement of electrodiagnostic studies by US. More research is needed to determine use of US for classifying CTS severity or as a differential diagnostic tool for conditions that mimic CTS.

Level of Evidence: N/A

Introduction

Carpal tunnel syndrome (CTS) is a common compression neuropathy of the median nerve at the wrist level. The lifetime prevalence, regardless of work status, is 7.8%, and it is higher for women than men (10.0% vs 5.8%)[1]. The prevalence also increases linearly with age[1]. Diagnosis of CTS is based on the presence of signs and symptoms found during a clinical exam and may or may not include electrodiagnostic studies, however, there is no single 'gold standard' test or measure for confirming the diagnosis.

Diagnostic ultrasound (US) is frequently reported in the literature as a tool used to examine the morphology of the median nerve. It can provide anatomical or structural information facilitating identification of anatomical variants and concurrent conditions such as ganglion cysts or tenosynovitis[2]. A number of me-

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dian nerve and carpal tunnel ultrasonographic measurements have been used in the assessment of individuals with CTS. A common measure is median nerve cross sectional area (CSA), a measure of nerve swelling[3]. Nerve CSA can be measured at different locations along the forearm and wrist using a direct trace method just inside the hyperechoic rim of the nerve sheath. Ultrasonography can also be used to assess median nerve and carpal tunnel dimensions, median nerve position within the tunnel (palmar displacement), and flexor retinacular (volar) bowing and thickness.

While evidence is conflicting, some authors have found moderate correlations between median nerve CSA measured at the distal wrist crease and subject height[4], weight[5], and wrist circumference[6]. In order to account for body anthropometric variations that could influence nerve CSA, ratios have been used to assess changes in median nerve morphology. Common ratios include: 1) wrist-to-forearm ratio (WFR), which is defined as the ratio between nerve CSA at a distal site, usually the pisiform or distal wrist crease, and CSA of the nerve in the forearm; 2) median-to-ulnar ratio (MUR), or the ratio of median nerve CSA to ulnar nerve CSA, measured at the wrist; and 3) flattening ratio (FR), which is determined by dividing the transverse, radial to ulnar nerve diameter (long axis) by the anterior to posterior nerve diameter (short axis). The FR can be calculated at multiple locations, similar to CSA. Diagnostic US may be beneficial for therapists in the examination of individuals with CTS because it is efficient, less invasive, and less expensive for patients than electrodiagnostic studies, and it is becoming more readily available in rehabilitation settings.

The American Academy of Orthopaedic Surgeons (AAOS) CTS Clinical Practice Guideline published in 2016 reported there was limited evidence against the routine use of US in diagnosing CTS[7]. This Guideline included studies published through February 27, 2015. The authors indicated there were conflicting results when US was compared to electrodiagnostic testing as the reference standard, variability in cutoff values for ruling CTS in and out, and a lack of consensus on the ideal location for obtaining measurements[7]. Guideline authors concluded there was a need for consensus on optimal measurement locations and diagnostic cutoff values in order for US to be considered an effective imaging modality[7]. Since then, a number of studies have provided additional reliability, validity, cutoff, sensitivity, and specificity values of median nerve and carpal tunnel measurements using diagnostic US.

The purpose of this systematic review is to examine and summarize the available data published on the measurement properties of diagnostic US in CTS since February 2015 in order to identify optimal measurement parameters. Specifically, it will describe updated data on reliability, known-group and concurrent validity, cutoff values, sensitivity, specificity, and likelihood ratios.

Methods

Search strategy

PubMed, Embase, the Cumulative Index of Nursing and Allied Health Literature, the Cochrane Library, and Academic Search Complete served as databases to identify studies to include in the review. Searches included articles published between February 27, 2015 to December 31, 2019. The February date was selected as it was the final date of inclusion of articles in the AAOS 2016 Clinical Practice Guideline. Relevant medical subheadings were identified by searching the MeSH database in PubMed and examining prior review articles for search terms. Additional terms were also determined by the research team as articles and ultrasonographic measurements were identified. Search terms included carpal tunnel syndrome, compression neuropathy, carpal tunnel, entrapment neuropathy, median neuropathy, ultrasonography, diagnostic-ultrasound, diagnostic-accuracy, cross-sectional-area, flattening-ratio, swelling-ratio, median-ulnar-ratio, wrist-forearm-ratio, palmar-displacement, sonography, and diagnostic-imaging. Boolean operators were used to connect search terms. The following is an example of a search strategy was used for PubMed:

(carpal tunnel syndrome [MeSH] OR compression neuropathy, carpal tunnel [MeSH] OR entrapment neuropathy, carpal tunnel [MeSH] OR median neuropathy, carpal tunnel [MeSH]) AND diagnostic-ultrasound AND diagnostic-accuracy.

Selection strategy

Primary studies written in the English language that examined the diagnostic accuracy of ultrasonographic median nerve or carpal tunnel measurements in individuals with CTS (ages $\geq$18) were included in the review. Study designs included cohort, case control, and cross-sectional. Systematic reviews and meta-analyses examining ultrasonographic characteristics in CTS were also included. Studies previously included in systematic reviews and meta-analyses were not included in this review. The following exclusion criteria were applied when reviewing articles: retrospective studies, narrative reviews, case studies, studies with less than 10 participants per group, conference abstracts, studies examining nerve characteristics in healthy participants or participants with diagnoses other than CTS, studies using a contralateral limb as a control, and studies that did not provide enough detail to be replicated.

Data extraction

The following data were extracted from each study: 1) reference information, 2) study design, 3) research question(s), 4) diagnostic properties evaluated, 5) sample size (hands and participants), 6) sample characteristics, 7) methodology, and 8) results including reliability, validity, and diagnostic accuracy.

Critical appraisal

Each researcher completed a critical appraisal of each article using the tool developed by the Center of Evidence Based Medicine for examining accuracy of diagnostic studies. Studies were scored on a scale of 0 to 5[8]. One point was assigned for 1) inclusion of a representative spectrum of participants, 2) all participants receiving the test of interest and the reference test, 3) blinding, 4) appropriate use and presentation of statistics, and 5) repeatability. To examine agreement between raters for the Center of Evidence Based Medicine critical appraisal tool, 5 studies were randomly selected and percent agreement between reviewers was calculated for each item. For item 1, percent agreement between the 3 raters was 87%, for item 2 percent agreement was 73%, and for items 3 through 5, percent agreement was 100%. Studies receiving a score of 2 or less from all reviewers were excluded. Studies receiving a 3 were discussed, and researchers came to consensus on whether or not to include the study. Studies receiving a score of 4 or 5 by all researchers were included in the review (Table 1). The systematic review was scored using the AMSTAR (A Measurement Tool to Assess Systematic Reviews) with a possible total of 11 points (Table 2)[9]. Interrater reliability data for the AMSTAR have previously been reported (Intraclass Correlation Coefficient [ICC] = 0.84)[10]. Score discrepancies were resolved through discussion.

Results

Results of the database searches can be found in the Fig. 1. Overall, out of 34 relevant articles, 16 original studies and one

Table 1
Article scores following critical appraisal

Study	Score					
	1[a]	2[b]	3[c]	4[d]	5[e]	Score Total
Atan 2018	0	0	1	1	1	3
Ažman 2018	1	1	0	1	1	4
Chang 2019	0	1	1	1	1	4
Deng 2018	1	1	0	1	1	4
El Habashy 2017	1	1	1	1	1	5
El Shintenaway 2018	1	0	0	1	1	3
Gonzalez-Suarez 2019	0	1	1	1	1	4
Ha 2017	0	1	1	1	1	4
Jiwa 2018	1	0	1	1	1	3
Junck 2015	0	0	1	1	1	3
Köroğlu 2019	0	1	1	1	1	4
Kutlar 2017	1	0	1	1	1	4
Lee 2016	0	1	1	1	1	4
Nkurmah 2018	0	1	1	1	1	4
Phongamwong 2017	1	1	1	1	1	5
Pimental 2018	0	1	1	1	1	4
Roghani (Sensitivity) 2018	0	1	1	1	1	4
Roghani (DX) 2018	0	1	1	1	1	4
Wessel 2019	0	1	1	1	1	4

Key: 1=Yes,0=No or Unclear
[a] Was the test evaluated in a representative spectrum of patients (I.e. all severities)?
[b] All subjects received the test of interest (US) and the reference standard.
[c] Was there an independent, blind comparison between the index test and an appropriate reference ('gold') standard of diagnosis?
[d] Were appropriate statistics presented (sensitivity, specificity, positive predictive values, negative predictive values, likelihood ratios)?
[e] Were the methods for performing the test described in sufficient detail to permit replication?

systematic review were used in the systematic review. Thirteen articles were from PubMed, 2 were from Embase, and 2 were from Academic Search Complete. Ultrasonographic measurements identified in this review included: 1) CSA at the carpal tunnel inlet and outlet, mid-canal, distal radioulnar joint (DRUJ), pronator quadratus, and forearm (various locations); 2) FR measured at the pisiform, hamate, lunate, and mid-canal; 3) carpal tunnel area; 4) median nerve circumference at the inlet, outlet, and mid-canal; 5) longitudinal (radial to ulnar) and transverse (anterior-to-posterior) median nerve diameter taken at the DRUJ, pisiform, scaphoid, and hamate; 6) flexor retinaculum thickness and bowing; 7) MUR with median nerve measures at the carpal tunnel inlet and outlet; 8) median-ulnar difference; 9) inlet CSA to outlet CSA ratio; 10) mean CSA (inlet CSA + outlet CSA/2); 11) WFR with wrist measures taken at the inlet and outlet compared to measures in the forearm; 12) wrist-to-forearm difference with wrist measures taken at the inlet and outlet; and 13) compression ratio (ratio between FR measured at the lunate to FR measured at the pisiform).

Reliability

There were four studies that provided reliability data[11-14]. (Table 3) Intraclass correlation coefficients and r-values were interpreted using values provided by Portney (excellent $\geq$0.90; good = 0.75-0.89; moderate = 0.50-0.75; and poor $\leq$ 0.49)[15]. Only one study reported intrarater reliability, and these authors provided data for a sonographer and a radiologist participating in the study[14]. Data were available for CSA of the median nerve at the carpal tunnel inlet, outlet, forearm, and the pronator quadratus; WFR; MUR; inlet-to-outlet (IO) ratio; and FR measured at the hamate. There was variability among studies on the landmark used to identify the carpal tunnel inlet. Authors used the distal wrist crease[11,13], the pisiform[12], or an area between the scaphoid tubercle and the pisiform[14]. Regardless of the landmark used, interrater reliability of the inlet CSA measurement was good to excellent (0.83-0.93) and intrarater reliability was also good for both a radiologist and a sonographer (0.81 and 0.88, respectively)[14]. The most common landmark used to identify the carpal tunnel outlet was the hamate. Interrater reliability of outlet CSA was good (0.84 and 0.86), but there were no intrarater reliability data for outlet CSA identified in this review.

There was variability in the landmarks used to assess median nerve CSA in the forearm. Jiwa et al[11] and Lee and Kim[12] recorded forearm CSA at a site 12 cm proximal to the distal wrist crease, while Junck et al[14] obtained forearm CSA at a midpoint of the measured distance between the distal wrist crease and the antecubital fossa. Interrater reliability values were inconsistent for both forearm CSA (-0.0007[11] and 0.89[14]) and WFR (0.33 to 0.85)[11,12,14], and intrarater reliability values did not exceed 0.69 for these measurements[14].

The interrater reliability of the CSA taken at the pronator quadratus was good (0.85), but intrarater reliability was poor (<0.49)[14]. Interrater reliability of the MUR measured at the distal wrist crease was poor[11]. The IO ratio and FR measured at the hamate demonstrated good interrater reliability (0.81[11] and 0.84-0.86[12], respectively), but there were no intrarater reliability data for IO or FR available in the studies included in this review.

Table 2
Systematic review scores following critical appraisal.

Systematic review	AMSTAR Score										
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]	9[i]	10[j]	11[k]
Torres-Costoso 2018	1	1	0	0	0	1	1	1	1	1	1

Key: 1=criteria is present, 0= criteria not present.
[a] Was an 'a priori' design provided?
[b] Was there duplicate study selection and data extraction?
[c] Was a comprehensive literature search performed?
[d] Was the status of publication (i.e. grey literature) used as an inclusion criterion?
[e] Was the list of included and excluded studies provided?
[f] the characteristics of the included studies provided?
[g] Was the scientific quality of the included studies assessed and documented?
[h] the scientific quality of the included studies used appropriately in formulating conclusions?
[i] the methods used to combine study findings appropriate?
[j] the likelihood of publication bias assessed?
[k] Was the conflict of interest stated?

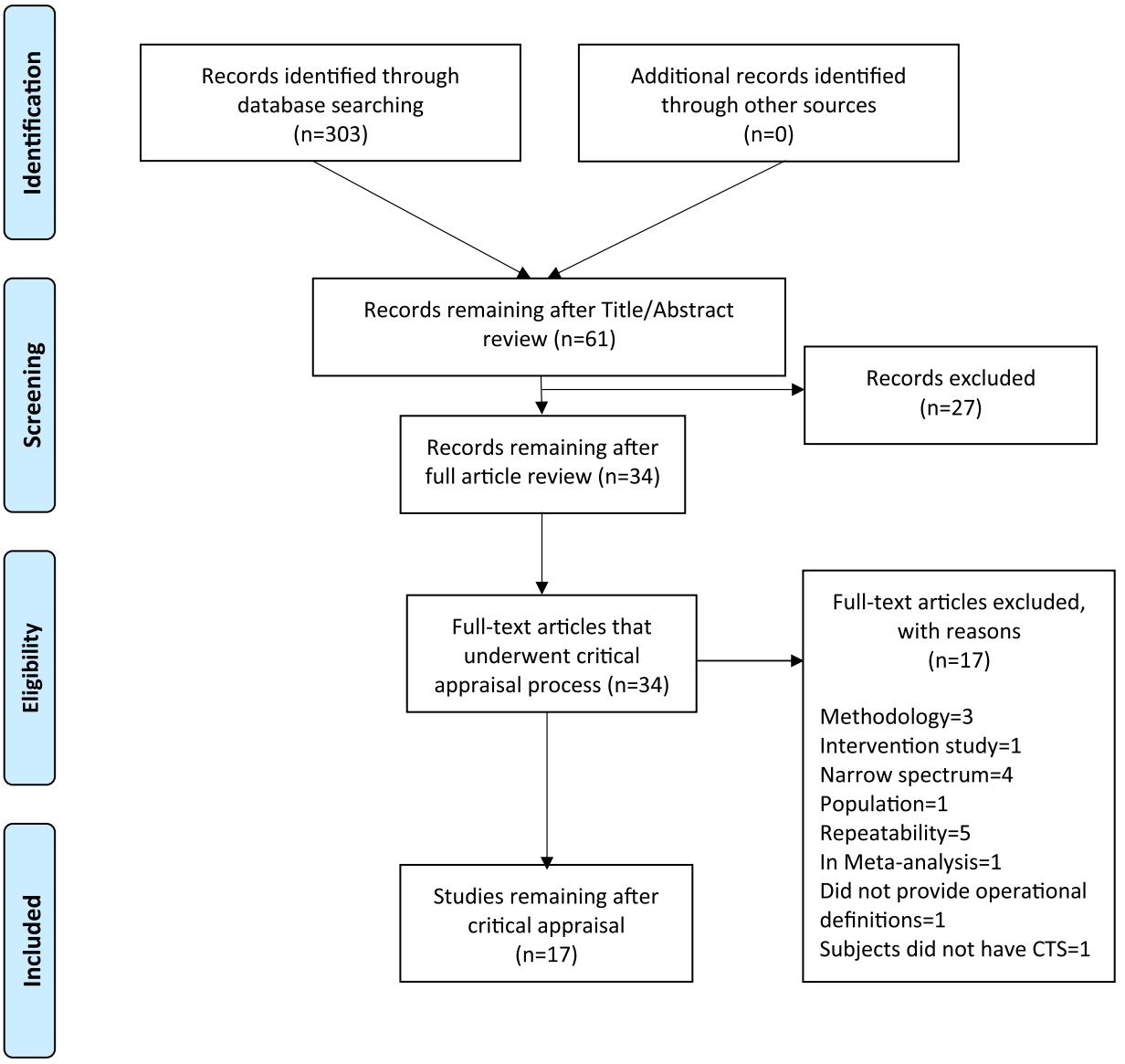

Fig. 1. Search results.

Table 3
Reliability values of sonographic measurements identified in this review.

Measurement	Study	Inter-rater reliability	Intra-rater reliability
Median nerve CSA (inlet)	Jiwa et al	ICC=0.93 ($CI_{95\%}$ 0.75, 0.98)	
	Phongamwong et al	ICC=0.93 ($CI_{95\%}$ 0.87, 0.96)	
	Junck et al	r=0.93 (P<0.0001)	Sonographer r=0.88; Radiologist r=0.81
	Lee and Kim	Using cut-off value >8.5 mm^2 ICC=0.85	
		Using cut-off value >9.0 mm^2 ICC=0.85	
		Using cut-off value >10.7 mm^2 ICC=0.87	
		Using cut-off value >15.0 mm^2ICC=0.83	
Median nerve CSA (outlet)	Jiwa et al	ICC=0.86 ($CI_{95\%}$ 0.53, 0.96)	
	Lee and Kim	Using cut-off value >12.0 mm^2 ICC=0.84	
Median nerve CSA (forearm)	Jiwa et al	ICC=0.0007 ($CI_{95\%}$ -0.60, 0.60)	
	Junck et al	r=0.89 (P<0.0001)	Sonographer r=0.67; Radiologist r=0.55
Median nerve CSA (PQ)	Junck et al	r=0.85 (P<0.0001)	Sonographer r=0.15; Radiologist r=0.49
Wrist-to-forearm ratio	Jiwa et al	ICC=0.33 ($CI_{95\%}$ -0.34, 0.78)	
	Lee and Kim	Using cut-off value ≥1.4 ICC=0.85	
	Junck et al	r=0.73 (P<0.0001)	Sonographer r=0.69; Radiologist r=0.44
Median-to-ulnar ratio	Jiwa et al	ICC=0.25 ($CI_{95\%}$ -0.41, 0.74)	
Inlet-to-outlet ratio	Jiwa et al	ICC=0.81 ($CI_{95\%}$ 0.40, 0.95)	
Flattening ratio (hamate)	Lee and Kim	Using cut-off value ≥4.2 ICC=0.86	
		Using cut-off value ≥3.4 ICC=0.84	

CI, confidence interval; CSA, cross-sectional area; ICC, intraclass correlation coefficient; PQ, pronator quadratus

Table 4
Known-group validity of sonographic measurements identified in this review.

Measurement	Study (measurement units)		CTS mean (SD)	Control mean (SD)	Mean Difference	P-value
Median nerve CSA (inlet)	Atan et al (mm^2)		14.51 (3.72)	9.33 (2.07)	5.17	<0.001
	Ažman et al (mm^2)		15.3 (5.15)	8.2 (1.43)	7.1	<0.001
	El Habashy et al (mm^2)		16.47 (4.28)	8.05 (1.49)	8.42	<0.0001
	Jiwa et al (mm^2)		14.96 (5.13)	8.37 (2.28)	6.59	<0.001
	Kutlar et al (cm^2)		0.13	0.08	0.05	<.0000
	Gonzalez-Suarez et al (cm^2)		0.08 (0.02)	0.07 (0.02)	0.01	0.02
	Köroğlu et al (cm^2)		*	*	*	<0.001
	Chang et al (mm^2)		11.3 (4.4)	8.8 (2.2)	2.5	<0.0001
Median nerve CSA (outlet)	Ažman et al (mm^2)		15.4 (5.37)	8.8 (1.74)	6.6	<0.001
	Jiwa et al (mm^2)		10.09 (3.28)	7.44 (2.09)	2.65	<0.001
	Gonzalez-Suarez et al(cm^2)		0.10 (0.03)	0.08 (0.02)	0.02	<0.01
	Köroğlu et al (cm^2)		*	*	*	<0.001
Median nerve CSA (mid-canal)	Ažman et al (mm^2)		11.6 (4.12)	8.2 (1.85)	3.4	<0.001
Median nerve CSA (DRUJ)	Chang et al (mm^2)		8.2 (2.9)	7.4 (1.7)	0.8	0.04
	Köroğlu et al (cm^2)		*	*	*	<0.001
Median Nerve CSA (PQ)	Junck et al (mm^2)	sonographer	10.6 (1.7)	9.5 (1.8)	1.1	0.68
		radiologist	11.5 (1.9)	9.8 (1.3)	1.7	0.003
Mean CSA (CSA inlet+CSA outlet/2)	Ažman et al (mm^2)		15.3 (4.04)	8.5 (1.33)	6.8	<0.001
Flattening ratio (pisiform)	Köroğlu et al		*	*	*	0.001
	Chang et al		2.5 (0.7)	2.6 (0.9)	0.1	0.64
	Lee and Kim	right	3.0 (0.8)	2.8 (0.4)	0.2	0.167
		left	3.0 (0.7)	2.7 (0.4)	0.3	0.372
Flattening ratio (hamate)	Köroğlu et al		*	*	*	0.679
	Lee and Kim	right	3.2 (0.4)	2.8 (0.4)	0.4	<0.001
		left	3.1 (0.4)	2.7 (0.4)	0.4	0.004
Flattening ratio (mid-canal)	Ažman et al		4.1 (1.63)	3.7 (1.17)	0.4	0.191
Flattening ratio (lunate)	Lee and Kim	right	2.7 (0.5)	2.7 (0.4)	0	0.609
		left	2.9 (0.5)	2.6 (0.4)	0.3	0.173
Median-to-ulnar ratio	Atan et al		3.75 (0.86)	2.72 (0.75)	1.03	<0.001
	Jiwa et al		3.10 (1.19)	1.75 (0.39)	1.35	<0.001
	Chang et al		4.1 (2.3)	2.9 (1.5)	1.2	0.0206
Inlet-to-outlet ratio	Ažman et al		1.1 (0.51)	1.0 (0.21)	0.1	0.235
	Jiwa et al		1.53 (0.61)	1.13 (0.17)	0.40	0.001
	Gonzalez-Suarez et al		0.87 (0.19)	0.93 (0.22)	-0.06	0.06
Swelling ratio	Köroğlu et al		*	*	*	<0.001
	Chang et al		1.5 (0.9)	1.2 (0.3)	0.3	0.04
Wrist-to-forearm ratio	Ažman et al		2.4 (0.79)	1.5 (.27)	0.9	<0.001
	El Habashy et al		3.07 (0.89)	1.26 (0.26)	1.81	<0.0001
	Jiwa et al		2.44 (0.77)	1.28 (0.39)	1.16	<0.001
	Gonzalez-Suarez et al		1.71 (0.63)	1.69 (0.71)	0.02	0.82
	Lee and Kim	right	1.9 (0.5)	1.1 (0.2)	0.8	<0.001
		left	1.9 (0.5)	1.1 (0.2)	0.8	<0.001
Outlet-to-forearm ratio	Ažman et al		2.4 (0.82)	1.5 (0.31)	0.9	<0.001
	Gonzalez-Suarez et al		2.01 (0.67)	1.88 (0.83)	0.13	0.32
Flexor retinacular bowing	Ažman et al (mm)		4.5 +/- 0.82	3.9 +/- 0.45	0.6	<0.001
	Köroğlu et al (mm)		*	*	*	<0.001
	Gonzalez-Suarez et al (cm)		0.21 +/- 0.11	0.21 +/- 0.19	0	0.83
Flexor retinacular thickness	Köroğlu et al	DRUJ	*	*	*	0.171
		pisiform	*	*	*	0.057
Median nerve circumference	Ažman et al (mm)	inlet	17.9 +/- 3.05	13.6 +/- 1.55	4.3	<0.001
		outlet	19.8 +/- 3.43	15.9 +/- 2.09	3.9	<0.001
		mid-canal	17.3 +/- 3.48	14.5 +/- 3.4	2.8	<0.001
Carpal tunnel area	Köroğlu et al		*	*	*	0.516
Median nerve diameter	Köroğlu et al		*	*	*	<0.001
Wrist (inlet)-to-forearm difference	Gonzalez-Suarez et al (cm)		0.03 +/- 0.03	0.02 +/- 0.06	0.01	0.16
Wrist (outlet)-to-forearm difference	Gonzalez-Suarez et al (cm)		0.03 +/- 0.06	0.05 +/- 0.03	0.02	0.01
Median-to-ulnar difference	Chang et al (mm2)		8.2 +/- 4.3	5.3 +/- 2.0	2.9	<0.0001
Compression ratio	Lee and Kim	right	1.2 +/- 0.6	1.0 +/- 0.3	0.2	0.263
		left	1.1 +/- 0.2	1.1 +/- 0.3	0	0.620

CSA, cross-sectional area; DRUJ, distal radio-ulnar joint; PQ, pronator quadratus; SD, standard deviation.
* data not reported.

Known-group validity

Data were available from 10 studies on known-group validity comparing measures from individuals with CTS to a control group (Table 4)[11,12,14,16-22]. In all studies reporting on median nerve CSA measurements taken at the DRUJ, within the canal, and at the carpal tunnel inlet and outlet showed a higher CSA in the CTS group compared to the control group ($P < .04$). The largest difference between those with and without CTS was reported by El Habashy et al[18] for the CSA measured at the carpal tunnel inlet. In their study, the CTS group had a mean CSA of 16.47 mm^2 versus the control group 8.05 mm^2 (mean difference [MD] = 8.42 mm^2). Mean CSA, MUR, swelling ratio, median nerve circumference and diameter, wrist-to-forearm CSA difference (wrist measurement taken at the outlet), and median-to-ulnar difference all showed statistically significant differences between those with and without CTS ($P < .04$). Flexor retinacular thickness, FR measured mid-canal and at the lunate, carpal tunnel area, compression ratio,

Table 5
Correlation between ultrasonographic measurements and nerve conduction parameters identified in this review.

Measurement	Study	DML (r, p-value)	DSL (r, p-value)	Motor amplitude (r, p-value)	Sensory amplitude (r, p-value)	Sensory conduction velocity (r, p-value)	Palmar-median interlatency (r, p-value)
Median nerve CSA (inlet)	El Habashy et al	0.62 (0.0001)	0.60 (0.0001)	-0.56 (0.0001)	-0.55 (0.0001)		
	El Shintenaway et al	0.58 (<0.001)	0.46 (<0.001)		-0.30 (0.027)	-0.56 (<0.001)	
Flattening ratio (pisiform)	El Shintenaway et al	0.19 (0.16)	0.29 (0.029)		-0.16 (0.24)	-0.05 (0.71)	
Flattening ratio (hamate)	El Shintenaway et al	0.24 (0.12)	-0.01 (0.95)		-0.19 (0.39)	-0.59 (0.003)	
Median-to-ulnar ratio	Jiwa et al	0.34 (0.03)					0.35 (0.04)

CSA, cross-sectional area; DML, distal motor latency; DSL, distal sensory latency.

Table 6
Correlations between severity and surgical outcome compared to ultrasonographic findings.

Measurement	Study	Severity using Padua Classification (r-value, p-value)	Severity using Bland Classification (r-value, p-value)
Median nerve CSA (inlet)	Ažman et al	0.71 (<0.001)	
	Ha et al		0.32 (0.02)
Median nerve CSA (outlet)	Ažman et al	0.61 (<0.001)	
	Ha et al		0.23 (0.09)
Median nerve CSA (mid-canal)	Ažman et al	0.45 (<0.001)	
Mean CSA (Inlet CSA + Outlet CSA/2)	Ažman et al	0.74 (<0.001)	
Flattening ratio (mid-canal)	Ažman et al	0.15 (0.021)	
Inlet-to-outlet ratio	Ažman et al	0.11 (0.10)	
Wrist-to-forearm ratio	Ažman et al	0.59 (<0.001)	
Outlet-to-forearm ratio	Ažman et al	0.47 (<0.001)	
Flexor retinacular bowing	Ažman et al	0.32 (<0.001)	
Median nerve circumference (inlet)	Ažman et al	0.66 (<0.001)	
Median nerve circumference (mid-canal)	Ažman et al	0.45 (<0.001)	
Median nerve circumference (outlet)	Ažman et al	0.53 (<0.001)	
Flexor retinacular bowing	Ažman et al	0.32 (<0.001)	

CSA, cross-sectional area; PQ, pronator quadratus; WFR, wrist-to-forearm ratio

and wrist-to-forearm difference (wrist measurement taken at the inlet) showed no significant difference between individuals with and without CTS ($P > .05$). There was conflicting evidence on all other measures (Table 4).

Concurrent validity

There were six studies that examined concurrent validity of ultrasonographic measures using a variety of reference standards including nerve conduction parameters (Table 5)[11,18,23], CTS severity grades using scales based on results of nerve conduction studies (Table 6)[17,24], and results of the Carpal Tunnel Questionnaire-Symptom Severity Scale[25]. There were no correlation coefficients between ultrasonographic measurements and reference standards that exceeded 0.74. Ažman et al[17] found the highest correlation coefficients between median nerve CSA measured at the carpal tunnel inlet and mean CSA and CTS severity using the Padua Classification (r = 0.71; $P < .001$ and r = 0.74; $P < .001$, respectively).

Wessel et al[25] examined the relationship between median nerve CSA measured at the pronator quadratus, pisiform, and hamate and scores on the Levine-Katz Symptom Severity Scale. There were no significant correlation coefficients between individual CSA measurements and Symptom Severity Scores (r <0.14; $P > .41$) These authors also examined the relationship between CSA change scores (Δ CSA: pisiform to hamate, pronator quadratus to pisiform, and pronator quadratus to hamate) and scores on the Levine Katz Symptom Severity Scale. They reported two significant correlation coefficients, but the magnitude of each was low (Δ CSA pisiform to hamate r = 0.36; $P < .05$; Δ CSA pronator quadratus to hamate r = 0.37; $P < .05$)[25].

Authors of two studies examined agreement between the presence of US findings, surgical resolution of symptoms[26], and the presence of electrodiagnostically confirmed CTS[12]. According to Pimentel et al[26], of the individuals who presented with a median nerve inlet CSA greater than 10 mm^2 prior to carpal tunnel release, 76.5% had surgical resolution of symptoms. The kappa coefficient, or level of agreement between finding a CSA >10 mm^2 (Yes/No) and having resolution of symptoms following surgery (Yes/No) was 0.42 ($P < .001$) suggesting moderate agreement. In the same study, authors reported that in individuals who had CTS confirmed through nerve conduction studies, 83.5% reported surgical resolution of symptoms ($\kappa = 0.65$; $P < .001$) Agreement between positive US findings (inlet CSA >10 mm^2) and positive nerve conduction studies was 0.232 ($P = .006$)[26].

Using cutoff values for diagnostic US extracted from the literature, Lee and Kim[12] examined the agreement between the presence of various US findings and the presence of electrodiagnostically-confirmed CTS. Authors reported fair agreement with presence of CTS and FR measured at the hamate (cutoff value ≥4.2; $\kappa = 0.38$) and moderate agreement with outlet CSA (cutoff value >12.0 mm^2; $\kappa = 0.55$), inlet CSA (cutoff >10.7 mm^2; $\kappa = 0.51$ and cutoff value >9.0 mm^2; $\kappa = 0.60$), and FR measured at the hamate (cutoff value ≥3.4; $\kappa = 0.42$). Authors found substantial agreement between electrodiagnostically-confirmed CTS and inlet CSA (cutoff value >8.5; $\kappa = 0.64$). In addition, when using a cutoff value of 1.4 for WFR, there was substantial agreement with electrodiagnostically-confirmed CTS ($\kappa = 0.71$). In this study, WFR was calculated using CSA measurements taken from the distal wrist crease and the forearm 12 cm proximal to the distal wrist crease.

Diagnostic accuracy

Several studies ($n = 11$) included in this review examined cutoff values for the optimal diagnostic accuracy of ultrasonographic measures (Table 7A and B)[11,13,28,16,17,19,21-23,26,27]. Mea-

Table 7A
Diagnostic accuracy for median nerve cross-sectional area measures at the carpal tunnel inlet and outlet.

Study	Diagnostic Accuracy of the Median Nerve CSA at the Carpal Tunnel Inlet					Diagnostic Accuracy of the Median Nerve CSA at the Carpal Tunnel Outlet				
	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR[a]	NLR	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR	NLR
Atan et al	>11.95	80.0	80.0	4.0	0.25	-	-	-	-	-
Ažman et al (overall)	>10	87.4	94.6	16.2	0.13	11	74.1	92.5	9.9	0.28
Ažman et al (clinically mild cases, n=83)	>10	94.2	89.2	8.8	0.06	-	-	-	-	-
Chang et al	>10.35	63	84	3.9	0.44	-	-	-	-	-
El-Shintenawy et al	> 9*	80.4	100.0	Infinity (or >804)	0.20	-	-	-	-	-
Jiwa et al	>10.22	93.0	89.0	8.6	0.08	-	-	-	-	-
Köroğlu et al	>12.5	88	96	22	0.13	8.5	52	85	3.47	0.56
Kutlar et al	>10	90.9	94.0	15.0	0.11	-	-	-	-	-
Phongamwong et al	>11.5	69.2	67.9	2.1	0.46	-	-	-	-	-
Pimentel et al	>10	84.6	81.8	4.7	0.19	-	-	-	-	-
Roghani et al	>8.5	96.9	93.6	15.1	0.03	11.5	72.2	53.2	1.5	0.53
Torres-Costoso et al (pooled data from systematic review)	ranged from 9-12.6	81	84	6.22	0.16	ranged from 9-10	74	76	4.63	0.25

CSA, cross-sectional area; NLR, negative likelihood ratio; PLR, positive likelihood ratio; Sn, sensitivity; Sp, specificity
cutoff values converted to mm^2 from cm^2 as appropriate.
[a] PLR/NLR calculated from sensitivity and specificity values:Calculations used: PLR = sensitivity/(1-specificity) and NLR = (1-sensitivity)/(specificity)

Table 7B
Diagnostic accuracy for median nerve cross-sectional area inlet-to-outlet ratio and flattening ratio measured at the hamate.

Study	Diagnostic Accuracy of the Median Nerve CSA Inlet-to-Outlet Ratio					Diagnostic Accuracy of the Median Nerve Flattening Ratio (measured at the hamate)				
	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR[a]	NLR	Cut-off value (mm^2)	Sn (%)	Sp (%)	PLR	NLR
El-Shintenawy et al	-	-	-	-	-	>4	91.3	100.0	Infinity	0.09
Jiwa et al	>1.27	56.0	84.0	3.5	0.52	-	-	-	-	-
Köroğlu et al	-	-	-	-	-	>3.54	28.9	92.5	3.85	0.77

CSA, cross-sectional area; NLR, negative likelihood ratio; PLR, positive likelihood ratio; Sn, sensitivity; Sp, specificity
cutoff values converted to mm^2 from cm^2 as appropriate.
[a] PLR/NLR calculated from sensitivity and specificity values:Calculations used: PLR = sensitivity/(1-specificity) and NLR = (1-sensitivity)/(specificity).

sures greater than the cutoff value indicate the presence of CTS (a positive test) and measures less than the cutoff value indicate a normal finding. Electrophysiological studies were used consistently as the reference standard to confirm or rule out the diagnosis. Sensitivity, specificity, as well as positive and negative likelihood values associated with the given cutoff value were the most commonly reported statistics. Where likelihood ratios were not given, values were calculated by the researchers. Given the numerous measures examined in these articles, diagnostic accuracy will be reported on the ultrasonographic measures that demonstrated consistent, acceptable reliability and known-group validity.

Mean cutoff values for CSA of the median nerve at the carpal tunnel inlet ranged from 8.5 mm^2 to 12.6 mm^2 (Table 7A). Sensitivity values ranged from 63% to 96.9%, while specificity values ranged from 67.9%-100%. Positive likelihood ratio values ranged from 2.1 to infinity, indicating anywhere from a small but sometimes important shift to large and conclusive shifts in pre- to post-test probability of being diagnosed with CTS given a positive test (CSA measuring at or greater than the CSA cutoff range)[29]. Negative likelihood ratio values range from 0.46-0.03 indicating small but sometimes important shifts to large and conclusive shifts of not having CTS given a negative test (CSA measuring smaller than the stated cutoff range)[29].

Four studies examined the mean cutoff values for CSA of the median nerve at the carpal tunnel outlet which ranged from 8.5-11.5 mm^2 (Table 7A)[17,21,27,28]. Sensitivity values ranged from 52%-74.1% and specificity values ranged from 53.2%-92.5%. Positive likelihood ratio values ranged from 1.5 to 9.9, indicating a range from negligible shifts to large and conclusive shifts in pre- to post-test probability of being diagnosed with CTS given a positive test. Negative likelihood ratio values range from 0.56-0.25 indicating negligible shifts to small shifts of not having CTS given a negative test[29]. Only one study reported on the accuracy of the median nerve CSA inlet to outlet ratio[11] and two studies reported the diagnostic accuracy of the flattening ratio (measured at the hamate) (Table 7B)[21,23].

Discussion

The purpose of this review was to report on measurement properties of diagnostic ultrasound in CTS published since the 2016 AAOS Clinical Practice Guideline and to determine if there is new evidence that would help in establishing recommendations for use in the clinical setting. Since publication of the AAOS Guideline, several good to high quality studies have provided additional properties on ultrasonographic measures. Only measures showing good to excellent interrater and/or intrarater reliability data identified in this review will be discussed in detail. These measures include CSA measured at the carpal tunnel inlet and outlet, the inlet-to-outlet ratio, and flattening ratio.

Inlet cross sectional area

Reliability and known-group validity of CSA measurements taken at the carpal tunnel inlet are consistently well-supported in

the literature. All studies reported good to excellent inter- and intrarater reliability using the direct trace method. These findings are consistent with prior studies examining inter- and intrarater reliability of inlet CSA[30-34]. Current findings are also consistent with interrater reliability values found in the asymptomatic population (ICC = 0.94)[5]. All studies examining known-group validity of inlet CSA support its use in differentiating between those with and without CTS[11,16-22].

Studies examined in this review reported statistically significant correlation coefficients between inlet CSA and electrodiagnostic test results; however, the highest correlation coefficient between inlet CSA and severity using the Padua scale was 0.71[17]. A limitation of this study was that it lacked researcher blinding. In a study from 2012, Kim et al[35] found a weak correlation (r = 0.43) between inlet CSA and severity using the Padua classification. Ha et al[24] used the Bland classification as the reference standard and found the correlation between inlet CSA and severity was 0.32. One reason for this difference may be that Ha et al[24] collapsed the 7-point Bland classification into an arbitrary 4-point scale. In this classification, Bland electrophysiological severity grades 1 and 2 were labeled Grade I, Bland grades 3 and 4 were regrouped into Grade II, and Bland severity grades 5 and 6 were reclassified into Grade III. Individuals with normal electrophysiological findings were labeled Grade 0.

In other studies reporting on correlations between inlet CSA and sensory conduction velocity and distal motor latency, both of which are parameters used in the Padua and Bland severity scales, the magnitude of the coefficients were lower than that reported by Azman et al[17] (-0.56[23] and -0.62[18]). Correlations between inlet CSA and sensory amplitude and distal sensory latency varied. One study included in this review reported a correlation coefficient of -0.30 between inlet CSA and sensory amplitude[23], while El Habashy et al[18] reported a moderate correlation (r = -0.55). These differences may be due to different testing protocols and interpretation of results used in different labs. In addition, the two tests, US and nerve conduction studies, are measuring different constructs. Ultrasound assesses nerve morphology while nerve conduction studies provide information on nerve function. Also, the US examiner in the Azman study was not blinded to electrodiagnostic or clinical findings.

The findings of this systematic review indicate a 3.1%-37% false negative rate and a 0-32.1% false positive rate when diagnosing CTS, using inlet CSA cutoff values between 8.5 mm^2 to 12.6 mm^2. Therefore, this test appears to be slightly better at correctly identifying CTS when the inlet CSA is at or greater than the cutoff range than it is in ruling out CTS when the test is negative. This is due to a slightly higher false negative rate. These results are consistent with the meta-analysis conducted by Torres et al[28]. Roghani et al[27] and El-Shintenawy et al[23] also reported excellent diagnostic accuracy of inlet CSA in which cutoff values were 8.5 mm^2 and 9 mm^2, respectively. Therefore, a larger cutoff value did not consistently result in greater diagnostic accuracy.

Pimentel et al[26] examined the diagnostic accuracy of both ultrasonographic measures and nerve conduction studies in females using remission of paresthesias (determined by change in Carpal Tunnel Questionnaire-Symptom Severity Scale) 4 months after surgery as the reference standard. Ultrasonographic evaluation of inlet CSA using a cutoff value of 10 mm^2 and results of standardized nerve conduction studies (sensory nerve conduction velocity and distal motor latency) demonstrated no statistically significant difference in sensitivity [US = 84.6% (95%CI: 76.2, 90.9); NCV = 92.3% (95%CI: 85.4, 96.6)], specificity [US = 81.8 (95% CI: 48.2, 97.7); NCV = 90.9 (95% CI: 58.7, 99.8)], positive likelihood ratio [US = 4.7 (95% CI: 1.3, 16.4); NCV = 10.2 (95% CI: 1.6, 65.9)], or negative likelihood ratio [US = 0.2 (95% CI: 0.1, 1.3) NCV = 0.1 (95% CI 0–0.2)]. The results of this study indicate false positive rates of 18.2% for inlet CSA using a cutoff of 10 mm^2 and 9.1% for NCV. The false negative rates of US and NCV are 15.4% and 7.7%, respectively.

Although, both diagnostic measures appear to effectively detect CTS, results of nerve conduction studies showed better agreement with postoperative resolution of symptoms at 4 months than inlet CSA. One might also expect inlet CSA to be highly correlated with CTS symptom severity. Wessel et al[25] found statistically significant correlations between symptom severity and changes in nerve CSA along the forearm and wrist; however, the magnitude of these correlations was low ($r<0.42$). This suggests that factors in addition to CSA or nerve morphology influence symptoms.

It does appear that the severity of CTS influences the diagnostic accuracy of median nerve CSA. Azman et al[17] demonstrated that in cases of mild CTS, when inlet median nerve CSA is larger than 10 mm^2, more false positives (10.8%) were noted when compared to the group of people with CTS as a whole. In mild CTS, when the inlet CSA was less than 10 mm^2, there were fewer false negatives (5.4% false negative rate). Therefore, the sensitivity of this cutoff value is better and the specificity is slightly worse in cases of mild CTS when compared to cases that are more severe.

Outlet cross sectional area

Studies included in this review showed good interrater reliability of measurements of median nerve CSA taken at the carpal tunnel outlet. However, prior reliability studies are conflicting, with reliability values ranging from 0.39 to 0.88.[32,34] All studies included in this review support the use of outlet CSA measurements to differentiate between those with and without CTS, but the studies examining correlations with severity scales based on electrodiagnostic classifications are conflicting. In comparing data on inlet and outlet CSA, there is more evidence to support the use of measuring CSA at the carpal tunnel inlet. The diagnostic accuracy values including sensitivity, specificity, and positive and negative likelihood ratios were consistently less for outlet CSA when compared to inlet CSA. This conclusion is similar to findings from two prior systematic reviews[28,36]. Torres et al[28] reported the diagnostic accuracy of inlet CSA measurements was higher than that for the outlet, and inlet CSA was more reliable.

Inlet-to-outlet ratio

The CSA IO ratio measured at the hamate showed good reliability, but this measure demonstrated conflicting evidence when comparing measurements between those with and without CTS. Azman et al[17] and Gonzalez-Suarezet al[20] reported no significant difference when comparing IO ratios in those with and without CTS, and Jiwa et al[11] reported a larger IO ratio in those with CTS, but the MD between groups was small (MD = 0.40; P = .001). There was no correlation between IO ratio and severity using the Padua classification (r = 0.11)[17]. Only one study examined the diagnostic accuracy of the IO ratio, and this measure demonstrated less diagnostic accuracy than measures of inlet CSA when using IO ratio of 1.27 as a cutoff value[11].

Flattening ratio

Median nerve FR is a measure of nerve compression. Flattening ratio measured at the hamate showed good interrater reliability in one study included in this review, but prior studies have shown conflicting results[33,34]. Ooi et al[33] reported interrater reliability values between 0.44 and 0.58, and Wang et al[34] reported the 95% confidence interval for interrater reliability ranged from 0.58

and 0.84. There was conflicting evidence on the ability of FR measured at the hamate to differentiate between those with and without CTS. Köroğlu et al[21] reported no significant difference (MD not reported; $P = .68$) while Lee and Kim[12] reported statistically significant differences when examining both right and left hands between those with and without CTS (MD 0.40; $P < .004$). The same is true for FR when measured at the pisiform level. Studies identified in this review and prior literature show there is conflicting evidence on known-group validity of FR assessed at the pisiform level[12,21,22,37,38]. Köroğlu et al[21] and Azami et al[38] reported statistically significant differences between groups. Mean values were not reported by Köroğlu et al[21], but Azami et al[38] reported the mean FR for those with CTS was 1.83 and those without was 0.88 ($P = .001$) when measured at the pisiform. Chang et al[22], Lee and Kim[12], and Roll et al[37] reported no differences between FR (pisiform) in those with CTS and those without (MDs <0.30; $P > .17$).

Median nerve compression is a primary factor in the pathogenesis of CTS, and it seems plausible that FR would be an objective measure of compression. Buchberger et al[39] reported a significantly higher FR measured at the distal tunnel, or hamate, when compared to the FR measured at the pisiform or distal radius. These authors also reported an increase in CSA at the inlet suggesting compression at the distal tunnel resulted in swelling at the proximal tunnel[39]. Findings in this review concur with evidence of a swollen median nerve captured by measuring inlet CSA, but measures of the FR were less consistent. If the measure is not taken at the site of compression, flattening may not be captured in the US assessment. Chronic nerve compression leads to a breakdown in endoneurial blood flow which results in neural edema and eventually fibroblast production and nerve scarring[40]. This is more consistent with the enlarged CSA rather than FR. The two studies that examined the diagnostic accuracy of the FR both demonstrated excellent specificity with a false positive rate of 0-7.5%; however, the false negative rate was much more variable (8.7%-71.1%)[21,23].

Some measurement properties of WFR are promising. Azman et al[17] found a moderate correlation between WFR and CTS severity, and Lee and Kim[12] showed substantial agreement between WFR >1.4 and presence of CTS as determined by electrodiagnostic testing. However, the results of this review identified issues with reliability of this measurement. This is likely due to the variability in the location from which the forearm measurement was taken and perhaps methodological difficulty in obtaining the forearm CSA measurement. The most common site used in the identified studies in this review (12 cm proximal to the wrist crease) showed the highest variability in interrater reliability (0.33-0.85). A prior study by Mhoon et al[31], who also measured forearm CSA 12 cm proximal to the distal wrist crease, showed interrater reliability equal to 0.96. While some measurement properties of WFR are acceptable, reliability and standardization of the landmarks used should be improved.

Some studies have suggested that US can be used in place of electrodiagnostic testing. Based on findings from this review, there is not enough evidence to show the two testing modalities can be used interchangeably. First, the two examinations are measuring different constructs, anatomy and function, and the magnitude of the correlations identified in the studies are moderate at best and are conflicting across some studies and measurements. Other authors have suggested using US and electrodiagnostics to complement one another[2,36]. Goldberg et al[2] suggested using US as a screening tool, but if the patient showed evidence of possible cervical radiculopathy, peripheral neuropathy, or brachial plexopathy, then the patient should proceed directly to electrodiagnostic testing for differential diagnosis. Also, some US measurements may be useful in differentiating between those with and without CTS, but there are no data on the ability of US to discriminate between CTS and pathologies that have signs and symptoms that mimic CTS.

This review was limited to data reported from 2015 to present. This was done to show new evidence that has emerged since publication of the AAOS CTS Clinical Practice Guideline. Measures that did not have recent, high-quality published data were not included in this review. For example, palmar displacement of the median nerve within the tunnel appeared in one study[11], but the authors did not provide an accurate description of how this measure was obtained, and therefore data for this measurement were not included in this review. Also, some measures with good known-group validity identified in this review were not reported on in depth because the authors were unable to identify high-quality reliability data on individuals with CTS, either from studies included in this review or in studies published prior to February 2015. For example, mean CSA (inlet CSA+outlet CSA/2), median nerve diameter, and median-to-ulnar difference may have promise, but more research is needed to establish reliability in individuals with CTS. Another limitation is that only studies in the English language were included. Additionally, it should be noted that assessor experience, equipment used, measurement parameters, and differences in reference standards were highly variable among included studies limiting the ability to identify a measurement parameter with a consistently strong body of evidence to support its use in practice. Finally, administration of EMG testing and classification patients according to electrodiagnostic findings with CTS could have affected criterion validity and thus the diagnostic accuracy values obtained among the studies.

Conclusion

Additional measurement properties studied since the AAOS Clinical Practice Guideline have been reported. Based on results of this study, the sonographic measurement most supported by evidence is median nerve CSA measured at the carpal tunnel inlet. There is no evidence to support this measure or the use of US in general as a replacement for electrodiagnostic studies. There is no additional evidence to support the use of diagnostic US on a routine basis for individuals with suspected CTS, and more research is needed to determine the ability of diagnostic US to differentiate between CTS of different severities and conditions that mimic CTS. Diagnostic US may provide additional information regarding anatomic variation and the presence of additional structures contributing to median nerve impairment. This knowledge could facilitate clinical decisions for non-surgical management by hand therapists or referral to a surgeon.

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1. The design of the study is.
   a. prospective cohort
   b. case series
   c. systematic review
   d. RCTs

2. Study scores were
   a. reached through a consensus of the team after discussion
   b. validated by computer analysis
   c. randomly reviewed by team members
   d. dictated by pre-established norms

3. CSA of the median nerve was shown to have
   a. excellent sensitivity, but poor specificity
   b. little clinical value
   c. excellent correlation to the CSA of the ulnar nerve
   d. good intrarater reliability and excellent interrater reliability

4. CSA measures were taken at the
   a. midpalmar level
   b. the level of the distal wrist crease
   c. carpal tunnel inlet
   d. carpal tunnel outlet

5. The evidence is that ultrasound should replace EMG & NCV in the evaluation of CTS
   a. true
   b. false

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A Guidebook for The Utility of MSK Ultrasound in Occupational Therapy Practice: An Educational Guidebook Series

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A Guidebook for The Utility of MSK Ultrasound in Occupational Therapy Practice: An Educational Guidebook Series

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Background

- Approximately 1.7 million people have MSK conditions worldwide that significantly impact functional mobility, resulting in early retirement, reduced well-being, and confined social participation (WHO, 2022).
- Detecting orthopedic conditions has advanced over the last decade, providing another option outside MRIs and X-rays. MSK ultrasound is an imaging modality widely expanding into the scope of practice for allied health professionals (Page et al., 2023).
- This modality helps health professionals understand underlying implications impacting functional mobility and occupation engagement. MSK ultrasound helps facilitate clinical reasoning to support informed interventions (Warning et al., 2021; Gray et al., 2017; Roll et al., 2015).

Problem

OT practitioners are unfamiliar with MSK ultrasound and are unaware of its potential use in OT practice.

Methods

➢ Theoretical Framework
-The Health Belief Model (HBM)

➢ Review the Literature
-significance to OT
-current protocols/guidelines
-assessments/interventions

➢ Survey/Needs Assessment
-OTs lack motivation to pursue MSK Ultrasound due to unreimbursed time, funding, and application for only select patients.

Intent:

-To be used in conjunction with STPH workshops

-Supplement training and education on the use and operation of MSK US

-Inform acute OTs on their role in using MSK US

-Guidance on incorporating MSK US into practice

-Advocate for the OT profession and certification opportunities for OTPs

-RA was used as an example for the guidebook

-Disseminated to OTPs

Purpose

The purpose of this project is to create an educational guidebook on the utility of MSK ultrasound in OT practice.

Guidebook

Guide Components

Chapter I: Introduction
· What is MSK US and uses · Orientation to equipment · Body Positioning · Imagine Competency

Chapter II: Assessment and Methods
· Anatomy and pathology · Evaluations · Goals · Interventions

Chapter III: Implementation into Practice
· Prevention and Wellness · Interpreting findings · ADL enhancement · Patient Education · Dynamic visual biofeedback during Functional activity

Chapter IV: Application
· Case studies · Practice slides for: Imaging competency Body positioning

Discussion

Empower

The guidebook aims to empower occupational therapists by helping them discover their role and showcase the value they bring to the healthcare team in managing RA through MSK ultrasound.

Educate

Provide occupational therapists with educational opportunities on technologies like MSK ultrasound. This equips them with advanced tools to enhance their assessment and intervention strategies. Ultimately, this optimizes their practice, enhances patient satisfaction, and contributes to the advancement of the profession.

Advocate

There is a need for advocacy for OTPs to learn about and pursue MSK ultrasound. Currently, despite having an advanced degree and meeting the minimum requirements, OTPs are not eligible to obtain certification for registration in musculoskeletal sonography (RMSK) (The American Registry for Diagnostic Medical Sonography, 2022).

References

This project did not involve human subjects and does not require IRB approval.

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Integrating musculoskeletal sonography into rehabilitation: Therapists' experiences with training and implementation

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Abstract

Musculoskeletal sonography is rapidly extending beyond radiology; however, best practices for successful integration into new practice contexts are unknown. This study explored non-physician experiences with the processes of training and integration of musculoskeletal sonography into rehabilitation. Qualitative data were captured through multiple sources and iterative thematic analysis was used to describe two occupational therapists' experiences. The dominant emerging theme was competency, in three domains: technical, procedural and analytical. Additionally, three practice considerations were illuminated: (1) understanding imaging within the dynamics of rehabilitation, (2) navigating nuances of interprofessional care, and (3) implications for post-professional training. Findings indicate that sonography training for rehabilitation providers requires multi-level competency development and consideration of practice complexities. These data lay a foundation on which to explore and develop best practices for incorporating sonographic imaging into the clinic as a means for engaging clients as active participants in the rehabilitation process to improve health and rehabilitation outcomes.

Keywords

Rehabilitation; Therapeutics; Ultrasonography

Introduction

The use of musculoskeletal sonography is rapidly extending beyond its traditional implementation by radiology professionals and is no longer used exclusively as a diagnostic tool. Researchers and practitioners are beginning to document potential uses of sonography to enhance patient care in a variety of ways (Akkaya, Ulasli, & Ozcakar, 2013). In rehabilitation, sonography has the potential to enhance practice by occupational and physical therapists (Roll, 2015; Roll, Asai, & Tsai, 2016; Roll, McLaughlin Gray, Frank, & Wolkoff, 2015; Teyhen, 2007) specifically in monitoring changes over time (Pong et al., 2009), individualizing treatments (Hsu et al., 2006), measuring therapeutic outcomes (Chon, Yoon, & You, 2010), and providing biofeedback (Hides et al., 2010; Teyhen et al., 2005).

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Although there is a call for increased utilization of sonography by non-physician allied health providers (Estrach & Thompson, 2009), there is currently limited imaging content within professional curricula and multiple challenges exist in developing post-professional education and competency requirements. Firstly, there is the lack of consensus regarding standardized training, relevant competencies, and best practices for implementation across countries and disciplines (Cunnington, Hide, & Kane, 2005; Cunnington, Platt, Raftery, & Kane, 2007; Speed & Bearcroft, 2002; Wakefield et al., 2004). Secondly, developing competency in sonographic imaging requires significant hands-on experience, much of which is beyond clinical hours. As many as 500 scans may be necessary following formal didactic training (Speed & Bearcroft, 2002) and the total average time required for the entire post-professional training process could require more than 100 hours (Brown et al., 2004). Finally, to ensure effective implementation, consistent expert mentoring is an important component of the post-professional process (Cunnington et al., 2007); something not readily available for non-physician rehabilitation providers.

In addition to complexities of training, integrating sonography into rehabilitation requires consideration of the ways in which therapists reason and interact with patients, which are unique from that of physicians and radiology professionals. The overall goal of therapy is to promote optimal function, through clarification of the diagnosis, identification of areas for improvement in function, and selection of therapeutic activities (Stucki, Cieza, & Melvin, 2007; Zanca & Dijkers, 2014). Change is targeted at numerous levels, from body structures to participation in daily life, and a variety of treatment theories and methods are used to concurrently address multiple goals (Whyte, 2014; Zanca & Dijkers, 2014). The therapeutic process reflects an on-going integration of assessment and treatment in which therapists tailor activities in response to patient performance (Whyte, 2014). For successful implementation, the use of sonography in clinical practice by rehabilitation providers must be fully integrated with these complex and concurrent therapeutic processes.

Given the identified challenges in post-professional training and the unique circumstances surrounding implementation of musculoskeletal sonography by rehabilitation providers, careful investigation of the training and implementation process is needed. The purpose of this research was to gather information on factors involved in implementing sonography within occupational therapy to gain deeper understanding of these processes and identify challenges to successful integration. Because little is known, a qualitative approach was used to preliminarily explore the following question: How do occupational therapists experience the process of training and implementation of musculoskeletal sonography into upper extremity rehabilitation? The results of this study present salient issues related to developing competence in imaging for rehabilitation professionals and particular challenges with clinical implementation, which give direction for expanded research to better understand therapist and patient experiences.

Methods

The researchers used a qualitative descriptive research design (Sandelowski, 2000, 2010) to conduct a preliminary investigation of therapists' experience of implementing sonography in an upper extremity rehabilitation setting as part of a feasibility study. As a preliminary

investigation, the purpose of this study was to explore this novel practice technique to provide foundational insight into the development of best practices for training and implementation. Rigorous procedures were used throughout an iterative process of data collection, analysis, and interpretation (Patton, 2002; Strauss & Corbin, 1990). The IRB of the academic medical center approved the use of human subjects in this study and both the therapists and patients provided informed consent to participate.

Participants

Purposeful sampling was used to recruit occupational therapists selected on the criteria of: (1) specialization in hand rehabilitation, (2) contrasting levels of experience; (3) availability to participate in the training and to implement the sonography in a clinical setting; and (4) willingness to provide data and be interviewed. Two occupational therapists working in an outpatient hospital-based hand rehabilitation clinic were available and agreed to participate in the training and implementation process. One of the therapists (T1) was a Certified Hand Therapist (CHT) with more than 20 years of experience. The other (T2) was an entry-level therapist completing a residency in hand therapy as partial requirement for a clinical doctorate. Patient participants were recruited from the therapists' caseloads using a convenience sampling method; recruitment of patients occurred when both the therapist and patient had time available at the end of the evaluation session and patients expressed interest in being scanned with sonography. Additionally, to be included patients were over the age of 18; had no open sores, wounds, or casts; and were English-speaking. Patient diagnoses were reflective of a typical out-patient hand therapy practice; varying and including crush injury, tendon rupture, release of the dorsal extensor component, ganglion cyst, tenosynovitis of the thumb extensors and general hand pain.

Study Phases

The feasibility study took place over twelve months in five phases: *Training*, *Data Collection I*, *Data Analysis I*, *Data Collection II*, and *Data Analysis II*. The roles of each team member were structured to maximize the qualifications of the research team as a whole, while maintaining rigor and trustworthiness of the design, data and findings (Lincoln & Guba, 1985). It is noted the one of the occupational therapists (T2) had a dual researcher-participant role during Data Collection and Analysis I; however, the researcher aspect of T2's role ended prior to Data Collection and Analysis II. Table 1 summarizes the activities and participants in each phase.

Training—Both occupational therapists participated in 12 training sessions for a total of 28 hours of direct training in the use of sonography for the upper extremity. All sessions were conducted by the researcher/trainer, an occupational therapist also registered in musculoskeletal sonography (RMSKS). No standardized protocols or curriculum exist for training in the use of musculoskeletal sonography, let alone training targeted specifically to non-physician, non-sonographer rehabilitation providers. Therefore, the trainer developed modules using a textbook (Jacobson, 2007) and scanning protocols/guidelines published by professional organizations (i.e., American Institute of Ultrasound in Medicine, European Society of Musculoskeletal Radiology). *Training* included an initial session providing an overview of ultrasound physics and operation of the equipment, followed by 10 sessions

covering anatomical reviews, scanning protocols and hands-on practice to identify musculoskeletal structures of the distal upper extremity. Competency was assessed in the final session using case studies for which each therapist had to demonstrate: (a) appropriate clinical decision-making regarding sonography use and (b) the selection and successful completion of a scanning protocol with output of quality images. Following formal training, the therapists independently practiced with the sonography intermittently for a month prior to implementation with patients.

Data Collection and Analysis I—*Data Collection I* was conducted over a three-month period as the therapists began clinical implementation of sonography. Nine patients were recruited and imaging was conducted at the beginning of treatment, at discharge from their course of standard therapy, or at both time points. Data were collected using a scan log during each scan, an open-ended questionnaire following each scan, and semi-structured interviews, each developed specifically for use in this study. The scan log documented a patient's diagnosis, the structure(s) of interest, and the therapist's purpose for obtaining each image or video during the scan. The questionnaire captured information about the therapist's confidence with sonography use, patient characteristics, perceived usefulness of the scanning, and barriers and facilitators to use. Information provided by the therapists on the scan log and in questionnaire responses were reviewed by the trainer and were used to inform semi-structured short interviews (about 15 minutes each). A total of five short-interviews were conducted intermittently throughout the implementation period with the purpose of exploring the therapists' evolving experience with the implementation process, specifically their perceptions of implementing sonography into hand therapy and clinical reasoning surrounding sonography use. Each subsequent interview provided an opportunity for the therapists to expand upon comments made in the questionnaires and to reflect on new experiences and revelations that occurred since the previous interview. Conducting this series of interview over time allowed for increased data capture to assist in identifying recurrent themes and move toward data saturation given the limited sample size. In *Data Analysis I*, the study team expanded to include two expert qualitative researchers who acted as peer auditors to debrief and identify possible biases of the RMSKS researcher/trainer and the dual-role participant-researcher (T2). The team reviewed the scan logs, questionnaire responses, and transcribed interviews and identified preliminary themes via open coding (Patton, 2002). Reflecting the iterative process of qualitative research, these preliminary themes informed the development of a second semi-structured interview guide used to gather a more detailed understanding of the therapists' experience with implementing sonography.

Data Collection and Analysis II—*Data Collection II* involved semi-structured, open-ended interviews (about 1 hour each) with T1 and T2 conducted by the qualitative researchers. To minimize response bias and enhance credibility of the data, the RMSKS researcher/trainer was not present during the interviews. The interviewers elicited reflections on: (a) experiences using sonography with specific patients; and (b) general perceptions and reflections about using sonography in hand therapy. In *Data Analysis II*, the RMSKS researcher/trainer rejoined the two qualitative researchers for an iterative process of reading, re-reading, and coding the new transcripts. The research team discussed and reconciled

questions or inconsistences between the new transcripts and the previously analyzed data. Data were coded to determine categories to which specific statements and assertions belonged, and to explore the meanings suggested by these statements within the research and clinical contexts. Numerous iterations of data analysis occurred through multiple discussions among the study team, resulting in a final synthesis of the data into meaningful thematic units concerning the domains of competency and contextual considerations required for successful use of sonography in hand therapy.

Results

The results of this study illuminate the occupational therapists' experiences with training and implementation of musculoskeletal sonography, while elsewhere is reported their overall perceptions of how musculoskeletal sonography might complement rehabilitation practice (Roll, McLaughlin Gray, et al., 2015). The dominant theme of these data concerns *competency*, within three domains: technical, procedural and analytic. Closer exploration of the data indicated that competence in practice resulted not only from skills in each of the three domains but also through the *complex interaction* of the three domains. Moreover, implementation of sonography took place within specific social and institutional *contexts of practice* (Figure 1).

Competencies

Competency Domains—After the training period, the therapists experienced challenges while implementing sonographic imaging with their patients. The data exposed the therapists' awareness of specific areas in which they needed to become more proficient. T2, who had assisted in the design of the first phase of the research, articulated three areas of competency that she considered central to integrating sonography in her practice:

> These three [competencies]…are pivotal in learning to use musculoskeletal ultrasound. The first is the technical aspect, learning to operate the machine; the second is…figuring out what structures to scan, where to place the transducer, how to actually get the image quality that you want; and then the third is…being able to read the information that you've gathered. (T2)

This comment by T2 provided an insightful conceptual framework to organize the data in the study. During *Data Analysis II*, the researchers formalized and defined these domains as *technical, procedural and analytical competency*, finding them to be useful and reasonably exhaustive of the contents of the data set.

Technical competencies primarily related to the operation of the machine itself; specifically, adjusting settings, capturing and storing images and videos, positioning the transducer, and changing imaging modes. As an example, early in the implementation process, Therapist 1 (T1) expressed a desire for more training and practice in "the buttons…how to just set a person up and take the scans, pictures and video." She described her challenges with these various functions:

> I got confused at saving an image versus video and pulled out my notes. I think I did Doppler one time but not sure…if it doesn't follow the exact scenario I don't know what to do. So when the screen [froze], I didn't know what to do. (T1)

Over time, new technical challenges arose as the therapists learned the capabilities of the equipment and became more adept at assessing the quality of the images taken. For example, T2 remarked, "I know how to adjust settings, but the adjustments don't always seem to help image clarity." The therapists also struggled with technical aspects related to interfaces among themselves, the patients and the equipment. There were concerns about body mechanics and ergonomics, as well as the safety and comfort of patients when utilizing the ultrasound. One therapist noted "a lot of twisting and bending to prevent twisting and bending of the patient" (T2), while the other experienced "mild soreness" (T1) due to awkward neck rotation to look at the screen and difficulty sustaining grasp on the transducer for the duration of the scan.

The second competency domain, *procedural*, encompassed, yet went beyond, technical competencies and involved deciding which structures to scan and how to capture a high quality image of those structures. Given her more than 20 years of experience treating the hand and upper extremity, T1 remarked that she "[likes] to think [she's] good at knowing what to scan." Nevertheless, a challenge arose in the transition from that initial decision to the final product of a high quality image or video. She described her efforts toward acquiring this procedural competency:

> I bought an ultrasound book just because I need to look at it and study it a little bit more. …looking at their case studies, what was confusing to me was, I need to see normal and abnormal and they were just going through normal…that's just a teaching style and that's how the book presented it, and I understand that now, but at first…you know, I can't tell you. (T1)

The other therapist remarked on how this became evident as soon as she began to implement the technology in the clinic: "Once we got the ultrasound in the clinic we started recruiting patients pretty quickly and so we were immediately jumping into the abnormal and I was realizing that, first off, I didn't really know what to expect with the abnormal" (T2). The development of procedural competency also involved a process of prioritization by both therapists. One therapist described a particular patient stating that there was "so much involved, [she] had trouble deciding where to start/what to look for" (T2). With complex cases, identifying structures of interest seemed to be only the first step. One therapist noted that she "would have liked to look for scar adhesion during limited [movements], such as thumb [abduction and extension with forearm supination/pronation], but had difficulty doing so" (T2). Executing a scan to capture high quality dynamic images remained a challenge beyond simply identifying structures.

Analytical competency, the third domain identified in the therapists' responses, included accurate reading of images obtained – a more sophisticated (diagnostic) differentiation between normal and abnormal – along with incorporation of this knowledge into intervention planning. One therapist noted, "I'm still trying to figure out what I'm seeing internally" (T1). The other therapist commented:

> Even once I got to the point where I was able to get a good quality image, reading it was difficult because there's just, I felt like I didn't have the experience and I hadn't seen the number of scans to fully understand what I was seeing (T2).

She expressed her ongoing struggles with making sense of the images:

> In terms of evaluating what I'm seeing, I'm still struggling…. I think now I can see it [the pathology] once I've been told, but we aren't seeing the same thing repeatedly so each time I do a scan it's something new I have to look for, and so I'm back at square one with not knowing how to evaluate the image. (T2)

Both therapists identified the need for increased familiarity with identification of abnormal structures. T2 summarized this the best in stating, "I definitely feel like I would have liked to see a lot more normal anatomy on ultrasound images and a lot more—much, much more—pathological images."

Interaction among Competency Domains—The therapists' experiences with implementing sonography revealed that the competency domains were not mutually exclusive nor as discrete as expected, but rather interconnected in multiple different ways. At times, competencies appeared to be nested within one another. For example, one therapist noted that her confidence in mastering technical competencies was first necessary in order to move forward in confidently mastering procedural and analytical competencies:

> When you have limited experience and limited knowledge of how to use the technology and you know what you're expecting to see but you don't see it, my immediate response was to think I was holding the transducer wrong…and so I think [with] a lot of my images I spent so much time trying to make it look the way I expected it to see, that I didn't realize that for this specific patient it's not going to look anything like I expected it to look because there was so much involved. (T2)

In most circumstances, the process of competency development was concurrent across the three domains, requiring the therapists to master combining several competencies at once. In one instance, the therapist described her confidence in procedural competency, but expressed concerns with concurrent technical and analytical competencies (i.e., obtaining images and discussing images with the patient):

> I'm okay with what to scan, but while I'm scanning, I'm watching the transducer. I wanna make sure it's at 90 degrees and I feel like if I watch the picture then I'm not gonna be holding that transducer the way I want, so I'm not really watching the picture. So, even if I was to use it for [patient education], I would have to replay the picture…because I have to really watch where my hand is and what I'm doing. (T1)

Similarly, the other therapist commented that she "was really concentrating and had difficulty multitasking enough to educate" the patient (T2). Intersections among all three domains of competency are also evident in the following excerpt in which one therapist describes the complex process involved in mastering the machine, capturing appropriate structures, and interpretation of the images being obtained:

> I'm still trying to figure out what I'm seeing internally, and so I'm again back to, "Is there scarring?," "Is there collagen?," because the first day I saw her it was…

> very angry red puffy scar and it's calmed down a lot since then. So I don't know if that got picked up on these scans. I can't tell by looking at the pictures and I did compare right and left. I hit the screen funny at one point so I didn't know how to get out of that. I think it was Doppler. I'm not sure. Then I wanted to do a video and I don't know if that worked either, so, for me, it's just practicing and finding the buttons and things. (T1)

On-site mentoring during the implementation phase was crucial in competency development. Both therapists frequently looked to the RMSKS trainer for on-going feedback on their technique, instructions on operation of the machine, assistance in improving the quality of their images, and guidance in evaluating those images. In one of the weekly interviews, one participant remarked to the trainer:

> It might be good for you to be there when I do one [scan] and see if I'm holding the transducer the right way. I mean, I think I am, but I don't know. When I think I'm fanning, am I really fanning? If I'm seeing a dark spot, is that really fluid or anisotropy? … I wanna get better at it and I don't know if I'm even holding it the right way. (T1)

Speaking of her mentorship experience, the other therapist noted:

> Even once I got to the point where I was able to get a good quality image, reading it was difficult because I felt like I didn't have the experience and I hadn't seen the number of scans to fully understand always what I was seeing. And so meeting with [the trainer] has been really helpful for that because a lot of times I'll do a scan and have absolutely no idea what I've found, and then we sit down and he can identify exactly what I was scanning without looking at my notes and he can point out scar tissue that I hadn't noticed was there and the impact it's having on the tendon that I hadn't noticed. (T2)

Reviewing images with the mentor enhanced the therapists' understanding of proper technique as well as assisted them in analyzing the resultant images and problem-solving how scans could be done differently the next time. Moreover, beyond competency, the mentorship seemed necessary for validating reasoning, perhaps supporting the development of confidence within and across each competency domain.

> [The trainer] was going through the scan with the ganglion, the little ganglion cyst, and he said, "Well, I would have scanned it this way next", and I said, "Well, that's what I did." Then he said, "And then I would have scanned it…" "Oh, that's what I did!" You know, so, yes, my clinical reasoning did help me to see what was hanging up and where I was going [with my treatment]. (T1)

Context of Practice

Careful review of the therapists' experiences also revealed ways in which competency development and implementation were situated within the context of client-centered rehabilitation. Integration of this new technology required time, both the therapists' and patients', space and resources. Additionally, individual therapist and patient factors, as well as consideration of the complexities of integrating the imaging within a patient's overall

intervention plan, each contributed to the complexity of successful implementation. Finally, an unanticipated, yet frequently mentioned, factor involved the interprofessional rehabilitation culture. At times, contextual factors were constraints, hindering the use of sonography in situations in which the therapists ordinarily would have used it readily, while at other times they were simply viewed as challenges.

Time was the most frequently mentioned contextual factor and in several instances was reported to be a constraint. This factor was discussed in terms of the extended time the therapists required to complete a scan due to developing competencies, as well as the already limited time for the entire patient evaluation and intervention. Of these two constraints, the therapists' limited efficiency with the technology seemed paramount. In early stages, the time needed to perform a scan exceeded the therapists' expectations and interfered with implementation in some instances. One remarked:

> It takes me a while to position the probe correctly and I feel like I don't have time to localize all the structures I'm interested in…at the end of the hour I still feel like I couldn't cover everything that I wanted to cover" (T2)

The more experienced therapist recognized the need to increase efficiency in order to include sonography as a reimbursable service as part of the evaluation:

> I think we'd get better with practice – but for right now it's thirty minutes to an hour of scanning; and so if you got better with that you could say that's just part of your eval, and…pictures would be very powerful as documentation, too, if we started to use it for that purpose. (T1)

The other concurred, "It does take time, you know, to pull it out and set it up and if you only have half an hour treating somebody maybe you can't do it every time" (T1). She noted that incorporating sonography for patient education would also take more time: "just whipping out a book – you know where certain pages are that you want. That's faster…So this is a little bit more time, you know, the set-up, bringing it out, and putting the gel on…" (T1). Therapist 2 was in agreement and identified a possible solution:

> If we're using it for education I don't think we could spend more than 15 minutes on it, and even that may be too much. But, if you're using it for them to watch the muscle contract while they're doing exercises, then it would give you more time. (T2)

The individual characteristics of the therapists was a second important factor that influenced how each was able develop competency and integrate the sonography into her practice; specifically, experience and technical aptitude. Although neither therapist had prior experience with sonography, the novice therapist noted that proficiency with anatomy was essential to implementation:

> For this to be able to be implemented in a clinical setting, I think access to a machine and emphasis on the importance of practicing on oneself and anyone available is, is really important, and really, really being competent in the normal anatomy before scanning patients. (T2)

While the novice therapist had less experience with clinical reasoning and typical anatomy, she had an advantage with some of the technical competencies. As the more experienced therapist explained:

> It is simple technology, but I'm not a computer person…I think new generations are like, "oh, okay!" and they just do it. But I had to write down [the steps] and then sort of study….So it was a little more challenging for me but still doable…It's just frustrating that the machinery for me is a little more complicated, but I'm getting it, you know, I'll keep working on it and I'll get it. (T1)

Individual patient characteristics, both physical and psychosocial, also influenced the process of competency development, the nature of the competencies required, and the ways in which sonography was implemented. Depending on stage of recovery and clinical presentation, use sonography was limited for certain patients. For one patient T1 described, "Right now, there's an open pin site, so we wouldn't be able to do [sonography] yet," and for another: "I don't even know if we can scan her because she still has sutures." While these types of constraints were transient and would resolve as the patients progressed, other patients had physical conditions that did not prohibit, but certainly complicated sonography use:

> I'm on the fence because she's really hypersensitive so I don't know if the ultrasound will bother her… I noticed scarring right under that incision, so I don't know…I mean it's very pin-pointable, so I'm not sure…knowing that it's there, how that will guide me, and if it's painful, I don't want to do it, but I'll see, I'll see how she's doing with some of the little things I gave her. (T1)

Another patient reported having a sacral fracture, which necessitated evaluation/scanning in supine. The therapist noted that the patient's "hand was positioned on a pillow which didn't feel as stable as the table" (T2). Similarly, external rotation of the shoulder was contraindicated for another patient for whom the therapist noted: "sometimes there was artifact when I would try to work around his [limited] mobility" (T2). T1 described a situation in which she opted not to use the sonography at all because of where the patient was in his/her overall recovery and psychosocial adaptation:

> She has a lot of questions – so I think I need to just sit down with her and spend time just talking to her, versus scanning – and a lot of other medical issues which shouldn't affect this, but she needs *TLC*. (T1)

Although both therapists believed the sonography presented an untapped potential to positively influence patient engagement, the use of the sonography for patient education and motivation also raised concerns. Therapists worried about how patients might respond emotionally if ultrasound findings did not confirm progress or indicated poor potential for recovery. As T1 explained "Telling her that it's working means she can have hope and she can improve it. If it's not working, and the doctor said that's something he's repaired, I'd rather talk to the doctor about it" (T1). T2 had this experience with a patient:

> It was really interesting because my therapy up to this point has been focusing on trying to get that tendon gliding, to get more motion at the interphalangeal joints (IPs), and we've realized from this scan that progress there is likely pretty

> limited…and that brought up an interesting consideration. I was curious…how that is going to impact morale, because that can be really disheartening, especially since he understands and he knows. (T2)

This situation was unique in that the patient was a radiologist; thus, he was knowledgeable about the implications of his sonography. In both cases, the therapists felt a need to be able to manage patients' reactions to potentially disappointing findings.

In addition to managing patient response to disappointing or incidental findings, the therapists discussed these concerns within the context of interprofessional care. Specifically, the therapists observed the potential for sonography to reveal new information about the diagnosis made by a referring physician. As one therapist commented, "Really the physicians should be diagnosing, but to say 'you've got some scar tissue here after the incision,' I think we would be fine with saying that, or 'look there's swelling here,' and measure the swelling" (T1). However, concerns about navigating interprofessional relationships were more complicated when sonography revealed information that seemed contradictory to the physician's summary. T2 described the dilemma posed by identification of a ganglion when tenosynovitis was diagnosed:

> I would have to think about what I would do in that situation, 'cause there's not a whole lot you can do therapeutically for a ganglion, and we aren't allowed to use this tool diagnostically, so I don't really know how I would bring it to the referring physician's attention. (T2)

The other therapist described a similar dilemma, avoiding providing contradictory information to a patient:

> Well, the only thing is not being able to diagnose, not being able to say to that person, "okay this is going on", especially if you see that something's not working…So, we're looking at them…we can't diagnose, and…so I just educated her a little bit. But she did want to know "Is this one working?", and I said, "I can't tell." I just said that. (T1)

Together, these dilemmas reflected that assumed professional boundaries, especially regarding the diagnostic process, may become blurred when implementing sonography in a rehabilitation context.

Discussion

Recent professional literature suggests that allied health professionals might routinely complete sonographic scans to supplement their evaluations and enhance client-centered rehabilitative care (Estrach & Thompson, 2009; Roll, 2015; Teyhen, 2007). To advance this perspective, the goal of this study was to examine occupational therapists' experiences with training and implementation of sonography in upper extremity rehabilitation. Along with findings on how sonography might be used in this setting (Roll, McLaughlin Gray, et al., 2015), this study revealed three interrelated competencies and various complexities of integrating sonography into a rehabilitation context. These data illuminate three primary considerations for the implementation of sonography by rehabilitation providers: (1)

understanding the place of imaging within the complex dynamics of rehabilitation, (2) navigating interprofessional care and nuances of the evolving diagnostic process, and (3) developing appropriate post-professional training.

There is an on-going dialogue regarding the complex dynamics of the therapeutic processes involved in rehabilitation (Dijkers, Hart, Tsaousides, Whyte, & Zanca, 2014), which includes physical and temporal settings, equipment, frequency and type of cueing or patient assistance, activity performance and modification, treatment approaches, and interdisciplinary collaborations (Zanca & Dijkers, 2014). A key tenet of successful rehabilitation is the full integration of these dynamics or factors, along with the therapeutic relationship between the patient and practitioner (Kayes & McPherson, 2012), all of which can modify the delivery or effects of the rehabilitation process (Hart et al., 2014). Additionally, patient education and training are often coincident with activities, and treatments often address multiples goals at once. Given these therapists' experiences, when used in rehabilitation, sonography becomes part of the complex clinical dynamic *via* the evolving and intricate relationships among the technology, patient, and therapist. Moreover, as a mind-body intervention, the ability of sonography to show a patient his/her own tissues and pathology is potentially a very powerful active ingredient in the rehabilitation process (Dijkers et al., 2014).

In addition to influencing the complex dynamics of implementing care in rehabilitation, sonography played a key role in the therapists' iterative clinical reasoning. Specifically, implementation of sonography as part of the rehabilitation process enhanced the therapists' understanding of each patient's condition, and, in turn, revealed nuances of the evolving diagnostic process. As healing and recovery are not stagnant, neither is a patient's diagnosis. As such, a physician's diagnosis might be best viewed as an element of clinical history that can be further informed by sonographic imaging (Penny & Zachariason, 2015). Accordingly, the referring physician's diagnosis might be considered a working diagnosis and the sonography implemented in therapy becomes investigative imaging to identify specific tissue pathology (Baun, 2004; Penny & Zachariason, 2015). While the working diagnosis may be determined based on the patient's clinical signs and symptoms, establishing a sonographic diagnosis advances and refines the care process (Baun, 2004).

Not only does understanding specific tissue involvement advance clinical reasoning and treatment planning by the rehabilitation provider, sonography also provides a means for evaluating a patient's physiological response to treatment as he/she recovers. This ability to evaluate and document the healing process supports ongoing efforts to classify and understand the complex process and outcomes of rehabilitation (Dijkers et al., 2014). Despite the potential for sonography to support clinical reasoning, treatment planning, and evidence building, there is a need to identify best practices for interprofessional communication, and determine decision making authority throughout this evolving diagnostic process, especially related to negative or incidental findings.

Leveraging the advantages of sonography in rehabilitation and developing best practices for interprofessional care are dependent upon adequate training of rehabilitation providers. Although limited instruction on integrating imaging into a care plan are beginning to appear

within entry-level curricula in the therapeutic professions (Education, 2013), training in image acquisition and analysis is not widely included. With limited imaging instruction, the complex integration of all three domains of competency, as identified in this study, is likely not addressed at all. This study suggests that sonography training in the three interrelated competencies (i.e., technical, procedural, analytical) needs to also account for complexities unique to the rehabilitation context. Post-professional training structured around an iterative process of didactic learning, clinical practice experience and mentoring will likely be more effective than one that is strictly linear and sequential. The training should account for the ways in which sonography use by rehabilitation providers differs from other professionals. To maximize care, therapists must develop the ability to evaluate and interpret findings as part of the clinical reasoning and evolving diagnostic process (Baun, 2004) and navigate the complex dynamics of the therapist-patient-machine interface.

This research provides a preliminary investigation into the complexities involved in training non-physician practitioners, specifically occupational therapists, and implementing sonography as part of the client-centered rehabilitation process. Because this is an area of practice innovation not yet widely implemented and required participants who were able to dedicate time to both training and data collection, this study involved a limited number of participants. Moreover, because the qualitative data were obtained as part of a feasibility study with a pre-determined timeline, repeated interviewing was restricted to this timeline and may have limited the opportunity to achieve rich data saturation. Given these limitations, findings are not meant to be widely generalized, and may not fully represent experiences of all occupational therapists in this area of practice. Instead, these preliminary findings are meant to provide initial insight and a foundation upon which researchers and practitioners can build as the profession considers adopting the technology into practice. These findings can and should be further explored in more diverse and larger contexts in order to develop and explore models of training and mentoring, as well as identify best practices for clinical implementation of sonography to advance clinical reasoning and patient outcomes, while navigating the intersections among training competencies, rehabilitation dynamics, and interprofessional care. Once training and best practices are addressed, the effects of clinical sonographic use as a rehabilitation intervention on patient outcomes and exploration of patient experiences of the use of sonography in rehabilitation can be explored.

Conclusion

This research provides insight into the complexities of training and implementation of sonographic imaging into a rehabilitation context by non-physician practitioners to improve the health outcomes and well-being of patients. Given the experiences of therapists in this study, training for occupational therapists and other rehabilitation providers may differ from that of other radiology and physician providers due to the complex dynamics of the rehabilitation process. In addition to imaging competency development, training must consider clinical reasoning, evolving diagnostics, therapist-patient-equipment interactions, and provide extensive mentoring in context. Additionally, these data identify a need for best practices in navigating and maximizing the interprofessional rehabilitation environment. When appropriately deployed, the unique training and integration processes will afford further study on the piloting of real-time implementation and reimbursement and the effects

of point-of-care sonographic imaging on patient engagement and participation, as well as potential effects on improvement in health outcomes.

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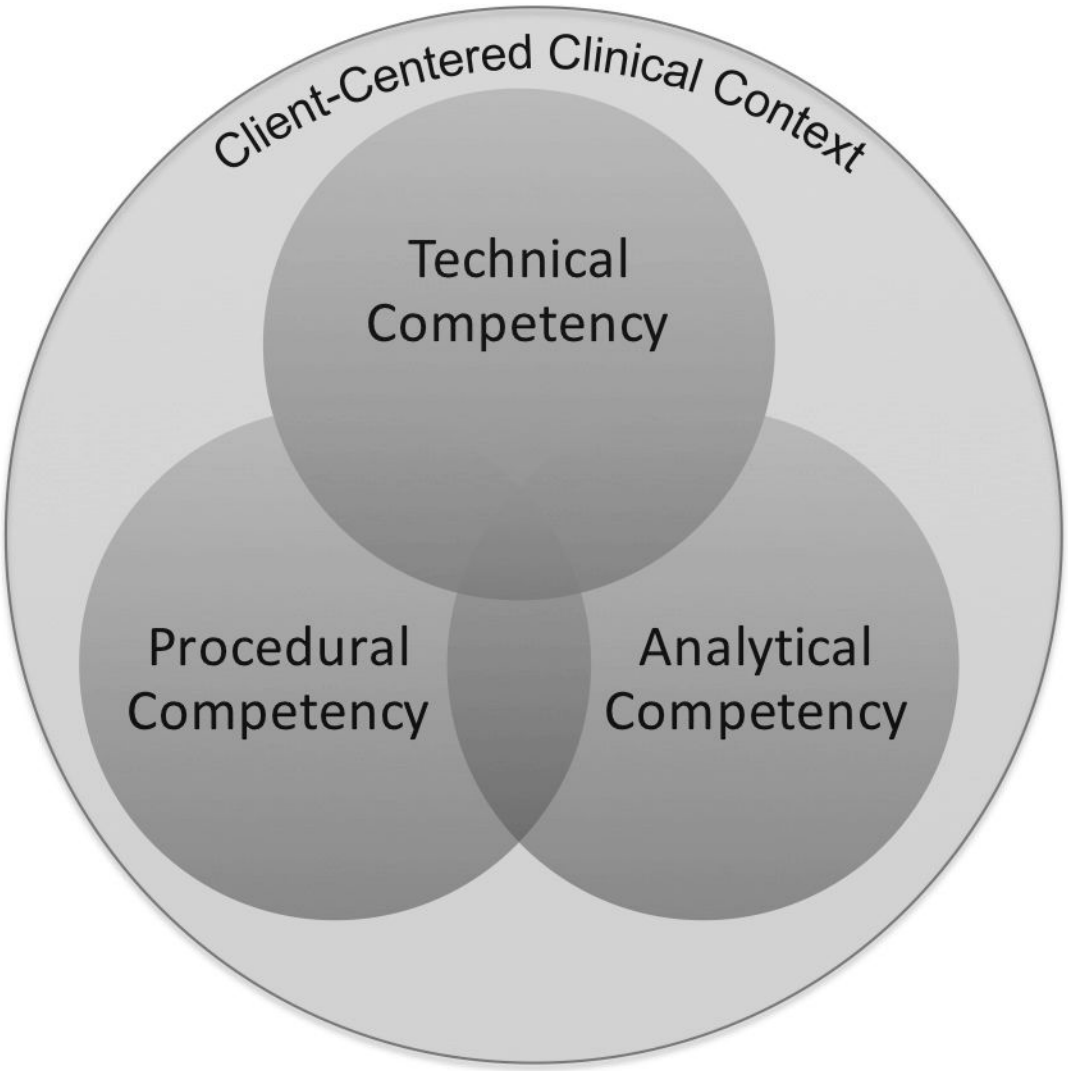

Figure 1.

Table 1

Participant (author) involvement in activities across each phase of the study.

		Therapist 1	Therapist 2	Trainer (SCR)	Qualitative Researcher 1 (JMG)	Qualitative Researcher 2 (GF)
TRAINING	Design of the Training Approach			X		
	Training	X	X	X		
	Design of Data Collection I Tools: • Questionnaires & Logs • Short Interview Guide		X	X		
DATA COLLECTION I	Completion of Questionnaires and Logs	X	X			
	Short Interviews with T1 and T2			X		
DATA ANALYSIS I	Review of Questionnaires and Logs		X	X	X	X
	Review of Short Interview Transcripts		X	X	X	X
	Design of Data Collection II Interview Guide				X	X
DATA COLLECTION II	Long Interviews with T1 and T2				X	X
DATA ANALYSIS II	Thematic Analysis			X	X	X

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Clinical utilization of musculoskeletal sonography involving non-physician rehabilitation providers: A scoping review

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Abstract

Background—Musculoskeletal sonography use in point-of-care physical medicine and rehabilitation is rapidly expanding, not only by physiatrists, but also by non-physician rehabilitation providers.

Aim—To evaluate the current range, extent and nature of literature and to identify emerging areas of evidence for the use of musculoskeletal sonography involving non-physician rehabilitation providers to guide research and clinical practice.

Design—Scoping Review

Setting—Inpatient, Outpatient, Other

Population—Musculoskeletal conditions

Methods—Five databases were searched and 578 unique abstracts were identified and screened for eligibility. Three raters independently read 68 full texts and 36 articles that reported on applied uses of sonography by non-physician rehabilitation providers were included.

Results—Eighteen studies described direct clinical use, primarily for outcomes measurement (n=12) or as a biofeedback intervention (n=10). Twelve laboratory studies were included that related morphology to patient reports or validated clinical interventions. Six additional studies, although not involving non-physician providers, were included as they presented potential valuable uses that were not noted in the other included studies, such as monitoring bone healing, tendon repair, and evaluation of idiopathic symptom reports or non-specific primary diagnoses.

Conclusion—This review indicates that non-physician rehabilitation providers use sonography for outcomes measurement and biofeedback interventions. Research is needed to evaluate effects of these uses on patient outcomes and to explore additional potential uses for clinical reasoning, treatment planning, and monitoring of tissue healing related to intervention.

Clinical Rehabilitation Impact—Implementation of musculoskeletal sonography by non-physician rehabilitation providers has the potential to be a critically advantageous addition to improve care.

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Keywords

ultrasonography; rehabilitation; therapeutics; musculoskeletal diseases

Introduction

Musculoskeletal sonography is a widely available, cost effective, portable, and noninvasive tool for use in disease prevention, evaluation, intervention, and management.[1–3] Although sonography has traditionally been used as a diagnostic tool, increases in access and technological advancements in the ability to conduct real-time, point-of-care evaluations of musculoskeletal structures have lead to a rapidly expanding utilization landscape. Musculoskeletal sonography is being implemented across numerous clinical contexts, by various service providers, and for a wide range of diagnoses. Based on a preliminary review of currently published literature, this rapidly expanding role of musculoskeletal sonography is summarized in Figure 1.

As part of this expanding role, there is an obvious trend of increasing use of musculoskeletal sonography in physical medicine and rehabilitation. Prior to 2001 as few as 6 publications involving physiatrists appeared in the literature, a number that increased exponentially in the ensuing decade to a total of 165 publications between 2001 and 2011.[4] Nearly half of the literature included the use of sonography by rehabilitation physicians for orthopedic conditions and peripheral neuropathies, with other uses in neurological, rheumatologic, and muscular conditions.[5] Based on these studies, physiatrists use sonographic imaging either as a diagnostic tool or for guiding interventions (e.g., needle injections or aspirations, biopsies).[5]

Parallel to the increasing use by physiatrists, there have been a growing number of studies discussing and evaluating the use of musculoskeletal sonography by non-physician rehabilitation providers. Physical therapists report the use of sonographic imaging as a means for measuring muscle dysfunction, documenting intervention outcomes and for providing feedback to patients,[6] as well as guiding rehabilitation decisions and treatment planning.[7] Similar clinical utilizations have been suggested for therapists and athletic trainers working with athletes.[8,9] Most recently, in addition to these uses, musculoskeletal sonography has been suggested as a means for tailoring interventions and contributing to biopsychosocial rehabilitative interventions by occupational therapists.[10,11]

Currently, clinical use of musculoskeletal sonography by non-physician rehabilitation providers may be quite limited—on average once or twice per day and less than 10 hours per month.[12,13] However, as sonographic equipment become increasingly automated, portable, and cost-efficient, training becomes more prevalent, and evidence-based literature for the use of musculoskeletal sonography in rehabilitation proliferates, uptake and utilization by non-physician providers is likely to rapidly increase. As this technology becomes increasingly adopted, it is vital to ensure that scientific inquiries and clinical practice advances are efficiently and effectively targeted. Therefore, the purposes of this scoping review were to evaluate the current range, extent and nature of existing literature and to identify emerging areas of evidence for the use of musculoskeletal sonography by non-physician rehabilitation

providers in order to provide a framework upon which future research and practice can be built.

Methods

In contrast to a systematic review that focuses on one specific question or examines the effect of a clinical intervention, a scoping review is a broad overview of existing research evidence used to map the range, extent and nature of a topic.[14] A scoping review can be completed to accomplish several objectives: to describe how strategies are currently applied within existing interventions, to identify the extent of available research evidence, to distinguish gaps in literature, and to clarify emerging areas of evidence.[14,15] Although the results of a scoping review do not evaluate evidence to directly inform best practices, the results can assist in shaping priorities for future clinical advancement and research investigations, especially in a novel area of interest.[16,17] Despite differences the objectives, a high quality scoping review will employ a rigorous, systematic methodology, equal to that of a systematic review or meta analysis. A full description of the rigorous methods completed as part of this scoping review follows.

All literature published between January 1, 2000 and June 30, 2014 was searched via PubMed, CINAHL, SPORTDiscus, PsycINFO and BIOSIS abstracts. In an attempt to ensure that the full scope of available literature was identified, three sets of broad and general search terms were combined, including: “sonography, ultrasound, or ultrasonography,” “musculoskeletal,” and “rehabilitation, therapy, or therapeutics.” The searches were limited to human studies, written in English language. Duplicates were removed and all abstracts were screened to determine their eligibility based on three primary inclusion criteria: (1) use of musculoskeletal sonography, (2) by non-physician rehabilitation providers or within a physical rehabilitation context, (3) for a rehabilitation-related diagnosis. For purposes of this review, non-physician rehabilitation providers were identified as athletic trainers or sports therapists, occupational therapists, physical therapists or physiotherapists, and speech therapists. Rehabilitation related diagnoses were defined as any musculoskeletal or neurological disorder that would be treated within the scope of practice for any of the aforementioned providers.

At least two reviewers independently screened all abstracts to determine relevance to the research question and the primary inclusion criteria. To minimize bias and ensure eligibility screening was not too restrictive, abstracts identified as meeting the inclusion criteria by at least one reviewer were marked for full-text review. A hand search was conducted of the reference lists of all eligible full-text articles, and any title of a reference that was potentially relevant to the scoping review question was added to the full-text review. Each full-text article was independently juried by at least two reviewers. Disagreement on final inclusion of any article was discussed and consensus among the reviewers was required for final inclusion a study in the synthesis. Given the goals of this scoping review to describe the extent of current research, inclusion was not restricted by study design or level of evidence, and the overall quality of each manuscript was not evaluated. However, articles were only eligible to be included if the manuscript described applied research. Therefore, although

case studies were included, non-systematic reviews, expert opinions, descriptive/educational, and purely methodological reports were excluded.

The second and third authors completed data extraction from the final included articles and the first author completed final reliability checks of all extracted data. These data from each article included the study design, context (i.e., location and providers), and diagnosis. Articles were coded by the clinical service being provided from among those services identified and defined by the research team in figure 1. A summary of service descriptions were added as necessary for applied studies that were not clinic-based or did not fit into the a priori categories.

Based on increasing familiarity with the scope of literature as the review progressed, synthesis of the included studies into categories was completed in a generative, post hoc process through multiple consensus meetings among the authors. Consensus was reached to organize the included articles into three categories: (1) *Rehabilitation Context*: evaluation of direct clinical use by, or in conjunction with treatment by, non-physician rehabilitation providers; (2) *Research Context*: laboratory-based or research-specific evaluation of sonography by these providers, or (3) *Rehabilitation Related*: evaluation of highly relevant utilization of sonographic imaging, but no direct use by these providers. The extracted data from studies within each category are presented in three corresponding tables described within the results. Implications for future research and practice, as well as additional potential applications not discussed by the included studies, were discussed among the authors throughout the process, and all authors contributed to the discussion and conclusions that are presented at the end of this manuscript.

Results

The flow of studies through the review process is depicted in figure 2. The systematic data base searches resulted in a total of 773 records, 106 of which were identified as duplicates and 89 that did not have an abstract. The remaining 578 abstracts were screened for eligibility. Because broad search terms were used, there were a significant number of abstracts that did not meet the primary inclusion criteria (i.e., 515). Abstracts were primarily excluded due to a focus on applications of sonographic imaging that were beyond the scope of services typically provided by the providers of interest in this study. These applications included the use of sonographic imaging for making a primary diagnosis or for needle guidance, as well as studies only involving pharmacologic interventions. Studies for which sonographic imaging was used for patients with diagnoses outside the scope of rehabilitation (e.g., hyperthyroidism, pulmonary embolism), and studies reporting on thermal ultrasound versus sonographic imaging were also frequent reasons for abstract exclusion.

Full-text reviews were completed for 63 articles that passed eligibility screening, as well as 16 additional articles identified through the hand-search process. The primary reason for exclusion at the full-text phase was for manuscripts describing non-applied studies, such as descriptions of protocols, pictorial essays, non-systematic reviews and editorials (n = 29). Studies developing and validating sonographic methods, descriptive studies of normal or abnormal pathologic appearances, and other studies not meeting the primary inclusion

criteria were also excluded. Thirty-six studies were identified for inclusion and synthesized in three areas for reporting: Rehabilitation Context (n = 18), Research Context (n = 12), and Rehabilitation Related Studies (n = 6).

Musculoskeletal Sonography in a Clinical Rehabilitation Context

Eighteen studies describe use of musculoskeletal sonography in a clinical setting either directly by a non-physician rehabilitation provider or in conjunction with treatment by one of these providers (Table 1). These studies describe use of sonography for a variety of rehabilitation diagnoses, including muscle tears and sprains, shoulder/back pain, arthritis, and urinary incontinence. Physical therapists are the only non-physician rehabilitation providers noted as conducting sonographic imaging in clinical settings, and physicians or sonographers conducted the imaging in half of the studies. In most of the studies, musculoskeletal sonography was used to measure outcomes of the rehabilitative intervention (n=12) or as a means for providing biofeedback (n=10). The biofeedback interventions were used either for individuals with low back pain[18–25] or for pelvic dysfunction intervention in females with urinary incontinence.[26,27] In addition to these primary uses, three studies describe the use of sonography as part of the rehabilitation providers' clinical reasoning process to identify tissue pathophysiology related to the primary diagnosis and patient symptomatology, as a means to inform treatment planning and more effectively target rehabilitation interventions. As part of clinical reasoning, two studies were unique in that they used sonographic imaging to evaluate joints and musculoskeletal structures that may be secondarily involved in patients with non-musculoskeletal diagnoses. Specifically, these studies evaluated the causes or progressive changes that lead to shoulder pain in patients with hemiplegia due to a neurological condition.[28,29] Lastly, two studies indicated use of sonographic imaging to monitor and manage patient progress throughout the rehabilitation episode of care.

Musculoskeletal Sonography in a Rehabilitation Research Context

Twelve studies fitting the rehabilitation context were conducted in a research or contrived clinical setting (Table 2). Similar to those studies being conducted directly in a rehabilitation setting, physical therapists were most often the rehabilitation provider conducting the imaging within the study; however, one study in this group was conducted by an occupational therapist.[36] Primary utilization of sonographic imaging in these studies were to examine the relationship between symptoms, tissue morphology, interventions and patient outcomes (n=4); discriminating between patients and controls (n=3); and validating clinical evaluation and intervention techniques (n=5). Studies evaluating various relationships between morphology and symptoms, as well as those determining differences between patients and controls covered a variety of diagnoses of the upper extremities (e.g., epicondylitis,[37,38] carpal tunnel syndrome[36]) and lower extremities (e.g., patellar tendonopathy[39,40]). Sonographic imaging was used to validate clinical provocative tests for supraspinatus tears,[41] as well as evaluate the effects on tissue morphology for various biofeedback,[42,43] thermotherapy,[44] and kinesiotaping[45] interventions.

Additional Rehabilitation Related Uses for Musculoskeletal Sonography

Six additional studies were selected for inclusion into this report that, while not involving non-physician rehabilitation providers, meeting all other inclusion criteria were thus considered to be highly relevant to clinical rehabilitation services (Table 3). Three of these studies were conducted on patients with bone and joint disorders and the other studies involved the use of imaging for tendon disorders. These studies represent opportunities for additional exploration of possible utility by non-physician rehabilitation providers. Specifically, five of these studies provide evidence for advancing the use of sonographic imaging in the areas with limited current rehabilitation use, that is, clinical reasoning and treatment monitoring/management. Three studies provide value in examining the specific pathophysiology of tissues involvement in rheumatoid arthritis[48] and biceps tendonitis,[49] as well as Achilles tendonitis and retrocalcaneal bursitis in patients with psoriatic arthritis.[50] Two additional studies describe use for monitoring the progress of tissue healing. In one study, it is suggested that sonography can identify cortical union of bone fractures prior to radiographic studies.[51] Similarly, sonographic imaging may be useful in evaluating the progress and successful healing following flexor tendon repair in the hand.[52] Given these two studies, rather than waiting a pre-defined amount of time for healing to occur, the use of sonographic imaging to evaluate tissue healing in individual patients could have direct utility to assist non-physician rehabilitation providers in determining when to begin more aggressive therapeutic interventions.

Discussion

The purpose of this scoping review was to evaluate the existing literature and identify emerging areas of evidence for the use of musculoskeletal sonography by non-physician rehabilitation providers. Physical therapists are currently the primary non-physician users of sonographic imaging in rehabilitation contexts. Although the types of disorders evaluated varies widely across body segments, clinical utilization of musculoskeletal sonography is primarily focused on providing biofeedback to enhance the performance of exercises or as an outcome measure following intervention. Non-clinical studies are being widely conducted to evaluate relationships between patient symptoms and tissue morphology, to identify morphologic differences in patients versus healthy controls, and to validate various interventions. In addition to these emerging clinical applications, numerous opportunities to advance practice and clinical use of sonographic imaging by non-physician rehabilitation providers exist, specifically in areas of clinical reasoning and intervention monitoring and management.

The most widely studied and reported use of sonographic imaging by non-physician rehabilitation providers is as a biofeedback intervention. Multiple randomized controlled trials demonstrate improved exercise performance and positive outcomes for patients with low back pain.[21–24] While utilization for biofeedback has been well discussed in various non-systematic reviews,[6,10,54,55] the real-time, dynamic capability of musculoskeletal sonography may have additional implications in providing a more precise evaluation of a patient's condition.[56] Moreover, real-time point-of-care imaging provides an excellent opportunity for patient education.[11] Education and visualization of the structural changes

can enable a patient to gain more understanding and confidence, leading to improved adherence and enhanced intervention outcomes.

One of the most widely advancing areas for the use of sonographic imaging is in the evaluation and management of arthritic conditions. Two studies were included in this review with direct relevance to rehabilitation practice for individuals with rheumatoid arthritis.[48,53] There are a plethora of additional studies not included that support the use of sonographic imaging for evaluating and monitoring the progression of various rheumatologic disorders to assist the medical provider in tailoring therapeutic interventions[57–59] and support implementation of early or aggressive therapies that could significantly alter a patient's prognosis.[3,60] Although this literature primarily describes progress related to pharmacological interventions for these disorders, sonographic imaging could be useful in evaluating progression of inflammation or bone changes for patients participating in conservative therapeutic regimens.

An additional emerging use of sonographic imaging for the evaluation of postoperative healing to determine readiness for various aspects of rehabilitation is an exceptionally promising application for non-physician rehabilitation providers. The two studies included in this review provide convincing preliminary support for the use of sonographic imaging to identify when a bone fracture[51] or flexor tendon repair[52] has healed enough to begin aggressive therapy. Similarly, there is additional evidence that suggests sonography could play a vital role in monitoring the healing of other repaired tissues, such as postoperative rotator cuff repair.[61] In addition to direct healing of tissues, sonographic imaging can be helpful to identify the relationship of soft tissues to implanted orthopedic hardware.[62] Identification of hardware impeding the movement of soft tissues or a shift in the implanted hardware could be vital in identifying the specific cause of pain with movement during clinical interventions. Gaining this advanced understanding as part of the rehabilitation clinical evaluation or ongoing treatment management can impact clinical reasoning and lead to a significant alteration in treatment plans.

Additional methodological reports provide evidence that sonographic imaging by non-physician rehabilitation providers will continue to be an area of interest in clinical research. A prospective cohort study is underway that intends to use sonographic imaging as a means for developing a predictive model of recovery for patients with shoulder pain who are referred to physical therapy from primary care.[63] Evaluation of tissue elasticity using sonography has been proposed as a method to enhance palpation for the identification of fibrotic scar tissue and measurement of changes following manual interventions.[64] Similarly, clinically relevant sonographic protocols have been reported in the literature as precursor to therapeutic treatments of male chronic pelvic pain.[65–67] These are only a few examples of various areas of advancing research. Given the range of potential utilization, and current low-level evidence across the limited existing literature, there is a need for increased large-scale clinical studies to further evaluate the effects of sonographic imaging on patient outcomes.

Limitations

The scoping review protocol was not formally registered, but a full description of rigorous review protocol was included as part of this manuscript. Although rigorous and systematic methods were used to reduce bias in the search and inclusion process, analysis and interpretation of findings is limited by the choice to use a scoping review methodology instead of a systematic review design. A primary limitation of a scoping review design is that final inclusion decisions and data synthesis do not take into account overall quality or risk of bias within each study. Additionally, a scoping review is not intended to analyze or interpret statistical summary measures within or across the included articles. Thus, the articles selected for this review should not be used as evidence of clinical efficacy. Instead, this review provides a comprehensive, but general overview of available literature to guide further inquiry for the advancement of clinical practice and applied research related to the use of musculoskeletal sonography as part of the rehabilitation process.

Although a wide-range of expert opinion, non-systematic review, and methodological articles supporting the purpose of this paper were identified, these articles were excluded. Similarly, there were a significant number of laboratory-based studies conducted by non-physician rehabilitation providers that describe tissue morphologic changes with various types of exercises and activities, as well as descriptions of measurement reliability and imaging protocol development. Despite being excluded, each of these articles were read by the research team to ensure that any relevant applied citations were identified and screened for inclusion in this review, and that all conceptual ideas presented in each of these articles were adequately captured by the studies that were included. Finally, it is important to note that this scoping review describes academically published literature, which may not be fully representative of actual clinical practice.

Conclusions

Implementation of musculoskeletal sonography by non-physician rehabilitation providers has the potential to be a critically advantageous addition to effective care. Current literature indicates that clinically applied uses of musculoskeletal sonography by non-physician rehabilitation providers are primarily as a biofeedback intervention tool and for measurement of rehabilitation outcomes. Opportunities exist to explore additional utilization of sonographic imaging as an adjunct to clinical reasoning through enhanced understanding of tissue pathophysiology, as well as managing clinical progress through monitoring of the natural tissue healing process and observing changes based on interventions provided. Despite apparent usefulness, with exception of sonographic biofeedback, there is very limited literature examining the effects of rehabilitative sonographic imaging. Further studies are needed to explore models for implementation and effects on patient outcomes for various uses of sonographic imaging by non-physician rehabilitation providers.

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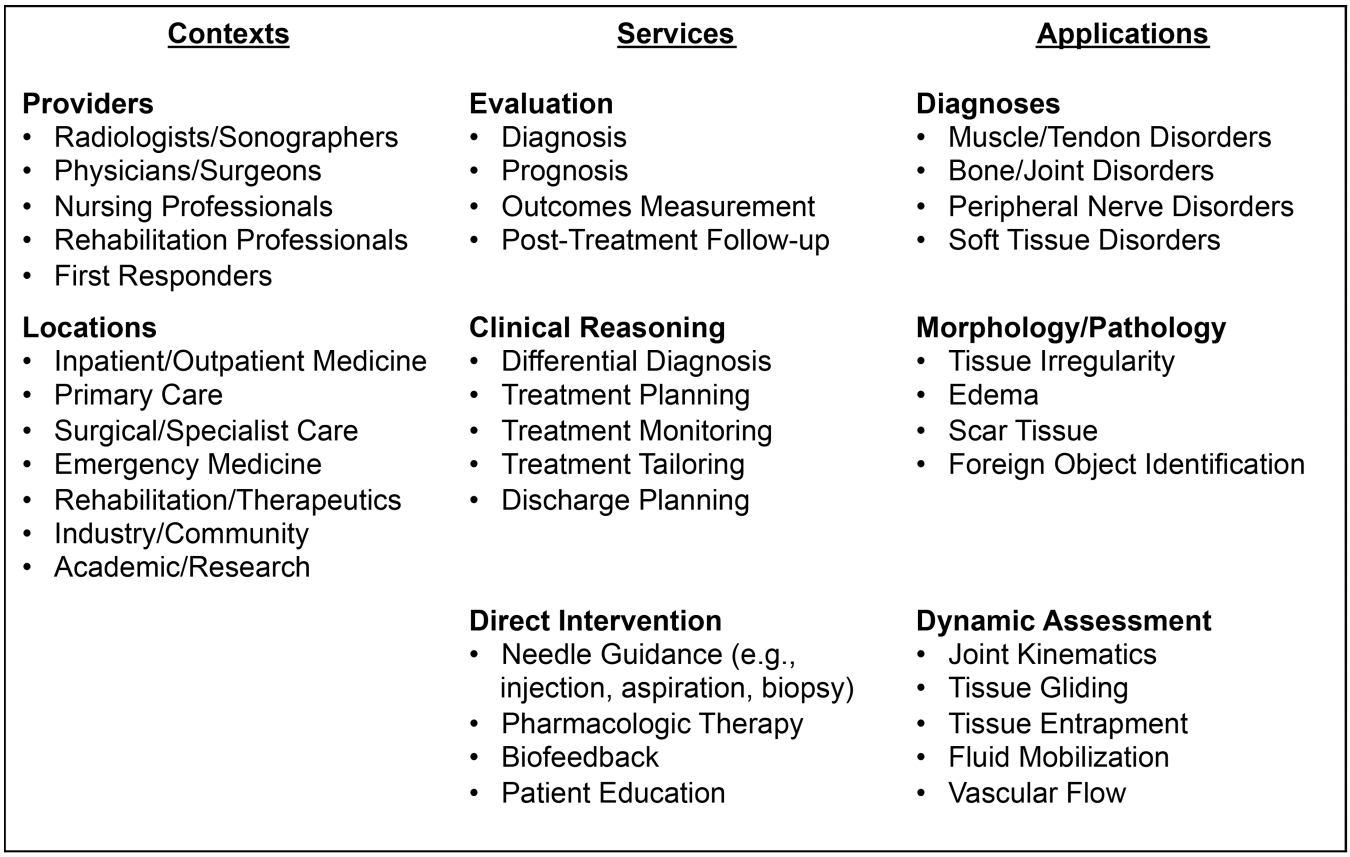

Figure 1.
Summary of the expanding role of musculoskeletal sonography in healthcare across various clinical contexts, services and applications

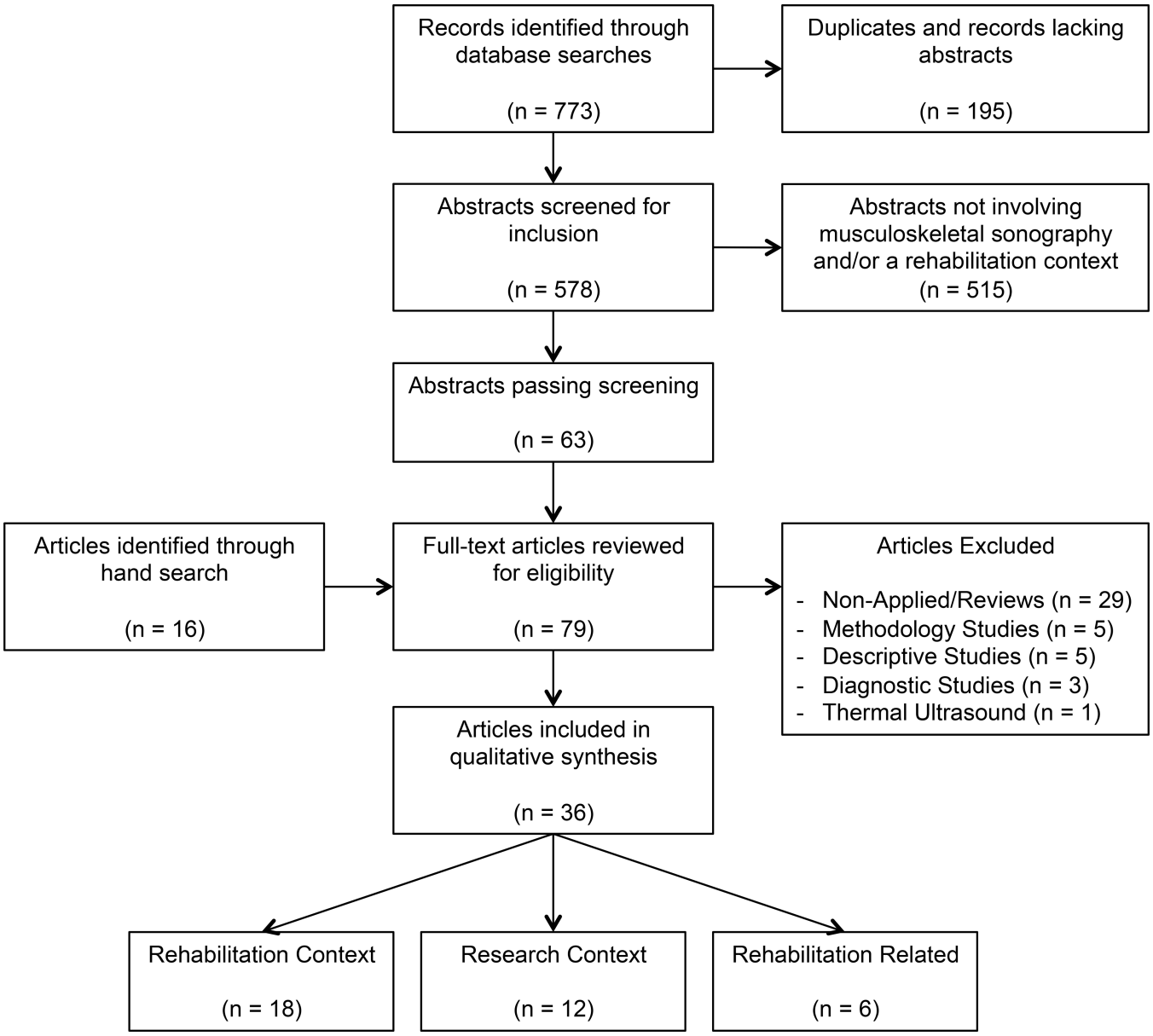

Figure 2.
Article selection flow chart from database searches to the final articles included in this scoping review.

Table 1

Studies in which musculoskeletal sonography is used directly in a rehabilitation setting or in combination with intervention provided by a non-physician rehabilitation provider. Studies are organized by the type of clinical use, study design and targeted clinical diagnosis.

Study	Study Design	Location	Sonographer	Diagnosis	Clinical Use of Sonography			
					Clinical Reasoning	Monitor/ Manage	Biofeedback Intervention	Outcomes Measure
Faltus 2012[30]	Case Study	Sports Clinic	Physician	Quadriceps Femoris Tear	X			X
Adunsky 2009[28]	Case Series	Inpatient Rehabilitation	Not Stated	Hemiplegic Shoulder Pain	X			
Hsu 2006[31]	Cross-Sectional	Outpatient Rehabilitation	Sonographer	Ankle Sprain	X			
Pong 2009[29]	Cohort Study	Inpatient Rehabilitation	Physiatrist	Hemiplegic Shoulder Pain		X		
Kermode 2004[18]	Case Study	Sports Clinic	Physical Therapist	Low Back Pain		X	X	
Raney 2007[19]	Case Series	Outpatient Rehabilitation	Physical Therapist	Low Back Pain			X	X
Hides 2001[20]	Case-Control	Sports Training Camp	Physical Therapist	Low Back Pain			X	X
Teyhen 2005[21]	RCT	Outpatient Rehabilitation	Physical Therapist	Low Back Pain			X	X
Ferreira 2007[22]	RCT	Outpatient Rehabilitation	Physical Therapist	Low Back Pain			X	
Worth 2007[23]	RCT	Outpatient Rehabilitation	Physical Therapist	Low Back Pain			X	X
Hides 2010[24]	RCT	Outpatient Rehabilitation	Physical Therapist	Low Back Pain			X	X
Lee 2011[25]	Cohort Study	Research Setting	Physical Therapist	Core Instability			X	X
Ariail 2008[26]	Case Study	Outpatient Rehabilitation	Physical Therapist	Urinary Incontinence			X	X
Dietz 2001[27]	Cross-Sectional	Urodynamic Clinic	Not Stated	Urinary Incontinence			X	
Aydog 2007[32]	Case Study	Sports Clinic	Physician	Tennis Leg				X
Hendry 2013[33]	RCT	Outpatient Rehabilitation	Sonographer	Juvenile Arthritis				X
Ohberg 2004[34]	Cohort Study	Sports Clinic	Radiologist	Achilles Tendinosis				X
Chon 2010[35]	Cohort Study	Rehabilitation Hospital	Radiologist	Congenital Torticollis				X

RCT, randomized controlled trial

Table 2

Studies in which musculoskeletal sonography is used to inform clinical practice through research not directly involving the rehabilitation process. Studies are organized by the type of use, study design and targeted clinical diagnosis.

Study	Study Design	Location	Sonographer	Diagnosis	Use of Sonography
Chourasia 2013[37]	Correlational	Research Setting	Radiologist	Lateral Epicondylosis	Correlate to Patient Reported Outcomes
Roll 2013[36]	Case-Control	Electromyography Clinic	Occupational Therapist	Carpal Tunnel Syndrome	Correlate to Patient Reported Function
Clarke 2010[38]	Cohort Study	Outpatient Rehabilitation	Radiologist	Lateral Epicondylitis	Predict Patient Reported Outcomes
Koenig 2010[39]	Cohort Study	Sporting Event	Rheumatologist	Anterior Knee Tendon Pain	Predict Pain After Activity
Yang 2005[46]	Case-Control	Research Setting	Not Stated	Hemiplegic Knee	Discriminate Between Patients and Controls
Kulig 2013[40]	Case-Control	Research Setting	Physical Therapist	Patellar Tendinopathy	Discriminate Between Patients and Controls
Cuesta-Vargas 2014[47]	Case-Control	Research Setting	Physical Therapist	Low Back Pain	Discriminate Between Patients and Controls
Forbush 2013[41]	Cross-Sectional	Research Setting	Physical Therapist	Supraspinatus Tear *	Validate Clinical Provocative Tests
Henry 2005[42]	RCT	Research Setting	Physical Therapist	Low Back Pain *	Evaluate Biofeedback Intervention
Van 2006[43]	RCT	Research Setting	Physical Therapist	Low Back Pain *	Evaluate Biofeedback Intervention
Kumamoto 2006[44]	Cohort Study	Research Setting	Physical Therapist	Muscle Tension *	Evaluate Thermotherapy Interventions
Luque-Suarez 2013[45]	RCT	Research Setting	Physical Therapist	Subacromial Impingement *	Evaluate Kinesiotaping Interventions

* Study evaluted healthy controls in preliminary testing meant to inform the translation to a targeted clinical population.

RCT, randomized controlled trial

Table 3

Studies in which musculoskeletal sonography was used for a diagnosis or purpose highly relevant to non-physician rehabilitation providers, but which were conducted in a non-rehabilitation setting. Studies are organized by the type of clinical use and study design.

Study	Study Design	Location	Provider	Diagnosis	Clinical Use of Sonography			
					Clinical Reasoning	Monitor/ Manage	Biofeedback Intervention	Outcome Measure
Micu 2013[48]	Cross-Sectional	Rheumatology Clinic	Rheumatologist	Arthritic Conditions	X			
Chen 2011[49]	Cross-Sectional	Physiatry Clinic	Physiatrist	Biceps Tendonitis	X			
Balint 2000[50]	Case Study	Rheumatology Clinic	Rheumatologist	Achilles Tendonitis & Retrocalcaneal Bursitis	X	X		
Dudkiewicz 2009[51]	Case Series	Outpatient Rehabilitation	Sonographer	Long Bone Fracture		X		
Puippe 2011[52]	Cohort Study	Outpatient Rehabilitation	Radiologist	Flexor Tendon Repair		X		
Perricone 2012[53]	Cohort Study	Rheumatology Clinic	Rheumatologist	Rheumatoid Arthritis				X

Brief Report

Exploring Occupational Therapists' Perceptions of the Usefulness of Musculoskeletal Sonography in Upper-Extremity Rehabilitation

Shawn C. Roll, Julie McLaughlin Gray, Gelya Frank, Monique Wolkoff

MeSH TERMS
- hand
- occupational therapy
- patient care management
- qualitative research
- ultrasonography

OBJECTIVE. To identify the potential utility of musculoskeletal sonographic imaging in upper-extremity rehabilitation.

METHOD. Two occupational therapists in an outpatient hand rehabilitation clinic were recruited by convenience, were trained in the use of sonography, and implemented sonographic imaging in their clinical practice. Qualitative data were obtained during and after the implementation period by means of questionnaires and interviews. Data collection, analysis, and interpretation were completed in an iterative process that culminated in a thematic analysis of the therapists' perceptions.

RESULTS. The data indicate four potential areas of utility for musculoskeletal sonography in upper-extremity rehabilitation: (1) mastering anatomy and pathology, (2) augmenting clinical reasoning, (3) supplementing intervention, and (4) building evidence.

CONCLUSION. Numerous potential uses were identified that would benefit both therapist and client. Further exploration of complexities and efficacy for increasing patient outcomes is recommended to determine best practices for the use of musculoskeletal sonography in upper-extremity rehabilitation.

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Sonography is an imaging modality that provides real-time, dynamic views of anatomical structures in a pain-free manner without exposure to radiation. Sonographic technologies have been rapidly advancing, leading to smaller, more portable equipment that requires minimal user–machine interface while providing good resolution of small, superficial structures. Increased ease of use, along with enhanced imaging, has prompted an increase in point-of-care use of sonographic imaging for musculoskeletal conditions by nonradiology providers. Specifically, evidence of the use of sonographic imaging in physical rehabilitation settings is growing. For example, therapists are using sonography to improve clinical evaluations of painful shoulders in patients with hemiplegia resulting from stroke (Huang, Liang, Pong, Leong, & Tseng, 2010), to document outcomes of therapeutic interventions for patients with spinal cord injuries and cerebral palsy (Dudley-Javoroski, McMullen, Borgwardt, Peranich, & Shields, 2010; Lee et al., 2013), and as a biofeedback intervention tool for pelvic floor disorders in women and patients with low back pain (Ariail, Sears, & Hampton, 2008; Herbert, Heiss, & Basso, 2008).

Although increasing evidence has suggested that musculoskeletal sonography has numerous rehabilitation applications, no studies have evaluated the use of sonographic imaging by occupational therapists for the rehabilitation of acute orthopedic hand conditions. In addition, no qualitative studies have explored the use of sonographic imaging in the rehabilitation context. Therefore, we designed this study to explore how occupational therapists use sonography in clinical practice, to identify additional potential uses for sonographic imaging by occupational therapists, and to inform future research

regarding the integration of imaging into practice.

Method

Study participants were 2 occupational therapists providing services in an outpatient hand rehabilitation clinic. Recruitment was based on the therapists' availability, willingness to participate in training, and access to clients. Therapist 1 (T1) was a certified hand therapist with >25 yr experience, and Therapist 2 (T2; author Wolkoff) was an entry-level occupational therapist completing her doctoral residency. In addition to participating in the research, T2 assisted in the initial steps of data analysis; however, to minimize bias, her researcher role was eliminated in subsequent phases, in which data were analyzed and interpreted by the other authors. The institutional review board of the academic center approved this study, and the therapists and their clients who received sonographic imaging provided informed consent. Rigorous qualitative methods were used to ensure trustworthiness (Lincoln & Guba, 1985; Patton, 2002), and the authors' involvement in research activities is summarized in Table 1.

Each therapist was trained in sonographic imaging by the study's lead author and primary investigator (Roll), who is both a registered and licensed occupational therapist and a sonographer registered in musculoskeletal sonography. Twenty-eight hours of training was provided across twelve 2- to 3-hr sessions over 4 mo. Training included basic principles of sonography, equipment operation, image acquisition, and identification of anatomic structures of the distal upper extremity. The therapists practiced with the sonographic equipment on an intermittent basis for 1 mo before implementing the imaging with clients. Over a 3-mo period, clients were recruited by convenience as long as they did not have open sores or wounds, were older than age 18 yr, and spoke English. Sonographic imaging was completed with a Venue-40 point-of-care sonography machine (GE Healthcare, Milwaukee, WI) after completion of the initial and discharge evaluations for each recruited client.

During the implementation period, data were obtained from the 2 therapists using a questionnaire and brief semistructured interviews. The questionnaire was developed by the lead author (Roll) specifically for this study and was used as a means of cuing the therapists to think about various aspects of their experience with the sonographic imaging process. The questionnaire included a wide range of open-ended questions regarding confidence with the sonography, factors that promoted or challenged the use of the sonography, and the usefulness of imaging for the individual client. Each therapist completed the questionnaire at the conclusion of every sonographic scan. The lead author conducted semistructured interviews lasting approximately 15 min every 2–3 wk, resulting in a total of five brief interviews. In these interviews, the therapists were asked to expand on the benefits of and barriers to using sonography that they had reported on the questionnaires.

As is customary in qualitative research, the interpretive process of data analysis was recursive with data collection (Creswell, 2007). After initial data collection, we individually reviewed and then collectively discussed the data from the questionnaires ($N = 10$) and transcripts of the brief interviews ($N = 5$) to identify patterns in the data. Rather than fitting the data to themes developed a priori, we used an open approach to coding, and the fourth author (T2, Wolkoff) drafted a summary of these preliminary findings. On the basis of this framework, the two qualitative researchers who were not involved in previous data collection developed a semistructured interview guide and conducted an individual follow-up interview with each therapist. Follow-up interviews lasted approximately 1 hr and engaged the therapists in open-ended discussion in two broad domains: (1) their experiences using sonography with their clients and (2) their perceptions more generally about uses for sonography in upper-extremity rehabilitation.

After reviewing transcripts of the follow-up interviews, the two qualitative researchers met to further collapse and refine the themes relating to the use of sonographic imaging in upper-extremity rehabilitation. The refined themes were discussed with the lead author, and the research team conducted a comprehensive review of all data sources to ensure the emerging themes were well supported throughout. The second author (Gray), a qualitative researcher, reread and recoded all data in relation to the emerging themes agreed on by the research team. The recoded data were synthesized into manuscript form, and all authors met numerous times to review and discuss the written findings. Using an iterative process, the synthesis of findings was edited by each author until consensus was reached on the meaning and overall implications of the data.

Table 1. Participant (Author) Involvement in Study Activities

Activity	T1	T2 (MW)	Trainer (SCR)	Qualitative Researcher 1 (JMG)	Qualitative Researcher 2 (GF)
Training	X	X	X		
Data collection and instrument design		X	X		
Brief interviews with T1 and T2			X		
Preliminary data analysis		X	X	X	X
Design of follow-up interview guide				X	X
Follow-up interviews				X	X
Final thematic analysis			X	X	X

Note. GF = Gelya Frank; JMG = Julie McLaughlin Gray; MW = Monique Wolkoff; SCR = Shawn C. Roll; T = therapist.

Results

The therapists viewed sonography as a positive addition to their clinical practice. Four areas of perceived usefulness were identified: (1) mastering anatomy and pathology, (2) augmenting clinical reasoning, (3) supplementing intervention, and (4) building evidence.

Mastering Anatomy and Pathology

Both therapists spoke of the usefulness of sonography as a means of advancing understanding and mastering knowledge of musculoskeletal anatomy, both general and

client specific. Most important, they indicated that sonography provided a means to study anatomy, specifically their own anatomy, in lieu of in a cadaver lab:

> This is another way to just scan yourself or your friend and see that a muscle is deeper down than another muscle, or see what happens when you flex. So I think it's just a great way for people to learn, even beyond 3-D models or videos, as opposed to flash cards or anatomy coloring books and things like that. (T1)

T1 also perceived that a novice therapist's anatomical learning could be accelerated by using sonography as a learning tool:

> Just observing [T2], who's a beginner, I think she picked it up really fast, and it was a great way for her to learn anatomy because you can definitely see superficial and deeper muscles, and you're seeing them as they're working. I would look at her and say, "Do you know how lucky you are instead of just looking at a still from a book?"

T2 agreed that sonography helped to enhance her mastery of basic anatomy:

> I did one scan of a client with a diagnosis of thumb extensor tenosynovitis. Initially I was looking for edema around the extensor pollicis longus. I was expecting to just see a black area around the tendon indicating some liquid. I found this circular black area in the joint space between the radius and the carpal bones. I thought I had found inflammation that was impacting her movement. We reviewed it with [the trainer] later. He scanned his own hand and showed that there is actually that amount of fluid in this joint space in normal anatomy.

In addition, the therapists found sonography useful in gaining a greater understanding of their clients' pathology and factors affecting recovery. T1 commented, "We have more information than we previously could have . . . about our clients by scanning them with sonography." T2 echoed, "As a new practitioner, I was nervous about feeling like I didn't know enough. The musculoskeletal sonography offers a deeper insight into the pathology, what's exactly happening." As T2 also noted,

> For cases where the diagnosis is not very specific, it's nice to be able to get some information about where the inflammation is occurring, or what type of inflammation it might be, because it could be inflammation within the tendon itself or just tenosynovitis around the tendon.

Both therapists noted their improved ability to determine how a repaired or injured tendon was functioning—specifically, whether it was intact and gliding properly. They also noted an improved ability to determine the location and causes of edema, the location and impact of scar tissue on surrounding structures, and the characteristics of a client's blood flow to the injured area. T2 noted enhancements in assessing the client's capacity for full recovery. She recalled scanning a client who had experienced a blast injury 20 yr earlier and had recently undergone multiple grafts and revisions to his flexor digitorum profundus:

> We were curious whether there is any glide of the tendon, and we were able to scan and see that the tendon really ends and turns into scar tissue at the proximal phalanx. So there's no gliding of the tendon; the movement that we're seeing is purely the tendon pulling on the scar tissue. (T2)

Augmenting Clinical Reasoning

The therapists' enhanced understanding of typical anatomy and their clients' specific pathology directly informed, and often overlapped with, discussion of the usefulness of sonography for enhancing clinical reasoning and intervention planning. On the most basic level, sonography was perceived as helpful for differential diagnosis in cases in which the diagnosis was not very specific, especially when receiving referrals for nonspecific diagnoses, such as hand pain. The therapists also noted that sonography could help to determine the cause of limited movement or pain and to focus and guide intervention plans. For the client with the blast injury discussed earlier, the therapist described how her clinical reasoning and intervention planning were affected by the information gained from the sonogram:

> [Seeing the scarring] definitely changed how I'm going to approach treatment because treatment now is going to probably mostly focus on increasing his MP flexion and strengthening lumbricals. I don't think he has interossei. It's definitely going to have an impact on how I spend my time throughout therapy. (T2)

The therapists imagined how sonography could be useful throughout the episode of care. T2 put it this way: "When something new happens clinically, it would be nice to see what's happening physiologically, too." Finally, the dynamic capabilities of sonography could reduce frustration by allowing the clinician to link clinical observations and reports with dynamic tissue movements. T1 noted, "Usually a client will say, 'When I do [this] motion, it really annoys me.' [What] if we could scan that motion and see what's going on?!"

Supplementing Intervention

Regarding use in direct intervention, the therapists described sonography as a tool for client education and biofeedback. T1 envisioned using sonography to instruct clients about their condition "the way we pull out a textbook." Sonography, she reasoned, was potentially more helpful than textbook illustrations because it could show clients their own anatomy and pathology. Both therapists noted that sonography provided a dynamic, interactive method for educating clients about the structure and function of the hand that was not available with textbooks. The therapists frequently mentioned dynamic movement in relation to scar tissue and noted that it would be useful after internal fixations to show clients the exact placement of plates and screws to help them better understand restrictions on their movement.

The therapists further suggested that viewing internal structures of the hand with sonography could be a source of emotional support to the client. T1 envisioned

how using sonography to assist clients in witnessing their own healing process could help them understand what might be causing plateaus or setbacks in their progress:

> Right now when I work with clients, I'll pull out a picture from a book. But, how cool is it when it's your own hand, and it's your own hand moving, versus a picture in a book? So, I think motivation; visualizing your own healing and where you're stuck, I think, is very powerful.

T1 suggested that, through the use of sonography, clients may gain an increased understanding of what could be improved, and they might "have hope [that they] can improve." T2 noted that even the smallest details elucidated by sonography could be "encouraging for clients, because seeing that their tendon is moving, even if they don't see their finger moving, makes a big difference." In addition, viewing physiological evidence may have a potentially positive effect by validating a client's symptoms. T1 described a client who was distressed by not having a clear understanding of the reason for her persistent discomfort, which disrupted her daily occupations. Because the client did not have evidence to explain her experience, she imagined that people suspected her of malingering. Instead, sonography validated the client's otherwise inexplicable dysfunction and reassured her:

> It was just a little incision, and [she said] "It's really bothering me. I can't type. I can't go back to work. I can't hold the mouse. It's driving me insane." I think that was validating to say, "Yes, it is stuck underneath, and what you're describing is right." It calmed her anxiety to see pictures of her own hand and that I was spending time with her about it. (T1)

T1 summarized, "There's a big mind–body connection in educating the client this way." She envisioned leveraging this mind–body connection by providing sonographically guided biofeedback: "You could show the client, 'This is what has to move. Okay, it moved some. Do you see where it is stuck?'" In another instance, she noted,

> There's a lot more in health care that we're finding out that we have this big [mind–body] connection, so I try to bring that in with the people that I treat, and I think that [sonography] is just such a visual motivator. (T1)

Building Evidence

Because sonography allows the therapist access to details of the client's physiology related to injury and healing, it can also be useful for measuring outcomes, a crucial step in the process of evidence-based practice. One of the therapists discussed the potential for sonography to assist in understanding the effects of her intervention on a physiological level, which enhanced her observations and the client's report. The sonogram could inform her practice, she suggested, by confirming her clinical speculations about a client's condition and providing a means for monitoring client progress throughout care in relation to her interventions: "Seeing over time how exactly things are healing. Is the bone actually healing? What's happening to the structures right above that bone? With edema? Are the tendons freely gliding over [the bone]?" (T1).

According to this therapist, sonography offers a way to observe and measure tissue changes that otherwise cannot be seen: "I'm still really interested in how the collagen gets realigned. It'll be interesting to see how that looks in the end, because [the client] is doing better" (T1). She also envisioned using sonography in clinical studies to provide practice-based evidence for her interventions: "I would do it as a clinical study. Do our scar mobilization techniques make a difference? Does myofascial release work? That would help therapists know that this is a technique that works" (T1).

Discussion

The purpose of this exploratory study was to identify actual and potential clinical uses of musculoskeletal sonography in upper-extremity rehabilitation as perceived by occupational therapists and to identify areas for future research. On the basis of their experience in this study, the therapists envisioned that sonography could enhance therapists' clinical practice and enrich the rehabilitation experience for clients.

First, with regard to enhancing clinical practice, sonographic imaging advanced the therapists' own knowledge and understanding of anatomy and pathology. Sonography is increasingly being used as an educational method in gross anatomy courses to increase student understanding of anatomy (Dreher, DePhilip, & Bahner, 2014). As with its use in didactic student learning, anatomical mastery of both normal anatomy and pathology was advanced not only for the novice therapist but also for the experienced therapist.

Second, the therapists viewed sonography as a means to augment clinical reasoning, obtain data necessary for monitoring progress, and provide evidence as an outcome measure. For upper-extremity conditions, sonography has been used by rehabilitation providers to identify causes of shoulder pain in clients with hemiplegia (Pong et al., 2012), as well as to begin differentiating pathological presentation and severity for patients with lateral epicondylitis (Chourasia et al., 2013) and carpal tunnel syndrome (Roll, Evans, Li, Sommerich, & Case-Smith, 2013; Roll, Volz, Fahy, & Evans, in press). The therapists in this study mentioned that intervention planning could be enhanced by identifying the specific location and progression of pathological changes. The most common perceived uses included identifying blood flow and edema, observing the impact of scar tissue on tendon movements, and monitoring the dynamic interaction of tendons with plates and screws that were surgically placed.

In terms of the client's experience in therapy, the therapists discussed using sonography as an educational aid. Education is a vital component of rehabilitation (Seu & Pasqualetto, 2012); it serves to actively engage a client and allows the client to take more responsibility for his or her improvement through changes in habits of use and adherence to exercises. When using sonography in undergraduate education, anatomical learning benefits have been documented with as little as 10 min of basic instruction (Ivanusic, Cowie, & Barrington, 2010). Furthermore, like the therapists in our study, students indicated that the use of sonography to show living anatomy reinforced their learning and had advantages over the use of cadavers (Ivanusic et al., 2010). Although these studies were completed with

undergraduate students, the therapists in the current study noted that clients had similar experiences and reported increased understanding of their anatomy with only minimal orientation to the images. As such, sonography may be an effective and dynamic way to educate a majority of clients about their own anatomy as an alternative or as a supplement or complement to textbooks and models.

In addition to education, the therapists suggested that sonographic imaging might be useful as a biofeedback tool to improve muscle activation and movement patterns. Biofeedback using sonographic imaging has been successfully used to assist clients with low back pain to activate the correct muscles during exercises (Hides et al., 2010; Worth, Henry, & Bunn, 2007) and to encourage effective performance of exercises for female clients with pelvic floor disorders (Ariail et al., 2008; Dietz, Wilson, & Clarke, 2001). In addition to directly enhancing performance, these types of sonographic interventions increase understanding, attention, and awareness of normal and abnormal structures. Furthermore, understanding normal and abnormal movement of tissues during functional tasks, facilitated by sonographic imaging, may lead to improved individual mental practice and occupational performance outside the clinic.

The use of sonographic imaging as an education and biofeedback tool may leverage the mind–body connection to enhance healing and client outcomes. Evidence has suggested that mind–body techniques are useful for modifying pain appraisals, reducing anxiety, strengthening awareness of biokinetic processes, and increasing self-efficacy (Jensen, Day, & Miró, 2014; Vøllestad, Nielsen, & Nielsen, 2012; Wong, Chan, & Chair, 2010). Each of these factors can be tied to improved client engagement, motivation, and adherence to intervention plans, especially for clients who are already interested in learning about the therapy process (Moorhead, Cooper, & Moorhead, 2011). The therapists consistently reported positive client feedback and noted that clients were engaged in asking questions to further understand how their pathological condition was tied to functional movements and limitations. Given the literature and our results, sonography could contribute to improved efficiency, cost-effectiveness, and holistic mind–body care in rehabilitation (Dale et al., 2002).

The findings of this study are based on the experiences of 2 therapists who were recruited by convenience, were interested in learning to use sonographic imaging, and planned to implement imaging in clinical practice. Thus, the results are meant to be exploratory and not necessarily widely generalizable. Because this was an initial exploratory study of clinical utility, emphasis on evaluating the initial training process itself was minimal. Similarly, although we obtained data concerning constraints and challenges to integrating musculoskeletal sonography into clinical care, we have not emphasized these findings in this report. Deeper exploration of training methods (e.g., who provides training, duration and intensity of training), professional boundaries, and other challenges is necessary to ensure successful implementation. Finally, we did not explore or measure effects of the use of sonographic imaging on client outcomes. Rather, this article provides a foundation on which additional analyses and feasibility studies can be conducted to evaluate best practices for implementation and efficacy of musculoskeletal sonography in the rehabilitation of upper-extremity conditions.

Implications for Occupational Therapy Practice

The results of this study have the following implications for occupational therapy practice:

- Sonographic imaging may assist therapists in mastering anatomy and pathology, inform clinical reasoning, and improve the planning and delivery of interventions.
- Sonography may enhance client motivation and engagement in the treatment process through education and biofeedback.
- The inclusion of sonography in clinical practice may prove a viable tool for outcomes research and increase the evidence base for upper-extremity rehabilitation.
- Further studies are necessary to develop effective training models, identify best practices for implementation, and evaluate the relationship between the clinical use of sonographic imaging and client motivation, engagement, adherence, and outcomes. ▲

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Occupational therapists (OTs) generally **do not perform diagnostic ultrasound** in the traditional medical sense—such as evaluating internal organs, vascular structures, or pregnancy. Diagnostic ultrasound is typically performed by trained professionals like:

- **Sonographers**
- **Radiologists**
- **Physicians (MD/DO)**
- **Certain Physical Therapists or other healthcare providers with specific credentials and within scope, depending on the state/country**

But—there's a nuance for OTs:

Some **specialized OTs**, particularly in **hand therapy**, use **rehabilitative ultrasound imaging (RUSI)** or **musculoskeletal ultrasound (MSK-US)** as a **biofeedback or assessment tool**, not to make a medical diagnosis.

OTs may use ultrasound to:

- Assess **tendon gliding** or **nerve movement**
- Observe **muscle activation** patterns
- Guide **interventions** such as manual therapy or exercise
- Monitor **swelling**, **scar tissue**, or **foreign bodies** in superficial tissues

Scope of Practice:

Whether or not an OT can use ultrasound (even for non-diagnostic purposes) depends on:

- **State practice act or country regulations**
- **Employer policy**
- **Training/certification** of the OT
- **Intent of use** (biofeedback vs. diagnosis)

Key takeaway:

OTs cannot independently perform or interpret diagnostic ultrasound in most jurisdictions. However, they may use **point-of-care ultrasound (POCUS)** or **rehabilitative ultrasound** within their scope **if trained and permitted by law and policy**.

If you're considering incorporating ultrasound in an OT setting, I can help you research scope-of-practice guidelines for your state or country. Would that be helpful?

□ Two Categories of Ultrasound Use in OT:

1. Therapeutic Ultrasound (US):

This is **within scope** for many OTs, especially in outpatient rehab settings.

- Used for:
  - Tissue healing (e.g., post-surgical tendon repair)
  - Pain reduction
  - Increasing tissue extensibility prior to stretching
- Often included in OT education or as post-grad training
- Covered by many state OT practice acts and reimbursable in certain settings

2. Diagnostic or Imaging Ultrasound:

This is where it gets nuanced.

- **Traditional diagnostic ultrasound** (like evaluating a rotator cuff tear or diagnosing a DVT) is **not within OT scope**.
- However, a growing number of OTs—especially **Certified Hand Therapists (CHTs)**—are using **Rehabilitative Ultrasound Imaging (RUSI)** or **Musculoskeletal Ultrasound (MSK-US)**.

🧠 What is Rehabilitative or MSK Ultrasound in OT?

This is not used to "diagnose" but rather to:

- **Visualize tendon or nerve movement** (e.g., median nerve gliding in carpal tunnel)
- Observe **muscle recruitment and timing**
- Guide **clinical decision-making** for splinting, exercise, or manual therapy
- Educate patients by showing live tissue responses (e.g., edema changes)

Think of it like a **visual feedback tool**, not a medical diagnostic test.

📚 Training & Certification

OTs interested in using ultrasound for MSK visualization should pursue:

- **Post-professional courses** in MSK or RUSI
- Programs offered by:
  - **AIUM** (American Institute of Ultrasound in Medicine)
  - **Hands-on MSK ultrasound workshops**
  - **PT or OT-focused continuing ed providers** (e.g., HawkGrips, Hands-on Diagnostics)
- Certification isn't currently mandated, but **training is crucial** to avoid practicing outside your scope

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📜 Legal & Ethical Scope Considerations

Before integrating imaging into your OT practice:

- **Check your state's practice act** (Alaska, in your case)
- **Consult your facility's risk management**
- Ensure **proper documentation and informed consent** if using US imaging
- You must **not interpret** or report ultrasound images as a diagnosis

In Alaska, OT practice is governed by the **Alaska Board of Occupational Licensing**, and while therapeutic modalities are covered, diagnostic imaging is not explicitly included—so any use of imaging should be framed as **visual biofeedback, not diagnosis.**

💡 Practical Examples in Hand Therapy

Here's how OTs have used MSK ultrasound successfully (within scope):

- Assessing **trigger finger** mechanics
- Observing **adhesions post-flexor tendon repair**
- Monitoring **median nerve gliding** during manual therapy
- Guiding **orthotic fit** to avoid nerve/tendon compression
- Educating patients by showing how edema shifts during elevation or compression

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📄 Professional Guidelines & Position Statements

1. American Occupational Therapy Association (AOTA)

- While AOTA has not published a specific position paper on diagnostic ultrasound, it supports the **use of physical agent modalities (PAMs)** like **therapeutic ultrasound** when OTs have appropriate training.
- Relevant documents:
    - AOTA Physical Agent Modalities Fact Sheet
    - OT Scope of Practice

🎓 Continuing Education & Training Resources

2. Hands-On Diagnostics (HODs)

- Offers MSK ultrasound training and certification (primarily for PTs, but content can be adapted for OTs in hand therapy).
- Website: www.handsondiagnostics.com

3. SonoSim

- Offers ultrasound education with portable simulators.
- Good for learning **musculoskeletal anatomy and scanning skills**.
- Website: www.sonosim.com

4. AIUM – American Institute of Ultrasound in Medicine

- Offers evidence-based guidelines and MSK ultrasound courses.
- Membership gives access to webinars, practice parameters, and imaging protocols.
- Website: www.aium.org

5. International Society of Clinical Rehabilitation Specialists (ISCRS)

- Offers MSK ultrasound courses with a rehab focus.
- Though primarily for PTs, some content is applicable to OT use in hand therapy.
- Website: www.iscrs.org

6. Academy of Clinical Electrophysiology and Wound Management (ACEWM)

- A section of APTA, but offers strong MSK ultrasound research and guidance for rehab professionals.
- Their **Rehabilitative Ultrasound Imaging (RUSI) guidelines** are foundational in education.

📚 Key Articles and Research

7. Peer-Reviewed Literature

Here are some useful journal articles for evidence-based context:

- **Whittaker JL, et al. (2007).** *Rehabilitative ultrasound imaging: understanding the technology and its applications.*
  - *J Orthop Sports Phys Ther.*
  - DOI: 10.2519/jospt.2007.2350
- **Teyhen DS, et al. (2010).** *Utilization of rehabilitative ultrasound imaging in orthopaedic and sports physical therapy.*

    - *J Orthop Sports Phys Ther.*
- **Koppenhaver SL, et al. (2009).** *Applications of diagnostic musculoskeletal ultrasound imaging: part 1 and 2.*
    - Great clinical series published in the *North American Journal of Sports Physical Therapy*.

The Model Practice Act for Physical Therapy

A Tool for Public Protection and Legislative Change

Seventh Edition

Revised 2022(Original Printing 1997)

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Preface

The Model Practice Act for Physical Therapy: A Tool for Public Protection and Legislative Change (MPA) is the preeminent standard and most effective tool available for revising and modernizing physical therapy practice acts. The continuing movement to update physical therapy practice acts helps ensure that they provide the legal authority to fully protect the public while allowing for the effective regulation of the profession.

This is the Seventh Edition of the Model Practice Act. Differences from the Sixth Edition can be compared in Appendix A. The structure of the Model Practice Act has remained consistent and is a model worthy of use in all jurisdiction practice acts. The statute language has remained clear and understandable throughout each edition and will continue to influence greater uniformity in practice acts now and in the future.

Delegate Assembly motion DEL-02-07 encouraged each jurisdiction to review, improve and strengthen practice acts and to use the latest edition of the Model Practice Act as a resource in that task. Even where sections of existing jurisdiction law may differ from the Model Practice Act, there is much that can be learned from MPA model statute language and the commentary that can be applied to many regulatory situations or questions.

The Federation of State Boards of Physical Therapy welcomes recommendations relative to any aspect of *The Model Practice Act for Physical Therapy: A Tool for Public Protection and Legislative Change*. Recommendations may be sent to the Federation for consideration in later revisions that will be initiated by the Ethics and Legislation Committee. The committee remains a continuing resource for any jurisdiction contemplating practice act changes. The Federation invites your use of this Model Practice Act for Physical Therapy and pledges its resources for your ongoing support.

Acknowledgements

The Model Practice Act Task Force of the Federation of State Boards of Physical Therapy served from November 1994 until the completion of their task in March 1997. Acknowledgement and appreciation are extended to them, to Federation staff and to many others who reviewed an contributed comments on early drafts and on the field review. Acknowledgement and appreciation are also extended to the Ethics and Legislation Committee, which continues the work of the original task force by periodically updating and revising the Model Practice Act as needed. The Federation is also grateful to the many jurisdiction licensing boards and APTA chapters that have already used this tool to effectively modernize jurisdiction practice acts.

"Original Developers"
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Introduction

The Federation of State Boards of Physical Therapy was organized in 1986. Soon thereafter, discussion began about the feasibility of developing model language for physical therapy practice acts. It wasn't until 1994 that the FSBPT Board of Directors appointed an eight-member task force, and their work was completed in 1997 with the publication of *The Model Practice Act for Physical Therapy: A Tool for Public Protection and Legislative Change*.

Over decades the various physical therapy practice acts have contained functional and useful regulatory language but also some problematic language. Most jurisdictional practice acts had their origins in the 1950s and early 1960s, and amendments have turned some practice acts into cobbled-together collections of regulatory language that are very diverse in their approach to the basic board responsibility of protecting the public and regulating the profession.

The task force originally envisioned a model act that could be used cafeteria style to allow states to change a specific section of a practice act as needed. While the Model Practice Act can be used effectively this way, those who study this document will find a tightly constructed and integrated model for the regulation of physical therapy. The component sections of this model fit together well and complement other sections. Certain areas of this model act are indispensable from others and changes in one of these areas will require additional modification of a jurisdiction's practice act in other areas. The commentary sections of this Model Practice Act will identify important cross-links in statute language. Since 1997 many states have enacted large portions and, in some instances, nearly the entire Model Practice Act as their jurisdiction statute.

As regulatory changes are made in jurisdiction practice acts, the Federation suggests the use of terms and statute language as recommended in this model act. This underscores the importance of a "model" act and will help avoid further confusion of terminology and regulation from jurisdiction to jurisdiction and occasionally within the same practice act.

Contents

Model Practice Act Language

Introductory Notes

- This is the Federation of State Boards of Physical Therapy's model physical therapy practice act.
- The numerical references used with each paragraph are only for organizational purposes within this model act. Each jurisdiction should use a numbering system that conforms to its own statutory classification system.
- Bracketed areas throughout the Model Practice Act indicate optional language each jurisdiction should adapt to its own needs. For example, the use of [act] in this model is a drafting option for statutory references such as "chapter," "act," "section" or "law" used commonly in practice acts. Each jurisdiction should use the term applicable to its statutes. The optional [certificate] and [certificate holder] apply if physical therapist assistants are certified by a jurisdiction. However, if physical therapist assistants are licensed by a jurisdiction this particular bracket option would not apply. Other bracketed options are explained in the context of the paragraphs where they appear or in commentary.
- For jurisdictions that are members of the Physical Therapy Compact, additional language to this act may be considered. These recommendations are found in the commentary of this document. However, jurisdictions should be assured that the Physical Therapy Compact legislation grants the authority to the jurisdiction to be a fully participating member of the Compact.
- Several other documents are referenced throughout the Model Practice Act. A few of these are included in the Appendix. Others may be referenced on websites of the Federation of State Boards of Physical Therapy or the American Physical Therapy Association.

Physical Therapy Practice Act

[Include proper numerical statute reference, e.g., Chapter # and/or Title #]

Article 1: General Provisions

1.01 Legislative Intent

This [act] is enacted for the purpose of protecting the public health, safety, and welfare, and provides for jurisdiction administrative control, supervision, licensure, and regulation of the practice of physical therapy. It is the legislature's intent that only individuals who meet and maintain prescribed standards of competence and conduct may engage in the practice of physical therapy as authorized by this [act]. This [act] shall be liberally construed to promote the public interest and to accomplish the purpose stated herein.

1.02 Definitions

As specifically used in this [act], the following terms have the meanings set forth below, unless the context requires otherwise.

1. "Board" means the [specify the jurisdiction] board of physical therapy.

2. "Competence" is the application of knowledge, skills, and behaviors required to function effectively, safely, ethically and legally within the context of the patient/client's role and environment.

3. "Consultation" means a physical therapist seeking assistance from, or rendering professional or expert opinion or advice to, another physical therapist or professional healthcare provider via electronic communications, telehealth, or in-person.

4. "Continuing competence" is the lifelong process of maintaining and documenting competence through ongoing self-assessment, development, and implementation of a personal learning plan, and subsequent reassessment.

5. “Electronic Communications” means the science and technology of communication (the process of exchanging information) over any distance by electronic transmission of impulses including activities that involve using electronic communications to store, organize, send, retrieve, and/or convey information.

6. “Examination” means a national examination approved by the board for the licensure of a physical therapist or the [certification/licensure] of a physical therapist assistant.

7. “Jurisdiction of the United States” means any state, the District of Columbia, the Commonwealth of Puerto Rico, or any American territory.

8. “Nexus to practice” means the criminal act of the applicant or licensee [certificant] posing a risk to the public’s welfare and safety relative to the practice of physical therapy.

9. “Onsite supervision” means supervision provided by a physical therapist who is continuously onsite and present in the department or facility where services are provided. The supervising therapist is immediately available to the person being supervised and maintains continued involvement in the necessary aspects of patient/client care.

10. “Patient/client” means any individual receiving physical therapy from a licensee [or certificate holder] under this Act.

11. “Physical therapist assistant” means a person who is [certified/licensed] pursuant to this [act] and who assists the physical therapist in selected components of the physical therapy treatment intervention.

12. “Physical therapist assistant-patient/client relationship” means the formal or inferred relationship entered into by mutual consent between a licensed [certified] physical therapist assistant and a patient/client or their legally authorized representative established once the physical therapist assistant assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged or treatment is formally transferred to another practitioner or as further defined by rule.

13. “Physical therapist” means a person who is a licensed healthcare practitioner pursuant to this [act] to practice physical therapy. The terms “physiotherapist” or “physio” shall be synonymous with “physical therapist” pursuant to this [act].

14. “Physical therapist-patient/client relationship” means the formal or inferred relationship entered into by mutual consent between a licensed physical therapist and a patient/client or their legally authorized representative established once the physical therapist assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged, or treatment is formally transferred to another healthcare practitioner or as further defined by rule.

15. “Physical therapy aide” means a person trained by or under the direction of a physical therapist who performs designated and supervised routine tasks related to physical therapy services.

16. “Physical therapy” means the care and services provided in-person or via telehealth by or under the direction and supervision of a physical therapist who is licensed pursuant to this [act]. The term “physiotherapy” shall be synonymous with “physical therapy” pursuant to this [act].

17. “Practice of physical therapy” means:
    a. Examining, evaluating, and testing patients/clients with mechanical, physiological and developmental impairments, functional limitations, and disabilities or other health and movement-related conditions in order to determine a diagnosis, prognosis and plan of treatment intervention, and to assess the ongoing effects of intervention.

b. Alleviating impairments, functional limitations and disabilities; promoting health; and preventing disease by designing, implementing and modifying treatment interventions that may include, but not limited to: therapeutic exercise; needle insertion; patient-related instruction; therapeutic massage; airway clearance techniques; integumentary protection and repair techniques; debridement and wound care; physical agents or modalities; mechanical and electrotherapeutic modalities; manual therapy including soft tissue and joint mobilization/manipulation; functional training in self-care and in home, community or work integration or reintegration; as well as prescription application and, as appropriate, fabrication of assistive, adaptive, orthotic, prosthetic, protective and supportive devices and equipment.
c. Reducing the risk of injury, impairment, functional limitation, and disability, including performance of participation-focused physical examinations and the promotion and maintenance of fitness, health, and wellness in populations of all ages.
d. Referring a patient/client to healthcare providers and facilities for services and testing to inform the physical therapist plan of care.
e. Engaging in administration, consultation, education, and research.

18. "Restricted [certificate/license]" for a physical therapist assistant means a [certificate/license] on which the board has placed any restrictions and/or condition as to scope of work, place of work, duration of certified or licensed status, or type or condition of patient/client to whom the certificate holder or licensee may provide services.

19. "Restricted license" for a physical therapist means a license on which the board has placed any restrictions and/or conditions as to scope of practice, place of practice, supervision of practice, duration of licensed status, or type or condition of individual to whom the licensee may provide services.

20. "Supervision" means the process by which a physical therapist oversees and directs safe and effective delivery of patient care through appropriate verbal, written, or electronic communication. This may be accomplished with the physical therapist located onsite or remotely as deemed appropriate based on the patient/client needs.

21. "Telehealth" is the use of electronic communications to provide and deliver a host of health-related information and healthcare services, including, but not limited to physical therapy related information and services, over large and small distances. Telehealth encompasses a variety of healthcare and health promotion activities, including, but not limited to, education, advice, reminders, interventions, and monitoring of interventions.

22. "Testing" means standard methods and techniques used to gather data about the patient/client, including but not limited to imaging, electrodiagnostic and electrophysiologic tests and measures.

Article 2: Board of Physical Therapy

The Board shall have all of the duties, powers, and authority specifically granted by or necessary for the enforcement of this Act, as well as such other duties, powers, and authority as it may be granted from time to time by applicable law.

2.01 Board of Physical Therapy

A. The board of physical therapy shall consist of [seven] members appointed by the Governor. [Four] members shall be physical therapists who are residents of this jurisdiction, possess unrestricted licenses to practice physical therapy in this jurisdiction and have been practicing in this jurisdiction for no less than five years before their appointments. [One] member shall be a physical therapist assistant who is a resident of this jurisdiction and possesses an unrestricted [certificate/license]. The Governor shall also appoint [two] public members who shall be residents of this jurisdiction and who are not affiliated with, nor have a financial interest

in, any healthcare profession and who have an interest in consumer rights. The Governor shall, to the greatest extent possible, appoint individuals to achieve diversity on the board.

B. Board members shall serve staggered four-year terms. Board members shall serve no more than two successive four-year terms or for more than ten consecutive years. By approval of the majority of the board, the service of a member may be extended at the completion of a four-year term until a new member is appointed or the current member is reappointed.

C. The board may request the Governor remove any member of the board for misconduct, incompetence, or neglect of duty.

D. Board members are eligible for [compensation and/or] reimbursement of necessary expenses pursuant to [cite applicable statute relating to [compensation and/or] reimbursement] for attending each board meeting or representing the board in an official board-approved activity.

E. A board member who acts within the scope of board duties, without malice and in the reasonable belief that the member's action is warranted by law, is immune from civil liability.

2.02 Powers and Duties of the Board

The board shall:

1. Evaluate the qualifications of applicants for licensure [and certification].

2. Provide for the examination of physical therapists and physical therapist assistants.

3. Issue licenses [or certificates] to persons who meet the qualifications of this [act].

4. Regulate the practice of physical therapy by interpreting and enforcing this [act].

5. Have the authority to establish committees, advisory panels, and task forces to further the work of the board.

6. Adopt and revise rules consistent with this [act]. Such rules, when lawfully adopted, shall have the effect of law.

7. Meet at least once each quarter in compliance with the open meeting requirements of [cite applicable statute]. A majority of filled board member positions shall constitute a quorum for the transaction of business. The board shall keep an official record of its meetings.

8. Establish mechanisms for assessing the continuing competence of physical therapists to practice physical therapy.

9. Establish mechanisms for assessing the continuing competence of physical therapist assistants to work in the profession of physical therapy.

10. Establish and collect fees for sustaining the necessary operation and expenses of the board.

11. Elect officers from its members necessary for the operations and obligations of the board. Terms of office shall be one year.

12. Provide for the timely orientation and training of new professional and public appointees to the board regarding board licensing and disciplinary procedures, this [act], and board rules, policies and procedures.

13. Maintain a current list of all persons regulated under this [act]. This information includes the person's name, current business and residential address, email address, telephone numbers, and license [or certificate] number.

14. Provide information to the public regarding the complaint process.

15. Employ necessary personnel to carry out the administrative work of the board. Board personnel are eligible to receive compensation pursuant to [cite specific statute].

16. Enter into contracts for services necessary for enforcement of this [act].

17. Report final disciplinary action taken against a licensee [or certificate holder] to a national disciplinary database recognized by the board or as required by law.

18. Report information of alleged unlawful conduct by licensees [or certificate holders], unlicensed individuals, other healthcare providers, and entities to the appropriate county, jurisdiction, or federal authority.

19. Publish, at least annually, final adverse action taken against a licensee [or certificate holder].

20. Publish at least annually, board rulings, opinions, and interpretations of statutes or rules in order to guide persons regulated pursuant to this [act].

21. Participate in or conduct performance audits.

22. Have the authority to fully participate in a national Exam, Licensure, and Disciplinary Database as defined by rule.

23. Have the authority to obtain biometric-based information from every physical therapist or physical therapist assistant applicant for licensure[certification] and submit this information to the Federal Bureau of Investigation for a criminal background check.

24. Have the authority to determine and collect, at the time of new licensure [or certification] and licensure [or certification] renewal, a core set of data elements deemed necessary for the purpose of workforce assessment and planning. The data elements shall be used to create and maintain a healthcare workforce database. The Board may enter into agreements with a private or public entity to establish and maintain the database, perform data analysis, and/or prepare reports concerning the physical therapy workforce. The Board shall promulgate rules to perform duties pursuant to this [act].

25. Have the authority to require a licensee [certificate holder] to complete educational activities.

2.03 Disposition of Funds

(No model language is offered under this section heading. See *Commentary* for further information.)

Article 3: Examination and Licensure

3.01 National Examination

A. The board shall provide for a national examination within the jurisdiction.

B. To be eligible to sit for the national examination, the candidate must meet nationally recognized requirements that support the integrity of the examination and are further defined by rule.
   1. The physical therapist examination is a national examination that tests entry-level competence related to

physical therapy theory, examination and evaluation, diagnosis, prognosis, treatment intervention, prevention and consultation.

2. The physical therapist assistant examination is a national examination that tests for requisite knowledge and skills in the technical application of physical therapy services.

C. Candidates must agree to abide by security and copyright provisions related to the national licensure examination. If the board determines that an applicant has violated any of these provisions or engaged in or attempted to engage in any other conduct that subverts or undermines the integrity of the examination process or validity of examination results, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.

D. Any violation of security and copyright provisions related to the national licensure examination, subversion or attempts to subvert the national examination shall be reported by the board to the Federation of State Boards of Physical Therapy.

E. If the board determines that an applicant has engaged or has attempted to engage in conduct that subverts or undermines the integrity of the examination process, including a violation of security and copyright provisions related to the national licensure examination, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.

3.02 Qualifications for Licensure [and Certification]

A. An applicant for a license as a physical therapist shall:

1. Complete the application process including payment of fees.
2. Submit proof of graduation from a professional physical therapy education program accredited by a national accreditation agency approved by the board.
3. Pass a national examination approved by the board.
4. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

B. An applicant for a license as a physical therapist who has been educated at a school that has not been accredited by an agency approved by the board shall:

1. Complete the application process including payment of fees.
2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapists educated in an accredited entry-level program as determined by the board. Graduation outside the United States from a professional education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure educated at a school that has not been accredited by an agency approved by the board shall have:
   a. Graduated from a physical therapist education program that prepares the applicant to engage without restriction in the practice of physical therapy;
   b. Provided written proof that the applicant's school of physical therapy is recognized by its own ministry of education or other appropriate recognition agency;
   c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   d. Completed any additional education as required by the board.

3. Pass a board-approved English proficiency examination as required by the board as further established by rule.
4. Pass a national examination approved by the board.
5. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.
6. Submit to a criminal records check.
7. Complete supervised clinical practice as defined by rules with a restricted license.
8. Meet the requirements established by board rule if applicable.
9. Meet other statutory and regulatory requirements applicable to individuals licensed under this [Act].

C. An applicant for a [certificate/license] as a physical therapist assistant shall:

1. Complete the application process including payment of fees.
2. Submit proof of graduation from a physical therapist assistant education program accredited by a national accreditation agency approved by the board.
3. Pass a national examination approved by the board.
4. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

D. An applicant for a [certificate/license] as a physical therapist assistant who has been educated at a school that has not been accredited by an agency approved by the board shall:

1. Complete the application process including payment of fees.
2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Graduation outside the United States from an education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure educated at a school that has not been accredited by an agency approved by the board shall have:
   a. Graduated from a physical therapist assistant educational program that prepares the applicant to work as a physical therapist assistant;
   b. Provided written proof that the applicant's physical therapist assistant school is recognized by its own ministry of education or other appropriate recognition agency;
   c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   d. Completed any additional education as required by the board.
3. Pass a board-approved English proficiency examination as required by the board as further established by rule.
4. Pass a national examination approved by the board.
5. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.
6. Submit to a criminal records check.
7. Complete supervised clinical practice as defined by rules with a restricted license.
8. Meet the requirements established by board rule if applicable.
9. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

E. . An applicant for a [certificate/license] as a physical therapist assistant who has completed a United States Armed Services program of training not accredited by a national accreditation agency approved by the board shall:

1. Complete the application process including payment of fees.
2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Successful completion of a United States Armed Services program of training accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure who has completed a United States Armed Services program of training shall have:
   a. Completed a physical therapist assistant training program that prepares the applicant to work as a physical therapist assistant;
   b. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   c. Completed any additional education as required by the board.
3. Pass a national examination approved by the board.
4. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

3.03 Licensure [and Certification] by Endorsement

A. The board shall issue a license to a physical therapist who has a current unrestricted license from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

B. The board shall issue a license [certificate] to a physical therapist assistant who has a current unrestricted license [certificate] from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

3.04 Exemptions from Licensure [or Certification]

A. This [act] does not restrict a person licensed or certified under any other law of this jurisdiction from engaging in the profession or practice for which that person is licensed if that person does not represent, imply or claim that he/she is a physical therapist, physical therapist assistant, or a provider of physical therapy as defined in Article 1, 1.02.

B. The following persons are exempt from the licensure [certification] requirements of this [act] when engaged in the following activities:
   1. A person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's physical therapist education while under onsite supervision of a physical therapist.
   2. A person satisfying a clinical education experience under the onsite supervision of a physical therapist as required by the board.
   3. A physical therapist who is practicing in the United States Armed Services, United States Public Health Service or Veterans Administration pursuant to federal regulations for jurisdiction licensure of healthcare providers. If such person, while federally employed as a physical therapist, shall engage in the practice of physical therapy outside the course and scope of such federal employment, he/she shall then be required to obtain a license in accordance with this [act].
   4. A physical therapist who is licensed in another jurisdiction of the United States or credentialed to practice physical therapy in another country if that person is teaching, demonstrating or providing physical therapy services in connection with teaching or participating in an educational seminar of no more than 60 days in a calendar year.

5. A physical therapist who is licensed in another jurisdiction of the United States if that person is rendering advice or professional or expert to a licensed healthcare practitioner in this jurisdiction.
6. A physical therapist who is licensed in a jurisdiction of the United States or credentialed in another country, if that person by contract or employment is providing physical therapy to patients/clients affiliated with or employed by established athletic teams, athletic organizations or performing arts companies temporarily practicing, competing, or performing in the jurisdiction for no more than 60 days in a calendar year.
7. A physical therapist who is licensed in a jurisdiction of the United States and who enters this jurisdiction to provide physical therapy during a declared local, jurisdictional or national disaster or emergency. This exemption applies for no longer than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.
8. A physical therapist licensed in a jurisdiction of the United States who is forced to leave his/her residence or place of employment due to a declared local, jurisdictional or national disaster or emergency and due to such displacement seeks to practice physical therapy. This exemption applies for no more than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.

C. A physical therapist assistant who is [certified/licensed] in a jurisdiction of the United States and is assisting a physical therapist engaged specifically in activities related to [subparagraphs (B) 2, 3, 5, 6 and 7 of this section] is exempt from the requirement of [certification/licensure] under this [act].

3.05 License [or Certificate] Renewal

A. A physical therapist applying for renewal of the license shall:
1. Complete a renewal application including payment of fees.
2. Demonstrate evidence of continuing competence as defined by rule.
3. Meet the requirements established by board rule if applicable.
4. Meet other statutory and regulatory requirements applicable to individuals licensed under this [Act].

B. A physical therapist assistant applying for renewal of the license [certificate] shall:
1. Complete a renewal application including payment of fees.
2. Demonstrate evidence of continuing competence as defined by rule.
3. Meet the requirements established by board rule if applicable.
4. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

3.06 Changes of Name, Address or Telephone Number

Each licensee [and certificate holder] is responsible for reporting a name change and changes in business and home address, email address and telephone numbers to the board within 30 days.

3.07 Reinstatement of License [or Certificate]

A. The board may reinstate a lapsed license [or certificate] upon completion of a reinstatement application including payment of fees, as defined by rule.

B. If a physical therapist's license has lapsed for a specified time period, as defined by rule, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to practice physical therapy by one or more of the following as determined by the board:
1. Complete supervised clinical practice as defined by rule with a restricted license.
2. Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure period.
3. Pass examination(s) approved by the board.
4. Provide proof of licensed practice in another jurisdiction.

C. If a physical therapist assistant's [certificate/ license] has lapsed for a specified time period, as defined by rule, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to work as a physical therapist assistant by one or more of the following as determined by the board:
   1. Complete supervised clinical practice as defined by rules with a restricted license.
   2. Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure [certification] period.
   3. Pass examination(s) approved by the board.
   4. Provide proof of licensed [certified] work as a physical therapist assistant in another jurisdiction.

D. The board may reinstate a suspended or revoked physical therapist's license upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of competence to practice physical therapy through the following activities:
   1. Complete supervised clinical practice, as defined by rule, with a restricted license.
   2. Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure period.
   3. Successfully complete assessment tool(s) and/or pass examination(s) approved by the board.

E. The board may reinstate a suspended or revoked physical therapist assistant's [certificate/license] upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of the physical therapist assistant's competence to work in the profession of physical therapy through the following activities.
   1. Complete supervised clinical practice with a restricted license under a qualified and approved supervisor.
   2. Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure period.
   3. Successfully complete assessment tool(s) and/or pass examination(s) approved by the board.

[**3.08 Fees**]
(This is optional statute language for states requiring maximum fee ceilings within their statutes.)
A. The board shall establish and collect fees not to exceed:
   1. _____ dollars for an application for an original license [or certificate]. This fee is nonrefundable.
   2. _____ dollars for a certificate of renewal of a license [or certificate].
   3. _____ dollars for an application for reinstatement of a license [or certificate].
   4. _____ dollars for each duplicate license [or certificate].
   5. _____ dollars for other administrative fees [e.g., criminal records report, pass through or processing fees]

Article 4: Regulation of Physical Therapy

4.01 Ethics in the Physical Therapy Profession

A. A physical therapist shall adhere to the recognized standards of ethics of the physical therapy profession as established by rule.
B. A physical therapist assistant shall adhere to the recognized standards of ethics of the physical therapy profession as established by rule.

4.02 Use of Titles and Terms; Restrictions; Classification of Violation

A. A physical therapist shall use the letters "PT" or the term "physical therapist" immediately following their name to designate licensure as a healthcare practitioner under this [act].

B. A person or business entity, its employees, agents or representatives shall not use in connection with that person's name or the name or activity of the business, the words "physical therapy," "physical therapist," "physiotherapy," "physiotherapist," "physio," "registered physical therapist," "doctor of physical therapy," the letters "PT," "DPT," "LPT," "RPT," or any other words, abbreviations or insignia indicating or implying directly

or indirectly that physical therapy is provided or supplied, unless such services are provided by or under the direction of a physical therapist licensed pursuant to this [act]. A person or business entity shall not advertise or otherwise promote another person as being a "physical therapist" or "physiotherapist" unless the individual so advertised or promoted is licensed as a physical therapist under this act. A person or business entity that offers, provides, or bills any other person for services shall not characterize those services as "physical therapy" or "physiotherapy" unless the individual performing those services is a person licensed as a physical therapist under this [act].

C. Physical therapists who have graduated from a DPT program may use the title Doctor of Physical Therapy. A physical therapist holding a DPT or other doctoral degree shall not use the title Doctor without also clearly informing the public of his or her profession as a physical therapist. Use of the title shall be in accordance with jurisdictional law.

D. A physical therapist assistant shall use the letters "PTA" immediately following his or her name to designate [certification/licensure] under this [act].

E. A person shall not use the title "physical therapist assistant," the letters "PTA," or any other words, abbreviations, or insignia in connection with that person's name to indicate or imply, directly or indirectly, that the person is a physical therapist assistant unless that person is [certified/licensed] as a physical therapist assistant pursuant to this [act].

F. A person or business entity that violates paragraphs (B) or (E) of this section is guilty of a [cite specific legal sanction]. The board shall have authority to impose a civil penalty, in an amount not to exceed [specify number of dollars] per violation, against any person or business entity that violates paragraphs (B) or (E). In addition, the board shall seek an injunction against conduct in violation of paragraphs (B) or (E) in any court of competent jurisdiction. For purposes of this [act], the board, in seeking an injunction, need only show that the defendant violated paragraphs (B) and (E) of this section to establish irreparable injury or a likelihood of a continuation of the violation.

4.03 Patient/Client Care Management

A. A physical therapist is fully responsible for managing all aspects of the physical therapy care of each patient/client. A physical therapist shall provide:
   1. The initial evaluation, determination of diagnosis, prognosis, and plan of treatment intervention and documentation of each encounter with each patient/client;
   2. Periodic reevaluation and documentation of each patient/client;
   3. The documented discharge of the patient/client, including the patient's/client's response to treatment intervention at the time of discharge.

B. A physical therapist shall assure the qualifications of all physical therapist assistants and physical therapy aides under their direction and supervision.

C. For each patient/client on each date of service, a physical therapist shall provide all the treatment intervention that requires the education, skills, and knowledge of a physical therapist and shall determine the use of physical therapist assistants or physical therapy aides to ensure that the delivery of care that is safe, effective, and efficient.
   1. A physical therapist assistant shall work under a physical therapist's supervision. A physical therapist assistant shall document the care they provide.
   2. A physical therapist may use physical therapy aides for designated routine tasks. A physical therapy aide shall work under the supervision of a physical therapist.

D. The physical therapist shall communicate the plan of care with, and obtain informed consent from, the patient/client or their legally authorized representative.

E. A physical therapist's responsibility shall include accurate documentation and billing of the services provided.

F. A physical therapist assistant's responsibility shall include accurate documentation and billing of the services provided.

G. Nothing in this [Act] shall prohibit a licensee[certificate holder] from providing physical therapy to animals for which the licensee[certificate holder] has completed the education and training as further established by rule.

4.04 Grounds for Denial of a License [and Certificate]; Disciplinary Action

A. The following are grounds for denial of a license [and certificate] or disciplinary action:

1. Violating any provision of this [act], board rules or a written order of the board.
2. Obtaining or attempting to obtain a license [or certificate] by fraud or misrepresentation.
3. Attempting to engage in conduct that subverts or undermines the integrity of the examination or the examination process including, but not limited to, a violation of security and copyright provisions related to the national licensure exam, utilizing in any manner recalled or memorized examination questions from or with any person or entity, failing to comply with all test center security procedures, communicating or attempting to communicate with other examinees during the test, or copying or sharing examination questions or portions of questions.
4. Practicing or offering to practice beyond the scope of the practice of physical therapy.
5. Acting in a manner inconsistent with generally accepted standards of physical therapy practice, regardless of whether actual injury to the patient/client is established.
6. Failing to adhere to the recognized standards of ethics of the physical therapy profession as established by rule.
7. Failing to complete continuing competence requirements as established by rule.
8. Failing to maintain adequate patient/client records. For the purposes of this paragraph, "adequate patient/client records" means legible records that contain at minimum sufficient information to identify the patient/client, an evaluation of objective findings, a diagnosis, a plan of care, a treatment record and a discharge plan.
9. Failing to supervise physical therapist assistants, physical therapy aides, a person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's education, or a person satisfying a supervised clinical practice in accordance with this [act] and board rules.
10. Failing to report to the board, where there is direct knowledge, any unprofessional, incompetent, or illegal acts that appear to be in violation of this [act] or any rules established by the board.
11. Engaging in sexual misconduct. For the purpose of this paragraph, sexual misconduct includes:
    a. Engaging in or soliciting romantic or sexual relationships, whether consensual or non-consensual, while a physical therapist or physical therapist assistant-patient/client relationship exists.
    b. Making advances, requesting favors, or expressing thoughts, feelings, or making gestures that are sexual in nature, or that reasonably may be construed by a patient/client as sexual in nature, by any means including verbal or physical contact, or via electronic communications.
    c. Intentionally viewing a completely or partially disrobed patient/client in the course of treatment if the viewing is not related to patient/client diagnosis or treatment under current practice standards.
12. Sexual contact between a physical therapist and patient/client after termination of the physical therapist-patient/client relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.
13. Sexual contact between a physical therapist assistant and patient/client after termination of the physical therapist assistant-patient/client relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.
14. Abusing the physical therapist-patient/client relationship to exert undue influence or exploiting persons over whom the licensee has supervisory, evaluative, or other authority.

15. Abusing the physical therapist assistant-patient/client relationship to exert undue influence or exploiting persons over whom the licensee [certificate holder] has supervisory or other authority.
16. Having had a license [or certificate] revoked or suspended, other disciplinary action taken, or an application for licensure [or certification] refused, revoked or suspended by the proper authorities of another jurisdiction, territory, or country.
17. Having been convicted of or pled guilty to a felony with a nexus to the practice of a physical therapist or work of a physical therapist assistant in the courts of this jurisdiction or any other jurisdiction, territory or country. Conviction, as used in this paragraph, shall include a deferred conviction, deferred prosecution, deferred sentence, finding or verdict of guilt, an admission of guilt, an Alfred plea, or a plea of *nolo contendere*.
18. Aiding and abetting the unlicensed practice of physical therapy.
19. Directly or indirectly requesting, receiving, or participating in the dividing, transferring, assigning, rebating or refunding of an unearned fee, or profiting by means of a credit or other valuable consideration such as an unearned commission, discount or gratuity in connection with the furnishing of physical therapy services. This does not prohibit the members of any regularly and properly organized business entity recognized by law and comprising physical therapists from dividing fees received for professional services among themselves as they determine necessary.
20. Promoting any unnecessary device, treatment intervention, or service resulting in the financial gain of the practitioner or of a third party.
21. Providing treatment intervention unwarranted by the condition of the patient/client or continuing treatment beyond the point of reasonable benefit.
22. Participating in underutilization or overutilization of physical therapy services for personal or institutional financial gain.
23. Charging fraudulent fees for services performed or not performed.
24. Making misleading, deceptive, untrue or fraudulent representations in violation of this [act] or in the practice of the profession.
25. Practicing as a physical therapist or working as a physical therapist assistant when physical or mental abilities are impaired by the use of controlled substances or other habit-forming drugs, chemicals or alcohol, or by other causes.
26. Practicing physical therapy with a mental or physical condition that impairs the ability of the licensee to practice with skill and safety.
27. Practicing after having been adjudged mentally incompetent by a court of competent jurisdiction.
28. Interfering with an investigation or disciplinary proceeding by failure to cooperate, by misrepresentation of facts, or by the use of threats or harassment against any patient/client or witness to prevent that patient/client or witness from providing evidence in a disciplinary proceeding or any legal action.
29. Failing to maintain patient/client confidentiality without documented authorization of the patient/client or unless otherwise required by law. All records used or resulting from a consultation by telehealth, as defined in [*Definitions,* Article 1.02], are part of a patient's/client's records and are subject to applicable confidentiality requirements.

4.05 Investigative Powers; Emergency Action; Hearing Officers

A. To enforce this [act], the board is authorized to:

1. Receive complaints filed against licensees [or certificate holders] and conduct a timely investigation.
2. File complaints against licensees [or certificate holders] or individuals engaging in the unlawful or unlicensed practice of physical therapy and conduct timely investigations.
3. Conduct an investigation at any time and on its own initiative without receipt of a written complaint if the board has reason to believe that there may be a violation of this [act].
4. Issue subpoenas to compel the attendance of any witness or the production of any documentation relative to a case.
5. Take emergency action ordering the summary suspension of a license [or certificate] or the restriction of a physical therapist's practice or a physical therapist assistant's work pending proceedings by the board.

6. Appoint hearing officers authorized to conduct hearings. Hearing officers shall prepare and submit to the board findings of fact, conclusions of law and a recommendation for board action that shall be reviewed and voted on by the board.
7. Require a physical therapist to be examined in order to determine his or her mental or physical ability to practice physical therapy.
8. Require a physical therapist assistant to be examined in order to determine his or her mental or physical ability to work in the profession of physical therapy.

B. If the board finds that the information received in a complaint or an investigation does not merit disciplinary action against a licensee [or certificate holder] it may take one of the following actions:

1. Dismiss the complaint.
2. Issue an advisory letter to the licensee [or certificate holder]. An advisory letter is non-disciplinary and notifies a licensee [or certificate holder] that, while there is no evidence to merit disciplinary action, the board believes that the licensee [or certificate holder] should become educated about the requirements of this [act] and board rules.

4.06 Hearings

(No model statute language is offered under this section heading. See *Commentary* for additional information.)

4.07 Disciplinary Actions; Penalties

Upon proof that any grounds prescribed in section [*Grounds for Denial of License [and Certificate]; Disciplinary Action*, Article 4.04], have been violated, the board may take the following disciplinary actions singly or in combination.

1. Issue a censure.
2. Restrict a license [or certificate]. The board may require a licensee [or certificate holder] to report regularly to the board on matters related to the grounds for the restricted license [or certificate].
3. Suspend a license [or certificate] for a period prescribed by the board.
4. Revoke a license [or certificate].
5. Refuse to issue or renew a license [or certificate].
6. Impose a civil penalty of at least _____ but not more than _____. (Include minimum and maximum dollar amounts of civil penalties.)
7. Accept a voluntary surrendering of a license [or certificate] based on an order of consent from the board.

4.08 Procedural Due Process

Actions of the board shall be taken subject to the right of notice, opportunity to be heard, and the right of appeal in accordance with [specify the jurisdiction] law relating to administrative law and procedure.

4.09 Unlawful Practice; Classification; Civil Penalties; Injunctive Relief

A. It is unlawful for any person or business entity, its employees, agents, or representatives not licensed as a physical therapist under this [act] to engage in the practice of physical therapy. Any person who violates this paragraph [(A) or *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02], is guilty of [cite specific criminal sanction, e.g., class 1 misdemeanor] and subject to any other remedies specified in this [act].

B. The board shall investigate any person or business entity to the extent necessary to determine whether the person or business entity is engaged in the unlawful practice of physical therapy. If an investigation indicates that a person or business entity is practicing physical therapy unlawfully, the board shall inform the person or the business entity of the alleged violation. The board may refer the matter for prosecution regardless of whether the person or business entity ceases the unlawful practice of physical therapy.

C. The board shall apply to any court of competent jurisdiction for an order enjoining any person or business entity from committing any violation of this [act]. Injunction proceedings under this paragraph shall be in addition to, and not in lieu of, all penalties and other remedies prescribed in this [act].

D. If a person or business entity knowingly violates this [act] or board rules, fraudulently uses or permits the use of a license [or certificate] number, or knowingly aids or requires another person to violate this [act] or board rules, the board may impose upon such person a civil penalty of not more than [dollar amount of penalty] for the first violation and not more than [dollar amount of penalty] for each subsequent violation.

[Optional Statute]

E. The board shall transmit all monies it collects from civil penalties pursuant to this [act] to the [specify the disposition of these funds if different from other funds].

4.10 Reporting Violations; Immunity

A. A person, including but not limited to a licensee [or certificate holder], corporation, insurance company, healthcare organization or healthcare facility and jurisdiction or local governmental agencies, shall report to the board any conviction or determination by an agency or court that a licensee [or certificate holder] has committed an act that constitutes a violation of [*Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04].

B. A person is immune from civil liability, whether direct or derivative, for reporting such facts as set forth in "A" above to the board in good faith and participating in the board's investigation and subsequent disciplinary process, if applicable.

C. The board shall not disclose the identity of a person who provides information unless such information is essential to proceedings conducted pursuant to [*Investigative Powers; Emergency Action; Hearing Officers* and *Hearings*, Articles 4.05 and 4.06], or unless required by a court of law.

4.11 Substance Abuse Recovery Program

A. The board may permit a licensee [or certificate holder] to actively participate in a board-approved substance abuse recovery program if:
   1. The board has evidence that the licensee [or certificate holder] is impaired.
   2. The licensee [or certificate holder] enters into a written agreement with the board for a restricted license [or certificate] and complies with all the terms of the agreement, including making satisfactory progress in the program and adhering to any limitations on his or her practice or employment imposed by the board to protect the public. Failure to enter into such an agreement shall activate an immediate investigation and disciplinary proceeding by the board.
   3. As part of the agreement established between the licensee [or certificate holder] and the board, the licensee [or certificate holder] signs a waiver allowing the substance abuse program to release information to the board if the licensee [or certificate holder] does not comply with the requirements of this section or is unable to practice or work with reasonable skill or safety.

4.12 Rights of Consumers

A. The public shall have access to the following information:
   1. A list of licensees [and certificate holders] that includes license [or certificate] number, date of license [or certificate] expiration, status of license [or certificate], and employment information.
   2. A list of final adverse actions taken by the board.
   3. The address, website, email and phone number of the board.

B. Each licensee [and certificate holder] shall display a copy of his or her license [or certificate] in a location accessible to public view or produce a copy immediately upon request.

C. Each licensee [and certificate holder] shall provide the public with information on how to file a complaint with the board against a licensee [or certificate holder].

D. Any person may submit a complaint regarding any licensee, [certificate holder] or any other person potentially in violation of this [act]. Confidentiality shall be maintained subject to law.

E. The home address, email address and home telephone numbers of physical therapists and physical therapist assistants are not public records and shall be kept confidential by the board unless they are the only addresses and telephone numbers of record.

F. A patient/client has freedom of choice in selection of services and products.

G. Information relating to the physical therapist-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written authorization of the patient/client. The physical therapist-patient/client privilege does not extend to cases in which the physical therapist has a duty to report or disclose information as required by law.

H. Information relating to the physical therapist assistant-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written authorization of the patient/client. The physical therapist assistant-patient/client privilege does not extend to cases in which the physical therapist assistant has a duty to report or disclose information as required by law.

I. The board shall keep all information relating to the receipt and investigation of complaints filed against licensees [or certificate holders] confidential until the information is disclosed in the course of the investigation or any subsequent proceeding or until disclosure is required by law. Patient/client records, including clinical records, files, any other report or oral statement relating to diagnostic findings or treatment of patients/clients, any information from which a patient/client or their family might be identified, or information received and records or reports kept by the board as a result of an investigation made pursuant to this [act] shall not be available to the public and shall be kept confidential by the board.

Model Practice Act with Commentary

Introductory Notes

This section of the Model Practice Act is divided into two distinct areas for easy reference:

- The Model Language (in bold text) for each statutory section
- The Commentary that clarifies the intent or adds other information about the suggested model language

Physical Therapy Practice Act

[Include proper numerical statute reference, e.g., Chapter # and/or Title #]

Article 1: General Provisions

1.01 Legislative Intent

This [act] is enacted for the purpose of protecting the public health, safety and welfare, and provides for jurisdiction administrative control, supervision, licensure and regulation of the practice of physical therapy. It is the legislature's intent that only individuals who meet and maintain prescribed standards of competence and conduct shall engage in the practice of physical therapy as authorized by this [act]. This [act] shall be liberally construed to promote the public interest and to accomplish the purpose stated herein.

Commentary

A statement of legislative intent makes explicit the desire of the legislature to place public interest first and foremost in the law that governs physical therapy. There is an inherent benefit to society and to individuals when public health, safety and welfare are protected through licensure. Licensing boards are obligated to ensure that the public actually realizes these benefits from the law.

Licensure is inherently restrictive for the licensee and exclusive to the particular profession. Only those who "meet and maintain prescribed standards" established by the board will, for the protection and benefit of the public, be allowed to profess their qualifications and provide their services to the public. The public is dependent upon the jurisdiction to evaluate and affirm the qualifications for licensure of physical therapists and licensure [certification] of physical therapist assistants.

The use of "maintain" in the model statute refers to the licensee's ongoing commitment to maintain minimal standards of practice throughout a career, also known as continuing competence. The Model Practice Act addresses continuing competence and provides the regulatory authority for this responsibility in the additional paragraphs: *Powers and Duties of the Board*, Article 2.02.8 *and 2.02.26 License [or Certificate] Renewal*, Article 3.05.A.2 and B.2, *Reinstatement of License [or Certificate]*, Articles 3.07.B and C.

The last sentence of the model statute mandates that all interpretations of the practice act and associated rules be "construed liberally"; Liberal construction is a legal concept instructing all parties interpreting a statute to give an expansive meaning to terms and provisions within the statute. This applies to the drafting and interpretation of rules, as well as instruction to the courts for how the statutes and rules combined should be interpreted, and that interpretation shall not only be based on the actual words and phrases used herein, but also by taking into account the legislative intent of promoting the public interest and accomplishing the purposes stated.

1.02 Definitions

As specifically used in this [act], the following terms have the meanings set forth below, unless the context requires otherwise.

Commentary

More exact language in the law produces more consistent understanding of the law by the public, the profession and the regulatory agencies created to enforce the law. Clear and concise laws require fewer modifications and less legal interpretation by attorneys, courts or by the office of the state attorney general.

Practice acts achieve clarity of intent and internal consistency by including definitions of the terms and phrases used within the act. Some of these are operational definitions that have more significance in a specific practice act because of the language used in that jurisdiction's laws. Other terms have overall significance in all practice acts because they define to *whom* and *what* is being regulated. The definitional terms listed below are the minimum recommended for inclusion in all practice acts, because they define *whom* and *what* is being regulated.

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1. "Board" means the [specify the jurisdiction] board of physical therapy.

Commentary

This model language indicates a preference for an autonomous physical therapy licensing board structure. Some jurisdictions have autonomous boards, but some jurisdictions have physical therapy boards as part of jurisdiction medical boards or combined with other professions. There are also a few "super boards" where all regulatory activities are subordinate to one board, with distinct committees or commissions for the various professions. (See additional discussion in *Board of Physical Therapy*, Article 2.01).

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2. "Competence" is the application of knowledge, skills, and behaviors required to function effectively, safely, ethically and legally within the context of the patient/client's's role and environment.

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3. "Consultation" means a physical therapist seeking assistance from or rendering advice or professional or expert opinion to, another physical therapist or professional healthcare provider via electronic communications, telehealth, or in-person.

Commentary

For the purposes of the Model Practice Act, per the definition of professional employee from the National Labor Relations Act , physical therapist assistants would be exempt from the status of "professional employee."

"(15) "professional employee" means—

(A) an employee engaged in the performance of work—

(i) requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study in an institution of higher learning or a hospital (as distinguished from knowledge acquired by a general academic education, or from an apprenticeship, or from training in the performance of routine mental, manual, mechanical, or physical activities);

(ii) requiring the consistent exercise of discretion and judgment in its performance;

(iii) which is predominantly intellectual and varied in character (as distinguished from routine mental, manual, mechanical, or physical work); and

(iv) which is of such character that the output produced or the result accomplished by such work cannot be standardized in relation to a given period of time; or

(B) an employee who has completed the courses of specialized intellectual instruction and study described in subparagraph (A)(i) of this paragraph and is performing related work under appropriate direction or guidance to qualify the employee as a professional employee described in subparagraph (A) of this paragraph;"

Consultation refers to a physical therapist rendering professional expert opinion or seeking professional expert opinion from another health care practitioner. The health care practitioner being consulted may possess highly specialized knowledge and skills to make recommendations, identify problems or solutions. In some cases, the physical therapist will find it necessary to seek the expertise of another healthcare practitioner to benefit the patient/client.

Consultations via electronic communications are intended to improve access to specialty expertise for patients/clients and practitioners without the need for an in-person visit.

4. "Continuing competence" is the lifelong process of maintaining and documenting competence through ongoing self-assessment, development, and implementation of a personal learning plan, and subsequent reassessment.

5. "Examination" means a national examination approved by the board for the licensure of a physical therapist or the [certification/licensure] of a physical therapist assistant.

Commentary
This definition for examination clarifies that each jurisdiction's practice act requires a national examination approved by the Board for licensure or certification. It also allows for the term "examination" to be used consistently throughout the act. The name of the examination shall be specified in rules, as many jurisdictions now specify the National Physical Therapy Examination of the Federation of State Boards of Physical Therapy.

6. "Electronic Communications" means the science and technology of communication (the process of exchanging information) over any distance by electronic transmission of impulses including activities that involve using electronic communications to store, organize, send, retrieve, and/or convey information.

Commentary
Electronic communications more accurately reflects the rapid change in technology and possible means of communications rather than the term telecommunications.

7. "Jurisdiction of the United States" means any state, the District of Columbia, the Commonwealth of Puerto Rico, or any American territory.

Commentary
This necessary clarifying definition specifies the range of possible licensing jurisdictions within the United States.

8. "Nexus to practice" means the criminal act of the applicant or licensee [certificant] posing a risk to the public's welfare and safety relative to the practice of physical therapy.

Commentary

A "nexus" is a connection or series of connections linking two or more things. "Nexus" is a concept commonly used in the criminal law system, and generally evaluates if the act has a relationship in timing, causation, or logic to the practice of physical therapy. When evaluating nexus to practice, a jurisdiction looking at how the criminal action may affect or have a connection with their ability to safely practice physical therapy.

At the same time, the nexus to practice requirement means that a jurisdiction cannot deny an applicant solely on the basis on the existence of a criminal act. The nexus to practice requirement means the jurisdiction must be able to document a direct relationship between the criminal act and the specific responsibilities and practice setting considerations of the license or certificate the for which the applicant is applying.

A nexus to practice requirement is considered best practice and many jurisdictions have been passing legislation addressing the requirement. According to the Council of State Governments Justice Center, nearly one in four jobs in the U.S. require a government-issued license. However, many people with a criminal record are prohibited from receiving occupational licenses or discouraged from seeking jobs in licensed fields even when no nexus is present.

Furthermore, according to research compiled by the Council of State Legislatures, people of color and those from lower socio-economic status are far more likely to enter the nation's justice system than the general population. For licensing boards, this can mean that disqualification from licensure based on the existence of criminal history without demonstration of nexus can have an unintended discriminatory impact.

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9. "Onsite supervision" means supervision by a physical therapist who is continuously onsite and present in the department or facility where services are provided. The supervising therapist is immediately available to the person being supervised and maintains continued involvement in the necessary aspects of patient/client care.

Commentary
"Onsite supervision" is an important inclusion in the definitions section. Some practice acts have very specific definitions where, for example, "onsite" is further defined as meaning direct visual contact, or defining "immediately available" within a time parameter of so many seconds or minutes. Such definitions are overly restrictive. The supervising physical therapist remains professionally and legally responsible for care rendered under the physical therapist's license, as discussed under the previous definition for "Supervision".
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When onsite supervision is appropriate, the Model Practice Act language recommends that the supervisor should be within close proximity—in the department or facility—*and* immediately available. "Immediately available" is a term frequently used in healthcare statutes and in Medicare rules. It denotes a sense of urgency in delivery of care, not a sense, necessarily, of standing next to the person being supervised at all times.

The phrase, "maintains continued involvement in the necessary aspects of patient care**,"** is emphasized and underscores that supervising physical therapists are responsible for provided physical therapy interventions. Supervising physical therapists should remain actively involved with those persons who are under their care and supervision. The definition has been broadened to be inclusive of various types of onsite supervision and may include but not limited to the supervision of physical therapy assistants, physical therapy aides as well as supervision of personnel under restrictive licensure.

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10. "Patient/client" means any individual receiving physical therapy from a licensee [or certificate holder] under this Act.

Commentary
The term "patient" has been replaced throughout this document by the term "patient/client" to reflect that licensees [certificate holders] work in a variety of different settings and that, in some of these settings (e.g. health clubs, wellness centers), the term "client" is more representative of the person the licensee [certificate holder] is treating.

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11. "Physical therapist assistant" means a person who is [certified/licensed] pursuant to this [act] and who assists the physical therapist in selected components of physical therapy treatment intervention.

Commentary
Several jurisdictions continue to use language that designates that the "assistant" assists in practice (physical *therapy* assistant), rather than language that defines the "assistant" as one who assists the physical therapist (physical *therapist* assistant). Language that equates physical *therapy* assistant with physical therapist assistant is best handled in *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02.

The requirement that a physical therapist assistant "has met the conditions of this [act]" refers to applicant qualifications and requirements addressed in *Examination and Licensure*, Article 3. Educational requirements, such as being a graduate of an accredited physical therapist assistant education program, are best addressed in other areas of the practice act, not in definitions.

Other role delineation or restrictions a board shall wish to include should be specified in rules. The Model Practice Act includes language for both certification and licensure. A jurisdiction shall select its preferred form of regulation for PTAs and apply the appropriate term throughout the practice act.

Optional for PT Compact Members

11. "Physical therapist assistant" means a person who is [certified/licensed] pursuant to this [act] or holds a compact privilege and who assists the physical therapist in selected components of physical therapy treatment intervention.

12."Physical therapist assistant-patient/client relationship" means the formal or inferred relationship entered into by mutual consent between a licensed [certified] physical therapist assistant and a patient/client or their legally authorized representative **established once the physical therapist assistant assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged or treatment is formally transferred to another practitioner or as further defined by rule.**

Commentary

Clearly defining the physical therapist assistant-patient/client relationship is important to clarify the professional boundary that must exist for objectivity in care. It is important to understand the inherent power dynamic in a clinician-patient relationship—regardless of gender or patient condition, this dynamic is real and powerful. The power differential between the physical therapist assistant and patient/client exists because the physical therapist assistant has knowledge and skills needed by the patient/client, access to personal medical information, and the patient/client's reliance on them for establishing boundaries in care. That power differential may continue after the end of formal treatment sessions, and boards should develop appropriate standards to protect the public even when the relationship may appear to be mutually consensual. Physical therapist assistants cannot have a relationship with someone who may still be vulnerable to the power imbalance. Additionally, discharging a patient only to have a relationship with them would also not be acceptable and is noted in some administrative codes.

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13. "Physical therapist" means a person who is a licensed healthcare practitioner pursuant to this [act] to practice physical therapy. The term "physiotherapist" or "physio" shall be synonymous with "physical therapist" pursuant to this [act].

Commentary

Only a licensed physical therapist shall use the professional designation of "physical therapist." Physiotherapist is included in the definition as synonymous with physical therapist to strengthen use of that title only by physical therapists. (See additional discussion under *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02.)

The term "healthcare practitioner" is defined in the *Guidebook for the National Practitioner Data Bank* as the "individual who is licensed or otherwise authorized by a state to provide healthcare services." The term "health care provider" has a broader context. At this time, as related to this act, healthcare practitioner refers to a physical therapist, while healthcare provider is more appropriate for the physical therapist assistant.

Several jurisdictions have used the definition of "physical therapist" to introduce other concepts that are better addressed in other areas of a practice act. Language concerning supervision, educational preparation, exclusive use of titles and practice restrictions (no X-rays, surgery, etc.) are sometimes included in this definition in older practice acts but are more appropriately addressed elsewhere in the law.

Outside of the United States, the term "physiotherapist" and the abbreviation "physio" are more commonly used titles than physical therapist.

Optional for PT Compact Members

13. "Physical therapist" means a person who is a licensed health care practitioner pursuant to this [act] or holds a compact privilege to practice physical therapy. The term "physiotherapist" or "physio" shall be synonymous with "physical therapist" pursuant to this [act].

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14. "Physical therapist-patient/client relationship" means the formal or inferred relationship entered into by mutual consent between a licensed physical therapist and a patient/client or their legally authorized representative established once the physical therapist assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged or treatment is formally transferred to another healthcare practitioner or as further defined by rule.

Commentary

Clearly defining the physical therapist-patient/client relationship is important to clarify the professional boundary that must exist for objectivity in care. It is important to understand the inherent power dynamic in a clinician-patient relationship—regardless of gender or patient condition, this dynamic is real and powerful. The power differential between the physical therapist and patient/client exists because the physical therapist has knowledge and skills needed by the patient/client, access to personal medical information, and the patient/client's reliance on them for establishing boundaries in care. That power differential may continue after the end of formal treatment sessions, and boards should develop appropriate standards to protect the public even when the relationship may appear to be mutually consensual. Physical therapists cannot have a relationship with someone who may still be vulnerable to the power imbalance. Additionally, discharging a patient only to have a relationship with them would also not be acceptable and is noted in some administrative codes.

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15. "Physical therapy aide" means a person trained by or under the direction of a physical therapist who performs designated and supervised components of care related to physical therapy services.

Commentary

Physical therapy aides are generally trained on the job. Physical therapy aides are also known as, but not limited to: technicians (techs), rehabilitation(rehab) aides, or rehabilitation technicians (rehab techs). This does not preclude vocational or technical training that shall exist for physical therapy aides or "techs." However, such training does not relieve the supervising physical therapist of responsibility for further on-the-job training. What this training is, and the documentation of the training, should be specifically addressed in rules. Regulation beyond this definition is not recommended for aides.

Massage therapists, exercise physiologists, athletic trainers or other persons who have technical or professional education or training, and who assist the physical therapist, should be considered physical therapy aides and be represented as such. The only exception to this is if such persons are providing consultative services and their particular service is not represented or billed as physical therapy.

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16. "Physical therapy" means the care and services provided in-person or via telehealth by or under the direction and supervision of a physical therapist who is licensed pursuant to this [act]. The term "physiotherapy" shall be synonymous with "physical therapy" pursuant to this [act].

Commentary

"Physical therapy" and "physiotherapy" are not generic terms. The *combined* language of the three definitions, "physical therapy," "physical therapist" and the "practice of physical therapy," is crucial to curtail frequent misrepresentation in the use of these terms and thus strengthen physical therapy practice acts. When changes to

any of these definitions are made they should be examined and changed in concert. It is equally important that the exclusive use of titles and terms be included whenever changes in definitions are made. (See National *Examination*, Article 3.01, *Use of Titles and Terms, Restrictions; Classification of Violation,* Article 4.02, and *Unlawful Practice; Classification; Civil Penalties; Injunctive Relief,*Article 4.09.)

The public expects the jurisdiction to ensure that practitioners of every profession practice competently within their scope. Jurisdiction regulation includes restrictions on how licensees represent themselves and the use of titles and/or letters and representations that do not mislead the public. For example, a medical or osteopathic physician practices and represents to the public that he or she practices medicine but not dentistry. When practitioners other than physical therapists represent that they are providing "physical therapy" or "physiotherapy," they are violating the very spirit and core of licensure laws by misrepresenting themselves to the public.

"Physiotherapy" is included in the definition as synonymous with "physical therapy." This strengthens the protection of the term "physiotherapy," a historically significant term and current international title, and one that is often used as a generic term and misrepresented by other disciplines.

In the past the practice of physical therapy was defined by listing various physical agents and modalities such as heat, ice, ultrasound, etc. This perpetuated the false concept that physical therapy was a generic term since these physical agents and modalities have not been the exclusive domain of physical therapy.

The solution to strengthening practice acts is to clearly define "physical therapy" as "the care and services provided or under the direction and supervision by *(and only by)* a physical therapist." Additional strengthening comes from a more modernized definition of the "Practice of physical therapy" that describes current scope of practice and from language in *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02 that protects the public from misrepresentation by others.

Removing the term *individuals* provides opportunity for boards to allow the practice of animal physical therapy for those boards who wish to address animal physical therapy.

Considering the growth of the delivery of physical therapy via telehealth, specifying both modes of delivery in the definition makes clear that the practice of physical therapy is not defined by the mode of delivery.

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17. "Practice of physical therapy" means:

a. Examining, evaluating and testing patients/clients with mechanical, physiological and developmental impairments, functional limitations, and disabilities or other health and movement-related conditions in order to determine a diagnosis, prognosis and plan of treatment intervention, and to assess the ongoing effects of intervention.

b. Alleviating impairments, functional limitations and disabilities; promoting health; and preventing disease by designing, implementing and modifying treatment interventions that may include, but ~~are~~ not limited to: therapeutic exercise;~~,~~ needle insertion; patient-related instruction; therapeutic massage; airway clearance techniques; integumentary protection and repair techniques; debridement and wound care; physical agents or modalities; mechanical and electrotherapeutic modalities; manual therapy including soft tissue and joint mobilization/manipulation; functional training in self-care and in home, community or work integration or reintegration; as well as prescription, application and, as appropriate, fabrication of assistive, adaptive, orthotic, prosthetic, protective and supportive devices and equipment.

c. Reducing the risk of injury, impairment, functional limitation, and disability, including performance of participation-focused physical examinations and the promotion and maintenance of fitness, health, and wellness in populations of all ages.

d. Referring a patient/client to healthcare providers and facilities for services and testing to inform the physical therapist plan of care.

e. Engaging in administration, consultation, education, and research.

Commentary
This language represents the "statutory" definition of the scope of physical therapist practice by identifying the main elements included within the scope. It also supports the two preceding definitions of the profession (physical therapy) and the professional (physical therapist).

The component elements of a profession's "scope of practice" include three determinants: 1) an established history of inclusion in education and training; 2) an established history of inclusion in clinical practice; and 3) specific statutory authority. When the first two determinants are well established, then specific statutory authority may also be substituted by the "*absence of* statutory prohibition." For example, where a practice act is silent on the issue of needle insertion EMG, the fact that there is a long history of educational inclusion and an established history of clinical practice in physical therapy substantiates this procedure as being within the scope of practice of physical therapy. Legal opinions in the form of affirmative court decisions also play a role in defining scope of practice, as they have in this specific example. The Model Practice Act offers additional definition language under Paragraph 10 for testing that allows for electrodiagnostic procedures.

The definition of the practice of physical therapy in the MPA gives a clear description of current practice. This definition forms a well-organized and structured outline for the scope of contemporary physical therapy practice. A few additional points regarding this model definition are important to highlight.

The wording "patients with mechanical, physiological and developmental impairments, functional limitations and disability or other health and movement-related conditions" is sufficiently broad to allow for inclusion of any type of patient that physical therapists encounter. Physical therapists must examine and evaluate each patient prior to initiating treatment interventions.

Determining "a diagnosis" rather than "diagnosis" or "the diagnosis" is a subtle but very important point. Direct patient access to physical therapy services is now a reality in the majority of jurisdictions. Physical therapists must determine a diagnosis regarding the patient's specific condition for which they will be providing treatment intervention prior to making patient management decisions. A diagnosis from a referral source does not rule out a physical therapist's responsibility to arrive at a diagnosis specific to the condition for which the therapist's treatment plan and intervention will be directed. By contrast, an inappropriate phrase and one strongly advised against, is "a physical therapy diagnosis." "Diagnosis for physical therapy," on the other hand, would be appropriate. Although diagnostic labels, tests or tools shall vary, the process of diagnosis is consistent among health professionals and should not be compartmentalized by provider.

The evaluative and diagnostic process should also include a prognosis or an expectation of outcome associated with treatment intervention. This shall also include time or outcome expectations. The end result of the evaluative process is the design of the treatment intervention. The effects of the treatment intervention are assessed regularly in order to make modifications to the intervention.

It is not necessary or advisable to list the tests and measures used by physical therapists within the definition of the "Practice of physical therapy." The use of this definition of the "Practice of physical therapy," should prevent any unreasonable restrictions on current or developing evaluative procedures used by physical therapists.

In Paragraph 4.b., it is appropriate to list some of the typical interventions used in physical therapy. This helps to exemplify the breadth and scope of practice based on education and training. A stand-alone list of physical agents or modalities is not recommended. Similarly, parts of the patient's/client's body that may be treated are not listed out. For example, a physical therapist may perform physical therapy for the pelvic floor or temporomandibular joint, both of which may include internal treatments, when the physical therapist has been trained in these specialized areas.

Because of political sensitivities over the term "manipulation," it shall occasionally be necessary to find an acceptable alternative that still authorizes, and in no way limits, the use of manipulative therapy procedures by physical therapists. An acceptable alternative is to retain in Paragraph 4.b the term "manual therapy" or "manual

therapy techniques" (without using the term "manipulation") and then further define "manual therapy" in statutes or rules. In 1998 the American Medical Association approved specific CPT coding for use by M.D. physicians and physical therapists for "manual therapy techniques." This code also contains the terms "mobilization" and "manipulation" as part of the CPT code description.

A physical therapist may refer a patient/client to another healthcare practitioner when information is sought to inform the plan of care and/or to obtain services for the patient/client that are beyond the scope of practice of the physical therapist. The physical therapist may:

- Refer an individual to another provider and conclude care, or not develop a plan of care
- Refer an individual to another provider and continue the plan of care at the same time

If an additional description or clarification is needed for "debridement and wound care" or "needle insertion" it should be further specified in statutes or rules. (See *Guidelines for Rules.*)

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18. "Restricted [certificate/license]" for a physical therapist assistant means a [certificate/license] on which the board has placed any restrictions and/or condition as to scope of work, place of work, duration of certified or licensed status, or type or condition of patient or client to whom the certificate holder or licensee may provide services.

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19. "Restricted license" for a physical therapist means a license on which the board has placed any restrictions and/or conditions, as to scope of practice, place of practice, supervision of practice, duration of licensed status, or type or condition of patient or client to whom the licensee shall provide services.

20."Supervision" means the process by which a physical therapist oversees and directs safe and effective delivery of patient/client care through appropriate verbal, written, or electronic communication. This may be accomplished with the physical therapist located onsite or remotely as deemed appropriate based on the patient/client needs.

Commentary
Version 7 of the Model Practice Act has added a definition of "supervision" to underscore the fact that the physical therapist is ultimately the party responsible for the safe and effective delivery of patient care, and that the physical therapist is responsible for determining the level of supervision and direction that is appropriate. While some sections or rules may specify onsite supervision is required, this underscores that even if not required in statute or rule, onsite supervision may be appropriate and therefore necessary based on the needs of the patient/client.

It is also important to note that within patient management, "direction" and "supervision" are functions that belong solely to the licensed physical therapist. The physical therapist assistant shall receive help from a physical therapy aide when performing certain tasks or procedures, but the physical therapist assistant does not assume the responsibility to "direct and supervise" the provision of care. That responsibility remains with the supervising physical therapist and, by law, cannot be relinquished to another.

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21. "Telehealth" is the use of electronic communications to provide and deliver a host of health-related information and healthcare services, including, but not limited to physical therapy related information and services, over large and small distances. Telehealth encompasses a variety of healthcare and health promotion activities, including, but not limited to, education, advice, reminders, interventions, and monitoring of interventions.

Commentary
As telehealth has emerged as a critical mode of delivery of physical therapy, it bears stating that the PT/PTA and patient/client relationship can be fully established in the absence of actual physical contact between the PT/PTA

and the patient/client. Telehealth is not a new treatment, or an expansion of scope of practice, but a means to deliver physical therapy care to those in need. The physical therapist is still responsible for the care of the patient and for making determinations of the best means to deliver that care. The standards of care and practice, laws, and regulations currently required to be followed for any in-person encounter must also be followed for any encounter via telehealth. The way in which components of intervention are rendered and the supervision levels required may be further clarified in rule.

Many jurisdictions have provisions for offsite supervision of physical therapist assistants. The way in which components of intervention are rendered by physical therapist assistants under offsite supervision, or interventions rendered directly to a patient by a physical therapist through some means of electronic communications, shall be areas of statute or rules needing further clarification.

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22. "Testing" means standard methods and techniques used to gather data about the patient/client, including but not limited to imaging, electrodiagnostic and electrophysiologic tests and measures.

Commentary
The definition of "Practice of physical therapy," Paragraph 4a, includes a reference to "testing." That statutory definition is purposely and necessarily broad and does not specify any particular tests (see *Commentary* under Paragraph 4). This statutory Paragraph 10 accomplishes two things: it incorporates the profession's accepted standard definition of "tests and measures," and it also includes a reference to particular diagnostic testing procedures that are within the scope of physical therapy practice but have occasionally been challenged legally or legislatively.

Some jurisdictions already have, and others shall wish to include, rules that specify additional training requirements and certification procedures relative to physical therapists performing electrodiagnostic and electrophysiologic procedures.

Optional for PT Compact Members
"Compact privilege" means the authorization granted by a remote state to allow a licensee from another member state to practice as a physical therapist or work as a physical therapist assistant in the remote state under its laws and rules. The practice of physical therapy occurs in the member state where the patient/client is located at the time of the patient/client encounter.

Article 2: Board of Physical Therapy
2.01 Board of Physical Therapy

Commentary
The language in this section is constructed upon the model of an autonomous licensing board. The title for this section could easily be modified, if necessary, to apply to other board structures. For example, if a jurisdiction board is actually a panel within a larger Board of Healing Arts, the title might be *The Physical Therapy Panel of the State Board of Healing Arts*.

A. The board of physical therapy shall consist of [seven] members appointed by the Governor. [Four] members shall be physical therapists who are residents of this jurisdiction, possess unrestricted licenses to practice physical therapy in this jurisdiction and have been practicing in this jurisdiction for no less than five years before their appointments. [One] member shall be a physical therapist assistant who is a resident of this jurisdiction and possesses an unrestricted [certificate/license]. The Governor shall also appoint [two] public members who shall be residents of this jurisdiction and who are not affiliated with, nor have a financial interest in, any healthcare profession and who have an interest in consumer rights. The Governor shall, to the greatest extent possible, appoint individuals to achieve diversity on the board.

Commentary
Most jurisdictions have licensing board members who are appointed by an elected official, usually the Governor. Public members are commonly included on boards, but often there is only one public member. Some jurisdictions currently have fewer than five total board members, while larger jursidictions have far greater numbers serving on their boards.

The language in the Model Practice Act of having no fewer than seven board members is based on the recommendation that boards have a minimum of two public board members. With that minimum, there should also be at least three professional members. The following ratios of professional to public members are the recommended ratios for various board sizes:

Board Size	Professional Members – PT Members	PTA Members	Public Members
7	4	1	2
8	4	1	3
9	5	1	3
10	6	1	3

A board comprising a majority of professionals along with a well-represented component of public members is capable of addressing the many complex and technical issues related to educational preparation and practice procedures. Public representation on boards is essential. Public members heighten the sensitivity of the board to public concerns and consumer protection.

Physical therapist and physical therapist assistant members of the board must reside in the jurisdiction, have practiced for a period of five years preceding their appointments, and have no restrictions on their licenses. The Model Practice Act makes no reference to a nomination process or guarantee of a position on the board from a professional association. This does not preclude a professional association or any other organization from making a nomination. Requirements for a nomination from the physical therapy professional association in the statute is an inappropriate link between a public board and a private professional association.

Public appointees should be competent to serve and effectively advocate for the public. Public members should not be members of any other healthcare discipline or be close enough to one that they shall have a financial or professional interest in the decisions made. In addition to those actually working as healthcare providers, this model language precludes appointment of spouses or immediate family members and those employed by any healthcare provider or organization. The intent is to obtain representation by public members who can be uncompromised in their interests and advocacy on behalf of the public.

B. Board members shall serve staggered four-year terms. Board members shall serve no more than two successive four year terms or for more than ten consecutive years. By approval of the majority of the board, the service of a member shall be extended at the completion of a four-year term until a new member is appointed or the current member is reappointed.

Commentary
A four-year term provides sufficient time to become thoroughly familiar with board functions and processes. Serving two consecutive four-year terms for a total of eight years should not be as imposing an obstacle as serving two five-year terms. The ten consecutive year provision addresses the circumstances in which someone is appointed to fill a partial term and, in addition, fills two consecutive terms.

C. The board may request the Governor remove any member of the board for misconduct, incompetence or neglect of duty.

Commentary
Many statutes specify that a member shall be removed for cause and list several causes, but they do not specify a mechanism. The Governor appoints those who serve on licensing boards, often subject to legislative approval, and should also retain the power to remove members, with certain restrictions. The causes for removal, the process for board consideration and action, and the recommendation to the Governor for removal should all be specified in rules. Such language in statutes and rules shall also preclude mass reappointment of board members due to political reasons, i.e. change in Governor or party affiliation. Preventing mass changeover will also help preserve the board's history and continuity.

D. Board members are eligible for [compensation and] reimbursement of necessary expenses pursuant to [cite applicable statute relating to [compensation and/or reimbursement] for attending each board meeting or ~~for~~ representing the board in an official board-approved activity.

Commentary
Most jurisdictions provide a *per diem* and reimbursement for members, but the method varies. Reimbursement procedures should be specified by reference to applicable statutes or in rules.

E. A board member who acts within the scope of board duties, without malice and in the reasonable belief that the member's action is warranted by law, is immune from civil liability.
Commentary

Commentary
Typically, members have absolute or qualified immunity from liability or suit while serving on a licensing board. This paragraph points out that even this protection has its limits if a board member's conduct is determined to be unwarranted or with malice.

Although many jurisdictions have separate statutes dealing with board member immunity from liability, each jurisdiction's law should be carefully analyzed to ensure that no further mention need be made in the jurisdiction's practice act. In light of the increased threat of litigation against jurisdiction administrative bodies, it is better to ensure, by way of the statute, the immunity of board members when acting without malice and in the scope of their duties.

2.02 Powers and Duties of the Board

The board shall:
1. Evaluate the qualifications of applicants for licensure [and certification].

Commentary
Establishing application requirements and reviewing credentials and other application material is often the first interaction a board has with a prospective licensee. This is the first duty and power listed. "Qualifications" such as graduation from an accredited education program or passing the national licensing examination are generally identical from jurisdiction to jurisdiction. Additional jurisdiction "requirements" are often specified in rules and include specific application questions or details that shall be particular to a given jurisdiction. Meeting the qualifications includes also meeting board requirements if statute language as in *Qualifications for Licensure and Certification,* Article 3.02A is used in a practice act. This is because the "qualifications" as listed under 3.02.A also include meeting jurisdiction "requirements" that shall be further defined in rules.

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2. Provide for the examination of physical therapists and physical therapist assistants.

Commentary
This language authorizes testing of both physical therapists and physical therapist assistants by standardized national examinations approved by the board. The name of the examinations can be specified in rules.

3. Issue licenses [or certificates] to persons who meet the qualifications of this [act].

Commentary
Boards are authorized by this paragraph to issue the appropriate license or certificate after all qualifications (including board requirements) as stated in statutes and rules have been met.

4. Regulate the practice of physical therapy by interpreting and enforcing this [act].

Commentary
A significant responsibility of licensing boards is interpreting and enforcing the statutes and rules of the practice act. Interpreting the practice act often is derived from a consistent pattern of board actions over time that guides further actions consistent with the statutes and rules. Substantive board policy and opinions are also derived from these consistent actions and interpretations. Rules provide a more formal process for recording and compiling substantive board policy, decisions and opinions. Board decisions shall also provide a valuable guide to the court in the event of an appeal from the administrative hearing level. Jurisdictions shall also have other administrative statutes relating to substantive board policies or opinions. Discipline, including consent orders that are part of the disciplinary process, is a component of the board's authority to regulate and enforce the practice act. The statutory authority of the board for this role should be clearly stated so that an assistant attorney general, in their role of protecting the interest of the jurisdiction, does not tie the hands of board members in their statutory role of interpreting and enforcing the practice act.

5. Have the authority to establish committees, advisory panels, and task forces to further the work of the board.

Commentary
The board may need specific topics researched or discussed in more detail than typical board meeting time allows. Committees, advisory panels, and task forces can perform the research and report back to assist the board in making decisions and acting.

6. Adopt and revise rules consistent with this [act]. Such rules, when lawfully adopted, shall have the effect of law.

Commentary
This rule-making authority is essential to the regulatory process. The Model Practice Act attempts to include only necessary, empowering or authorizing language in statutes, leaving the remainder of administrative process and procedure to rules. It is important to clearly define that legally promulgated rules have the effect of statutory law, especially where there is any chance that rulemaking shall only be given the weight of *policy.* Policy decisions, normally, are not legally enforceable.

Jurisdictions vary considerably in the process used to adopt rules. Some licensing boards have wide latitude and discretion; others are under Governor or jurisdiction legislative oversight nearly as restrictive as that required to change the statutes. There are generally other administrative codes or laws that address the rule-making procedure. (See additional discussion in *Guidelines for Rules.*)

7. Meet at least once each quarter in compliance with the open meeting requirements of [cite applicable statute]. A majority of filled board members positions shall constitute a quorum for the transaction of business. The board shall keep an official record of its meetings.

Commentary

This language sets a minimum meeting frequency to comply with the law. Board meetings are subject to open meeting laws, and administrative procedures acts specify when executive sessions are permissible or advisable. Of necessity, boards require that a majority of members be present to conduct business. Recordkeeping is legally required.

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8. Establish mechanisms for assessing the continuing competence of physical therapists to practice physical therapy.

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9. Establish mechanisms for assessing the continuing competence of physical therapist assistants to work in the profession of physical therapy.

Commentary
This paragraph empowers the board to set the requirements for assessing continuing competence to practice physical therapy.

The public has been increasingly concerned that licensed professionals demonstrate competence to practice, and all healthcare professions are developing appropriate models to provide for the valid and measurable assessment of continuing competence. Mandatory continuing education as the sole method for meeting requirements for licensure renewal is not recommended. There is no empirical evidence that mandatory continuing education ensures continuing competence of licensees. This Model Practice Act recommends that demonstrating continued competence to practice physical therapy applies only to license renewal of physical therapists.

Models or processes that shall be considered for assessing the continuing competence of physical therapists are outlined in *Guidelines for Rules*.

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10. Establish and collect fees for sustaining the necessary operation and expenses of the board.

Commentary
This clause empowers boards to establish and collect fees. Placing the listing of specific fees in the rules gives greater latitude for changes in fee structure that shall occur from time to time. Rules should include a breakout of all the fees, including application fees for licensure and certification, testing fees, renewal fees, reinstatement fees, late penalties, etc.

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11. Elect officers from its members necessary for the operations and obligations of the board. Terms of office shall be one year.

Commentary
Eligibility requirements and any particular duties related to the various offices should be specified in rules.

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12. Provide for the timely orientation and training of new professional and public appointees to the board regarding board licensing and disciplinary procedures, this [act], and board rules, policies and procedures.

Commentary
Several practice acts fail to include requirements for orientation and training of new board members. For the benefit and protection of the public, timely and adequate training of new appointees needs to be a statutory requirement. Responsibility for board orientation and training should be that of the board officers assisted by staff. Appropriate materials provided to a new appointee shall include the statutes and rules, substantive board policies,

other board operational policies, contracts, minutes, sunset reviews, legislative audits, procedures and historical documents.

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13. Maintain a current list of all persons regulated under this [act]. This information includes each person's name, current business and residential address, email address, telephone numbers, and license [or certificate] number.

Commentary
Boards should exercise discretion in how they distribute or share such information, subject to the jurisdiction's open records act. For example, board policy shall need to include whether information is shared or sold to patient/client'sor organizations for commercial purposes. The public should have access to information regarding those licensed or certified by the jurisdiction. A jurisdiction board directory of licensees and certificate holders shall be one appropriate mechanism for sharing this information. Technological advances shall provide other avenues of electronic access to this information. It is important to note that home addresses and telephone numbers are not public information unless they are the only address and telephone numbers of record, as stated in *Rights of Consumers*, Article 4.12. An email address is becoming increasingly important for board communication with licensees but also is not a public record under *Rights of Consumers*, Article 4.12.

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14. Provide information to the public regarding the complaint process.

Commentary
Boards should provide the public with assistance to facilitate the complaint process. The board should have easy-to-follow information available to aid a person who wishes to file a complaint against a licensee or certificate holder. Some jurisdictions require the posting of a public notice in each physical therapy facility that includes contact information for filing a complaint with the Board. Some jurisdictions require the posting of copies of jurisdiction licenses of those individuals providing services in that facility. Such a requirement with the actual language to be used could be specified in rules.

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15. Employ necessary personnel to carry out the administrative work of the board. Board personnel are eligible to receive compensation pursuant to [cite specific statute].

Commentary
The board should have statutory authority to employ necessary personnel to carry out duties of the board. The board must comply with jurisdiction administrative employment guidelines, including relevant compensation guidelines. Final decisions to hire, release, give direction relative to duties, review for pay increases, etc., should reside with the board.

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16. Enter into contracts for services necessary for enforcement of this [act].

Commentary
This provides for additional activities that shall be needed to carry out the work of the board. This shall include contracts for investigators, administrative law judges or hearing officers, board consultants, outside legal counsel where permitted by law or regulation, and for other services deemed necessary by the board.

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17. Report final disciplinary action taken against a licensee [or certificate holder] to a national disciplinary database recognized by the board or as required by law.

Commentary

The ending phrase, "…or as required by law," is in reference to the federally mandated reporting system known as the Healthcare Integrity and Protection Data Bank (HIPDB). Since 1999, jurisdiction boards have been required to report "final adverse action" against anyone regulated by the board to the HIPDB. This requirement is a result of the Health Insurance Portability and Accountability Act (HIPAA), which was signed into law in 1996. The Affordable Care Act of 2010 required a transfer of data from HIPDB to the National Practitioner Data Bank (NPDB). As of 2013, HIPDB was no longer operational; the functions of HIPDB are now with the NPDB.

Naming the Federation of State Boards of Physical Therapy as the jurisdictional board's agent or intermediary for reporting adverse action to the HIPDB facilitates the gathering of data and jurisdictional access to that information in the Federation's national database of disciplinary actions. The Federation of State Boards of Physical Therapy will automatically supply this information when it sends a score report for an applicant currently licensed or certified in another jurisdiction. The effect of this program will be to prevent someone from moving from one jurisdiction to another to escape disciplinary consequences. *Grounds for Denial of License [and Certificate]; Disciplinary Action,* Article 4.04, contains the statute clause allowing previous disciplinary action to be sufficient grounds to continue a disciplinary action in the new jurisdiction or to deny the applicant a license or certificate.

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18. Report information of alleged unlawful conduct by licensees [or certificate holders], unlicensed individuals, other healthcare providers, and entities to the appropriate county, jurisdiction, or federal authority.

Commentary
Reporting requirements are imposed by law through other agencies related to law enforcement, public protection or the courts. Jurisdictional boards should have clear authority to comply with such reporting requirements.

Jurisdictions may consider sharing information, records, and documents received or generated by the physical therapy licensing board pursuant to an investigation. Although they cannot act, sharing information of this type prior to resolution of the complaint may alert other jurisdictions of a potential threat to the public's safety. This is similar to the agreement within the Compact to share investigative information pertaining to a licensee [certificate holder] in any member state. Compact member states will abide by the specifics from the Compact statute regarding sharing investigative information.

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19. Publish, at least annually, final adverse action taken against a licensee [or certificate holder].

Commentary
The public has the right to know about disciplinary actions taken against any regulated healthcare provider. The purpose of discipline is to remove the risk of harm to the public, correct deficiencies in conduct, and address violations of the law. Discipline is first corrective in nature but shall become punitive if violations are repeated or are serious enough to constitute a threat of harm or actual harm to the public. Whether it is potential or actual harm and whether the discipline is corrective or punitive, the public has the right to access public records pertaining to final disciplinary actions against those regulated by the practice act.

Paragraphs 17 and 18 specify making "final disciplinary action" known to others. Boards shall also be required to release general information about pending complaints; for example, "the licensee has two pending complaints being processed or under investigation." The particular open meeting laws of a jurisdiction will also affect what information a board must release. The board shall also need to address, in rules and in consultation with legal counsel, the extent to which complaint information appears in the minutes of their proceedings.

There are various confidentiality laws that shall guide such decisions. Information being released or published could also be in other forms, and the model statute language speaks of at least two. First, boards must publish at least annually a notice of final disciplinary action against any licensed physical therapist or certified physical therapist assistant. This could occur through the board's own newsletter, through a professional association

newsletter, or through local print media. Second, boards should develop a method to easily accommodate consumer requests for status on any given licensee or certificate holder. A board website shall suffice.

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20. Publish, at least annually, board rulings, opinions, and interpretations of statutes or rules in order to guide persons regulated pursuant to this [act].

Commentary
Boards are frequently asked by licensees or other members of the public to provide advisory opinions clarifying definitions or practice issues. This clause gives boards authority to issue such advisory opinions and to publish them periodically as a guide to those regulated under the practice act.

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21. Participate in or conduct performance audits.

Commentary
Many jurisdictions conduct regular performance audits of their boards or jurisdiction agencies using an agency such as an Office of the Auditor General. Such audits should suggest improvements in board performance. Boards may find FSBPT resources including but not limited to the Board Assessment Resource, Examination, Licensure, and Disciplinary Database, Healthy Practice Guidelines, and Model Board Action Guidelines helpful to prepare for the audit. The audit results shall also be important if policy makers question the need for the existence of a board. Substantiation of actions taken for public protection demonstrates continued public benefit from the board. This, or an additional clause, shall also require an annual reporting process to the Governor.

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22. Have the authority to fully participate in a national Exam, Licensure, and Disciplinary Database as defined by rule.

Commentary
"Exam, Licensure and Disciplinary Database (ELDD)" means an integrated process for collecting, storing, and sharing information on physical therapist and physical therapist assistant licensure/certification and enforcement activities related to physical therapist and physical therapist assistant licensure laws that are administered by a nonprofit organization composed of and controlled by licensing boards." The preferred Exam, Licensure, and Disciplinary Database named in rules is the FSBPT's ELDD. Even though states are required to report disciplinary actions to the National Practitioner Databank (NPDB), this is not sufficient. Boards should participate in another profession-specific database, such as the FSBPT ELDD, to maximize public protection. In order to find out if someone has been reported to the NPDB, a state board must send a query to the NPDB for that information, the information is not automatically sent to the Board. The Board also has to pay to query the NPDB for that specific person; the FSBPT automatically notifies all jurisdictions of the disciplinary record associated with an individual (existing license or open score transfer) in the FSBPT's Exam, Licensure, and Disciplinary Database (ELDD) for no charge.

"Fully participate" must be defined in the rules. Fully participate means supplying licensure and discipline data meaning identifying information that includes but is not limited to the licensee's name, address, nationally recognized unique number of identification (such as the FSBPT ID number), date of birth, and physical therapist/physical therapist education. It is necessary to have at least one unique identifier to confirm identity and avoid mistakes in matching data to individuals. By applying for physical therapist or physical therapist assistant licensure[certification], individuals shall consent to allowing the board to share their licensure and discipline data with the ELDD.

Jurisdictions should be concerned with the security of the information provided to the ELDD. Unless specific permission is granted by the individual, such as releasing a score to a school, access to the information should be restricted to sharing only with other member jurisdictions. Whenever possible, such as for research purposes, information released by the ELDD should only be in the aggregate without reference to any person's name or

other individual identifiers. FSBPT maintains a high level of security for ELDD data and follows these recommendations.

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23. Have the authority to obtain biometric-based information from every physical therapist or physical therapist assistant applicant for licensure[certification] and submit this information to the Federal Bureau of Investigation for a criminal background check.

Commentary

FBI background checks should be in accordance with 28 U.S.C. §534 and 42 U.S.C. §14616. In order to be considered for FBI criminal background check approval the state code must comply with the requirements of Federal statute P.L. 92-544 which consists of the following criteria:

a. The statute must exist as a result of a legislative enactment;
b. It must require the fingerprinting of applicants who are to be subjected to a national criminal history background check; .
c. It must expressly or by implication authorize the use of FBI records for the screening of applicants;
d. It must identify the specific category of applicants/licensees falling within its purview, thereby avoiding overbreadth;
e. It must not be against public policy; and
f. It must not authorize receipt of the CHRI by a private entity

However, jurisdictions should consult their state ID bureaus regarding the recommended statutory language in order to meet the requirements of P.L. 92-544. A list of the ID bureaus can be found at https://www.fbi.gov/services/cjis/identity-history-summary-checks/state-identificationbureau-listing

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24. Have the authority to determine and collect, at the time of new licensure [or certification] and licensure [or certification] renewal, a core set of data elements deemed necessary for the purpose of workforce assessment and planning. The data elements shall be used to create and maintain a healthcare workforce database. The Board may enter into agreements with a private or public entity to establish and maintain the database, perform data analysis, and/or prepare reports concerning the physical therapy workforce. The Board shall promulgate rules to perform duties pursuant to this [act].

Commentary

Collecting a core set of data elements, or minimum data set, for physical therapists/physical therapist assistants allows workforce information to be standardized. Some jurisdictions may have a data set specific to physical therapy providers while others will have a data set for multiple health care professions.

In some jurisdictions, the Board may be required to provide this data either upon request or as required to other state agencies, the Legislative Assembly, the public etc. The Board may choose to add this requirement in the statutory language or in rules.

Whenever possible, information should be released by the Board only in the aggregate without reference to any person's name or other individual identifiers. A Board may choose to add language to that effect in the statutory language or to rules.

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25. Have the authority to require a licensee [certificate holder] to complete educational activities.

Commentary

At times it may be necessary for the board to require licensees [certificate holders] to complete educational activities that are non-disciplinary or outside the typical continuing competence requirements. For example, a board may choose (if able) to require a licensee [certificate holder] to complete education on a topic if a complaint is lodged but found to not have enough merit to move forward with a formal investigation and disciplinary

process, however the behavior of the PT or PTA warrants intervention by the board. A board may also have a topic of concern (e.g., COVID-19 pandemic) that justifies additional educational activities to be completed.

Optional for PT Compact Members

26. Participate in a national licensure compact.

Commentary
Including language to allow the Board to participate in a national licensure compact removes all questions as to the ability of the Board to implement necessary procedures to be compliant with the requirements of membership in a licensure compact.

2.03 Disposition of Funds

(No model language is offered under this section heading. See *Commentary* for further information.)

Commentary
No model language is offered under this section, but the heading is noted in the Model Practice Act because this is the proper location to include this language within a practice act.

This section would not include fees or the setting of various fees, but it would cover such topics, for example, as specifying 1) which jurisdiction fund monies are deposited into, general or cash fund 2) how funds are used to cover board expenses, including compensation for appointees' expenses and 3) whether there is a division of fees between a jurisdiction's general fund and that used specifically by the physical therapy board. There shall also be references or a deferring to other jurisdiction statutes that guide or direct jurisdiction agency funding issues.

Article 3: Examination and Licensure
3.01 National Examination

A. The board shall provide for a national examination within the jurisdiction.

B. To be eligible to sit for the national examination, the candidate must meet nationally recognized requirements that support the integrity of the examination and are further defined by rule.

1. The physical therapist examination is a national examination that tests entry-level competence related to physical therapy theory, examination and evaluation, diagnosis, prognosis, treatment intervention, prevention, and consultation.

2. The physical therapist assistant examination is a national examination that tests for requisite knowledge and skills in the technical application of physical therapy services.

C. Candidates must agree to abide by security and copyright provisions related to the national licensure examination. If the board determines that an applicant has violated any of these provisions or engaged in or attempted to engage in any other conduct that subverts or undermines the integrity of the examination process or validity of examination results, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.

D. Any violation of security and copyright provisions related to the national licensure examination, subversion or attempts to subvert the national examination shall be reported by the board to the Federation of State Boards of Physical Therapy.

E**. If the board determines that an applicant has engaged or has attempted to engage in conduct that subverts or undermines the integrity of the examination process, including a violation of security and copyright provisions related to the national licensure examination, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.**

Commentary
The entry-level examinations for licensure and certification are provided at testing centers in each state. The examination for a physical therapist is "competency specific" and covers the entire scope of practice, including theory, examination and evaluation, diagnosis, prognosis, treatment intervention, prevention and consultation that are consistent with the exam blueprint. This list of competencies is included in the definition of the "Practice of physical therapy." (See *Definitions*, Article 1.02.)

Examinations used for the measurement of entry-level competence are in most cases protected by copyright laws. The National Physical Therapy Examinations are protected by copyright. Individuals who share questions from any board-approved examination by memorizing, giving away, attempting to give away, receiving recalled questions or trafficking in the same, shall be subject to legal action and/or potentially severe discipline including being prohibited from testing for licensure or losing an existing license. This is also addressed under *Grounds for Denial of License [and Certificate]; Disciplinary Action*, Section 4.04 and 4.07.

3.02 Qualifications for Licensure [and Certification]

A. An applicant for a license as a physical therapist shall:

1. **Complete the application process including payment of fees.**
2. **Submit proof of graduation from a professional physical therapy education program accredited by a national accreditation agency approved by the board.**
3. **Pass a national examination approved by the board.**
4. **Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.**
5. **Submit to a criminal records check.**
6. **Meet the requirements established by board rule if applicable.**
7. **Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].**

Commentary
The detailed procedure and requirements for license application should be outlined in rules rather than statutes. For example, the board shall decide what questions to include in the application form about criminal records, substance abuse or any other conduct that shall constitute grounds for denial of a license. (See *Grounds for Denial of a License [and Certificate]; Disciplinary Action,* Article 4.04.) Rather than a vague statement about moral character, such questions will provide more specific information to a board about fitness to practice in addition to the qualifications for practice determined through graduation and passing an entry-level exam.

Jurisdictions may choose to require additional exams for licensure. A common example is a jurisprudence exam testing knowledge of a state's laws and rules. All licensed physical therapists (PTs) and licensed [certified] physical therapist assistants (PTAs) should be familiar with the practice act and rules under which they are allowed to work.

Many jurisdictions have administrative code that applies to applicants and licensees[certificate holders] of many different disciplines. Applicants and licensees [certificate holders] must meet these requirements to become licensed. Additionally, a jurisdiction may pass laws requiring additional coursework and assessment for applicants within that jurisdiction either at time of initial application or upon renewal. The model practice act provides statutory language enabling any and all of the above examples of additional exams.

An important qualification for licensure is graduation from an accredited educational program. It is not recommended that the actual accrediting agency be named in the statutes. The agency currently accrediting physical therapy education is the Commission on Accreditation in Physical Therapy Education (CAPTE). This agency can be identified either by rule or by board policy. The model language specifies that it is the accrediting agency, rather than each educational program, that needs the approval of the board.

The U.S. Supreme Court (*Dent v. West*, 1889) upheld the constitutional right of jurisdiction licensing boards to set educational requirements for entry into practice. Accreditation, at least for U.S. professional programs, is the means of assuring standardized professional education, thereby giving licensing boards a degree of comfort in licensing a new graduate from any accredited educational program outside their jurisdiction, or granting licensure by endorsement to an applicant previously licensed in another jurisdiction who graduated from an accredited educational program.

The examination approved by the board currently in all jurisdictions is the National Physical Therapy Examination of the Federation of State Boards of Physical Therapy. Board requirements shall also include passing a jurisprudence or law exam.

B. An applicant for a license as a physical therapist who has been educated at a school that has not been accredited by an agency approved by the board shall:

1. **Complete the application process including payment of fees.**
2. **Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapists educated in an accredited entry-level program as determined by the board. Graduation outside the United States from a professional education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure educated at a school that has not been accredited by an agency approved by the board shall have:**
   a. Graduated from a physical therapist education program that prepares the applicant to engage without restriction in the practice of physical therapy;
   b. Provided written proof that the applicant's school of physical therapy is recognized by its own ministry of education or other appropriate recognition agency;
   c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   d. Completed any additional education as required by the board.
3. **Pass a board-approved English proficiency examination as required by the board as further established by rule.**
4. **Pass a national examination approved by the board.**
5. **Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.**
6. **Submit to a criminal records check.**
7. **Complete supervised clinical practice as defined by rules with a restricted license.**
8. **Meet the requirements established by board rule if applicable.**
9. **Meet other statutory and regulatory requirements applicable to individuals licensed under this [Act].**

Commentary

The term "substantially equivalent," as defined here in model statute, should be delineated specifically in rules. Rule language should contain, at minimum, the requirement that any credentials evaluation 1) utilize the appropriate edition of the *FSBPT CourseworkTool for Foreign Educated Physical Therapists* in order to determine educational equivalency at the date of graduation; 2) require that a physical therapist trained in credential reviewing participates in the evaluation; and 3) require that quality assurance standards be met by the credentials review agency.

The *Illegal Immigration Reform and Immigrant Responsibilities Act of 1996* requires prescreening of applicants educated at a school that has not been accredited by an agency approved by the board for physical therapist licensure before granting work visas or a change in immigrant status. Screening includes credentials review, English proficiency examinations and determination of prior license or authority to practice in the country where the professional education was completed. Physical therapy licensing boards and their staff spend considerable time processing applications for licensure by applicants educated at a school that has not been accredited by an agency approved by the board. It is important that consistency occurs in the licensing standards from jurisdiction to jurisdiction and that the entire application process is sufficiently detailed both in statute and in rules. The inclusion of supervised clinical practice for the foreign educated physical therapist would provide the opportunity for integration and progression into the United States healthcare delivery system. With variations in healthcare delivery and culture, a supervised clinical experience would provide direct learning and ease of transition of the foreign educated physical therapist.

C. An applicant for a [certificate/license] as a physical therapist assistant shall:

1. Complete the application process including payment of fees.

2. Submit proof of graduation from a physical therapist assistant education program accredited by a national accreditation agency approved by the board.

3. Pass a national examination approved by the board.

4. Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.

5. Submit to a criminal records check.

6. Meet the requirements established by board rule if applicable.

7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

Commentary

As with the application process for a physical therapist, the application process for licensure or certification as a physical therapist assistant should be specified in rules.

Jurisdictions will need to determine whether to accept education as a physical therapist as a prerequisite to sit for the physical therapist assistant exam. At this time, there is minimal evidence to allow or deny an individual educated as a physical therapist the opportunity to become licensed as a physical therapist assistant. It may be argued that the knowledge and skills taught within the physical therapist assistant program represent a subset of the knowledge and skills that are taught within a physical therapist education program. There is no evidence to support the concern that graduates of a physical therapist program who become licensed as physical therapist assistants will knowingly or unknowingly use skills such as differential diagnosis, assessment of prognosis, and design plan of care; activities that they were taught in their physical therapist education program but are not within the scope of work of a physical therapist assistant.

Jurisdictions should specify in rules if any additional requirements have to be met prior to licensure of a graduate of a physical therapist program as a physical therapist assistant such as supervised clinical practice as a physical therapist assistant, working under a restricted license, education regarding the role of the physical therapist assistant, etc.

D. An applicant for a [certificate/license] as a physical therapist assistant who has been educated at a school that has not been accredited by an agency approved by the board-shall:

1. **Complete the application process including payment of fees.**
2. **Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Graduation outside the United States from an education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence**

of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure educated at a school that has not been accredited by an agency approved by the board shall have:
a. Graduated from a physical therapist assistant educational program that prepares the applicant to work as a physical therapist assistant;
b. Provided written proof that the applicant's physical therapist assistant school is recognized by its own ministry of education or other appropriate recognition agency;
c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
d. Completed any additional education as required by the board.

3. **Pass a board-approved English proficiency examination as required by the board as further established by rule.**
4. **Pass a national examination approved by the board.**
5. **Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.**
6. **Submit to a criminal records check.**
7. **Complete supervised clinical practice as defined by rules with a restricted license.**
8. **Meet the requirements established by board rule if applicable.**
9. **Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].**

Commentary
Although the physical therapist assistant does not have the same level of standing as a professional healthcare provider with the U.S. Citizenship and Immigration Services, it has become necessary to regulate physical therapist assistants educated at a school that has not been accredited by an agency approved by the board. The Centers for Medicare and Medicaid Services published a regulation in 2008 (number CMS-138) regarding Medicare reimbursement. This CMS regulation requires a foreign-educated physical therapist assistant to show certification of education which is substantially equivalent to an entry-level physical therapist assistant's education in the United States.

Additionally, physical therapist assistant education programs have been developed outside the United States and a tool exists to determine substantially equivalent education. The term "substantially equivalent," as defined here in model statute, should be delineated specifically in rules. Rule language should contain, at minimum, the requirement that any credentials evaluation 1) utilize the appropriate edition of the *Coursework Tool for Foreign Educated Physical Therapist Assistants (PTA Tool 2007)* in order to determine educational equivalency at the date of graduation; 2) require that a physical therapist trained in credential reviewing participates in the evaluation; and 3) require that quality assurance standards be met by the credentials review agency.

Jurisdictions should require at minimum a credentials review, English proficiency examinations and determination of prior license or authority to practice in the country where the professional education was completed. Physical therapy licensing boards and their staff spend considerable time processing applications for licensure by applicants educated at a school that has not been accredited by an agency approved by the board. It is important that consistency occurs in the licensing standards from jurisdiction to jurisdiction and that the entire application process is sufficiently detailed both in statute and in rules.

The inclusion of supervised clinical practice for the foreign trained physical therapist assistant would provide the opportunity for integration and progression into the United States healthcare delivery system. With variations in healthcare delivery and culture, a supervised clinical experience would provide direct learning and ease of transition of the foreign trained physical therapy assistant.

E. . An applicant for a [certificate/license] as a physical therapist assistant who has completed a United States Armed Services program of training not accredited by a national accreditation agency approved by the board shall:

1. **Complete the application process including payment of fees.**
2. **Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Successful completion of a United States Armed Services program of training accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure who has completed a United States Armed Services program of training shall have:**
   a. Completed a physical therapist assistant training program that prepares the applicant to work as a physical therapist assistant;
   b. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   c. Completed any additional education as required by the board.
3. **Pass national examination approved by the board.**
4. **Pass additional examinations [e.g., jurisprudence examination] required by the board as further established by rule.**
5. **Submit to a criminal records check.**
6. **Meet the requirements established by board rule if applicable.**
7. **Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].**

Commentary

This section allows a military trained PTA to be evaluated for substantial equivalency.

3.03 Licensure [and Certification] by Endorsement

A. The board shall issue a license to a physical therapist who has a current unrestricted license [certificate] from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

Commentary

Jurisdictions will confidently grant licensure by endorsement to physical therapists currently licensed in other jurisdictions when greater regulatory consistency is achieved from jurisdiction to jurisdiction. A phrase common in many practice acts in their endorsement or reciprocity sections is: "...having licensing requirements substantially similar to those prescribed in this [act] at the time the license was originally granted." That language is closer to reciprocity than to endorsement. The qualifications for licensure of foreign-educated physical therapists in 3.02.B, combined with this qualification for endorsement, will ultimately help achieve uniformity and actual endorsement in this aspect of regulation.

Any other jurisdictional "requirements" for endorsement should be specified in the rules associated with an application for endorsement. These shall include submission of verification of a current license in the jurisdiction of previous residency, affidavit of previous practice within a specified period of time, absence of pending or current disciplinary action or restricted license, continuing competence history if mandatory for licensing requirements, or the requirement to take a jurisprudence examination.

Because of many challenges, FSBPT discourages boards from trying to reinterpret licensing test scores obtained prior to 1996. Many of the reinterpretation processes require jurisdictional boards to apply decision processes that are no longer within acceptable professional standards, such as basing a passing score on a prescribed number of standard deviations below the mean score on the test form. These processes have been abandoned because they can result in large differences in outcomes among similarly qualified candidates as a function of the test form, comparison group, and other factors. And because these processes require complex calculations of historical data, the decisions jurisdictional boards make based on the calculations take a long time and are often erroneous. It would be hard for a jurisdictional board to argue that a test score from more than two decades ago is a good indicator of a candidate's current ability to practice safely and effectively. A passing licensing test score in another jurisdiction, at the time of licensure, should be considered a passing score in any other jurisdiction absent any other concerns about the candidate's ability to practice safely and competently.

As the PT Compact and other legislative efforts such as universal recognition and allowing health care practitioners from out of state licensees provide services via telehealth without licensure, jurisdictions may consider evaluating their current endorsement requirements for applicants with a pre-1996 examination score or educated at a school that has not been accredited by an agency approved by the board. These individuals may be able to provide services in the jurisdiction (e.g., compact privilege), but find significant barriers to becoming licensed.

B. The board shall issue a license [certificate] to a physical therapist assistant who has a current unrestricted license [certificate] from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

Commentary
Jurisdictions will confidently grant licensure by endorsement to physical therapists currently licensed in other jurisdictions when greater regulatory consistency is achieved from jurisdiction to jurisdiction. A phrase common in many practice acts in their endorsement or reciprocity sections is: "...having licensing requirements substantially similar to those prescribed in this [act] at the time the license was originally granted." That language is closer to reciprocity than to endorsement. The qualifications for licensure of foreign-educated physical therapists in 3.02.B, combined with this qualification for endorsement, will ultimately help achieve uniformity and actual endorsement in this aspect of regulation.

Any other jurisdictional "requirements" for endorsement should be specified in the rules associated with an application for endorsement. These shall include submission of verification of a current license in the jurisdiction of previous residency, affidavit of previous practice within a specified period of time, absence of pending or current disciplinary action or restricted license, continuing competence history if mandatory for licensing requirements, or the requirement to take a jurisprudence examination.

3.04 Exemptions from Licensure [or Certification]

A. This [act] does not restrict a person licensed or certified under any other law of this jurisdiction from engaging in the profession or practice for which that person is licensed if that person does not represent, imply or claim that he/she is a physical therapist, physical therapist assistant, or a provider of physical therapy as defined in Article 1, 1.02B.

Commentary
The importance of this model language is in not granting blanket exemption status to other healthcare professionals through language such as "Other licensed healthcare providers are exempt from the provisions of this [act]." Other professionals have occasionally attempted to exploit this language by interpreting it to mean that

they are completely exempt from all provisions of the physical therapy practice act, including title protection. This is something never intended in licensure laws.

This model language, combined with other language in the Model Practice Act under *Definitions*, Article 1.02, *Examination and Licensure*, Article 3, and *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02 provides clarification of physical therapy services and ensures public protection by providing a deterrent against misrepresentation and the illegal practice of physical therapy.

The Model Practice Act does not include and recommends against exempting other practitioners such as massage therapists, athletic trainers, chiropractors, etc., who shall be providing services with similar components to physical therapy.

B. The following persons are exempt from the licensure [certification] requirements of this [act] when engaged in the following activities:

1. **A person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's physical therapist education while under onsite supervision of a physical therapist.**
2. **A person satisfying a clinical education experience under the onsite supervision of a physical therapist as required by the board.**
3. **A physical therapist who is practicing in the United States Armed Services, United States Public Health Service or Veterans Administration pursuant to federal regulations for jurisdiction licensure of healthcare providers. If such person, while federally employed as a physical therapist shall engage in the practice of physical therapy outside the course and scope of such federal employment, he/she shall then be required to obtain a license in accordance with this [act].**
4. **A physical therapist who is licensed in another jurisdiction of the United States or credentialed to practice physical therapy in another country if that person is teaching, demonstrating or providing physical therapy services in connection with teaching or participating in an educational seminar of no more than 60 days in a calendar year.**
5. **A physical therapist who is licensed in another jurisdiction of the United States if that person is rendering advice or professional or expert opinion.**
6. **A physical therapist who is licensed in a jurisdiction of the United States or credentialed in another country, if that person by contract or employment is providing physical therapy to patients/clients affiliated with or employed by established athletic teams, athletic organizations or performing arts companies temporarily practicing, competing or performing in the jurisdiction for no more than 60 days in a calendar year.**
7. **A physical therapist who is licensed in a jurisdiction of the United States and who enters this jurisdiction to provide physical therapy during a declared local, jurisdictional or national disaster or emergency. This exemption applies for no longer than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.**
8. **A physical therapist licensed in a jurisdiction of the United States who is forced to leave his/her residence or place of employment due to a declared local, jurisdictional or national disaster or emergency and due to such displacement seeks to practice physical therapy. This exemption applies for no more than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.**

C. A physical therapist assistant who is licensed [certified] in a jurisdiction of the United States and is assisting a physical therapist engaged specifically in activities related to [subparagraphs (B) 2, 3, 5, 6, 7, and 8 of this section] is exempt from the requirement of [licensure/certification] under this [act].

Commentary

The purpose of exemption from licensure is to allow a person who is practing or working in physical therapy for a specific period of time in the state, due to compelling reasons, to provide physical therapy services without the

requirement of state licensure. The exemptions included in the Model Practice Act apply to physical therapist students and physical therapist assistant students in entry level programs or other persons satisfying clinical education requirements and physical therapists or physical therapist assistants who are licensed[certified] in other jurisdictions. The categories of persons who are exempt from state licensure should be limited.

Physical therapy students in clinical internships are exempt because they are in a physical therapy education program and they are under the direct, onsite supervision of a licensed physical therapist. While in clinical training they need the authority to practice the full scope of physical therapy. Physical therapist assistant students in clinical internships are exempt because they are in a physical therapist assistant education program and they are under the direct, onsite supervision of a licensed physical therapist. While in clinical training they need the authority to work within the full scope of a physical therapist assistant.

Applicants for a physical therapist or physical therapist assistant license [certification] that are not current students may be required to complete supervised clinical experience as a requirement for licensure. These individuals are exempt because they are under the direct, onsite supervision of a licensed physical therapist. While in supervised clinical training, physical therapist applicants need the authority to practice the full scope of physical therapy. Physical therapist assistant students in required supervised clinical work are exempt because they are under the direct, onsite supervision of a licensed physical therapist. While in clinical training they need the authority to work within the full scope of a physical therapist assistant.

Physical therapists in federal employment, such as in the Veterans Administration, U.S. Public Health Service, or the military services, have historically been exempt from licensure while practicing specifically in those governmental environments. The statute language above reflects changing federal regulations that now require federally employed healthcare professionals to be licensed in at least one jurisdiction, although not necessarily the jurisdiction where they are practicing. However, if the person chooses to practice outside of the confines of their federal employment while in a jurisdiction other than that of their licensure (i.e., employment outside of their normal business hours), they would be required to obtain licensure in the jurisdiction of practice.

Paragraph B.4 provides exemption for physical therapists participating either as instructors or as students in post-graduate education. Frequently these individuals are participating in offerings outside the jurisdiction where they are licensed, and occasionally patient contact and treatment may be part of their educational experience.

This exemption is for no more than 60 days in a calendar year. A longer period of time would constitute a fellowship or an advanced clinical residency and should require licensure in that jurisdiction. Physical therapists participating in a fellowship or residency shall hold a current license in good standing in any jurisdiction. If that fellowship or residency occurs in another jurisdiction and extends beyond 60days, the therapist is expected to obtain licensure in the jurisdiction of the fellowship or residency.

Paragraph B.5 provides exemption for consultation. Exemption from licensure is provided specifically for consultation with another health professional who is licensed in another jurisdiction. This exemption extends only to consultation and does not extend to any other aspect of patient management, including treatment intervention.

Paragraph B.6 provides exemption for licensed physical therapists traveling with a sports team or performing arts company who enters the jurisdiction for a limited time to provide physical therapy to the members of the team or company. Practice under this exemption is authorized only for those individual licensees who are affiliated with the visiting organization since no public contact is anticipated.

Paragraphs B.7 and B.8 address large-scale natural disasters that induce licensed physical therapists to enter a jurisdiction temporarily to provide their services as part of disaster assistance, or where licensed physical therapists are temporarily displaced as a result of a natural disaster and wish to practice in another jurisdiction temporarily or until licensure is achieved by endorsement.

Paragraph C provides an exemption for a physical therapist assistant, licensed or certified in another jurisdiction, to assist a physical therapist in the situations described in *Exemptions from Licensure [or Certification]*, Article 3.04 (Paragraphs B.2, B.3, B.5, B.6 and B.7). This exemption is necessary because the physical therapist assistant shall be participating in patient treatment interventions in these specific situations that are typically restricted to persons licensed or certified by the jurisdiction. Subject to this exemption, a physical therapist assistant would still be under the supervision of a licensed physical therapist.

3.05 License [or Certificate] Renewal

A. A physical therapist applying for renewal of the license shall:

1. **Complete a renewal application including payment of fees.**
2. **Demonstrate evidence of continuing competence as defined by rule.**
3. **Meet the requirements established by board rule if applicable.**
4. **Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].**

B. A physical therapist assistant applying for renewal of the license [certificate] shall:

1. **Complete a renewal application including payment of fees.**
2. **Demonstrate evidence of continuing competence as defined by rule.**
3. **Meet the requirements established by board rule if applicable.**
4. **Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].**

Commentary

Although at this time, there is no specific model language for statute or regulation suggested for jurisdictions when shifting to a continuing competence model, there are some elements that are recommended. First, the language must state "continuing competence" activities rather than continuing education. Second, a minimum number of continuing competence units for re-licensure should be established. Third, an approval process of "continuing competence" activities should be established. Fourth, a determination must be made of the minimum standard continuing competence activities must meet in order to gain approval. Fifth, the jurisdiction must retain the ability to designate an outside body to do the approval of "continuing competence" activities. Finally, the jurisdiction should in some way require evidence of accomplishment by the participant of the required minimum standard.

Additionally, there are suggested principles to consider when implementing a continuing competence model which will need to be communicated:

- Continuing competence should be self-directed by the PT or PTA.
- Evaluation/assessment of current competence is critical for the PT or PTA. The results of an evaluation or assessment should be used by the PT or PTA to then select appropriate development activities.
- PTs and PTAs should have a wide variety of activities available to demonstrate their competence; there is not one "right" way to demonstrate competence.

Many jurisdictions have administrative code that applies to licensees of many different disciplines. Licensees [certificate holders] must meet these requirements in order to renew their license [certification].

3.06 Changes of Name, Address or Telephone Number

Each licensee [and certificate holder] is responsible for reporting a name change and changes in business and home address, email address and telephone numbers to the board within 30 days.

Commentary

Jursidictions should specify in rules the terms of license and certification renewal and the exact renewal date. It should be stated clearly in rules that all licensees and certificate holders are responsible for keeping the board advised of their current home and practice addresses and telephone numbers. Failure to receive a renewal notification should not constitute an excuse for failure to renew on time. It should be further specified that failure to meet the renewal timeframe constitutes practicing without a license or certificate and will be treated as such under authority of *Unlawful Practice; Classification; Civil Penalties; Injunctive Relief,* Article 4.09. Timely renewal is the responsibility of the licensee or certificate holder even where an employer shall be funding the expense of renewal.

3.07 Reinstatement of License [or Certificate]

A. The board may reinstate a lapsed license [or certificate] upon completion of a reinstatement application including payment of fees, as defined by rule.

B. If a physical therapist's license has lapsed for a specified time period, as defined by rules, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to practice physical therapy by one or more of the following as determined by the board:

1. **Complete supervised clinical practice as defined by rules with a restricted license.**
2. **Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure period.**
3. **Pass examination(s) approved by the board.**
4. **Provide proof of licensed practice in another jurisdiction.**

C. If a physical therapist assistant's [certificate/license] has lapsed for a specified time period, as defined by rule, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to work as a physical therapist assistant by one or more of the following as determined by the board:

1. **Complete supervised clinical practice as defined by rules with a restricted license.**
2. **Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure [certification] period.**
3. **Pass examination(s) approved by the board.**
4. **Provide proof of licensed [certified] work as a physical therapist assistant in another jurisdiction.**

D. The board may reinstate a suspended or revoked physical therapist's license upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of competence to practice physical therapy through the following activities:

1. **Complete supervised clinical practice, as defined by rule, with a restricted license.**
2. **Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure period.**
3. **Successfully complete assessment tool(s) and/or pass examination(s) approved by the board.**

E. The board may reinstate a suspended or revoked physical therapist assistant's [certificate/license] upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of the physical therapist assistant's competence to work in the profession of physical therapy through the following activities.

1. **Complete supervised clinical practice with a restricted license [certificate]under a qualified and approved supervisor.**
2. **Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure [certification] period.**
3. **Successfully complete assessment tool(s) and/or pass examination(s) approved by the board.**

Commentary

When a license has been allowed to lapse for a lengthy period of time it shall be an indication of a break in continuity of practice and professional development, and potentially, a loss of ongoing competence. It is recommended that a four-year time period be used to determine when the further requirement of reapplication for licensure should be instituted. The board should have the discretion to assess continuing competence to practice physical therapy in the case of a lapse in practice of four or more years. Competence assessment shall include the options of 1) a supervised internship, 2) remedial or refresher coursework, and 3) retesting, or 4) any combination of these options. Further provisions for applicant interview by the board should be specified.

In cases where a licensee relocates and practices in another jurisdiction and subsequently returns and wishes to practice in the original jurisdiction of licensure, the requirement for successfully demonstrating competence, as stated in Paragraph B above, shall be satisfied by verification of licensure and practice in the other jurisdiction. Reinstatement is used rather than endorsement and granting a new license in order to retain a previous exam history, license number and, if applicable, disciplinary history.

During a period of remedial action prior to reinstatement of license without restrictions, the physical therapist's practice shall be with a restricted license as directed by the board. This type of remediation, outside of a disciplinary action, is an example of the appropriate use of a restricted license.

A lapse of a certificate disqualifies a physical therapist assistant from working as a physical therapist assistant until appropriate renewal and reinstatement requirements are met and fees are paid. As the physical therapist assistant resumes employment, the supervising physical therapist should direct appropriate remedial measures for a physical therapist assistant who lacks current experience or has inadequate skills.

Paragraphs D and E address important considerations if a revoked license or certificate shall someday be eligible for reinstatement. At the time of a revocation, the consent decree should stipulate the conditions, if any, under which the board would consider an application for reinstatement. The specific requirements shall be helpful to a later board when an application is considered. In this situation, a board would likely convene a hearing to review the application and evaluate the fitness of the applicant to, once again hold a license or certificate. All other requirements related to demonstration of continuing competence applicable to any other reinstatement situation would also apply in such a case. Reinstatement is also preferable in this situation to a new application license so that prior history is maintained through a single license number.

A restricted license does not notate merely a disciplinary action. Restricted licenses shall result from re-entry, etc.

[3.08 Fees]

This is optional statutory language for jurisdictions requiring maximum fee ceilings within their statutes.
The board shall establish and collect fees not to exceed:

1. **_____ dollars for an application for an original license [or certificate]. This fee is nonrefundable.**
2. **_____ dollars for a certificate of renewal of a license [or certificate].**
3. **_____ dollars for an application for reinstatement of a license [or certificate].**
4. **_____dollars for each duplicate license [or certificate].**
5. **_____dollars for other administrative fees [e.g., criminal records report, pass through or processing fees]**

Commentary
This is optional language to use if fee ceilings or ranges are required in statute rather than being addressed in rules. Using this model, a ceiling for fees would be established in statute, and the actual fees would be established in rules. The language here sets the same dollar amount for licenses and certificates in the different categories. The fees for licensees and certificate holders could easily be established at different amounts in rules for each of the categories.

Optional for PT Compact Members

6._____dollars for each compact privilege.

Article 4: Regulation of Physical Therapy

4.01 Ethics in the Physical Therapy Profession

A. A physical therapist shall adhere to the recognized standards of ethics of the physical therapy profession as established by rule.

Commentary

A profession's code of ethics encourages a higher standard of conduct; whereas jurisdiction laws establish minimum levels of acceptable conduct. Professional associations are recognized as the promulgators of a profession's code of ethics. This language establishes that ethical conduct in the jurisdiction is legally mandated as the minimum standard of lawful practice. Inclusion of this language empowers a board to be more than the "gatekeepers" or "hand-slappers", some feel is the historical and only duty of licensing boards. A similar clause is included in the model language under the *Grounds for Denial of a License [and Certificate], Disciplinary Action*, Article 4.04.

The model language is "generic" in that it does not specifically reference the American Physical Therapy Association's (APTA's) *Code of Ethics,* with its accompanying *Guide for Professional Conduct* (See *Appendix B*). This generic approach is preferred by many jurisdictions' legal counsel, in order to avoid mention in statue of professional associations and links to documents not under jurisdiction approval authority. The link can be specifically and appropriately made in rules by reference to a specific version of the APTA *Code of Ethics* and *Guide for Professional Conduct.*

B. A physical therapist assistant shall adhere to the recognized standards of ethics~~al conduct~~ of the physical therapy profession as established by rule.

Commentary

A profession's code of ethics encourages a higher standard of conduct; whereas jurisdiction laws establish minimum levels of acceptable conduct. Professional associations are recognized as the promulgators of a profession's code of ethics. This language establishes that ethical conduct in the jurisdiction is legally mandated as the minimum standard of lawful practice. Inclusion of this language empowers a board to be more than the "gatekeepers" or "hand-slappers;" some feel is the historical and only duty of licensing boards. A similar clause is included in the model language under the *Grounds for Denial of a License [and Certificate], Disciplinary Action*, Article 4.04.

The model language is "generic" in that it does not specifically reference the American Physical Therapy Association's (APTA's) *Standards of Ethical Conduct for the physical therapist assistant* (See *Appendix C*). This generic approach is preferred by many jurisdictions' legal counsel, in order to avoid mention in statue of professional associations and links to documents not under jurisdiction approval authority. The link can be specifically and appropriately made in rules by reference to a specific version of the APTA *Standards of Ethical Conduct for the Physical Therapist Assistant* and *Guide for Conduct of the Physical Therapist Assistant*.

4.02 Use of Titles and Terms; Restrictions; Classification of Violation

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A. A physical therapist shall use the letters "PT" or the term "physical therapist" immediately following his or her name to designate licensure as a heath care practitioner under this [act].

Commentary

Abbreviations or terms denoting educational degrees, certifications, or honorary status designations may follow, as applicable. These abbreviations should be used in all correspondence related to practice, including advertisements.

Optional for PT Compact Members

A physical therapist shall use the letters "PT" or the term "physical therapist" immediately following his or her name to designate licensure under this [act] or authorization to practice under a compact privilege.

B. A person or business entity, its employees, agents or representatives shall not use in connection with that person's name or the name or activity of the business, the words "physical therapy," "physical therapist," "physiotherapy,"" physiotherapist," "physio," "registered physical therapist," "doctor of physical therapy," the letters "PT,""DPT,""LPT,""RPT," or any other words, abbreviations or insignia indicating or implying directly or indirectly that physical therapy is provided or supplied, unless such services are provided by or under the direction of a physical therapist licensed pursuant to this [act]. A person or business entity shall not advertise or otherwise promote another person as being a "physical therapist" or "physiotherapist" unless the individual so advertised or promoted is licensed as a physical therapist under this act. A person or business entity that offers, provides or bills any other person for services shall not characterize those services as "physical therapy" or "physiotherapy" unless the individual performing those services is a person licensed as a physical therapist under this [act].

Optional for PT Compact Members

A person or business entity, its employees, agents or representatives shall not use in connection with that person's name or the name or activity of the business, the words "physical therapy," "physical therapist," "physiotherapy,"" physiotherapist," "registered physical therapist," "doctor of physical therapy," the letters "PT,""DPT,""LPT,""RPT," or any other words, abbreviations or insignia indicating or implying directly or indirectly that physical therapy is provided or supplied, unless such services are provided by or under the direction of a physical therapist licensed pursuant to this [act] or authorized to practice under a compact privilege. A person or business entity shall not advertise or otherwise promote another person as being a "physical therapist" or "physiotherapist" unless the individual so advertised or promoted is licensed as a physical therapist under this act or authorized to practice under a compact privilege. A person or business entity that offers, provides or bills any other person for services shall not characterize those services as "physical therapy" or "physiotherapy" unless the individual performing those services is a person licensed as a physical therapist under this [act] or authorized to work under a compact privilege.

C. Physical therapists who have graduated from a DPT program may use the title "Doctor of Physical Therapy." A physical therapist holding a DPT or other doctoral degree shall not use the title "Doctor" without also clearly informing the public of his or her profession as a physical therapist.Use of the title shall be in accordance with jurisdictional law.

D. A physical therapist assistant shall use the letters "PTA" immediately following his or her name to designate [certification/ licensure] under this [act].

Commentary

Abbreviations or terms denoting educational degrees, certifications, or honorary status designations may follow, as applicable. These abbreviations should be used in all correspondence related to practice, including advertisements.

Optional for PT Compact Members

A physical therapist assistant shall use the letters "PTA" or the term "physical therapist assistant" immediately following his or her name to designate [certification/ licensure] under this [act] or authorization to work under a compact privilege.

E. A person shall not use the title "physical therapist assistant," the letters "PTA," or any other words, abbreviations or insignia in connection with that person's name to indicate or imply, directly or indirectly, that the person is a physical therapist assistant unless that person is [certified/ licensed] as a physical therapist assistant pursuant to this [act].

Optional for PT Compact Members

A person shall not use the title "physical therapist assistant," the letters "PTA," or any other words, abbreviations or insignia in connection with that person's name to indicate or imply, directly or indirectly, that the person is a physical therapist assistant unless that person is [certified/ licensed] as a physical therapist assistant pursuant to this [act] or authorized to work under a compact privilege.

F. A person or business entity that violates paragraphs (B) or (E) of this section is guilty of a [cite specific legal sanction].The board shall have authority to impose a civil penalty, in an amount not to exceed [specify number of dollars] per violation, against any person or business entity that violates paragraphs (B) or (E). In addition, the board shall seek an injunction against conduct in violation of paragraphs (B) or (E) in any court of competent jurisdiction. For purposes of this [act], the board, in seeking an injunction, need only show that the defendant violated paragraphs (B) and (E) of this section to establish irreparable injury or a likelihood of a continuation of the violation.

Commentary

"PT" is the professional and regulatory designation required by practice acts and used by physical therapists in the United States. It should immediately follow the licensee's name. The model statute language prohibits substituting but does not restrict adding other letter designations indicating an academic degree (e.g., MS, PhD), professional degree (e.g., DPT), certification (e.g., ATC), or honorary status (e.g., FAPTA). All these additional designations should follow the standard "PT" designation. For example, a board-certified orthopedic specialist with a doctoral degree in physical therapy would be appropriately designated as Jane Doe, PT, DPT, OCS.

The jurisdiction legislature grants scope of practice privileges and imposes certain restrictions on the use of titles and terms for public protection. The use of the title "physical therapist" connotes education and training in a unique body of knowledge and skills exclusive to physical therapists.

Title protection encompasses names and titles, as well as the letters and abbreviations that are associated with licensure. Paragraph B above addresses all such titles, designations and abbreviations applicable to physical therapy licensure, including archaic terms and some that shall be future terms.

Archaic designations such as RPT or LPT, while they should be protected, should not be used. Rules shall be considered that prohibit the use of these archaic designations
protecting the term "physiotherapy," which is a historically significant as well as current international title of the profession, prevents the misleading use of this term by other individuals or professionals. A claim that physical therapy or physiotherapy is a generic term is misleading, and any terms implying that physical therapy is being provided should be protected. This term protection is not against the use of various physical agents, modalities or procedures by others but rather is against the inappropriate labeling of those modalities and procedures as physical therapy. Any violation of this term protection paragraph would be addressed in paragraph A of Article 4.09.

Those therapists holding a DPT or any doctoral degree such as a PhD or EdD, are entitled to use "Dr" as a prefix to their name in honor of the professional degree they have earned. However, DPT or PhD are academic degrees, not a clinical designator. It is important that the public perceive the critical difference between the word "physician" and the use of the title "Dr." Therefore, in order to minimize confusion, physical therapists should identify themselves and their profession when first meeting a patient. A physical therapist may not use the title of "Dr."in a manner which would mislead a patient into assuming that he or she is anything other than a physical therapist.

Paragraphs D and E provide title protection for physical therapist assistants. In this instance, title protection is granted without a corresponding granting of a scope of practice. (See *Definitions*, Article 1.02.E; *Examination and Licensure*, Article 3.01-3.04; *Patient Care Management*, Article 4.03.)

4.03 Patient/Client Care Management

A. A physical therapist is fully responsible for managing all aspects of the physical therapy care of each patient/client. A physical therapist shall provide:

1. **The initial evaluation, determination of diagnosis, prognosis, and plan of treatment intervention and documentation of each encounter of each patient/client;**
2. **Periodic reevaluation and documentation of each patient/client;**
3. **The documented discharge of the patient/client, including the patient's/client's response to treatment intervention at the time of discharge.**

Commentary

Physical therapists are professionally and legally responsible for the treatment interventions they personally render as well as those components of intervention rendered by personnel under the physical therapist's supervision. This responsibility is not diminished when persons assisting the physical therapist are licensed, certified or otherwise regulated. The practice of physical therapy includes examination, evaluation and testing for purposes of determining a diagnosis, a prognosis, a plan of treatment intervention, and an assessment of the ongoing effects of treatment. These responsibilities are evaluative in nature and can only be performed by a physical therapist.

The initial evaluation is essential to determine if physical therapy services are medically necessary, gather baseline data, establish a treatment plan, and develop goals based on the data. An evaluation is needed before implementing any physical therapy treatment. Evaluation begins with the administration of appropriate and relevant assessments using standardized assessments and tools. The evaluation shall include, but is not limited to:

a) A history of current condition and treatment previously provided
b) A relevant systems review
c) Prior functional level
d) Specific standardized and non-standardized tests, assessments, and tools
e) Analytic interpretation and synthesis of all data, including a summary of the baseline findings in written or electronic report(s)
f) Objective, measurable, and functional descriptions of a patient/client's deficits using comparable and consistent methods
g) Summary of clinical reasoning and consideration of contextual factors with recommendations
h) Plan of care with specific treatment techniques and/or activities to be used in treatment sessions that should be updated as the patient/client's condition changes
i) Communication to the patient and /or others, as indicated, the prospective plan of treatment and outlined goals
j) Frequency and duration of treatment plan
k) Functional, measurable, and time-framed long-term and short-term goals based on appropriate and relevant evaluation data
l) Rehabilitation prognosis

A reevaluation is indicated when there are new clinical findings, a rapid change in patient status, or failure to respond to physical therapy interventions. These include ongoing reassessments that are part of each skilled treatment session, progress reports, and discharge summaries and shall include modifications and renewal to the treatment plan of care.

Reevaluation is a more comprehensive assessment that includes some or all the components of the initial evaluation, such as:

a) Data collection with *objective* measurements taken based on appropriate and relevant assessment tests and tools using comparable and consistent methods
b) Making a judgment as to whether skilled care is still warranted
c) Organizing the composite of current problem areas and deciding a priority/focus of treatment
d) Identifying the appropriate intervention(s) for new or ongoing goal achievement
e) Modification of intervention(s)
f) Revision in plan of care if needed
g) Correlation to meaningful change in function, and
h) Deciphering effectiveness of intervention(s).

The physical therapist shall ensure that patients are provided appropriate treatment that is delivered in a reasonably safe manner, that, where known standards of practice exist, such treatment adheres to applicable standards, and that recognized standards of ethics, as established by rule or otherwise, are followed. In the event the evaluation or re-evaluation reveals a condition or suspected condition which is beyond the PT scope of practice, the therapist shall communicate these findings to the patient's primary care provider or make a referral to an appropriate provider of care.

Paragraphs A.1 through A.3 of the model statute require physical therapists to document the services they personally provide.

B. A physical therapist shall assure the qualifications of all physical therapist assistants and physical therapy aides under their direction and supervision.

Commentary

The use of personnel assisting the physical therapist is a patient care management decision made by each physical therapist. The physical therapist must determine whether personnel assisting the physical therapist are qualified to perform the designated activity, and their qualifications should be verified and documented. For the physical therapist assistant, this should at least include documentation of educational training and regulatory credentialing. For physical therapy aides, this should at least include written evidence of on-the-job training by the physical therapist.

C. For each patient/client on each date of service, a physical therapist shall provide all the treatment intervention that requires the education, skills and knowledge of a physical therapist and shall determine the use of physical therapist assistants or physical therapy aides to ensure that the delivery of care that is safe, effective, and efficient.

Commentary

This language requires the physical therapist to personally provide those services that require his or her expertise and to determine the appropriate tasks that shall be assigned to assisting personnel for each patient on every date of service. The physical therapist must ensure that the use of supervised personnel is an efficient use of resources and is based on patient safety and treatment efficacy.

There are limits to a physical therapist's capacity to fulfill the responsibilities of direct patient care as well as to fulfill a supervisory role over other personnel. Jurisdictions shall wish to adopt rules that specify a reasonable limit

on the number of physical therapist assistants, aides, and students that a physical therapist shall personally supervise.

1. **A physical therapist assistant shall work under a physical therapist's supervision. A physical therapist assistant shall document the care they provide.**

Commentary
The language of this section provides authorization for the physical therapist assistant to work in an offsite setting and under the general supervision of a physical therapist. If a jurisdiction opts for a different supervision level it should be specified in this section. For example, a jurisdiction requiring onsite supervision of a physical therapist assistant could insert "onsite" prior to the word "supervision" in the first sentence. Any other supervisory limits or requirements and procedures related to communication and documentation should be specified here or clarified in rules.

2. **A physical therapist may use physical therapy aides for designated routine tasks. A physical therapy aide shall work under the supervision of a physical therapist.**

Commentary
Jurisdictions are encouraged to adopt the basic language in Paragraph C.2 that limits the use of aides to working only under the supervision of a physical therapist or allowing use of an aide in an offsite setting only when directly helping a physical therapist assistant or performing tasks which are not patient-related. The phrase "designated routine tasks" in the model definition of a physical therapy aide is distinctly different from "selected components of intervention" as used in the model definition for physical therapist assistants. If a jurisdiction chooses to enact more explicit restrictions on the duties of a physical therapist aide, a more detailed definition of "designated routine tasks" should be included in rules.

There are many situations in extended care, home health or school settings, where physical therapists train others to carry out certain exercises or activities for the benefit of patients/clients. However, unless a physical therapist is onsite and providing supervision as an integral part of a physical therapy plan of care and treatment intervention these activities should not be represented as physical therapy services.

In this provision, as in 1.02.9 , "direction" and "supervision" are functions that belong solely to the licensed physical therapist. The physical therapist assistant shall receive help from a physical therapy aide when performing certain tasks or procedures, but the physical therapist assistant does not assume the responsibility to "direct and supervise" the provision of care. That responsibility remains with the supervising physical therapist and, by law, cannot be relinquished to another.

D. The physical therapist shall communicate the plan of care with, and obtain informed consent from, the patient/client or the patient's legally authorized representative.

Commentary

Informed consent, at a minimum, occurs at the outset of physical therapy care and is updated when there are changes/modifications to the plan. Informed consent is not a passive, one-time, one-way push of information from the provider of physical therapy services to the patient/client (legally authorized representative). Instead, it is a process by which the patient/client is given an explanation of the treatment plan of care (or specific treatment being performed), the opportunity to ask questions and be made aware of any risks and ultimately decide whether or not to move forward with the proposed intervention. Informed consent is a two-way ongoing process

between the provider and the patient/client respecting the right of the patient/client to make decisions regarding their healthcare.

The nature of physical therapy treatments often requires close contact between PT/PTA and the patient/client, which may warrant more frequent communication to maximize patient/client understanding of the intent or necessity of the physical proximity. It is incumbent upon the provider to describe actions necessary to address the patient/client dysfunction while considering cultural, social, and personal boundary sensitivities of the patient/client.

Informed consent may be written or verbal, in-person or via electronic communications. The treatment setting may impact the format of informed consent and the provider should consider setting in the informed consent process. An indepent outpatient receiving care may require a different approach to informed consent than the indiviudal in an institutional setting in which a informed consent covers a broad range of inpatient services/care. In any setting, however, the patient/client has the right to receive a clear explanation of care and the opportunity to give or deny consent.

The provider should document informed consent was obtained from the patient/client. Written consent may be the most ideal format, however depending upon the environment or situation, verbal consent may be appropriate provided it is fully conveyed in the documentation.

E. A physical therapist's responsibility shall include accurate documentation and billing of the services provided.

Commentary

F. A physical therapist assistant's responsibility shall include accurate documentation and billing of the services provided.

Commentary

G. Nothing in this [Act] shall prohibit a licensee[certificate holder] from providing physical therapy to animals for which the licensee[certificate holder] has completed the education and training as further established by rule.

Commentary

The practice of physical therapy continues to evolve including the treatment of animals. While there is currently no consistent standard of specified education and training, it is appropriate to note that additional rule development in a jurisdiction may address minimum standards to demonstrate competency to provide physical therapy to animals.

4.04 Grounds for Denial of a License [and Certificate]; Disciplinary Action

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A. The following are grounds for denial of a license [and certificate] or disciplinary action.

Commentary

The following language itemizes the various causes or grounds for which a physical therapist, and in many cases a physical therapist assistant, shall be denied a license or certificate or disciplined under the provisions of the law.

Others who practice physical therapy unlawfully come under the powers granted a licensing board in *Unlawful Practice; Classification; Civil Penalties; Injunctive Relief*, Article 4.09. In many practice acts, this list is referred to as "unprofessional conduct." The term "grounds for denial of a license and disciplinary action" is more descriptive and is the recommended title for this section. This section needs to be comprehensive enough to cover all areas of potential violation.

1. Violating any provision of this [act], board rules or a written order of the board.

Commentary
This clause provides the broadest foundation for disciplinary action. It encompasses statutes, rules and written disciplinary orders.

2. Obtaining or attempting to obtain a license [or certificate] by fraud or misrepresentation.

Commentary
Individuals who do not meet licensure qualifications and requirements may resort to falsifying or omitting information when applying for licensure or certification. Examples would be when an applicant by endorsement withholds information of disciplinary action in another jurisdiction, or when an applicant for renewal falsely claims to have completed continuing competence requirements.

Optional for PT Compact Members
2. Obtaining or attempting to obtain a license [or certificate] or compact privilege by fraud or misrepresentation.

3. Attempting to engage in conduct that subverts or undermines the integrity of the examination or the examination process including, but not limited to, a violation of security and copyright provisions related to the national licensure exam, utilizing in any manner recalled or memorized examination questions from or with any person or entity, failing to comply with all test center security procedures, communicating or attempting to communicate with other examinees during the test, or copying or sharing examination questions or portions of questions.

Commentary
Exam cheating and other forms of attempted cheating on the licensure examination are addressed in this model statute language. The Federation of State Boards of Physical Therapy is authorized under exam contract and under the express written approval of each examinee to take action against those who attempt to cheat on the examination. This paragraph empowers a jurisdictional board to take the necessary action prior to or after the licensing process if an applicant violates the integrity of the examination process.

4. Practicing or offering to practice beyond the scope of the practice of physical therapy.

Commentary
The determination of what constitutes practice "beyond the scope" of physical therapy is predominantly the responsibility of licensing board members. Scope of practice changes as contemporary practice evolves and boards need the latitude to determine the appropriateness of physical therapy procedures as they relate to both established and evolving scope of practice. The definition of "the practice of physical therapy" should also serve as a primary resource for determining violations of scope of practice.

5. Acting in a manner inconsistent with generally accepted standards of physical therapy practice, regardless of whether actual injury to the patient/client is established.

Commentary

There are a number of other authoritative sources for the board to consult in addition to statute and rules when determining "generally accepted standards of physical therapy practice." These might include published standards of physical therapy practice, case law or other source documents. Injury does not need to be established when professional conduct is substandard or potentially injurious to a patient.

6. Failing to adhere to the recognized standards of ethics of the physical therapy profession as established by rule.

Commentary
This clause empowers a licensing board to discipline licensees or certificate holders for unethical conduct as promulgated by rules. (See *Ethicss in the Physical Therapy Profession*, Article 4.01 and *Commentary*.) There is clear legal precedence for jurisdiction regulatory boards utilizing the established ethical standards of the profession in disciplinary matters.

7. Failing to complete continuing competence requirements as established by rule.

Commentary
Authority to enact continuing competence requirements is contained under several paragraphs of the Model Practice Act (see *Legislative Intent,* Article 1.01, *Powers and Duties of the Board,* Article 2.02.8, *License [or Certificate] Renewal,* Article 3.05.A). This paragraph provides board authority to take disciplinary action if a physical therapist fails to meet the continuing competence standards established by law, including fulfilling any remedial requirements.

8. Failing to maintain adequate patient/client records. For the purposes of this paragraph, "adequate patient/client records" means legible records that contain at minimum sufficient information to identify the patient/client, an evaluation of objective findings, a diagnosis, a plan of care, a treatment record and a discharge plan.

Commentary
The importance of maintaining a thorough and timely written record of physical therapy services provided to every patient/client and patient response to treatment should be self-evident. It is the written record that ultimately supports the effectiveness and appropriateness of the physical therapist's patient/client evaluation, plan of care and treatment intervention. This paragraph establishes a legally minimum standard for physical therapist patient documentation and allows the board to take disciplinary action against therapists who maintain faulty or incomplete patient records.

9. Failing to supervise physical therapist assistants, physical therapy aides, or a person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's education in accordance with this [act] and board rules.

Commentary
A physical therapist remains responsible for the entire scope of patient management including the supervision of physical therapist assistants, physical therapy aides, and students completing clinical education experiences. The practice act and rules govern supervisory requirements. See *Definitions*, Article 1.02; *Patient Care Management*, Article 4.03; and *Guidelines for Rules*.

10. Failing to report to the board, where there is direct knowledge, any unprofessional, incompetent or illegal acts that appear to be in violation of this [act] or any rules established by the board.

Commentary
Regulatory boards, by means of the disciplinary process, bear the responsibility for the public's expectation of qualified services from duly scrutinized practitioners. This responsibility is passed on to the licensed professionals by the requirement that they must bring to the Board's attention direct knowledge of incompetent, unprofessional

or illegal practices. The reporting of these acts serves to protect the public from harm as a result. The paragraph authorizes disciplinary action against a licensee who fails to report 'direct knowledge' to the physical therapy board. A licensee or certificate-holder is not obligated to report hearsay when he or she has no direct knowledge of a possible violation.

11. Engaging in sexual misconduct. For the purpose of this paragraph sexual misconduct includes:

a. Engaging in or soliciting sexual relationships, whether consensual or non-consensual, while a physical therapist or physical therapist assistant-patient/client relationship exists.

b. Making advances, requesting favors or expressing thoughts, feelings, or making gestures that are sexual in nature, or that reasonably may be construed by a patient/client as sexual in nature, by any means including verbal, physical contact, or via electronic communications.

c. Intentionally viewing a completely or partially disrobed patient/client in the course of treatment if the viewing is not related to patient/client diagnosis or treatment under current practice standards.

Commentary

To violate the provisions of this law, physical therapists or physical therapist assistants do not need to actually engage in sexual relations since even the solicitation of such a relationship is a violation. The violation is not excused even in the case of a consensual sexual relationship with a patient. Sexual misconduct also includes activities specified in Paragraph 11.B above that defines sexual harassment and includes inappropriate touching and violations of established boundaries. Paragraph 11.C expands sexual misconduct to inappropriate examination or treatment that exposes a patient unnecessarily or for improper motives. The patient provider relationship is therapeutic and not social or emotional. It inherently establishes boundaries and a power differential between the healthcare provider and the patient. Any conduct that exploits the vulnerability of the patient should clearly be a violation of law.

12. Sexual contact between a physical therapist and patient/client after termination of the physical therapist-patient/client Relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.

Commentary

Even after the termination of physical therapy services it is possible that a physical therapist may be culpable for a violation of this Act if the physical therapist demonstrates an abuse of their relationship with the patient/client in order to gain sexual contact with the patient/client. Boards should be able to liberally construe the timing and connection of the interactions and sexual contact between a physical therapist and patient/client even if the sexual contact occurs after the termination of physical therapy services, and not be bound by a definition that ends a physical therapists' responsibilities for their behavior or actions solely at the termination of services, especially if services are terminated for the purpose of sexual contact with a patient/client.

13. Sexual contact between a physical therapist assistant and patient/client after termination of the physical therapist assistant-patient/client relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.

Commentary

Even after the termination of physical therapy services it is possible that a physical therapist assistant may be culpable for a violation of this Act if the physical therapist assistant demonstrates an abuse of their relationship with the patient/client in order to gain sexual contact with the patient/client. Boards should be able to liberally construe the timing and connection of the interactions and sexual contact between a physical therapist assistant and patient/client even if the sexual contact occurs after the termination of physical therapy services, and not be bound by a definition that ends a physical therapist assistant's responsibilities for their behavior or actions solely at the termination of services, especially if services are terminated for the purpose of sexual contact with a patient/client.

14. Abusing the physical therapist-patient/client relationship to exert undue influence or exploiting persons over whom the licensee has supervisory, evaluative, or other authority

Commentary

Factors that can contribute to positional power imbalance include the physical therapist's knowledge of the evaluation and treatment of a diagnosis, the patient/client dependence on the physical therapist to address pain and decreased function and the vulnerability that can arise due to this pain and decreased function. A power imbalance can also exist as related to cultural background(s), socio-economic status, educational background, health literacy, mental and emotional status of others.

While the focus here in statute relates to the power imbalance the physical therapist may hold over the patient/client, it is worth noting that power imbalance may also work in the reverse such that a patient holds an imbalance of power, consider an older patient working with a younger or recent graduate where the patient/client has years of life-experience beyond that of the younger or recent graduate physical therapist.

15. Abusing the physical therapist assistant-patient/client relationship to exert undue influence or exploiting persons over whom the licensee [certificate holder] has supervisory or other authority

Commentary

Factors that can contribute to positional power include the patient/client dependence on the knowledge of the physical therapist assistant and the vulnerability that can arise due to pain and decreased function. A power imbalance can also exist as related to cultural background(s), socio-economic status, educational background, health literacy, mental and emotional status of others.

While the focus here in statute relates to the power imbalance the physical therapist assistant may hold over the patient/client, it is worth noting that power imbalance may also work in the reverse such that a patient holds an imbalance of power, consider an older patient working with a younger or recent graduate where the patient/client has years of life-experience beyond that of the younger or recent graduate physical therapist assistant.

16. Having had a license [or certificate] revoked or suspended, other disciplinary action taken, or an application for licensure [or certification] refused, revoked or suspended by the proper authorities of another jurisdiction, territory or country.

Commentary

This paragraph gives the board the authority to review any disciplinary action taken against a licensee or certificate holder by another jurisdiction when granting a license or certificate or in any subsequent disciplinary case. The board should consider the relationship between the risk to the public resulting in the disciplinary action taken by another jurisdiction, as well as the appropriate level of discipline for the circumstances that formed the basis of the action.

NOTE: In the specific instance where an investigative process or disciplinary action was initiated but not completed, and the licensee or certificate holder then applies in another jurisdiction, this should be addressed by the rules that specify the requirements of application or endorsement. Rules or application questions should address whether the applicant has any pending complaints or investigations from other jurisdictions. Failure to disclose and then subsequent discovery would be grounds for disciplinary action under Paragraph 4.04.2 of this section that describes attempting to obtain a license by fraud or misrepresentation.

Optional for PT Compact Members

12. Having had a license [or certificate] or compact privilege revoked or suspended, other disciplinary action taken, or an application for licensure [or certification] or compact privilege refused, revoked or suspended by the proper authorities of another jurisdiction, territory or country.

17. Having been convicted of or pled guilty to a felony with a nexus to the practice of a physical therapist or work of a physical therapist assistant in the courts of this jurisdiction or any other jurisdiction, territory or country. Conviction, as used in this paragraph, shall include a deferred conviction, deferred prosecution, deferred sentence, finding or verdict of guilt, an admission of guilt, an Alfred plea, or a plea of *nolo contendere*.

Commentary
Although this paragraph gives the board broad authority to review any felony conviction of a licensee/certificate holder, the board should consider the relationship or nexus between the felony to the practice of the physical therapist or work of a physical therapist assistant and the risk to the public's welfare and safety when determining whether and what level of disciplinary action is appropriate. Additional considerations may include but are not necessarily limited to the time since the felony conviction, mitigating/extenuating circumstances, and any additional infractions of the law.

18. Aiding and abetting the unlicensed practice of physical therapy.

Commentary
The most frequent use of this paragraph occurs when someone not licensed or certified is providing services represented as physical therapy without the legal and appropriate supervision of a physical therapist. An example might be a situation where a physical therapist performs only the initial evaluation of a patient and subsequent care is provided by other individuals without the involvement and supervision of the therapist but which is represented and billed as physical therapy. The therapist in this case could be held accountable for abetting this illegal practice by unlicensed personnel.

19. Directly or indirectly requesting, receiving or participating in the dividing, transferring, assigning, rebating or refunding of an unearned fee, or profiting by means of a credit or other valuable consideration such as an unearned commission, discount or gratuity in connection with the furnishing of physical therapy services. This does not prohibit the members of any regularly and properly organized business entity recognized by law comprising physical therapists from dividing fees received for professional services among themselves as they determine necessary.

Commentary
This model language is fairly common statute language dealing with kickbacks, rebates and unearned fees. It does not directly address employment relationships with referral sources. Some jurisdictions have legislatively prohibited referral for profit relationships associated with employment of physical therapists by physicians by inserting the word "wages" into the language of this paragraph. While it is unlawful to pay or receive any remuneration to or from a referral source, it is lawful under this clause for physical therapist within a physical therapist-owned practice to divide profits among themselves.

20. Promoting any unnecessary device, treatment intervention or service resulting in the financial gain of the practitioner or of a third party.

21. Providing treatment intervention unwarranted by the condition of the patient or continuing treatment beyond the point of reasonable benefit.

Commentary
Professional practitioners have a fiduciary responsibility to place patient welfare above all other concerns when providing health or medical services. Physical therapist services and product recommendations should be entirely

based on patient need and benefit and uninfluenced by financial benefits the physical therapist might receive. This paragraph establishes that this ethical standard of fiduciary responsibility is also the legal standard of practice in the jurisdiction. These two sections prohibit the provision of unnecessary devices, unnecessary treatment intervention, or overutilization of services. Paragraph 20 focuses on motives of financial gain, whereas Paragraph 21 focuses on treatment effectiveness and appropriateness.

22. Participating in underutilization or overutilization of physical therapy services for personal or institutional financial gain.

Commentary
This paragraph establishes the legal obligation of the professional practitioner to maintain independent judgment and ensure patient benefit regardless of the limitations or opportunities presented by the prevailing healthcare environment or particular employment directives. Under a fee-for-service payment system an increase of intervention shall result in greater financial gain to the provider or employer. In a managed care system the denial or limitation of intervention shall result in greater financial gain to a provider or employer. These types of conflicts are inherent in either system of payment. This paragraph allows the board to take disciplinary action should patients be exploited by overutilization or underutilization of physical therapy services.

23. Charging fraudulent fees for services performed or not performed.

Commentary
This language empowers a licensing board to address circumstances involving the charging of fraudulent fees and billing practices. A board shall still need to wrestle with the issue of when or if a clearly unreasonable fee shall reach the proportion of being considered fraudulent.

24. Making misleading, deceptive, untrue or fraudulent representations in violation of this [act] or in the practice of the profession.

Commentary
Professional accountability encompasses integrity and truthfulness in the practice and promotion of physical therapy services. This language empowers a board to deny licensure or certification or to take disciplinary action against individuals who intentionally violate the public trust. Possible violations shall include private or public representations of one's ability to diagnose or provide treatment for conditions outside the scope of physical therapy practice, or false or misleading advertisement or promotion regarding one's services. The language is broad enough to apply to business operations, employment-related issues, billing practices or any other activity related to the operation of physical therapy services that shall be misleading, deceptive, untrue or fraudulent to the public. This clause is not intended in any way to restrict or limit legally appropriate advertisement or promotion.

25. Practicing as a physical therapist or working as a physical therapist assistant when physical or mental abilities are impaired by the use of controlled substances or other habit-forming drugs, chemicals or alcohol, or by other causes.

Commentary
This paragraph grants the board authority to initiate and carry out disciplinary action when an individual's abilities shall be impaired by substance use. The safety and welfare of patients is of highest priority and is the focus of this statute language. The treatment of the impaired professional recognizes the need to pursue active rehabilitation in cases of substance abuse, as discussed in *Substance Abuse Recovery Program*, Article 4.11.

26. Practicing physical therapy with a mental or physical condition that impairs the ability of the licensee to practice with skill and safety.

Commentary

This paragraph grants a board the authority to impose restrictions on a licensee relating to a determination that the individual's ability to practice physical therapy with skill and safety is impaired by mental or physical conditions, whether temporary or permanent. Examples might be a physical therapist who is recovering from a closed-head injury, or an individual who suffers from a neurological condition that impairs his or her physical performance to practice physical therapy, or a licensee who is dealing with an episode of severe depression. The board could determine whether and for how long the licensee's practice should be restricted to ensure protection of the public. The Americans with Disabilities Act shall pose additional legal restraints when a board relies on this provision.

27. Practicing after having been adjudged mentally incompetent by a court of competent jurisdiction.

Commentary
Mental incompetence is a judgment made outside the scope of a physical therapy licensing board's responsibility. Concern for patient safety and concern that a patient receives appropriate care shall merit board action restricting or denying licensure in a situation where a court of law has made the determination of mental incompetence (see *Investigative Powers; Emergency Action; Hearing Officers*, Article 4.05, which authorizes and empowers the board to require a licensee to be examined for mental or physical ability to practice).

28. Interfering with an investigation or disciplinary proceeding by failure to cooperate, by willful misrepresentation of facts, or by the use of threats or harassment against any patient/client or witness to prevent that patient/client or witness from providing evidence in a disciplinary proceeding or any legal action.

Commentary
The board must have access to all relevant information to adequately protect the public and enforce this act. Any attempt to interfere with or cover up the facts of an investigation or disciplinary proceeding would be a violation of this statute, and potentially subject a licensee or certificate holder to further disciplinary action.

29. Failing to maintain patient/client confidentiality without documented authorization of the patient/client or unless otherwise required by law. All records used or resulting from a consultation by telehealth, as defined in [*Definitions*, Article 1.02], are part of a patient's/client's records and are subject to applicable confidentiality requirements.

Commentary
Patient/provider confidentiality is an inherent responsibility of professional practice. Initial patient registration information generally contains provisions for the proper and legal release of medical information upon written approval by the patient. This paragraph establishes that violation of this patient/provider trust will also be a violation of law. There shall be other federal or jurisdiction disclosure laws related to confidentiality that shall modify the provisions of this paragraph. There is additional language in the Model Practice Act that addresses provider/patient confidentiality under *Rights of Consumers*, Article 4.12.G.

4.05 Investigative Powers; Emergency Action; Hearing Officers

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Commentary
Most jurisdictions have entire sections of administrative law known as an Administrative Procedures Act that directs the disciplinary process. Procedural aspects of discipline need to be delineated in rules if they are not addressed in a jurisdiction's Administrative Procedures Act. This section of the model statute addresses the board's authority to investigate complaints and discipline licensees and certificate holders, including:

- Initiation and handling of complaints
- Investigation
- Informal disposition of complaints

- Summons and complaint issued by the board
- Pre-hearing discovery
- Subpoena and injunctive authority
- Informal interviews or hearings
- Formal hearings
- Settlement, consent orders, disciplinary actions

A. To enforce this [act], the board is authorized to:

1. Receive complaints filed against licensees [or certificate holders] and conduct a timely investigation.

Commentary
Public access to the complaint process should be clearly established by the law. There should be a standard complaint form, allowing for complaints to be received verbally or in writing. The complainant must provide their name and address for follow-up contact. However, it should be specified that confidentiality will be maintained if the complainant so requests and within the limits of law. Jurisdiction confidentiality laws shall be a factor in drafting conforming rules. (See *Guidelines for Rules.*)

2. File complaints against licensees [or certificate holders] or individuals engaging in the unlawful or unlicensed practice of physical therapy and conduct a timely investigation.

Commentary

Board members may become aware of possible infractions of the laws and rules through multiple sources about the unlawful or unlicensed practice of physical therapy. This standard empowers the Board to file a complaint to report the unlawful or unlicensed practice of physical therapy. Some examples may include, but are not limited to, a physical therapist or physical therapist assistant practicing with an expired license or individuals purporting to provide physical therapy when they are not authorized to do so.

3. Conduct an investigation at any time and on its own initiative without receipt of a written complaint if the board has reason to believe that there shall be a violation of this [act].

Commentary
Board members may become aware of possible infractions of the laws and rules through inquiries to board members or staff from physical therapists, the public or other sources about the legal appropriateness of a physical therapist's practices. As well, information may come to the board through the complaint investigation process that identifies other practitioners in possible illegal actions. Boards need the latitude to investigate these concerns without being required to wait for a formal complaint to be submitted. This standard allows more latitude than "probable cause" or "reasonable cause."

4. Issue subpoenas to compel the attendance of any witness or the production of any documentation relative to a case.

Commentary
A subpoena shall be used to access, review and obtain records in addition to compel the testimony of any witnesses in an investigation or disciplinary proceeding. The use of subpoenas in unannounced site investigations is occasionally a necessary part of investigating complaints. The issuance of subpoenas shall be dependent upon individual jurisdiction laws. Specific model language regarding the confidentiality of patient records is further recommended. (See *Rights of Consumers*, Article 4.12.H.)

5. Take emergency action ordering the summary suspension of a license [or certificate] or the restriction of a physical therapist's practice or a physical therapist assistant's work, pending proceedings by the board.

Commentary
This language grants a board the authority to respond quickly to a complaint having serious implications for public protection. Jurisdiction boards have sometimes been required to wait weeks or months before a hearing could be conducted, putting the public at risk. In the absence of an Administrative Procedures Act, conforming rules shall be necessary to specify parameters for the use of this authority, for example, how soon a hearing must be held and what type of conduct or imminent danger warrants use of this authority.

Optional for PT Compact Members

Take emergency action ordering the summary suspension of a license [or certificate] or compact privilege or the restriction of a physical therapist's practice or a physical therapist assistant's employment, pending proceedings by the board.

6. Appoint hearing officers authorized to conduct hearings. Hearing officers shall prepare and submit to the board findings of fact, conclusions of law and a recommendation for board action that shall be reviewed and voted on by the board.

Commentary
When the disciplinary process reaches the formal level, the preferred procedure is to use an independent hearing officer to conduct the hearing. Administrative Procedures Acts shall specify that hearing officers shall be administrative law judges. If that is the case, the reference to "administrative law judges" shall be more appropriate than "hearing officers." Hearing procedures should be specified in rules or referenced in a uniform Administrative Procedures Act.

7. Require a physical therapist to be examined in order to determine his or her mental or physical ability to practice physical therapy.

Commentary
There shall be times when a licensee or applicant's mental, physical or professional competence could impair their ability to practice physical therapy with skill and safety. This paragraph empowers a board to direct appropriate evaluations for such competence if the circumstances warrant. The Americans with Disabilities Act shall pose additional restraints. Paragraph 4.04.23 under *Grounds for Denial of a License [and Certificate] Disciplinary Action* authorizes the board to take action that shall limit or prevent practice determined by the board to be unsafe to the public.

8. Require a physical therapist assistant to be examined in order to determine his or her mental or physical ability to work in the profession of physical therapy.

Commentary
There shall be times when a licensee or applicant's mental, physical or professional competence could impair their ability to work in the profession of physical therapy with skill and safety. This paragraph empowers a board to direct appropriate evaluations for such competence if the circumstances warrant. The Americans with Disabilities Act shall pose additional restraints. Paragraph 4.04.23 under *Grounds for Denial of a License [and Certificate]; Disciplinary Action* authorizes the board to take action that shall limit or prevent practice determined by the board to be unsafe to the public.

B. If the board finds that the information received in a complaint or an investigation does not merit disciplinary action against a licensee [or certificate holder] it shall take one of the following actions:

1. Dismiss the complaint.

Commentary
A complaint is dismissed if there is no violation of the law or rules.

2. Issue an advisory letter to the licensee [or certificate holder]. An advisory letter is non-disciplinary and notifies a licensee [or certificate holder] that, while there is not evidence to merit disciplinary action, the board believes that the licensee [or certificate holder] should become educated about the requirements of this [act] and board rules.

Commentary
The Model Practice Act consistently advocates a broader role for licensing boards than merely punishing practitioners who violate the law. This paragraph grants a board the authority to address issues of conduct it believes shall be problematic but that do not rise to the level of a violation of law. This paragraph is pre-emptive in its approach by authorizing a board to give guidance in the spirit of public protection about a physical therapist's practices which shall avert future violation of law or potential risk to the public.

An advisory letter is instructive and not disciplinary or punitive. The advisory letter is not considered a disciplinary action and thus does not require reporting to HIPDB. Each jurisdiction will need to determine the limits of disclosure pursuant to their open records act. Other questions that might be addressed in rules include whether an advisory letter is retained in a licensee's file, for how long, and whether it can be used in any way in future disciplinary proceedings.

Optional for PT Compact Members

B. If the board finds that the information received in a complaint or an investigation does not merit disciplinary action against a licensee [or certificate holder] or compact privilege holder it shall take one of the following actions:

1. Dismiss the complaint.

Commentary
A complaint is dismissed if there is no violation of the law or rules.

2. Issue an advisory letter to the licensee [or certificate holder] or compact privilege holder. An advisory letter is non-disciplinary and notifies a licensee [or certificate holder] that, while there is not evidence to merit disciplinary action, the board believes that the licensee [or certificate holder] or compact privilege holder should become educated about the requirements of this [act] and board rules.

4.06 Hearings

[No model statute language is offered under this section heading. See *Commentary* for additional information.]

Commentary
At the very minimum, there should be a statute paragraph referring to the jurisdiction's Administrative Procedures Act. For jurisdictions that might have or feel that they have an inadequate Administrative Procedures Act, this statute section is appropriately placed at this point in the physical therapy practice act. Topics under this section may include:

- Authority to request hearings
- Authority to take disciplinary action after hearings
- Authority and procedure for notice of a formal hearing

- The right of anyone appearing before the board to be represented by counsel
- Authority to administer the oath to witnesses
- The right of a board to waive the technical rules of evidence in hearings
- The right to file a motion for rehearing or review of a board decision within a specified time period
- The right to appeal a disciplinary action

4.07 Disciplinary Actions; Penalties

Upon proof that any grounds prescribed in [*Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04], have been violated, the board shall take the following disciplinary actions singly or in combination.

Commentary
Discipline serves two essential purposes: to protect the health, safety and welfare of the public, and to provide corrective action for those individuals who have been disciplined. The board needs the discretion to take appropriate disciplinary action against a licensee or certificate holder who has violated any law or rule and to determine appropriate action on a case-by-case basis based on at least the following considerations:
(a) The seriousness of the infraction,
(b) The detriment to the health, safety and welfare of the public,
(c) Past and pending disciplinary actions relating to the licensee or certificate holder,
(d) The potential for remediation.

Based on these considerations, the options for action that a board may take include:

1. Issue a censure.

Commentary
A censure is the mildest form of discipline and shall be used where violations of the law or rules do not merit more serious disciplinary action. A censure shall include corrective actions, advice or admonitions from the board. A censure remains a part of the licensee or certificate holder's file and is considered disciplinary action reportable to a national disciplinary data base.

2. Restrict a license [or certificate]. The board shall require a licensee [or certificate holder] to report regularly to the board on matters related to the grounds for the restricted license [or certificate].

Commentary
Use of a restricted license or certificate can also be in combination with other disciplinary actions. Boards must have authority to place restrictions on a license or certificate relating to scope or place of practice, supervision of practice, types of patients serviced and the duration of the restrictions. Probation is not one of the options for discipline in this model act since probation is simply one form of a restricted license.

A restricted license, as presented in this model, is generally not intended to be used for purposes other than a disciplinary situation. For example, it should not be used to replace the lack of authority to issue a temporary license or interim permit. There are three exceptions for use of a restricted license other than for disciplinary actions: 1) with a voluntary substance abuse program, 2) with a professional re-entry after a lapse of a license for two or more renewal periods, and 3) supervised clinical practice for a foreign-educated applicants.

3. Suspend a license [or certificate] for a period prescribed by the board.

Commentary
Suspension is a disciplinary action that prohibits a physical therapist's ability to practice or a physical therapist assistant's ability to work for a specified, temporary period of time. *Investigative Powers; Emergency Action;*

Hearing Officers, Article 4.05, Paragraph A.4, grants the board the authority to take emergency action temporarily suspending a license or certificate during the investigative process when potential danger to the public requires immediate action. The conditions and process for when and how this action shall be imposed should be further clarified in rules. Reinstatement requirements should always be included in rules or in a final agency order.

4. Revoke a license [or certificate].

Commentary
The most severe penalty enacted by the board is the revocation of a license to practice physical therapy or a certificate allowing work as a physical therapist assistant. Licenses and certificates that are revoked *should never be automatically reinstated* and application for reinstatement should be necessary. The revocation order shall specify the conditions, if applicable, under which reinstatement will be considered. Rules should address the process whereby an individual shall have a revoked license or certificate restored. (See *Reapplication for Licensure after Revocation* in *Guidelines for Rules* under Article 4.07.)

Optional for PT Compact Members

4. Revoke a license [or certificate] or compact privilege.

5. Refuse to issue or renew a license [or certificate].

Commentary
There shall be circumstances, such as a fraudulent application, discipline imposed by another state, or current investigation, when a board shall refuse to issue or renew a license or certificate. This model language grants a board the authority to withhold licensure or certification based on serious illegal or unprofessional conduct that threatens the public safety or welfare. (See *Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04.)

6. Impose a civil penalty of at least _____ but not more than _____. (Include minimum and maximum dollar amounts of civil penalties.)

Commentary
Most jurisdictions have provisions for imposing fines or civil penalties associated with disciplinary decisions. Jurisdictions vary considerably on the use of these monetary penalties. Some jurisdictions use fines for punitive measures while others use fines to recover the cost of an investigation or disciplinary proceeding. It is recommended that the range of fines or penalties be specified either in statute or rules. The Model Practice Act, in *Fees*, Article 3.08, does not address fines or penalties, so these should be clarified under this section or in the rules.

7. Accept a voluntary surrendering of a license [or certificate] based on an order of consent from the board.

Commentary
This provision grants specific authority to accept a voluntary surrender of a license or certificate under circumstances when a licensee or certificate holder wishes to surrender the license or certificate in lieu of continuing a disciplinary proceeding. Acceptance of surrender of a license or certificate should be accompanied by findings and conclusions relating to violations of law and reported as disciplinary action. Such acceptance, in the consent order, shall jurisdiction that the voluntary surrender has the same effect as a revocation. This allows the public record to reflect the basis on which the license or certificate was surrendered. The board may decline to accept a voluntary surrender and proceed with an investigation and hearing based upon the particulars of the disciplinary situation.

4.08 Procedural Due Process

Actions of the board shall be taken subject to the right of notice, opportunity to be heard and the right of appeal in accordance with [specify the jurisdiction] law relating to administrative law and procedure.

Commentary
This provision ensures the licensee or certificate holder due process of law. Most jurisdictions have separate statutory provisions related to this right that should be referred to under this paragraph.

4.09 Unlawful Practice; Classification; Civil Penalties; Injunctive Relief

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A. It is unlawful for any person or business entity, its employees, agents or representatives not licensed as a physical therapist under this [act] to engage in the practice of physical therapy. Any person who violates this paragraph [(A) or *Use of Titles and Terms; Restrictions; Classification of Violation,* Article 4.02], is guilty of [cite specific criminal sanction, e.g., class 1 misdemeanor] and subject to any other remedies specified in this [act].

Commentary
This section authorizes board action against persons who are not regulated providers of physical therapy but who falsely claim to provide, or attempt to provide, physical therapy services in violation of the practice act. The possible ways a person may make such a false claim are specified in *Use of Titles and Terms; Restrictions; Classification of Violation*, Article 4.02. Therefore, it is essential that 4.02 be cited in this paragraph and also included in a practice act in combination with this paragraph. The specific civil sanctions may vary from jurisdiction to jurisdiction but jurisdictions generally consider a first-time violation of this statute a misdemeanor. The jurisdiction attorney general's office, a county or a city attorney would be responsible for prosecuting unlawful practice, but these agencies may be reluctant to devote resources to pursue a violation unless injury to the public is evident. The threat of prosecution shall, in and of itself, impose an impediment to persons who would otherwise violate the provisions of this statute.

Optional for PT Compact Members
A. It is unlawful for any person or business entity, its employees, agents or representatives not licensed as a physical therapist under this [act] or holding a compact privilege to engage in the practice of physical therapy. Any person who violates this paragraph [(A) or *Use of Titles and Terms; Restrictions; Classification of Violation,* Article 4.02], is guilty of [cite specific criminal sanction, e.g., class 1 misdemeanor] and subject to any other remedies specified in this [act].

B. The board shall investigate any person or business entity to the extent necessary to determine whether the person or business entity is engaged in the unlawful practice of physical therapy. If an investigation indicates that a person or business entity is practicing physical therapy unlawfully, the board shall inform the person or the business entity of the alleged violation. The board may refer the matter for prosecution regardless of whether the person or business entity ceases the unlawful practice of physical therapy.

Commentary
Under *Investigative Powers; Emergency Action; Hearing Officers*, Article 4.05, the board is authorized to investigate, issue subpoenas and compel witnesses in any case involving someone regulated under the practice act. This section extends the board's authority of investigation to persons not regulated under the practice act. Where an investigation reveals this type of a violation, the board is empowered to inform the violator and request that he or she immediately cease and desist the unlawful behavior. The threat of the board referring the case for legal action if the violator does not stop the unlawful conduct shall be the main deterrent of this clause.

C. The board shall apply to any court of competent jurisdiction for an order enjoining any person or business entity from committing any violation of this [act]. Injunction proceedings under this paragraph shall be in addition to, and not in lieu of, all penalties and other remedies prescribed in this [act].

Commentary
In addition to the threat of action that an investigation and subsequent cease and desist letter shall pose, the board should be empowered to pursue a cessation of illegal action through the appropriate jurisdiction authority when necessary. This is the sole intent of an injunction. Subsequent violations of the injunction are considered contempt and handled by the court thereafter. Most often an injunction is obtained through the jurisdiction attorney general's office. An injunction does not preclude additional actions, penalties or remedies that may be imposed according to law.

D. If a person or business entity knowingly violates this [act] or board rules, fraudulently uses or permits the use of a license [or certificate] number, or knowingly aids or requires another person to violate this [act] or board rules, the board shall impose upon such person a civil penalty of not more than [dollar amount of penalty] for the first violation and not more than [dollar amount of penalty] for each subsequent violation.

Commentary
This paragraph applies to those outside the regulation of the physical therapy act, but could also include those regulated by the act: physical therapists and physical therapist assistants who participate in violations of the law. This is often the case where a physical therapist shall assist, condone or supposedly lend the authority of his or her license illegally to someone not regulated by the practice act. In such a case, in addition to the disciplinary provisions cited in *Unlawful Practice; Classification; Civil Penalties; Injunctive Relief*, Article 4.09, someone regulated under the act shall also be exposed to the monetary penalties stated above. This paragraph could be applied to a non-physical therapist employer or supervisor who shall exert influence on a licensee, requesting or requiring conduct in violation of the practice act.

Optional for PT Compact Members
D. If a person or business entity knowingly violates this [act] or board rules, fraudulently uses or permits the use of a license [or certificate] or compact privilege number, or knowingly aids or requires another person to violate this [act] or board rules, the board shall impose upon such person a civil penalty of not more than [dollar amount of penalty] for the first violation and not more than [dollar amount of penalty] for each subsequent violation.

[Optional Statute]

E. The board shall transmit all monies it collects from civil penalties pursuant to this [act] to the [specify the disposition of these funds if different from other funds].

Commentary
A jurisdiction shall make the determination that money received from civil penalties goes into the physical therapy fund or the operating funds of the board or whether the money goes into the general fund of the jurisdiction. Depositing civil penalties into the general fund is the customary procedure that provides a barrier against the temptation of using civil penalties to increase the funds of the board.

4.10. Reporting Violations; Immunity

A. A person, including but not limited to a licensee [or certificate holder], corporation, insurance company, healthcare organization or healthcare facility and jurisdiction or local governmental agencies, shall report to the board any conviction or determination by an agency or court that a licensee [or certificate holder] has committed an act that constitutes a violation of [*Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04].

Commentary
This paragraph provides board authority to directly solicit and require reporting by any individual or organization taking any action against a licensee, certificate holder or applicant related to *Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04. This reporting requirement requires a formal conviction,

determination or finding against the regulated individual so as to eliminate the possibility of imposing penalties for unconfirmed violations. This language also requires a licensee to report his or her own legal entanglements that resulted in conviction, determination or finding consistent with the violations contained in *Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04. When jurisdictions adopt these reporting standards they should communicate the reportable grounds to all agencies who shall have taken action against regulated individuals to enhance their understanding and cooperation with the reporting mandates of this section.

B. A person is immune from civil liability, whether direct or derivative, for reporting such facts as set forth in A above to the board in good faith and participating in the board's investigation and subsequent disciplinary process, if applicable.

Commentary
This paragraph is a necessary companion to Paragraph A, above, to protect an individual who reports information or findings to the board as long as the reporting is in good faith. A person reporting a false or bad faith claim of "suspected" conduct would not be granted immunity from civil liability.

C. The board shall not disclose the identity of a person who provides information unless such information is essential to proceedings conducted pursuant to [*Investigative Powers; Emergency Action; Hearing Officers* and *Hearings*, Articles 4.05 and 4.06], or unless required by a court of law.

Commentary
This paragraph gives the board authority to protect the identity of someone providing information that shall be used in a board decision. There are various disclosure laws that shall govern what a board shall and shall not disclose. Those laws generally focus on the right of an accused to face his or her accuser if an action comes to the point of formal discipline. Board legal counsel will be able to advise boards in these matters.

4.11. Substance Abuse Recovery Program

A. The board shall permit a licensee [or certificate holder] to actively participate in a board-approved substance abuse recovery program if:

1. **The board has evidence that the licensee [or certificate holder] is impaired.**
2. **The licensee [or certificate holder] enters into a written agreement with the board for a restricted license [or certificate] and complies with all the terms of the agreement, including making satisfactory progress in the program and adhering to any limitations on his or her practice or employment imposed by the board to protect the public. Failure to enter into such an agreement shall activate an immediate investigation and disciplinary proceeding by the board.**
3. **As part of the agreement established between the licensee [or certificate holder] and the board, the licensee [or certificate holder] signs a waiver allowing the substance abuse program to release information to the board if the licensee [or certificate holder] does not comply with the requirements of this section or is unable to practice or work with reasonable skill or safety.**

Commentary
This model language is placed here as opposed to *Grounds for Denial of a License[and Certificate]; Disciplinary Action,* Article 4.04 because entry and participation in a substance abuse recovery program shall be initiated in a way other than through the formal disciplinary process. A person regulated by this statute could (and should) report a substance abuse problem to the board. This self-reporting could be handled through voluntary participation in a recovery program monitored by the board in lieu of discipline. Successful recovery from substance abuse provides a benefit to society in general, to the profession's position of public trust and to the impaired practitioner. After a sufficient period of supervision and recovery, a physical therapist or physical therapist assistant who is otherwise free from actionable activities under the disciplinary provisions of a practice act shall be able to return to or maintain a productive career.

This section does not preclude disciplinary action against an impaired physical therapist or physical therapist assistant who declines to participate in voluntary recovery or who violates the conditions of an approved recovery program (see Paragraph 22 under *Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04). This section provides two options: the licensee or certificate holder shall either participate in the substance abuse program or face disciplinary proceedings. The public will be further protected by Paragraph 2 that requires the licensee or certificate holder to adhere to any limitations imposed by the board as a condition of participation in a recovery program.

This model language does not provide for confidential participation in a substance abuse recovery program. Entering into a written agreement requiring participation in such a program constitutes an official action by the board and would be part of the public record. Jurisdictions wishing to adopt a confidential program should seek local legal counsel.

4.12. Rights of Consumers

A. The public shall have access to the following information:

1. A list of licensees [and certificate holders] that includes license [or certificate] number, date of license [or certificate] expiration, status of license [or certificate], and employment information.

2. A list of final adverse actions taken by the board.

3. The address, website, email and phone number of the board.

Commentary

This entire section contains clauses that have historically been scattered throughout various sections of practice acts. All of them have a common interest in consumer advocacy. A practice act, by its very nature, is focused on public protection, so this is a more natural grouping of similar topics giving greater focus to the board's role in advocating for the physical therapy patient.

Optional for PT Compact Members

A. The public shall have access to the following information:

1. A list of licensees [and certificate holders] that includes license [or certificate] number, date of license [or certificate] expiration and status of license [or certificate].

2. A list of final adverse actions taken by the board.

3. A list of compact privilege holders

3. The address, website, email and phone number of the board.

B. Each licensee [and certificate holder] shall display a copy of his or her license [or certificate] in a location accessible to public view or produce a copy immediately upon request.

Commentary

Patients need to know the names and qualifications of the persons providing their care. Posting licenses and certificates ensures that the public can identify the name and qualifications of the provider as well as their valid license or certificate status. In home health or community settings where the posting of a license shall not be feasible, this language allows the provider to produce a licensure upon request. As most jurisdictions have licensure information posted electronically, licensees [and certificate holders] may produce an electronic copy or verification of licensure upon demand. Other identification such as nametags with titles is discretionary according to the facility or agency standards or requirements, but when worn these identifiers should also include appropriate title and letter designations.

Optional for PT Compact Members

Each licensee [and certificate holder] and compact privilege shall display a copy of his or her license [or certificate] in a location accessible to public view or produce a copy immediately upon request.

C. Each licensee [and certificate holder] shall provide the public with information on how to file a complaint with the board against a licensee [or certificate holder].

Commentary
This section places the responsibility for consumer education about the complaint process upon the individual physical therapist and physical therapist assistant. The board is likewise directed to educate the public about the complaint process under *Powers and Duties of the Board*, Article 2.02, paragraph 13. Compliance could occur via posting of a notice containing the board address and telephone number with a brief statement of the right of consumers to file complaints.

Optional for PT Compact Members
Each licensee [and certificate holder] and compact privilege holder shall provide the public with information on how to file a complaint with the board against a licensee [or certificate holder] or compact privilege holder.

D. Any person may submit a complaint regarding any licensee, [certificate holder] or any other person potentially in violation of this [act]. Confidentiality shall be maintained subject to law.

Commentary
Most jurisdictions allow a confidential complaint, but not an anonymous complaint. This means that the name of the complainant will be held confidential as long as possible or as the law requires. With any complaint due process shall eventually require disclosure of the complainant in order for a licensee/certificate holder to fully defend their actions. The purpose of this paragraph is to remove barriers to the public's filing of complaints against those regulated by practice acts or others who shall be in violation of a practice act.

E. The home address, email address and home telephone numbers of physical therapists and physical therapist assistants are not public records and shall be kept confidential by the board unless they are the only addresses and telephone numbers of record.

Commentary
Some information required by a board and used in regulation of licensees is not necessarily public information. This paragraph clarifies which information is confidential and for board use only.

F. A patient/client has freedom of choice in selection of services and products.

Commentary
The rights of consumers of healthcare services include the *right to know* and the *right to choose*. In order for consumers to be able to "choose" effectively, there is an obligation on the part of providers to furnish accurate and sufficient information so that consumers can make informed choices. This model language emphasizes the responsibility that all physical therapists have to inform their patients about freedom of choice in all aspects of services being provided.

The patient should know that they may raise questions about procedures or even refuse treatment. These principles should apply at the time products or equipment is recommended. They shall also apply when a physical therapist recommends or refers a patient to a physician and should offer the patient at least two or three options, answering questions fairly about each physician they are recommending to the patient.

G. Information relating to the physical therapist-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written

authorization of the patient/client. The physical therapist-patient/client privilege does not extend to cases in which the physical therapist has a duty to report or disclose information as required by law.

H. Information relating to the physical therapist assistant-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written authorization of the patient/client. The physical therapist assistant-patient/client privilege does not extend to cases in which the physical therapist assistant has a duty to report or disclose information as required by law.

Commentary
This model language is similar to language used by other healthcare disciplines. Written authorization allows information to be communicated to a referring physician, insurance company and perhaps other family members. But the written authorization should be specific as to what information can be released. The last two sentences clarify that this privilege does not extend to withholding information that is required by law to be reported to the board concerning an investigation. Patient record confidentiality is further addressed in Paragraph I that follows. Boards have a further obligation regarding confidentiality of patient records when obtained by subpoena.

I. The board shall keep all information relating to the receipt and investigation of complaints filed against licensees [or certificate holders] confidential until the information is disclosed in the course of the investigation or any subsequent proceeding or until disclosure is required by law. Patient/client records, including clinical records, files, any other report or oral statement relating to diagnostic findings or treatment of patients/clients, any information from which a patient/client or their family might be identified, or information received and records or reports kept by the board as a result of an investigation made pursuant to this [act] shall not be available to the public and shall be kept confidential by the board.

Commentary
Disclosure of information related to a complaint investigation prior to official action or ruling of the board could disrupt the disciplinary process and have a detrimental and possibly irreversible influence on both the complainant and the individual being investigated. Once final disciplinary action is taken, further information becomes public knowledge and can be disclosed. The board has further reporting requirements under *Board of Physical Therapy*, Article 2.01, and *Powers and Duties of the Board*, Article 2.02, that relate to reporting to a national database and the publication of final disciplinary actions.

Patient/client records should be afforded a high level of protection. If patient records are obtained in an investigation and retained in an investigative file they remain confidential and are not accessible as public records.

Optional for PT Compact Members

Except as directed by the physical therapy compact, the board shall keep all information relating to the receipt and investigation of complaints filed against licensees [or certificate holders] or compact privilege holders confidential until the information is disclosed in the course of the investigation or any subsequent proceeding or until disclosure is required by law. Patient records, including clinical records, files, any other report or oral statement relating to diagnostic findings or treatment of patients, any information from which a patient or his family might be identified, or information received and records or reports kept by the board as a result of an investigation made pursuant to this [act] shall not be available to the public and shall be kept confidential by the board.

Guidelines for Rules

Introduction

The Model Practice Act for Physical Therapy does not include recommended model language for administrative rules. When jurisdictions make regulatory changes to their practice acts using language from this model act, conforming rules will be required to complete the regulatory design. Individual jurisdictions are traditionally responsible for writing rules to accompany the statutory language adopted by the legislature.

One of the driving philosophies behind creating this Model Practice Act was to keep the statutory language as concise as possible and free of procedural activity or description. Rules are the place where procedural descriptions and processes are addressed. There will need to be some structure, policy and operational definitions to help make the administrative rules a functional and complementary part of a practice act. Some jurisdictions have relatively large statutory sections and small rule sections to their practice acts. Others are just the opposite. The Model Practice Act, in keeping with statutory recommendations, is concise and anticipates the "smaller statutes/larger rules" structure.

To provide assistance to jurisdictions as they work to revise practice acts, Guidelines for Rules examines each of the four Articles of the model practice act language and lists several conforming rules that should be developed. This is by no means an exhaustive list of potential rules. It follows the same order as the Articles, so it should be easy to coordinate the two. Regardless of the organizational structure of the rules adopted by each jurisdiction, there should be a system to facilitate correlation of the rules with the corresponding statutes.

The use of "board policies" is a way to organize procedural activities that are strictly internal and operational and have no effect on those regulated by the practice act or by any other external group or individual. An example might be a board policy on office supply and equipment purchases and the authorization for such acquisitions. This should not be confused with written board "positions" or "opinions" that serve to interpret or give guidance on how the board interprets the statutes or rules. Boards should not use policies as a means to avoid the admittedly more difficult task of changing a statute or adopting rules. If a topic or issue of concern directly affects those licensed or regulated under a practice act, and if it is not a matter of internal board or office procedure, it should be addressed through rules if not in the statutes.

ARTICLE 1: GENERAL PROVISIONS

1.01 Legislative Intent

Jurisdictions should to add a statement of purpose or philosophy about administrative rules and cite the specific statute that grants authority to promulgate such rules. The authorizing statute in the model act is in Powers and Duties of the Board, Article 2.02. Here is an example of an opening paragraph loosely adapted from Hawaii's rules section of a previous version of their practice act:

"The [name of jurisdiction] Board of Physical Therapy shall adopt rules pursuant to [citing the specific authority granted by statute in Article 2.02 Board of Physical Therapy to effectuate this [act] and its licensing laws, and to carry out its purpose of protecting the health, safety and welfare of consumers of services provided by or under the direction of a physical therapist licensed under this act. The enumeration of specific matters that shall properly be made the subject of rules shall not be construed to limit the board's broad general power to make all rules necessary to fully effectuate the purpose of this chapter."

1.02 Definitions

Physiotherapy/Physiotherapist Definition

There may be a need to have further operational definitions of terms not addressed in the Definitions section of the statutes. Statutory construction varies from jurisdiction to jurisdiction and frequently the definition of terms used in statute must be contained in the definition section, whereas definition of terms used in administrative

rules are contained in the rules definition section. The following definition of the terms "physiotherapy," "physiotherapist," and "physio" could be contained in either statute or rules:

"Physiotherapy," "physiotherapist," and "physio" are the international terms for physical therapy and physical therapist respectively. These terms are not used by physical therapists in the United States, but they are protected titles and terminology under [cite the specific Use of Titles statute for protected terms] and, therefore, are not to be used in any manner by any other person or organization that could mislead consumers of healthcare and induce the false belief that physical therapy or physiotherapy is being provided by any person not licensed under this [act].

Practice of physical therapy

Jurisdictions should consider adopting rules addressing the scope of certain procedures authorized under the practice act. For example, rules might define the scope of wound debridement to include sharp, enzymatic, selective, and pharmacological wound debridement. Other procedures that might be addressed in rules are whether physical therapists can use certain machines and perform procedures such as electroneuromyography, needle EMG, dry needling, etc. that are not specifically addressed in the statutory language. This provides licensees with guidance to their proper scope while providing jurisdictions with the flexibility to evaluate and determine whether certain procedures/machines are properly within the scope of physical therapy.

ARTICLE 2: BOARD OF PHYSICAL THERAPY

2.01 Board of Physical Therapy Board Appointments

Rules should be developed outlining the process of appointment to the board. The nomination process varies from jurisdiction to jurisdiction. In some jurisdictions, the statute or rules specify that appointments to the board must be made from a list supplied to the governor from the APTA state chapter. In other jurisdictions the board may use its own nomination process where a mail ballot determines the top five recommendations to pass on to the governor. A suggestion is to include in rules the following:

"The governor shall appoint any qualified person to the Board of Physical Therapy meeting the requirements outlined in [citing statute area] and in [citing rules outlining additional qualifications] herein. A list of qualified candidates shall be provided to the governor by the Physical Therapy Board or by any other interested group or individual. Any qualified person may also submit his or her own name to the governor for consideration."

As discussed earlier, rules shall also include recommendations to the governor to consider geographic distribution, gender, ethnicity, diversity, and practice settings in the appointment process. (See rationale under Board of Physical Therapy Article 2.01.) The use of the phrase "as prescribed by law," usually addresses other statutory requirements for appointment by the governor, such as senate confirmation of all appointments. Adopting a rule requesting that the governor consider geographic distribution, gender, ethnicity and practice settings in the selection process will have more of an influence on the organizations or individuals recommending individuals for appointment than on the governor when making the appointment.

Terms of Board Appointment

Rules should be developed delineating specific dates, or years of appointment, and the dates of staggered or overlapped terms of office. This facilitates smoother transitions so that only one or two members of a board are appointed in any year to avoid disruptions caused by multiple appointments in a single year.

Removal of Board Members

The entire process for removal of a board member for misconduct should be outlined in rules. This should include the specific grounds for removal, the options for correction of a problem prior to removal, and the procedures used to request removal of a board member by the governor.

Expense Reimbursement

Rules should include guidelines for reimbursement of board members' expenses, per diem, travel, etc., and reference any other applicable regulations or operational procedures addressing reimbursement.

2.02 Powers and Duties of the Board

Rule Development

The process for administrative rule development should be detailed. This includes proper notice, public hearings and final approval mechanisms of changes to, or adoption of, any existing or proposed rule based upon each jurisdiction's specific Administrative Procedures Act or authorizing statute.

Official Board Records

The maintenance of official records, confidentiality of certain records and of other discussion, and distribution of board minutes are necessary inclusions in rules, as is automatic distribution of minutes and to whom they should be sent.

Assessing Continuing Competence

Specific mechanisms for assessing continuing competence shall be included in this section or in License [or Certificate] Renewal, Article 3.05.

Election of Board Officers

The process for the election of board officers should be detailed in rules. This includes eligibility, the dates of elections and any other restrictions, e.g., concurrent terms in the same office.

Orientation

The process for orientation of new board members should be developed and outlined in rules. Proper orientation and training for board members should be a high priority of every licensing board.

Reporting to appropriate authorities

In order to protect the public, the Board should report findings of unlawful conduct that shall be in violation of other state or federal laws. In this section the board should outline the types of violations (e.g. criminal conduct) that will be referred and to which agencies. The Board should determine at what point in the disciplinary process the information should be referred to other agencies.

ARTICLE 3: EXAMINATION AND LICENSURE

3.01 Examination

Rules specifying the examination process, the procedure for applicants or licensees who subvert or undermine the examination process (including due process), the reporting of scores, etc., should be developed. The following language should be placed in rules to describe the kinds of behaviors that the Board considers to be subverting or undermining the integrity of the examination or examination process:

"Examples of conduct that subverts or undermines the examination or examination process shall include, without limitation, utilizing in any manner of communication, including copying, duplication, written notes or any electronic medium, recalled or memorized examination questions from or with any person or entity, failing to comply with all test center security procedures, attempting to communicate with other examinees during the test, or copying and sharing examination questions or portions of questions. Any such violation shall be recorded in the official records of the board. Board action shall include the following: 1. Disqualify the applicant, permanently or for a specified period of time, from eligibility for the examination. 2. Disqualify the applicant who has failed the examination from eligibility to retake the examination. 3. Disqualify the applicant, permanently or for a specific period of time, from eligibility for licensure. 4. Revoke, suspend or impose probationary conditions on any license [or certificate] issued to such applicant."

Failing the Examination

Rules may specify the number of times the applicant can re-take the national examination. If limitations are specified, any requirements for reapplication, submitting additional fees, or other requirements for retaking the examination. It should be specified in rules that if an applicant completely a supervised clinical experience prior to attempting the national examination and subsequently fails the national examination the assumption of competence is deemed void and no approval for continued clinical practice should be extended, even under supervision, until competence is demonstrated by successful passing of the national examination.

3.02 Qualifications for Licensure [and Certification]

Qualifications for licensures describe the basic preparation necessary to "qualify" for practice or work in physical therapy, i.e. graduation from an appropriate school, passage of an entry examination, completion of the application process. These qualifications are the same from jurisdiction to jurisdiction. In addition to these basic qualifications, many jurisdictions establish additional requirements that applicants must fulfill prior to licensure or certification, i.e. passage of a jurisprudence exam, submission of letters of recommendation, passage of English proficiency examinations. Requirements for licensure differ from jurisdiction to jurisdiction and need to be detailed in rule.

Application Procedures

All procedures for making application for original licensure or certification, for licensure of physical therapist graduates of programs from non-approved accredited agencies, for endorsement, for renewal, for re-licensure after a lapse, etc., should be included in detail within rules. This includes reference to various application forms (application forms themselves should not be included in rules), various application fees, and any other supporting documentation required under the application procedures. Some jurisdictions require that the specific questions asked of applicants for original licensure/certification or renewal must be delineated in rules.

Disciplinary Database

A rule should be developed requiring the board to check the Federation of State Boards of Physical Therapy's database for any previous disciplinary actions taken against any applicant.A score transfer report from the Federation would be an acceptable check of an applicant's license.This should occur with anyone applying for licensure by endorsement, or for certification, where the applicant was previously regulated in another state. This should also include a requirement that the applicant report all previous jurisdictions of licensure or certification, not just the one of previous residence.

Credential Review Agencies

A list of board-approved educational credential review agencies should be included in rules, and with a description of the process by which an agency becomes board-approved A list of the kinds of information that must be submitted to the credential review agency should be noted. The jurisdiction's requirement to use the applicable FSBPT Coursework Tool for Foreign Educated Physical Therapists and/or FSBPT Coursework Tool for Foreign Educated Physical Therapist Assistants could also be specified in rules.

English Proficiency Examinations

Rules should specify the exact English proficiency examinations and scores required for licensure.

Waiving Requirements for Applicants Educated at a School that has not been Accredited by an Agency Aproved by the Board

Under Qualifications for Licensure [and Certification], Article 3.02, when an applicant educated outside of the United States graduates but from a program accredited by an agency approved by the board then several of the requirements under this section may be waived by the board. Rules should be formulated that address whether or not there are instances when these requirements should be waived.

Rule language should contain, at minimum, the requirement that any credentials evaluation 1) utilize the appropriate edition of the FSBPT Coursework Tool for Foreign Educated Physical Therapists or Physical Therapist Assistants in order to determine educational equivalency at the date of graduation; 2) require that a physical therapist trained in credential reviewing participates in the evaluation; and 3) require that quality assurance standards be met by the credentials review agency.

All procedures for making application for original licensure or certification, for licensure of physical therapists or physical therapist assistants educated at a school that has not been accredited by an agency approved by the board, for endorsement, for renewal, for re-licensure after a lapse, etc., should be included in detail within rules. This includes reference to various application forms (application forms themselves should not be included in rules), various application fees, and any other supporting documentation required under the application procedures. Some jurisdictions require that the specific questions asked of applicants for original licensure/certification or renewal must be delineated in rules.

3.03 Licensure [and Certification] by Endorsement

Rules should clearly state the process for obtaining endorsement. Any requirements beyond the completed application process, proof of graduation and score transfers should be clarified, such as verification of licensure in good standing. Rules should be written for specifically and separately for applicants that have/have not been educated at a school accredited by a board approved agency.

These requirements might include submission of verification of a current license in the state of previous residency, affidavit of previous practice within three years, absence of pending or current disciplinary action or restricted license, continuing education history if mandatory for licensing requirements, specific continuing education required such as in HIV or MRSA continuing education, or the requirement to take a jurisprudence examination.

3.04 Exemptions from Licensure [or Certification] Declared State or National Emergencies

Jurisdictions should consider including in rules the discretion to modify requirements for licensure renewal and endorsement under declared county, state, and/or national emergency situations. For example, in situations such as natural disasters, armed forces reserve call-ups or overseas military duty, the board should be granted flexibility in the area of license or certificate issuance or renewal. Jurisdictions might want to seek an executive order to authorize licensure renewal extensions in order to prevent unlawful practice with a lapsed license for licensees impacted by state, national, or local disasters.

Professional Education Registering

A rule could be included for “registering” physical therapists or physical therapist assistants who provide or participate in continuing education courses in a state and who are not licensed in that state. When clinical education courses involve actual patient contact, or when participants practice procedures upon each other, it shall be desirable to enact a registration process to ensure that the exemption granted to instructors and participants in these continuing education offerings is specifically restricted to short-term courses never extending past 60 days. Physical therapists or physical therapist assistants traveling with bona fide sports teams or performing arts organizations would also need an exemption with a time limit, such as the 60 days noted previously. If this time limit were exceeded, licensure would be required. The board shall choose to only require registration for those courses exceeding, for example, 30 days.

3.05 License [or Certificate] Renewal

Rules should address licensure and certificate renewal in a timely manner and should specify the information required for renewal. It is appropriate here to include the requirement and responsibility of those regulated to provide the board with current business or other mailing addresses. Rules should state that failure to have a current address on file with the board is not sufficient reason for the licensee’s or certificate holder’s failure to renew in a timely manner.

Continuing Competence

Criteria that the board uses for determining continuing competence requirements associated with licensure or certification renewal should be clearly outlined in rules. Refer to discussion under Powers and Duties of the Board, Article 2.02.

3.06 Changes of Name, Address or Telephone Number

It should be stated clearly in rules that all licensees and certificate holders are responsible for keeping the board advised of their current home and practice addresses telephone numbers, and electronic contact information, if available. Failure to receive a renewal notification should not constitute an excuse for failure to renew on time. It should be further specified that failure to meet the renewal timeframe constitutes practicing without a license or certificate and will be treated as such under authority of Unlawful Practice; Classification; Civil Penalties; Injunctive Relief, Article 4.09.

3.07 Reinstatement of License [or Certificate]

Rules should address the process for reinstatement of lapsed licenses or certificates.

Professional Reentry

An appropriate use of a restricted license would be for persons reentering the profession after an absence from practice or work in the profession. Rules shall be needed to address the specific requirements for reentering the profession in such circumstances.

Restricted License or Certificate

The model statute language specifies the existence of restricted licenses and certificates. Rules should be developed providing further clarification to the processes and procedures for such restrictions, e.g., criteria stating under what circumstances and for whom restricted licenses or certificates can be imposed; the procedures for imposing restrictions, for determining the extent of the restrictions, and for lifting the restrictions. For example, it is important to include a statement in rules to the effect that, in addition to disciplinary actions, a restricted license can also be used with physical therapists or physical therapist assistants in professional reentry programs or physical therapists or physical therapist assistants in voluntary substance abuse programs. Where a restricted license is imposed as part of discipline, reinstatement of an unrestricted license should not be automatic but should always be associated with an appearance or re-hearing of the licensee or certificate holder before the board. Any supervision requirements for someone under restriction should be addressed in rules.

3.08 Fees

A section of rules should list all fees and types of fees that are imposed by the board upon persons regulated by this [act]. Penalties for late or lapsed licenses or certificates are also “fees” and should be included in the same area as other fees. Rules should state that there will be additional testing fees associated with computerized testing (fees paid directly to a testing center for use of its facility, equipment, etc.) that are not part of the board fees, but are acknowledged and authorized.

ARTICLE 4: REGULATION OF PHYSICAL THERAPY

4.01 Ethics in the Physical Therapy Profession

Recognized Standards of Ethics

Ethics in the Physical Therapy Profession, Article 4.01 is the requirement to adhere to the recognized standards of ethics of the physical therapy profession. An operational definition of the standards of ethics of the profession is strongly suggested. It could be included either in this area of rules or later under rules associated with Grounds for Denial of a License [and Certificate]; Disciplinary Action, Article 4.04. Jurisdictions may choose to author their own code of ethics or use the American Physical Therapy Association’s. An example using APTA’s would be as follows:

"The recognized standards of ethics" of the physical therapy profession shall be the American Physical Therapy Association (APTA) Code of Ethics and the accompanying Guide for Professional Conduct.

"The recognized standards of ethical conduct" for the physical therapist assistant shall be the American Physical Therapy Association (APTA) Standards of Ethical Conduct for the Physical Therapist Assistant and the accompanying Guide for Professional Conduct for the Physical Therapist Assistant.

Jurisdictions should review their Administrative Procedures Act on how to properly incorporate documents by reference or consider itemizing ethical standards in rules.

4.02 Use of Titles and Terms; Restrictions; Classification of Violation

"RPT," "LPT," and "LPTA" Prohibited

The only rule suggested under Use of Titles and Terms; Restrictions; Classification of Violation, Article 4.02, is a rule prohibiting the use of the letters "RPT" and "LPT" by licensed physical therapists. Even though these are "protected terms" under the restricted use of titles, they are archaic terms and don't reflect the level of professionalism of contemporary physical therapy practitioners. An example of rule language would be:

"RPT" and "LPT" are archaic letter designations for the physical therapist. While they remain protected designations under Use of Titles and Terms; Restrictions; Classification of Violation, Article 4.02, they are not to be used by physical therapists or any other persons. The proper letter designation of a licensed physical therapist is "PT." Improper use of this designation shall result in disciplinary action.

"LPTA" is an archaic letter designation for the physical therapist assistants. While they remain protected designations under Use of Titles and Terms; Restrictions; Classification of Violation, Article 4.02, they are not to be used by physical therapist assistants or any other persons. The proper letter designation of a licensed physical therapist assistant is "PTA." Improper use of this designation shall result in disciplinary action.

4.03 Patient Care Management

This section of rules should contain any conditions or specifications relating to patient care management within the specific jurisdiction, including qualifications and/or conditions of supervisions of other personnel including communication and documentation requirements.

4.05 Investigative Powers; Emergency Action; Hearing Officers

Receiving Complaints

Rules should specify how complaints against licensees or certificate holders can be submitted. A complaint form could be used, whether completed by the complainant or by board staff if telephone or electronic complaints are permitted. Overly burdensome requirements place further obstacles and extends the response time in dealing with consumer complaints. Rules should include what information must be included in a complaint (e.g., name of physical therapist, date of service, allegation, etc.). The rule should also include timeframes for board processing of complaints to provide assurance to complainants that all complaints are taken seriously and processed accordingly.

4.07 Disciplinary Actions; Penalties Administrative Procedures Act

In addition to the practice act and other laws, all jurisdictions have an Administrative Procedures Act (APA), or similar law, that governs the processes by which government agencies take action against individuals regulated by the jurisdiction. Jurisdictions should consult their APA prior to developing rules.

Censure

Rules should be developed that address the scope, duration and procedures for the issuance of a censure.

Restricted License [or Certificate]

Rules should be developed giving further clarification to the processes and procedures for such restrictions, e.g., criteria stating under what circumstances and for whom restricted licenses or certificates could be imposed; the procedures for imposing restrictions, for determining the extent of the restrictions, and for lifting the restrictions.

A restricted license can also be used with for re-entry or in voluntary substance abuse programs. Where a restricted license is imposed as part of formal discipline, reinstatement of an unrestricted license should not be automatic, but should always be associated with an appearance or rehearing of the licensee or certificate holder before the board. The supervision required of a licensee under such restriction should be addressed in rules.

Reapplication for License [or Certificate] after Revocation

Rules should include the process for reapplication for license or certificate after revocation. A license is usually revoked with no mention of timeframe for potential reapplication. It is appropriate to consider establishing an amount of time, such as one year, which must pass before a person can reapply for licensure and what requirements will apply.

Voluntary Surrender of a License [or Certificate]

Rules should require that acceptance of surrender of a license or certificate should be accompanied by admissions or findings of fact and conclusions of law relating to violations of law and reported as disciplinary action. Rules should reflect that a voluntary surrender has the full force and effect of a revocation for reporting purposes.

3.11 Substance Abuse Recovery Program

Voluntary Substance Abuse Program

Rules should outline the process for a licensee who is allowed by the board to participate in a voluntary substance abuse program. Criteria for board authorization of substance abuse programs should be established as well as reporting requirements for licensees who participate in a substance abuse program.

Appendix A: Model Statute Language Changes

The following are the changes in the model statute language made from the Sixth to the Seventh Edition of the Model Practice Act. The following formatting allows for review of all substantive changes made; most formatting changes or simple edits are not included here. ~~Strike-through~~ is deleted language from the Sixth Edition. <u>Underline</u> is new language in the Seventh Edition. The *Model Statutes with Commentary* section provides explanations for these changes.

Physical Therapy Practice Act

[Include proper numerical statute reference, e.g., Chapter # and/or Title #]

Article 1: General Provisions

1.01 Legislative Intent

This [act] is enacted for the purpose of protecting the public health, safety, and welfare, and provides for jurisdiction administrative control, supervision, licensure, and regulation of the practice of physical therapy. It is the legislature's intent that only individuals who meet and maintain prescribed standards of competence and conduct may engage in the practice of physical therapy as authorized by this [act]. This [act] shall be liberally construed to promote the public interest and to accomplish the purpose stated herein.

1.02 Definitions

As specifically used in this [act], the following terms have the meanings set forth below, unless the context requires otherwise.

1. "Board" means the [specify the jurisdiction] board of physical therapy.

2. "Competence" is the application of knowledge, skills, and behaviors required to function effectively, safely, ethically and legally within the context of the patient/client's~~'s~~ role and environment.

3. "Consultation ~~by telehealth~~" means ~~that~~ a physical therapist <u>seeking assistance from, or rendering~~s~~</u> professional or expert opinion or advice to another physical therapist or professional healthcare provider via electronic communications<u>,</u> telehealth, or in-person ~~computer technology from a distant location~~.

4. "Continuing competence" is the lifelong process of maintaining and documenting competence through ongoing self-assessment, development, and implementation of a personal learning plan, and subsequent reassessment.

5. "Electronic Communications" means the science and technology of communication (the process of exchanging information) over any distance by electronic transmission of impulses including activities that involve using electronic communications to store, organize, send, retrieve, and/or convey information.

6. "Examination" means a national examination approved by the board for the licensure of a physical therapist or the [certification/licensure] of a physical therapist assistant.

7. "Jurisdiction of the United States" means any state, the District of Columbia, the Commonwealth of Puerto Rico, or any American territory.

8. <u>"Nexus to practice" means the criminal act of the applicant or licensee [certificant] posing a risk to the public's welfare and safety relative to the practice of physical therapy.</u>

9. "Onsite supervision" means supervision provided by a physical therapist who is continuously onsite and present in the department or facility where services are provided. The supervising therapist is immediately available to the person being supervised and maintains continued involvement in the necessary aspects of patient/client care.

10. "Patient/client" means any individual receiving physical therapy from a licensee [or certificate holder] under this Act.

11. "Physical therapist assistant" means a person who is [certified/licensed] pursuant to this [act] and who assists the physical therapist in selected components of the physical therapy treatment intervention.

12. "Physical therapist assistant-patient/client relationship" means the formal or inferred relationship entered into by mutual consent between a licensed [certified] physical therapist assistant and a patient/client or their legally authorized representative established once the physical therapist assistant assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged or treatment is formally transferred to another practitioner or as further defined by rule.

13. "Physical therapist" means a person who is a licensed healthcare practitioner pursuant to this [act] to practice physical therapy. The terms "physiotherapist" or "physio" shall be synonymous with "physical therapist" pursuant to this [act].

14. "Physical therapist-patient/client relationship" means the formal or inferred relationship entered into by mutual consent between a licensed physical therapist and a patient/client or their legally authorized representative established once the physical therapist assumes or undertakes the care or treatment of a patient/client and continues until either the patient/client is discharged or treatment is formally transferred to another healthcare practitioner or as further defined by rule.

15. "Physical therapy" means the care and services provided in-person or via telehealth by or under the direction and supervision of a physical therapist who is licensed pursuant to this [act]. The term "physiotherapy" shall be synonymous with "physical therapy" pursuant to this [act].

16. "Physical therapy aide" means a person trained by or under the direction of a physical therapist who performs designated and supervised routine tasks related to physical therapy services.

17. "Practice of physical therapy" means:

    a. Examining, evaluating and testing patients/clients with mechanical, physiological and developmental impairments, functional limitations, and disabilities or other health and movement-related conditions in order to determine a diagnosis, prognosis and plan of treatment intervention, and to assess the ongoing effects of intervention.
    b. Alleviating impairments, functional limitations and disabilities; promoting health; and preventing disease by designing, implementing and modifying treatment interventions that may include, but ~~are~~ not limited to: therapeutic exercise;~~,~~ needle insertion; patient-related instruction; therapeutic massage; airway clearance techniques; integumentary protection and repair techniques; debridement and wound care; physical agents or modalities; mechanical and electrotherapeutic modalities; manual therapy including soft tissue and joint mobilization/manipulation;~~, therapeutic massage, prescription, application and, as appropriate, fabrication of assistive, adaptive, orthotic, prosthetic, protective and supportive devices and equipment, airway clearance techniques, integumentary protection and repair techniques, debridement and wound care, physical agents or modalities, mechanical and electrotherapeutic modalities, and patient-related instruction.~~ Functional training in self-care and in home, community or work integration or reintegration~~,~~; as well as prescription application and, as appropriate, fabrication of assistive, adaptive, orthotic, prosthetic, protective and supportive devices and equipment.

c. Reducing the risk of injury, impairment, functional limitation, and disability, including performance of participation-focused physical examinations and the promotion and maintenance of fitness, health, and wellness in populations of all ages.
d. Referring a patient/client to healthcare providers and facilities for services and testing to inform the physical therapist plan of care.
~~D~~e. Engaging in administration, consultation, education, and research.

18. "Restricted [certificate/license]" for a physical therapist assistant means a [certificate/license] on ~~patient~~which the board has placed any restrictions and/or condition as to scope of work, place of work, duration of certified or licensed status, or type or condition of patient/client to whom the certificate holder or licensee may provide services.

19. "Restricted license" for a physical therapist means a license on which the board has placed any restrictions and/or conditions as to scope of practice, place of practice, supervision of practice, duration of licensed status, or type or condition of individual to whom the licensee may provide services.

20. Supervision" means the process by which a physical therapist oversees and directs safe and effective delivery of patient care through appropriate verbal, written, or electronic communication. This may be accomplished with the physical therapist located onsite or remotely as deemed appropriate based on the patient/client needs.

21. "Telehealth" is the use of electronic communications to provide and deliver a host of health-related information and healthcare services, including, but not limited to physical therapy related information and services, over large and small distances. Telehealth encompasses a variety of healthcare and health promotion activities, including, but not limited to, education, advice, reminders, interventions, and monitoring of interventions.

22. "Testing" means standard methods and techniques used to gather data about the patient/client, including but not limited to imaging, electrodiagnostic and electrophysiologic tests and measures.

Article 2: Board of Physical Therapy

The Board shall have all of the duties, powers, and authority specifically granted by or necessary for the enforcement of this Act, as well as such other duties, powers, and authority as it may be granted from time to time by applicable law.

2.01 Board of Physical Therapy

A. The board of physical therapy shall consist of [seven] members appointed by the G~~g~~overnor. [Four] members shall be physical therapists who are residents of this jurisdiction, possess unrestricted licenses to practice physical therapy in this jurisdiction and have been practicing in this jurisdiction for no less than five years before their appointments. [One] member shall be a physical therapist assistant who is a resident of this jurisdiction and possesses an unrestricted [certificate/license]. The Governor shall also appoint [two] public members who shall be residents of this jurisdiction and who are not affiliated with, nor have a financial interest in, any healthcare profession and who have an interest in consumer rights. The Governor shall, to the greatest extent possible, appoint individuals to achieve diversity on the board.

B. Board members shall serve staggered four-year terms. Board members shall serve no more than two successive four-year terms or for more than ten consecutive years. By approval of the majority of the board, the service of a member may be extended at the completion of a four-year term until a new member is appointed or the current member is reappointed.

C. ~~If requested by the board,~~The board may request the Governor ~~may~~ remove any member of the board for misconduct, incompetence, or neglect of duty.

D. Board members are eligible for [compensation and/or] reimbursement of necessary expenses pursuant to [cite applicable statute relating to [compensation and/or] reimbursement] ~~to cover necessary expenses~~ for attending each board meeting or ~~for~~ representing the board in an official board-approved activity.

E. A board member who acts within the scope of board duties, without malice and in the reasonable belief that the member's action is warranted by law, is immune from civil liability.

2.02 Powers and Duties of the Board

The board shall:

1. Evaluate the qualifications of applicants for licensure [and certification].

2. Provide for the examination of physical therapists and physical therapist assistants.

3. Issue licenses [or certificates] to persons who meet the qualifications of this [act].

4. Regulate the practice of physical therapy by interpreting and enforcing this [act].

5. ~~Issue advisory opinions upon request regarding this [act].~~ Have the authority to establish committees, advisory panels, and task forces to further the work of the board.

6. Adopt and revise rules consistent with this [act]. Such rules, when lawfully adopted, shall have the effect of law.

7. Meet at least once each quarter in compliance with the open meeting requirements of [cite applicable statute]. A majority of filled board members ~~positions~~ shall constitute a quorum for the transaction of business. The board shall keep an official record of its meetings.

8. Establish mechanisms for assessing the continuing competence of physical therapists to practice physical therapy.

9. Establish mechanisms for assessing the continuing competence of physical therapist assistants to work in the profession of physical therapy.

10. Establish and collect fees for sustaining the necessary operation and expenses of the board.

11. Elect officers from its members necessary for the operations and obligations of the board. Terms of office shall be one year.

12. Provide for the timely orientation and training of new professional and public appointees to the board regarding board licensing and disciplinary procedures, this [act], and board rules, policies and procedures.

13. Maintain a current list of all persons regulated under this [act]. This information includes the person's name, current business and residential address, email address, telephone numbers, and license [or certificate] number.

14. Provide information to the public regarding the complaint process.

15. Employ necessary personnel to carry out the administrative work of the board. Board personnel are eligible to receive compensation pursuant to [cite specific statute].

16. Enter into contracts for services necessary for enforcement of this [act].

17. Report final disciplinary action taken against a licensee [or certificate holder] to a national disciplinary database recognized by the board or as required by law.

18. Report information of alleged unlawful conduct by licensees [or certificate holders], unlicensed individuals, other healthcare providers, and entities to the appropriate county, jurisdiction, or federal authority.

19. Publish, at least annually, final adverse action taken against a licensee [or certificate holder].

20. Publish at least annually, board rulings, opinions, and interpretations of statutes or rules in order to guide persons regulated pursuant to this [act].

21. Participate in or conduct performance audits.

22. Have the authority to fully participate in a national Exam, Licensure, and Disciplinary Database as defined by rule.

23. Have the authority to obtain biometric-based information from every physical therapist or physical therapist assistant applicant for licensure[certification] and submit this information to the Federal Bureau of Investigation for a criminal background check.

24. Have the authority to determine and collect, at the time of new licensure [or certification] and licensure [or certification] renewal, a core set of data elements deemed necessary for the purpose of workforce assessment and planning. The data elements shall be used to create and maintain a healthcare workforce database. The Board may enter into agreements with a private or public entity to establish and maintain the database, perform data analysis, and/or prepare reports concerning the physical therapy workforce. The Board shall promulgate rules to perform duties pursuant to this [act].

25. Have the authority to require a licensee [certificate holder] to complete educational activities.

2.03 Disposition of Funds

(No model language is offered under this section heading. See *Commentary* for further information.)

Article 3: Examination and Licensure

3.01 National Examination

A. The board shall provide for a national examination within the jurisdiction. ~~In order to be eligible to sit for the examination, the candidate must meet nationally recognized requirements that support the integrity of the examination and are further defined in rule.~~

B. To be eligible to sit for the national examination, the candidate must meet nationally recognized requirements that support the integrity of the examination and are further defined by rule.

1. The physical therapist examination is a national examination that tests entry-level competence related to physical therapy theory, examination and evaluation, diagnosis, prognosis, treatment intervention, prevention and consultation.

2. The physical therapist assistant examination is a national examination that tests for requisite knowledge and skills in the technical application of physical therapy services.

C~~D~~. ~~Licensure applicants~~ Candidates must agree to abide by security and copyright provisions related to the national licensure examination. If the board determines that an applicant has violated any of these provisions or engaged in or attempted to engage in any other conduct that subverts or undermines the integrity of the examination process or validity of examination results, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.

D~~E~~. Any violation of security and copyright provisions related to the national licensure examination, subversion or attempts to subvert the national examination shall be reported by the board to the Federation of State Boards of Physical Therapy.

E~~F~~. If the board determines that an applicant has engaged or has attempted to engage in conduct that subverts or undermines the integrity of the examination process, including a violation of security and copyright provisions related to the national licensure examination, the board may disqualify the applicant from taking or retaking the examination permanently or for a specified period of time.

3.02 Qualifications for Licensure [and Certification]

A. An applicant for a license as a physical therapist shall:

1. Complete the application process including payment of fees.
2. Submit proof of graduation from a professional physical therapy education program accredited by a national accreditation agency approved by the board.
3. Pass a~~n~~ national examination approved by the board.
4. Pass additional examinations [e.g. jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

B. An applicant for a license as a physical therapist who has been educated at a school that has not been accredited by an agency approved by the board ~~educated outside of the United States~~ shall:

1. Complete the application process including payment of fees.
2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapists educated in an accredited entry-level program as determined by the board. Graduation outside the United States from a professional education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure educated at a school that has not been accredited by an agency approved by the board ~~educated outside of the United States~~ shall have:
   a. Graduated from a physical therapist education program that prepares the applicant to engage without restriction in the practice of physical therapy;
   b. Provided written proof that the applicant's school of physical therapy is recognized by its own ministry of education or other appropriate recognition agency;
   c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   d. Completed any additional education as required by the board.
3. Pass a board-approved English proficiency examination as required by the board as further established by rule.
4. Pass a~~n~~ national examination approved by the board.

5. Pass additional examinations [e.g. jurisprudence examination] required by the board as further established by rule.
6. Submit to a criminal records check.
7. Complete supervised clinical practice as defined by rules with a restricted license.
8. Meet the requirements established by board rule if applicable.
9. Meet other statutory and regulatory requirements applicable to individuals licensed under this [Act].

C. An applicant for a [certificate/license] as a physical therapist assistant shall:

1. Complete the application process including payment of fees.
2. Submit proof of graduation from a physical therapist assistant education program accredited by a national accreditation agency approved by the board.
3. Pass ~~a~~an national examination approved by the board.
4. Pass additional examinations [e.g. jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

D. An applicant for a [certificate/license] as a physical therapist assistant who has been educated at a school that has not been accredited by an agency approved by the board ~~educated outside of the United States~~ shall:

1. Complete the application process including payment of fees.
2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Graduation outside the United States from an education program accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure ~~educated outside of the United States~~ educated at a school that has not been accredited by an agency approved by the board shall have:
   a. Graduated from a physical therapist assistant educational program that prepares the applicant to work as a physical therapist assistant;
   b. Provided written proof that the applicant's physical therapist assistant school is recognized by its own ministry of education or other appropriate recognition agency;
   c. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   d. Completed any additional education as required by the board.
3. Pass a board-approved English proficiency examination as required by the board as further established by rule.
4. Pass ~~a~~an national examination approved by the board.
5. Pass additional examinations [e.g. jurisprudence examination] required by the board as further established by rule.
6. Submit to a criminal records ~~background~~ check.
7. Complete supervised clinical practice as defined by rules with a restricted license.
8. Meet the requirements established by board rule if applicable.
9. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

E. . An applicant for a [certificate/license] as a physical therapist assistant who has completed a United States Armed Services program of training not accredited by a national accreditation agency approved by the board shall:

1. Complete the application process including payment of fees.

2. Provide satisfactory evidence that the applicant's education is substantially equivalent to the education of physical therapist assistants educated in an accredited entry-level program as determined by the board. Successful completion of a United States Armed Services program of training accredited by the same accrediting agency that the board approves for programs within the United States constitutes evidence of substantial equivalency. In all other instances, "substantially equivalent" means that an applicant for licensure who has completed a United States Armed Services program of training shall have:
   a. Completed a physical therapist assistant training program that prepares the applicant to work as a physical therapist assistant;
   b. Undergone a credentials evaluation as directed by the board that determines that the candidate has met uniform criteria for educational requirements as further established by rule; and
   c. Completed any additional education as required by the board.
3. Pass ~~the~~ a national examination approved by the board.
4. Pass additional examinations [e.g. jurisprudence examination] required by the board as further established by rule.
5. Submit to a criminal records check.
6. Meet the requirements established by board rule if applicable.
7. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

3.03 Licensure [and Certification] by Endorsement

A. The board shall issue a license to a physical therapist ~~or a license [certificate] to a physical therapist assistant~~ who has a current unrestricted license ~~[certificate]~~ from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

B. The board shall issue a license [certificate] to a physical therapist assistant who has a current unrestricted license [certificate] from another jurisdiction of the United States if that person meets all qualifications prescribed in [*Qualifications for Licensure and Certification*, Article 3.02] at the time of the applicant's initial licensure.

3.04 Exemptions from Licensure [or Certification]

A. This [act] does not restrict a person licensed or certified under any other law of this jurisdiction from engaging in the profession or practice for which that person is licensed if that person does not represent, imply or claim that he/she is a physical therapist, physical therapist assistant, or a provider of physical therapy as defined in Article 1, 1.02~~B~~.

B. The following persons are exempt from the licensure [certification] requirements of this [act] when engaged in the following activities:
   1. A person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's physical therapist education while under onsite supervision of a physical therapist.
   2. A person satisfying a clinical education experience under the onsite supervision of a physical therapist as required by the board.
   3. A physical therapist who is practicing in the United States Armed Services, United States Public Health Service or Veterans Administration pursuant to federal regulations for jurisdiction licensure of healthcare providers. If such person, while federally employed as a physical therapist, shall engage in the practice of physical therapy outside the course and scope of such federal employment, he/she shall then be required to obtain a license in accordance with this [act].
   4. A physical therapist who is licensed in another jurisdiction of the United States or credentialed to practice physical therapy in another country if that person is teaching, demonstrating or providing physical therapy services in connection with teaching or participating in an educational seminar of no more than 60 days in a calendar year.

5. A physical therapist who is licensed in another jurisdiction of the United States if that person is rendering advice or professional or expert opinion ~~providing consultation by telehealth, as defined in [Definitions, Article 1.02],~~ to a ~~physical therapist~~ licensed healthcare practitioner in this jurisdiction ~~under this [act]~~.
6. A physical therapist who is licensed in a jurisdiction of the United States or credentialed in another country, if that person by contract or employment is providing physical therapy to patients/clients affiliated with or employed by established athletic teams, athletic organizations or performing arts companies temporarily practicing, competing or performing in the jurisdiction for no more than 60 days in a calendar year.
7. A physical therapist who is licensed in a jurisdiction of the United States and who enters this jurisdiction to provide physical therapy during a declared local, jurisdictional or national disaster or emergency. This exemption applies for no longer than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.
8. A physical therapist licensed in a jurisdiction of the United States who is forced to leave his/her residence or place of employment due to a declared local, jurisdictional or national disaster or emergency and due to such displacement seeks to practice physical therapy. This exemption applies for no more than 60 days following the declaration of the emergency. In order to be eligible for this exemption the physical therapist shall notify the board of their intent to practice.

C. A physical therapist assistant who is [certified/licensed] in a jurisdiction of the United States and is assisting a physical therapist engaged specifically in activities related to [subparagraphs (B) 2, 3, 5, 6 and 7 of this section] is exempt from the requirement of [certification/licensure] under this [act].

3.05 License [or Certificate] Renewal

A. A physical therapist applying for renewal of the license shall:
1. Complete a renewal application including payment of fees.
2. Demonstrate evidence of continuing competence as defined by rule.
3. Meet the requirements established by board rule if applicable.
4. Meet other statutory and regulatory requirements applicable to individuals licensed under this [Act].

B. A physical therapist assistant applying for renewal of the license [certificate] shall:
1. Complete a renewal application including payment of fees.
2. Demonstrate evidence of continuing competence as defined by rule.
3. Meet the requirements established by board rule if applicable.
4. Meet other statutory and regulatory requirements applicable to individuals licensed [certified] under this [Act].

3.06 Changes of Name, Address or Telephone Number

Each licensee [and certificate holder] is responsible for reporting a name change and changes in business and home address, email address and telephone numbers to the board within 30 days.

3.07 Reinstatement of License [or Certificate]

A. The board may reinstate a lapsed license [or certificate] upon completion of a reinstatement application including payment of fees, as defined by rule.

B. If a physical therapist's license has lapsed for a specified time period, as defined by rules, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to practice physical therapy by one or more of the following as determined by the board:
1. Complete supervised clinical practice as defined by rule with a restricted license.
2. Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure period.
3. Pass examination(s) approved by the board.
4. Provide proof of licensed practice in another jurisdiction.

C. If a physical therapist assistant's [certificate/ license] has lapsed for a specified time period, as defined by rule, that person shall fulfill all requirements of [3.07 A] and demonstrate to the board's satisfaction competence to work as a physical therapist assistant by one or more of the following as determined by the board:
   1. Complete supervised clinical practice as defined by rules with a restricted license.
   2. Demonstrate or complete continued competence requirements, as defined by rule, required during lapsed licensure [certification] period.
   3. Pass examination(s) approved by the board.
   4. Provide proof of licensed [certified] work as a physical therapist assistant in another jurisdiction.

D. The board may reinstate a suspended or revoked physical therapist's license upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of competence to practice physical therapy through the following activities:
   1. Complete supervised clinical practice, as defined by rule, with a restricted license.
   2. Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure period.
   3. Successfully complete ~~examinations or~~ assessment tool(s) and/or pass examination(s) approved by the board.

E. The board may reinstate a suspended or revoked physical therapist assistant's [certificate/license] upon completion of the requirements in [3.07 A] and evidence of satisfactory completion of all requirements for reinstatement that were stipulated in a consent order at the time of discipline. The board may further require evidence of the physical therapist assistant's competence to work in the profession of physical therapy through the following activities.
   1. Complete supervised clinical practice with a restricted license under a qualified and approved supervisor.
   2. Demonstrate or complete continued competence requirements, defined by rule, required during the suspended or revoked licensure period.
   3. Successfully complete ~~examinations or~~ assessment tool(s) and/or pass examination(s) approved by the board.

[3.08 Fees]

(This is optional statute language for states requiring maximum fee ceilings within their statutes.)

A. The board shall establish and collect fees not to exceed:
   1. _____ dollars for an application for an original license [or certificate]. This fee is nonrefundable.
   2. _____ dollars for a certificate of renewal of a license [or certificate].
   3. _____ dollars for an application for reinstatement of a license [or certificate].
   4. _____ dollars for each duplicate license [or certificate].
   5. _____ dollars for other administrative fees [e.g. criminal records report, pass through or processing fees]

Article 4: Regulation of Physical Therapy

4.01 Ethics in the Physical Therapy Profession

A. A physical therapist shall adhere to the recognized standards of ethics of the physical therapy profession as established by rule.
B. A physical therapist assistant shall adhere to the recognized standards of ethics~~ethical conduct~~ of the physical therapy profession as established by rule.

4.02 Use of Titles and Terms; Restrictions; Classification of Violation

A. A physical therapist shall use the letters "PT" or the term "physical therapist" immediately following their ~~his or her~~ name to designate licensure as a healthcare practitioner under this [act].

B. A person or business entity, its employees, agents or representatives shall not use in connection with that person's name or the name or activity of the business, the words "physical therapy," "physical therapist,"

"physiotherapy," "physiotherapist," "physio," "registered physical therapist," "doctor of physical therapy," the letters "PT," "DPT," "LPT," "RPT," or any other words, abbreviations or insignia indicating or implying directly or indirectly that physical therapy is provided or supplied, unless such services are provided by or under the direction of a physical therapist licensed pursuant to this [act]. A person or business entity shall not advertise or otherwise promote another person as being a "physical therapist" or "physiotherapist" unless the individual so advertised or promoted is licensed as a physical therapist under this act. A person or business entity that offers, provides, or bills any other person for services shall not characterize those services as "physical therapy" or "physiotherapy" unless the individual performing those services is a person licensed as a physical therapist under this [act].

C. Physical therapists who have graduated from a DPT program may use the title Doctor of Physical Therapy. A physical therapist holding a DPT or other doctoral degree shall not use the title Doctor without also clearly informing the public of his or her profession as a physical therapist. Use of the title shall be in accordance with jurisdictional law.

D. A physical therapist assistant shall use the letters "PTA" immediately following his or her name to designate [certification/licensure] under this [act].

E. A person shall not use the title "physical therapist assistant," the letters "PTA," or any other words, abbreviations, or insignia in connection with that person's name to indicate or imply, directly or indirectly, that the person is a physical therapist assistant unless that person is [certified/licensed] as a physical therapist assistant pursuant to this [act].

F. A person or business entity that violates paragraphs (B) or (E) of this section is guilty of a [cite specific legal sanction]. The board shall have authority to impose a civil penalty, in an amount not to exceed [specify number of dollars] per violation, against any person or business entity that violates paragraphs (B) or (E). In addition, the board shall seek an injunction against conduct in violation of paragraphs (B) or (E) in any court of competent jurisdiction. For purposes of this [act], the board, in seeking an injunction, need only show that the defendant violated paragraphs (B) and (E) of this section to establish irreparable injury or a likelihood of a continuation of the violation.

4.03 Patient/Client Care Management

A. A physical therapist is fully responsible for managing all aspects of the physical therapy care of each patient/client. A physical therapist shall provide:
   1. The initial evaluation, determination of diagnosis, prognosis, and plan of treatment intervention and documentation of each encounter with each patient/client;
   2. Periodic reevaluation and documentation of each patient/client;
   3. The documented discharge of the patient/client, including the patient's/client's response to treatment intervention at the time of discharge.

B. A physical therapist shall assure the qualifications of all physical therapist assistants and physical therapy aides under ~~his or her~~ their direction and supervision.

C. For each patient/client on each date of service, a physical therapist shall provide all ~~of~~ the treatment intervention that requires the education, skills, and knowledge of a physical therapist and shall determine the use of physical therapist assistants or physical therapy aides to ensure that the delivery of care that is safe, effective, and efficient.
   1. A physical therapist assistant shall work under a physical therapist's supervision. A physical therapist assistant shall document the care ~~he/she~~they provide~~s~~.
   2. A physical therapist may use physical therapy aides for designated routine tasks. A physical therapy aide shall work under the supervision of a physical therapist.

D. The physical therapist shall communicate the ~~overall~~ plan of care with, and obtain informed consent from, the patient/client or their ~~patient's~~ legally authorized representative.

E. A physical therapist's responsibility shall include accurate documentation and billing of the services provided.

F. A physical therapist assistant's responsibility shall include accurate documentation and billing of the services provided.

G. Nothing in this [Act] shall prohibit a licensee[certificate holder] from providing physical therapy to animals for which the licensee[certificate holder] has completed the education and training as further established by rule.

4.04 Grounds for Denial of a License [and Certificate]; Disciplinary Action

A. The following are grounds for denial of a license [and certificate] or disciplinary action:

1. Violating any provision of this [act], board rules or a written order of the board.
2. Obtaining or attempting to obtain a license [or certificate] by fraud or misrepresentation.
3. Attempting to engage in conduct that subverts or undermines the integrity of the examination or the examination process including, but not limited to, a violation of security and copyright provisions related to the national licensure exam, utilizing in any manner recalled or memorized examination questions from or with any person or entity, failing to comply with all test center security procedures, communicating or attempting to communicate with other examinees during the test, or copying or sharing examination questions or portions of questions.
4. Practicing or offering to practice beyond the scope of the practice of physical therapy.
5. Acting in a manner inconsistent with generally accepted standards of physical therapy practice, regardless of whether actual injury to the patient/client is established.
6. Failing to adhere to the recognized standards of ethics of the physical therapy profession as established by rule.
7. Failing to complete continuing competence requirements as established by rule.
8. Failing to maintain adequate patient/client records. For the purposes of this paragraph, "adequate patient/client records" means legible records that contain at minimum sufficient information to identify the patient/client, an evaluation of objective findings, a diagnosis, a plan of care, a treatment record and a discharge plan.
9. Failing to supervise physical therapist assistants, ~~or~~ physical therapy aides, a person in an entry-level professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's education, or a person satisfying a supervised clinical practice in accordance with this [act] and board rules.
10. Failing to report to the board, where there is direct knowledge, any unprofessional, incompetent, or illegal acts that appear to be in violation of this [act] or any rules established by the board.
11. Engaging in sexual misconduct. For the purpose of this paragraph sexual misconduct includes:
    a. Engaging in or soliciting romantic or sexual relationships, whether consensual or non-consensual, while a physical therapist or physical therapist assistant-patient/client relationship exists.
    ~~b.~~ Making ~~sexual~~ advances, requesting ~~sexual~~ favors or expressing thoughts, feelings, or making gestures that are sexual in nature, or that reasonably may be construed by a patient/client as sexual in nature, by any means including ~~engaging in other~~ verbal ~~conduct~~ or physical contact, ~~of a sexual nature~~ or via electronic communications. ~~with patients or clients which may~~
    c. Intentionally viewing a completely or partially disrobed patient/client in the course of treatment if the viewing is not related to patient/client diagnosis or treatment under current practice standards.
12. Sexual contact between a physical therapist and patient/client after termination of the physical therapist-patient/client relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.

13. Sexual contact between a physical therapist assistant and patient/client after termination of the physical therapist assistant-patient/client relationship may still constitute sexual misconduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from that relationship.
14. Abusing the physical therapist-patient/client relationship to exert undue influence or exploiting persons over whom the licensee has supervisory, evaluative, or other authority.
15. Abusing the physical therapist assistant-patient/client relationship to exert undue influence or exploiting persons over whom the licensee [certificate holder] has supervisory or other authority.
16. Having had a license [or certificate] revoked or suspended, other disciplinary action taken, or an application for licensure [or certification] refused, revoked or suspended by the proper authorities of another jurisdiction, territory, or country.
17. Having been convicted of or pled guilty to a felony with a nexus to the practice of a physical therapist or work of a physical therapist assistant in the courts of this jurisdiction or any other jurisdiction, territory or country. Conviction, as used in this paragraph, shall include a deferred conviction, deferred prosecution, deferred sentence, finding or verdict of guilt, an admission of guilt, an Alfred plea, or a plea of *nolo contendere*.
18. Aiding and abetting the unlicensed practice of physical therapy.
19. Directly or indirectly requesting, receiving or participating in the dividing, transferring, assigning, rebating or refunding of an unearned fee, or profiting by means of a credit or other valuable consideration such as an unearned commission, discount or gratuity in connection with the furnishing of physical therapy services. This does not prohibit the members of any regularly and properly organized business entity recognized by law and comprising physical therapists from dividing fees received for professional services among themselves as they determine necessary.
20. Promoting any unnecessary device, treatment intervention, or service resulting in the financial gain of the practitioner or of a third party.
21. Providing treatment intervention unwarranted by the condition of the patient/client or continuing treatment beyond the point of reasonable benefit.
22. Participating in underutilization or overutilization of physical therapy services for personal or institutional financial gain.
23. Charging fraudulent fees for services performed or not performed.
24. Making misleading, deceptive, untrue or fraudulent representations in violation of this [act] or in the practice of the profession.
25. Practicing as a physical therapist or working as a physical therapist assistant when physical or mental abilities are impaired by the use of controlled substances or other habit-forming drugs, chemicals or alcohol, or by other causes.
26. Practicing physical therapy with a mental or physical condition that impairs the ability of the licensee to practice with skill and safety.
27. Practicing after having been adjudged mentally incompetent by a court of competent jurisdiction.
28. Interfering with an investigation or disciplinary proceeding by failure to cooperate, by ~~willful~~ misrepresentation of facts, or by the use of threats or harassment against any patient/client or witness to prevent that patient/client or witness from providing evidence in a disciplinary proceeding or any legal action.
29. Failing to maintain patient/client confidentiality without documented authorization of the patient/client or unless otherwise required by law. All records used or resulting from a consultation by telehealth, as defined in [*Definitions,* Article 1.02], are part of a patient's/client's records and are subject to applicable confidentiality requirements.

4.05 Investigative Powers; Emergency Action; Hearing Officers

A. To enforce this [act], the board is authorized to:

1. Receive complaints filed against licensees [or certificate holders] and conduct a timely investigation.
2. File complaints against licensees [or certificate holders] or individuals engaging in the unlawful or unlicensed practice of physical therapy and conduct timely investigations.
3. Conduct an investigation at any time and on its own initiative without receipt of a written complaint if the board has reason to believe that there may be a violation of this [act].

4. Issue subpoenas to compel the attendance of any witness or the production of any documentation relative to a case.
5. Take emergency action ordering the summary suspension of a license [or certificate] or the restriction of a physical therapist's practice or a physical therapist assistant's ~~employment~~ work pending proceedings by the board.
6. Appoint hearing officers authorized to conduct hearings. Hearing officers shall prepare and submit to the board findings of fact, conclusions of law and a recommendation for ~~B~~board action that shall be reviewed and voted on by the board.
7. Require a physical therapist to be examined in order to determine his or her mental or physical ability to practice physical therapy.
8. Require a physical therapist assistant to be examined in order to determine his or her mental or physical ability to work in the profession of physical therapy.

B. If the board finds that the information received in a complaint or an investigation does not merit disciplinary action against a licensee [or certificate holder] it may take one of the following actions:
1. Dismiss the complaint.
2. Issue an advisory letter to the licensee [or certificate holder]. An advisory letter is non-disciplinary and notifies a licensee [or certificate holder] that, while there is no evidence to merit disciplinary action, the board believes that the licensee [or certificate holder] should become educated about the requirements of this [act] and board rules.

4.06 Hearings
(No model statute language is offered under this section heading. See *Commentary* for additional information.)

4.07 Disciplinary Actions; Penalties
Upon proof that any grounds prescribed in section [*Grounds for Denial of License [and Certificate]; Disciplinary Action*, Article 4.04], have been violated, the board may take the following disciplinary actions singly or in combination.
1. Issue a censure.
2. Restrict a license [or certificate]. The board may require a licensee [or certificate holder] to report regularly to the board on matters related to the grounds for the restricted license [or certificate].
3. Suspend a license [or certificate] for a period prescribed by the board.
4. Revoke a license [or certificate].
5. Refuse to issue or renew a license [or certificate].
6. Impose a civil penalty of at least _____ but not more than _____. (Include minimum and maximum dollar amounts of civil penalties.)
7. Accept a voluntary surrendering of a license [or certificate] based on an order of consent from the board.

4.08 Procedural Due Process
Actions of the board shall be taken subject to the right of notice, opportunity to be heard, and the right of appeal in accordance with [specify the jurisdiction] law relating to administrative law and procedure.

4.09 Unlawful Practice; Classification; Civil Penalties; Injunctive Relief
A. It is unlawful for any person or business entity, its employees, agents, or representatives not licensed as a physical therapist under this [act] to engage in the practice of physical therapy. Any person who violates this paragraph [(A) or *Use of Titles and Terms, Restrictions; Classification of Violation*, Article 4.02], is guilty of [cite specific criminal sanction, e.g., class 1 misdemeanor] and subject to any other remedies specified in this [act].

B. The board shall investigate any person or business entity to the extent necessary to determine whether the person or business entity is engaged in the unlawful practice of physical therapy. If an investigation indicates that a person or business entity is practicing physical therapy unlawfully, the board shall inform the person or

the business entity of the alleged violation. The board may refer the matter for prosecution regardless of whether the person or business entity ceases the unlawful practice of physical therapy.

C. The board shall apply to any court of competent jurisdiction for an order enjoining any person or business entity from committing any violation of this [act]. Injunction proceedings under this paragraph shall be in addition to, and not in lieu of, all penalties and other remedies prescribed in this [act].

D. If a person or business entity knowingly violates this [act] or board rules, fraudulently uses or permits the use of a license [or certificate] number, or knowingly aids or requires another person to violate this [act] or board rules, the board may impose upon such person a civil penalty of not more than [dollar amount of penalty] for the first violation and not more than [dollar amount of penalty] for each subsequent violation.

[Optional Statute]

E. The board shall transmit all monies it collects from civil penalties pursuant to this [act] to the [specify the disposition of these funds if different from other funds].

4.10 Reporting Violations; Immunity

A. A person, including but not limited to a licensee [or certificate holder], corporation, insurance company, healthcare organization or healthcare facility and jurisdiction or local governmental agencies, shall report to the board any conviction or determination by an agency or court that a licensee [or certificate holder] has committed an act that constitutes a violation of [*Grounds for Denial of a License [and Certificate]; Disciplinary Action*, Article 4.04].

B. A person is immune from civil liability, whether direct or derivative, for reporting such facts as set forth in "A" above to the board in good faith and participating in the board's investigation and subsequent disciplinary process, if applicable.

C. The board shall not disclose the identity of a person who provides information unless such information is essential to proceedings conducted pursuant to [*Investigative Powers; Emergency Action; Hearing Officers* and *Hearings*, Articles 4.05 and 4.06], or unless required by a court of law.

4.11 Substance Abuse Recovery Program

A. The board may permit a licensee [or certificate holder] to actively participate in a board-approved substance abuse recovery program if:
   1. The board has evidence that the licensee [or certificate holder] is impaired.
   2. The licensee [or certificate holder] enters into a written agreement with the board for a restricted license [or certificate] and complies with all the terms of the agreement, including making satisfactory progress in the program and adhering to any limitations on his or her practice or employment imposed by the board to protect the public. Failure to enter into such an agreement shall activate an immediate investigation and disciplinary proceeding by the board.
   3. As part of the agreement established between the licensee [or certificate holder] and the board, the licensee [or certificate holder] signs a waiver allowing the substance abuse program to release information to the board if the licensee [or certificate holder] does not comply with the requirements of this section or is unable to practice or work with reasonable skill or safety.

4.12 Rights of Consumers

A. The public shall have access to the following information:
   1. A list of licensees [and certificate holders] that includes ~~place of employment, address and telephone number of record,~~ license [or certificate] number, date of license [or certificate] expiration, ~~and~~ status of license [or certificate], and employment information.
   2. A list of final adverse actions taken by the board.
   3. The address, website, email and phone number of the board.

B. Each licensee [and certificate holder] shall display a copy of his or her license [or certificate] in a location accessible to public view or produce a copy immediately upon request.

C. Each licensee [and certificate holder] shall provide the public with information on how to file a complaint with the board against a licensee [or certificate holder].

D. Any person may submit a complaint regarding any licensee, [certificate holder] or any other person potentially in violation of this [act]. Confidentiality shall be maintained subject to law.

E. The home address, email address and home telephone numbers of physical therapists and physical therapist assistants are not public records and shall be kept confidential by the board unless they are the only addresses and telephone numbers of record.

F. A patient/client has freedom of choice in selection of services and products.

G. Information relating to the physical therapist-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written authorization of the patient/client. The physical therapist-patient/client privilege does not extend to cases in which the physical therapist has a duty to report or disclose information as required by law.

H. Information relating to the physical therapist assistant-patient/client relationship is confidential and shall not be communicated to a third party who is not involved in that patient's/client's care without the written authorization of the patient/client. The physical therapist assistant-patient/client privilege does not extend to cases in which the physical therapist assistant has a duty to report or disclose information as required by law.

I~~H~~. The board shall keep all information relating to the receipt and investigation of complaints filed against licensees [or certificate holders] confidential until the information is disclosed in the course of the investigation or any subsequent proceeding or until disclosure is required by law. Patient/Client records, including clinical records, files, any other report or oral statement relating to diagnostic findings or treatment of patients/clients, any information from which a patient/client or ~~his~~ their family might be identified, or information received and records or reports kept by the board as a result of an investigation made pursuant to this [act] shall not be available to the public and shall be kept confidential by the board.

Appendix B: Code of Ethics for the Physical Therapist and Guide for Professional Conduct

Code of Ethics for the Physical Therapist

HOD S06-20-28-25 [Amended HOD S06-19-47-67; HOD S06-09-07-12; HOD S06-00-12-23; HOD 06-91-05-05; HOD 06-87-11-17; HOD 06-81-06-18; HOD 06-78-06-08; HOD 06-78-06-07; HOD 06-77-18-30; HOD 06-77-17-27; Initial HOD 06-73-13-24] [Standard]

Preamble

The Code of Ethics for the Physical Therapist (Code of Ethics) delineates the ethical obligations of all physical therapists as determined by the House of Delegates of the American Physical Therapy Association (APTA). The purposes of this Code of Ethics are to:

1. Define the ethical principles that form the foundation of physical therapist practice in patient and client management, consultation, education, research, and administration.
2. Provide standards of behavior and performance that form the basis of professional accountability to the public.
3. Provide guidance for physical therapists facing ethical challenges, regardless of their professional roles and responsibilities.
4. Educate physical therapists, students, other health care professionals, regulators, and the public regarding the core values, ethical principles, and standards that guide the professional conduct of the physical therapist.
5. Establish the standards by which the American Physical Therapy Association can determine if a physical therapist has engaged in unethical conduct.

No code of ethics is exhaustive nor can it address every situation. Physical therapists are encouraged to seek additional advice or consultation in instances where the guidance of the Code of Ethics may not be definitive. The APTA Guide for Professional Conduct and Core Values for the Physical Therapist and Physical Therapist Assistant provide additional guidance.

This Code of Ethics describes the desired behavior of physical therapists in their multiple roles(eg, management of patients/clients, consultation, education, research, and administration), addresses multiple aspects of ethical action (individual, organizational, and societal) and reflects the core vales of the physical therapist (accountability, altruism, collaboration, compassion and caring, duty, excellence, integrity, and social responsibility). Throughout the document the primary core values that support specific principles are indicated in parentheses. Unless a specific role is indicated in the principle, the duties and obligations being delineated pertain to the five roles of the physical therapist. Fundamental to the Code of Ethics is the special obligation of physical therapists to empower, educate, and enable those with impairments, activity limitations, participation restrictions, and disabilities to facilitate greater independence, health, wellness, and enhanced quality of life.

Principles

Principle #1: Physical therapists shall respect the inherent dignity and rights of all individuals.(Core Values: Compassion and Caring, Integrity)

1A. Physical therapists shall act in a respectful manner toward each person regardless of age, gender, race, nationality, religion, ethnicity, social or economic status, sexual orientation, health condition, or disability.

1B. Physical therapists shall recognize their personal biases and shall not discriminate against others in physical therapist practice, consultation, education, research, and administration.

Principle #2: Physical therapists shall be trustworthy and compassionate in addressing the rights and needs of patients/clients. (Core Values: Altruism, Collaboration, Compassion and Caring, Duty)

2A. Physical therapists shall adhere to the core values of the profession and shall act in the best interests of patients and clients over the interests of the physical therapist.
2B. Physical therapists shall provide physical therapist services with compassionate and caring behaviors that incorporate the individual and cultural differences of patients and clients.
2C. Physical therapists shall provide the information necessary to allow patients or their surrogates to make informed decisions about physical therapist care or participation in clinical research.
2D. Physical therapists shall collaborate with patients and clients to empower them in decisions about their health care.
2E. Physical therapists shall protect confidential patient and client information and may disclose confidential information to appropriate authorities only when allowed or as required by law.

Principle #3: Physical therapists shall be accountable for making sound professional judgments. (Core Values: Collaboration, Duty, Excellence, Integrity)

3A. Physical therapists shall demonstrate independent and objective professional judgment in the patient's or client's best interest in all practice settings.
3B. Physical therapists shall demonstrate professional judgment informed by professional standards, evidence (including current literature and established best practice), practitioner experience, and patient and client values.
3C. Physical therapists shall make judgments within their scope of practice and level of expertise and shall communicate with, collaborate with, or refer to peers or other health care professionals when necessary.
3D. Physical therapists shall not engage in conflicts of interest that interfere with professional judgment.
3E. Physical therapists shall provide appropriate direction of and communication with physical therapist assistants and support personnel.

Principle #4: Physical therapists shall demonstrate integrity in their relationships with patients and clients, families, colleagues, students, research participants, other health care providers, employers, payers, and the public.(Core Value: Integrity)

4A. Physical therapists shall provide truthful, accurate, and relevant information and shall not make misleading representations.
4B. Physical therapists shall not exploit persons over whom they have supervisory, evaluative or other authority (eg, patients/clients, students, supervisees, research participants, or employees).
4C. Physical therapists shall not engage in any sexual relationship with any of their patients and clients, supervisees, or students.
4D. Physical therapists shall not harass anyone verbally, physically, emotionally, or sexually.
4E. Physical therapists shall discourage misconduct by physical therapists, physical therapist assistants, and other health care professionals and, when appropriate, report illegal or unethical acts, including verbal, physical, emotional, or sexual harassment, to an appropriate authority with jurisdiction over the conduct.
4F. Physical therapists shall report suspected cases of abuse involving children or vulnerable adults to the appropriate authority, subject to law.

Principle #5: Physical therapists shall fulfill their legal and professional obligations. (Core Values: Accountability, Duty, Social Responsibility)

5A. Physical therapists shall comply with applicable local, state, and federal laws and regulations.
5B. Physical therapists shall have primary responsibility for supervision of physical therapist assistants and support personnel.
5C. Physical therapists involved in research shall abide by accepted standards governing protection of research participants.

5D. Physical therapists shall encourage colleagues with physical, psychological, or substance-related impairments that may adversely impact their professional responsibilities to seek assistance or counsel.
5E. Physical therapists who have knowledge that a colleague is unable to perform their professional responsibilities with reasonable skill and safety shall report this information to the appropriate authority.
5F. Physical therapists shall provide notice and information about alternatives for obtaining care in the event the physical therapist terminates the provider relationship while the patient or client continues to need physical therapy services.

Principle #6: Physical therapists shall enhance their expertise through the lifelong acquisition and refinement of knowledge, skills, abilities, and professional behaviors. (Core Value: Excellence)

6A. Physical therapists shall achieve and maintain professional competence.
6B. Physical therapists shall take responsibility for their professional development based on critical self-assessment and reflection on changes in physical therapist practice, education, health care delivery, and technology.
6C. Physical therapists shall evaluate the strength of evidence and applicability of content presented during professional development activities before integrating the content or techniques into practice.
6D. Physical therapists shall cultivate practice environments that support professional development, lifelong learning, and excellence.

Principle #7: Physical therapists shall promote organizational behaviors and business practices that benefit patients/clients and society. (Core Values: Integrity, Accountability)

7A. Physical therapists shall promote practice environments that support autonomous and accountable professional judgments.
7B. Physical therapists shall seek remuneration as is deserved and reasonable for physical therapist services.
7C. Physical therapists shall not accept gifts or other considerations that influence or give an appearance of influencing their professional judgment.
7D. Physical therapists shall fully disclose any financial interest they have in products or services that they recommend to patients/clients.
7E. Physical therapists shall be aware of charges and shall ensure that documentation and coding for physical therapy services accurately reflect the nature and extent of the services provided.
7F. Physical therapists shall refrain from employment arrangements, or other arrangements, that prevent physical therapists from fulfilling professional obligations to patients/clients.

Principle #8: Physical therapists shall participate in efforts to meet the health needs of people locally, nationally, or globally.(Core Value: Social Responsibility)

8A. Physical therapists shall provide pro bono physical therapy services or support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured.
8B. Physical therapists shall advocate to reduce health disparities and health care inequities, improve access to health care services, and address the health, wellness, and preventive health care needs of people.
8C. Physical therapists shall be responsible stewards of health care resources and shall avoid overutilization or underutilization of physical therapy services.
8D. Physical therapists shall educate members of the public about the benefits of physical therapy and the unique role of the physical therapist.

Guide for Professional Conduct

Purpose
This Guide for Professional Conduct (Guide) is intended to serve physical therapists in interpreting the Code of Ethics for the Physical Therapist (Code) of the American Physical Therapy Association (APTA) in matters of professional conduct. The APTA House of Delegates in June of 2009 adopted a revised Code, which became effective on July 1, 2010.

The Guide provides a framework by which physical therapists may determine the propriety of their conduct. It is also intended to guide the professional development of physical therapist students. The Code and the Guide apply to all physical therapists. These guidelines are subject to change as the dynamics of the profession change and as new patterns of health care delivery are developed and accepted by the professional community and the public.

Interpreting Ethical Principles
The interpretations expressed in this Guide reflect the opinions, decisions, and advice of the Ethics and Judicial Committee (EJC). The interpretations are set forth according to topic. These interpretations are intended to assist a physical therapist in applying general ethical principles to specific situations. They address some but not all topics addressed in the Principles and should not be considered inclusive of all situations that could evolve.

This Guide is subject to change, and the Ethics and Judicial Committee will monitor and timely revise the Guide to address additional topics and Principles when necessary and as needed.

Preamble to the Code

The Preamble states as follows:
The Code of Ethics for the Physical Therapist (Code of Ethics) delineates the ethical obligations of all physical therapists as determined by the House of Delegates of the American Physical Therapy Association (APTA). The purposes of this Code of Ethics are to:
1. Define the ethical principles that form the foundation of physical therapist practice in patient and client management, consultation, education, research, and administration.
2. Provide standards of behavior and performance that form the basis of professional accountability to the public.
3. Provide guidance for physical therapists facing ethical challenges, regardless of their professional roles and responsibilities.
4. Educate physical therapists, students, other health care professionals, regulators, and the public regarding the core values, ethical principles, and standards that guide the professional conduct of the physical therapist.
5. Establish the standards by which the American Physical Therapy Association can determine if a physical therapist has engaged in unethical conduct.

No code of ethics is exhaustive nor can it address every situation. Physical therapists are encouraged to seek additional advice or consultation in instances where the guidance of the Code of Ethics may not be definitive.

This Code of Ethics is built upon the five roles of the physical therapist (management of patients/clients, consultation, education, research, and administration), the core values of the profession, and the multiple realms of ethical action (individual, organizational, and societal). Physical therapist practice is guided by a set of seven core values: accountability, altruism, compassion/caring, excellence, integrity, duty, and social responsibility. Throughout the document the primary core, values that support specific principles are indicated in parentheses. Unless a specific role is indicated in the principle, the duties and obligations being delineated pertain to the five roles of the physical therapist. Fundamental to the Code of Ethics is the special obligation of physical therapists to empower, educate, and enable those with impairments, activity limitations, participation restrictions, and disabilities to facilitate greater independence, health, wellness, and enhanced quality of life.

Interpretation: Upon the Code of Ethics for the Physical Therapist being amended effective July 1, 2010, all the

lettered principles in the Code contain the word "shall" and are mandatory ethical obligations. The language contained in the Code is intended to better explain and further clarify existing ethical obligations. These ethical obligations predate the revised Code. Although various words have changed, many of the obligations are the same. Consequently, the addition of the word "shall" serves to reinforce and clarify existing ethical obligations. A significant reason that the Code was revised was to provide physical therapists with a document that was clear enough such that they can read it standing alone without the need to seek extensive additional interpretation.

The Preamble states that "[n]o Code of Ethics is exhaustive nor can it address every situation." The Preamble also states that physical therapists "are encouraged to seek additional advice or consultation in instances in which the guidance of the Code may not be definitive." Potential sources for advice and counsel include third parties and the myriad resources available on the APTA Web site. Inherent in a physical therapist's ethical decision-making process is the examination of his or her unique set of facts relative to the Code.

Topics

Respect
Principle 1A states as follows:
1A. Physical therapists shall act in a respectful manner toward each person regardless of age, gender, race, nationality, religion, ethnicity, social or economic status, sexual orientation, health condition, or disability.

Interpretation: Principle 1A addresses the display of respect toward others. Unfortunately, there is no universal consensus about what respect looks like in every situation. For example, direct eye contact is viewed as respectful and courteous in some cultures and inappropriate in others. It is up to the individual to assess the appropriateness of behavior in various situations.

Altruism
Principle 2A states as follows:
2A. Physical therapists shall adhere to the core values of the profession and shall act in the best interests of patients/clients over the interests of the physical therapist.

Interpretation: Principle 2A reminds physical therapists to adhere to the profession's core values and act in the best interest of patients/clients over the interests of the physical therapist. Often this is done without thought, but sometimes, especially at the end of the day when the physical therapist is fatigued and ready to go home, it is a conscious decision. For example, the physical therapist may need to make a decision between leaving on time and staying at work longer to see a patient who was 15 minutes late for an appointment.

Patient Autonomy
Principle 2C states as follows:
2C. Physical therapists shall provide the information necessary to allow patients or their surrogates to make informed decisions about physical therapy care or participation in clinical research.

Interpretation: The underlying purpose of Principle 2C is to require a physical therapist to respect patient autonomy. In order to do so, a physical therapist shall communicate to the patient and client the findings of his/her examination, evaluation, diagnosis, and prognosis. A physical therapist shall use sound professional judgment in informing the patient and client of any substantial risks of the recommended examination and intervention and shall collaborate with the patient and client to establish the goals of treatment and the plan of care. Ultimately, a physical therapist shall respect the patient's/client's right to make decisions regarding the recommended plan of care, including consent, modification, or refusal.

Professional Judgment
Principles 3, 3A, and 3B state as follows:
3: Physical therapists shall be accountable for making sound professional judgments. (Core Values: Excellence, Integrity)

3A. Physical therapists shall demonstrate independent and objective professional judgment in the patient's/client's best interest in all practice settings.
3B. Physical therapists shall demonstrate professional judgment informed by professional standards, evidence (including current literature and established best practice), practitioner experience, and patient and client values.

Interpretation: Principles 3, 3A, and 3B state that it is the physical therapist's obligation to exercise sound professional judgment, based upon his/her knowledge, skill, training, and experience. Principle 3B further describes the physical therapist's judgment as being informed by three elements of evidence-based practice.

With regard to the patient and client management role, once a physical therapist accepts an individual for physical therapy services he/she shall be responsible for: the examination, evaluation, and diagnosis of that individual; the prognosis and intervention; re-examination and modification of the plan of care; and the maintenance of adequate records, including progress reports. A physical therapist shall establish the plan of care and shall provide and/or supervise and direct the appropriate interventions. Regardless of practice setting, a physical therapist has primary responsibility for the physical therapy care of a patient and shall make independent judgments regarding that care consistent with accepted professional standards.

If the diagnostic process reveals findings that are outside the scope of the physical therapist's knowledge, experience, or expertise or that indicate the need for care outside the scope of physical therapy, the physical therapist shall so inform the patient and client and shall refer the patient and client to an appropriate practitioner.

A physical therapist shall determine when a patient and client will no longer benefit from physical therapy services. When a physical therapist's judgment is that a patient will receive negligible benefit from physical therapy services, the physical therapist shall not provide or continue to provide such services if the primary reason for doing so is to further the financial self-interest of the physical therapist or his/her employer. A physical therapist shall avoid overutilization of physical therapy services. See Principle 8C.

Supervision
Principle 3E states as follows:
3E. Physical therapists shall provide appropriate direction of and communication with physical therapist assistants and support personnel.

Interpretation: Principle 3E describes an additional circumstance in which sound professional judgment is required; namely, through the appropriate direction of and communication with physical therapist assistants and support personnel. Further information on supervision via applicable local, state, and federal laws and regulations (including state practice acts and administrative codes) is available. Information on supervision via APTA policies and resources is also available on the APTA Web site. See Principles 5A and 5B.

Integrity in Relationships
Principle 4 states as follows:
4: Physical therapists shall demonstrate integrity in their relationships with patients/clients, families, colleagues, students, research participants, other health care providers, employers, payers, and the public. (Core Value: Integrity)

Interpretation: Principle 4 addresses the need for integrity in relationships. This is not limited to relationships with patients/clients, but includes everyone physical therapists come into contact with professionally. For example, demonstrating integrity could encompass working collaboratively with the health care team and taking responsibility for one's role as a member of that team.

Reporting
Principle 4C states as follows:
4C. Physical therapists shall discourage misconduct by healthcare professionals and report illegal or unethical acts to the relevant authority, when appropriate.

Interpretation: When considering the application of "when appropriate" under Principle 4C, keep in mind that not all allegedly illegal or unethical acts should be reported immediately to an agency/authority. The determination of when to do so depends upon each situation's unique set of facts, applicable laws, regulations, and policies. Depending upon those facts, it might be appropriate to communicate with the individuals involved. Consider whether the action has been corrected, and in that case, not reporting may be the most appropriate action. Note, however, that when an agency/authority does examine a potential ethical issue, fact finding will be its first step. The determination of ethicality requires an understanding of all of the relevant facts, but may still be subject to interpretation.

The EJC Opinion titled: Topic: Preserving Confidences; Physical Therapist's Reporting Obligation With Respect to Unethical, Incompetent, or Illegal Acts provides further information on the complexities of reporting.

Exploitation
Principle 4E states as follows:
4E. Physical therapists shall not engage in any sexual relationship with any of their patient and clients, supervisees or students.

Interpretation: The statement is fairly clear – sexual relationships with their patients/clients, supervisees or students are prohibited. This component of Principle 4 is consistent with Principle 4B, which states: Physical therapists shall not exploit persons over whom they have supervisory, evaluative or other authority (e.g. patients/clients, students, supervisees, research participants, or employees). Next, consider this excerpt from the EJC Opinion titled Topic: Sexual Relationships With Patients/Former Patients: A physical therapist stands in a relationship of trust to each patient and has an ethical obligation to act in the patient's best interest and to avoid any exploitation or abuse of the patient. Thus, if a physical therapist has natural feelings of attraction toward a patient, he/she must sublimate those feelings in order to avoid sexual exploitation of the patient. One's ethical decision making process should focus on whether the patient and client, supervisee or student is being exploited. In this context, questions have been asked about whether one can have a sexual relationship once the patient and client relationship ends. To this question, the EJC has opined as follows: The Committee does not believe it feasible to establish any bright-line rule for when, if ever, initiation of a romantic/sexual relationship with a former patient would be ethically permissible. The Committee imagines that in some cases a romantic/sexual relationship would not offend ... if initiated with a former patient soon after the termination of treatment, while in others such a relationship might never be appropriate.

Colleague Impairment
Principle 5D and 5E state as follows:
5D. Physical therapists shall encourage colleagues with physical, psychological, or substance-related impairments that may adversely impact their professional responsibilities to seek assistance or counsel.
5E. Physical therapists who have knowledge that a colleague is unable to perform their professional responsibilities with reasonable skill and safety shall report the information to the appropriate authority.

Interpretation: The central tenet of Principles 5D and 5E is that inaction is not an option for a physical therapist when faced with the circumstances described. Principle 5D states that a physical therapist shall encourage colleagues to seek assistance or counsel while Principle 5E addresses reporting information to the appropriate authority. 5D and 5E both require a factual determination on your part. This may be challenging in the sense that you might not know or it might be difficult for you to determine whether someone in fact has a physical, psychological, or substance-related impairment. In addition, it might be difficult to determine whether such impairment may be adversely affecting his or her professional responsibilities.

Moreover, once you do make these determinations, the obligation under 5D centers not on reporting, but on encouraging the colleague to seek assistance. However, the obligation under 5E does focus on reporting. But note that 5E discusses reporting when a colleague is unable to perform, whereas 5D discusses encouraging colleagues to seek assistance when the impairment may adversely affect his or her professional responsibilities. So, 5D

discusses something that may be affecting performance, whereas 5E addresses a situation in which someone is clearly unable to perform. The 2 situations are distinct. In addition, it is important to note that 5E does not mandate to whom you report; it gives you discretion to determine the appropriate authority. The EJC Opinion titled: Topic: Preserving Confidences; Physical Therapist's Reporting Obligation With Respect to Unethical, Incompetent, or Illegal Acts provides further information on the complexities of reporting.

Professional Competence
Principle 6A states as follows:
6A. Physical therapists shall achieve and maintain professional competence.

Interpretation: 6A requires a physical therapist to maintain professional competence within one's scope of practice throughout one's career. Maintaining competence is an ongoing process of self-assessment, identification of strengths and weaknesses, acquisition of knowledge and skills based on that assessment, and reflection on and reassessment of performance, knowledge and skills. Numerous factors including practice setting, types of patients/clients, personal interests and the addition of new evidence to practice will influence the depth and breadth of professional competence in a given area of practice. Additional resources on Continuing Competence are available on the APTA Web site.

Professional Growth
Principle 6D states as follows:
6D. Physical therapists shall cultivate practice environments that support professional development, life-long learning, and excellence.

Interpretation: 6D elaborates on the physical therapist's obligations to foster an environment conducive to professional growth, even when not supported by the organization. The essential idea is that this is the physical therapist's responsibility, whether or not the employer provides support.

Charges and Coding
Principle 7E states as follows:
7E. Physical therapists shall be aware of charges and shall ensure that documentation and coding for physical therapy services accurately reflect the nature and extent of the services provided.9

Interpretation: Principle 7E provides that the physical therapist must make sure that the process of documentation and coding accurately captures the charges for services performed. In this context, where charges cannot be determined because of payment methodology, physical therapists may review the House of Delegates policy titled Professional Fees for Physical Therapy Services. Additional resources on documentation and coding include the House of Delegates policy titled Documentation Authority for Physical Therapy Services and the Documentation and Coding and Billing information on the APTA Web site.

Pro Bono Services
Principle 8A states as follows:
8A. Physical therapists shall provide pro bono physical therapy services or support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured.

Interpretation: The key word in Principle 8A is "or". If a physical therapist is unable to provide pro bono services he or she can fulfill ethical obligations by supporting organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured. In addition, physical therapists may review the House of Delegates guidelines titled Guidelines: Pro Bono Physical Therapy Services. Additional resources on pro bono physical therapy services are available on the APTA Web site.

8A also addresses supporting organizations to meet health needs. In terms of supporting organizations, the principle does not specify the type of support that is required. Physical therapists may express support through

volunteerism, financial contributions, advocacy, education, or simply promoting their work in conversations with colleagues.

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Appendix C: Standards of Ethical Conduct for the Physical Therapist Assistant & Guide for Conduct

Standards of Ethical Conduct for the Physical Therapist Assistant
HOD S06-09-20-18 [Amended HOD S06-00-13-24; HOD 06-91-06-07; Initial HOD 06-82-04-08] [Standard]

Preamble
The Standards of Ethical Conduct for the Physical Therapist Assistant (Standards of Ethical Conduct) delineate the ethical obligations of all physical therapist assistants as determined by the House of Delegates of the American Physical Therapy Association (APTA). The Standards of Ethical Conduct provide a foundation for conduct to which all physical therapist assistants shall adhere. Physical therapist assistants are guided by a set of core values (accountability, altruism, collaboration, compassion and caring, duty, excellence, integrity, and social responsibility). Throughout the document the primary core values that support specific principles are indicated in parenthesis. Fundamental to the Standards of Ethical Conduct is the special obligation of physical therapist assistants to enable patients/clients to achieve greater independence,health and wellness, and enhanced quality of life.

No document that delineates ethical standards can address every situation. Physical therapist assistants are encouraged to seek additional advice or consultation in instances where the guidance of the Standards of Ethical Conduct may not be definitive.The APTA Guide for Conduct of the Physical Therapist Assistant and Core Values for the Physical Therapist and Physical Therapist Assistant provide additional guidance.

Standards

Standard #1: Physical therapist assistants shall respect the inherent dignity, and rights, of all individuals.
(Core Values: Compassion and Caring, Integrity)

1A. Physical therapist assistants shall act in a respectful manner toward each person regardless of age, gender, race, nationality, religion, ethnicity, social or economic status, sexual orientation, health condition, or disability.
1B. Physical therapist assistants shall recognize their personal biases and shall not discriminate against others in the provision of physical therapy services.

Standard #2: Physical therapist assistants shall be trustworthy and compassionate in addressing the rights and needs of patients/clients.
(Core Values: Altruism, Collaboration, Comopassion and Caring, Duty)

2A. Physical therapist assistants shall act in the best interests of patients/clients over the interests of the physical therapist assistant.
2B. Physical therapist assistants shall provide physical therapy interventions with compassionate and caring behaviors that incorporate the individual and cultural differences of patients/clients.
2C. Physical therapist assistants shall provide patients/clients with information regarding the interventions they provide.
2D. Physical therapist assistants shall protect confidential patient and client information and, in collaboration with the physical therapist, may disclose confidential information to appropriate authorities only when allowed or as required by law.

Standard #3: Physical therapist assistants shall make sound decisions in collaboration with the physical therapist and within the boundaries established by laws and regulations.
(Core Values: Collaboration, Duty, Excellence, Integrity)

3A. Physical therapist assistants shall make objective decisions in the patient's or client's best interest in all practice settings.

3B. Physical therapist assistants shall be guided by information about best practice regarding physical therapist interventions.
3C. Physical therapist assistants shall make decisions based upon their level of competence and consistent with patient and client values.
3D. Physical therapist assistants shall not engage in conflicts of interest that interfere with making sound decisions.
3E. Physical therapist assistants shall provide physical therapy services under the direction and supervision of a physical therapist and shall communicate with the physical therapist when patient or client status requires modifications to the established plan of care.

Standard #4: Physical therapist assistants shall demonstrate integrity in their relationships with patients/ clients, families, colleagues, students, other health care providers, employers, payers, and the public.
(Core Value: Integrity)

4A. Physical therapist assistants shall provide truthful, accurate, and relevant information and shall not make misleading representations.
4B. Physical therapist assistants shall not exploit persons over whom they have supervisory, evaluative or other authority (eg, patients and clients, students, supervisees, research participants, or employees).
4C. Physical therapist assistants shall not engage in any sexual relationship with any of their patients and clients, supervisees, or students.
4D. Physical therapist assistants shall not harass anyone verbally, physically, emotionally, or sexually.
4E. Physical therapist assistants shall discourage misconduct by physical therapists, physical therapist assistants, and other health care professionals and, when appropriate, report illegal or unethical acts, including verbal, physical, emotional, or sexual harassment, to an appropriate authority with jurisdiction over the conduct.
4F. Physical therapist assistants shall report suspected cases of abuse involving children or vulnerable adults to the appropriate authority, subject to law.

Standard #5: Physical therapist assistants shall fulfill their legal and ethical obligations.
(Core Values: Accountability, Duty, Social Responsibility)

5A. Physical therapist assistants shall comply with applicable local, state, and federal laws and regulations.
5B. Physical therapist assistants shall support the supervisory roleof the physical therapist to ensure quality care and promote patient and client safety.
5C. Physical therapist assistants involved in research shall abide by accepted standards governing protection of research participants.
5D. Physical therapist assistants shall encourage colleagues with physical, psychological, or substance related impairments that may adversely impact their professional responsibilities to seek assistance or counsel.
5E. Physical therapist assistants who have knowledge that a colleague is unable to perform their professional responsibilities with reasonable skill and safety shall report this information to the appropriate authority.

Standard #6: Physical therapist assistants shall enhance their competence through the lifelong acquisition and refinement of knowledge, skills, and abilities.
(Core Value: Excellence)

6A. Physical therapist assistants shall achieve and maintain clinicalcompetence.
6B. Physical therapist assistants shall engage in lifelong learning consistent with changes in their roles and responsibilities and advances in the practice of physical therapy.
6C. Physical therapist assistants shall support practice environments that support career development and lifelong learning.

Standard #7: Physical therapist assistants shall support organizational behaviors and business practices that benefit patients/clients and society.
(core Values: Integrity, Accountability)

7A. Physical therapist assistants shall promote work environments that support ethical and accountable decision-making.
7B. Physical therapist assistants shall not accept gifts or other considerations that influence or give an appearance of influencing their decisions.
7C. Physical therapist assistants shall fully disclose any financial interest they have in products or services that they recommend to patients/clients.
7D. Physical therapist assistants shall ensure that documentation for their interventions accurately reflects the nature and extent of the services provided.
7E. Physical therapist assistants shall refrain from employment arrangements, or other arrangements, that prevent physical therapist assistants from fulfilling ethical obligations to patients/clients

Standard #8: Physical therapist assistants shall participate in efforts to meet the health needs of people locally, nationally, or globally.
(Core Value: Social Responsibility)

8A. Physical therapist assistants shall support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured.
8B. Physical therapist assistants shall advocate for people with impairments, activity limitations, participation restrictions, and disabilities in order to promote their participation in community and society.
8C. Physical therapist assistants shall be responsible stewards of health care resources by collaborating with physical therapists in order to avoid overutilization or underutilization of physical therapy services.
8D. Physical therapist assistants shall educate members of the public about the benefits of physical therapy.

APTA Guide for Conduct of the Physical Therapist Assistant

Purpose
This Guide for Conduct of the Physical Therapist Assistant (Guide) is intended to serve physical therapist assistants in interpreting the Standards of Ethical Conduct for the Physical Therapist Assistant (Standards) of the American Physical Therapy Association (APTA). The APTA House of Delegates in June of 2009 adopted the revised Standards, which became effective on July 1, 2010.

The Guide provides a framework by which physical therapist assistants may determine the propriety of their conduct. It is also intended to guide the development of physical therapist assistant students. The Standards and the Guide apply to all physical therapist assistants. These guidelines are subject to change as the dynamics of the profession change and as new patterns of health care delivery are developed and accepted by the professional community and the public.

Interpreting Ethical Standards
The interpretations expressed in this Guide reflect the opinions, decisions, and advice of the Ethics and Judicial Committee (EJC). The interpretations are set forth according to topic. These interpretations are intended to assist a physical therapist assistant in applying general ethical standards to specific situations. They address some but not all topics addressed in the Standards and should not be considered inclusive of all situations that could evolve.

This Guide is subject to change, and the Ethics and Judicial Committee will monitor and timely revise the Guide to address additional topics and Standards when necessary and as needed.

Preamble to the Standards
The Preamble states as follows:
The Standards of Ethical Conduct for the Physical Therapist Assistant (Standards of Ethical Conduct) delineate the ethical obligations of all physical therapist assistants as determined by the House of Delegates of the American

Physical Therapy Association (APTA). The Standards of Ethical Conduct provide a foundation for conduct to which all physical therapist assistants shall adhere. Fundamental to the Standards of Ethical Conduct is the special obligation of physical therapist assistants to enable patients/clients to achieve greater independence, health and wellness, and enhanced quality of life.
No document that delineates ethical standards can address every situation. Physical therapist assistants are encouraged to seek additional advice or consultation in instances where the guidance of the Standards of Ethical Conduct may not be definitive.

Interpretation: Upon the Standards of Ethical Conduct for the Physical Therapist Assistant being amended effective July 1, 2010, all the lettered standards contain the word "shall" and are mandatory ethical obligations. The language contained in the Standards is intended to better explain and further clarify existing ethical obligations. These ethical obligations predate the revised Standards. Although various words have changed, many of the obligations are the same. Consequently, the addition of the word "shall" serves to reinforce and clarify existing ethical obligations. A significant reason that the Standards were revised was to provide physical therapist assistants with a document that was clear enough such that they can read it standing alone without the need to seek extensive additional interpretation.

The Preamble states that "[n]o document that delineates ethical standards can address every situation." The Preamble also states that physical therapist assistants "are encouraged to seek additional advice or consultation in instances where the guidance of the Standards of Ethical Conduct may not be definitive." Potential sources for advice or counsel include third parties and the myriad resources available on the APTA Web site. Inherent in a physical therapist assistant's ethical decision-making process is the examination of his or her unique set of facts relative to the Standards.

Standards
Respect
Standard 1A states as follows:
1A. Physical therapist assistants shall act in a respectful manner toward each person regardless of age, gender, race, nationality, religion, ethnicity, social or economic status, sexual orientation, health condition, or disability.

Interpretation: Standard 1A addresses the display of respect toward others. Unfortunately, there is no universal consensus about what respect looks like in every situation. For example, direct eye contact is viewed as respectful and courteous in some cultures and inappropriate in others. It is up to the individual to assess the appropriateness of behavior in various situations.3

Altruism
Standard 2A states as follows:
2A. Physical therapist assistants shall act in the best interests of patients/clients over the interests of the physical therapist assistant.

Interpretation: Standard 2A addresses acting in the best interest of patients/clients over the interests of the physical therapist assistant. Often this is done without thought, but sometimes, especially at the end of the day when the clinician is fatigued and ready to go home, it is a conscious decision. For example, the physical therapist assistant may need to make a decision between leaving on time and staying at work longer to see a patient who was 15 minutes late for an appointment.

Sound Decisions
Standard 3C states as follows:
3C. Physical therapist assistants shall make decisions based upon their level of competence and consistent with patient and client values.

Interpretation: To fulfill 3C, the physical therapist assistant must be knowledgeable about his or her legal scope of work as well as level of competence. As a physical therapist assistant gains experience and additional knowledge,

there may be areas of physical therapy interventions in which he or she displays advanced skills. At the same time, other previously gained knowledge and skill may be lost due to lack of use. To make sound decisions, the physical therapist assistant must be able to self-reflect on his or her current level of competence.

Supervision
Standard 3E states as follows:
3E. Physical therapist assistants shall provide physical therapy services under the direction and supervision of a physical therapist and shall communicate with the physical therapist when patient and client status requires modifications to the established plan of care.

Interpretation: Standard 3E goes beyond simply stating that the physical therapist assistant operates under the supervision of the physical therapist. Although a physical therapist retains responsibility for the patient and client throughout the episode of care, this standard requires the physical therapist assistant to take action by communicating with the supervising physical therapist when changes in the patient and client status indicate that modifications to the plan of care may be needed. Further information on supervision via APTA policies and resources is available on the APTA Web site.

Integrity in Relationships
Standard 4 states as follows:
4: Physical therapist assistants shall demonstrate integrity in their relationships with patients/clients, families, colleagues, students, other health care providers, employers, payers, and the public.

Interpretation: Standard 4 addresses the need for integrity in relationships. This is not limited to relationships with patients/clients, but includes everyone physical therapist assistants come into contact with in the normal provision of physical therapy services. For example, demonstrating integrity could encompass working collaboratively with the health care team and taking responsibility for one's role as a member of that team.

Reporting
Standard 4C states as follows:
4C. Physical therapist assistants shall discourage misconduct by health care professionals and report illegal or unethical acts to the relevant authority, when appropriate.

Interpretation: When considering the application of "when appropriate" under Standard 4C, keep in mind that not all allegedly illegal or unethical acts should be reported immediately to an agency/authority. The determination of when to do so depends upon each situation's unique set of facts, applicable laws, regulations, and policies.

Depending upon those facts, it might be appropriate to communicate with the individuals involved. Consider whether the action has been corrected, and in that case, not reporting may be the most appropriate action. Note, however, that when an agency/authority does examine a potential ethical issue, fact finding will be its first step. The determination of ethicality requires an understanding of all of the relevant facts, but may still be subject to interpretation. The EJC Opinion titled: Topic: Preserving Confidences; Physical Therapist's Reporting Obligation With Respect to Unethical, Incompetent, or Illegal Acts provides further information on the complexities of reporting.

Exploitation
Standard 4E states as follows:
4E. Physical therapist assistants shall not engage in any sexual relationship with any of their patients/clients, supervisees, or students.

Interpretation: The statement is fairly clear – sexual relationships with their patients/clients, supervisees or students are prohibited. This component of Standard 4 is consistent with Standard 4B, which states:

4B. Physical therapist assistants shall not exploit persons over whom they have supervisory, evaluative or other authority (eg, patients/clients, students, supervisees, research participants, or employees).

Next, consider this excerpt from the EJC Opinion titled Topic: Sexual Relationships With Patients/Former Patients (modified for physical therapist assistants):

A physical therapist [assistant] stands in a relationship of trust to each patient and has an ethical obligation to act in the patient's best interest and to avoid any exploitation or abuse of the patient. Thus, if a physical therapist [assistant] has natural feelings of attraction toward a patient, he/she must sublimate those feelings in order to avoid sexual exploitation of the patient.

One's ethical decision making process should focus on whether the patient and client, supervisee or student is being exploited. In this context, questions have been asked about whether one can have a sexual relationship once the patient and client relationship ends. To this question, the EJC has opined as follows: The Committee does not believe it feasible to establish any bright-line rule for when, if ever, initiation of a romantic/sexual relationship with a former patient would be ethically permissible. The Committee imagines that in some cases a romantic/sexual relationship would not offend ... if initiated with a former patient soon after the termination of treatment, while in others such a relationship might never be appropriate.

Colleague Impairment
Standard 5D and 5E state as follows:
5D. Physical therapist assistants shall encourage colleagues with physical, psychological, or substance-related impairments that may adversely impact their professional responsibilities to seek assistance or counsel.

5E. Physical therapist assistants who have knowledge that a colleague is unable to perform their professional responsibilities with reasonable skill and safety shall report this information to the appropriate authority.

Interpretation: The central tenet of Standard 5D and 5E is that inaction is not an option for a physical therapist assistant when faced with the circumstances described. Standard 5D states that a physical therapist assistant shall encourage colleagues to seek assistance or counsel while Standard 5E addresses reporting information to the appropriate authority.

5D and 5E both require a factual determination on the physical therapist assistant's part. This may be challenging in the sense that you might not know or it might be difficult for you to determine whether someone in fact has a physical, psychological, or substance-related impairment. In addition, it might be difficult to determine whether such impairment may be adversely affecting someone's work responsibilities.

Moreover, once you do make these determinations, the obligation under 5D centers not on reporting, but on encouraging the colleague to seek assistance. However, the obligation under 5E does focus on reporting. But note that 5E discusses reporting when a colleague is unable to perform, whereas 5D discusses encouraging colleagues to seek assistance when the impairment may adversely affect his or her professional responsibilities. So, 5D discusses something that may be affecting performance, whereas 5E addresses a situation in which someone is clearly unable to perform. The 2 situations are distinct. In addition, it is important to note that 5E does not mandate to whom you report; it gives you discretion to determine the appropriate authority. The EJC Opinion titled Topic: Preserving Confidences; Physical Therapist's Reporting Obligation With Respect to Unethical, Incompetent, or Illegal Acts provides further information on the complexities of reporting.

Clinical Competence
Standard 6A states as follows:
6A. Physical therapist assistants shall achieve and maintain clinical competence.

Interpretation: 6A should cause physical therapist assistants to reflect on their current level of clinical competence, to identify and address gaps in clinical competence, and to commit to the maintenance of clinical

competence throughout their career. The supervising physical therapist can be a valuable partner in identifying areas of knowledge and skill that the physical therapist assistant needs for clinical competence and to meet the needs of the individual physical therapist, which may vary according to areas of interest and expertise. Further, the physical therapist assistant may request that the physical therapist serve as a mentor to assist him or her in acquiring the needed knowledge and skills. Additional resources on Continuing Competence are available on the APTA Web site.

Lifelong Learning
Standard 6C states as follows:
6C. Physical therapist assistants shall support practice environments that support career development and lifelong learning.

Interpretation: 6C points out the physical therapist assistant's obligation to support an environment conducive to career development and learning. The essential idea here is that the physical therapist assistant encourage and contribute to the career development and lifelong learning of himself or herself and others, whether or not the employer provides support.

Organizational and Business Practices
Standard 7 states as follows:
7. Physical therapist assistants shall support organizational behaviors and business practices that benefit patients/clients and society.

Interpretation: Standard 7 reflects a shift in the Standards. One criticism of the former version was that it addressed primarily face-to-face clinical practice settings. Accordingly, Standard 7 addresses ethical obligations in organizational and business practices on a patient and client and societal level.

Documenting Interventions
Standard 7D states as follows:
7D. Physical therapist assistants shall ensure that documentation for their interventions accurately reflects the nature and extent of the services provided.
Interpretation: 7D addresses the need for physical therapist assistants to make sure that they thoroughly and accurately document the interventions they provide to patients/clients and document related data collected from the patient and client. The focus of this Standard is on ensuring documentation of the services rendered, including the nature and extent of such services.

Support - Health Needs
Standard 8A states as follows:
8A. Physical therapist assistants shall support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured.

Interpretation: 8A addresses the issue of support for those least likely to be able to afford physical therapy services. The Standard does not specify the type of support that is required. Physical therapist assistants may express support through volunteerism, financial contributions, advocacy, education, or simply promoting their work in conversations with colleagues. When providing such services, including pro bono services, physical therapist assistants must comply with applicable laws, and as such work under the direction and supervision of a physical therapist. Additional resources on pro bono physical therapy services are available on the APTA Web site.

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Colorado Revised Statutes 2024

TITLE 12
PROFESSIONS AND OCCUPATIONS

ARTICLE 285:
PHYSICAL THERAPISTS
& PHYSICAL THERAPY ASSISTANTS

Editor's note: This title 12 was repealed and reenacted, with relocations, in 2019. This article 285 was numbered as article 41 of this title 12 prior to 2019. Former C.R.S. section numbers are shown in editor's notes following those sections that were relocated. For a detailed comparison of this title 12, see the comparative tables located in the back of the index or https://leg.colorado.gov/sites/default/files/images/olls/title-12-2019-table.pdf.

Cross references: For practicing a profession or operating a business without a license, see § 16-13-306; for rule-making procedures and license suspension and revocation procedures by state agencies, see article 4 of title 24; for an alternative disciplinary action for persons licensed, registered, or certified pursuant to this title 12, see § 24-34-106; for disposition of money collected under this title 12, see §§ 24-35-101 and 24-36-103.

12-285-101. Short title. The short title of this article 285 is the "Physical Therapy Practice Act".

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1504, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-101 as it existed prior to 2019.

12-285-102. Legislative declaration. (1) The general assembly hereby finds and declares that:
(a) The practice of physical therapy by any person who does not possess a valid license issued under this article 285 is inimical to the general public welfare. It is not, however, the intent of this article 285 to restrict the practice of any person duly licensed under other laws of this state from practicing within the person's scope of competency and authority under those laws.
(b) Physical therapy practice consists of patient and client management, which includes physical therapy diagnosis and prognosis to optimize physical function, movement, performance, health, quality of life, and well-being across the life-span and also includes contributions to public health services aimed at improving the health of the population; and
(c) The professional scope of physical therapy practice evolves in response to innovation, research, collaboration, and change in societal needs.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1504, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-102 as it existed prior to 2019.

12-285-103. Applicability of common provisions. Articles 1, 20, and 30 of this title 12 apply, according to their terms, to this article 285.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1504, § 1, effective October 1.

12-285-104. Definitions. As used in this article 285, unless the context otherwise requires:
(1) "Accredited physical therapy program" means a program of instruction in physical therapy that is accredited as set forth in section 12-285-110 (1)(a)(I).
(2) "Adverse action" means disciplinary action taken by the board based upon misconduct, unacceptable performance, or a combination of both and includes any action taken pursuant to the following:
(a) Section 12-285-122, except for any action taken pursuant to subsection (4) of that section;
(b) Section 12-285-129;
(c) Section 12-285-130;
(d) Section 12-285-212, except for any action taken pursuant to subsection (4) of that section;
(e) Section 12-285-218; and
(f) Section 12-285-219.
(3) "Board" means the state physical therapy board created in section 12-285-105.

(4) "Physical therapist" means a person who is licensed to practice physical therapy. The term "physiotherapist" is synonymous with the term "physical therapist".

(5) "Physical therapist assistant" means a person who is required to be certified under part 2 of this article 285 and who assists a physical therapist in selected components of physical therapy.

(6) (a) (I) "Physical therapy" means the examination, physical therapy diagnosis, treatment, or instruction of patients and clients to detect, assess, prevent, correct, alleviate, or limit physical disability, movement dysfunction, bodily malfunction, or pain from injury, disease, and other bodily conditions.

(II) As used in this article 285, "physical therapy" includes:

(A) The administration, evaluation, and interpretation of tests and measurements of bodily functions and structures;

(B) The planning, administration, evaluation, and modification of treatment and instruction;

(C) The use of physical agents, measures, activities, and devices for preventive and therapeutic purposes, subject to the requirements of section 12-285-116;

(D) The administration of topical and aerosol medications consistent with the scope of physical therapy practice subject to the requirements of section 12-285-116;

(E) The provision of consultative, educational, and other advisory services for the purpose of reducing the incidence and severity of physical disability, movement dysfunction, bodily malfunction, and pain;

(F) General wound care and wound debridement, including the assessment and management of skin lesions, surgical incisions, open wounds, and areas of potential skin breakdown in order to maintain or restore the integumentary system. Wound debridement includes sharp debridement and nonsharp debridement, such as mechanical, autolytic, enzymatic, and maggot.

(G) The authorization to directly recommend and prescribe durable medical equipment to patients without requesting a prescription from a licensed physician; and

(H) Ongoing review, integration, and understanding of a patient's or client's prescription and nonprescription medication regimen, with consideration of its impact on health, function, movement, and disability.

(b) As used in subsection (6)(a)(II) of this section:

(I) "Physical agents" includes, but is not limited to, heat, cold, water, air, sound, light, compression, electricity, and electromagnetic energy.

(II) (A) "Physical measures, activities, and devices" includes resistive, active, and passive exercise, with or without devices; joint mobilization; mechanical stimulation; biofeedback; dry needling; postural drainage; traction; positioning; massage; splinting; training in locomotion; other functional activities, with or without assistive devices; and correction of posture, body mechanics, and gait.

(B) "Biofeedback", as used in this subsection (6)(b)(II), means the use of monitoring instruments by a physical therapist to detect and amplify internal physiological processes for the purpose of neuromuscular rehabilitation.

(III) "Tests and measurements" means standard methods and techniques used to obtain data about the patient or client, including diagnostic imaging and electrodiagnostic and electrophysiological tests and measures.

(7) "Physical therapy compact commission" means the national administrative body whose membership consists of all states that have enacted the "Interstate Physical Therapy Licensure Compact Act", and as enacted in this state in part 37 of article 60 of title 24.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1504, § 1, effective October 1. **L. 2022:** (3) amended, (SB 22-162), ch. 469, p. 3397, § 135, effective August 10. **L. 2024:** (4), IP(6)(a)(II), (6)(a)(II)(E), (6)(a)(II)(F), and (6)(b)(III) amended and (6)(a)(II)(G) and (6)(a)(II)(H) added, (HB 24-1327), ch. 421, pp. 2875, 2876, §§ 1, 5, effective August 7.

Editor's note: (1) This section is similar to former § 12-41-103 as it existed prior to 2019.

(2) Subsection (6)(a)(II)(F) was amended in section 1 of HB 24-1327. Those amendments were superseded by the amendment of subsection (6)(a)(II)(F) in section 5 of HB 24-1327.

Cross references: For the short title (the "Debbie Haskins 'Administrative Organization Act of 1968' Modernization Act") in SB 22-162, see section 1 of chapter 469, Session Laws of Colorado 2022.

12-285-105. State physical therapy board - created. (1) (a) The state physical therapy board is hereby created as the agency for regulation of the practice of physical therapy in this state and to carry out the purposes of this article 285. The board consists of: Four physical therapist members; one physical therapist assistant, unless a physical therapist assistant cannot be found, in which case the governor may appoint an additional physical therapist to the board; and two members from the public at large. Each member of the board is to be appointed by the governor for terms of four years. A member shall not serve more than two consecutive terms of four years. The governor shall give due consideration to having a geographic, political, urban, and rural balance among the board members.

(b) The board is a **type 1** entity, as defined in section 24-1-105, and exercises its powers and performs its duties and functions under the division. The division shall provide necessary management support to the board under section 12-20-103 (2).

(2) A person is qualified to be appointed to the board if the person:

(a) Is a legal resident of Colorado; and

(b) Is currently licensed in good standing, with no restrictions, as a physical therapist and actively engaged in the practice of physical therapy in this state for at least five years preceding his or her appointment, if fulfilling the position of physical therapist on the board.

(3) Should a vacancy occur in any board membership before the expiration of the member's term, the governor shall fill the vacancy by appointment for the remainder of the term in the same manner as in the case of original appointments. A member of the board shall remain on the board until his or her successor has been appointed. A member may be removed by the governor for misconduct, incompetence, or neglect of duty.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1506, § 1, effective October 1. **L. 2022:** (1)(b) amended, (SB 22-162), ch. 469, p. 3397, § 136, effective August 10.

Editor's note: This section is similar to former § 12-41-103.3 as it existed prior to 2019.

Cross references: For the short title (the "Debbie Haskins 'Administrative Organization Act of 1968' Modernization Act") in SB 22-162, see section 1 of chapter 469, Session Laws of Colorado 2022.

12-285-106. Powers and duties of board - reports - publications - rules - interstate compact - limitation on authority. (1) The board shall administer and enforce this article 285 and rules adopted under this article 285.

(2) In addition to any other powers and duties given the board by this article 285, the board has the following powers and duties:

(a) To evaluate the qualifications of applicants for licensure, administer examinations, issue and renew licenses and permits authorized under this article 285, and take disciplinary actions authorized under this article 285 and section 12-20-404;

(b) To adopt all reasonable and necessary rules pursuant to section 12-20-204 for the administration and enforcement of this article 285, including rules regarding:

(I) The supervision of unlicensed persons by physical therapists, taking into account the education and training of the unlicensed individuals; and

(II) Physical therapy of animals, including, without limitation, educational and clinical requirements for the performance of physical therapy of animals and the procedure for handling complaints to the department regarding physical therapy of animals. In adopting rules, the board shall consult with the state board of veterinary medicine established by section 12-315-106.

(c) To conduct hearings in accordance with section 12-20-403 upon charges for discipline of a licensee and cause the prosecution and enjoinder, in accordance with section 12-20-406, of all persons violating this article 285;

(d) To maintain a register listing the name of every physical therapist, including the contact address, last-known place of residence, and the license number of each licensee;

(e) To promote consumer protection and consumer education by such means as the board finds appropriate;

(f) To facilitate Colorado's participation in the "Interstate Physical Therapy Licensure Compact Act", part 37 of article 60 of title 24, as follows:

(I) Appoint a qualified delegate to serve on the physical therapy compact commission;

(II) Participate fully in the physical therapy compact commission data system;

(III) Obtain a set of fingerprints from an applicant for initial licensure or certification and forward the fingerprints to the Colorado bureau of investigation for the purpose of obtaining a fingerprint-based criminal history record check. Upon receipt of fingerprints and payment for the costs, the Colorado bureau of investigation shall conduct a state and national fingerprint-based criminal history record check using records of the Colorado bureau of investigation, the federal bureau of investigation, or other appropriate federal agency. The board is the authorized agency to receive information regarding the result of a national criminal history record check. The

applicant whose fingerprints are checked shall pay the actual costs of the state and national fingerprint-based criminal history record check.

(IV) Notify the physical therapy compact commission of any adverse action taken by the board; and

(V) Approve payment of assessments levied by the physical therapy compact commission to cover the cost of the operations and activities of the commission and its staff.

(3) The authority granted the board by this article 285 does not authorize the board to arbitrate or adjudicate fee disputes between licensees or between a licensee and any other party.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1507, § 1, effective October 1.

Editor's note: Subsection (1) is similar to former § 12-41-103.6 (1)(a); subsection (2) is similar to former § 12-41-103.6 (2); and subsection (3) is similar to former § 12-41-127, as those sections existed prior to 2019.

12-285-107. Use of titles restricted. (1) A person licensed as a physical therapist may use the title "physical therapist" or the letters "P.T." or any other generally accepted terms, letters, or figures that indicate that the person is a physical therapist. No other person shall be so designated or shall use the terms "physical therapist", "licensed physical therapist", "physiotherapist", "doctor of physical therapy", "doctor of physiotherapy", or "physical therapy technician", or the letters "P.T.", "L.P.T.", "P.T.A.", "D.P.T.", "R.P.T.", or any letters, abbreviations, or insignia indicating or implying that the person is a physical therapist unless the person is licensed pursuant to this article 285.

(2) A person enrolled as a student physical therapist in an educational program accredited by the Commission on Accreditation in Physical Therapy Education or a comparable organization, as determined by the board, may use the title "student physical therapist". No other person shall use the term "student physical therapist" or the letters "S.P.T." or any letters, abbreviations, or insignia indicating or implying that the person is a student physical therapist.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1509, § 1, effective October 1. **L. 2024:** Entire section amended, (HB 24-1327), ch. 421, p. 2877, § 6, effective August 7.

Editor's note: This section is similar to former § 12-41-104 as it existed prior to 2019.

12-285-108. Limitations on authority. (1) Nothing in this article 285 authorizes a physical therapist to perform any of the following acts:

(a) Practice of medicine, surgery, or any other form of healing except as authorized by the provisions of this article 285; or

(b) Use of roentgen rays and radioactive materials for therapeutic purposes; the use of electricity for surgical purposes; or the diagnosis of disease.

(2) Nothing in this section prevents a physical therapist from making a physical therapy diagnosis within the physical therapist's scope of practice.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1509, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-105 as it existed prior to 2019.

12-285-109. License required. Except as otherwise provided by this article 285, any person who practices physical therapy or who represents himself or herself as being able to practice physical therapy in this state must possess a valid license under this article 285.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1509, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-106 as it existed prior to 2019.

12-285-110. Licensure by examination. (1) Every applicant for a license by examination shall:

(a) Successfully complete a physical therapy program:

(I) That is accredited by a nationally recognized accrediting agency; or

(II) That the board has determined to be substantially equivalent. The general assembly intends that this determination be liberally construed to ensure qualified applicants seeking licensure under this article 285 the right to take the qualifying examination. The general assembly does not intend for technical barriers to be used to deny applicants the right to take the examination.

(b) Pass a written examination that is:

(I) Approved by the board; and

(II) A national examination accredited by a nationally recognized accrediting agency;

(c) Submit an application in the form and manner designated by the director; and

(d) Pay a fee in an amount determined by the director.

(2) The board may refuse to permit an applicant to take the examination if the application is incomplete, the applicant is not qualified to sit for the examination, or the applicant has committed any act that would be grounds for disciplinary action under section 12-285-120.

(3) When the applicant has fulfilled all the requirements of subsection (1) of this section, the board shall issue a license to the applicant; except that the board may deny the license if the applicant has committed an act that would be grounds for disciplinary action under section 12-285-120.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1509, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-107 as it existed prior to 2019.

12-285-111. Provisional license - fee. (1) The board may issue a provisional license to practice as a physical therapist to a person who:

(a) Submits an application and pays a fee as determined by the director; and

(b) Successfully completes a physical therapy program that meets the educational requirements in section 12-285-110 (1)(a).

(2) A person who holds a provisional license may only practice under the supervision of a physical therapist actively licensed in this state.

(3) A provisional license issued pursuant to this section expires no later than one hundred twenty days after the date it was issued. A provisional license may only be issued one time and is not subject to section 12-285-114.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1510, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-107.5 as it existed prior to 2019.

12-285-112. Licensure by endorsement. An applicant may obtain licensure by endorsement if the applicant satisfies the requirements of the occupational credential portability program.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1510, § 1, effective October 1. **L. 2020:** Entire section amended, (HB 20-1326), ch. 126, p. 545, § 40, effective June 25.

Editor's note: This section is similar to former § 12-41-109 as it existed prior to 2019.

Cross references: For the short title ("Red Tape Reduction Act") and the legislative declaration in HB 20-1326, see sections 1 and 2 of chapter 126, Session Laws of Colorado 2020.

12-285-113. Licensing of internationally-educated applicants. (1) Every applicant for licensing who is educated by a program that is not accredited by the Commission on Accreditation in Physical Therapy Education or a comparable organization, as determined by the board, shall:

(a) Have received education and training in physical therapy substantially equivalent to the education and training required at accredited physical therapy programs in the United States;

(b) Possess an active, valid license in good standing or other authorization to practice physical therapy from an appropriate authority in the country where the applicant is practicing or has practiced;

(c) Pass a written examination approved by the board in accordance with section 12-285-110 (1)(b);

(d) Submit an application in the form and manner designated by the director; and

(e) Pay an application fee in an amount determined by the director.

(2) Upon receipt of all documents required by subsection (1) of this section, the director shall review the application and determine if the applicant is qualified to be licensed.

(3) When the applicant has fulfilled all requirements of subsection (1) of this section, the board shall issue a license to the applicant; except that the board may deny the application if the applicant has committed an act that would be grounds for disciplinary action under section 12-285-120.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1511, § 1, effective October 1. **L. 2024:** IP(1) and (1)(b) amended, (HB 24-1327), ch. 421, p. 2878, § 7, effective August 7.

Editor's note: This section is similar to former § 12-41-111 as it existed prior to 2019.

12-285-114. Expiration and renewal of licenses. Licenses issued pursuant to this article 285 are subject to the renewal, expiration, reinstatement, and delinquency fee provisions specified in section 12-20-202 (1) and (2). A person whose license has expired is subject to the penalties provided in this article 285 and section 12-20-202 (1).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1512, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-112 as it existed prior to 2019.

12-285-115. Inactive license - rules. A physical therapist may request that the board inactivate or activate the physical therapist's license. The board shall promulgate rules governing the activation and inactivation of licenses. Notwithstanding any law to the contrary, the board's rules may limit the applicability of statutory requirements for maintaining professional liability insurance and continuing professional competence for a licensee whose license is currently inactive. The board need not reactivate an inactive license if the physical therapist has committed any act that would be grounds for disciplinary action under section 12-285-120. A physical therapist whose license is currently inactive shall not practice physical therapy.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1512, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-112.5 as it existed prior to 2019.

12-285-116. Special practice authorities and requirements - definition - rules. (1) **Supervising persons not licensed as a physical therapist.** A physical therapist may supervise up to four individuals at one time who are not physical therapists, including certified nurse aides, to assist in the therapist's clinical practice; except that this limit does not include student physical therapists and student physical therapist assistants supervised by a physical therapist for educational purposes. The board shall promulgate rules governing the required supervision. This subsection (1) does not affect or limit the independent practice or judgment of other professions regulated under this title 12. For purposes of this subsection (1), a "physical therapist assistant" means a person certified under part 2 of this article 285.

(2) **Administration of medications.** Physical therapists or physical therapist assistants under the direct supervision of a physical therapist may administer topical and aerosol medications when they are consistent with the scope of physical therapy practice and when any such medication is prescribed by a licensed health-care practitioner who is authorized to prescribe that medication. A prescription or order shall be required for each such administration.

(3) **Wound debridement.** A physical therapist is authorized to perform wound debridement under a physician's order, the order of a physician assistant authorized under section 12-240-107 (6), or the order of an advanced practice registered nurse authorized under section 12-255-111 when debridement is consistent with the scope of physical therapy practice. The performance of wound debridement does not violate the prohibition against performing surgery pursuant to section 12-285-108 (1)(a).

(4) **Physical therapy of animals.** (a) A physical therapist is authorized to perform physical therapy of animals when the physical therapy of animals is consistent with the scope of physical therapy practice. In recognition of the special authority granted by this subsection (4), the performance of physical therapy of animals in accordance with this subsection (4) shall not constitute the practice of veterinary medicine, as defined in section 12-315-104 (14), nor shall it be deemed a violation of section 12-315-105.

(b) In recognition of the emerging field of physical therapy of animals, before commencing physical therapy of an animal, a physical therapist shall obtain veterinary medical clearance of the animal by a veterinarian licensed under article 315 of this title 12.

(5) **Dry needling.** (a) A physical therapist is authorized to perform dry needling if the physical therapist:

(I) Has the knowledge, skill, ability, and documented competency to perform the act;

(II) Has successfully completed a dry needling course of study that meets the supervision, educational, and clinical prerequisites; and

(III) Obtains one written informed consent from each patient for dry needling, including information concerning potential benefits and risks of dry needling.

(b) The board shall promulgate rules to update the requirements for a physical therapist to perform dry needling in order to ensure adequate protection of the public. Prior to promulgating the initial update of the rules, the board shall seek input from the Colorado medical board created in section 12-240-105 (1) and from the director.

(c) The performance of dry needling in accordance with this section is not the practice of acupuncture as defined in section 12-200-103 and is not a violation of section 12-200-108.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1512, § 1, effective October 1. **L. 2024:** (3) amended, (HB 24-1327), ch. 421, p. 2878, § 8, effective August 7.

Editor's note: This section is similar to former § 12-41-113 as it existed prior to 2019.

12-285-117. Scope of article - exclusions. (1) Nothing contained in this article 285 prohibits:

(a) The practice of physical therapy by students enrolled in an accredited physical therapy or physical therapist assistant program and performing under the direct supervision of a physical therapist currently licensed in this state;

(b) The practice of physical therapy in this state by any legally qualified physical therapist from another state or country whose employment requires the physical therapist to accompany and care for a patient temporarily residing in this state, but the physical therapist shall not provide physical therapy services for any other individuals nor shall the person represent or hold himself or herself out as a physical therapist licensed to practice in this state;

(c) The administration of massage, external baths, or exercise that is not a part of a physical therapy regimen;

(d) Any person registered, certified, or licensed in this state under any other law from engaging in the practice for which the person is registered, certified, or licensed;

(e) The practice of physical therapy in this state by a legally qualified physical therapist from another state or country when providing services in the absence of a physical therapist licensed in this state, so long as the unlicensed physical therapist is acting in accordance with rules established by the board. A person shall not practice without a license under this subsection (1)(e) for more than four weeks' duration or more than once in any twelve-month period.

(f) The practice of physical therapy in this state by a legally qualified physical therapist from another state or country for the purpose of participating in an educational program of not more than sixteen weeks' duration;

(g) The provision of physical therapy services in this state by an individual from another country who is engaged in a physical therapy-related educational program if the program is sponsored by an institution, agency, or individual approved by the board, the program is under the direction and supervision of a physical therapist licensed in this state, and the program does not exceed twelve consecutive months' duration without the specific approval of the board;

(h) The practice of any physical therapist licensed in this state or any other state or territory of the United States who is employed by the United States government or any bureau, division, or agency thereof while within the course and scope of the physical therapist's official duties.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1513, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-114 as it existed prior to 2019.

12-285-118. Professional liability insurance required - rules. (1) Except as provided in subsection (2) of this section, a person shall not practice physical therapy unless the person purchases and maintains professional liability insurance of at least one million dollars per claim and at least three million dollars per year for all claims, unless the corporation that employs the physical therapist maintains the insurance required by section 12-285-131 if the insurance covers at least one million dollars per claim and at least three million dollars per year.

(2) The board may by rule establish lesser financial responsibility standards for a class of physical therapists whose practice does not require the level of public protection established by subsection (1) of this section. The board shall not establish greater financial responsibility standards than those established in subsection (1) of this section.

(3) This section does not apply to a physical therapist who is a public employee acting within the course and scope of the public employee's duties and who is granted immunity under the "Colorado Governmental Immunity Act", article 10 of title 24.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1514, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-114.5 as it existed prior to 2019.

12-285-119. Continuing professional competency - definition - rules. (1) (a) A licensed physical therapist shall maintain continuing professional competency to practice.

(b) The board shall adopt rules establishing a continuing professional competency program. The rules shall set forth the following elements:

(I) A self-assessment of the knowledge and skills of a physical therapist seeking to renew or reinstate a license;

(II) Development, execution, and documentation of a learning plan based on the assessment; and

(III) Periodic demonstration of knowledge and skills through documentation of professional development activities necessary to ensure at least minimal ability to safely practice the profession; except that a licensed physical therapist need not retake any examination required by section 12-285-110 for initial licensure.

(c) The board shall establish that a licensed physical therapist satisfies the continuing competency requirements of this section if the physical therapist meets the continuing professional competency requirements of one of the following entities:

(I) A state department, including continuing professional competency requirements imposed through a contractual arrangement with a provider;

(II) An accrediting body recognized by the board; or

(III) An entity approved by the board.

(d) (I) After the program is established, a licensed physical therapist shall satisfy the requirements of the program in order to renew or reinstate a license to practice physical therapy.

(II) The requirements of this section apply to individual licensed physical therapists, and nothing in this section requires a person who employs or contracts with a physical therapist to comply with the requirements of this section.

(e) Professional development activities must be measured by a contact-hour-to-credit-hour ratio.

(2) Records of assessments or other documentation developed or submitted in connection with the continuing professional competency program are confidential and not subject to inspection by the public or discovery in connection with a civil action against a licensed physical therapist. A person or the board shall not use the records or documents unless used by the board to determine whether a licensed physical therapist is maintaining continuing professional competency to engage in the profession.

(3) As used in this section, "continuing professional competency" means the ongoing ability of a physical therapist to learn, integrate, and apply the knowledge, skill, and judgment to practice as a physical therapist according to generally accepted standards and professional ethical standards.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1515, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-114.6 as it existed prior to 2019.

12-285-120. Grounds for disciplinary action - definitions. (1) The board may take disciplinary action in accordance with sections 12-20-404 and 12-285-122 against a person who has:

(a) Committed any act that does not meet generally accepted standards of physical therapy practice or failed to perform an act necessary to meet generally accepted standards of physical therapy practice;

(b) Engaged in a sexual act with a patient while a patient-physical therapist relationship exists. For the purposes of this subsection (1)(b):

(I) "Patient-physical therapist relationship" means that period of time beginning with the initial evaluation through the termination of treatment.

(II) "Sexual act" means sexual contact, sexual intrusion, or sexual penetration as defined in section 18-3-401.

(c) Failed to refer a patient to the appropriate licensed health-care professional when the services required by the patient are beyond the level of competence of the physical therapist or beyond the scope of physical therapy practice;

(d) Abandoned a patient by any means, including failure to provide a referral to another physical therapist or to another appropriate health-care professional when the referral was necessary to meet generally accepted standards of physical therapy care;

(e) Failed to provide adequate or proper supervision when utilizing certified physical therapist assistants, unlicensed persons, or persons with a provisional license in a physical therapy practice;

(f) Failed to make essential entries on patient records or falsified or made incorrect entries of an essential nature on patient records;

(g) Engaged in any of the following activities and practices: Ordering or performance, without clinical justification, of demonstrably unnecessary laboratory tests or studies; the administration, without clinical justification, of treatment that is demonstrably unnecessary; or ordering or performing, without clinical justification, any service, X ray, or treatment that is contrary to recognized standards of the practice of physical therapy as interpreted by the board;

(h) (I) Committed abuse of health insurance as set forth in section 18-13-119 (3); or

(II) Advertised through newspapers, magazines, circulars, direct mail, directories, radio, television, or otherwise that the licensee will perform any act prohibited by section 18-13-119 (3);

(i) Committed a fraudulent insurance act, as defined in section 10-1-128;

(j) Offered, given, or received commissions, rebates, or other forms of remuneration for the referral of clients; except that a licensee may pay an independent advertising or marketing agent compensation for advertising or marketing services rendered by an agent on the licensee's behalf, including compensation for referrals of clients identified through the services on a per-client basis;

(k) Falsified information in any application or attempted to obtain or obtained a license by fraud, deception, or misrepresentation;

(l) Engaged in the habitual or excessive use or abuse of alcohol, a habit-forming drug, or a controlled substance as defined in section 18-18-102 (5);

(m) (I) Failed to notify the board, as required by section 12-30-108 (1), of a physical illness, physical condition, or behavioral, mental health, or substance use disorder that impacts the licensee's ability to perform physical therapy with reasonable skill and safety to patients;

(II) Failed to act within the limitations created by a physical illness, physical condition, or behavioral, mental health, or substance use disorder that renders the licensee unable to perform physical therapy with reasonable skill and safety to the patient; or

(III) Failed to comply with the limitations agreed to under a confidential agreement entered pursuant to sections 12-30-108 and 12-285-125;

(n) Refused to submit to a physical or mental examination when so ordered by the board pursuant to section 12-285-124;

(o) Failed to notify the board in writing of the entry of a final judgment by a court of competent jurisdiction against the licensee for malpractice of physical therapy or a settlement by the licensee in response to charges or allegations of malpractice of physical therapy, which notice must be given within ninety days after the entry of judgment or settlement and, in the case of a judgment, must contain the name of the court, the case number, and the names of all parties to the action;

(p) Violated or aided or abetted a violation of this article 285, an applicable provision of article 20 or 30 of this title 12, a rule adopted under this article 285, or a lawful order of the board;

(q) Been convicted of, pled guilty, or pled nolo contendere to any crime related to the licensee's practice of physical therapy or a felony or committed an act specified in section 12-285-128. A certified copy of the judgment of a court of competent jurisdiction of the conviction or plea is conclusive evidence of the conviction or plea. In considering the disciplinary action, the board is governed by sections 12-20-202 (5) and 24-5-101.

(r) Fraudulently obtained, furnished, or sold any physical therapy diploma, certificate, license, renewal of license, or record, or aided or abetted any such act;

(s) Advertised, represented, or held himself or herself out, in any manner, as a physical therapist or practiced physical therapy without a license or unless otherwise authorized under this article 285;

(t) Used in connection with the person's name any designation tending to imply that the person is a physical therapist without being licensed under this article 285;

(u) Practiced physical therapy during the time the person's license was inactive, expired, suspended, or revoked;

(v) Failed to maintain the insurance required by section 12-285-118 or a rule promulgated thereunder;

(w) Failed to respond in an honest, materially responsive, and timely manner to a complaint issued under this article 285;

(x) Failed to know the contents of this part 1 and any rules promulgated under this part 1;

(y) Failed to either:

(I) Confirm that a patient is under the care of a physician or other health-care professional for the underlying medical condition when providing general wound care within the scope of the physical therapist's practice; or

(II) Refer the patient to a physician or other appropriate health-care professional for the treatment of the underlying medical condition when providing general wound care within the scope of the physical therapist's practice; or

(z) Failed to report an adverse action, the surrender of a license, or other discipline taken in another jurisdiction.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1516, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-115 as it existed prior to 2019.

12-285-121. Protection of medical records - licensee's obligations - verification of compliance - rules. (1) Each licensed physical therapist responsible for patient records shall develop a written plan to ensure the security of patient medical records. The plan must address at least the following:

(a) The storage and proper disposal of patient medical records;

(b) The disposition of patient medical records in the event the licensee dies, retires, or otherwise ceases to practice or provide physical therapy care to patients; and

(c) The method by which patients may access or obtain their medical records promptly if any of the events described in subsection (1)(b) of this section occurs.

(2) Upon initial licensure under this part 1 and upon renewal of a license, the applicant or licensee shall attest to the board that he or she has developed a plan in compliance with this section.

(3) A licensee shall inform each patient in writing of the method by which the patient may access or obtain his or her medical records if an event described in subsection (1)(b) of this section occurs.

(4) The board may adopt rules reasonably necessary to implement this section.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1518, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-115.5 as it existed prior to 2019.

12-285-122. Disciplinary actions. (1) (a) The board, in accordance with article 4 of title 24 and section 12-20-403, may take disciplinary or other action as specified in section 12-20-404 or impose public censure if the board or the board's designee determines after notice and the opportunity for a hearing that the licensee has committed an act specified in section 12-285-120.

(b) In the case of a deliberate and willful violation of this article 285 or if the public health, safety, and welfare require emergency action, the board may take disciplinary action on an emergency basis under sections 24-4-104 and 24-4-105.

(2) The board may send a letter of admonition to a licensee under the circumstances specified in and in accordance with section 12-20-404 (4).

(3) In any disciplinary order that allows a physical therapist to continue to practice, the board may impose upon the licensee conditions the board deems appropriate to ensure that the physical therapist is physically, mentally, and professionally qualified to practice physical therapy in accordance with generally accepted professional standards. The conditions may include any or all of the following:

(a) Examination of the physical therapist to determine his or her mental or physical condition, as provided in section 12-285-124, or to determine professional qualifications;

(b) Any therapy, training, or education that the board believes necessary to correct deficiencies found either in a proceeding in compliance with section 24-34-106 or through an examination under subsection (3)(a) of this section;

(c) A review or supervision of a licensee's practice that the board finds necessary to identify and correct deficiencies therein;

(d) Restrictions upon the nature and scope of practice to ensure that the licensee does not practice beyond the limits of the licensee's capabilities.

(4) The board may send a confidential letter of concern to a licensee under the circumstances specified in section 12-20-404 (5).

(5) The board may take disciplinary action against a physical therapist for failure to comply with any of the conditions imposed by the board under subsection (3) of this section.

(6) The two-year waiting period specified in section 12-20-404 (3) applies to a person whose license to practice physical therapy, or to practice any other health-care occupation, is revoked by any other legally qualified board or regulatory entity.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1519, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-116 as it existed prior to 2019.

12-285-123. Disciplinary proceedings - investigations - judicial review. (1) The board may commence a proceeding for the discipline of a licensee in accordance with section 12-20-403 when the board has reasonable grounds to believe that a licensee has committed an act enumerated in section 12-285-120.

(2) In any proceeding held under this section, the board may accept as prima facie evidence of grounds for disciplinary action any disciplinary action taken against a licensee from another jurisdiction if the violation that prompted the disciplinary action in that jurisdiction would be grounds for disciplinary action under this article 285.

(3) (a) The board may investigate potential grounds for disciplinary action upon its own motion or when the board is informed of the dismissal of a person licensed under this article 285 if the dismissal was for a matter constituting a violation of this article 285.

(b) A person who supervises a physical therapist shall report to the board when the physical therapist has been dismissed because of incompetence in physical therapy or failure to comply with this article 285. A physical therapist who is aware that another physical therapist is violating this article 285 shall report the violation to the board.

(4) The board may keep any investigation authorized under this article 285 closed until the results of the investigation are known and either the complaint is dismissed or notice of hearing and charges are served upon the licensee.

(5) The board, through the department, may employ administrative law judges appointed pursuant to part 10 of article 30 of title 24, on a full-time or part-time basis, to conduct hearings under this article 285 in accordance with section 12-20-403 (3).

(6) Final action of the board may be judicially reviewed in accordance with section 12-20-408, and judicial proceedings for the enforcement of an order of the board may be instituted in accordance with section 24-4-106.

(7) The board may issue cease-and-desist orders under the circumstances and in accordance with the procedures specified in section 12-20-405.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1520, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-117 as it existed prior to 2019.

12-285-124. Mental and physical examination of licensees. (1) If the board has reasonable cause to believe that a licensee is unable to practice with reasonable skill and safety, the board may require the licensee to take a mental or physical examination by a health-care provider designated by the board. If the licensee refuses to undergo a mental or physical examination, unless due to circumstances beyond the licensee's control, the board may suspend the licensee's license until the results of the examination are known and the board has made a determination of the licensee's fitness to practice. The board shall proceed with an order for examination and determination in a timely manner.

(2) An order issued to a licensee under subsection (1) of this section to undergo a mental or physical examination must contain the basis of the board's reasonable cause to believe that the licensee is unable to practice with reasonable skill and safety. For the purposes of a disciplinary proceeding authorized by this article 285, the licensee is deemed to have waived all objections to the admissibility of the examining health-care provider's testimony or examination reports on the ground that they are privileged communications.

(3) The licensee may submit to the board testimony or examination reports from a health-care provider chosen by the licensee pertaining to the condition that the board has alleged may preclude the licensee from practicing with reasonable skill and safety. These may be considered by the board in conjunction with, but not in lieu of, testimony and examination reports of the health-care provider designated by the board.

(4) A person shall not use the results of any mental or physical examination ordered by the board as evidence in any proceeding other than one before the board. The examination results are not public records and are not available to the public.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1523, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-118 as it existed prior to 2019.

12-285-125. Confidential agreements. Section 12-30-108 concerning confidential agreements to limit practice applies to this article 285.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1524, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-118.5 as it existed prior to 2019.

12-285-126. Professional review committees - immunity. (1) A professional review committee may be established pursuant to this section to investigate the quality of care being given by a person licensed under this article 285. It shall include in its membership at least three persons licensed under this article 285, but the committee may be authorized to act only by:

(a) The board;

(b) A society or an association of physical therapists whose membership includes not less than one-third of the persons licensed pursuant to this article 285 and residing in this state if the licensee whose services are the subject of review is a member of the society or association; or

(c) A hospital licensed pursuant to part 1 of article 3 of title 25 or certified pursuant to section 25-1.5-103 (1)(a)(II); except that the professional review committee shall include in its membership at least a two-thirds majority of persons licensed under this article 285. The review committee may function under the quality management provisions of section 25-3-109.

(2) Any professional review committee established pursuant to subsection (1) of this section shall report to the board any adverse findings that would constitute a possible violation of this article 285.

(3) In addition to the persons specified in section 12-20-402, a member of a professional review committee authorized by the board, a member of the committee's staff, a person acting as a witness or consultant to the committee, a witness testifying in a proceeding authorized under this article 285, and a person who lodges a complaint pursuant to this article 285 is granted the same immunity, and is subject to the same conditions for immunity, as specified in section 12-20-402.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1525, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-119 as it existed prior to 2019.

12-285-127. Reports by insurance companies. (1) (a) Each insurance company licensed to do business in this state and engaged in the writing of malpractice insurance for physical therapists shall send to the board information about any malpractice claim that involves a physical therapist and is settled or in which judgment is rendered against the insured.

(b) In addition, the insurance company shall submit supplementary reports containing the disposition of the claim to the board within ninety days after settlement or judgment.

(2) Regardless of the disposition of any claim, the insurance company shall provide such information as the board finds reasonably necessary to conduct its own investigation and hearing.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1525, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-120 as it existed prior to 2019.

12-285-128. Unauthorized practice - penalties. Any person who practices or offers or attempts to practice physical therapy without an active license issued under this article 285 is subject to penalties pursuant to section 12-20-407 (1)(a).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1526, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-121 as it existed prior to 2019.

12-285-129. Violation - fines. Notwithstanding section 12-285-128, the board may assess a fine for a violation of this article 285 or any rule adopted under this article 285. The fine shall not be greater than one thousand dollars. All fines shall be imposed in accordance with the provisions of section 24-4-105, but shall not be considered a substitute or waiver of the criminal penalties.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1526, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-122 as it existed prior to 2019.

12-285-130. Injunctive proceedings. The board may apply for an injunction in accordance with section 12-20-406, but only to enjoin a person from committing an act declared to be a misdemeanor by this article 285 or section 12-20-407 (1)(a).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1526, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-123 as it existed prior to 2019.

12-285-131. Professional service corporations, limited liability companies, and registered limited liability partnerships for the practice of physical therapy - definitions. (1) Physical therapists may form professional service corporations for the practice of physical therapy under the "Colorado Business Corporation Act", articles 101 to 117 of title 7, if the corporations are organized and operated in accordance with this section. The articles of incorporation of the corporations must contain provisions complying with the following requirements:

(a) The name of the corporation shall contain the words "professional company" or "professional corporation" or abbreviations thereof.

(b) The corporation must be organized solely for the purposes of conducting the practice of physical therapy only through persons licensed by the board to practice physical therapy.

(c) The corporation may exercise the powers and privileges conferred upon corporations by the laws of Colorado only in furtherance of and subject to its corporate purpose.

(d) (I) Except as provided in subsection (1)(d)(II) of this section, all shareholders of the corporation must be persons licensed by the board to practice physical therapy and who at all times own their shares in their own right. With the exception of illness, accident, or time spent in the armed services, on vacations, or on leaves of absence not to exceed one year, the individuals must be actively engaged in the practice of physical therapy in the offices of the corporation.

(II) If a person licensed to practice physical therapy who was a shareholder of the corporation dies, an unlicensed heir to the deceased shareholder may become a shareholder of

the corporation for up to two years. Unless the heir is the only shareholder of the corporation, the heir who becomes a shareholder is a nonvoting shareholder. If the heir of the deceased shareholder ceases to be a shareholder, the owner who received the stocks from the shareholder shall dispose of the shares in accordance with the provisions required by subsection (1)(e) of this section. An heir who is not licensed under this article 285 shall not exercise any authority over professional or clinical matters.

(e) Provisions shall be made requiring any shareholder who ceases to be or for any reason is ineligible to be a shareholder to dispose of all such shares forthwith, either to the corporation or to any person having the qualifications described in subsection (1)(d) of this section.

(f) The president shall be a shareholder and a director, and, to the extent possible, all other directors and officers shall be persons having the qualifications described in subsection (1)(d) of this section. Lay directors and officers shall not exercise any authority whatsoever over professional matters.

(g) The articles of incorporation must provide, and all shareholders of the corporation shall agree, that all shareholders of the corporation are jointly and severally liable for all acts, errors, and omissions of the employees of the corporation or that all shareholders of the corporation are jointly and severally liable for all acts, errors, and omissions of the employees of the corporation except when the shareholders maintain professional liability insurance that meets the standards of section 12-285-118 or when the corporation maintains professional liability insurance that meets the following minimum standards:

(I) The insurer shall insure the corporation against liability imposed upon the corporation by law for damages resulting from any claim made against the corporation arising out of the performance of professional services for others by those officers and employees of the corporation who are licensed by the board to practice physical therapy.

(II) The policies must insure the corporation against liability imposed upon it by law for damages arising out of the acts, errors, and omissions of all nonprofessional employees.

(III) The insurance policy must provide for an amount for each claim of at least one hundred thousand dollars multiplied by the number of persons licensed to practice physical therapy employed by the corporation. The policy must provide for an aggregate top limit of liability per year for all claims of three hundred thousand dollars also multiplied by the number of persons licensed to practice physical therapy employed by the corporation, but no firm is required to carry insurance in excess of three hundred thousand dollars for each claim with an aggregate top limit of liability for all claims during the year of nine hundred thousand dollars.

(IV) The policy may provide that it does not apply to:

(A) A dishonest, fraudulent, criminal, or malicious act or omission of the insured corporation or any stockholder or employee thereof;

(B) The conduct of any business enterprise, not including the practice of physical therapy, in which the insured corporation under this section is not permitted to engage but that nevertheless may be owned by the insured corporation, in which the insured corporation may be a partner, or that may be controlled, operated, or managed by the insured corporation in its own or in a fiduciary capacity, including the ownership, maintenance, or use of any property in connection therewith, when not resulting from breach of professional duty, bodily injury to, or sickness, disease, or death of any person, or to injury to or destruction of any tangible property, including the loss of use thereof; and

(V) The policy may contain reasonable provisions with respect to policy periods, territory, claims, conditions, and other usual matters.

(2) The corporation shall do nothing that, if done by a person licensed to practice physical therapy and employed by the corporation, would constitute any ground for disciplinary action, as set forth in section 12-285-120. Any violation by the corporation of this section is grounds for the board to terminate or suspend its right to practice physical therapy.

(3) Nothing in this section diminishes or changes the obligation of each person licensed to practice physical therapy employed by the corporation to practice in accordance with the standards of professional conduct under this article 285 and rules adopted under this article 285. Physical therapists who by act or omission cause the corporation to act or fail to act in a way that violates the standards of professional conduct, including any provision of this section, are personally responsible for the violation and subject to discipline for the violation.

(4) A professional service corporation may adopt a pension, cash profit sharing, deferred profit sharing, health and accident insurance, or welfare plan for all or part of its employees, including lay employees, if the plan does not require or result in the sharing of specific or identifiable fees with lay employees and if any payments made to lay employees or into any plan on behalf of lay employees are based upon their compensation or length of service, or both, rather than the amount of fees or income received.

(5) (a) Except as provided in this section, corporations shall not practice physical therapy.

(b) The corporate practice of physical therapy does not include physical therapists employed by a certified or licensed hospital, licensed skilled nursing facility, certified home health agency, licensed hospice, certified comprehensive outpatient rehabilitation facility, certified rehabilitation agency, authorized health maintenance organization, accredited educational entity, organization providing care for the elderly under section 25.5-5-412, or other entity wholly owned and operated by a governmental unit or agency if:

(I) The relationship created by the employment does not affect the ability of the physical therapist to exercise his or her independent judgment in the practice of the profession;

(II) The physical therapist's independent judgment in the practice of the profession is in fact unaffected by the relationship;

(III) The policies of the entity employing the physical therapist contain a procedure by which complaints by a physical therapist alleging a violation of this subsection (5)(b) may be heard and resolved;

(IV) The physical therapist is not required to exclusively refer any patient to a particular provider or supplier; except that nothing in this subsection (5)(b)(IV) shall invalidate the policy provisions of a contract between a physical therapist and his or her intermediary or the managed care provisions of a health coverage plan; and

(V) The physical therapist is not required to take any other action he or she determines not to be in the patient's best interest.

(c) The provisions of subsection (5)(b) of this section shall apply to professional service corporations, limited liability companies, and registered limited liability partnerships formed for the practice of physical therapy in accordance with this section regardless of the date of formation of the entity.

(d) A physical therapist employed by an entity described in subsection (5)(b) of this section shall be an employee of the entity for purposes of liability for all acts, errors, and omissions of the employee.

(6) As used in this section, unless the context otherwise requires:

(a) "Articles of incorporation" includes operating agreements of limited liability companies and partnership agreements of registered limited liability partnerships.

(b) "Corporation" includes a limited liability company organized under the "Colorado Limited Liability Company Act", article 80 of title 7, and a limited liability partnership registered under section 7-60-144 or 7-64-1002.

(c) "Director" and "officer" of a corporation includes a member and a manager of a limited liability company and a partner in a registered limited liability partnership.

(d) "Employees" includes employees, members, and managers of a limited liability company and employees and partners of a registered limited liability partnership.

(e) "President" includes all managers, if any, of a limited liability company and all partners in a registered limited liability partnership.

(f) "Share" includes a member's rights in a limited liability company and a partner's rights in a registered limited liability partnership.

(g) "Shareholder" includes a member of a limited liability company and a partner in a registered limited liability partnership.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1526, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-124 as it existed prior to 2019.

12-285-132. Repeal of part - review of functions. This part 1 and the licensing functions of the board as set forth in this part 1 are repealed, effective September 1, 2035. Before the repeal, the licensing functions of the board are scheduled for review in accordance with section 24-34-104.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1530, § 1, effective October 1. **L. 2024:** Entire section amended, (HB 24-1327), ch. 421, p. 2875, § 2, effective August 7.

Editor's note: This section is similar to former § 12-41-130 as it existed prior to 2019.

PART 2

PHYSICAL THERAPIST ASSISTANTS

12-285-201. Additional board authority - rules. (1) In addition to all other powers and duties given to the board by law, the board may:

(a) Certify physical therapist assistants to practice;

(b) Evaluate the qualifications of applicants for certification, issue and renew the certifications authorized under this part 2, and take the disciplinary actions authorized under this part 2 and section 12-20-404;
(c) Conduct hearings in accordance with section 12-20-403 upon charges for discipline of a certified physical therapist assistant and cause the prosecution and enjoinder, in accordance with section 12-20-406, of all persons violating this part 2;
(d) Establish fines under section 12-285-129.
(2) The board may promulgate rules pursuant to section 12-20-204 to implement, administer, and enforce this part 2.
(3) The authority granted to the board by this part 2 does not authorize the board to arbitrate or adjudicate fee disputes between physical therapist assistants or between a physical therapist assistant and another party.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1530, § 1, effective October 1.

Editor's note: Subsection (1) is similar to former § 12-41-201 (1); subsection (2) is similar to former § 12-41-201 (3); and subsection (3) is similar to former § 12-41-219, as those sections existed prior to 2019.

12-285-202. Use of titles restricted. A person certified as a physical therapist assistant may use the title "physical therapist assistant" or the letters "P.T.A." or any other generally accepted terms, letters, or figures that indicate that the person is a physical therapist assistant. No other person shall use the terms "physical therapist assistant", "certified physical therapist assistant", or any letters or words that indicate that the person is a physical therapist assistant.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1531, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-202 as it existed prior to 2019.

12-285-203. Limitations on authority. (1) Nothing in this part 2 authorizes a physical therapist assistant to perform any of the following acts:

(a) Practice of medicine, surgery, or any other form of healing except as authorized by this part 2; or

(b) Use of roentgen rays and radioactive materials for therapeutic purposes, use of electricity for surgical purposes, or diagnosis of disease.

(2) A physical therapist assistant shall not practice physical therapy unless the assistant works under the supervision of a licensed physical therapist.

(3) A physical therapist assistant:

(a) Shall not perform sharp wound debridement;

(b) May perform general wound care and nonsharp debridement, including mechanical, autolytic, enzymatic, and maggot, under the supervision of a physical therapist when debridement is consistent with the scope of physical therapy practice.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1531, § 1, effective October 1. **L. 2024:** (3) added, (HB 24-1327), ch. 421, p. 2878, § 9, effective August 7.

Editor's note: This section is similar to former § 12-41-203 as it existed prior to 2019.

12-285-204. Certification required. Effective June 1, 2012, except as otherwise provided by this part 2, a person who practices as a physical therapist assistant or who represents himself or herself as being able to practice as a physical therapist assistant in this state must possess a valid certification issued by the board under this part 2 and rules adopted under this part 2.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1531, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-204 as it existed prior to 2019.

12-285-205. Certification by examination. (1) Every applicant for a certification by examination shall:

(a) (I) Have successfully completed a physical therapist assistant program accredited by the Commission on Accreditation in Physical Therapy Education or any comparable organization as determined by the board; or

(II) Qualify to take the physical therapy examination established under section 12-285-110;

(b) Pass a written examination that is:

(I) Approved by the board; and

(II) A national examination accredited by a nationally recognized accrediting agency;

(c) Submit an application in the form and manner designated by the director; and

(d) Pay a fee in an amount determined by the director.

(2) The board may refuse to permit an applicant to take the examination if the application is incomplete or indicates that the applicant is not qualified to sit for the examination, or if the applicant has committed any act that would be grounds for disciplinary action under section 12-285-211.

(3) When the applicant has fulfilled all the requirements of subsection (1) of this section, the board shall issue a certification to the applicant; except that the board may deny certification if the applicant has committed an act that would be grounds for disciplinary action under section 12-285-211.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1531, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-205 as it existed prior to 2019.

12-285-206. Certification by endorsement. An applicant may obtain certification by endorsement if the applicant satisfies the requirements of the occupational credential portability program.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1532, § 1, effective October 1. **L. 2020:** Entire section amended, (HB 20-1326), ch. 126, p. 546, § 41, effective June 25.

Editor's note: This section is similar to former § 12-41-206 as it existed prior to 2019.

Cross references: For the short title ("Red Tape Reduction Act") and the legislative declaration in HB 20-1326, see sections 1 and 2 of chapter 126, Session Laws of Colorado 2020.

12-285-207. Certification of internationally-educated applicants. (1) Every applicant for certification who is educated by a program that is not accredited by the Commission on Accreditation in Physical Therapy Education or a comparable organization, as determined by the board, shall:

(a) Have received education and training as a physical therapist assistant that is substantially equivalent to the education and training required by accredited physical therapist assistant programs in the United States;

(b) Possess an active, valid license, certification, or registration in good standing or other authorization to practice as a physical therapist assistant from an appropriate authority in the country where the applicant is practicing or has practiced;

(c) Pass a written examination approved by the board in accordance with section 12-285-205 (1)(b);

(d) Submit an application in the form and manner designated by the director; and

(e) Pay an application fee in an amount determined by the director.

(2) Upon receipt of all documents and the fee required by subsection (1) of this section, the director shall review the application and determine if the applicant is qualified to be certified.

(3) When the applicant has fulfilled all the requirements of subsection (1) of this section, the board shall issue a certification to the applicant; except that the board may deny the application if the applicant has committed an act that would be grounds for disciplinary action under section 12-285-211.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1533, § 1, effective October 1. **L. 2024:** IP(1) and (1)(b) amended, (HB 24-1327), ch. 421, p. 2878, § 10, effective August 7.

Editor's note: This section is similar to former § 12-41-207 as it existed prior to 2019.

12-285-208. Expiration and renewal of certification. Certifications issued pursuant to this part 2 are subject to the renewal, expiration, reinstatement, and delinquency fee provisions specified in section 12-20-202 (1) and (2). A person whose certification has expired is subject to the penalties provided in this part 2 and section 12-20-202 (1).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1533, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-208 as it existed prior to 2019.

12-285-209. Continuing professional competency - rules - definition. (1) (a) A certified physical therapist assistant shall maintain continuing professional competency to practice.

(b) The board shall adopt rules establishing a continuing professional competency program. The rules shall set forth the following elements:

(I) A self-assessment of the knowledge and skills of a physical therapist assistant seeking to renew or reinstate a certification;

(II) Development, execution, and documentation of a learning plan based on the assessment; and

(III) Periodic demonstration of knowledge and skills through documentation of professional development activities necessary to ensure at least minimal ability to safely practice the profession; except that a physical therapist assistant need not retake any examination required by section 12-285-205 for initial certification.

(c) The board shall establish that a certified physical therapist assistant satisfies the continuing competency requirements of this section if the certified physical therapist assistant meets the continuing professional competency requirements of one of the following entities:

(I) An accrediting body recognized by the board; or

(II) An entity approved by the board.

(d) (I) After the program is established, a physical therapist assistant shall satisfy the requirements of the program in order to renew or reinstate a certification to practice as a certified physical therapist assistant.

(II) The requirements of this section apply to individual certified physical therapist assistants, and nothing in this section requires a person who employs or contracts with a certified physical therapist assistant to comply with the requirements of this section.

(e) Professional development activities must be measured by a contact-hour-to-credit-hour ratio.

(2) Records of assessments or other documentation developed or submitted in connection with the continuing professional competency program are confidential and not subject to inspection by the public or discovery in connection with a civil action against a certified physical therapist assistant. A person or the board shall not use the records or documents unless used by the board to determine whether a certified physical therapist assistant is maintaining continuing professional competency to engage in the profession.

(3) As used in this section, "continuing professional competency" means the ongoing ability of a certified physical therapist assistant to learn, integrate, and apply the knowledge, skill, and judgment to practice as a certified physical therapist assistant according to generally accepted standards and professional ethical standards.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1534, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-208.5 as it existed prior to 2019.

12-285-210. Scope of part 2 - exclusions. (1) This part 2 does not prohibit:

(a) Practice as a physical therapist assistant in this state by a legally qualified physical therapist assistant from another state or country whose employment requires the physical therapist assistant to accompany and care for a patient temporarily residing in this state, but the physical therapist assistant shall not provide physical therapy services for another individual, nor shall the person represent or hold himself or herself out as a physical therapist assistant certified to practice in this state;

(b) The administration of massage, external baths, or exercise that is not a part of a physical therapy regimen;

(c) A person registered, certified, or licensed in this state under any other law from engaging in the practice for which the person is registered, certified, or licensed;

(d) Practice as a physical therapist assistant in this state by a legally qualified physical therapist assistant from another state or country for the purpose of participating in an educational program of not more than sixteen weeks' duration;

(e) The practice of a physical therapist assistant licensed, certified, or registered in this or any other state or territory of the United States who is employed by the United States government or a bureau, division, or agency thereof while within the course and scope of the physical therapist assistant's duties; or

(f) The performance of noninvasive debridement, such as autolytic and enzymatic debridement treatment.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1535, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-209 as it existed prior to 2019.

12-285-211. Grounds for disciplinary action. (1) The board may take disciplinary action in accordance with sections 12-20-404 and 12-285-212 against a person who has:

(a) Committed an act that does not meet generally accepted standards of physical therapist assistant practice or failed to perform an act necessary to meet generally accepted standards of physical therapist assistant practice;

(b) Engaged in sexual contact, sexual intrusion, or sexual penetration, as defined in section 18-3-401, with a patient during the period of time beginning with the initial evaluation through the termination of treatment;

(c) Abandoned a patient by any means;

(d) Failed to make essential entries on patient records or falsified or made incorrect entries of an essential nature on patient records;

(e) (I) Committed abuse of health insurance as set forth in section 18-13-119; or

(II) Advertised through newspapers, magazines, circulars, direct mail, directories, radio, television, or otherwise that the certified physical therapist assistant will perform an act prohibited by section 18-13-119;

(f) Committed a fraudulent insurance act, as defined in section 10-1-128;

(g) Falsified information in any application or attempted to obtain or obtained a certification by fraud, deception, or misrepresentation;

(h) Engaged in the habitual or excessive use or abuse of alcohol, a habit-forming drug, or a controlled substance as defined in section 18-18-102 (5);

(i) (I) Failed to notify the board, as required by section 12-30-108 (1), of a physical illness, physical condition, or behavioral, mental health, or substance use disorder that impacts the certified physical therapist assistant's ability to perform physical therapy with reasonable skill and safety to patients;

(II) Failed to act within the limitations created by a physical illness, physical condition, or behavioral, mental health, or substance use disorder that renders the certified physical therapist assistant unable to perform physical therapy with reasonable skill and safety to the patient; or

(III) Failed to comply with the limitations agreed to under a confidential agreement entered into under sections 12-30-108 and 12-285-215;

(j) Refused to submit to a physical or mental examination when so ordered by the board under section 12-285-214;

(k) Failed to notify the board in writing of the entry of a final judgment by a court of competent jurisdiction against the certified physical therapist assistant for malpractice or a settlement by the certified physical therapist assistant in response to charges or allegations of malpractice, which notice must be given within ninety days after the entry of judgment or settlement and, in the case of a judgment, must contain the name of the court, the case number, and the names of all parties to the action;

(l) Violated or aided or abetted a violation of this part 2, an applicable provision of article 20 or 30 of this title 12, a rule adopted under this part 2, or a lawful order of the board;

(m) Been convicted of, pled guilty, or pled nolo contendere to a crime related to the certified physical therapist assistant's practice or a felony or committed an act specified in section 12-285-217. A certified copy of the judgment of a court of competent jurisdiction of the conviction or plea is conclusive evidence of the conviction or plea. In considering the disciplinary action, the board is governed by sections 12-20-202 (5) and 24-5-101.

(n) Fraudulently obtained, furnished, or sold a physical therapist assistant diploma, certificate, renewal of certificate, or record, or aided or abetted any such act;

(o) Represented, or held himself or herself out as, in any manner, a physical therapist assistant or practiced as a physical therapist assistant without a certification, unless otherwise authorized under this part 2;

(p) Used in connection with the person's name a designation implying that the person is a physical therapist assistant without being certified under this part 2;

(q) Practiced as a physical therapist assistant during the time the person's certification was expired, suspended, or revoked; or

(r) Failed to respond in an honest, materially responsive, and timely manner to a complaint issued under this part 2.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1535, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-210 as it existed prior to 2019.

12-285-212. Disciplinary actions. (1) (a) The board, in accordance with article 4 of title 24 and section 12-20-403, may take disciplinary or other action as specified in section 12-20-404 or impose public censure if the board or the board's designee determines after notice and the opportunity for a hearing that the certified physical therapist assistant has committed an act specified in section 12-285-211.

(b) In the case of a deliberate and willful violation of this part 2 or if the public health, safety, and welfare require emergency action, the board may take disciplinary action on an emergency basis under sections 24-4-104 and 24-4-105.

(2) The board may send a letter of admonition to a certified physical therapist assistant under the circumstances specified in and in accordance with section 12-20-404 (4).

(3) In a disciplinary order that allows a certified physical therapist assistant to continue to practice, the board may impose upon the certified physical therapist assistant conditions that the board deems appropriate to ensure that the certified physical therapist assistant is physically, mentally, and professionally qualified to practice in accordance with generally accepted professional standards. The conditions may include the following:

(a) Examination of the certified physical therapist assistant to determine his or her mental or physical condition, as provided in section 12-285-214, or to determine professional qualifications;

(b) Any therapy, training, or education that the board believes necessary to correct deficiencies found either in a proceeding in compliance with section 24-34-106 or through an examination under subsection (3)(a) of this section;

(c) A review or supervision of a certified physical therapist assistant's practice that the board finds necessary to identify and correct deficiencies therein; or

(d) Restrictions upon the nature and scope of practice to ensure that the certified physical therapist assistant does not practice beyond the limits of the certified physical therapist assistant's capabilities.

(4) The board may send a confidential letter of concern to a certified physical therapist assistant under the circumstances specified in section 12-20-404 (5).

(5) The board may take disciplinary action against a certified physical therapist assistant for failure to comply with any of the conditions imposed by the board under subsection (3) of this section.

(6) The two-year waiting period specified in section 12-20-404 (3) applies to a person whose certification as a physical therapist assistant is revoked by any other legally qualified board or regulatory entity.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1537, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-211 as it existed prior to 2019.

12-285-213. Disciplinary proceedings - investigations - judicial review. (1) The board may commence a proceeding for the discipline of a physical therapist assistant in accordance with section 12-20-403 when the board has reasonable grounds to believe that a physical therapist assistant has committed an act enumerated in section 12-285-211.

(2) In a proceeding held under this section, the board may accept as prima facie evidence of grounds for disciplinary action any disciplinary action taken against a physical therapist assistant from another jurisdiction if the violation that prompted the disciplinary action in that jurisdiction would be grounds for disciplinary action under this part 2.

(3) (a) The board may investigate potential grounds for disciplinary action upon its own motion or when the board is informed of dismissal of a person certified under this part 2 if the dismissal was for a matter constituting a violation of this part 2.

(b) A person who supervises a physical therapist assistant shall report to the board when the physical therapist assistant has been dismissed because of incompetence or failure to comply with this part 2. A certified physical therapist assistant who is aware that another person is violating this part 2 shall report the violation to the board.

(4) The board may keep any investigation authorized under this part 2 closed until the results of the investigation are known and either the complaint is dismissed or notice of hearing and charges are served upon the certified physical therapist assistant.

(5) The board, through the department, may employ administrative law judges appointed pursuant to part 10 of article 30 of title 24, on a full-time or part-time basis, to conduct hearings under this part 2 in accordance with section 12-20-403.

(6) Final action of the board may be judicially reviewed in accordance with section 12-20-408, and judicial proceedings for the enforcement of an order of the board may be instituted in accordance with section 24-4-106.

(7) The board may issue cease-and-desist orders under the circumstances and in accordance with the procedures specified in section 12-20-405.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1538, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-212 as it existed prior to 2019.

12-285-214. Mental and physical examination of certified physical therapist assistants. (1) If the board has reasonable cause to believe that a certified physical therapist assistant is unable to practice with reasonable skill and safety, the board may require the certified physical therapist assistant to take a mental or physical examination by a health-care provider designated by the board. If the certified physical therapist assistant refuses to undergo the mental or physical examination, unless due to circumstances beyond the certified physical therapist assistant's control, the board may suspend the certified physical therapist assistant's certification until the results of the examination are known and the board has made a determination of the certified physical therapist assistant's fitness to practice. The board shall proceed with an order for examination and determination in a timely manner.

(2) An order issued to a certified physical therapist assistant under subsection (1) of this section to undergo a mental or physical examination must contain the basis of the board's reasonable cause to believe that the certified physical therapist assistant is unable to practice with reasonable skill and safety. For the purposes of a disciplinary proceeding authorized by this part 2, the certified physical therapist assistant is deemed to have waived all objections to the admissibility of the examining health-care provider's testimony or examination reports on the ground that they are privileged communications.

(3) The certified physical therapist assistant may submit to the board testimony or examination reports from a health-care provider chosen by the certified physical therapist assistant pertaining to the condition that the board has alleged may preclude the certified physical therapist assistant from practicing with reasonable skill and safety. The board may consider the testimony or examination reports in conjunction with, but not in lieu of, testimony and examination reports of the health-care provider designated by the board.

(4) A person shall not use the results of any mental or physical examination ordered by the board as evidence in any proceeding other than one before the board. The examination results are not public records and are not available to the public.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1541, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-213 as it existed prior to 2019.

12-285-215. Confidential agreements. Section 12-30-108 concerning confidential agreements to limit practice applies to this part 2.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1542, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-214 as it existed prior to 2019.

12-285-216. Reports by insurance companies. (1) (a) Each insurance company licensed to do business in this state and engaged in the writing of malpractice insurance for physical therapist assistants shall send to the board information about any malpractice claim that involves a physical therapist assistant and is settled or in which judgment is rendered against the insured.

(b) In addition, the insurance company shall submit supplementary reports containing the disposition of the claim to the board within ninety days after settlement or judgment.

(2) Regardless of the disposition of any claim, the insurance company shall provide such information as the board finds reasonably necessary to conduct its own investigation and hearing.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1543, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-215 as it existed prior to 2019.

12-285-217. Unauthorized practice - penalties. Any person who violates section 12-285-202 or 12-285-203 without an active certification issued under this part 2 is subject to penalties pursuant to section 12-20-407 (1)(d).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1543, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-216 as it existed prior to 2019.

12-285-218. Violation - fines. Notwithstanding section 12-285-217, the board may assess a fine for a violation of this part 2 or a rule adopted under this part 2. The fine shall not be greater than one thousand dollars. All fines must be imposed in accordance with section 24-4-105 but are not a substitute or waiver of a criminal penalty.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1543, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-217 as it existed prior to 2019.

12-285-219. Injunctive proceedings. The board may apply for an injunction in accordance with section 12-20-406, but only to enjoin a person from committing an act declared to be a misdemeanor by this part 2 or section 12-20-407 (1)(d).

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1543, § 1, effective October 1.

Editor's note: This section is similar to former § 12-41-218 as it existed prior to 2019.

12-285-220. Repeal of part - review of functions. This part 2 is repealed, effective September 1, 2035. Before the repeal, the functions of the board in regulating physical therapist assistants under this part 2 are scheduled for review in accordance with section 24-34-104.

Source: L. 2019: Entire title R&RE with relocations, (HB 19-1172), ch. 136, p. 1544, § 1, effective October 1. **L. 2024:** Entire section amended, (HB 24-1327), ch. 421, p. 2876, § 3, effective August 7.

Editor's note: This section is similar to former § 12-41-221 as it existed prior to 2019.

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Chapter PT 10

ORDERING X-RAYS

PT 10.01 Authority and purpose. The rules in this chapter are adopted by the board pursuant to the authority delegated by ss. 15.08 (5) (b) and 448.56 (7) (a), Stats., and specify the qualifications a physical therapist must satisfy to order x-rays.

Note: See also s. 448.56 (7) (b), Stats., relating to coordination of care with the patient's primary care physician or an appropriate health care practitioner.

History: CR 16-089: cr. Register July 2017 No. 739, eff. 8-1-17.

PT 10.02 Qualifications. A physical therapist may order x-rays to be performed by qualified persons if the physical therapist satisfies one of the following qualifications:

(1) The physical therapist holds an entry level clinical doctorate or transitional clinical doctoral degree in physical therapy from a college or university that has a physical therapy program accredited by the Commission on Accreditation in Physical Therapy Education or a successor organization.

(2) The physical therapist has been issued a specialty certification from the American Board of Physical Therapy Specialties. The clinical practice hours leading to the specialty certification shall include training in the practice of ordering x-rays. A specialty certification issued by a national organization other than the American Board of Physical Therapy Specialties satisfies the qualification under this subsection if the certification program meets the criteria under sub. (4) (a) to (f).

(3) The physical therapist has completed a residency or fellowship accredited by the American Board of Physical Therapy Residency and Fellowship Education. The residency or fellowship shall include training in the practice of ordering x-rays. Completion of a residency or fellowship accredited by a national organization other than the American Board of Physical Therapy Residency and Fellowship Education satisfies the qualification under this subsection if the residency or fellowship program meets the criteria under sub. (4) (a) to (f).

(4) The physical therapist has successfully completed a formal x-ray ordering training program meeting all of the following criteria:

(a) The program constitutes an organized program of learning which contributes directly to the professional competency of a licensee to order x-rays.

(b) The program pertains to subject matters which integrally relate to the practice of ordering x-rays.

(c) The program is conducted by individuals who have specialized education, training, or experience by reason of which the individuals should be considered qualified concerning the practice of ordering x-rays. This shall include demonstrated physician involvement in the development or presentation of the program.

(d) The program fulfills pre-established goals and objectives.

(e) The program provides proof of attendance by licensees.

(f) The program includes a final examination or other assessment of a licensees' competency to order x-rays.

History: CR 16-089: cr. Register July 2017 No. 739, eff. 8-1-17.

CHAPTER 43-26.1
PHYSICAL THERAPISTS

43-26.1-01. Definitions.

In this chapter, unless the context otherwise requires:

1. "Board" means the North Dakota board of physical therapy.
2. "Competence" is the application of knowledge, skills, and behaviors required to function effectively, safely, ethically, and legally within the context of the patient's or client's environment.
3. "Continuing competence" is the lifelong process of maintaining and documenting competence through ongoing self-assessment, development, and implementation of a personal learning plan along with subsequent reassessment.
4. "Direct supervision" means the supervising physical therapist is physically present on the premises and immediately available for direction and supervision, has direct contact with the patient during each visit, and completes all components of care requiring skilled therapy services. Telehealth does not meet the requirement for direct supervision.
5. "Electronic communications" means the science and technology of communication over a distance by electronic transmission of impulses, including activities involving or using electronic communications to store, organize, send, retrieve, and convey information.
6. "Examination" means a national examination approved by the board for the licensure of a physical therapist or the licensure of a physical therapist assistant.
7. "General supervision" means the supervising physical therapist is onsite and present where services are provided or is immediately available to the physical therapist assistant being supervised by means of electronic communications, maintains continual involvement in the appropriate aspects of patient care, and has primary responsibility for all patient care services rendered by a physical therapist assistant.
8. "Manual therapy" means the use of techniques such as mobilization or manipulation, manual lymphatic drainage, and manual traction on one or more regions of the body.
9. "Onsite supervision" means the supervising physical therapist is onsite and present in the department or facility where services are provided, is immediately available to the individual being supervised, and maintains continued involvement in appropriate aspects of each treatment session in which a student physical therapist or a student physical therapist assistant is involved in components of care.
10. "Physical therapist" means an individual licensed under this chapter to practice physical therapy. The term "physiotherapist" is synonymous with "physical therapist" under this chapter.
11. "Physical therapist assistant" means an individual licensed under this chapter and who assists the physical therapist in selected components of physical therapy intervention.
12. "Physical therapy" means the care and services provided by or under the direction and supervision of a physical therapist licensed under this chapter.
13. "Physical therapy aide" means an individual trained under the direction of a physical therapist who performs designated and supervised routine tasks related to physical therapy.
14. "Practice of physical therapy" means:
    a. Examining, evaluating, and testing individuals with mechanical, physiological, and developmental impairments, functional limitations in movement and mobility, and disabilities or other health and movement-related conditions to determine a diagnosis for physical therapy, prognosis, and plan of therapeutic intervention, and to assess the ongoing effects of intervention. The term includes ordering musculoskeletal imaging consisting of plain film radiographs to be performed by a professional authorized by chapter 43-62 and interpreted by a licensed physician trained in radiology interpretation, and using these results to determine if a referral to another health care provider is necessary or indicates the necessary treatment is within the physical therapist's scope of practice.

b. Alleviating impairments, functional limitations in movement and mobility, and disabilities by designing, implementing and modifying therapeutic interventions that may include therapeutic exercise; neuromuscular education; functional training related to positioning, movement, and mobility in self-care and in-home, community, or work integration or reintegration; manual therapy; therapeutic massage; prescription, application and, as appropriate, fabrication of assistive, adaptive, orthotic, prosthetic, protective, and supportive devices and equipment related to positioning, movement, and mobility; airway clearance techniques; integumentary protection and repair techniques; debridement and wound care; physiotherapy; physical agents or modalities; mechanical and electrotherapeutic modalities; and patient-related instruction.
c. Engaging as a physical therapist in reducing the risk of injury, impairment, functional limitation and disability, including the promotion and maintenance of fitness, health, and wellness in populations of all ages.
d. Engaging as a physical therapist in administration, consultation, education, and research.

15. "Restricted license" for a physical therapist or physical therapist assistant means a license on which the board places restrictions or conditions, or both, as to scope of practice, place of practice, supervision of practice, duration of licensed status, or type or condition of patient or client to whom the licensee may provide services.
16. "Telehealth" is the use of electronic communications to provide and deliver health-related information and health care services, including physical therapy related information and services, over any distance. Telehealth encompasses health care and health promotion activities, including education, advice, reminders, interventions, and the monitoring of interventions.
17. "Testing" means standard methods and techniques used to gather data about the patient.

43-26.1-02. Board of physical therapy - Members - Appointments - Vacancies.

1. The board of physical therapy shall administer this chapter. The board consists of three licensed physical therapists, one licensed physician, one licensed physical therapist assistant, and two public members. The governor shall appoint board members for a term of five years, staggered so the terms of no more than two members expire each year. An individual may not serve more than two full consecutive terms. Terms begin on July first. Appointments to the board to fill a vacancy occurring for other than the expiration of a term may only be made for the remainder of the unexpired term.
2. Each physical therapist and physical therapist assistant appointed must have had at least three years of physical therapy experience in North Dakota immediately before appointment and must practice in North Dakota during the term. The physician appointed must have practiced medicine at least three years in North Dakota immediately before appointment and must practice in North Dakota during the term. Each board member shall take and file with the secretary of state the oath of office prescribed for state officials before entering upon the discharge of the member's duties.
3. Each board member is entitled to mileage reimbursement as provided in section 54-06-09 and reimbursement for actual and necessary expenses in the amounts provided by law for state officers in section 44-08-04.

43-26.1-03. Powers of the board.

The board may:

1. Evaluate the qualifications of applicants for licensure.
2. Provide for the examination of physical therapists and physical therapist assistants and adopt passing scores for the examinations.
3. Issue licenses to persons who meet the requirements of this chapter.
4. Regulate the practice of physical therapy by interpreting and enforcing this chapter.

5. Adopt and revise rules consistent with this chapter.
6. Meet at least annually and other times as deemed necessary. A majority of board members constitutes a quorum for the transaction of business.
7. Establish mechanisms for assessing the continuing professional competence of physical therapists and physical therapist assistants to engage in the practice of physical therapy.
8. Establish and collect fees for sustaining the necessary operation and expenses of the board.
9. Elect officers from its members necessary for the operations and obligations of the board. Terms of office are one year.
10. Provide for the timely orientation and training of new professional and public appointees to the board regarding board licensing and disciplinary procedures, this chapter, and board rules, policies, and procedures.
11. Maintain a current list of all individuals regulated under this chapter. This contact information includes the individual's name, current business address, business telephone number, electronic mail address, and board license number.
12. Provide information to the public regarding the complaint process.
13. Employ necessary personnel to carry out the administrative work of the board.
14. Enter contracts for services necessary for enforcement of this chapter.
15. Report final disciplinary action taken against a licensee to a national disciplinary database recognized by the board or as required by law.
16. Review and investigate all complaints the board receives against licensees concerning violations of this chapter. The board shall keep all information relating to the receipt and investigation of the complaint confidential until the information is disclosed in the course of the investigation or any subsequent proceeding or until disclosure is required by law. However, patient records, including clinical records, files, any report or oral statement relating to diagnostic findings of a patient or treatment of a patient, any information from which a patient or the patient's family might be identified, or information received and records or reports kept by the board as a result of its investigation, are confidential.

43-26.1-04. Qualifications for licensure.

1. Before being approved for a license as a physical therapist or physical therapist assistant, an applicant:
   a. Must be of good moral character.
   b. Shall complete the application process.
   c. Must be a graduate of a professional physical therapist or physical therapist assistant education program accredited by a national accreditation agency approved by the board.
   d. Shall pass the examination approved by the board.
2. An applicant for a license as a physical therapist or a physical therapist assistant who has been educated outside of the United States:
   a. Must be of good moral character.
   b. Shall complete the application process.
   c. Shall provide satisfactory evidence the applicant's education is substantially equivalent to the requirements of a physical therapist or physical therapist assistant educated in an accredited education program as determined by the board. For the purpose of this section, "substantially equivalent" means an applicant for licensure educated outside the United States must have:
      (1) Graduated from a physical therapist or physical therapist assistant education program that prepares the applicant to engage in the practice of physical therapy without restriction.
      (2) Provided written proof the applicant's school of physical therapy or physical therapy assistant education is recognized by its ministry of education or other appropriate education agency.

(3) Undergone a credentials evaluation as directed by the board determining the candidate has met uniform criteria for educational requirements as further established by rule.
(4) Completed any additional education or clinical experience as required by the board.

d. Shall pass the board-approved English proficiency examinations if the applicant's native language is not English.
e. Shall pass the examination approved by the board.
f. Shall obtain a criminal background check as referenced in section 43-26.1-05.1 and required under article III of chapter 43-26.2.

3. Notwithstanding the provisions of subsection 2, if the applicant is educated outside the United States and is a graduate of a professional physical therapist or physical therapist assistant educational program accredited by a national accrediting agency approved by the board, the board may waive the requirements in subdivision c of subsection 2.

43-26.1-05. Application and examination.

1. An applicant for licensure shall file a complete application as required by the board. The applicant shall include application fees as provided in this chapter and under applicable rules.
2. The board shall provide examinations at times and places the board determines. The board shall determine the passing score.
3. An applicant for licensure as a physical therapist may take the examination after the application process has been completed. The examination must test entry-level competence related to physical therapy theory, examination and evaluation, diagnosis, prognosis, treatment intervention, prevention, and consultation.
4. An applicant for licensure as a physical therapist assistant may take the examination after the application process has been completed. The examination must test for requisite knowledge and skills in the technical application of physical therapy services.
5. An applicant for licensure who does not pass the examination on the first attempt may retake the examination, not to exceed six attempts. There is a limit of two attempts for scores below four hundred.
6. If the board determines an applicant or examinee has engaged, or has attempted to engage, in conduct that subverts or undermines the integrity of the examination process, the board may disqualify the applicant or examinee from taking the examination.

43-26.1-05.1. Use of criminal history record checks.

The board may require a physical therapy or physical therapy assistant applicant, or a licensee under investigation, to submit to a statewide and nationwide criminal history record check, including a fingerprint-based criminal history background check. The criminal history record check must be conducted in the manner provided by section 12-60-24. The criminal history record check is an exempt record but may not be disseminated by the board to the physical therapy compact commission or a similar entity. All costs associated with a criminal history record check performed under this section are the responsibility of the applicant or licensee.

43-26.1-06. Licensure by endorsement.

The board shall issue a license to a physical therapist or physical therapist assistant who has a license in good standing from another jurisdiction that imposes requirements for obtaining and maintaining a license which are at least as stringent as the requirements imposed in this state.

43-26.1-07. Exemptions from licensure.

1. This chapter does not restrict a person licensed under any other law of this state from engaging in the profession or practice for which that person is licensed as long as that person does not represent, imply, or claim that that person is a physical therapist, physical therapist assistant, or a provider of physical therapy.
2. The following persons are exempt from the licensure requirements of this chapter when engaged in the following activities:
   a. A person in a professional education program approved by the board who is satisfying supervised clinical education requirements related to the person's physical therapist or physical therapist assistant education while under onsite supervision of a physical therapist.
   b. A physical therapist who is practicing in the United States armed services, United States public health service, or veterans administration pursuant to federal regulations for state licensure of health care providers.
   c. A physical therapist who is licensed in another jurisdiction of the United States or credentialed to practice physical therapy in another country if that person is teaching, demonstrating, or providing physical therapy in connection with teaching or participating in an educational seminar in the state of no more than sixty days in a calendar year.
   d. A physical therapist who is licensed in another United States jurisdiction if that person is providing services in accordance with section 43-51-03.
   e. A physical therapist who is licensed in another United States jurisdiction or credentialed in another country, if that person by contract or employment is providing physical therapy to individuals affiliated with or employed by established athletic teams, athletic organizations, or performing arts companies temporarily practicing, competing, or performing in the state for no more than sixty days in a calendar year.
   f. A physical therapist assistant who is licensed in another United States jurisdiction and is assisting a physical therapist engaged specifically in activities related to subdivisions b, c, and e is exempt from the requirements of licensure under this chapter.

43-26.1-08. License renewal - Changes.

A licensee shall renew the license annually pursuant to board rules. A licensee who fails to renew the license on or before the expiration date may not practice as a physical therapist or physical therapist assistant in this state, and may be subject to a late renewal fee. A licensee shall report to the board a name change and other changes in contact information within thirty days of the date of change.

43-26.1-09. Reinstatement of license.

1. The board may reinstate an expired license upon payment of a renewal fee and reinstatement fee.
2. If a physical therapist's or physical therapist assistant's license has expired for more than three consecutive years, that person shall reapply for licensure and shall demonstrate to the board's satisfaction competence to practice physical therapy, by one or more of the following as determined by the board:
   a. Practice for a specified time under a restricted license.
   b. Complete prescribed remedial courses.
   c. Complete continuing competence requirements for the period of the expired license.
   d. Pass an examination.

43-26.1-10. Fees.

The board shall establish and collect fees not to exceed:

1. Two hundred dollars for an application for an original license. This fee is nonrefundable.
2. One hundred dollars for an annual renewal of the license.
3. Two hundred dollars for an application for reinstatement of a license.
4. Fifty dollars for late renewal of a license.
5. Forty dollars for the compact privilege.

43-26.1-11. Patient care management.

1. A physical therapist shall manage all aspects of each patient's physical therapy. A physical therapist shall provide:
   a. Each patient's initial evaluation and documentation.
   b. Periodic re-evaluation and documentation of each patient.
   c. The documented discharge of the patient, including the response to therapeutic intervention at the time of discharge.
2. If the diagnostic process reveals findings outside the scope of a physical therapist's knowledge, experience, or expertise, a physical therapist shall inform the patient or client and refer the patient or client to an appropriate practitioner.
3. A physical therapist shall assure the qualifications of a physical therapist assistant and physical therapy aide under the physical therapist's direction and supervision.
4. For each patient on each date of service, a physical therapist shall provide all of the therapeutic intervention that requires the expertise of a physical therapist and shall determine the use of physical therapist assistants that provide for the delivery of care that is safe, effective, and efficient.
   a. A physical therapist assistant shall work under the supervision of a physical therapist. A physical therapist assistant may document care provided without the cosignature of the supervising physical therapist.
   b. A physical therapist may use physical therapy aides for designated routine tasks. A physical therapy aide shall work under the direct supervision of a physical therapist. This supervision may extend to general supervision of the physical therapy aide only when the physical therapy aide is accompanying and working directly with a physical therapist assistant with a specific patient or when performing non-patient-related tasks.
5. A physical therapist's or physical therapist assistant's responsibility for patient care management includes accurate documentation and billing of the services provided.
6. The physical therapist shall communicate the overall plan of care with the patient or the patient's legally authorized representative.

43-26.1-11.1. Ordering imaging.

A physical therapist may order musculoskeletal imaging consisting of plain film radiographs if the physical therapist holds a clinical doctorate degree in physical therapy or has completed a board-approved formal medical imaging training program.

43-26.1-12. Consumers' rights.

1. The public shall have access to the following information:
   a. A list of physical therapists that includes place of practice, license number, date of license, and expiration and status of license.
   b. A list of physical therapist assistants licensed in the state, including place of employment, license number, date of license, and expiration and status of license.
   c. The board's address and telephone number.
2. A patient has freedom of choice in selection of services and products.
3. Information relating to the physical therapist-patient relationship is confidential and may not be communicated to a third party who is not involved in that patient's care without the written authorization of the patient or as permitted by law.

4. Any person may submit a complaint to the board regarding any licensee, or any other person potentially in violation of this chapter.

43-26.1-13. Grounds for disciplinary actions.

The board may refuse to license any physical therapist or physical therapist assistant, may discipline, or may suspend or revoke the license of any physical therapist or physical therapist assistant for any of the following grounds:

1. Violating any provision of this chapter, board rules, or a written order of the board.
2. Practicing or offering to practice beyond the scope of the practice of physical therapy.
3. Failing to refer a patient or client to an appropriate practitioner if the diagnostic process reveals findings that are outside the scope of a physical therapist's knowledge, experience, or expertise.
4. Obtaining or attempting to obtain a license by fraud or misrepresentation.
5. Engaging in the performance of substandard physical therapy care due to a deliberate or negligent act or failure to act, regardless of whether actual injury to the patient is established.
6. Engaging in the performance of substandard care by a physical therapist assistant, including exceeding the authority to perform components of intervention selected by the supervising physical therapist regardless of whether actual injury to the patient is established.
7. Failing to supervise physical therapist assistants or physical therapy aides in accordance with this chapter and board rules.
8. A determination by the board that a licensee's conviction of an offense has a direct bearing on the licensee's ability to serve the public as a physical therapist or physical therapist assistant or that, following conviction of any offense, the holder is not sufficiently rehabilitated as provided under section 12.1-33-02.1.
9. Practicing as a physical therapist or working as a physical therapist assistant when physical or mental abilities are impaired by the use of controlled substances or other habit-forming drugs, chemicals, alcohol, or by other causes.
10. Having had a license revoked or suspended, other disciplinary action taken, or an application for licensure refused, revoked, or suspended by the proper authorities of another state, territory, or country.
11. Engaging in sexual misconduct. For the purpose of this subsection sexual misconduct includes:
    a. Engaging in or soliciting sexual relationships, whether consensual or nonconsensual, while a physical therapist or physical therapist assistant-patient relationship exists, except with a spouse.
    b. Making sexual advances, requesting sexual favors, or engaging in other verbal conduct or physical contact of a sexual nature with patients or clients.
    c. Intentionally viewing a completely or partially disrobed patient in the course of treatment if the viewing is not related to patient diagnosis or treatment under current practice standards.
12. Failing to adhere to the standards of ethics of the physical therapy profession adopted by rule by the board.
13. Charging unreasonable or fraudulent fees for services performed or not performed.
14. Making misleading, deceptive, untrue, or fraudulent representations in violation of this chapter or in the practice of the profession.
15. Having been adjudged mentally incompetent by a court.
16. Aiding and abetting a person who is not licensed in this state in the performance of activities requiring a license.
17. Failing to report to the board, when there is direct knowledge, any unprofessional, incompetent, or illegal acts that appear to be in violation of this chapter or any rules established by the board.
18. Interfering with an investigation or disciplinary proceeding by failure to cooperate, by willful misrepresentation of facts, or by the use of threats or harassment against any

patient or witness to prevent that patient or witness from providing evidence in a disciplinary proceeding or any legal action.

19. Failing to maintain adequate patient records. For the purposes of this subsection, "adequate patient records" means legible records that contain at a minimum sufficient information to identify the patient, an evaluation of objective findings, a diagnosis, a plan of care, a treatment record, and a discharge plan.
20. Failing to maintain patient confidentiality without the written authorization of the patient or unless otherwise permitted by law. All records used or resulting from a consultation under section 43-51-03 are part of a patient's records and are subject to applicable confidentiality requirements.
21. Promoting any unnecessary device, treatment intervention, or service resulting in the financial gain of the practitioner or of a third party.
22. Providing treatment intervention unwarranted by the condition of the patient or continuing treatment beyond the point of reasonable benefit.
23. Participating in underutilization or overutilization of physical therapy services for personal or institutional financial gain.
24. Attempting to engage in conduct that subverts or undermines the integrity of the examination or the examination process, including a violation of security and copyright provisions related to the national licensure examination; utilizing recalled or memorized examination questions from or with any person; communicating or attempting to communicate with other examinees during the examination; or copying or sharing examination questions or portions of questions.

43-26.1-14. Lawful practice.

1. A physical therapist or physical therapist assistant licensed under this chapter is fully authorized to practice physical therapy. The board shall require each licensee to provide the board with evidence of competence regarding the various elements of manual therapy the licensee practices so the board may determine satisfactory competency levels and requirements as provided under section 43-26.1-03.
2. A physical therapist or physical therapist assistant shall adhere to the standards of ethics of the physical therapy profession as established by rule.
3. A physical therapist may purchase, store, and administer topical medications, including aerosol medications as part of the practice of physical therapy but may not dispense or sell any of the medications to patients. A physical therapist shall comply with any regulation adopted by the United States pharmacopoeia specifying protocols for storage of medications.

43-26.1-15. Terms and titles.

1. A physical therapist shall use the letters "PT" in connection with the physical therapist's name or place of business to denote licensure under this chapter.
2. Except as otherwise provided by law, a person or business entity, and its employees, agents, or representatives, shall not use in connection with that person's or entity's name or activity the words "physical therapy", "physical therapist", "physiotherapist", "registered physical therapist", the letters "PT", "MPT", "DPT", "LPT", "RPT", or any other words, abbreviation, or insignia indicating or implying directly or indirectly that physical therapy is provided or supplied, unless such services are provided by or under the direction of a physical therapist licensed pursuant to this chapter. A person or business entity shall not advertise or otherwise promote another person as being a "physical therapist" or "physiotherapist" unless the individual so advertised or promoted is licensed as a physical therapist under this chapter. A person or business entity that offers, provides, or bills any other person for services shall not characterize those services as "physical therapy" unless the individual performing that service is licensed as a physical therapist under this chapter.
3. A physical therapist assistant shall use the letters "PTA" in connection with that person's name to denote licensure under this chapter.

4. A person shall not use the title "physical therapist assistant", the letters "PTA", or any other words, abbreviations, or insignia in connection with that person's name to indicate or imply, directly or indirectly, that the person is a physical therapist assistant unless that person is licensed under this chapter.
5. A physical therapist who graduated from a doctor of physical therapy program may use the title "doctor of physical therapy". A physical therapist holding a doctor of physical therapy or other doctoral degree may not use the title "doctor" without clearly informing the public of the physical therapist's licensure as a physical therapist.

43-26.1-16. Representations and billings without licensure prohibited - Enforcement - Injunctions.

No person or business entities of any type shall practice physical therapy or hold themselves out, represent themselves, or send out billings as providing physical therapy services, without personal licensure or the use of licensed employees as provided in this chapter. It shall be unlawful to employ an unlicensed physical therapist or physical therapist assistant to provide physical therapy services. The board's executive officer, under the board's direction, shall aid state's attorneys in the enforcement of this chapter and the prosecution of any violations thereof. In addition to the criminal penalties provided by this chapter, the civil remedy of injunction shall be available to restrain and enjoin violations of this chapter without proof of actual damages sustained by any person.

43-26.1-17. Penalty.

Any person violating any of the provisions of this chapter is guilty of a class B misdemeanor.

Effective 5/8/2018

58-54-303 Supervision and prescription required -- Imaging ordered by physical therapists.

(1) The practice of radiologic technology by a radiologic technologist licensed under this chapter shall be under the general supervision of a radiologist or radiology practitioner and may be performed only upon the order of a radiologist or radiology practitioner acting within the scope of the radiologist's or radiology practitioner's license and experience within the scope of practice of a radiology practitioner.

(2)

(a) Notwithstanding Subsection (1), a physical therapist acting within the scope of the physical therapist's license and experience may order plain radiographs and magnetic resonance imaging if:

(i) the physical therapist designates a physician to receive the results of the plain radiographs or magnetic resonance imaging; and

(ii) the physician designated in Subsection (2)(a)(i) agrees to receive the results of the plain radiographs or magnetic resonance imaging.

(b) A physical therapist who orders plain radiographs or magnetic resonance imaging under Subsection (2)(a) shall:

(i) communicate with the patient's physician to ensure coordination of care; and

(ii) refer a patient to an appropriate provider when the findings of the imaging that was ordered by the physical therapist indicate that the services that are needed exceed the physical therapist's experience and scope of practice.

(c) A physical therapist is not subject to Subsection (2)(b)(i) if:

(i) a radiologist has read the image and has not identified a significant finding;

(ii) the patient does not have a primary care physician; and

(iii) the patient was not referred to the physical therapist for health care services by another health care provider.

Amended by Chapter 242, 2018 General Session

~~technical correction; child care; licensing~~
(now: physical therapy; practice; imaging)

State of Arizona
Senate
Fifty-fifth Legislature
Second Regular Session
2022

CHAPTER 289

SENATE BILL 1312

AN ACT

AMENDING SECTION 32-2001, ARIZONA REVISED STATUTES; AMENDING TITLE 32, CHAPTER 19, ARTICLE 3, ARIZONA REVISED STATUTES, BY ADDING SECTION 32-2041.01; RELATING TO PHYSICAL THERAPY.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 32-2001, Arizona Revised Statutes, is amended to read:

32-2001. Definitions

In this chapter, unless the context otherwise requires:

1. "Assistive personnel":

(a) Includes:

(i) Physical therapist assistants. ~~and~~

(ii) Physical therapy aides. ~~and~~

(iii) Other assistive personnel who are trained or educated health care providers and who are not physical therapist assistants or physical therapy aides but who perform specific designated tasks related to physical therapy under the supervision of a physical therapist. At the discretion of the supervising physical therapist, and if properly credentialed and not prohibited by any other law, other assistive personnel may be identified by the title specific to their training or education. ~~This paragraph~~

(b) Does not ~~apply to~~ INCLUDE personnel assisting other health care professionals licensed pursuant to this title in ~~the performance of~~ PERFORMING delegable treatment responsibilities within their scope of practice.

2. "Board" means the board of physical therapy.

3. "Business entity" means a business organization that has an ownership that includes any persons who are not licensed or certified to provide physical therapy services in this state, that offers to the public professional services regulated by the board and that is established pursuant to the laws of any state or foreign country.

4. "Dry needling" means a skilled intervention performed by a physical therapist that uses a thin filiform needle to penetrate the skin and stimulate underlying neural, muscular and connective tissues ~~for the evaluation~~ TO EVALUATE and ~~management of~~ MANAGE neuromusculoskeletal conditions, pain and movement impairments.

5. "General supervision" means that the supervising physical therapist is on call and is readily available via telecommunications when the physical therapist assistant is providing treatment interventions.

6. "Interim permit" means a permit issued by the board that allows a person to practice as a physical therapist in this state or to work as a physical therapist assistant for a specific period of time and under conditions prescribed by the board before that person is issued a license or certificate.

7. "Manual therapy techniques" means a broad group of passive interventions in which physical therapists use their hands to administer skilled movements designed to modulate pain, increase joint range of motion, reduce or eliminate soft tissue swelling, inflammation~~,~~ or restriction, induce relaxation, improve contractile and noncontractile

tissue extensibility, and improve pulmonary function. These interventions involve a variety of techniques, such as the application of graded forces.

8. "On-site supervision" means that the supervising physical therapist is on site and is present in the facility or on the campus where assistive personnel or a holder of an interim permit is performing services, is immediately available to assist the person being supervised in the services being performed and maintains continued involvement in appropriate aspects of each treatment session in which a component of treatment is delegated.

9. "Physical therapist" means a person who is licensed pursuant to this chapter.

10. "Physical therapist assistant" means a person who meets the requirements of this chapter for certification and who performs physical therapy procedures and related tasks that have been selected and delegated by the supervising physical therapist.

11. "Physical therapy" means the care and services provided by or under the direction and supervision of a physical therapist who is licensed pursuant to this chapter.

12. "Physical therapy aide" means a person who is trained under the direction of a physical therapist and who performs designated and supervised routine physical therapy tasks.

13. "Practice of physical therapy" means:

(a) Examining, evaluating and testing persons who have mechanical, physiological and developmental impairments, functional limitations and disabilities or other health and movement related conditions in order to determine a diagnosis, a prognosis and a plan of therapeutic intervention and to assess the ongoing effects of intervention, INCLUDING ORDERING MUSCULOSKELETAL IMAGING CONSISTING OF PLAIN FILM RADIOGRAPHS.

(b) Alleviating impairments and functional limitations by managing, designing, implementing and modifying therapeutic interventions including:

(i) Therapeutic exercise.

(ii) Functional training in self-care and in home, community or work reintegration.

(iii) Manual therapy techniques.

(iv) Therapeutic massage.

(v) Assistive and adaptive orthotic, prosthetic, protective and supportive devices and equipment.

(vi) Pulmonary hygiene.

(vii) Debridement and wound care.

(viii) Physical agents or modalities.

(ix) Mechanical and electrotherapeutic modalities.

(x) Patient related instruction.

(c) Reducing the risk of injury, impairments, functional limitations and disability by means that include promoting and maintaining a person's fitness, health and quality of life.

(d) Engaging in administration, consultation, education and research.

14. "Restricted certificate" means a certificate on which the board ~~has placed~~ PLACES any restrictions as the result of a disciplinary action.

15. "Restricted license" means a license on which the board places restrictions or conditions, or both, as to the scope of practice, place of practice, supervision of practice, duration of licensed status or type or condition of a patient to whom the licensee may provide services.

16. "Restricted registration" means a registration ON WHICH the board ~~has placed~~ PLACES any restrictions ~~on~~ as the result of disciplinary action.

Sec. 2. Title 32, chapter 19, article 3, Arizona Revised Statutes, is amended by adding section 32-2041.01, to read:

32-2041.01. Musculoskeletal imaging; ordering; requirements; reporting

A. A PHYSICAL THERAPIST MAY ORDER MUSCULOSKELETAL IMAGING CONSISTING OF PLAIN FILM RADIOGRAPHS. THE IMAGING SHALL BE PERFORMED BY A HEALTH CARE PRACTITIONER WHO IS AUTHORIZED PURSUANT TO THIS TITLE TO PERFORM THE IMAGING AND SHALL BE INTERPRETED BY A PHYSICIAN WHO IS LICENSED PURSUANT TO CHAPTER 13, 14 OR 17 OF THIS TITLE AND TRAINED IN RADIOLOGY INTERPRETATION.

B. A PHYSICAL THERAPIST SHALL REPORT RESULTS FOR ALL IMAGING TESTS THE PHYSICAL THERAPIST ORDERS PURSUANT TO SUBSECTION A OF THIS SECTION TO THE PATIENT'S HEALTH CARE PRACTITIONER OF RECORD OR THE REFERRING HEALTH CARE PRACTITIONER, IF DESIGNATED, WITHIN SEVEN DAYS AFTER RECEIVING THE RESULTS. IF THE PATIENT DOES NOT HAVE A HEALTH CARE PRACTITIONER OF RECORD, THE PHYSICAL THERAPIST SHALL REFER THE PATIENT TO AN APPROPRIATE HEALTH CARE PRACTITIONER IF THE PHYSICAL THERAPIST HAS REASONABLE CAUSE TO BELIEVE THAT ANY SYMPTOMS OR CONDITIONS ARE PRESENT THAT MAY REQUIRE SERVICES BEYOND THE PHYSICAL THERAPIST'S SCOPE OF PRACTICE.

APPROVED BY THE GOVERNOR JUNE 13, 2022.

FILED IN THE OFFICE OF THE SECRETARY OF STATE JUNE 13, 2022.

Department of Veterans Affairs
Veterans Health Administration
Washington, DC 20420

VHA DIRECTIVE 1170.05
Transmittal Sheet
May 11, 2020

PHYSICAL THERAPY PRACTICE

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) directive defines the physical therapy scope of practice, which includes evaluation, treatment, consultation, education, research, health maintenance/coaching, program development and oversight, and provides assistance to Department of Veterans Affairs (VA) medical facility leadership and clinicians in establishing, maintaining, and improving physical therapy services and programs. This allows for progression of evolving profession to practice at the highest level of licensure and training.

2. SUMMARY OF CONTENT: This is a new directive establishing policy for the scope of practice for physical therapists and physical therapist assistants and provides authority for the establishment of performance goals.

3. RELATED ISSUES: VA Handbook 5005/99, Staffing, Part II, Appendix G-12, dated February 7, 2018; VHA Directive 1170.03, Physical Medicine and Rehabilitation Service, dated November 5, 2019.

4. RESPONSIBLE OFFICE: The Director, Physical Medicine and Rehabilitation Service (PM&RS) (10P4R), and the Physical Therapy Executive are responsible for the contents of this directive. Questions may be referred to the VHA Physical Therapy Executive at 515-699-5510 or the PM&RS Program Office at pmrsprogramoffice@va.gov.

5. RESCISSIONS: None.

6. RECERTIFICATION: This VHA directive is scheduled for recertification on or before the last working day of May 2025. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

BY DIRECTION OF THE OFFICE OF
THE UNDER SECRETARY FOR HEALTH:

/s/ Lucille B. Beck, PhD
Deputy Under Secretary for
Health for Policy and Services

NOTE: *All references herein to VA and VHA documents incorporate by reference subsequent VA and VHA documents on the same or similar subject matter*.

DISTRIBUTION: Emailed to the VHA Publications Distribution List on May 12, 2020.

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PHYSICAL THERAPY PRACTICE

PHYSICAL THERAPY PRACTICE

1. PURPOSE

This Veterans Health Administration (VHA) directive defines the physical therapy scope of practice, which includes evaluation, treatment, consultation, education, research, health maintenance/coaching, program development and oversight, and provides assistance to Department of Veterans Affairs (VA) medical facility leadership and clinicians in establishing, maintaining, and improving physical therapy services and programs. This allows for progression of evolving profession to practice at the highest level of licensure and training. **AUTHORITY:** Title 38 United States Code (U.S.C.) 7301(b), 7402(b)(14).

2. BACKGROUND

a. The goal of physical therapy is to restore, optimize, and promote physical function, health, and wellness. Physical therapy is a dynamic profession with an established theoretical and scientific base and widespread clinical applications for restoration, maintenance, and promotion of optimal function. Physical therapy within the United States (U.S.) was born out of the necessity to meet the needs of American Service members injured during World War I. VA Physical Therapists (PTs) are licensed independent practitioners who continue to serve the VA mission by helping enrolled Veterans and other individuals who are eligible for VA health care maintain, restore, and improve movement, activity, and functioning, thereby enabling optimal performance and enhancing health, well-being, and quality of life. Moreover, physical therapy services work to prevent, minimize, or eliminate impairments and any limitations in their activities of daily living or functional independence. Physical Therapist Assistants (PTAs) practice only under the plan of care established by a PT.

b. Physical therapy clinical evaluations include but are not limited to patient history, systems review, and standardized tests to identify potential and existing problems including physical therapy treatment diagnosis. PTs synthesize the examination data and develop individualized plans of care that incorporate clinical judgment, the best available scientific evidence, socioeconomic factors, and patient goals. Clinical management requires ongoing assessment of progress towards patient goals of care and modifications of the treatment plan, including collaboration with and referrals to other health care providers, as indicated.

c. PT entry level education is at the doctoral level. In addition to the entry level doctorate, there are other PT board certifications recognizing advanced practice, identified by organizations that include but are not limited to the American Board of Physical Therapy Specialties, the Hand Therapy Certification Commission, the Lymphology Association of North America, the American Board of Wound Management, and the Rehabilitation Engineering and Assistive Technology Society of North America. PTs function at the highest level of licensure and training.

d. PTA education is an associate degree with the potential for advanced practice recognition.

e. PTs and PTAs in the U.S. are licensed and regulated by a State, territory, or Commonwealth of the U.S. or the District of Columbia. As of January 1, 2015, all 50 states, the District of Columbia, and the U.S. Virgin Islands allow patients to seek treatment from a licensed physical therapist without a prescription or referral. Patients are able to self-refer to physical therapists without being referred by a physician or other health care practitioner. The health care provider of record is sufficient to satisfy the requirements of institutional billing; therefore, initial certification and re-certification is not required for coverage of Physical Therapy services.

3. POLICY

It is VHA policy to provide high quality physical therapy services by ensuring that physical therapy services align to the practice standards of VA and the American Physical Therapy Association (APTA) and established strategic goals.

4. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health is responsible for ensuring overall VHA compliance with this directive.

b. **Deputy Under Secretary for Health for Operations and Management.** The Deputy Under Secretary for Health for Operations and Management is responsible for:

(1) Communicating the contents of this directive to each of the Veterans Integrated Services Networks (VISNs).

(2) Ensuring that each VISN Director has the sufficient resources to implement this directive in all VA medical facilities within that VISN.

(3) Providing oversight of VISNs to assure compliance with this directive, relevant standards, and applicable regulations.

c. **Deputy Under Secretary for Health for Policy and Services.** The Deputy Under Secretary for Health for Policy and Services is responsible for supporting the implementation and oversight of this directive across VHA.

d. **Deputy Chief Patient Care Services Officer for Rehabilitation and Prosthetic Services.** The Deputy Chief Patient Care Services Officer for Rehabilitation and Prosthetic Services is responsible for:

(1) Ensuring support and resources for successful implementation of this directive.

(2) Communicating programmatic changes, performance metrics, and progress on strategic goals to the Deputy Under Secretary for Health for Policy and Services.

(3) Establishing annual strategic goals based on VHA leadership priorities.

(4) Establishing performance metrics and goals and the reporting and oversight structure for the delivery of physical therapy services. These metrics and goals must be reviewed annually and updated as needed and made available to the field.

(5) Overseeing the VHA Physical Therapy (VHA PT) Executive.

e. **VHA Physical Therapy Executive.** The VHA PT Executive provides policy guidance in the overall administration of a system-wide physical therapy health care service. The VHA PT Executive is responsible for:

(1) Establishing and disseminating overarching VHA physical therapy policy and determining the effectiveness and efficacy of the policy and field compliance using established reports, surveys, and measurement instruments. This includes reports provided by VISN Directors.

(2) Providing guidance and clarification of the establishment of scopes of practice and credentialing.

(3) Suggesting staffing levels and appropriate utilization of PTs and PTAs for VISNs and VA medical facilities upon request.

(4) Initiating, promoting, and leading effective collaborations with other VHA program offices to integrate the delivery of comprehensive physical therapy health care services to patients and continuously evaluating and improving the delivery of health care to Veterans.

(5) Overseeing physical therapy performance and strategic goals established by the Deputy Chief Patient Care Services Officer for Rehabilitation and Prosthetic Services, and other VHA leadership based on priorities.

f. **Veterans Integrated Services Networks Director.** The VISN Director provides a critical juncture in implementation and support for physical therapy services, balancing local needs within the framework of national strategic initiatives and national policy. The VISN Director, or designee, is responsible for:

(1) Ensuring that all VA medical facilities within the VISN comply with this directive.

(2) Providing necessary support and resources to ensure high-quality, efficient, and accessible physical therapy services sufficient to meet network and local needs while achieving VA and VHA strategic priorities, objectives, and goals.

(3) Working with the VHA PT Executive to ensure there is a VISN PT designee to serve as point of contact to ensure communication channels regarding the VHA Physical Therapy Practice are available between VA Central Office, the VISN, and VA medical facilities.

(4) Ensuring that established physical therapy performance goals are reported to the VHA PT Executive.

(5) Reviewing available data resources, and reports from the VA medical facility director that track PT and PTA workload, productivity, cost, utilization, access, and other available and relevant metrics within the VISN. VHA Rehabilitation and Prosthetic Services data resources can be found here: https://reports.vssc.med.va.gov/Reports/report/OPES/RehabSPARQ/SpecialtyQuadrant. ***NOTE:*** *This is an internal VA Web site that is not available to the public.*

g. **VA Medical Facility Director.** The VA medical facility Director is responsible for:

(1) Ensuring that physical therapy programs are consistent with applicable VHA policies.

(2) Ensuring that physical therapy services are delivered by a qualified and competent workforce in a high-quality and efficient manner that supports VA and VHA strategic goals.

(3) Ensuring VA Handbook 5005/99; VA Directive 5017, Employee Recognition and Awards, dated April 15, 2002; and other VA and VHA policies related to recruitment, appointment, promotion, recognition, and advancement are consistently implemented.

(4) Engaging with local PTs and PTAs to determine appropriate local performance and outcome measures set against national standards and related to areas such as access and scheduling to evaluate local practice. The needs of the VA medical facility must shape these discussions (e.g., VHA access criteria).

(5) Considering the quality of care to Veterans foremost in making decisions on staffing in conjunction with VA medical facility physical therapy leadership.

(6) Providing adequate space for the provision of diagnostic and therapeutic services for the effective and efficient delivery physical therapy services. Established criteria for minimum space requirements are provided in VA Space Planning Criteria, Chapter 270: Veterans Health Administration: Physical Medicine and Rehabilitation Service, available at http://www.cfm.va.gov/til/space.asp#VHA.

(7) Using available local, VISN, and VHA Rehabilitation and Prosthetic Services data resources and reports from the VA medical facility Supervisor of Physical Therapy Services to track and analyze PT and PTA workload, productivity, cost, utilization, and access, and report findings to the VISN Director. VHA Rehabilitation and Prosthetic Services data resources can be found here: https://reports.vssc.med.va.gov/Reports/report/OPES/RehabSPARQ/SpecialtyQuadrant. ***NOTE:*** *This is an internal VA Web site that is not available to the public.*

(8) Implementing quality management initiatives related to the mix and level of staff required, based upon trends in performance measures, patient outcomes, or other

indicators or monitors of the accessibility and quality of care provided after seeking input from PTs and PTAs providing the care or services involved.

(9) Determining the appropriate equipment, resources, and necessary supplies to provide diagnostic testing and rehabilitation. This includes, but is not limited to:

(a) Therapeutic and rehabilitative equipment, devices, expendables, and tools sufficient for the treatment and management of disorders associated with the practice of physical therapy involving a full range of patient complexity;

(b) Computers, Internet connectivity, and information technology sufficient to run clinical equipment, and analyze diagnostic results, provide staff and patient education, and manage health records; and

(c) Physical therapy equipment that requires calibration must be maintained according to current standards published by the American National Standards Institute or other established standard organization. ***NOTE:*** *Appropriate standards depend on contracts and manufacturer.*

(10) Ensuring that credentialing staff verify that each PT and PTA possesses a full current and unrestricted license for as required, in accordance with VHA Handbook 1100.19, Credentialing and Privileging, dated October 15, 2012, and the appropriate VA qualification standard for the occupation.

(11) Determining appropriate organizational placement of PTs and PTAs.

(12) Reporting established national physical therapy performance goals to the VISN Director.

(13) Ensuring consistent standard operating procedures are in place to address practice, supervision, and physical therapy service administration (i.e., scope of practice or credentialing in accordance with VHA Handbook 1100.19).

h. **Chief of Staff, Associate Director, Patient Care Services, or Nursing Executive.** Depending on the VA medical facility's reporting structure as established by the VA medical facility Director, the Chief of Staff, Associate Director, Patient Care Services, or Nursing Executive is responsible for collaborating with the VA medical facility Supervisor of Physical Therapy Services or equivalent to develop consistent standard operating procedures to address practice, supervision, and physical therapy service administration (i.e., scope of practice or credentialing and privileging relevant to physical therapy in accordance with VHA Handbook 1100.19).

i. **VA Medical Facility Chief Physical Medicine and Rehabilitation.** The VA medical facility Chief Physical Medicine and Rehabilitation (Chief PM&R) or equivalent service or designee is responsible for:

(1) Ensuring that their staff has been informed of the contents of this directive.

(2) Ensuring standard operating procedures to cover the provision of physical therapy to address clinical services not otherwise outlined in this directive.

(3) Providing clinical and administrative support as needed.

j. **VA Medical Facility Supervisor of Physical Therapy Services.** ***NOTE:*** *In those VA medical facilities where no supervisory PT is assigned, a physical therapy Chief, Program Manager, or Lead is responsible for the management of professional and administrative activities. For the purpose of this directive, the term Supervisor, Physical Therapy Service will be used as the title for the person responsible for the management of the Physical Therapy Service. If the Supervisor of PT is not a PT, it is essential that documentation of competence for PTs be performed by a PT.* The VA medical facility Supervisor of Physical Therapy Services or equivalent title is responsible for:

(1) Collaborating with the VA medical facility Chief of Staff to develop consistent standard operating procedures to address practice, supervision, and physical therapy service administration (i.e., scope of practice or credentialing and privileging relevant to physical therapy in accordance with VHA Handbook 1100.19).

Tracking, analyzing, and trending variations in patient outcomes and performance metrics established by the Office of Productivity, Efficiency and Staffing (OPES) to assess VA medical facility needs and the effectiveness of staffing plans, making adjustments as indicated, and reporting metrics on established performance goals to the VA medical facility Director. Dashboards reporting OPES information are available at https://vaww.infoshare.va.gov/sites/rehab/Data%20References/Forms/AllItems.aspx. ***NOTE:*** *This is an internal VA Web site that is not available to the public.*

(2) Referring to relevant productivity tracking resources to track productivity and establish reasonable workload and productivity goals for PTs and PTAs, considering the unique scope and complexity of physical therapy services, quality of health care services, access goals, expected and emerging demand for services, sustainability, cost, availability of resources, and staff morale. Dashboards reporting this information are available at https://vaww.infoshare.va.gov/sites/rehab/Data%20References/Forms/AllItems.aspx. ***NOTE:*** *This is an internal VA Web site that is not available to the public.*

(3) Ensuring coordination and collaboration within the physical therapy service and with other relevant VA medical facility programs.

(4) Defining, assigning, and delegating duties and responsibilities, evaluating the work of employees at least annually, and administrating appropriate disciplinary actions.

(5) Collaborating with the Designated Learning Officer, ensuring effective academic affiliations when appropriate.

(6) Encouraging professional development and providing training and continuing education resources to physical therapy staff.

(7) Contributing to budget development and communicating resource needs to accomplish the PM&R's mission to upper-level management using evidence-based data to justify requests.

(8) Ensuring that physical therapy services are provided in a timely, effective, and efficient manner by utilizing available data resources.

(9) Providing general supervision of other professional, technical, and clerical staff such as occupational therapists and kinesiotherapists if assigned.

(10) Ensuring established performance goals are met by VA PTs and VA PTAs.

k. **VA Medical Facility Physical Therapist.** The VA medical facility PT is responsible for:

(1) Providing patient evaluation, examination, diagnosis, prognosis, establishing plan of care, treatment, and interventions based upon their evaluation.

(2) Providing patient health and wellness interventions and education evaluation in muscle strength, balance and coordination, joint flexibility, physical endurance, locomotion and transfer mobility, and pain.

(3) Providing patient physical therapy assessment techniques including, but not limited to:

(a) Strength and range of motion;

(b) Gait analysis;

(c) Posture;

(d) Balance and coordination;

(e) Transfer mobility;

(f) Pain;

(g) Physical endurance; and

(h) Systems Review (i.e., Neuromuscular, Musculoskeletal, Integumentary, and Cardiovascular/pulmonary).

(4) Providing common physical therapy interventions, if applicable, including, but not limited to:

(a) Therapeutic exercise and activities;

(b) Strength and conditioning training;

(c) Joint mobilization;

(d) Manipulation;

(e) Soft tissue mobilization;

(f) Debridement and wound care;

(g) Pelvic health intervention;

(h) Gait analysis and training;

(i) Mobility assessment and training;

(j) Environmental assessment;

(k) Therapeutic dry needling;

(l) Fabrication and modification of assistive, adaptive, orthotic, prosthetic, protective, casting, and supportive devices and equipment;

(m) Airway clearance techniques;

(n) Lymphedema management;

(o) Aquatic therapy;

(p) Application of physical agents or modalities, including thermal and nonthermal but not limited to mechanical and electrotherapeutic modalities; and

(q) Any other practices that are informed by evidence and linked to existing or emerging practice models such as additional privileges with demonstrated training (i.e. initiating electromyographic testing, battlefield/auricular acupuncture, ordering diagnostic imaging and laboratory studies, and specific pharmacy and therapeutic medications approved by the VA medical facility in accordance with applicable requirements from The Joint Commission).

(5) Providing patient, caregiver, and family education efforts that include injury prevention, human performance optimization, and management of chronic conditions and pain management strategies (see the APTA Web site at http://www.apta.org for more information on physical therapy education efforts). ***NOTE:*** *PTs provide supervision as appropriate to PTAs. Supervision can occur through an in-person or telehealth visit. A PT must use professional judgement when delegating to a PTA and how frequently the PT needs to participate in the frequency of physical therapy services provided. Only the PT performs the initial examination and reexamination of the patient and may utilize the PTA in collection of selected examination and outcomes data.*

l. **VA Medical Facility Physical Therapist Assistant.** The VA medical facility PTA is responsible for:

(1) Collaborating with the primary VA medical facility PT and drawing upon practical knowledge and treatment skill set in order to reach pre-determined patient goals by independently modifying techniques within the established patient plan of care.

(2) Implementing the patient plan of care under the direction of the primary VA medical facility PT for patient cases, advancing the program and continually reviewing the patient's condition to determine medical and functional status.

(3) Performing selected physical therapy intervention as outlined in APTA's Guide to Physical Therapy Practice, with no less than general supervision by the PT. This guide and the recommended Federal scope of practice are available on APTA's Web site at http://www.apta.org.

NOTE: *General physical therapist supervision and participation can occur through an in-person or telehealth visit. Supervision may occur across state lines while performing in their official capacity as a VA employee. In general supervision, the PT is not required to be on-site for direction and supervision but must be available at minimum by telecommunication*.

(4) Providing evidenced based skilled patient interventions including, but not limited to:

(a) Therapeutic exercise;

(b) Therapeutic activities;

(c) Therapeutic modalities;

(d) Gait training;

(e) Transfer training;

(f) Manual treatment;

(g) Neuromuscular re-education;

(h) Self-care and management training; and

(i) Patient and caregiver education and group therapy.

5. TRAINING

There are no formal training requirements associated with this directive.

6. RECORDS MANAGEMENT

All records regardless of format (e.g., paper, electronic, electronic systems) created by this directive shall be managed per the National Archives and Records Administration (NARA) approved records schedules found in VA Records Control

Schedule 10-1. Questions regarding any aspect of records management should be addressed to the appropriate Records Manager or Records Liaison.

7. REFERENCES

a. 38 U.S.C. 7301(b).

b. 38 U.S.C. 7402(b)(14).

c. VA Directive 5017, Employee Recognition and Awards, dated April 15, 2002.

d. VA Handbook 5005/99, Staffing, dated April 15, 2002.

e. VA Handbook 5005/99, Staffing, Part II, Appendix G-12, dated February 7, 2018.

f. VHA Directive 1170.03, Physical Medicine and Rehabilitation Service, dated November 5, 2019.

g. VHA Handbook 1100.19, Credentialing and Privileging, dated October 15, 2012.

h. VHA Procedure Guide 1601C.03, Physical Therapy and Rehabilitation Services Reasonable Charges and Billing, Chapter 7, Section C. 2019

i. VA Space Planning Criteria, Chapter 270: Veterans Health Administration: Physical Medicine and Rehabilitation Service, http://www.cfm.va.gov/til/space.asp#VHA.

j. American Board of Physical Therapy Specialties, http://www.abpts.org.

k. American Board of Wound Management, http://www.abwmcertified.org.

l. American National Standards Institute, http://www.ansi.org.

m. American Physical Therapy Association, http://www.apta.org.

n. American Physical Therapy Association, Guide to Physical Therapist Practice, http://guidetoptpractice.apta.org.

o. American Physical Therapy Association, Physical Therapist Scope of Practice, http://www.apta.org/ScopeOfPractice.

p. The Hand Therapy Certification Commission, http://www.htcc.org.

q. The Lymphology Association of North America, http://www.clt-lana.org.

r. Rehabilitation Engineering and Assistive Technology Society of North America http://www.resna.org.

MODEL OCCUPATIONAL THERAPY PRACTICE ACT

The Model Occupational Therapy Practice Act (Model Practice Act) has been developed by the State Affairs Group of the American Occupational Therapy Association, in collaboration with the Commission on Practice for use by state occupational therapy associations or state regulatory boards interested in developing or revising legislation to regulate the practice of Occupational Therapy. The Model Practice Act also includes the definition of Occupational Therapy, which is approved by the Representative Assembly Coordinating Committee (RACC) on behalf of the Representative Assembly (RA) and is included in the Scope of Practice Official Document[1]. The current definition was approved in 2021.

The Model Practice Act must be reviewed and carefully adapted to comply with a state's legislative requirements and practices. It must also be adapted to reflect a state's administrative and regulatory laws and other legal procedures. The Model Practice Act leaves blanks or indicates alternatives in brackets when further detail needs to be considered or when adaptions are especially necessary. The term "state" is used throughout the document for ease of reading. Other jurisdictions, such as the District of Columbia and Puerto Rico, will need to modify the language accordingly.

[1] American Occupational Therapy Association. (2021). Occupational therapy scope of practice. *American Journal of Occupational Therapy, 75*(Suppl. 3), 7513410030. https://doi.org/10.5014/ajot.2021.75S3005

American Occupational Therapy Association
State Affairs Group
1-800-SAY-AOTA (members)
301-652-6611 (non-members)
stpd@aota.org

December 2022

MODEL OCCUPATIONAL THERAPY PRACTICE ACT TABLE OF CONTENTS

Article I. General Provisions

1.01 Title [Title should conform to state requirements. The following is suggested for appropriate adaptation.]

An Act providing for the licensure of Occupational Therapists and Occupational Therapy Assistants; for a Board of Occupational Therapy practice and its powers and duties; and for related purposes.

1.02 Short Title

This Act shall be known and may be cited as the "Occupational Therapy Practice Act."

1.03 Legislative Intent and Purpose

The Legislature finds and declares that the Occupational Therapy Practice Act is enacted to safeguard public health, safety, and welfare; to protect the public from incompetent, unethical, or unauthorized persons; to assure a high level of professional conduct on the part of Occupational Therapists and Occupational Therapy Assistants; and to assure the availability of high quality Occupational Therapy services to persons in need of such services. It is the purpose of this Act to provide for the regulation of persons representing themselves as Occupational Therapists or as Occupational Therapy Assistants, or performing services that constitute Occupational Therapy.

1.04 Definitions

(1) "Act" means the Occupational Therapy Practice Act.
(2) "Aide" means a person who is not licensed by the Board and who provides supportive services to Occupational Therapists and Occupational Therapy Assistants. An Aide shall function only under the guidance, responsibility, and supervision of the licensed Occupational Therapist or an Occupational Therapy Assistant who is appropriately supervised by an Occupational Therapist. An Aide does not provide occupational therapy services. An Aide must first demonstrate competence before performing assigned, delegated, client related and non–client related tasks.
(3) "Association" means the _____ State Occupational Therapy Association.
(4) "Board" means the _____ State Board of Occupational Therapy.
(5) "Good Standing" means the individual's license is not currently suspended or revoked by any State regulatory entity.
(6) "Continuing Competence" means the process in which an occupational therapist or occupational therapy assistant develops and maintains the knowledge, critical reasoning, interpersonal skills, performance skills, and ethical practice necessary to perform their occupational therapy responsibilities.
(7) "The Practice of Occupational Therapy" means the therapeutic use of everyday life occupations with persons, groups, or populations (clients) to support occupational performance and participation. Occupational therapy practice includes clinical reasoning and professional judgment to evaluate, analyze, and diagnose occupational challenges (e.g., issues with client factors, performance patterns, and performance skills) and provide occupation-based interventions to address them. Occupational therapy services include habilitation, rehabilitation, and the promotion of physical and mental health and wellness for clients with all levels of ability-related needs. These services are provided for clients who have or are at risk for developing an illness, injury, disease, disorder, condition, impairment, disability, activity limitation, or participation restriction. Through the provision of skilled services and engagement in everyday activities, occupational therapy promotes physical and mental health and well-being by supporting occupational performance in people with, or at risk of experiencing, a range of developmental,

physical, and mental health disorders. The practice of occupational therapy includes the following components:

a) Evaluation of factors affecting activities of daily living (ADLs), instrumental activities of daily living (IADLs), health management, rest and sleep, education, work, play, leisure, and social participation, including
    1. Context (environmental and personal factors) and occupational and activity demands that affect performance
    2. Performance patterns including habits, routines, roles, and rituals
    3. Performance skills, including motor skills (e.g., moving oneself or moving and interacting with objects), process skills (e.g., actions related to selecting, interacting with, and using tangible task objects), and social interaction skills (e.g., using verbal and nonverbal skills to communicate)
    4. Client factors, including body functions (e.g., neuromuscular, sensory, visual, mental, psychosocial, cognitive, pain factors), body structures (e.g., cardiovascular, digestive, nervous, integumentary, and genitourinary systems; structures related to movement), values, and spirituality
b) Methods or approaches to identify and select interventions, such as
    1. Establishment, remediation, or restoration of a skill or ability that has not yet developed, is impaired, or is in decline
    2. Compensation, modification, or adaptation of occupations, activities, and contexts to improve or enhance performance
    3. Maintenance of capabilities to prevent decline in performance in everyday life occupations
    4. Health promotion and wellness to enable or enhance performance in everyday life activities and quality of life
    5. Prevention of occurrence or emergence of barriers to performance and participation, including injury and disability prevention
c) Interventions and procedures to promote or enhance safety and performance in ADLs, IADLs, health management, rest and sleep, education, work, play, leisure, and social participation, for example:
    1. Therapeutic use of occupations and activities
    2. Training in self-care, self-management, health management (e.g., medication management, health routines), home management, community/work integration, school activities, and work performance
    3. Identification, development, remediation, or compensation of physical, neuromusculoskeletal, sensory–perceptual, emotional regulation, visual, mental, and cognitive functions; pain tolerance and management; praxis; developmental skills; and behavioral skills
    4. Education and training of persons, including family members, caregivers, groups, populations, and others
    5. Care coordination, case management, and transition services
    6. Consultative services to persons, groups, populations, programs, organizations, and communities
    7. Virtual interventions (e.g., simulated, real-time, and near-time technologies, including telehealth and mobile technology)
    8. Modification of contexts (environmental and personal factors in settings such as home, work, school, and community) and adaptation of processes, including the application of ergonomic principles

9. Assessment, design, fabrication, application, fitting, and training in seating and positioning, assistive technology, adaptive devices, and orthotic devices, and training in the use of prosthetic devices
10. Assessment, recommendation, and training in techniques to enhance functional mobility, including fitting and management of wheelchairs and other mobility devices
11. Exercises, including tasks and methods to increase motion, strength, and endurance for occupational participation
12. Remediation of and compensation for visual deficits, including low vision rehabilitation
13. Driver rehabilitation and community mobility
14. Management of feeding, eating, and swallowing to enable eating and feeding performance
15. Application of physical agent and mechanical modalities and use of a range of specific therapeutic procedures (e.g., wound care management; techniques to enhance sensory, motor, perceptual, and cognitive processing; manual therapy techniques) to enhance performance skills
16. Facilitating the occupational participation of persons, groups, or populations through modification of contexts (environmental and personal) and adaptation of processes
17. Efforts directed toward promoting occupational justice and empowering clients to seek and obtain resources to fully participate in their everyday life occupations
18. Group interventions (e.g., use of dynamics of group and social interaction to facilitate learning and skill acquisition across the life course).

(8) "Occupational Therapist" means a person licensed to practice Occupational Therapy under this Act. The Occupational Therapist is responsible for and directs the evaluation process, develops the intervention plan, and provides occupational therapy services.

(9) "Occupational Therapy Assistant" means a person licensed to assist in the practice of Occupational Therapy under this Act and who shall work under the appropriate supervision of and in partnership with an Occupational Therapist.

(10) "Person" means any individual, partnership, unincorporated organization, limited liability entity, or corporate body, except that only an individual may be licensed under this Act.

(11) "Supervision" means a collaborative process for responsible, periodic review and inspection of all aspects of occupational therapy services. The Occupational Therapist is accountable for occupational therapy services provided by the Occupational Therapy Assistant and the Aide. In addition, the Occupational Therapy Assistant is accountable for occupational therapy services they provide. Within the scope of occupational therapy practice, supervision is aimed at ensuring the safe and effective delivery of occupational therapy services and fostering professional competence and development.

(12) "Telehealth" means the application of evaluation, consultative, preventative, and therapeutic services delivered through information and communication technology.

Article II. Board of Occupational Therapy

2.01 Board Created

There is hereby established the _____ Board of Occupational Therapy hereafter referred to as the Board, which shall be responsible for the implementation and enforcement of this Act.

2.02 Board Composition

(1) The Board shall be composed of at least five individuals appointed by the Governor.
(2) At least two members shall be licensed as Occupational Therapists in this state.
(3) At least one member shall be an Occupational Therapy Assistant licensed in this state.
(4) At least two members shall be representatives of the public with an interest in the rights of consumers of health and wellness services (public member) and a representative of healthcare or education (consumer member).

2.03 Qualifications

(1) Public and Consumer Members must reside in this state for at least 5 years immediately preceding their appointment. Public members and consumer members shall understand or be willing to learn the specific responsibilities of the Board; be willing to learn about and develop contacts with major community service, civic, consumer, public service, religious, and other organizations in their state that have an interest in health care delivery and health care policy, including organizations that represent disadvantaged communities, rural, and non-English speaking populations; and have a track record of advocacy related to furthering consumer interests, especially in the area of health care. Public and consumer members may not be or have ever been Occupational Therapists or Occupational Therapy Assistants or in training to become an Occupational Therapist or Occupational Therapy Assistant. Public and consumer members may not be related to or have a household member who is an Occupational Therapist or an Occupational Therapy Assistant. The consumer member shall have knowledge of the profession of occupational therapy through personal experience. The public member shall have knowledge of the profession of occupational therapy through professional experience in health care reimbursement, regulatory, or policy arenas.
(2) Occupational Therapy and Occupational Therapy Assistant members must be licensed consistent with state law and reside in the state for at least 5 years, or have a privilege to practice through the Occupational Therapy Licensure Compact, and have been engaged in: rendering occupational therapy services to the public; teaching; consultation; or research in occupational therapy for at least 5 years, including the 3 years immediately preceding their appointment.
(3) No member shall be a current officer, Board member, or employee of a statewide organization established for the purpose of advocating for the interests of persons licensed under this Act.

2.04 Appointments

(1) Within 90 days after the enactment of this Act, the first Board shall be appointed by the Governor from a list of names submitted by the State Occupational Therapy Association and from nominations submitted by interested organizations or persons in the state.
(2) Each subsequent appointment shall be made from recommendations submitted by the State Occupational Therapy Association or from recommendations submitted by other interested organizations or persons in the state.

2.05 Terms

(1) Appointments to the Board shall be for a period of 3 years, except for the initial appointments which shall be staggered terms of 1, 2, and 3 years. Members shall serve until the expiration of the term for which they have been appointed or until their successors have been appointed to serve on the Board. No member may serve more than two consecutive 3-year terms or for six consecutive years.

(2) Terms shall begin on the first day of the calendar year and end on the last day of the calendar year or until successors are appointed, except for the first appointed members who shall serve through the last calendar day of the year in which they are appointed, before commencing the terms prescribed by this section.

2.06 Vacancies

In the event of a vacancy in the office of a member of the Board other than by expiration of a term, the Governor shall appoint a qualified person to fill the vacancy for the unexpired term.

2.07 Removal of Board Members

The Governor or the Board may remove a member of the Board for incompetence, professional misconduct, conflict of interest, or neglect of duty after written notice and opportunity for a hearing. The Board shall be responsible for defining the standards for removal for regulation.

2.08 Compensation of Board Members

Members of the Board shall receive no compensation for their services, but shall be entitled to reasonable reimbursement for travel and other expenses incurred in the execution of their powers and duties.

2.09 Administrative Provisions

(1) The Board may employ and discharge an Administrator and such officers and employees as it deems necessary, and shall determine their duties in accordance with [applicable State statute].
(2) [This subsection should be used to include administrative detail covering revenues and expenditures, authentication and preservation of documents, promulgation of rules and regulations, etc., in accordance with prevailing state practice, and to the extent that such detail is not already taken care of in state laws of general applicability.]

2.10 Meetings

(1) The Board shall, at the first meeting of each calendar year, select a Chairperson and conduct other appropriate business.
(2) At least three additional meetings shall be held before the end of each calendar year.
(3) Other meetings, including telecommunication conference meetings, may be convened at the call of the Chairperson or the written request of two of more Board members.
(4) A majority of the members of the Board shall constitute a quorum for all purposes. The quorum must include at least one Occupational Therapist.
(5) The Board shall conduct its meetings and keep records of its proceedings in accordance with the provisions of the Administrative Procedure Act of this state.
(6) All Board meetings and hearings shall be open to the public. The Board may, in its discretion and according to the state's Administrative Procedures Act [or other comparable statute], conduct any portion of its meetings or hearings in executive session, closed to the public.
(7) The Board shall develop and implement policies that provide the public with a reasonable opportunity to appear before the Board and to speak on any issue under Board jurisdiction.

2.11 Powers and Duties

(1) The Board shall, in accordance with the Administrative Procedures Act, perform all lawful functions consistent with this Act, or otherwise authorized by state law including that it shall:
    a. Administer, coordinate, and enforce the provisions of this Act;
    b. Evaluate applicants' qualifications for licensure in a timely manner;
    c. Establish licensure fees and issue, renew, or deny licenses;
    d. Issue subpoenas, examine witnesses, and administer oaths;
    e. Investigate allegations of practices violating the provisions of this Act;
    f. Make, adopt, amend, and repeal such rules as may be deemed necessary by the Board from time to time for the proper administration and enforcement of this Act;
    g. Conduct hearings and keep records and minutes;
    h. Establish a system for giving the public, including its regulated profession, reasonable advance notice of all open Board and committee meetings. Emergency meetings, including telephone or other telecommunication conference meetings, shall be held in accordance with applicable Administrative Procedures Act provisions;
    i. Communicate disciplinary actions to relevant state and federal authorities, the National Board for Certification in Occupational Therapy (NBCOT), the American Occupational Therapy Association (AOTA) Ethics Commission, and to other State OT licensing authorities;
    j. Publish at least annually Board rulings, opinions, and interpretations of statutes or rules in order to guide persons regulated by this Act; and
    k. Establish a system for tracking the amount of time the Board takes to issue an initial license or licensure renewal to an applicant.
(2) No member of the Board shall be civilly liable for any act or failure to act performed in good faith in the performance of his or her duties as prescribed by law.

2.12 Training of New Members

The Board shall conduct and new members shall attend a training program designed to familiarize new members with their duties. A training program for new members shall be held as needed.

Article III. Licensing and Examination

3.01 Requirements for Licensure

An applicant applying for a license as an Occupational Therapist or as an Occupational Therapy Assistant shall file a written application provided by the Board, demonstrating to the satisfaction of the Board that the applicant

(1) Is in good standing as defined in Section 1.04;
(2) Has successfully completed the minimum academic requirements of an educational program for Occupational Therapists or Occupational Therapy Assistants that is accredited by the American Occupational Therapy Association's Accreditation Council for Occupational Therapy Education (ACOTE) or predecessor organizations;
(3) Has successfully completed a minimum period of supervised fieldwork experience required by the recognized educational institution where the applicant met the academic requirements described in Section 3.03 (2); and
(4) Has passed an examination administered by the National Board for Certification in Occupational Therapy (NBCOT), a predecessor organization, or another nationally recognized credentialing body as approved by the Board.

3.02 Internationally Educated Applicants

An Occupational Therapist who is a graduate of a school of occupational therapy that is located outside of the United States and its territories shall:

(1) Complete occupational therapy education programs (including fieldwork requirements) that are deemed comparable by the credentialing body recognized by the state occupational therapy regulatory board or agency to entry-level occupational therapy education programs in the United States.
(2) Fulfill examination requirement described in section 3.01(4).

3.03 Limited Permit

(1) A limited permit to practice occupational therapy may be granted to a person who has completed the academic and fieldwork requirements for Occupational Therapist of this Act and has not yet taken or received the results of the entry-level certification examination. This permit shall be valid for __ months and shall allow the person to practice occupational therapy under the direction and appropriate supervision of an Occupational Therapist licensed under this Act. This permit shall expire when the person is issued a license under Section 3.01or if the person is notified that they did not pass the examination. The limited permit may not be renewed.
(2) A limited permit to assist in the practice of occupational therapy may be granted to a person who has completed the academic and fieldwork requirements of Occupational Therapy Assistant of this Act and has not yet taken or received the results of the entry-level certification examination. This permit shall be valid for __ months and shall allow the person to practice occupational therapy under the direction and appropriate supervision of an Occupational Therapist licensed under this Act. This permit shall expire when the person is issued a license under Section 3.01 or if the person is notified that they did not pass the examination. The limited permit may not be renewed.

3.04 Temporary License

An applicant who is currently licensed and in good standing to practice in another jurisdiction and meets the requirements for licensure by endorsement may obtain a temporary license while the application is being processed by the Board.

3.05 Issuance of License

The Board shall issue a license to any person who meets the requirements of this Act, as described in sections 3.01 or 3.02, upon payment of the prescribed license fee as described in Section 3.09.

3.06 Renewal of License

(1) Any license issued under this Act shall be subject to annual [biennial] renewal and shall expire unless renewed in the manner prescribed by the rules and regulations of the Board.
(2) The Board shall prescribe by rule continuing competence requirements as a condition for renewal of licensure.
(3) The Board may provide late renewal of a license upon the payment of a late fee in accordance with its rules and regulations.
(4) Licensees are granted a grace period of 30 days after the expiration of their licenses in which to renew retroactively if they meet statutory requirements for renewal and pay to the Board the renewal fee and any late fee set by the Board.

(5) A suspended license is subject to expiration and may be renewed as provided in this Act, but such renewal shall not entitle the licensee, while the license remains suspended and until it is reinstated, to engage in the licensed activity, or in any other conduct or activity in violation of the order of judgement by which the license was suspended.
(6) A license revoked on disciplinary grounds may not be renewed or restored.

3.07 Inactive License

(1) Upon request, the Board shall grant inactive status to a licensee who is in good standing and maintains continuing competence requirements established by the Board, and
    a. Does not practice during such "inactive" period as an Occupational Therapist or an Occupational Therapy Assistant, and
    b. Does not during such "inactive" period hold themselves out as an Occupational Therapist or an Occupational Therapy Assistant.

3.08 Re-entry

(1) Reentering Occupational Therapists and Occupational Therapy Assistants are individuals who have previously practiced in the field of occupational therapy and have not engaged in the practice of occupational therapy for a minimum of 24 months.
(2) Occupational Therapists and Occupational Therapy Assistants who are seeking re-entry must fulfill re-entry requirements as prescribed by the Board in regulations.

3.09 Fees

(1) Consistent with the Administrative Procedures Act, the Board shall prescribe, and publish in the manner established by its rules, fees in amounts determined by the Board for the following:
    a. Initial license fee
    b. Renewal of license fee
    c. Late renewal fee
    d. Limited permit fee
    e. Temporary license fee
    f. Any other fees it determines appropriate.
(2) These fees shall be set in such an amount as to reimburse the state, to the extent feasible, for the cost of the services rendered.

Article IV. Regulation of Practice

4.01 Unlawful Practice

(1) No person shall practice occupational therapy or assist in the practice of occupational therapy or provide occupational therapy services or hold themselves as an Occupational Therapist or Occupational Therapy Assistant, or as being able to practice occupational therapy or assist in the practice of occupational therapy or provide occupational therapy services in this state unless they are licensed under the provisions of this Act.
(2) It is unlawful for any person not licensed as an Occupational Therapist in this state or whose license is suspended or revoked to use in connection with their name or place of business in this state, the words "Occupational Therapist," "licensed Occupational Therapist," "Doctor of Occupational Therapy," or the professional abbreviations "O.T.," "O.T.L.," "M.O.T.," "O.T.D.," "M.O.T./L.," "O.T.D./L." or any word, title, letters, or designation that implies that the person practices or is authorized to practice occupational therapy.

(3) It is unlawful for any person not licensed as an Occupational Therapy Assistant in this state or whose license is suspended or revoked to use in connection with their name or place of business in this state, the words “Occupational Therapy Assistant,” “licensed Occupational Therapy Assistant,” or the professional abbreviations “O.T.A.” or “O.T.A./L.,” or use any word, title, letters, or designation that implies that the person assists in, or is authorized to assist in, the practice of occupational therapy as an Occupational Therapy Assistant.

4.02 Exemptions

This Act does not prevent or restrict the practice, service, or activities of:

(1) Any person licensed or otherwise regulated in this state by any other law from engaging in their profession or occupation as defined in the Practice Act under which they are licensed.
(2) Any person pursuing a course of study leading to a degree in occupational therapy at an accredited educational program, if that person is designated by a title that clearly indicates their status as a student and if they act under appropriate instruction and supervision.
(3) Any person fulfilling the supervised fieldwork experience requirements of Section 3.01 of this Act, if the experience constitutes a part of the experience necessary to meet the requirement of that section and they act under appropriate supervision.
(4) Any person fulfilling a supervised or mentored occupational therapy doctoral capstone experience.
(5) An Occupational Therapist or Occupational Therapy Assistant who is authorized to practice occupational therapy in any jurisdiction, if they practice occupational therapy in this state for the purpose of education, consulting, or training, for the duration of the purpose, as preapproved by the Board;

4.03 Titles and Designations

(1) A licensed Occupational Therapist may use the words “occupational therapist,” “licensed occupational therapist,” or any words, title, letters, or other appropriate designation that indicates licensure, including but not limited to OT or OT/L, MOT/L, MSOT/L, and OTD/L that identifies the person as a licensed Occupational Therapist in connection with:
    a. Their name or place of business; and
    b. Any activity, practice, or service, so long as they are at all times in conformance with the requirements of this Act when providing occupational therapy services.
(2) A licensed Occupational Therapy Assistant may use the words “occupational therapy assistant,” “licensed occupational therapy assistant,” or any word, title, letters, or other appropriate designation that indicates licensure including, but not limited to OTA or OTA/L that identifies the person as a licensed Occupational Therapy Assistant in connection with:
    a. Their name or place of business; and
    b. Any activity, practice, or service, so long as they are at all times in conformance with the requirements of this Act when providing occupational therapy services.

4.04 Grounds for Disciplinary Action

The Board may take action against a licensee as described in Section 4.08 for unprofessional conduct including:

(1) Obtaining a license by means of fraud, misrepresentation, or concealment of material facts.

(2) Being guilty of unprofessional conduct as defined by the rules established by the Board, or violating the Code of Ethics adopted and published by the Board.
(3) Being convicted of a crime in any court except for minor offenses.
(4) Violating any lawful order, rule, or regulation rendered or adopted by the Board.
(5) Violating any provision of this Act (or regulations pursuant to this Act).
(6) Practicing beyond the scope of the practice of occupational therapy.
(7) Providing substandard care as an Occupational Therapist due to a deliberate or negligent act or failure to act regardless of whether actual injury to the client is established.
(8) Providing substandard care as an Occupational Therapy Assistant, including exceeding the authority to perform components of intervention selected and delegated by the supervising Occupational Therapist regardless of whether actual injury to the client is established.
(9) Knowingly delegating responsibilities to an individual who does not have the knowledge, skills, or abilities to perform those responsibilities.
(10) Failing to provide appropriate supervision to an Occupational Therapy Assistant or Aide in accordance with this Act and Board rules.
(11) Practicing as an Occupational Therapist or Occupational Therapy Assistant when competent services to recipients may not be provided due to the practitioner's own physical or mental impairment.
(12) Having had an Occupational Therapist or Occupational Therapy Assistant license revoked or suspended, other disciplinary action taken, or an application for licensure reused, revoked, or suspended by the proper authorities of another state, territory, or country, irrespective of intervening appeals and stays.
(13) Engaging in sexual misconduct. For the purposes of this paragraph, sexual misconduct includes:
    a. Engaging in or soliciting a sexual relationship, whether consensual or non-consensual, while an Occupational Therapist or Occupational Therapy Assistant/client relationship exists with that person.
    b. Making sexual advances, requesting sexual favors, or engaging in physical contact of a sexual nature with patients or clients.
(14) Aiding or abetting a person who is not licensed as an Occupational Therapist or Occupational Therapy Assistant in this state and who directly or indirectly performs activities requiring a license.
(15) Abandoning or neglecting a patient or client under and in need of immediate professional care, without making reasonable arrangements for the continuation of such care.

4.05 Complaints

(1) Any individual, group, or entity may file a complaint with the Board against any licensed Occupational Therapist or licensed Occupational Therapy Assistant in the state charging that person with having violated the provisions of this Act.
(2) The complaint shall specify charges in sufficient detail so as to disclose to the accused fully and completely the alleged acts of misconduct for which they are charged.
    a. "Sufficient Detail" is defined as a complainant's full name and contact information, respondent's full name and contact information when available, alleged violations of Standards of Conduct from the Code, signature or e-signature, and supporting documentation.
(3) Upon receiving a complaint, the Board shall notify the licensee of the complaint and request a written response from the licensee.

(4) The Board shall keep an information file about each complaint filed with the Board. The information in each complaint file shall contain complete, current, and accurate information including, but not limited to:
    a. All persons contacted in relation to the complaint;
    b. A summary of findings made at each step of the complaint process;
    c. An explanation of the legal basis and reason for the complaint that is dismissed; and
    d. Other relevant information.

4.06 Due Process

(1) Before the Board imposes disciplinary actions, it shall give the individual against whom the action is contemplated an opportunity for a hearing before the Board.
(2) The Board shall give notice and hold a hearing in accordance with the state's Administrative Procedures Act [or other comparable statute].
(3) The individual shall be entitled to be heard in their defense, alone or with counsel, and may produce testimony and testify on their own behalf, and present witnesses, within reasonable time limits.
(4) Any person aggrieved by a final decision of the Board may appeal in accordance with the Administrative Procedures Act [or other comparable statute].

4.07 Investigation

To enforce this Act, the Board is authorized to:

(1) Receive complaints filed against licensees and conduct a timely investigation.
(2) Conduct an investigation at any time and on its own initiative without receipt of a written complaint if the Board has reason to believe that there may be a violation of this Act.
(3) Issue subpoenas to compel the attendance of any witness or the production of any documentation relative to a case.
(4) For good cause, take emergency action ordering the summary suspension of a license or the restriction of the licensee's practice or employment pending proceedings by the Board.
(5) Appoint hearing officers authorized to conduct hearings. Hearing officers shall prepare and submit to the Board findings of fact, conclusions of law, and an order that shall be reviewed and voted on by the Board.
(6) Require a licensee to be examined in order to determine the licensee's professional competence or resolve any other material issue arising from a proceeding.
(7) Take the following actions if the Board finds that the information received in a complaint or an investigation is not of sufficient seriousness to merit disciplinary action against a licensee:
    a. Dismiss the complaint if the Board believes the information or complaint is without merit or not within the purview of the Board. The record of the complaint shall be expunged from the licensee's record.
    b. Issue a confidential advisory letter to the licensee. An advisory letter is non-disciplinary and notifies a licensee that, while there is insufficient evidence to begin disciplinary action, the Board believes that the licensee should be aware of an issue.
(8) Take other lawful and appropriate actions within its scope of functions and implementation of this Act.

The licensee shall comply with a lawful investigation conducted by the Board.

4.08 Penalties

(1) Consistent with the Administrative Procedures Act, the Board may impose separately, or in combination, any of the following disciplinary actions on a licensee as provided in this Act:
    a. Refuse to issue or renew a license;
    b. Suspend or revoke a license;
    c. Impose probationary conditions;
    d. Issue a letter of reprimand, concern, public order, or censure;
    e. Require restitution of fees;
    f. Impose a fine not to exceed $____, which deprives the licensee of any economic advantage gained by the violation and which reimburses the Board for costs of the investigation and proceeding;
    g. Impose practice and/or supervision requirements;
    h. Require licensees to participate in continuing competence activities specified by the Board;
    i. Accept a voluntary surrendering of a license; or
    j. Take other appropriate corrective actions including advising other parties as needed to protect their legitimate interests and to protect the public.
(2) If the Board imposes suspension or revocation of license, application may be made to the Board for reinstatement, subject to the limits of section 3.06. The Board shall have the discretion to accept or reject an application for reinstatement and may require an examination or other satisfactory proof of eligibility for reinstatement.
(3) If a licensee is placed on probation, the Board may require the license holder to:
    a. Report regularly to the Board on matters that are the basis of probation;
    b. Limit practice to the areas prescribed by the Board;
    c. Continue to review continuing competence activities until the license holder attains a degree of skill satisfactory to the Board in those areas that are the basis of the probation;
    d. Provide other relevant information to the Board.

4.09 Injunction

(1) The Board is empowered to apply for relief by injunction, without bond, to restrain any person, partnership, or corporation from any threatened or actual act or practice that constitutes an offense against this Act. It shall not be necessary for the Board to allege and prove that there is no adequate remedy at law in order to obtain the relief requested. The members of the Board shall not be individually liable for applying for such relief.
(2) If a person other than a licensed Occupational Therapist or Occupational Therapy Assistant threatens to engage in or has engaged in any act or practice that constitutes an offense under this Act, a district court of any county on application of the Board may issue an injunction or other appropriate order restraining such conduct.

4.10 Duty to Refer

(1) An Occupational Therapist may evaluate, initiate, and provide occupational therapy treatment for a client without a referral from other health service providers.
(2) An Occupational Therapist shall refer recipients to other service providers or consult with other service providers when additional knowledge and expertise are required or when this would further the client's care needs and health outcomes.

4.11 Telehealth

A licensee may provide occupational therapy services to a client utilizing a telehealth visit if the occupational therapy services are provided in accordance with all requirements of this Act.

(1) "Telehealth Visit" means the provision of occupational therapy services by a licensee to a client using technology where the licensee and client are not in the same physical location for the occupational therapy service.
(2) A licensee engaged in a telehealth visit shall utilize technology that is secure and compliant with state and federal law.
(3) A licensee engaged in a telehealth visit shall be held to the same standard of care as a licensee who provides in-person occupational therapy. A licensee shall not utilize a telehealth visit if the standard of care for the particular occupational therapy services cannot be met using technology.
(4) Occupational therapy services provided by telehealth can be synchronous or asynchronous.
    a. "Asynchronous" means using any transmission to another site for review at a later time that uses a camera or other technology to capture images or data to be recorded.
    b. "Synchronous" means real-time interactive technology.
(5) Supervision of Occupational Therapy Assistants, Aides, and students using telehealth technologies must follow existing state law and guidelines regarding supervision, regardless of the method of supervision.

Article V. Other

5.01 Severability

(1) If a part of this Act is held unconstitutional or invalid, all valid parts that are severable from the invalid or unconstitutional part shall remain in effect.
(2) If a part of this Act is held unconstitutional or invalid in one or more of its applications, the part shall remain in effect in all constitutional and valid applications that are severable from the invalid applications.

5.02 Effective Date

(1) The Act, except for Section 3.01, shall take effect ninety (90) days after enactment [unless State practice or requirements require another effective date].
(2) Section 3.01 of this Act shall take effect 180 days after enactment.

Guidelines for Supervision, Roles, and Responsibilities During the Delivery of Occupational Therapy Services

This document is a set of guidelines describing the supervision, roles, and responsibilities of occupational therapy practitioners. Intended for both internal and external audiences, it also provides an outline of the roles and responsibilities of occupational therapists, occupational therapy assistants, and occupational therapy aides during the delivery of occupational therapy services.

General Supervision

These guidelines provide a definition of supervision and outline parameters regarding effective supervision as it relates to the delivery of occupational therapy services. The guidelines themselves cannot be interpreted to constitute a standard of supervision in any particular locality. Occupational therapists, occupational therapy assistants, and occupational therapy aides are expected to meet applicable state or jurisdictional and federal regulations, adhere to relevant workplace and payer policies and to the *Occupational Therapy Code of Ethics (2015)* (American Occupational Therapy Association [AOTA], 2015), and participate in ongoing professional development activities to maintain continuing competence.

Within the scope of occupational therapy practice, supervision is a process aimed at ensuring the safe and effective delivery of occupational therapy services and fostering professional competence and professional development. In addition, in these guidelines, *supervision* is viewed as a cooperative process in which two or more people participate in a joint effort to establish, maintain, and/or elevate competence and performance. Supervision is based on mutual understanding between the supervisor and the supervisee about each other's education, experience, credentials, and competence. The supervisory relationship and supervisory process provide education and support, foster growth and development, promote effective utilization of resources, and encourage creativity and innovation.

Supervision of Occupational Therapists and Occupational Therapy Assistants

Occupational Therapists

Based on their education and training, occupational therapists, after initial certification and relevant state licensure or other governmental requirements, are autonomous practitioners who are able to deliver occupational therapy services independently. Occupational therapists are responsible for all aspects of occupational therapy service delivery and are accountable for the safety and effectiveness of occupational therapy services and the service delivery process. Occupational therapists are encouraged to seek peer supervision,

interprofessional collaboration, and mentoring to promote their ongoing professional development and to ensure they are using best practice approaches in the delivery of occupational therapy services.

Occupational Therapy Assistants

Based on their education and training, occupational therapy assistants, after completing initial certification and meeting state or jurisdictional regulatory requirements, receive supervision from an occupational therapist when delivering occupational therapy services. Occupational therapy assistants deliver occupational therapy services within a supervisory relationship and in partnership with occupational therapists.

General Principles

1. Occupational therapists and occupational therapy assistants are equally responsible for developing a collaborative plan for supervision. The occupational therapist is ultimately responsible for the implementation of appropriate supervision, but the occupational therapy assistant also has a responsibility to seek and obtain appropriate supervision.
2. To ensure safe and effective occupational therapy services, it is the responsibility of occupational therapy practitioners to recognize when they require peer supervision or mentoring that supports current and advancing levels of competence and professional development.
3. The specific frequency, methods, and content of supervision may vary depending on the client (person, group, or population) and on the
   a. Complexity of client needs,
   b. Number and diverse needs of the client,
   c. Knowledge and skill levels of the occupational therapist and the occupational therapy assistant,
   d. Type of practice setting,
   e. Service delivery approach,
   f. Requirements of the practice setting,
   g. Payer requirements, and
   h. Other regulatory requirements.
4. More frequent supervision of the occupational therapy assistant may be necessary when
   a. The needs of the client and the occupational therapy process are complex, diverse, and changing or
   b. The occupational therapist and occupational therapy assistant collaborate and determine that additional supervision is necessary to ensure safe and effective delivery of occupational therapy services.
5. A variety of types and methods of supervision apply to occupational therapy practice settings. Methods can include, but are not limited to, direct face-to-face contact and indirect contact. Examples of methods or types of supervision that involve direct face-to-face contact include observation, modeling, demonstration with a client, discussion, teaching, and instruction. Examples of methods or types of supervision that involve indirect contact include phone and virtual interactions, telehealth, written correspondence, and other forms of secure electronic exchanges.
6. Occupational therapists and occupational therapy assistants must abide by facility, state or jurisdictional, and payer requirements regarding the documentation of a supervision plan and supervision contacts. Documentation may include the following information:
   a. Frequency of supervisory contact
   b. Methods or types of supervision
   c. Content areas addressed
   d. Evidence to support areas of practice and levels of competence applicable to the setting
   e. Names and credentials of the persons participating in the supervisory process.

Roles and Responsibilities of Occupational Therapists and Occupational Therapy Assistants

Overview of the Occupational Therapy Process

The focus of occupational therapy is to assist the client in "achieving health, well-being, and participation in life through engagement in occupation" (AOTA, 2020). Occupational therapy addresses the needs and goals of the client related

to engagement in areas of occupation, and the profession's domain consists of occupations, contexts, performance patterns, performance skills, and client factors that may influence participation in various areas of occupation.

The occupational therapist must be directly involved in the delivery of services during the initial evaluation and regularly throughout the course of intervention planning, implementation, and review and outcome evaluation.

1. The occupational therapy assistant delivers safe and effective occupational therapy services under the supervision of and in partnership with the occupational therapist.
2. It is the responsibility of the occupational therapist to determine when to delegate responsibilities to an occupational therapy assistant. It is the responsibility of the occupational therapy assistant who performs the delegated responsibilities to demonstrate service competence and to not accept delegated responsibilities that go beyond the legal and professional scope or beyond the demonstrated skill and competence of the occupational therapy assistant.
3. The occupational therapist and the occupational therapy assistant demonstrate and document service competence for clinical and professional reasoning and judgment during the service delivery process and for the performance of specific assessments, techniques, and interventions used.
4. When delegating aspects of occupational therapy services, the occupational therapist considers the following factors:
    a. Complexity of the client's condition and needs
    b. Knowledge, skill, and competence of the occupational therapy assistant
    c. Nature and complexity of the intervention
    d. Needs and requirements of the practice setting
    e. Appropriate scope of practice of the occupational therapy assistant within the boundaries of jurisdictional regulations, payment source requirements, and other requirements.

Roles and Responsibilities

Regardless of the setting in which occupational therapy services are delivered, occupational therapists and occupational therapy assistants assume the following general responsibilities during the evaluation process, the intervention process, and the process of targeting and evaluating outcomes.

Evaluation

1. The occupational therapist directs the evaluation process.
2. The occupational therapist is responsible for directing all aspects of the initial contact during the occupational therapy evaluation, including
    a. Determining the need for service,
    b. Defining the problems within the domain of occupational therapy to be addressed,
    c. Determining the client's goals and priorities,
    d. Establishing intervention priorities,
    e. Determining specific further assessment needs, and
    f. Determining specific assessment tasks that can be delegated to the occupational therapy assistant.
3. The occupational therapist initiates and directs the evaluation, interprets the data, and develops the intervention plan.
4. The occupational therapy assistant contributes to the evaluation process by implementing delegated assessments and by providing verbal and written reports of assessments, analysis of performance, and client capacities to the occupational therapist.
5. The occupational therapist interprets the information provided by the occupational therapy assistant and integrates that information into the evaluation and decision-making process.

Intervention Planning

1. The occupational therapist has overall responsibility for the development of the occupational therapy intervention plan.
2. The occupational therapist and the occupational therapy assistant collaborate with the client to develop the plan.
3. The occupational therapy assistant is responsible for understanding evaluation results and providing input

into the intervention plan on the basis of client needs and priorities.

Intervention Implementation

1. The occupational therapist has overall responsibility for intervention implementation.
2. When delegating aspects of the occupational therapy intervention to the occupational therapy assistant, the occupational therapist is responsible for providing appropriate supervision.
3. The occupational therapy assistant is responsible for understanding and supporting the client's occupational therapy goals.
4. The occupational therapy assistant, in collaboration with the occupational therapist, selects, implements, and makes modifications to occupational therapy interventions consistent with demonstrated competence levels, client goals, and the requirements of the practice setting, including payment source requirements.

Intervention Review

1. The occupational therapist is responsible for determination of the need to continue, modify, or discontinue occupational therapy services.
2. The occupational therapy assistant contributes to this process by exchanging information with and providing documentation to the occupational therapist about the client's responses to and communications during intervention.

Outcomes

1. The occupational therapist is responsible for the selection, measurement, and interpretation of outcomes related to the client's ability to engage in occupations.
2. The occupational therapy assistant is responsible for being knowledgeable about the client's targeted occupational therapy outcomes and for providing information and documentation related to outcome achievement.
3. The occupational therapy assistant may implement outcome measurements and provide needed resources for transition or discharge.

Service Delivery Outside of Occupational Therapy Practice Settings

The education and expertise of occupational therapists and occupational therapy assistants prepare them for employment in arenas other than those typically related to the delivery of occupational therapy. In these other arenas, supervision of the occupational therapy assistant may be provided by non–occupational therapy professionals, or supervisory relationships may not be applicable when the occupational therapy assistant is a sole proprietor.

1. The guidelines of the setting, regulatory agencies, and funding sources may direct the supervision requirements.
2. The occupational therapist and occupational therapy assistant should obtain and use credentials or job titles commensurate with their roles in these other employment arenas.
3. The following sources can be used to determine whether the services provided are related to the delivery of occupational therapy:
    a. State or jurisdictional practice acts
    b. Regulatory agency standards and rules
    c. Payment and reimbursement sources
    d. *Occupational Therapy Practice Framework: Domain and Process* (4th ed.; AOTA, 2020) and other AOTA official documents
    e. Written or verbal concurrence among the occupational therapist, the occupational therapy assistant, the client, and the agency or payer about the services provided.

Supervision of Occupational Therapy Aides

An *aide,* as the term is used in occupational therapy practice, is an individual who provides supportive services to the occupational therapist and the occupational therapy assistant. Aides do not provide skilled occupational therapy services. An aide is trained by an occupational therapist or an occupational therapy assistant to perform specifically delegated tasks. The occupational

therapist is responsible for the overall use and actions of the aide. An aide first must demonstrate competence before performing assigned, delegated client-related and non–client-related tasks.

1. The occupational therapist oversees the development, documentation, and implementation of a plan to supervise and routinely assess the ability of the occupational therapy aide to carry out client-related and non–client-related tasks. The occupational therapy assistant may contribute to the development, documentation, and implementation of this plan.
2. The occupational therapy assistant can serve as the direct supervisor of the aide.
3. *Non–client-related tasks* include clerical activities and preparation of the work area or equipment.
4. *Client-related tasks* are routine tasks during which the aide may interact with the client. The following factors must be present when an occupational therapist or occupational therapy assistant delegates a selected client-related task to the aide:
    a. The outcome anticipated for the delegated task is predictable.
    b. The client's condition and the environment are stable and will not require that judgment, interpretations, or adaptations be made by the aide.
    c. The client has demonstrated previous performance ability in executing the task.
    d. The task routine and process have been clearly established.
5. When delegating client-related tasks, the supervisor must ensure that the aide
    a. Is trained and able to demonstrate competence in carrying out the selected task and using related equipment, if appropriate;
    b. Has been instructed on how specifically to carry out the delegated task with the specific client;
    c. Knows the precautions, signs, and symptoms for the particular client that would indicate the need to seek assistance from the occupational therapist or occupational therapy assistant; and
    d. Is not used to perform billable functions that are prohibited by the payment source of the client being served.
6. The supervision of the aide needs to be documented (e.g., orientation checklist, performance review, skills checklist, in-service participation). Documentation includes information about the frequency and methods of supervision used, the content of supervision, and the names and credentials of all persons participating in the supervisory process.

Summary

These guidelines are designed to define and delineate the professional roles of occupational therapy practitioners. The guidelines also address supervision when occupational therapy practitioners provide services in arenas outside typical occupational therapy practice settings. It is expected that occupational therapy services are delivered in accordance with applicable state or jurisdictional and federal regulations, relevant workplace policies, the *Occupational Therapy Code of Ethics (2015)* (AOTA, 2015), and continuing competence and professional development guidelines. For information regarding the supervision of occupational therapy students, refer to *Fieldwork Level 2 and Occupational Therapy Students* (AOTA, 2018).

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OTA Supervision

State	Statute or Regulation[1]
Alabama	**Statute: Code of Alabama §34-39-3, Definitions** (6) OCCUPATIONAL THERAPY ASSISTANT. A person licensed to assist in the practices of occupational therapy under the supervision of, or with the consultation of, a licensed occupational therapist whose license is in good standing. **Regulation: Alabama Administrative Code 625-X-8-.01 Supervision Of Licensed Occupational Therapy Assistants.** (1) "Occupational therapy assistant" means a person licensed to assist in the practices of occupational therapy under the supervision of, or with the consultation of, a licensed occupational therapist whose license is in good standing. (2) "Supervision" means a collaborative process for the responsible periodic review and inspection of all aspects of occupational therapy services. Responsibility of supervision is shared between the supervising occupational therapist(s) and the occupational therapy assistant(s) and/or all unlicensed personnel involved with the provision of occupational therapy services, including aides and students. (3) An occupational therapist may assign an increased level of supervision if necessary for the safety of a patient or client. The levels of supervision are: a. Direct Supervision: the supervising occupational therapist is in the immediate area of the occupational therapy assistant while performing supportive services. b. Close Supervision: the supervising occupational therapist provides initial direction to the occupational therapy assistant and daily contact while on the premises at least 50% of the occupational therapy assistant's direct patient care hours per month. c. General Supervision: the supervising occupational therapist has face-to-face contact with the occupational therapy assistant at least once every 30-calendar days, with the supervising occupational therapist available by telephone, electronic, or written communication. (4) Supervision Ratios: An occupational therapist may supervise up to three (3) full-time occupational therapy assistants, but never more than two (2) occupational therapy assistants who require "direct" level of supervision. The total number of supervised occupational therapy assistants, occupational therapy personnel on a limited permit, and non-licensed occupational therapy personnel (including any occupational therapy students, occupational therapy assistant students, licensee applicants required to perform a preceptorship, and/or aides) may not exceed five (5) without prior Board approval. The Board may permit the supervision of a greater number by an occupational therapist if, in the Board's opinion, there would be adequate supervision to protect public health and safety. (5) Only a licensed occupational therapist shall: a. Prepare a written initial treatment plan prior to implementation by the occupational therapy assistant, initiate or re-evaluate a client or patient's treatment plan, or authorize in writing a change of a treatment plan b. Delegate duties to a licensed occupational therapy assistant, designate an assistant's duties, and assign a level of supervision; and c. Authorize a patient discharge.

[1] DISCLAIMER: This chart is provided for informational and educational purposes only and is not a substitute for legal advice or the professional judgment of health care professionals in evaluating and treating patients. Contact your state licensing board, committee, or agency with any questions regarding this information or to verify the accuracy of this information.

	(6) A licensed occupational therapy assistant shall not: a. Evaluate or develop a treatment plan independently; b. Initiate a treatment plan before a client or patient is evaluated and a written treatment plan is prepared by an occupational therapist; c. Continue a treatment procedure appearing harmful to a patient or client until the procedure is reevaluated by an occupational therapist; or d. Continue or discontinue occupational therapy services unless the treatment plan is approved or re-approved by a supervising occupational therapist. (7) A supervising occupational therapist shall supervise a licensed occupational therapy assistant as follows: a. Supervision should be "Direct" at the discretion of the supervising occupational therapist. b. Supervision should be "Close" if the occupational therapy assistant has less than 12 months of experience. c. Supervision should be at least "General" if an occupational therapy assistant has more than 12 months of experience. d. For occupational therapy assistants employed by state agencies and those employed by public schools and colleges of this state who provide screening and rehabilitation services for the educationally related needs of the student, the "Direct" and "close" supervision mandate based on work experience does not apply. In these instances, supervision should be at least "General". e. The following levels of supervision are minimal. An occupational therapist must assign an increased level of supervision if the occupational therapy assistant is new to a practice setting or particular skill. An occupational therapist must assign an increased level of supervision if necessary for the safety of a patient or client. f. All occupational therapist(s) who delegate to occupational therapy assistants must participate in the supervision of that occupational therapy assistant. g. Occupational therapy assistants working part-time should have no less than one hour of direct supervision per calendar month, and meet all other supervision requirements within this section. h. Occupational therapy assistants who work with more than one employer must notify the board of the supervisor(s) for each employer. i. The occupational therapist shall ensure that the occupational therapy assistant is assigned only those duties and responsibilities for which the assistant has been specifically educated and which the occupational therapy assistant is qualified to perform.
Alaska	**Statute: Alaska Statutes 08.84.190, Definitions** (4) "occupational therapy assistant" means a person who assists in the practice of occupational therapy under the supervision of an occupational therapist; **Regulation: Title 12, Chapter 54, Article 7, Occupational Therapy Standards of Practice.** **§12 AAC 54.800. OCCUPATIONAL THERAPY STANDARDS.** (a) In order to maintain a high standard of integrity in the profession and to safeguard the health and welfare of the public, occupational therapists and occupational therapy assistants shall adhere to *the State Physical Therapy and Occupational Therapy Board Principles of Practice*, dated March 2015. *The State Physical Therapy and Occupational Therapy Board Principles of Practice* is adopted by reference. (b) An occupational therapist may not supervise more than three aides, assistants, students, foreign-educated candidates, or permittees at the same time, in any combination.

	§12 AAC 54.810, SUPERVISION OF OCCUPATIONAL THERAPY ASSISTANTS. (a) An occupational therapy assistant shall work under the supervision of a licensed occupational therapist. To meet this supervision requirement, (1) at least once every month, while the occupational therapy assistant being supervised implements a treatment plan for a patient, the occupational therapist supervising the licensed occupational therapy assistant shall be physically present, or shall be present by video or teleconference when in-person supervision is not reasonable or practicable; and (2) the occupational therapist supervising the occupational therapy assistant shall be available for consultation with the occupational therapy assistant being supervised, through telephone consultations, written reports, or in person conferences. (b) If the licensed occupational therapist agrees to supervise an occupational therapy assistant, the occupational therapist shall (1) determine the frequency and manner of consultations, taking into consideration the treatment settings being used, patient rehabilitation status, and the competency of the occupational therapy assistant being supervised; (2) fully document the supervision provided, including a record of all consultations provided, and maintain those records at the occupational therapy assistant's place of employment; and (3) countersign the patient treatment record each time the occupational therapist supervising the occupational therapy assistant is physically present and directly supervises or supervises by video or teleconference the treatment of a patient by the occupational therapy assistant being supervised. §**12 AAC 54.890, Definitions related to occupational therapy** (1) "continual on-site supervision" means the supervising occupational therapist or occupational therapy assistant (A) is present in the department or facility where services are being provided; (B) is immediately available to the non-licensed personnel being supervised; and (C) maintains continual oversight of patient-related duties performed by the non-licensed personnel; (6) "supervision" means (A) the licensed occupational therapist will be present whenever a patient is evaluated, a treatment program is established, or a treatment program is changed; and (B) the licensed occupational therapist is present to personally review the diagnosis of the condition to be treated, to authorize the procedure, and before dismissal of the patient, to evaluate the performance of the treatment given.
Arizona	**<u>Statute:</u> Arizona Revised Statutes §32-3401 Definitions.** 7. "Occupational therapy assistant" means a person who is licensed pursuant to this chapter, who is a graduate of an accredited occupational therapy assistant education program, who assists in the practice of occupational therapy and who performs delegated procedures commensurate with the person's education and training. 9. "Supervision" means the giving of instructions by the supervising occupational therapist or the occupational therapy assistant that are adequate to ensure the safety of clients during the provision of occupational therapy services and that take into consideration at least the following factors: (a) Skill level. (b) Competency. (c) Experience. (d) Work setting demands. (e) Client population.

	<u>Regulation:</u> Arizona Administrative Code R4-43-101, Definitions. 11. "Supervision" means a collaborative process for the responsible periodic review and inspection of all aspects of occupational therapy services. The following levels of supervision are minimal. An occupational therapist may assign an increased level of supervision if necessary for the safety of a patient or client. The levels of supervision are: a. "Close supervision" means the supervising occupational therapist provides initial direction to the occupational therapy assistant and daily contact while on the premises. b. "Continuous supervision" means the supervising occupational therapist is in the immediate area of the occupational therapy aide performing supportive services. c. "General supervision" means the supervising occupational therapist has face-to-face contact with the occupational therapy assistant at least once every 30-calendar days on a per patient or client basis while on the premises, with the supervising occupational therapist available by telephone or by written communication. d. "Minimal supervision" means the supervising occupational therapist has face-to-face contact with the occupational therapy assistant at least once every 30-calendar days while on the premises. e. "Routine supervision" means the supervising occupational therapist has face-to-face contact with the occupational therapy assistant at least once every 15-calendar days on a per patient or client basis while on the premises, with the supervising occupational therapist available by telephone or by written communication. **<u>Regulation:</u> Arizona Administrative Code R4-43-401, Supervision of Occupational Therapy Assistants** A. Only a licensed occupational therapist shall: 1. Prepare an initial treatment plan, initiate or re-evaluate a client or patient's treatment plan, or authorize in writing a change of a treatment plan; 2. Delegate duties to a licensed occupational therapy assistant, designate an assistant's duties, and assign a level of supervision; and 3. Authorize a patient discharge. B. A licensed occupational therapy assistant shall not: 1. Evaluate or develop a treatment plan independently; 2. Initiate a treatment plan before a client or patient is evaluated and a treatment plan is prepared by an occupational therapist; 3. Continue a treatment procedure appearing harmful to a patient or client until the procedure is reevaluated by an occupational therapist; or 4. Continue or discontinue occupational therapy services unless the treatment plan is approved or re-approved by a supervising occupational therapist. C. A supervising occupational therapist shall supervise a licensed occupational therapy assistant as follows: 1. Not less than routine supervision if the occupational therapy assistant has less than 12 months work experience in a particular practice setting or with a particular skill. 2. Not less than general supervision if the occupational therapy assistant has more than 12 months but less than 24 months of experience in a particular practice setting or with a particular skill. 3. Not less than minimal supervision if an occupational therapy assistant has more than 24 months of experience in a particular practice setting or with a particular skill. 4. Increased level of supervision, if necessary, for the safety of a patient or client.

Arkansas	**<u>Statutes:</u> Code of Arkansas §17-88-102 Definitions.** (7) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the frequent and regular supervision by or with consultation with an occupational therapist, whose license is in good standing. The definition of "frequent" and "regular" will be established by the Arkansas State Occupational Therapy Examining Committee; **<u>Regulation:</u> Arkansas Administrative Rules Regulation No. 6, 6.2 FREQUENT AND REGULAR SUPERVISION DEFINED** As specified in the Occupational Therapy Practice Act 17-88-102, (3) an "occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the frequent and regular supervision by or in consultation with an occupational therapist whose license is in good standing. "Frequent" and "regular" are defined by the Arkansas State Occupational Therapy Examining Committee as consisting of the following elements: (A) The supervising occupational therapist shall have a legal and ethical responsibility to provide supervision, and the supervisee shall have a legal and ethical responsibility to obtain supervision regarding the patients seen by the occupational therapy assistant. (B) Supervision by the occupational therapist of the supervisee's occupational therapy services shall always be required, even when the supervisee is experienced and highly skilled in a particular area. (C) Frequent/Regular Supervision of an occupational therapy assistant by the occupational therapist is as follows: 1) The supervising occupational therapist shall meet with the occupational therapy assistant for onsite, face to face supervision a minimum of one (1) hour per forty (40) occupational therapy work hours performed by the occupational therapy assistant, to review each patient's progress and objectives. 2) The supervising occupational therapist shall meet with each patient and the occupational therapy assistant providing services on a monthly basis, to review patient progress and objectives. 3) Supervision Log. It is the responsibility of the occupational therapy assistant to maintain on file signed documentation reflecting supervision activities. This supervision documentation shall contain the following: date of supervision, time (start to finish), means of communication, information discussed, number of patients, and outcomes of the interaction. Both the supervising occupational therapist and the occupational therapy assistant must sign each entry. 4) Each occupational therapy assistant will maintain for a period of three (3) years proof of a supervision log, should it be requested by the Board for audit purposes. (D) The occupational therapists shall assign, and the occupational therapy assistant shall accept, only those duties and responsibilities for which the occupational therapy assistant has been specifically trained and is qualified to perform, pursuant to the judgment of the occupational therapist. (1) Assessment/reassessment. Patient evaluation is the responsibility of the occupational therapists. The occupational therapy assistant may contribute to the evaluation process by gathering data, and reporting observations. The occupational therapy assistant may not evaluate independently or initiate treatment prior to the occupational therapist's evaluation. (2) Treatment planning/Intervention. The occupational therapy assistant may contribute to treatment planning as directed by the occupational therapist. The occupational therapist shall advise the patient/client as to which level of practitioner will carry out the treatment plan.

	(3) Discontinuation of intervention. The occupational therapy assistant may contribute to the discharge process as directed by the occupational therapist The occupational therapist shall be responsible for the final evaluation session and discharge documentation. (E) Before an occupational therapy assistant can assist in the practice of occupational therapy, he or she must file with the Board a signed, current statement of supervision of the licensed occupational therapist(s) who will supervise the occupational therapy assistant. Change in supervision shall require a new status report to be filed with the Board, prior to starting work and when supervision ends. (F) In extenuating circumstances, when the occupational therapy assistant is without supervision, the occupational therapy assistant may carry out established programs for up to thirty (30) calendar days while appropriate occupational therapy supervision is sought. It shall be the responsibility of the occupational therapy assistant to notify the Board of these circumstances. (G) Failure to comply with the above will be considered unprofessional conduct and may result in punishment by the Board.
California	**Statute: California Business & Professions Code Division 2, Chapter 5.6** **§2570.2** (i) "Occupational therapy assistant" means an individual who is licensed pursuant to the provisions of this chapter, who is in good standing as determined by the board, and based thereon, who is qualified to assist in the practice of occupational therapy under this chapter, and who works under the appropriate supervision of a licensed occupational therapist. (j) "Occupational therapy services" means the services of an occupational therapist or the services of an occupational therapy assistant under the appropriate supervision of an occupational therapist. **§2570.3** (a) No person shall practice occupational therapy or hold himself or herself out as an occupational therapist or as being able to practice occupational therapy, or to render occupational therapy services in this state unless he or she is licensed as an occupational therapist under the provisions of this chapter. No person shall hold himself or herself out as an occupational therapy assistant or work as an occupational therapy assistant under the supervision of an occupational therapist unless he or she is licensed as an occupational therapy assistant under the provisions of this chapter. (j) "Supervision of an occupational therapy assistant" means that the responsible occupational therapist shall at all times be responsible for all occupational therapy services provided to the client. The occupational therapist who is responsible for appropriate supervision shall formulate and document in each client's record, with his or her signature, the goals and plan for that client, and shall make sure that the occupational therapy assistant assigned to that client functions under appropriate supervision. As part of the responsible occupational therapist's appropriate supervision, he or she shall conduct at least weekly review and inspection of all aspects of occupational therapy services by the occupational therapy assistant. (1) The supervising occupational therapist has the continuing responsibility to follow the progress of each client, provide direct care to the client, and to assure that the occupational therapy assistant does not function autonomously. (2) An occupational therapist shall not supervise more occupational therapy assistants, at any one time, than can be appropriately supervised in the opinion of the board. Three occupational therapy assistants shall be the maximum number of occupational therapy assistants supervised by an occupational therapist at any one time, but the board may permit the supervision of a greater number by an occupational therapist if, in the opinion of the board, there would be adequate supervision and the public's health and safety would be served. In no case shall the total number of occupational therapy assistants exceed twice the number of occupational therapists regularly employed by a facility at any one time.

§2570.13
(a) Consistent with this section, subdivisions (a), (b), and (c) of Section 2570.2, and accepted professional standards, the board shall adopt rules necessary to assure appropriate supervision of occupational therapy assistants and aides.
(b) An occupational therapy assistant may practice only under the supervision of an occupational therapist who is authorized to practice occupational therapy in this state.
(c) An aide providing delegated, client-related supportive services shall require continuous and direct supervision by an occupational therapist or occupational therapy assistant.

Regulations: California Code of Regulations Title 16, Division 39, Article 9
§4181. Supervision Parameters
(a) Appropriate supervision of an occupational therapy assistant includes, at a minimum:
(1) The weekly review of the occupational therapy plan and implementation and periodic onsite review by the supervising occupational therapist. The weekly review shall encompass all aspects of occupational therapy services and be completed by telecommunication or onsite.
(2) Documentation of the supervision, which shall include either documentation of direct client care by the supervising occupational therapist, documentation of review of the client's medical and/or treatment record and the occupational therapy services provided by the occupational therapy assistant, or co-signature of the occupational therapy assistant's documentation.
(3) The supervising occupational therapist shall be readily available in person or by telecommunication to the occupational therapy assistant at all times while the occupational therapy assistant is providing occupational therapy services.
(4) The supervising occupational therapist shall provide periodic on-site supervision and observation of client care rendered by the occupational therapy assistant.
(b) The supervising occupational therapist shall at all times be responsible for all occupational therapy services provided by an occupational therapy assistant, a limited permit holder, a student or an aide. The supervising occupational therapist has continuing responsibility to follow the progress of each client, provide direct care to the client, and assure that the occupational therapy assistant, limited permit holder, student or aide do not function autonomously.
(c) The level of supervision for all personnel is determined by the supervising occupational therapist whose responsibility it is to ensure that the amount, degree, and pattern of supervision are consistent with the knowledge, skill and ability of the person being supervised.
(d) Occupational therapy assistants may supervise:
(1) Level I occupational therapy students;
(2) Level I and Level II occupational therapy assistant students; and
(3) Aides providing non-client related tasks.
(e) The supervising occupational therapist shall determine that the occupational therapy practitioner possesses a current license or permit to practice occupational therapy prior to allowing the person to provide occupational therapy services.

§4182. Treatments Performed by Occupational Therapy Assistants.
(a) The supervising occupational therapist shall determine the occupational therapy treatments the occupational therapy assistant may perform. In making this determination, the supervising occupational therapist shall consider the following:
(1) the clinical complexity of the patient/client;
(2) skill level of the occupational therapy assistant in the treatment technique; and

	(3) whether continual reassessment of the patient/client status is needed during treatment. This rule shall not preclude the occupational therapy assistant from responding to acute changes in the client's condition that warrant immediate action. The occupational therapy assistant shall inform the supervising occupational therapist immediately of the acute changes in the patient's/client's condition and the action taken. (b) The supervising occupational therapist shall assume responsibility for the following activities regardless of the setting in which the services are provided: (1) Interpretation of referrals or prescriptions for occupational therapy services. (2) Interpretation and analysis for evaluation purposes. (A) The occupational therapy assistant may contribute to the evaluation process by gathering data, administering standardized tests and reporting observations. The occupational therapy assistant may not evaluate independently or initiate treatment before the supervising occupational therapist performs an assessment/evaluation. (3) Development, interpretation, implementation, and modifications of the treatment plan and the discharge plan. (A) The supervising occupational therapist shall be responsible for delegating the appropriate interventions to the occupational therapy assistant. (B) The occupational therapy assistant may contribute to the preparation, implementation and documentation of the treatment and discharge summary. **§4187. Occupational Therapy Assistants Serving in Administrative Positions.** An occupational therapy assistant in an administrative role, or supervisory role related to the provision of occupational therapy services may provide administrative responsibilities in a setting where permitted by law.
Colorado	**Statute: Colorado Revised Statutes Title 12, Article 270** **§12-270-104 Definitions.** (7) “Occupational therapy assistant” means a person licensed under this article 270 to practice occupational therapy under the supervision of an in partnership with an occupational therapist. (8) "Supervision" means the giving of aid, directions, and instructions that are adequate to ensure the safety and welfare of clients during the provision of occupational therapy by the occupational therapist designated as the supervisor. Responsible direction and supervision by the occupational therapist shall include consideration of factors such as level of skill, the establishment of service competency, experience, work setting demands, the complexity and stability of the client population, and other factors. Supervision is a collaborative process for responsible, periodic review and inspection of all aspects of occupational therapy services, and the occupational therapist is legally accountable for occupational therapy services provided by the occupational therapy assistant and the aide. **§12-270-109 Supervision of occupational therapy assistants and aides.** (1) An occupational therapy assistant may practice only under the supervision of an occupational therapist who is licensed to practice occupational therapy in this state. The occupational therapist is responsible for occupational therapy evaluation, appropriate reassessment, treatment planning, interventions, and discharge from occupational therapy services based on standard professional guidelines. Supervision of an occupational therapy assistant by an occupational therapist is a shared responsibility. The supervising occupational therapist and the supervised occupational therapy assistant have legal and ethical responsibility for ongoing management of supervision, including providing, requesting, giving, or obtaining supervision. The supervising occupational therapist shall determine the frequency, level, and nature of supervision with input from the occupational therapy assistant and shall base the supervision determination

	on a variety of factors, including the clients' required level of care, the treatment plan, and the experience and pertinent skills of the occupational therapy assistant. (2) The supervising occupational therapist shall supervise the occupational therapy assistant in a manner that ensures that the occupational therapy assistant: (a) Does not initiate or alter a treatment program without prior evaluation by and approval of the supervising occupational therapist; (b) Obtains prior approval of the supervising occupational therapist before making adjustments to a specific treatment procedure; and (c) Does not interpret data beyond the scope of the occupational therapy assistant's education and training. **<u>Regulations:</u> Colorado Code of Regulations 3 CCR 715-1.8, Supervision of Licensed Occupational Therapy Assistants and Aides** A. The occupational therapist is legally responsible for the performance of the licensed occupational therapy assistant(s) and aide(s) operating under the occupational therapist's direction and supervision as authorized by § 12-270-104(12), C.R.S. That responsibility in turn requires the occupational therapist to provide supervision adequate to ensure the safety and welfare of clients. B. Adequate supervision of licensed occupational therapy assistants and aides requires, at a minimum, that a supervising occupational therapist perform the following: 1. Provide client evaluation and appropriate reassessment; 2. Interpret available information concerning the individual under care; 3. Develop a plan of care, including long and short term goals; 4. Identify and document precautions, special problems, contraindications, anticipated progress, and/or plans for reevaluation; 5. Select and delegate appropriate tasks in the plan of care; 6. Designate or establish channels of written and oral communication; 7. Assess competence of personnel to perform assigned tasks; 8. Direct and supervise personnel in delegated tasks; and 9. When necessary, re-evaluate, adjust plan of care, perform final evaluation, and/or establish follow-up plan. C. An occupational therapist must exercise professional judgment when determining the number of personnel the occupational therapist can safely and effectively supervise to ensure that quality client care is provided at all times. D. An occupational therapist must provide adequate staff-to-client ratio at all times to ensure the provision of safe, quality care. E. Supervision of licensed occupational therapy assistants shall be accomplished to ensure that: 1. Licensed occupational therapy assistants do not initiate or alter a treatment program without prior evaluation by and approval of the supervising occupational therapist. 2. Licensed occupational therapy assistants obtain prior approval of the supervising occupational therapist before making adjustments to a specific treatment procedure. 3. Licensed occupational therapy assistants do not interpret data beyond the scope of their occupational therapy assistant education and training. 4. Licensed occupational therapy assistants respond to inquiries regarding client status to appropriate parties within the protocol established by the supervising occupational therapist. 5. Licensed occupational therapy assistants refer inquiries regarding client prognosis to a supervising occupational therapist.

Connecticut	**Statute: General Statutes of Connecticut Chapter 376a, Sec. 20-74a** (3) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy, under the supervision of or with the consultation of a licensed occupational therapist, and whose license is in good standing.

Delaware	**Statute: Delaware Code Title 24, Chapter 20, § 2002**
	(8) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist.
	(15) "Supervision" means the interactive process between a licensed occupational therapist and an occupational therapy assistant, and requires more than a paper review or cosignature. "Supervision" means that the supervising occupational therapist is responsible for insuring the extent, kind, and quality of the services that the occupational therapy assistant renders.
	
	Regulation: Delaware Administrative Code Title 24, Section 2000, 1.0 Supervision/consultation Requirements for Occupational Therapy Assistants
	1.1 Definitions. The following words and terms, when used in this regulation shall have the following meaning unless the context clearly indicates otherwise:
	
	“Occupational therapy assistant” shall mean a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist.
	
	“Under the supervision of an occupational therapist” means the interactive process between the licensed occupational therapist and the occupational therapy assistant. It shall be more than a paper review or co-signature. The supervising occupational therapist is responsible for insuring the extent, kind, and quality of the services rendered by the occupational therapy assistant.
	
	• The phrase, “under the supervision of an occupational therapist,” as used in the definition of occupational therapist assistant includes, but is not limited to the following requirements:
	  • Communicating to the occupational therapy assistant the results of patient/client evaluation and discussing the goals and program plan for the patient/client;
	  • In accordance with supervision level and applicable health care, educational, professional and institutional regulations, reevaluating the patient/client, reviewing the documentation, modifying the program plan if necessary and co-signing the plan.
	  • Case management;
	  • Determining program termination;
	  • Providing information, instruction and assistance as needed;
	  • Observing the occupational therapy assistant periodically; and
	  • Preparing on a regular basis, but at least annually, a written appraisal of the occupational therapy assistant’s performance and discussion of that appraisal with the assistant.
	
	1.2 Supervision for Occupational Therapy Assistants
	1.2.1 Supervising occupational therapists must have at least 1 year clinical experience after they have received permanent licensure. The supervisor may assign to a competent occupational therapy assistant the administration of standardized tests, the performance of activities of daily living evaluations and other elements of patient/client evaluation and reevaluation that do not

	require the professional judgment and skill of an occupational therapist. The occupational therapy assistant may not evaluate or develop a treatment plan independently. 1.2.2 The amount of supervision should be determined by the occupational therapist before the individuals enter into a supervisor/supervisee relationship. The chosen amount of supervision should be reevaluated regularly for effectiveness. Special consideration should be given to experience and any changes in practice area concentrations. 1.2.3 The supervising occupational therapist, in collaboration with the occupational therapy assistant, shall maintain a written supervisory plan specifying the amount of supervision and shall document the supervision of each occupational therapy assistant. The amount of supervision should be determined by the occupational therapist before the individuals enter into a supervisor/supervisee relationship. The chosen amount of supervision should be reevaluated regularly for effectiveness. This plan shall be reviewed at least every 6 months or more frequently as demands of service changes. 1.2.4 A supervisor who is temporarily unable to provide supervision shall arrange for substitute supervision by an occupational therapist licensed by the Board with at least 1 year of clinical experience, as defined above, to provide supervision as specified by Section 1.0 of this regulation.
District of Columbia	**Statute: DC Code §3–1201.02** (9)(B) An individual licensed as an occupational therapy assistant pursuant to this chapter may assist in the practice of occupational therapy under the general supervision of a licensed occupational therapist. **Regulation: DC Municipal Regulations, §17–63 (Occupational Therapists)** **§6312 RESPONSIBILITIES** 6312.5 An occupational therapist supervising an occupational therapy assistant shall be responsible for all of the occupational therapy assistant's actions performed within the scope of practice during the time of supervision and shall be subject to disciplinary action for any violation of the Act or this chapter by the occupational therapy assistant under his or her supervision. 6312.6 A supervising occupational therapist shall provide the following: (a) Direct supervision of an occupational therapy assistant prior to initiating treatment programs and before planned discharges for patients; (b) An initial and, at a minimum, bimonthly direction to the occupational therapy assistant; and (c) Documentation for verification of supervision and direction. 6312.7 A supervising occupational therapist shall only delegate duties and responsibilities for the care of patients to the occupational therapy assistant with consideration given to the following: (a) The level of skill shown by the occupational therapy assistant; (b) The ability to use identified intervention in a safe and effective manner; (c) Experience of the occupational therapy assistant and work setting demands; and (d) The complexity and stability of the patient population to be treated. **§6399 DEFINITIONS.** 6399.1 As used in this chapter, the following terms and phrases shall have the meanings ascribed:

	Direct supervision - Supervision in which the supervisor is personally present and immediately available within the treatment area to give aid, direction, and instruction when occupational therapy procedures or activities are performed. General supervision - Supervision in which the supervisor is available on the premises or by communication device at the time the supervisee is practicing, and can be on-site in the event of a clinical emergency within two (2) hours. Occupational therapy assistant - A person licensed to practice as an occupational therapy assistant under the Act. Supervised practice - unlicensed practice by a student, graduate, or person seeking reactivation, reinstatement, or re-licensure, as authorized by the Board and subject to the general supervision of an occupational therapist. **<u>Regulation:</u> DC Municipal Regulations, §17–73 (Occupational Therapy Assistants)** **§7314 SUPERVISION OF OCCUPATIONAL THERAPY ASSISTANTS** An occupational therapy assistant may only practice under the supervision, as specified in this section, of an occupational therapist with an active, unrestricted license in good standing in the District of Columbia. The supervising occupational therapist must be available on an as-needed basis and must be able to be on-site within two (2) hours if a need arises. 7314.2 The supervising occupational therapist shall provide the following: (a) Direct supervision of an occupational therapy assistant prior to initiating treatment programs and before planned discharges for patients; (b) An initial and, at a minimum, bimonthly direction to the occupational therapy assistant; and (c) Documentation to verify details of supervision and direction. 7314.3 The supervising occupational therapist shall only delegate duties and responsibilities for the care of patients to the occupational therapy assistant with consideration given to the following: (a) The level of skill shown by the occupational therapy assistant; (b) The occupational therapy assistant's ability to use identified intervention in a safe and effective manner; (c) Experience of the occupational therapy assistant and work setting demands; and (d) The complexity and stability of the patient population to be treated. 7314.4 An occupational therapy assistant may assist in the collection and some of the documentation of patient information pertaining to the evaluation and treatment of a patient provided that the supervising occupational therapist bases such assignment or delegation of duties on the demonstrated competency of the occupational therapy assistant. This demonstrated competency shall be documented and maintained on file by the supervising occupational therapist. 7314.5 An occupational therapy assistant shall not supervise another occupational therapy assistant. 7314.6 An occupational therapy assistant shall immediately inform the supervising occupational therapist and discontinue treatment if a procedure appears to be harmful to the patient.

	§7399 DEFINITIONS 7399.1 As used in this chapter, the following terms and phrases shall have the meanings ascribed: Direct supervision - supervision in which the supervisor is personally present and immediately available within the treatment area to give aid, direction, and instruction when occupational therapy procedures or activities are performed. General supervision - supervision in which the supervisor is available on the premises or by communication device at the time the supervisee is practicing, and can be on-site within two (2) hours in the event of a clinical emergency.
Florida	**Statute: Florida Statutes Title XXXII, §468.203 Definitions.** As used in this act, the term: (6) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy, who works under the supervision of an occupational therapist, and whose license is in good standing. (8) "Supervision" means responsible supervision and control, with the licensed occupational therapist providing both initial direction in developing a plan of treatment and periodic inspection of the actual implementation of the plan. Such plan of treatment shall not be altered by the supervised individual without prior consultation with, and the approval of, the supervising occupational therapist. The supervising occupational therapist need not always be physically present or on the premises when the assistant is performing services; however, except in cases of emergency, supervision shall require the availability of the supervising occupational therapist for consultation with and direction of the supervised individual.
Georgia	**Statute: Official Code of Georgia §43–28–3 Definitions** (8) "Occupational therapy assistant" means a person licensed to assist the occupational therapist in the practice of occupational therapy under the supervision of or with the consultation of the licensed occupational therapist and whose license is in good standing. **Regulation: Rules and Regulations of the State of Georgia Department 671, Chapter 671–2, DEFINITIONS** Rule 671-2-.02 Supervision Defined Supervision as used in the law shall mean personal involvement of the licensed occupational therapist in the supervisee's professional experience which includes evaluation of his or her performance. Further, supervision shall mean personal supervision with weekly verbal contact and consultation, monthly review of patient care documentation, and specific delineation of tasks and responsibilities by the licensed occupational therapist and shall include the responsibility for personally reviewing and interpreting the results of any habilitative or rehabilitative procedures conducted by the supervisee. It is the responsibility of the licensed occupational therapist to ensure that the supervisee does not perform duties for which he or she is not trained. C.O.T.A.s and limited permit holders must be supervised. Rule 671-2-.03 Direct Supervision Defined Direct Supervision as used in the Law shall mean daily on-site, close contact whereby the supervisor is able to respond quickly to the needs of the client or supervisee. It requires specific delineation of task and responsibilities by a licensed Occupational Therapist and shall include the responsibility for personally reviewing and interpreting the result of any habilitative or rehabilitative procedures conducted by the supervisee. It is the responsibility of the licensed occupational therapist to ensure that the supervisee does not perform duties for which he/she is not trained.

Guam	**Statute: Guam Code Annotated Title 10, Chapter 12, Part 2, Article 14, Occupational Therapy.** **§121401. Definitions.** (d) Occupational therapy assistant means a person licensed to assist in the practice of occupational therapy who works under the indirect supervision of an occupational therapist, or as otherwise determined by the supervising occupational therapist. **§121410. Scope of practice; Occupational Therapy Assistant.** The occupational therapy assistant works under the supervision of the occupational therapist. The amount, degree and pattern of supervision a practitioner requires varies depending on the employment setting, method of service provision, the practitioner's competence and the demands of service. The occupational therapist is responsible for the evaluation of the client or patient. The treatment plan may be developed by the occupational therapist in collaboration with the occupational therapy assistant. Once the evaluation and treatment plans are established, the occupational therapy assistant may implement and modify various therapeutic interventions, as permitted by the Board under the supervision of the occupational therapist.
Hawaii	**Statute: Hawaii Revised Statutes Chapter 457G** **§457G-1 Definitions** "Occupational therapy assistant" means a person who engages in the practice of occupational therapy under the supervision of and in partnership with an occupational therapist. **§457G-2.7 Supervision of occupational therapy assistants; partnership with occupational therapists** (a) An occupational therapy assistant may practice occupational therapy only under the supervision of, and in partnership with, an occupational therapist who is licensed to practice occupational therapy in the State. The occupational therapist shall be responsible for occupational therapy evaluation, appropriate reassessment, treatment planning, interventions, and discharge from occupational therapy based on standard professional guidelines. The supervising occupational therapist and the supervised occupational therapy assistant shall have legal and ethical responsibility for ongoing management of supervision, including providing, requesting, giving, or obtaining supervision. (b) The supervising occupational therapist shall: (1) Determine the frequency, level, and nature of supervision with input from the occupational therapy assistant; and (2) Base the supervision determination on a variety of factors, including the clients' required level of care, treatment plan, and experience and pertinent skills of the occupational therapy assistant. (c) The supervising occupational therapist shall supervise the occupational therapy assistant to ensure that the occupational therapy assistant: (1) Does not initiate or alter a treatment program without prior evaluation by and approval of the supervising occupational therapist; (2) Obtains prior approval of the supervising occupational therapist before making adjustments to a specific treatment procedure; and (3) Does not interpret data beyond the scope of the occupational therapy assistant's education and training.
Idaho	**Statute: Idaho Statutes Title 54, Chapter 37** **§54-3702 DEFINITIONS.** As used in this chapter: (12) "Occupational therapy assistant" means a person licensed under this chapter to practice occupational therapy and who works under the supervision of an occupational therapist.

	§54-3715 SUPERVISION Within the scope of occupational therapy practice, supervision is aimed at ensuring the safe and effective delivery of occupational therapy services and the fostering of professional competence and development. Practices and procedures governing the supervision of occupational therapy assistants, a limited permit holder and an aide in the delivery of occupational therapy services shall be established in rule and be adopted by the board. **<u>Regulation:</u> Idaho Administrative Code 24.06.01** **010. DEFINITIONS.** 02. Direct Line-of-Site Supervision. Direct line-of-sight supervision requires the supervisor's physical presence when services are being provided to clients by the individual under supervision. 03. Direct Supervision. Direct supervision requires daily, in-person contact by the supervisor at the site where services are provided to clients by the individual under supervision. 05. General Supervision. General Supervision requires in-person or synchronous interaction at least once per month by an occupational therapist and contact by other means as needed. Other means of contact include, but are not limited to, electronic communications such as email. 06. Routine Supervision. Routine Supervision requires in-person or synchronous interaction at least once every two (2) weeks by an occupational therapist and contact by other means as needed. Other means of contact include, but are not limited to, electronic communications such as email. **011. SUPERVISION.** An occupational therapist shall supervise and be responsible for the patient care given by occupational therapy assistants, limited permit holders, aides, and students. An occupational therapist's or occupational therapy assistant's failure to provide appropriate supervision in accordance with these rules is grounds for discipline. 01. Occupational Therapy Assistants. Occupational therapy assistants must be supervised by an occupational therapist. General Supervision must be provided at a minimum. 05. Supervision Requirements. Supervision is the direction and review of service delivery, treatment plans, and treatment outcomes. Unless otherwise specified in this rule, General Supervision is the minimum level of supervision that must be provided. Methods of supervision may include, but are not limited to, Direct Line-of-Sight Supervision, Direct Supervision, Routine Supervision, or General Supervision, as needed to ensure the safe and effective delivery of occupational therapy. a. An occupational therapist and an occupational therapy assistant must ensure the delivery of services by the individual being supervised is appropriate for client care and safety and must evaluate: i. The complexity of client needs; ii. The number and diversity of clients; iii. The skills of the occupational therapist and the occupational therapist assistant, aide, or limited permit holder; iv. The type of practice setting; v. The requirements of the practice setting; and vi. Other regulatory requirements applicable to the practice setting or delivery of services. b. Supervision must be documented in a manner appropriate to the individuals and the setting. The documentation must be kept as required by Section 013 of these rules.

	c. Supervision must include consultation at appropriate intervals regarding evaluation, intervention, progress, reevaluation and discharge planning for each patient. Consultation must be documented and signed by the supervisor and supervisee.
Illinois	**Statute: 225 ILCS 75/2 Definitions** In this Act: (5) "Occupational therapy assistant" means a person initially registered and licensed who assists in the practice of occupational therapy under this Act. The occupational therapy assistant shall work under appropriate supervision of an in partnership with a licensed occupational therapist. **Regulation: Illinois Administrative Code Title 68, Chapter VII, Subchapter b, Part 1315** **Section 1315.163 Supervision of an Occupational Therapy Assistant** a) A certified occupational therapy assistant shall practice only under the supervision of a registered occupational therapist. Supervision is a process in which 2 or more persons participate in a joint effort to establish, maintain and elevate a level of performance and shall include the following criteria: 1) To maintain high standards of practice based on professional principles, supervision shall connote the physical presence of the supervisors and the assistant at regularly scheduled supervision sessions. 2) Supervision shall be provided in varying patterns as determined by the demands of the areas of patient/client service and the competency of the individual assistant. Such supervision shall be structured according to the assistant's qualifications, position, level of preparation, depth of experience and the environment within which he/she functions. 3) The supervisors shall be responsible for the standard of work performed by the assistant and shall have knowledge of the patients/clients and the problems being discussed. Co-signature does not reflect supervision. 4) A minimum guideline of formal supervision is as follows: A) The occupational therapy assistant who has less than one year of work experience or who is entering new practice environments or developing new skills shall receive a minimum of 5% on-site face-to-face supervision from a registered occupational therapist per month. On-site supervision consists of direct, face-to-face collaboration in which the supervisor must be on the premises. The remaining work hours shall be supervised by a combination of telephone, electronic communication, telecommunication, technology or face-to-face consultation. B) The occupational therapy assistant with more than one year of experience in his/her current practice shall have a minimum of 5% direct supervision from a registered occupational therapist per month. The 5% direct supervision shall consist of 2% direct, face-to-face collaboration. The remaining 3% of supervision shall be a combination of telephone, electronic communication, telecommunication technology or face-to-face consultation. The remaining work hours will be supervised in accordance with subsection (a)(2). b) Record Keeping. It is the responsibility of the occupational therapy assistant to maintain on file at the job site signed documentation reflecting supervision activities. This supervision documentation shall contain the following: date of supervision, means of communication, information discussed and the outcomes of the interaction. Both the supervising occupational therapist and the occupational therapy assistant must sign each entry.
Indiana	**Statute: Indiana Code 25-23.5** **Chapter 0.5 Applicability** Sec. 3. An occupational therapy assistant shall: (1) be licensed under this article; and (2) practice under the supervision of an occupational therapist who is licensed under this article.

	Chapter 1. Definitions Sec. 6. "Occupational therapy assistant" means a person who provides occupational therapy services under the supervision of an occupational therapist. **<u>Regulation:</u> Indiana Administrative Code Title 844, Article 10, Rule 5. Standards of Competent Practice of Occupational Therapy** **Sec. 5. Supervision of occupational therapy assistant** Under the supervision of an occupational therapist, an occupational therapy assistant may contribute to the screening and evaluation process. The occupational therapy assistant may also contribute to the following: (1) The development and implementation of the intervention plan. (2) The monitoring and documentation of progress. (3) The discontinuation or discharge from care or transitioning to another level of care. The occupational therapy assistant may not independently develop the intervention plan or initiate treatment.
Iowa	**<u>Statute:</u> Iowa Code Title IV, Section 148B2 Definitions.** As used in this chapter: 4. “Occupational therapy assistant” means a person licensed under this chapter to assist in the practice of occupational therapy. **<u>Regulation:</u> Iowa Administrative Code Division 645, Chapter 206 Licensure of Occupational Therapists and Occupational Therapy Assistants** **645–206.1 Definitions** “Occupational therapy assistant” means a person licensed under this chapter to assist in the practice of occupational therapy. “On site” means: 1. To be continuously onsite and present in the department or facility where the assistive personnel are performing services; 2. To be immediately available to assist the person being supervised in the services being performed; and 3. To provide continued direction of appropriate aspects of each treatment session in which a component of treatment is delegated to assistive personnel. **<u>Regulation:</u> Iowa Administrative Code Division 645, Chapter 208 Practice of occupational Therapists and Occupational Therapy Assistants** **645–208.5 Supervision requirements.** **208.5(2)** Occupational therapist supervisor responsibilities. The supervisor shall: a. Provide supervision to a licensed OTA, OT limited permit holder and OTA limited permit holder any time occupational therapy services are rendered. Supervision may be provided on site or through the use of telecommunication or other technology. b. Ensure that every licensed OTA, OT limited permit holder and OTA limited permit holder being supervised is aware of who the supervisor is and how the supervisor can be contacted any time occupational therapy services are rendered. c. Assume responsibility for all delegated tasks and shall not delegate a service that exceeds the expertise of the OTA or OTA limited permit holder. d. Provide evaluation and development of a treatment plan for use by the OTA.

	e. Ensure that the OTA, OT limited permit holder and OTA limited permit holder under the OT's supervision have current licenses to practice. f. Ensure that the signature of an OTA on an occupational therapy treatment record indicates that the occupational therapy services were provided in accordance with the rules and regulations for practicing as an OTA. **208.5(3)** The following are functions that only an occupational therapist may provide and that shall not be delegated to an OTA: a. Interpretation of referrals; b. Initial occupational therapy evaluation and reevaluations; c. Identification, determination or modification of patient problems, goals, and care plans; d. Final discharge evaluation and establishment of the discharge plan; e. Assurance of the qualifications of all assistive personnel to perform assigned tasks through written documentation of their education or training that is maintained and available at all times; f. Delegation of and instruction in the services to be rendered by the OTA, including but not limited to specific tasks or procedures, precautions, special problems, and contraindicated procedures; and g. Timely review of documentation, reexamination of the patient and revision of the plan when indicated. **208.5(5)** Minimum frequency of OT interaction. At a minimum, an OT must directly participate in treatment, either in person or through a telehealth visit, every twelfth visit for all patients and must document each visit. The occupational therapist shall participate at a higher frequency when the standard of care dictates. **208.5(6)** Occupational therapy assistant responsibilities. a. The occupational therapy assistant shall: (1) Provide only those services for which the OTA has the necessary skills and shall consult the supervising occupational therapist if the procedures are believed not to be in the best interest of the patient; (2) Gather data relating to the patient's disability during screening, but shall not interpret the patient information as it pertains to the plan of care; (3) Communicate any change, or lack of change, that occurs in the patient's condition and that may need the assessment of the OT; (4) Provide occupational therapy services only under the supervision of the occupational therapist; (5) Provide treatment only after evaluation and development of a treatment plan by the occupational therapist; (6) Refer inquiries that require interpretation of patient information to the occupational therapist; (7) Be supervised by an occupational therapist, either on site or through the use of telecommunication or other technology, at all times when occupational therapy services are being rendered; (8) Receive supervision from any number of at least one occupational therapist; and (9) Record on every patient chart the name of the OTA's supervisor for each treatment session. b. The signature of an OTA on the occupational therapy treatment record indicates that occupational therapy services were provided in accordance with the rules and regulations for practicing as an OTA.
Kansas	**<u>Statute:</u> Kansas Statutes Annotated §65-5402. Definitions.** (e) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist.

	<u>Regulation:</u> Kansas Administrative Regulations Agency 100, Article 54 Occupational Therapy **§100-54-9. Occupational therapy assistants; information to board.** Before an occupational therapist allows an occupational therapy assistant to work under the occupational therapist's direction, the occupational therapist shall inform the board of the following: (a) The name of each occupational therapy assistant who intends to work under the direction of that occupational therapist; (b) the occupational therapy assistant's place of employment; and (c) the address of the employer. **§100-54-10 Delegation and supervision.** (a) Occupational therapy procedures delegated by an occupational therapist or occupational therapy assistant to an occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional shall be performed under the direct, on-site supervision of a licensed occupational therapist or occupational therapy assistant. (b) (1) "Occupational therapy technician" as used in this regulation, shall mean "occupational therapy tech" pursuant to K.S.A. 65-5419 and amendments thereto. (2) An occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional shall mean an individual who provides support services to the occupational therapist and occupational therapy assistant. (c) A task delegated to an occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional by an occupational therapist or occupational therapy assistant shall not exceed the level of training, knowledge, skill, and competence of the individual being supervised. The occupational therapist or occupational therapy assistant shall be responsible for the acts or actions performed by the occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional functioning in a practice setting. (d) Each occupational therapist and each occupational therapy assistant shall delegate only specific tasks to an occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional that meet all of the following conditions: (1) The tasks are routine in nature. (2) The treatment outcome is predictable. (3) The task does not require judgment, interpretation, or adaptation by the occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional. (e) The tasks that an occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional may perform shall include the following specifically selected routine tasks: (1) Clerical, secretarial, or administrative duties; (2) transportation of patients, clients, or students; (3) preparation or setup of the treatment equipment and work area; (4) attending to a patient's, client's, or student's needs during treatment; and (5) maintenance or restorative services to patients, clients, or students. (f) Any occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional may assist in the delivery of occupational therapy services. However, no occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional shall provide independent treatment or use any title or description implying that the occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional is a provider of occupational therapy services. (g) An occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional shall not perform any of the following:

(1) Interpret referrals or prescriptions for occupational therapy services;
(2) evaluate treatment procedures;
(3) develop, plan, adjust, or modify treatment procedures;
(4) act on behalf of the occupational therapist or occupational therapy assistant relating to direct patient care that requires judgment or decision making; and
(5) act independently or without the supervision of an occupational therapist or occupational therapy assistant.

§100-54-12. Supervision of occupational therapy assistants.

(a) For the purposes of this regulation, each of the following terms shall have the meaning specified in this subsection:
(1) "Full-time" means employed for 30 or more hours per week.
(2) "Supervision" means oversight of an occupational therapy assistant by a licensed occupational therapist that includes initial direction and periodic review of service delivery and the provision of relevant instruction and training.

(b) Supervision shall be considered adequate if the occupational therapist and occupational therapy assistant have on-site contact at least monthly and interim contact occurring as needed by other means, including telephone, electronic mail, text messaging, and written communication.

(c) Each occupational therapist who supervises an occupational therapy assistant shall meet the following requirements:
(1) Be licensed in Kansas;
(2) be actively engaged in the practice of occupational therapy in Kansas;
(3) be responsible for the services and tasks performed by the occupational therapy assistant under the supervision of the occupational therapist;
(4) be responsible for any tasks that the supervised occupational therapy assistant delegates to an occupational therapy aide, occupational therapy technician, or occupational therapy paraprofessional;
(5) delegate only those services for which the occupational therapist has reasonable knowledge that the occupational therapy assistant has the knowledge, experience, training, and skill to perform;
(6) document in the patient's chart any direction or review of occupational therapy services provided under supervision by the occupational therapy assistant; and
(7) report to the board any knowledge that the occupational therapy assistant has committed any act specified in K.S.A. 65-5410, and amendments thereto. The occupational therapist shall report this information to the board within 10 days of receiving notice of the information.

(d) An occupational therapist shall not supervise more than the combined equivalent of four fulltime occupational therapy assistants. This combination shall not exceed a total of eight occupational therapy assistants.

(e) Each occupational therapist's decision to delegate components of occupational therapy services under this regulation to an occupational therapy assistant shall be based on that occupational therapist's education, expertise, and professional judgment.

(f) An occupational therapy assistant shall not initiate therapy for any patient or client before the supervising occupational therapist's evaluation of the patient or client.

(g) An occupational therapy assistant shall not perform any of the following services for a patient or client:
(1) Performing and documenting an initial evaluation;
(2) developing or modifying the treatment plan; or
(3) developing a plan of discharge from treatment.

(h) Any occupational therapy assistant, under supervision, may perform the following services for a patient or client:
(1) Collecting initial patient data through screening and interviewing;

	(2) assessing initial activities of daily living by administering standardized assessments; (3) performing a chart review; (4) implementing and coordinating occupational therapy interventions; (5) providing direct services that follow a documented routine and accepted protocol; (6) grading and adapting activities, media, or the environment according to the needs of the patient or client; (7) contributing to the reassessment process; and (8) contributing to the discontinuation of intervention, as directed by the occupational therapist, by implementing a discharge plan and providing necessary client discharge resources. (i) Failure by any occupational therapist or occupational therapy assistant to meet the applicable requirements of this regulation shall constitute evidence of unprofessional conduct.
Kentucky	**Statute: Kentucky Revised Statutes 319A.010, Definitions for chapter.** As used in this chapter: (4) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under this chapter, who works under the supervision of an occupational therapist; **Regulation: Kentucky Administrative Regulations 201 KAR 28:010, Section 1. Definitions.** (11) "General supervision" means an interactive process for collaboration on the practice of occupational therapy which includes the review and oversight of all aspects of the services being provided by the individual under supervision. **Regulation: Kentucky Administrative Regulations 201 KAR 28:130, Supervision of occupational therapy assistant, occupational therapy aides, occupational therapy students, and temporary permit holders** Section 1. Definitions. (1) "Countersign" means the OT/L signs the client's documentation after actively reviewing the history of the intervention provided to the client and confirming that, in light of the entire intervention plan, the OTA/L's entry is proper. (2) "Face-to-face supervision" means being physically present in the room and being able to directly communicate with an individual while observing and guiding the activities of that individual, including: (a) A review of the occupational therapy services being provided to a client that might affect the therapeutic outcomes and the revision of the plan of care for each client; and (b) An interactive process between the supervisor and the individual under supervision involving direct observation, co-treatment, dialogue, teaching, and instruction in a face-to face setting. (3) "Supervisor" means the OT/L who is providing supervision. Section 2. General Policy Statement for Supervision. (1) The OT/L shall have the ultimate responsibility for occupational therapy outcomes. Supervision shall be a shared responsibility. (2) The supervising OT/L shall have a legal and ethical responsibility to provide supervision and the supervisee shall have a legal and ethical responsibility to obtain supervision. (3) Supervision by the OT/L of the supervisee's provision of occupational therapy services shall always be required, even when the supervisee is experienced and skilled in a particular practice area.

	Section 3. Supervision of Licensed Occupational Therapy Assistants. (1) An OTA/L shall assist in the practice of occupational therapy only under the supervision of an OT/L. (2) The supervisor shall provide no less than four (4) hours per month of general supervision for each occupational therapy assistant which shall include no less than two (2) hours per month of face-to-face supervision. (3) The amount of supervision time shall be prorated for a part-time OTA/L. (4) The supervisor or the OTA/L may institute additional supervision based on the competence and experience of the OTA/L. (5) The supervisor shall assign and the OTA/L shall accept only those duties and responsibilities for which the OTA/L has been specifically trained and which the OTA/L is qualified to perform. (6) Specific responsibilities for supervising OT/Ls and OTA/Ls. (a) Assessment and reassessment. 1. Client evaluation is the responsibility of the OT/L. 2. The OTA/L may contribute to the evaluation process by gathering data, administering structured tests, and reporting observations. 3. The OTA/L may not evaluate independently or initiate therapy prior to the OT/L's evaluation. (b) Intervention planning. 1. The OT/L shall take primary responsibility for the intervention planning. 2. The OTA/L may contribute to the intervention planning as directed by the OT/L. (c) Intervention. 1. The OT/L shall be responsible for the outcome and delivery of the occupational therapy intervention. 2. The OT/L shall be responsible for assigning appropriate therapeutic interventions to the OTA/L. (d) Discontinuation of intervention. 1. The OT/L shall be responsible for the discontinuation of occupational therapy services. 2. The OTA/L may contribute to the discontinuation of intervention as directed by the OT/L. (7) Documentation requirements. (a) Notations recorded by an OTA/L to an initial evaluation, plan of care, or discharge summary, that are documented in a client's permanent record, shall be countersigned by the supervisor within fourteen (14) calendar days of the notation. (b) The supervising OT/L and individuals under supervision shall each maintain a log which shall document: 1. The frequency of the supervision provided; 2. The observation, dialogue and discussion, and instructional techniques employed; 3. The type of supervision provided, either general or face-to-face; 4. The dates on which the supervision occurred; and 5. The number of hours worked by the OTA/L each month. (c) It shall be the responsibility of the supervising OT/L to maintain a list of any OTA/L that he or she has supervised with the OTA/L's name and license number. (d) It shall be the responsibility of the OTA/L under supervision to maintain a list of his or her supervising OT/L with that individual's name and license number. (8) A supervising OT/L shall not have more than the equivalent of three (3) full time OTA/Ls under supervision at any one (1) time. (9) (a) In extenuating circumstances, when the OTA/L is without supervision, the OTA/L may continue carrying out established programs for up to thirty (30) calendar days under agency supervision while appropriate occupational therapy supervision is sought.

	(b) It shall be the responsibility of the OTA/L to notify the board of these circumstances and to submit, in writing, a plan for resolution of the situation. (10) A supervisor shall be responsible for ensuring the safe and effective delivery of OT services and for fostering the professional competence and development of the OTA/Ls under his or her supervision.
Louisiana	**Statute: Louisiana Revised Statutes Title 37, Chapter 39, §3003 Definitions.** (5) "Occupational therapy assistant" means a person who is certified as a certified occupational therapy assistant (COTA) by the American Occupational Therapy Association, Inc. (AOTA), and is licensed to assist in the practice of occupational therapy under the supervision of, and in activity programs with the consultation of, an occupational therapist licensed under this Act. **Regulation: Louisiana Administrative Code Title 46, Part XLV, Subpart 2, Chapter 19, Subchapter A, §1901. Definitions** Occupational Therapy Assistant—a person who is licensed to assist in the practice of occupational therapy under the supervision of, and in activity programs with the consultation of, an occupational therapist licensed under this Chapter. **Regulation: Louisiana Administrative Code Title 46, Part XLV, Subpart 3, Chapter 49, Subchapter A** **§4903. Definitions.** Close Client Care Supervision—face to face observation of an occupational therapy assistant administering occupational therapy to a client, accompanied or followed in a timely fashion by verbal discussion of client goals, the individual program plan and other matters which may affect the client's plan of care. Occupational Therapy Assistant—a person who is licensed to assist in the practice of occupational therapy under the supervision of, and in activity programs with the consultation of, an occupational therapist licensed under this Chapter. Periodically—occurring at regular intervals of time not less than every two weeks or the sixth visit, whichever comes first. Supervising Occupational Therapist—an occupational therapist responsible to the client for occupational therapy who observes, directs, consults with and retains responsibility for the service competence and performance of an occupational therapy assistant in the administration of occupational therapy to such client. **§4919. Quality Assurance and Service Competency** C. Any occupational therapist supervising an occupational therapy assistant must have performed and documented a service competency on the occupational therapy assistant. The occupational therapist must have previously evaluated and/or treated any client being seen by an occupational therapy assistant he or she is supervising. In addition: 1. initial service competency. Following acceptance of responsibility to supervise an occupational therapy assistant, but prior to utilization of such assistant in the implementation of any client program plan or other administration of occupational therapy to a client, the supervising occupational therapist shall initially evaluate and document the occupational therapy assistant's service competency to administer all occupational therapy services which are to be performed under his or her supervision and direction. The service competency is designed to document the occupational therapy assistant's skill set; 2. annual service competency. Following such an initial evaluation the supervising occupational therapist shall thereafter annually conduct and document a service competency to determine the occupational therapy assistant's skill set;

	3. documentation of service competency. Documentation of initial and annual competency shall include the date the evaluation was performed, a description of the tasks evaluated, and the name, signature and Louisiana license number of the supervising occupational therapist conducting the service competency evaluation; 4. in practice settings where an occupational therapy assistant is supervised by more than one occupational therapist, service competencies (initial and/or annual) performed by one supervising occupational therapist will satisfy the requirements of this Section for all occupational therapists supervising the occupational therapy assistant in the performance of the same services, provided that their name, signature and Louisiana license number appears on the evaluation; 5. a supervising occupational therapist shall insure such documentation is maintained by the occupational therapy assistant and at each clinic, facility or home health agency where the occupational therapy assistant practices under his or her supervision. D. A supervising occupational therapist is responsible for and must be capable of demonstrating compliance with the requirements of this Chapter and AOTA supervision guidelines respecting supervision of occupational therapy assistants. **§4925. Supervision of Occupational Therapy Assistants** A. The rules of this Section, together with those specified in §4915 and §4919, govern supervision of an occupational therapy assistant by a supervising occupational therapist in any clinical setting. B. An occupational therapy assistant may assist in implementation of a client program plan in consultation with and under the supervision of an occupational therapist. Such supervision shall not be construed in every case to require the continuous physical presence of the supervising occupational therapist provided, however, that the supervising occupational therapist and the occupational therapy assistant must have the capability to be in contact with each other by telephone or other telecommunication which allows for simultaneous interactive discussion between the supervising occupational therapist and occupational therapy assistant. Supervision shall exist when the occupational therapist responsible for the client gives informed concurrence of the actions of the occupational therapy assistant and adheres to all requirements set forth in this Chapter. C. Prior to Implementation of Program Plan. Prior to the administration of occupational therapy by an occupational therapy assistant, the supervising occupational therapist shall, in accordance with AOTA standards of practice as may from time to time be amended: 1. perform an evaluation; 2. identify and establish occupational therapy needs, goals and an individual program plan; 3. ensure that the documents created pursuant to §4925.C.1 and §4925.C.2 are made part of the client's record and accessible to the occupational therapy assistant prior to his or her the first treatment session with the client; and 4. be available for a client care conference. D. Throughout the Duration of Program Plan. Following implementation and throughout the duration of the program plan: 1. a supervising occupational therapist shall periodically and systematically re-evaluate the appropriateness of all services delivered. Such information shall be documented in the client's record, which shall be made available to the occupational therapy assistant. The supervising occupational therapist preparing such revisions shall communicate any critical aspect or significant change in the program plan to the occupational therapy assistant by means of a client care conference prior to the occupational therapy assistant's next treatment session with the client; 2. at all times during which an occupational therapy assistant assists in program plan implementation, the supervising occupational therapist shall be immediately accessible for a client care conference; and 3. an occupational therapy assistant shall not administer occupational therapy to any client whose physical, cognitive, functional or mental status differs substantially from that identified by the supervising occupational therapist's individual program plan in the absence of re-evaluation by, or an immediate prior client care conference with, the supervising occupational therapist.

	E. In addition to the terms and conditions specified in §4919 and §4925.A-D, the following additional requirements are applicable to an occupational therapy assistant's administration of occupational therapy under the supervision of an occupational therapist. 1. In any clinical setting, other than specified by §4925.E.3: a. an occupational therapy assistant with less than one year of practice experience: i. shall receive close client care supervision in each clinical setting for not less than one of every four, or 25+ percent, of those clients to whom he or she has administered occupational therapy during an average weekly case load; ii. in addition, a client care conference shall be held with respect to each client to whom the occupational therapy assistant administers occupational therapy; b. an occupational therapy assistant with more than one but less than two years of practice experience: i. shall receive close client care supervision in each clinical setting for not less than one of every 10, or 10 percent, of those clients seen during an average weekly case load; ii. in addition, a client care conference shall be held with respect to each client to whom the occupational therapy assistant administers occupational therapy; c. an occupational therapy assistant with more than two years of practice experience: i. shall receive a client care conference with respect to each client to whom the occupational therapy assistant administers occupational therapy. 2. School System, Long-Term Psychiatric and Nursing Home Facility Settings. In addition to the requirements prescribed in §4925.E.1, clients in school system, long-term psychiatric or nursing home facility settings shall be re-evaluated or treated by the supervising occupational therapist not less frequently than the earlier of once a month or every sixth treatment session. 3. Home Health Setting. The terms and conditions prescribed by §4925.E.1 shall not be applicable to a home health setting. An occupational therapy assistant may assist in implementation of a client program plan in a home health setting under the supervision of an occupational therapist provided all the following terms, conditions and restrictions of this Chapter, except §4925.E.1, are strictly observed: a. an occupational therapy assistant shall have had not less than two years practice experience in providing occupational therapy prior to administering occupational therapy in a home health environment; b. each client in a home health setting to whom an occupational therapy assistant administers occupational therapy shall be re-evaluated or treated by the supervising occupational therapist not less frequently than the earlier of once every two weeks or every sixth treatment session; and c. a face-to-face client care conference shall occur not less frequently than once every two weeks to discuss all clients to whom the occupational therapy assistant has administered occupational therapy in a home health setting. Such conference shall be documented by the supervising occupational therapist in a supervisory log and maintained by or at the home health entity. 4. Early Intervention Setting. The terms and conditions prescribed by §4925.E.1 shall not be applicable to an early intervention setting. An occupational therapy assistant may assist in implementation of a client program plan in an early intervention setting under the supervision of an occupational therapist provided all the following terms, conditions and restrictions of this Chapter, except §4925.E.1, are strictly observed: a. an occupational therapy assistant shall have had not less than two years practice experience in providing occupational therapy prior to administering occupational therapy in an early intervention setting;

	b. each client in an early intervention setting to whom an occupational therapy assistant administers occupational therapy shall be re-evaluated or treated by the supervising occupational therapist not less frequently than the earlier of once a month or every sixth treatment session; and c. a client care conference shall occur not less frequently than the earlier of once every month or every sixth treatment session to discuss all clients to whom the occupational therapy assistant has administered occupational therapy in an early intervention setting. Such conference shall be documented and maintained by the supervising occupational therapist in a supervisory log. F. Mutual Obligations and Responsibilities. A supervising occupational therapist and occupational therapy assistant shall bear equal reciprocal obligations to insure strict compliance with the obligations, responsibilities and provisions set forth in this Chapter. G. The administration of occupational therapy other than in accordance with the provisions of this Section and §4919 shall be deemed a violation of these rules, subjecting the occupational therapist and/or an occupational therapy assistant to suspension or revocation of licensure pursuant to §4921.B.18.
Maine	**<u>Statute:</u> Maine Revised Statutes Title 32, Chapter 32, §2272 Definitions** 12–B. "Occupational therapy assistant" means an individual who has passed the certification exam of the NBCOT for an occupational therapy assistant or who was certified as an occupational therapy assistant prior to June 1977 and who is licensed to practice occupational therapy under this chapter in the State under the supervision of a licensed occupational therapist. 14. "Supervision of OTA" means initial directions and periodic inspection of the service delivery and provision of relevant in-service training. The supervising licensed occupational therapist shall determine the frequency and nature of the supervision to be provided based on the clients' required level of care and the OTA's caseload, experience and competency. **<u>Regulations:</u> Maine Rules 02-477, Chapter 5 ROLE OF THE OCCUPATIONAL THERAPY ASSISTANT; SUPERVISION OF OCCUPATIONAL THERAPY ASSISTANTS AND TEMPORARY LICENSEES** 1. Role of the Occupational Therapy Assistant The occupational therapy assistant: 1. May assist in the practice of occupational therapy only with the supervision of an occupational therapist; 2. Shall apply critical thinking and clinical reasoning, including reflection and reassessment, in addressing clients' needs; 3. May initiate a treatment intervention program only when the client has been evaluated and intervention treatment has been planned by the occupational therapist, and may discharge the client from a treatment intervention program only in collaboration with or after consultation with the occupational therapist; 4. May not perform an evaluation independently, but may contribute to the evaluation process in collaboration or consultation with the occupational therapist; 5. May participate in the screening process by collecting data, such as records, by general observation and/or by conducting a general interview, and may communicate in writing or orally the information gathered to the occupational therapist; 6. May track the need for reassessment, report changes in status that might warrant reassessment or referral, and administer the reassessment under the supervision of the occupational therapist; and 7. Shall immediately discontinue any specific treatment procedure which appears harmful to the client and so notify the supervising occupational therapist. NOTE: The permissible activities of occupational therapists are set forth in 32 MRSA §2272(12) (statutory definition of occupational therapy).

	2. Supervision of Occupational Therapy Assistants and Temporary Licensees 1. Principles of Supervision The occupational therapist has the ultimate responsibility for occupational therapy treatment outcomes. Supervision is a shared responsibility. The supervising occupational therapist has a legal and ethical responsibility to provide supervision, and the supervisee has a legal and ethical responsibility to obtain supervision. Supervision is required even when the supervisee is experienced and/or highly skilled in a particular area. A supervisor is legally and ethically responsible for the professional activities of an occupational therapy assistant or temporary licensee under his or her supervision. 2. Knowledge of Client The supervising occupational therapist must have knowledge of the client, or the occupational therapy services received by the client, and the problems being discussed. 3. Supervision of Occupational Therapy Assistants Supervision consists of "initial directions and periodic inspection of the service delivery and provision of relevant in-service training. The supervising licensed occupational therapist shall determine the frequency and nature of the supervision to be provided based on the clients' required level of care and the COTA's caseload, experience and competency."32 MRSA §2272(14) 5. Supervision Requirement; Supervision Forms A. Each occupational therapy assistant and temporary licensee must have a supervisor of record for each facility or work setting at or in which the occupational therapy assistant or temporary licensee is employed. The supervising occupational therapist must agree in writing, on a form provided by the board, to provide supervision to the named supervisee pursuant to the laws and rules governing the practice of occupational therapy. Any change of supervisor must be documented by a replacement or supplemental supervision form, as the case may be. B. All supervision forms must be must sent to the board no later than 10 days after execution by the supervisor and supervisee. The supervisor and supervisee are equally responsible for sending the forms to the board and ensuring that accurate, up-to-date supervision forms are on file with the board at all times.
Maryland	**<u>Statute:</u> Annotated Code of Maryland Health Occupations Article, Title 10** **§10-101 Definitions.** (e) "Direct supervision" means supervision provided on a face-to-face basis by a supervising therapist when delegated client-related tasks are performed. (h) "Licensed occupational therapy assistant" means, unless the context requires otherwise, an occupational therapy assistant who is licensed by the Board to practice limited occupational therapy. (i) (1) "Limited occupational therapy" means participation, while under the periodic supervision of a licensed occupational therapist, in: (i) An initial screening and evaluation that applies the principles and procedures of occupational therapy; and (ii) A treatment program that applies the principles and procedures of occupational therapy. (2) "Limited occupational therapy" does not include: (i) Initiation and interpretation of evaluation data; and (ii) Initiation of a treatment program before the client has been evaluated and a licensed occupational therapist has rendered a treatment plan. (q) "On-site supervision" means supervision in which a supervisor is immediately available on a face-to-face basis when client procedures are performed or as otherwise necessary.

	(r) (1) “Periodic supervision” means supervision by a licensed occupational therapist on a face-to-face basis, occurring the earlier of at least: (i) Once every 10 therapy visits; or (ii) Once every 30 calendar days. (2) “Periodic supervision” includes: (i) Chart review; and (ii) Meetings to discuss client treatment plans, client response, or observation of treatment. (s) “Supervision” means aid, direction, and instruction provided by an occupational therapist to adequately ensure the safety and welfare of clients during the course of occupational therapy. **§10-310. Scope of occupational therapy assistant license** (a) Subject to subsection (b) of this section, an occupational therapy assistant license authorizes the licensee to practice limited occupational therapy while the license is effective. (b) A licensed occupational therapy assistant may practice limited occupational therapy only under the supervision of an occupational therapist who is authorized to practice occupational therapy in this State. **Regulation: Code of Maryland Regulations 10.46.01** **.01 Definitions.** (8) "Direct supervision" means supervision provided on a face-to-face basis by a supervisor who is a licensed occupational therapist or occupational therapy assistant, during the performance of delegated client-related tasks. (18) "Occupational therapy assistant" means, unless the context requires otherwise, an occupational therapy assistant who is licensed by the Board to practice limited occupational therapy. (19) "On-site supervision" means supervision provided by a supervisor who is: (a) A licensed occupational therapist or occupational therapy assistant; and (b) Immediately available on the premises to provide direct supervision, if needed, when client-related procedures are performed or as otherwise necessary. (20) Periodic Supervision. (a) "Periodic supervision" means supervision provided by a supervisor who is a licensed occupational therapist on a face-to-face basis, for each client who is being treated by the licensed occupational therapy assistant supervisee, occurring the earlier of at least: (i) Once every 10 therapy visits; or (ii) Once every 30 calendar days. (b) "Periodic supervision" includes: (i) Chart review; and (ii) Meetings to discuss client treatment plans, client response to treatment, or observation of treatment, as indicated to ensure the competent and safe provision of occupational therapy services. (26) “Supervision” means the provision of clinical aid, direction, and instruction, by either a licensed occupational therapist or an occupational therapy assistant, to ensure the competent delivery of occupational therapy services. (27) “Supervisor” means an occupational therapist or occupational therapy assistant, excluding temporary licensees, who is licensed by the Board and has the responsibility of clinically supervising the provision of occupational therapy treatment services.

	.04 Supervision requirements A. Occupational Therapist. (1) A licensed occupational therapist may supervise the clinical practice of the following: (a) Occupational therapist; (b) Occupational therapy assistant; (c) Temporary occupational therapist; (d) Temporary occupational therapy assistant; (e) Aide; and (f) Occupational therapy student or occupational therapy assistant student. (2) Unless otherwise stated, a supervisor need not be physically present on the premises at all times, but may be available by telephone or by other electronic communication means. B. Occupational Therapy Assistant. (1) Subject to the requirements of this section, an occupational therapy assistant may practice limited occupational therapy under the supervision of an occupational therapist provided it is at least periodic supervision. (2) The supervising occupational therapist working with the occupational therapy assistant shall determine the appropriate amount and type of supervision necessary, taking into consideration: (a) Skills, experience, and education of the occupational therapy assistant and the occupational therapist; (b) Change in a client's status; (c) Complexity of the treatment program; and (d) Type and requirements of practice setting. (3) In addition to the other requirements specified by this section, supervision requires that, before the initiation of the treatment program and before a planned discharge, the supervising occupational therapist shall provide direction to the occupational therapy assistant by verbal, written, or electronic communication. (4) An occupational therapy assistant, under the direction of the occupational therapist, is permitted to be the primary clinical supervisor for the following: (a) Aide; (b) Temporary occupational therapy assistant; (c) Level I fieldwork occupational therapy student; and (d) Level I and Level II fieldwork occupational therapy assistant student. (5) The occupational therapy assistant may be utilized to facilitate occupational therapy student and occupational therapy assistant student learning experiences in both Level I and Level II fieldwork under the direction of the occupational therapist. (6) The supervising occupational therapist and the occupational therapy assistant are jointly responsible for maintaining formal documentation of periodic supervision as set forth in Regulation .05 of this chapter.
Massachusetts	**Statute: Massachusetts General Laws, Part I, Title XVI, Chapter 112, Section 23A** Occupational therapy shall also include delegating of selective forms of treatment to occupational therapy assistants and occupational therapy aides; provided, however, that the occupational therapist so delegating shall assume the responsibility for the care of the patient and the supervision of the occupational therapy assistant or the occupational therapy aide. "Occupational therapy assistant", a person duly licensed in accordance with section twenty-three B and who assists in the practice of occupational therapy who works under the supervision of a duly licensed occupational therapist.

	<u>Regulation:</u> Code of Massachusetts Regulations 259 CMR 3.00 **3.01: Definitions.** Assessment. An assessment is a standardized or non-standardized tool or instrument used in the evaluation process. Client. A client is the entity receiving occupational therapy services. Clients may include: (a) individuals and other persons relevant to an individual's life, including family, caregivers, teachers, employers, and others who also may help or be served indirectly; (b) organizations such as businesses, industries or agencies; and (c) populations within a community. Evaluation. The process of obtaining and interpreting data necessary for an intervention, including planning for and documenting the evaluation process and results. Intervention Plan. An outline of selected approaches and types of interventions, based on the results of the evaluation process and developed to reach the client's identified targeted outcomes. Occupational Therapy Service Delivery Process. The process of evaluation, intervention planning, intervention implementation, intervention review, and outcome evaluation for a client. Screening. An initial brief assessment to determine the need for occupational therapy evaluation and intervention, consisting of record review, observation, and consultation. Service Competency. Demonstration of specific knowledge and skills to permit safe and competent delivery of occupational therapy services. **3.02: Occupational Therapy Service Delivery Process.** (1) Responsibility of the Occupational Therapist. (a) Responsible for all aspects of occupational therapy service delivery, including Screening, Evaluation and reevaluation and is accountable for the safety and effectiveness of the Occupational Therapy Service Delivery Process. (b) Must be directly involved in the delivery of services during the Screening, initial Evaluation, reevaluation, and regularly throughout the course of intervention, including discharge/outcome Evaluation. (c) Responsible for determining when to delegate to other occupational therapy personnel. When delegating aspects of occupational therapy services, the occupational therapist considers the following factors 1. The complexity of the Client's condition. 2. The knowledge, skill and competence of the occupational therapy practitioner and/or the Occupational Therapy Aide. 3. The nature and complexity of the intervention. 4. The needs and requirements of the practice setting. (d) Assumes primary responsibility for obtaining informed consent from the Client for occupational therapy services to be provided.

	(e) Provides appropriate and required supervision (see 259 CMR 3.05) to other occupational therapy personnel, including occupational therapy assistant, occupational therapy student or occupational therapy assistant student and Occupational Therapy Aide. (f) Assumes responsibility for communicating results of Evaluation, goals, and Intervention Plan to the Client with recommendations about occupational therapy services to be provided. (g) Initiates and directs the Screening process, analyzes and interprets the data in accordance with applicable laws, other regulatory requirements and AOTA documents. (h) Initiates and directs the Evaluation process, analyzes and interprets the data in accordance with applicable laws, other regulatory requirements, and AOTA documents. 1. Uses current Assessments and Assessment procedures and follows defined protocols of standardized Assessments. 2. Uses best evidence to inform intervention. 3. Directs all aspects of the initial contact during the occupational therapy Evaluation, including: a. Determining the need for service (Screening). b. Determining the Client's goals and priorities based on collaborative discussion with the Client. c. Establishing intervention priorities. d. Determining specific needs for further Assessment. e. Determining specific Assessment tasks that can be delegated to the occupational therapy assistant. 4. Interpret Evaluation data, including information provided by the occupational therapy assistant, occupational therapy student, or occupational therapy assistant student. (i) Assumes primary responsibility for the development of the occupational therapy Intervention Plan based on the initial Evaluation, including long and short term goals, expected frequency, and duration. Identifies and documents precautions, contraindications, anticipated progress, and plans for reevaluation on a regular basis or as required by payors and other regulatory bodies. (j) Assumes primary responsibility for the intervention process. 1. Assumes responsibility for providing appropriate supervision to the occupational therapy assistant when delegating aspects of the occupational therapy intervention. 2. Determines the need for continuing, modifying or discontinuing occupational therapy services in consultation with the Client. 3. Designates or establishes channels of written and/or oral communication with all other care providers, regarding Client's status. 4. Recommends additional consultations or refers Clients to appropriate resources when the needs of the Client can best be served by the expertise of other professionals or services. (k) Assumes primary responsibility for selecting, measuring and interpreting discharge data/outcomes. 1. Prepares and implements a transition or discontinuation plan based on the Client's needs, goals, performance, and appropriate follow-up resources. 2. Directs responsibility for the contents of the discharge Evaluation/summary. 3. Makes necessary referrals to other professionals or facilities. (2) Responsibility of Occupational Therapy Assistants. (a) Occupational therapy assistants may contribute to the Screening process by collecting data with Service Competency and shall communicate the information gathered to the supervising occupational therapist.

(b) Occupational therapy assistants may contribute to the Evaluation process by collecting data and administering specific Assessments, with Service Competency, and shall communicate the information gathered to the supervising occupational therapist.
(c) Occupational therapy assistants may not interpret data beyond the scope of their occupational therapy assistant education or current Service Competency.
(d) Occupational therapy assistants may not initiate or alter an Intervention Plan without prior Evaluation by and approval of the supervising occupational therapist.
(e) Occupational therapy assistants may, with prior documented approval of the supervising occupational therapist, adjust a specific intervention procedure in accordance with changes in Client status.
(f) Occupational therapy assistants may respond to inquiries regarding Client status to appropriate parties within the protocol established by the supervising occupational therapist.
(g) Occupational therapy assistants shall refer inquiries regarding Client prognosis to a supervising occupational therapist.

3.03: Documentation.
Timely and accurate documentation is necessary whenever occupational therapy services are provided, regardless of payer source. The Client's record must be signed with the provider's name, professional designation, and license number.

(1) The occupational therapist's primary role in documentation is to ensure that documentation is completed timely, following formats and standards established by the practice setting, agencies, external accreditation programs, state and federal law, and other regulators and payers. The occupational therapist's primary role is to document the following, with input from the occupational therapy assistant, as applicable:
(a) Screenings;
(b) Evaluations;
(c) Initial goals and any modifications in goals, as needed;
(d) Initial Intervention Plans and any modifications;
(e) Patient progress notes;
(f) Formal reviews of the initial Intervention Plan (or reevaluations); and
(g) Discharge Evaluations or summaries.
(2) The occupational therapy assistant's primary role is to document the following:
(a) Objective data from Assessments with established Service Competency; and
(b) Patient progress notes as directed by the Occupational Therapist.

3.04: Co-Signing of Documentation
(1) The supervising occupational therapist must co-sign the documentation of occupational therapy students and those holding temporary licenses as occupational therapists.
(2) The supervising occupational therapist or occupational therapy assistant must co-sign the documentation of occupational therapy assistant students and those holding temporary licenses as occupational therapy assistants.
(3) Occupational therapy assistants are not required to have their documentation co-signed.
(4) The supervising occupational therapist or occupational therapy assistant must co-sign the documentation of Occupational Therapy Aides.

	3.05: Supervision of Personnel Various types and methods of supervision should be used. These may include direct, face-to-face contact and indirect contact. Examples of supervision involving direct, face-to-face contact include: observation, modeling, co-intervention, discussions, teaching, and instruction. Examples of supervision involving indirect contact include: telephone conversations, written correspondence, and electronic exchanges. (1) Primary responsibility for occupational therapy services rendered by supportive personnel rests with the supervising occupational therapist. (2) Occupational therapists and occupational therapy assistants must exercise their professional judgment when determining the number of personnel they can safely and effectively supervise to ensure that safe and appropriate care is provided at all times. (a) Specific frequency, methods, and content of supervision should be determined based on the following factors: 1. Complexity of Clients' needs; 2. Number of Clients; 3. Diversity of Client conditions; 4. Service Competency of the occupational therapist and the occupational therapy assistant; 5. Type of practice setting and the administrative requirements of that setting; and 6. Other regulatory requirements. (b) Supervision may necessarily be more frequent than the minimum required by the practice setting or regulatory agencies depending upon: 1. The complexity or unpredictability of the Client's needs or the Occupational Therapy Service Delivery Process. 2. The number of Clients and the diversity of their conditions within a particular practice setting. 3. The professional judgment of the occupational therapist or occupational therapy assistant, that additional supervision is necessary to ensure the safe and effective delivery of occupational therapy services.
Michigan	**<u>Statute:</u> Michigan Compiled Laws, Chapter 333, Section 333.18301, Definitions.** (1) As used in this part: (a) "Occupational therapy assistant" means an individual licensed under this article to engage in practice as an occupational therapy assistant. (d) "Practice as an occupational therapy assistant" means the practice of occupational therapy under the supervision of an occupational therapist licensed under this article. **<u>Regulation:</u> Michigan Administrative Code R338.1211, Definitions.** As used in these rules: (f) “Direct supervision” means that the occupational therapist is physically present or present via telemedicine with the individual being supervised or immediately available for direction and onsite supervision when the limited assessment, task, intervention, or interaction with the client is performed. (g) “General supervision” means that the occupational therapist is not required to be physically present on site or present during a telemedicine visit but is continuously available when the limited assessment, task, intervention, or interaction with the client is performed. Continuously available includes availability by telecommunication or another electronic device.

	<u>Regulation:</u> Michigan Administrative Code R338.1229, Delegation of limited assessments, tasks or interventions to an occupational therapy assistant; supervision of an occupational therapy assistant; requirements. Rule 29. (1) An occupational therapist who delegates the performance of limited assessments, tasks or interventions to an occupational therapy assistant as allowed under section 16215 of the code, MCL 333.16215, shall supervise the occupational therapy assistant consistent with section 16109(2) of the code, MCL 333.16109, and satisfy the requirements of this rule. As used in this rule, "limited assessment" means those parts of an evaluation that an occupational therapy assistant is qualified by education and training to perform while under the supervision of an occupational therapist. (2) Before an occupational therapist delegates limited assessments, tasks, or interventions to an occupational therapy assistant, the occupational therapist shall evaluate the qualifications of the occupational therapy assistant, including verification of the occupational therapy assistant's training, education, and licensure. (3) An occupational therapist who delegates limited assessments, tasks, or interventions to an occupational therapy assistant shall determine and provide the appropriate level of supervision required for the occupational therapy assistant's performance of the delegated limited assessment, task, or intervention. The appropriate level of supervision must be determined based on the occupational therapy assistant's education, training, and experience. The level of supervision must be either general supervision or direct supervision. (4) An occupational therapist who delegates limited assessments, tasks, or interventions under this rule shall also comply with all of the following: (a) Initiate and direct the evaluation of the patient or client before delegating limited assessments. (b) Complete the evaluation of the patient or client before delegating tasks or interventions to be performed by an occupational therapy assistant. (c) Supervise an occupational therapy assistant to whom limited assessments, tasks, or interventions are delegated. (d) Provide predetermined procedures and protocols for limited assessments, tasks, or interventions that are delegated. (e) Monitor an occupational therapy assistant's practice of assigned limited assessments, tasks, or interventions. (f) Maintain a record of the names of the occupational therapy assistants to whom limited assessments, tasks, or interventions have been delegated pursuant to section 16215 of the code, MCL 333.16215. (g) Meet using live, synchronous contact at least once per month with the occupational therapy assistant to whom limited assessments, tasks, or interventions have been delegated to accomplish all of the following: (i) Evaluate the occupational therapy assistant's performance. (ii) Review the patient or client records. (iii) Educate the occupational therapy assistant on the limited assessments, tasks, or interventions that have been delegated to facilitate professional growth and development. (h) The occupational therapist shall maintain documentation of the meeting, which must be signed by both the occupational therapist and occupational therapist assistant. Compliance with this subdivision must not be used as a substitute for the ongoing supervision required under this subrule and subrule (3) of this rule. (5) An occupational therapist shall not delegate the performance of either of the following to an occupational therapy assistant: (a) The sole development of a treatment plan. (b) The sole evaluation and interpretation of evaluation results. (6) An occupational therapist shall not supervise more than 4 occupational therapy assistants who are providing services to patients at the same time.

Minnesota	**Statute: Minnesota Statutes, Chapter 148, Occupational Therapists and Occupational Therapy Assistants.** **§148.6402. DEFINITIONS** "Direct supervision" of an occupational therapy assistant using physical agent modalities means that the occupational therapist has evaluated the patient and determined a need for use of a particular physical agent modality in the occupational therapy treatment plan, has determined the appropriate physical agent modality application procedure, and is available for in-person intervention while treatment is provided. "Occupational therapy assistant" means an individual who meets the qualifications for an occupational therapy assistant in sections 148.6401 to 148.6449 and is licensed by the board. "Service competency" of an occupational therapy assistant in performing evaluation tasks means the ability of an occupational therapy assistant to obtain the same information as the supervising occupational therapist when evaluating a client's function. Service competency of an occupational therapy assistant in performing treatment procedures means the ability of an occupational therapy assistant to perform treatment procedures in a manner such that the outcome, documentation, and follow-up are equivalent to that which would have been achieved had the supervising occupational therapist performed the treatment procedure. Service competency of an occupational therapist means the ability of an occupational therapist to consistently perform an assessment task or intervention procedure with the level of skill recognized as satisfactory within the appropriate acceptable prevailing practice of occupational therapy. **§148.6432. SUPERVISION OF OCCUPATIONAL THERAPY ASSISTANTS** 1.Applicability. If the professional standards identified in section 148.6430 permit an occupational therapist to delegate an evaluation, reevaluation, or treatment procedure, the occupational therapist must provide supervision consistent with this section. 2.Evaluations. The occupational therapist shall determine the frequency of evaluations and reevaluations for each client. The occupational therapy assistant shall inform the occupational therapist of the need for more frequent reevaluation if indicated by the client's condition or response to treatment. Before delegating a portion of a client's evaluation pursuant to section 148.6430, the occupational therapist shall ensure the service competency of the occupational therapy assistant in performing the evaluation procedure and shall provide supervision consistent with the condition of the patient or client and the complexity of the evaluation procedure. 3. Intervention. (a) The occupational therapist must determine the frequency and manner of supervision of an occupational therapy assistant performing intervention procedures delegated pursuant to section 148.6430 based on the condition of the patient or client, the complexity of the intervention procedure, and the service competency of the occupational therapy assistant. (b) Face-to-face collaboration between the occupational therapist and the occupational therapy assistant must occur every ten intervention days or every 30 days, whichever comes first, during which time the occupational therapist is responsible for: (1) planning and documenting an initial intervention plan and discharge from interventions; (2) reviewing intervention goals, therapy programs, and client progress; (3) supervising changes in the intervention plan;

	(4) conducting or observing intervention procedures for selected clients and documenting appropriateness of intervention procedures. Clients must be selected based on the occupational therapy services provided to the client and the role of the occupational therapist and the occupational therapy assistant in those services; and (5) ensuring the service competency of the occupational therapy assistant in performing delegated intervention procedures. (c) Face-to-face collaboration must occur more frequently if necessary to meet the requirements of paragraph (a) or (b). (d) The occupational therapist must document compliance with this subdivision in the client's file or chart. 4. Exception. The supervision requirements of this section do not apply to an occupational therapy assistant who: (1) works in an activities program; and (2) does not perform occupational therapy services. The occupational therapy assistant must meet all other applicable requirements of sections 148.6401 to 148.6449.
Mississippi	**Statute: Mississippi Code Annotated Title 73, Chapter 24, Section 3, Definitions.** The following words and phrases shall have the following meanings, unless the context requires otherwise: (g) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the supervision of or with the consultation of the licensed occupational therapist, and whose license is in good standing. **Regulation: Mississippi Administrative Code Title 15, Part 19, Subpart 60, Chapter 8** **Subchapter 1 General** Rule 8.1.3 Definitions: The following terms shall have the meaning set forth below, unless the context otherwise requires: 11. Occupational Therapy Assistant means a person licensed to assist in the practice of occupational therapy under the supervision of or with the consultation of a licensed occupational therapist and whose license is in good standing. 14. Direct supervision means the daily, direct, on-site contact at all times of a licensed occupational therapist or occupational therapy assistant when an occupational therapy aide assists in the delivery of patient care. **Subchapter 10 Occupational Therapy Assistant** Rule 8.10.1 Definition: An occupational therapy assistant (OTA), shall be defined as an individual who meets the qualifications and requirements as set forth in Subchapter 4 of these regulations, and has been issued a license by the Department. The roles and responsibilities of an OTA are: 1. To practice only under the supervision of, or in consultation with, an occupational therapist licensed to practice in Mississippi. 2. To assist with but not perform total patient evaluations. 3. To perform treatment procedures as delegated by the occupational therapist. 4. To supervise other supportive personnel as charged by the occupational therapist. 5. To notify the occupational therapist of changes in the patient's status, including all untoward patient responses. 6. To discontinue immediately any treatment procedures which in their judgment appear to be harmful to the patient. 7. To refuse to carry out treatment procedures that they believe to be not in the best interest of the patient. Rule 8.10.2 Supervision or Consultation: 1. An occupational therapy assistant issued a limited permit (see Rule 8.4.5). 2. An occupational therapy assistant issued a regular license.

	a. Supervision or consultation which means face-to-face meetings of supervisor and supervisee (OT and OTA) to review and evaluate treatment and progress at the work site, and regular interim communication between the supervisor and supervisee. A face-to-face meeting is held at least once every seventh treatment day or 21 calendar days, whichever comes first. b. The supervising occupational therapist must be accessible by telecommunications to the occupational therapy assistant on a daily basis while the occupational therapy assistant is treating patients. c. Regardless of the practice setting, the following requirements must be observed when the occupational therapist is supervising or consulting with the occupational therapy assistant: i. The initial visit for evaluation of the patient and establishment of a plan of care must be made by the supervising or consulting occupational therapist. ii. A joint supervisory visit must be made by the supervising occupational therapist and the occupational therapy assistant with the patient present at the patient's residence or treatment setting once every 7 treatment days or every 21 days, whichever comes first. iii. A supervisory visit should include: 1. A review of activities with appropriate revision or termination of the plan of care; 2. An assessment of utilization of outside resources (whenever applicable); 3. Documentary evidence of such visit; 4. Discharge planning as indicated. iv. An occupational therapist may not supervise/consult with more than two (2) occupational therapy assistants except in school settings, or setting where maintenance or tertiary type services are provided, such as the regional treatment centers under the direction of the Department of Mental Health.
Missouri	**<u>Statute:</u> Missouri Revised Statutes Title XXII, Chapter 324** **324.050 Occupational therapy practice act – definitions.** 2. For the purposes of sections 324.050 to 324.089, the following terms mean: (8) "Occupational therapy assistant", a person who is licensed as an occupational therapy assistant by the division, in collaboration with the board. The function of an occupational therapy assistant is to assist an occupational therapist in the delivery of occupational therapy services in compliance with federal regulations and rules promulgated by the division, in collaboration with the Missouri board of occupational therapy. **324.056 License to practice required, when — supervision of occupational therapy assistants.** 2. A licensed occupational therapy assistant shall be directly supervised by a licensed occupational therapist. The licensed occupational therapist shall have the responsibility of supervising the occupational therapy treatment program. No licensed occupational therapist shall have under his or her direct supervision more than four occupational therapy assistants. **<u>Regulation:</u> 20 CSR 2205-4.010 Supervision of Occupational Therapy Assistants and Occupational Therapy Assistant Limited Permit Holders** (1) An occupational therapy assistant and/or occupational therapy assistant limited permit holder shall assist an occupational therapist in the delivery of occupational therapy services in compliance with all state and federal statutes, regulations, and rules. (2) The occupational therapy assistant or occupational therapy assistant limited permit holder may only perform services under the direct supervision of an occupational therapist.

	(A) The manner of supervision shall depend on the treatment setting, patient/client caseload, and the competency of the occupational therapy assistant and/or occupational therapy assistant limited permit holder as determined by the supervising occupational therapist. At a minimum, supervision shall include consultation of the occupational therapy assistant and/or occupational therapy assistant limited permit holder with the supervising occupational therapist prior to the initiation of any patient's/client's treatment plan and modification of treatment plan. (B) More frequent face-to-face supervision may be necessary as determined by the occupational therapist or occupational therapy assistant and/or occupational therapy assistant limited permit holder dependent on the level of expertise displayed by the occupational therapy assistant and/or occupational therapy assistant limited permit holder, the practice setting, and/or the complexity of the patient/client caseload. (C) Supervision shall be an interactive process between the occupational therapist and occupational therapy assistant and/or occupational therapy assistant limited permit holder. It shall be more than peer review or co-signature. The interactive process shall include but is not limited to the patient/client assessment, reassessment, treatment plan, intervention, discontinuation of intervention, and/or treatment plan. (D) The supervising occupational therapist or the supervisor's designee must be available for immediate consultation with the occupational therapy assistant and/or occupational therapy assistant limited permit holder. The supervisor need not be physically present or on the premises at all times. (3) The supervising occupational therapist has the overall responsibility for providing the necessary supervision to protect the health and welfare of the patient/client receiving treatment from an occupational therapy assistant and/or occupational therapy assistant limited permit holder. The supervising occupational therapist shall— (A) Be licensed by the board as an occupational therapist; (B) Not be licensed as a limited permit holder; (C) Not be under restriction or discipline from any licensing board or jurisdiction; (D) Not have more than four (4) full-time equivalent (FTE) occupational therapy assistants under his/her supervision at one time; (E) Be responsible for all referrals of the patient/client; (F) Be responsible for completing the patient's evaluation/assessment. The occupational therapy assistant and/or occupational therapy assistant limited permit holder may contribute to the screening and/or evaluation process by gathering data, administering standardized tests and reporting observations. The occupational therapy assistant and/or occupational therapy assistant limited permit holder may not evaluate independently or initiate treatment before the supervising occupational therapist's evaluation/assessment; (G) Be responsible for developing and modifying the patient's treatment plan. The treatment plan must include goals, interventions, frequency, and duration of treatment. The occupational therapy assistant and/or occupational therapy assistant limited permit holder may contribute to the preparation, implementation and documentation of the treatment plan. The supervising occupational therapist shall be responsible for the outcome of the treatment plan and assigning of appropriate intervention plans to the occupational therapy assistant and/or occupational therapy assistant limited permit holder within the competency level of the occupational therapy assistant and/or occupational therapy assistant limited permit holder; (H) Be responsible for developing the patient's discharge plan. The occupational therapy assistant and/or occupational therapy assistant limited permit holder may contribute to the preparation, implementation and documentation of the discharge plan. The supervising occupational therapist shall be responsible for the outcome of the discharge plan and assigning of appropriate tasks to the occupational therapy assistant and/or occupational therapy assistant limited permit holder within the competency level of the occupational therapy assistant and/or occupational therapy assistant limited permit holder; and (I) Ensure that all patient/client documentation becomes a part of the permanent record.

	(4) The supervising occupational therapist has the overall responsibility for providing the necessary supervision to protect the health and welfare of the patient/client receiving treatment from an occupational therapy assistant and/or occupational therapy assistant limited permit holder. However, this does not absolve the occupational therapy assistant and/or occupational therapy assistant limited permit holder from his/her professional responsibilities. The occupational therapy assistant and/or occupational therapy assistant limited permit holder shall exercise sound judgement and provide adequate care in the performance of duties. The occupational therapy assistant and/or occupational therapy assistant limited permit holder shall— (A) Not initiate any patient/client treatment program or modification of said program until the supervising occupational therapist has evaluated, established a treatment plan and consulted with the occupational therapy assistant and/or occupational therapy assistant limited permit holder; (B) Not perform an evaluation/assessment, but may contribute to the screening and/or evaluation process by gathering data, administering standardized tests and reporting observations; (C) Not analyze or interpret evaluation data; (D) Track the need for reassessment and report changes in status that might warrant reassessment or referral; (E) Immediately suspend any treatment intervention that appears harmful to the patient/client and immediately notify the supervising occupational therapist; and (F) Ensure that all patient/client documentation prepared by the occupational therapy assistant and/or occupational therapy assistant limited permit holder becomes a part of the permanent record. (5) The supervisor shall ensure that the occupational therapy assistant and/or occupational therapy assistant limited permit holder provides occupational therapy as defined in section 324.050, RSMo appropriate to and consistent with his/her education, training, and experience.
Montana	**<u>Statute:</u> Montana Code Annotated §37-24-103 Definitions** As used in this chapter, unless the context requires otherwise, the following definitions apply: (2) "Certified occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under this chapter, who works under the general supervision of an occupational therapist in accordance with the provisions of the national board for certification in occupational therapy, inc., and adopted by the board. (7) "Occupational therapy assistant" means a person who is licensed to assist in the practice of occupational therapy under this chapter and who works under the general supervision of an occupational therapist. **<u>Regulation:</u> Administrative Regulations of Montana 24.165** **Subchapter 3 Definitions** 24.165.302 DEFINITIONS For the purpose of this chapter the following definitions apply: (4) “Direct supervision” means the supervisor is physically present in the direct treatment area of the client-related activity being performed by the supervisee and requires face-to-face communication, direction, observation, and daily evaluation. (6) “General supervision” means the supervisor provides face-to-face communication, direction, observation, and evaluation of a supervisee’s delivery of client services at least monthly at the site of client-related activity, with interim supervision occurring by other methods, such as telephonic, electronic, or written communication. **Subchapter 5 Licensing and Scope of Practice** 24.165.501 SUPERVISION

	(1) Supervisors shall determine the required level of supervision based on the supervisee's clinical experience, responsibilities, and competence. (2) Occupational therapists do not require supervision except for direct supervision of proctored treatments. (3) Except per 37-24-105(2) and 37-24-106(2), MCA, certified occupational therapy assistants must work under the general supervision of an occupational therapist.
Nebraska	**Statute: Nebraska Revised Statutes, Chapter 38** **38-2512 Occupational therapy assistant, defined.** Occupational therapy assistant means a person holding a current license to assist in the practice of occupational therapy. **38-2527 Occupational therapy assistant; supervision required.** An occupational therapy assistant may deliver occupational therapy services enumerated in section 38-2526 in collaboration with and under the supervision of an occupational therapist. **Regulation: Nebraska Administrative Code 172 NAC 114** 002. DEFINITIONS. Definitions are set out in the Occupational Therapy Practice Act, the Uniform Credentialing Act, 172 Nebraska Administrative Code (NAC) 10, and this chapter. 002.06 CERTIFIED OCCUPATIONAL THERAPY ASSISTANT. A person who is certified pursuant to guidelines established by the National Board for Certification in Occupational Therapy (NBCOT). 002.07 CONSULTATION OR IN ASSOCIATION WITH. Providing professional advice. 002.14 OCCUPATIONAL THERAPIST REGISTERED. A person who is registered under guidelines established by the National Board for Certification in Occupational Therapy (NBCOT). 002.15 ONSITE. The location where the occupational therapy assistant is providing occupational therapy services. 002.16 ONSITE SUPERVISION. The occupational therapist or occupational therapy assistant must be physically present at the practice site to direct all actions when occupational therapy services are being provided. 002.17 SUPERVISION. The process by which the quantity and quality of work of an occupational therapy assistant is monitored. Supervision means the directing of the authorized activities of an occupational therapy assistant by a licensed occupational therapist and will not be construed to require the physical presence of the supervisor when carrying out assigned duties. 002.18 TREATMENT PLAN. A written statement setting forth the goals, method of treatment, and time frame for goal achievement. 005. REQUIREMENTS FOR CONSULTING WITH OR SUPERVISING AN OCCUPATIONAL THERAPY ASSISTANT. An occupational therapy assistant may assist in the practice of occupational therapy under the supervision of or in consultation with an occupational therapist. 005.01 STANDARDS. An occupational therapist that is supervising or consulting with an occupational therapy assistant must meet the following standards: (A) Evaluate each patient prior to treatment by the occupational therapy assistant; (B) Develop a treatment plan outlining which elements have been delegated to the occupational therapy assistant; (C) Monitor the patient's progress; (D) Approve any change in the occupational therapy treatment plan;

	(E) Ensure that the occupational therapy assistant is assigned only to duties and responsibilities for which he or she has been specifically trained and is qualified to perform; (F) Review all documentation written by the occupational therapy assistant; (G) Interpret the results of tests which are administered by the occupational therapy assistant; and (H) Evaluate the treatment plan and determine termination of treatment. 005.02 REQUIREMENTS. An occupational therapist supervising an occupational therapy assistant must meet the following requirements: (A) A minimum of 4 hours per month of on-site supervision if an occupational therapy assistant has more than 1 year satisfactory work experience as an occupational therapy assistant; or (B) A minimum of 8 hours per month of on-site supervision if an occupational therapy assistant has less than 1 year satisfactory work experience as an occupational therapy assistant.
Nevada	**<u>Statute:</u> Nevada Revised Statutes 640A.070** "Occupational therapy assistant" means a person who is licensed pursuant to this chapter to practice occupational therapy under the general supervision of an occupational therapist. **<u>Regulation:</u> Nevada Administrative Code Chapter 640A** 1. An occupational therapist who is the treating occupational therapist of record for a patient remains the treating occupational therapist of record for the patient until the responsibility for the program of treatment for the patient is reassigned to another occupational therapist. After such a reassignment, the occupational therapist to whom the responsibility for the program of treatment for the patient is reassigned shall be the treating occupational therapist of record for the patient. 2. A reassignment of the responsibility for the program of treatment for a patient from the treating occupational therapist of record to another occupational therapist must be noted in the record of the patient. 3. Temporary or intermittent services provided to a patient by an occupational therapist who is not the treating occupational therapist of record for the patient and which are consistent with the program of intervention of the patient do not constitute a reassignment of the responsibility for the treatment of the patient for the purposes of this section. **NAC 640A.010 Definitions.** 640A.012 "Certified occupational therapy assistant" means a person who is certified as an occupational therapy assistant by the National Board for Certification in Occupational Therapy, Inc., or its successor organization. 640A.0143 "Primary supervisor" means a licensed occupational therapist who is responsible for the general supervision of an occupational therapy assistant or provisional licensee during his or her term of employment. 640A.0165 "Supervision" means a collaborative process for the responsible, periodic review and inspection of all aspects of any occupational therapy services provided. 640A.018 "Treating occupational therapist" means a licensed occupational therapist who is responsible for the program of treatment of a patient.

	NAC 640A.250 Occupational therapy assistant or provisional licensee: Practice under general supervision of occupational therapist. 1. An occupational therapy assistant or a provisional licensee shall not practice occupational therapy without the general supervision of an occupational therapist. Immediate physical presence or constant presence on the premises where the occupational therapy assistant or provisional licensee is practicing is not required of the occupational therapist. To provide satisfactory general supervision, the treating occupational therapist shall: (a) Provide an initial program of intervention, and any subsequent changes to the initial program, for patients assigned to the occupational therapy assistant or provisional licensee. (b) Not less than 1 hour for each 40 hours of work performed by the occupational therapy assistant or provisional licensee and, in any event, not less than 1 hour each month, engage in: (1) Clinical observation of the occupational therapy assistant or provisional licensee; or (2) Direct communication with the occupational therapy assistant or provisional licensee. The mode and frequency of that communication is dependent upon the setting for the practice of the occupational therapy assistant or provisional licensee. Direct communication may consist of, without limitation: (I) Direct or joint treatment of a patient; (II) Personal supervision of the occupational therapy assistant or provisional licensee while providing services; (III) Conversation, in person or by telephone; (IV) Exchange of written comments; (V) Review of patient records; or (VI) Conferences, or other face-to-face meetings; or (VII) Communications conducted using audio-video communications technology. (c) Establish the patient workload of the occupational therapy assistant or provisional licensee based on the competency of the occupational therapy assistant or provisional licensee as determined by the occupational therapist. (d) Review written documentation prepared by the occupational therapy assistant or provisional licensee during the course of treatment of a patient. The completion of this review by the occupational therapist may be evidenced by: (1) Preparation of a separate progress note; or (2) The occupational therapist signing and dating the document prepared by the occupational therapy assistant or provisional licensee. 2. The treating occupational therapist and the occupational therapy assistant or provisional licensee shall jointly: (a) Document, in a manner other than the mere signing of service records prepared by another person, the supervision required pursuant to this section. Such documentation may include, without limitation, the preparation of: (1) Daily or weekly treatment or intervention schedules; (2) Logs of supervision, which include, without limitation, the time and date of supervision, the type of supervision provided and the subject matter covered during the supervision; and (3) Patient records. (b) Ensure that the record regarding a patient treated by the occupational therapy assistant or provisional licensee is signed, dated and reviewed at least monthly by the occupational therapy assistant or provisional licensee and the occupational therapist. In reviewing the record, the occupational therapist and the occupational therapy assistant or provisional licensee shall verify, without limitation: (1) The accuracy of the record; and (2) That there is continuity in the services received by the patient pursuant to the program of intervention.

	3. An occupational therapy assistant or provisional licensee may assist an occupational therapist in: (a) Preparing and disseminating any written or oral reports, including, without limitation, the final evaluation and discharge summary of a patient; (b) Unless the treatment is terminated by a patient or his or her provider of health care, determining when to terminate treatment; and (c) Delegating duties to an occupational therapy aide or technician. 4. An occupational therapy assistant or provisional licensee shall document all treatment provided to a patient by the occupational therapy assistant or provisional licensee. 5. An occupational therapist shall not delegate responsibilities to an occupational therapy assistant or provisional licensee which are beyond the scope of the training of the occupational therapy assistant or provisional licensee. 6. The provisions of this section do not prohibit an occupational therapy assistant or provisional licensee from responding to acute changes in a patient's condition that warrant immediate assistance or treatment. 7. As used in this section, "sign" means to inscribe by handwriting or electronic means one's name, initials or license number. **NAC 640A.255 Occupational therapy assistant or provisional licensee: Review and approval of supervisory logs by primary supervisor; general supervision by treating occupational therapist.** 1. A primary supervisor of an occupational therapy assistant or a provisional licensee shall review documentation maintained by both the treating occupational therapist and the occupational therapy assistant or provisional licensee pursuant to NAC 640A.250 to ensure that such documentation satisfies the requirements of that section. 2. A treating occupational therapist shall provide general supervision, as described in NAC 640A.250, to an occupational therapy assistant or provisional licensee to whom he or she delegated duties for the provision of care to a patient. 3. A treating occupational therapist is responsible for all occupational therapy services provided by an occupational therapy assistant or provisional licensee to whom he or she delegates duties for the provision of care to a patient. **NAC 640A.260 Occupational therapy assistant or provisional licensee: Verification to Board of employment and supervision; notice of termination; number of primary supervisors required per employer of record.** 1. An occupational therapy assistant or provisional licensee shall submit verification of his or her employment and supervision by a primary supervisor to the Board within 30 days after a change in the employment or primary supervisor. The verification must be submitted in a format approved by the Board. 2. An occupational therapist who is a primary supervisor shall notify the Board within 30 days after the termination of his or her supervision of an occupational therapy assistant or provisional licensee. 3. An occupational therapy assistant or provisional licensee must have at least one primary supervisor and may have one alternate primary supervisor for each employer of record. **NAC 640A.265 Occupational therapy assistant or provisional licensee: Delegation of duties by treating occupational therapist; limitations.** 1. A treating occupational therapist shall provide direction to and supervise any program of intervention which is delegated to an occupational therapy assistant or provisional licensee and shall ensure that the occupational therapy assistant or provisional licensee does not function autonomously. 2. Only an occupational therapist may: (a) Interpret the record of a patient who is referred to the occupational therapist by a provider of health care;

	(b) Interpret the evaluation of a patient and identify any problem of the patient; (c) Develop a plan of care for a patient based upon the initial evaluation of the patient, which includes the goal of the treatment of the patient; (d) Determine the appropriate portion of the program of intervention and evaluation to be delegated to an occupational therapy assistant; (e) Delegate the treatment to be administered by the occupational therapy assistant; (f) Instruct the occupational therapy assistant regarding: (1) The specific program of intervention of a patient; (2) Any precaution to be taken to protect a patient; (3) Any special problem of a patient; (4) Any procedure which should not be administered to a patient; and (5) Any other information required to treat a patient; (g) Review the program of intervention of a patient in a timely manner; (h) Record the goal of treatment of a patient; and (i) Revise the plan of care when indicated. 3. A treating occupational therapist may delegate to an occupational therapist who holds a provisional license any of the activities identified in subsection 2. 4. An occupational therapy assistant shall not: (a) Write formal evaluations of the progress of a patient to another health care professional. For the purposes of this paragraph, daily chart notes in the records of a patient does not constitute a formal evaluation of the progress of the patient. (b) Participate in any meeting with a patient or a health care professional, including, without limitation, a meeting in an educational setting, at which: (1) The occupational therapy assistant is the sole licensee; and (2) The program of intervention of a patient may be modified. (c) Make clinical decisions regarding the provision of occupational therapy services to a patient that conflict with or overrule the decisions of an occupational therapist. 5. An occupational therapy assistant or provisional licensee shall notify the treating occupational therapist of record for a patient and document in the records of the patient any change in the: (a) General condition of the patient; and (b) Condition of a patient that is not within the planned progress or treatment goals of the patient. 6. A treating occupational therapist of record for a patient shall continuously follow the progress of the patient. 7. Except as otherwise provided in NAC 640A.267, a licensee shall not knowingly delegate to a person who is less qualified than the licensee any program of intervention which requires the skill, common knowledge and judgment of the licensee. 8. As used in this section, "health care professional" has the meaning ascribed to it in NRS 629.076, as amended by section 15 of Senate Bill No. 137, chapter 289, Statutes of Nevada 2021, at page 1595.
New Hampshire	**Statute: New Hampshire Statutes Title XXX, Chapter 326-C, Section 326-C.1, Definitions.** In this chapter and RSA 328-F, unless the context otherwise requires: IV. "Occupational therapy assistant" means a person currently licensed to assist in the practice of occupational therapy, under the supervision of an occupational therapist, in the state of New Hampshire.

	<u>Regulations:</u> New Hampshire Administrative Rules, Occ 100 ORGANIZATIONAL RULES, Rules, Section 102.04, Definitions "Occupational therapy assistant (OTA)" means "occupational therapy assistant" as defined in RSA 326-C:1, IV, namely, "a person currently licensed to assist in the practice of occupational therapy, under the supervision of an occupational therapist, in the state of New Hampshire." **<u>Regulations:</u> New Hampshire Administrative Rules, Occ 300 REQUIREMENTS FOR LICENSURE, Part Occ 301 Definitions.** **Occ 301.04** "Direct supervision" means supervision through direct and continuous observation of the activities of the person being supervised. **Occ 301.05** "Indirect supervision" means supervision through the supervisor's review of the treatment progress notes made by the person supervised, telephone conversations between the supervisor and the person supervised, electronic correspondence between the supervisor and the person supervised or any other form of supervision which is not direct supervision. **<u>Regulations:</u> New Hampshire Administrative Rules, Occ 400 CONTINUED STATUS, Part 407 ONGOING REQUIREMENTS** **Occ 407.06** Supervision of Occupational Therapy Assistants. (a) Occupational therapy assistants shall be supervised in their work in occupational therapy by occupational therapists: (1) Who meet the description in Occ 408.07; (2) In accordance with the requirements of (b), (c) and (d) below; and (3) For periods longer than those set forth in (b), (c) and (d) below whenever such longer periods are required for accurate implementation of treatment plans. (b) Occupational therapy assistants with less than one year of paid experience in occupational therapy shall be directly supervised at least 5% of their work time and indirectly supervised an additional 10% of their work time. (c) Occupational therapy assistants with one to 5 years of paid experience in occupational therapy shall be directly supervised during at least 5% of their work time and indirectly supervised an additional 5% of their work time. (d) Occupational therapy assistants with greater than 5 years of paid experience in occupational therapy shall receive both direct and indirect supervision during 5% of their work time. **Occ 407.07 Qualifications to be a Supervisor.** To qualify to supervise occupational therapy assistants individuals shall be: (a) Currently licensed in New Hampshire as occupational therapists; (b) Not under disciplinary investigation by the board or under pending disciplinary charges in the facilities where supervision is to take place; and (c) Not related in any of the following ways to the occupational therapy assistants being supervised: (1) Spouse; (2) Parent, step-parent, parent-in-law or step-parent in-law; (3) Natural, foster or adopted child or stepchild; (4) Sibling, brother-in-law or sister-in-law; (5) First or second cousin; (6) Grandparent; or (7) Aunt or uncle.

	Occ 407.08 Limitation on Number of Occupational Therapy Assistants Under Supervision. An occupational therapist shall not supervise at any one time more occupational therapy assistants than those whose combined work hours total the work hours of 2 full-time occupational therapy assistants. **Occ 407.09** Occupational Therapy Assistants' Obligation to Present Supervision Rules to Supervisors and to Report Supervision to the Board. (a) Before beginning work in occupational therapy, an occupational therapy assistant shall: (1) Give to the person intending to provide supervision to the assistant a copy of Occ 408.06-Occ 408.10 and the supervision form; (2) Discuss the supervision requirements with the person intending to provide supervision; and (3) Submit to the board the completed supervision form. (b) An occupational therapy assistant shall submit a revised or additional supervision form to the board: (1) Within 30 days of the date of change each time there is a change in the person providing supervision to the assistant; and (2) Whenever the occupational therapy assistant takes on a second employer. **Occ 407.10** Supervision Form. (a) The supervision form shall be the form as specified in Ahp 601.06.
New Jersey	**Statute: New Jersey Legislative Statutes §45:9-37.53. Definitions.** "Occupational therapy assistant" means a person licensed pursuant to the provisions of this act to assist in the practice of occupational therapy under the supervision of or in collaboration with an occupational therapist on a regularly scheduled basis for the purpose of the planning, review, or evaluation of occupational therapy services. "Supervision" means the responsible and direct involvement of a licensed occupational therapist with an occupational therapy assistant for the development of an occupational therapy treatment plan and the periodic review of the implementation of that plan. The form and extent of the supervision shall be determined by the council. **Regulation: New Jersey Administrative Code, 13:44K-1.2, DEFINITIONS** The following words and terms, as used in this chapter, shall have the following meaning, unless the context clearly indicates otherwise: "Occupational therapy assistant" means a person licensed pursuant to the provisions of the Act and this chapter to assist in the practice of occupational therapy under the supervision of an occupational therapist on a regularly scheduled basis for the purpose of planning, review or evaluation of occupational therapy services. "Supervision" means the responsible and direct involvement of a licensed occupational therapist with an occupational therapy assistant, a temporary licensed occupational therapist, a temporary licensed occupational therapy assistant or an occupational therapy student fulfilling the required fieldwork component of his or her educational training, for the development of an occupational therapy treatment plan and the periodic review of the implementation of that plan. Such supervision shall be close, routine or general, consistent with the following: 1. "Close supervision" means daily, face-to-face contact with and frequent observation of the performance of the individual at the location where he or she is rendering services;

	2. "Routine supervision" means face-to-face contact with and observation of the performance of the individual at least once a week at the location where he or she is rendering services; and 3. "General supervision" means face-to-face contact with and observation of the performance of the individual at least once every two weeks at the location where he or she is rendering services. **<u>Regulation:</u> New Jersey Administrative Code, Tile 13, Chapter 44K, Subchapter 6, Supervision** **6.1 SUPERVISION REQUIREMENT** a) A licensed occupational therapy assistant or temporary licensed occupational therapist shall provide occupational therapy services only under the supervision of a licensed occupational therapist pursuant to the provisions of this subchapter. b) A temporary licensed occupational therapy assistant shall work only under the supervision of a licensed occupational therapist, or a licensed occupational therapy assistant who has been delegated supervisory responsibilities pursuant to N.J.A.C. 13:44K-6.6, pursuant to the provisions of this subchapter. c) The supervising occupational therapist shall retain responsibility for the occupational therapy care of the client being treated by the licensed occupational therapy assistant, a temporary licensed occupational therapist, or a temporary licensed occupational therapy assistant. d) In the event of a change of the supervising occupational therapist, the subsequent supervisor shall assume responsibility for the ongoing supervision of any occupational therapy assistant(s), temporary licensed occupational therapist(s), or temporary licensed occupational therapy assistant(s) providing care to a client and shall become the designated supervisor. **6.2 DESIGNATED SUPERVISOR: GENERAL QUALIFICATIONS AND RESPONSIBILITIES** a) Prior to supervising any person engaged in the practice of occupational therapy services, a licensed occupational therapist shall have at least 1,200 hours of work experience obtained in no less than one year and within three consecutive years of practice. b) A licensed occupational therapist shall not supervise more than five licensees, including occupational therapy assistants, temporary licensed occupational therapists or temporary licensed occupational therapy assistants. c) A licensed occupational therapist may supervise five occupational therapy students who are fulfilling the required fieldwork component of their educational training. d) Notwithstanding the provisions of (b) and (c) above, a licensed occupational therapist shall not supervise more than seven persons at one time. e) A designated supervisor shall maintain a written plan of supervision that shall include evidence of the ongoing supervision of each occupational therapy assistant and temporary licensee for whom the supervisor is responsible. **6.3 RESPONSIBILITIES OF A DESIGNATED SUPERVISOR: OCCUPATIONAL THERAPY ASSISTANT** a) A designated supervisor shall be responsible for the close, routine, or general supervision of an occupational therapy assistant. b) A designated supervisor shall determine the level of supervision required of each occupational therapy assistant consistent with the condition of the client, the education, skill, and training of the occupational therapy assistant, and the nature of the tasks and activities to be performed by the occupational therapy assistant; provided, however, that a designated supervisor shall provide close supervision for any occupational therapy assistant who has been engaged in the practice of occupational therapy services for less than one year on a full-time basis. 1) For purposes of this subsection, “full-time basis” means 1,200 hours of practice. No more than 30 hours of practice shall be obtained in any one week.

	c) When providing routine or general supervision of an occupational therapy assistant, a designated supervisor may also provide interim supervision of the occupational therapy assistant through telephonic or written communications, including reports and/or conferences, between the supervisor and the occupational therapy assistant. d) A designated supervisor who is unavailable to provide occupational therapy assistants with either routine or general supervision as required in (a), (b), or (c) above, for two or more contact periods, shall arrange for substitute supervision by a licensed occupational therapist, who shall follow the established plan of supervision. e) A designated supervisor who is unable to provide occupational therapy assistants with close supervision as required in (b) above, for more than one day, shall arrange for substitute supervision by a licensed occupational therapist, who shall follow the established plan of supervision. **6.4 RESPONSIBILITIES OF A DESIGNATED SUPERVISOR: TEMPORARY LICENSE HOLDER** a) A designated supervisor shall be responsible for the close supervision of a temporary license holder. b) A designated supervisor who is unavailable to provide a temporary license holder with supervision as required by (a) above, for more than one day, shall arrange for substitute supervision by a licensed occupational therapist, who shall follow the established plan of supervision. **6.5 RESPONSIBILITIES OF AN OCCUPATIONAL THERAPY ASSISTANT AND TEMPORARY LICENSE HOLDER** a) An occupational therapy assistant, a temporary licensed occupational therapist, or a temporary licensed occupational therapy assistant shall not render nor continue to render client care unless he or she has obtained ongoing direction from his or her designated supervisor. b) An occupational therapy assistant, a temporary licensed occupational therapist, and a temporary licensed occupational therapist assistant shall each be responsible for clients within the limits of his or her respective scope of practice pursuant to N.J.A.C. 13:44K-5.1 or 5.2, as applicable. c) An occupational therapy assistant, a temporary licensed occupational therapist, and a temporary licensed occupational therapist assistant shall maintain a record of supervision, which shall include the name and license number of his or her designated supervisor, the date when the occupational therapy assistant or temporary licensee received supervision, and the type of supervision that was provided. **6.6 DELEGATION OF SUPERVISION RESPONSIBILITIES** a) A designated supervisor providing close supervision of an occupational therapy assistant, a temporary licensed occupational therapy assistant or an occupational therapy student, may delegate his or her supervisory responsibility for the daily, face-to-face contact with and frequent observation of the performance of the occupational therapy assistant, the temporary licensed occupational therapy assistant or the occupational therapy student, to an occupational therapy assistant who, in the professional judgment of the supervising occupational therapist, has been adequately prepared by verified training and education in the provision of occupational therapy services consistent with the requirements set forth at N.J.A.C. 13:44K-2.1. b) Notwithstanding the provisions of (a) above, no designated supervisor shall delegate his or her responsibilities for close supervision of an occupational therapy assistant to an occupational therapy assistant who has less than 3,600 hours of work experience obtained within a five year period in the particular practice area in which services are being provided. c) A licensed occupational therapy assistant who has been delegated supervision responsibilities pursuant to (a) and (b) above, shall not supervise more than three persons at one time. d) Notwithstanding the provisions of (a), (b) and (c) above, a licensed occupational therapist shall not supervise more than seven persons at one time, pursuant to the provisions of N.J.A.C. 13:44K-6.2.

	e) When supervision of an occupational therapy assistant, a temporary licensed occupational therapy assistant or an occupational therapy student is delegated pursuant to the provisions of (a), (b), (c) and (d) above, the supervising occupational therapist shall retain responsibility for all occupational therapy care of the client.
New Mexico	**Statute: New Mexico Revised Statutes, Chapter 61, Article 12A** **61-12A-3. Definitions.** H. "occupational therapy assistant" means a person having no less than an associate degree in occupational therapy and holding an active license to practice occupational therapy in New Mexico who assists an occupational therapist under the supervision of the occupational therapist. **61-12A-5. Supervision; required; defined.** A. Occupational therapy shall not be performed by an occupational therapy assistant, occupational therapy aide, or technician or by any person practicing on a provisional permit unless such therapy is supervised by an occupational therapist. The Board shall adopt rules defining supervision, which definitions may include various categories such as "close supervision", "routine supervision", and "general supervision". **Regulation: New Mexico Administrative Code Title 16, Chapter 15, Part 3 Supervision** **16.15.3.7 Definitions** In this section, the following terms have the meanings indicated: A. "Aide" means a person who is not licensed by the board and who provides supportive services to occupational therapists and occupational therapy assistants. An aide shall function under the guidance and responsibility of the occupational therapist and may be supervised by the occupational therapist or an occupational therapy assistant for specifically selected routine tasks for which the aide has been trained and has demonstrated competency. B. "Board" means the board of examiners for occupational therapy. C. "Competence" refers to an individual's capacity to perform job responsibilities. D. "Competency" refers to an individual's actual performance in a specific situation. E. "Limited permit holder" means an individual who has completed the academic and fieldwork requirements of this Act for occupational therapists or occupational therapy assistants, has not yet taken or received the results of the entry level certification examination, and has applied for and been granted limited permit status. F. "Occupational therapist" means a person who holds an active license to practice occupational therapy in New Mexico. G. "Occupational therapy assistant" means a person having no less than an associate degree in occupational therapy and holding an active license to practice occupational therapy in New Mexico who assists an occupational therapist under the supervision of the occupational therapist. H. "Supervision" means a cooperative process in which two or more people participate in a joint effort to establish, maintain, and elevate a level of competence and performance. Within the scope of occupational therapy practice, supervision is aimed at ensuring the safe and effective delivery of occupational therapy services and fostering professional competence and development. I. "Supportive services" means tasks that include providing patient transport, routine maintenance of equipment or work areas, setup, preparation, and cleanup of equipment of work areas, and supporting licensed practitioners during treatment or intervention while under the direct supervision of the licensed practitioner.

16.15.3.8 Supervision

A. Occupational therapy assistants: supervision involves guidance and oversight related to the delivery of occupational therapy services and the facilitation of professional growth and competence. It is the responsibility of the occupational therapist and the occupational therapy assistant to seek the appropriate quality and frequency of supervision to ensure safe and effective occupational therapy service delivery.

(1) The specific frequency, methods, and content of supervision may vary by practice setting and is dependent upon the:

(a) complexity of client needs;
(b) number and diversity of clients;
(c) skills of the occupational therapist and the occupational therapy assistant;
(d) type of practice setting;
(e) requirements of the practice setting; and
(f) other regulatory requirements.

(2) More frequent supervision may be necessary when:

(a) the needs of the client and the occupational therapy process are complex and changing;
(b) the practice setting provides occupational therapy services to a large number of clients with diverse needs; or
(c) the occupational therapist and occupational therapy assistant determine that additional supervision is necessary to ensure safe and effective delivery of occupational therapy services.

(3) A variety of types and methods of supervision may be used. Methods may include direct face-to-face contact and indirect contact. Examples of methods or types of supervision that involve direct face-to-face contact include but are not limited to observation, modeling, co-treatment, discussions, teaching, instruction, and video teleconferencing. Examples of methods or types of supervision that involve indirect contact include but are not limited to phone conversations, written correspondence, electronic exchanges, and other methods using secure telecommunication technology. All methods should be compliant with confidentiality requirements of government agencies, facilities, employers, or other appropriate bodies.

(4) Occupational therapists and occupational therapy assistants must document a supervision plan and supervision contacts. Documentation shall include the:

(a) frequency of supervisory contact;
(b) method(s) or type(s) of supervision;
(c) content areas addressed;
(d) names and credentials of the persons participating in the supervisory process.

(5) An occupational therapist is limited to supervising three or fewer occupational therapy assistants during their first year of licensure as an occupational therapist.

(6) After the first year of licensure, an occupational therapist must make the decision on the number of appropriate occupational therapy assistants to be supervised depending on the experience of the occupational therapy assistant, complexity of the patient or client needs and the setting of care.

16.15.3.9 Task Delegation

Regardless of the setting in which occupational therapy services are delivered, the occupational therapist and the occupational therapy assistant assume the following generic responsibilities during evaluation, intervention, and outcomes evaluation.

A. Evaluation.

(1) The occupational therapist directs the evaluation process.

	(2) The occupational therapist is responsible for directing all aspects of the initial contact during the occupational therapy evaluation, including: (a) determining the need for service; (b) defining the problems within the domain of occupational therapy that need to be addressed; (c) determining the client's goals and priorities; (d) establishing intervention priorities; (e) determining specific further assessment needs; and (f) determining specific assessment tasks that can be delegated to the occupational therapy assistant; (3) The occupational therapist initiates and directs the evaluation, interprets the data, and develops the intervention plan. (4) The occupational therapy assistant contributes to the evaluation process by implementing delegated assessments and by providing verbal and written reports of observations and client capacities to the occupational therapist. (5) The occupational therapist interprets the information provided by the occupational therapy assistant and integrates that information into the evaluation and decision making process. B. Intervention planning. (1) The occupational therapist has overall responsibility for the development of the occupational therapy intervention plan. (2) The occupational therapist and the occupational therapy assistant collaborate with the client to develop the plan. (3) The occupational therapy assistant is responsible for being knowledgeable about evaluation results and for providing input into the intervention plan, based on client needs and priorities. C. Intervention Implementation. (1) The occupational therapist has overall responsibility for implementing the intervention. (2) Then delegating aspects of the occupational therapy intervention to the occupational therapy assistant, the occupational therapist is responsible for providing appropriate supervision. (3) The occupational therapy assistant is responsible for being knowledgeable about the client's occupational therapy goals. (4) The occupational therapy assistant selects, implements, and makes modifications to therapeutic activities and interventions that are consistent with demonstrated competency levels, client goals, and the requirements of the practice setting. D. Intervention Review. (1) The occupational therapist is responsible for determining the need for continuing, modifying, or discontinuing occupational therapy services. (2) The occupational therapy assistant contributes to this process by exchanging information with and providing documentation to the occupational therapist about the client's responses to and communications during intervention. E. Outcome Evaluation. (1) The occupational therapist is responsible for selecting, measuring, and interpreting outcomes that are related to the client's ability to engage in occupations. (2) The occupational therapy assistant is responsible for being knowledgeable about the client's targeted occupational therapy outcomes and for providing information and documentation related to outcome achievement. (3) The occupational therapy assistant may implement outcome measurements and provide needed client discharge resources.

New York	**<u>Statute:</u> Laws of New York, Education Law, Article 156** **§7902-a Practice of occupational therapy assistant and use of the title "occupational therapy assistant."** Only a person licensed or otherwise authorized under this title shall participate in the practice of occupational therapy as an occupational therapy assistant or use the title "occupational therapy assistant." Practice as an occupational therapy assistant shall include the providing of occupational therapy and client related services under the direction and supervision of an occupational therapist or licensed physician in accordance with the commissioner's regulations. **§7906 Exempt persons.** This article shall not be construed to affect or prevent the following, provided that no title, sign, card or device shall be used in such manner as to tend to convey the impression that the person rendering such service is a licensed occupational therapist: 7. The following people from working under the direct supervision of a licensed occupational therapist: An individual employed by the state or municipal government at the effective date of this article who performs supportive services in occupational therapy solely for the time such person continues in that employment. **<u>Regulations:</u> New York Codes, Rules, and Regulations §76.8 Supervision of an occupational therapy assistant.** a. A written supervision plan, acceptable to the occupational therapist or licensed physician providing direction and supervision, shall be required for each occupational therapy assistant providing services pursuant to section 7902-a of the Education Law. The written supervision plan shall specify the names, professions and other credentials of the persons participating in the supervisory process, the frequency of formal supervisory contacts, the methods (e.g., in-person, by telephone) and types (e.g., review of charts, discussion with occupational therapy assistant) of supervision, the content areas to be addressed, how written treatment notes and reports will be reviewed, including, but not limited to, whether such notes and reports will be initialed or co-signed by the supervisor, and how professional development will be fostered. b. Documentation of supervision shall include the date and content of each formal supervisory contact as identified in the written supervision plan and evidence of the review of all treatment notes, reports and assessments. c. Consistent with the requirements of this section, the determination of the level and type of supervision shall be based on the ability level and experience of the occupational therapy assistant providing the delegated occupational therapy services, the complexity of client needs, the setting in which the occupational therapy assistant is providing the services, and consultation with the occupational therapy assistant. d. The supervision plan shall require that the occupational therapist or licensed physician be notified whenever there is a clinically significant change in the condition or performance of the client, so that an appropriate supervisory action can take place. e. Direction and supervision means that the occupational therapist or licensed physician: 1. initiates, directs and participates in the initial evaluation, interprets the evaluation data, and develops the occupational therapy services plan with input from the occupational therapy assistant; 2. participates, on a regular basis, in the delivery of occupational therapy services; 3. is responsible for determining the need for continuing, modifying, or discontinuing occupational therapy services, after considering any reports by the occupational therapy assistant of any changes in the condition of the client that would require a change in the treatment plan; 4. takes into consideration information provided about the client's responses to and communications during occupational therapy services; and 5. is available for consultation with the occupational therapy assistant in a timely manner, taking into consideration the practice setting, the condition of the client and the occupational therapy services being provided.

	f. In no event shall the occupational therapist or licensed physician supervise more than five occupational therapy assistants, or its full time equivalent, provided that the total number of occupational therapy assistants being supervised by a single occupational therapist or licensed physician shall not exceed 10.
North Carolina	**Statute: North Carolina General Statutes §90-270.67 DEFINITIONS** 3. Occupational therapy assistant. - An individual licensed in good standing to assist in the practice of occupational therapy under this Article, who performs activities commensurate with his or her education and training under the supervision of a licensed occupational therapist. **Regulations: North Carolina Administrative Code Title 21, Chapter 38, Section .0100 Organization and General Provisions** **.0103 DEFINITIONS** (14) "Occupational therapy practitioner" means an individual licensed by the Board as an occupational therapist or an occupational therapy assistant. (21) "Supervision" is the process by which two or more people participate in joint effort to establish, maintain, and elevate a level of performance to ensure the safety and welfare of clients during occupational therapy. Supervision is structured according to the supervisee's qualifications, position, level of preparation, depth of experience and the environment within which the supervisee functions. Levels of supervision are: (a) "General supervision," which is required for all occupational therapy assistants by an occupational therapist. It includes a variety of types and methods of supervision and may include observation, modeling, co-treatment, discussions, teaching, instruction, phone conversations, videoconferencing, written correspondence, electronic exchanges, and other telecommunication technology. Methods of observation include face-to-face, synchronous or asynchronous videoconferencing. The specific frequency, methods, and content of supervision may vary by practice setting and are dependent on the complexity of client needs, number and diversity of clients, demonstrated service competency of the occupational therapist and the occupational therapy assistant, type of practice setting, requirements of the practice setting, and federal and state regulatory requirements. General supervision shall be required at least monthly; and (b) "Direct supervision," which is required for all unlicensed personnel and volunteers. It means the Occupational Therapy supervisor must be within audible and visual range of the client and unlicensed personnel and available for immediate physical intervention. Videoconferencing is not allowed for direct supervision. **Regulations: North Carolina Administrative Code Title 21, Chapter 38, Section .0900 Supervision, Supervisory Roles, and Clinical Responsibilities of Occupational Therapist and Occupational Therapy Assistants** **.0901 NOTIFICATION OF SUPERVISION CHANGE** Occupational therapy assistants and supervising occupational therapists must notify the Board office in writing of any change in ceasing or assuming supervision. The occupational therapist is responsible for supervision of the occupational therapy assistant until official notice that supervision has ceased is received at the Board office. Failure to notify the Board may subject both the occupational therapist and occupational therapy assistant to disciplinary action. Notices must be signed. Telephone or email notices shall not be accepted. **.0902 SUPERVISION IS AN INTERACTIVE PROCESS.** The occupational therapist and the occupational therapy assistant are each responsible for supervision to ensure safe and effective service delivery of occupational therapy services and to foster professional competence and development. The supervising occupational

	therapist shall provide supervision. The occupational therapy assistant shall obtain supervision. Evidence of supervision must be recorded on a supervisory log or in the documentation. **.0903 TYPES OF SUPERVISION** (a) Occupational therapy assistants at all levels shall require general supervision by an occupational therapist pursuant to Rule .0103(21)(a) of this Chapter. **.0904 DOCUMENTATION OF SUPERVISION** (a) Documentation of supervision is the responsibility of both the occupational therapist and occupational therapy assistant. Documentation must include the frequency of supervisory contact, method(s) or type(s) of supervision, content areas addressed, and names and credentials of the persons participating in the supervisory process. (b) Supervision must reflect a review of all aspects of the occupational therapy assistant's practice. In any situation, the occupational therapist is ultimately responsible for all delegated services. Co-signature on occupational therapy service documentation, even if mandated by statute or rule, does not accurately satisfy supervision requirements. (c) Effectiveness of the supervision shall be regularly evaluated by both the occupational therapist and the occupational therapy assistant. **.0905 DELINEATION OF CLINICAL RESPONSIBILITIES** Regardless of the setting in which occupational therapy services are delivered, the occupational therapist and the occupational therapy assistant shall have the following responsibilities during client evaluation, intervention, and outcome evaluation: (1) Evaluations: (a) The occupational therapist shall; (i) Direct the evaluation process; (ii) Determine the need for services; (iii) Define the problems within the domain of occupational therapy that need to be addressed; (iv) Determine the client's goals and priorities in collaboration with the occupational therapy assistant and the client or caregiver; (v) Interpret the information provided by the occupational therapy assistant and integrate that information into the evaluation decision-making process; (vi) Establish intervention priorities; (vii) Determine specific future assessment needs; (viii) Determine specific assessment tasks that can be delegated to the occupational therapy assistant; and (ix) Initiate and complete the evaluation, interpret the data, and develop the intervention plan in collaboration with the occupational therapy assistant. (b) The occupational therapy assistant may contribute to the evaluation process by implementing assessments delegated by the occupational therapist. (2) Intervention Planning: (a) The occupational therapist shall develop the occupational therapy intervention plan. The plan may be developed collaboratively with the occupational therapy assistant and the client or caregiver; and (b) The occupational therapy assistant may provide input into the intervention plan. (3) Intervention implementation: (a) The occupational therapist:

	(i) Shall implement the occupational therapy intervention; (ii) May delegate aspects of the occupational therapy intervention to the occupational therapy assistant; and (iii) Shall supervise all aspects of intervention delegated to the occupational therapy assistant. (b) The occupational therapy assistant shall implement delegated aspects of intervention in which the occupational therapy assistant has established service competency; and (c) Occupational therapists shall not be subject to disciplinary action by the Board for refusing to delegate or refusing to provide the required training for delegation, if the occupational therapist determines that delegation may compromise client safety. (4) Intervention review: (a) The occupational therapist shall meet with each client who has been assigned to an occupational therapy assistant to further assess the client, to evaluate intervention, and, if necessary, to modify the individual's intervention plan; (b) The occupational therapist shall determine the need for continuing or discontinuing services; and (c) The occupational therapy assistant may contribute to the process of determining continuing or discontinuing services by providing information about the client's response to intervention to assist with the occupational therapist's decision making. (5) Documentation: (a) The occupational therapy practitioner shall document each evaluation, intervention, and discharge plan recognizing the requirements of practice settings, payors, and service delivery models. Documentation shall include the following elements: (i) Client name or identifiable information; (ii) Signature with occupational therapist or occupational therapy assistant designation of the occupational therapy practitioner who performed the service; (iii) Date of the evaluation, intervention, or discharge plan; (iv) Objective and measurable description of contact or intervention and client response; and (v) Length of time of intervention session or evaluation. (b) The occupational therapist shall determine the overall completion of the evaluation, intervention, or discharge plan; and (c) The occupational therapy assistant shall; (i) Document intervention, intervention response, and outcome; and (ii) Document client's level of function at discharge. (6) Discharge: (a) The occupational therapist shall determine the client's discharge from occupational therapy services; and (b) The occupational therapy assistant shall: (i) Report data for discharge summary; and (ii) Formulate discharge or follow-up plans under the supervision of the occupational therapist. (7) Outcome evaluation: (a) The occupational therapist is responsible for the selection, measurement, and interpretation of outcomes that are related to the client's ability to engage in occupations; and (b) The occupational therapy assistant must be knowledgeable about duties delegated by the occupational therapist that relate to the client's targeted occupational therapy outcome and provide information relating to outcome achievement.

North Dakota	**Statute: North Dakota Century Code §43-40-01 Definitions.** 4. "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy, under this chapter, who works under the supervision of an occupational therapist. **Regulation: North Dakota Administrative Code Title 55.5, Article 02** **Section 55.5-02-03-01 Supervision.** The occupational therapist and occupational therapy assistant shall exercise appropriate supervision over individuals who are authorized to practice only under supervision. Supervision is a cooperative process in which two or more people participate in a joint effort to establish, maintain, and elevate a level of competence and performance. Within the scope of occupational therapy practice, supervision is aimed at ensuring the safe and effective delivery of occupational therapy services and fostering professional competence and development. Supervision involves guidance and oversight related to the delivery of occupational therapy services and the facilitation of professional growth and competence. It is the responsibility of the occupational therapist and the occupational therapy assistant to seek the appropriate quality and frequency of supervision to ensure safe and effective occupational therapy service delivery. **Section 55.5-02-03-01.1 Definitions.** For purposes of sections 55.5-02-03-01.2 and 55.5-02-03-01.3: 1. "Direct supervision" means face-to-face contact, including observation, modeling, cotreatment, discussions, teaching, and video teleconferencing. 2. "Indirect supervision" means other than face-to-face contact, including phone conversations, written correspondence, electronic exchanges, and other methods using secure telecommunication technology. **Section 55.5-02-03-01.2 Supervision of occupational therapy assistants.** An occupational therapy assistant must be supervised by an occupational therapist. 1. An occupational therapist may not supervise more than three occupational therapy assistants licensed or limited permitholders at the same time. 2. An occupational therapy assistant must be directly supervised as needed by evidence of clinical practice, and indirectly supervised as is necessary. In determining the methods, frequency, and content of supervision, an occupational therapist shall consider all of the following: a. Complexity of clients' needs. b. Number and diversity of clients. c. Skills of the occupational therapy assistant. d. Type of practice setting. e. Changes in practice settings. f. Requirements of the practice setting. g. Other regulatory requirements. 3. An occupational therapist and a supervised occupational therapy assistant shall make a written supervision plan, including all of the following: a. Documentation that the occupational therapy assistant is competent to perform the services provided. b. Documentation of the frequency, methods, and content of supervision. c. Documentation of periodic evaluation of the occupational therapy assistant's competence and the supervision necessary.

	4. An occupational therapist shall file with the board a substantiation of supervision form for each occupational therapy assistant supervised before the occupational therapy assistant may practice. If there is a change in supervisors, the new supervisor shall immediately file a new substantiation of supervision form. The form is available from the board. 5. An occupational therapist, who is unavailable to supervise an occupational therapy assistant for more than one day, shall arrange to have supervision available by another occupational therapist as necessary.
Ohio	**Statute: Ohio Revised Code §4755.04, Definitions.** (C) "Occupational therapy assistant" means a person who holds a license or limited permit to provide occupational therapy techniques under the general supervision of an occupational therapist. **Regulation: Ohio Administrative Code Chapter 4755:1-2 Code of Ethical Conduct and Practice Definition.** **4755:1-2-02 Occupational therapy practice defined.** For the purpose of Chapters 4755:1 of the Administrative Code, the following definitions apply: (B) "Occupational therapy assistant" means a person who holds a license to provide occupational therapy techniques under the general supervision of an occupational therapist. (H) "Unlicensed personnel" means any person who is on the job trained and supports the delivery of occupational therapy services by personally assisting the occupational therapist, occupational therapy assistant, student occupational therapist, and/or student occupational therapy assistant while the occupational therapist, occupational therapy assistant, student occupational therapist, and/or student occupational therapy assistant is concurrently providing services to the same client. (I) "Supervising occupational therapist" means the occupational therapist who is available to supervise the occupational therapy assistant, the student occupational therapist, student occupational therapy assistant, or unlicensed personnel. The supervising occupational therapist may be the occupational therapist who performed the initial evaluation or another occupational therapist with whom that occupational therapist has a documented agreement. (J) "Supervising occupational therapy assistant" means the occupational therapy assistant who is appropriately available to supervise the student occupational therapy assistant, the student occupational therapist who is completing the level I fieldwork experience, or unlicensed personnel. **4755:1-2-03 Roles and responsibilities.** (A) Occupational therapist. The occupational therapist must assume professional responsibility for the provision of all occupational therapy services, of which the following activities must not be wholly delegated, regardless of the setting in which the services are provided: (1) Interpretation of referrals or prescriptions for occupational therapy services; (2) Interpretation and analysis for evaluation purposes; (3) Development, interpretation, and modification of the treatment/intervention plan and the discharge plan. (B) Occupational therapy assistant. (1) The occupational therapy assistant may contribute to and collaborate in: (a) The evaluation process by gathering data, administering standardized tests and/or objective measurement tools, and reporting observations. (b) The preparation, implementation, and documentation of the treatment/intervention plan and the discharge plan. (c) Choosing the appropriate treatment interventions. (2) The occupational therapy assistant may independently:

(a) Select the daily modality of choice according to the established treatment/intervention plan.
(b) Document the progress and outcomes summary.
(3) The occupational therapy assistant may not evaluate independently or initiate treatment/intervention before the supervising occupational therapist performs an evaluation.

4755:1-2-04 Delegation.
(A) Occupational therapy assistant.
The occupational therapy assistant may implement the occupational therapy treatment/intervention plan established by the supervising occupational therapist. The supervising occupational therapist must consider the following when delegating to the occupational therapy assistant:
(1) The clinical complexity of the client;
(2) The competency of the occupational therapy assistant;
(3) The occupational therapy assistant's level of training in the treatment/intervention technique; and
(4) Whether continual reassessment of the client's status is needed during treatment/intervention.
(5) Notwithstanding paragraphs (A)(1) to (A)(4) of this rule, the occupational therapy assistant may respond to acute changes in the client's condition that warrant immediate action.
(D) Unlicensed personnel.
(1) Unlicensed personnel may only perform specific tasks which are neither evaluative, task selective, nor recommending in nature. The occupational therapist, occupational therapy assistant, student occupational therapist, or student occupational therapy assistant may delegate such tasks only after ensuring that the unlicensed personnel has been appropriately trained for the performance of the tasks.
(2) The occupational therapist, occupational therapy assistant, student occupational therapist, and student occupational therapy assistant must not delegate the following to unlicensed personnel:
(a) Performance of occupational therapy evaluative services;
(b) Initiation, planning, adjustment, modification, or performance of occupational therapy services;
(c) Making occupational therapy entries directly in the client’s official records; and
(3) The unlicensed personnel must not act independently on behalf of the occupational therapist, occupational therapy assistant, student occupational therapist, or student occupational therapy assistant in any matter related to occupational therapy treatment.

4755:1-2-05 Supervision.
(A) Supervision must ensure consumer protection. The supervising occupational therapist is ultimately responsible for all clients and is accountable and responsible at all times for the actions of persons supervised, including the:
(1) Occupational therapy assistant;
(2) Student occupational therapist;
(3) Student occupational therapy assistant; and
(4) Unlicensed personnel.
(B) The following factors must be considered by the supervising occupational therapist when determining the appropriate frequency, methods, and content of supervision:
(1) Complexity of the client needs;
(2) Number and diversity of clients;
(3) Skills of the occupational therapist and occupational therapy assistant;

	(4) Type and number of practice settings; (5) Requirements of the practice setting; and (6) Any other regulatory or administrative requirements. (C) Occupational therapy assistant. Supervision of the occupational therapy assistant, as defined in division (C) of section 4755.04 of the Revised Code, requires initial direction and periodic inspection of the service delivery and relevant in-service training. The supervising occupational therapist need not be on-site, but must be available for consultation with the occupational therapy assistant at all times. (1) The supervising occupational therapist must provide supervision at least one time per week for all occupational therapy assistants who are in their first year of practice. (2) The supervising occupational therapist must provide supervision at least one time per month for all occupational therapy assistants beyond their first year of practice. (3) Supervision requires an interactive process between the supervising occupational therapist and the occupational therapy assistant. The interactive process must include, but is not limited to, review of the following: (a) Client assessment; (b) Client reassessment; (c) Treatment/intervention plan; (d) Intervention; and (e) Discontinuation of treatment/intervention plan. (4) Co-signing client documentation alone does not meet the minimum level of supervision. (5) The supervising occupational therapy assistant is accountable and responsible at all times for the actions of all student occupational therapy assistants and unlicensed personnel supervised by the supervising occupational therapy assistant.
Oklahoma	**<u>Statute:</u> Oklahoma Statutes Title 59, Section 888.3, Definitions.** 3. "Occupational therapy assistant" means a person licensed to provide occupational therapy treatment under the general supervision of a licensed occupational therapist; **<u>Regulation:</u> Oklahoma Administrative Code Title 435, Chapter 30** **435:30-1-2. Definitions** The following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly in-dictates otherwise: "Alternate supervisor" means an Oklahoma licensed Occupational Therapist who has signed a Form #5, Verification of Supervision, agreeing to provide supervision to the Occupational Therapy Assistant or applicant for licensure in the absence of the supervising Occupational Therapist. The alternate supervisor assumes all duties and responsibilities of the primary supervisor during that absence. "Direct supervision" means personal supervision and specific delineation of tasks and responsibilities by an Oklahoma licensed occupational therapist who has signed a Form #5, Verification of Supervision, agreeing to supervise the Occupational Therapy Assistant or applicant for licensure. Direct supervision shall include the responsibility for personally reviewing and interpreting the results of any habilitative or rehabilitative procedures conducted by the supervisee. It is the responsibility of the supervising occupational therapist to be onsite during treatment to ensure that the supervisee does not perform duties for which he is not trained.

"General supervision" means responsible supervision and control by an Oklahoma licensed occupational therapist who has signed a Form #5, Verification of Supervision, agreeing to supervise the Occupational Therapy Assistant or applicant for licensure. The supervising occupational therapist provides both initial direction in developing a plan of treatment and periodic inspection of the actual implementation of the plan. Such plan of treatment shall not be altered by the supervised individual without prior consultation with and approval of the supervising occupational therapist. The supervising occupational therapist need not always be physically present or on the premises when the assistant is performing services; however, except in cases of emergency, supervision shall require the availability of the supervising occupational therapist for consultation with and direction of the supervised individual. Supervision is an interactive process, more than a paper review or a co-signature, and requires direct in-person contact.

"Occupational therapist of record" means the occupational therapist who assumes responsibility for the provision and /or supervision of occupational therapy services for a client, and is held accountable for the coordination, continuation and progression of the plan of care

"Primary supervisor" means the Oklahoma licensed Occupational Therapist who has signed a Form #5, Verification of Supervision, agreeing to provide supervision to the Occupational Therapy Assistant or applicant for licensure. The Primary Supervisor must have access to the client's plan of care.

435:30-1-8. Licensure requirements specific to occupational therapy assistant

(a) An occupational therapy assistant is a person who assists in the duties usually performed by an occupational therapist under the general supervision of a licensed occupational therapist.

435:30-1-16. Responsible supervision

(a) An occupational therapist will not sign the Form #5, Verification of Supervision, to be the direct clinical supervisor for more than a total of four occupational therapy assistants or applicants for licensure regardless of the type of professional licensure or level of training.
(b) It shall be the responsibility of the occupational therapist to monitor the number of persons under his/her direct clinical supervision. It shall be the responsibility of the occupational therapy assistant to inquire of the occupational therapist in regards to the number of persons being directly supervised.
(c) On a case-by-case basis, an occupational therapist may petition the Committee to receive permission to supervise additional occupational therapy assistants or applicants.
(d) If responsible supervision is not practiced, both the occupational therapist and occupational therapy assistant are in violation of this rule.
(e) If the licensed occupational therapist agrees to supervise an occupational therapy assistant, the occupational therapist shall:

(1) determine the frequency and manner of consultations, taking into consideration the treatment settings being used, client rehabilitation status, and the competency of the occupational therapy assistant being supervised;
(2) maintain a record of all consultations provided;
(3) document in the client treatment record each time the occupational therapist supervising the occupational therapy assistant is physically present and directly supervises the treatment of a client by the occupational therapy assistant being supervised.
(4) make herself/himself available to the occupational therapy assistant in person or via telecommunication for consultation prior to implementation of any treatment program revisions; and

	(5) review with the occupational therapy assistant in person or via telecommunication the diagnosis of the condition to be treated, the authorization of the procedure, dismissal of the client, and evaluation of the performance of the treatment given. (f) The licensed occupational therapy assistant shall: (1) consult with the supervising occupational therapist in person or via telecommunication prior to any treatment program revision; and (2) notify the supervising occupational therapist of any significant changes in the physical, cognitive and/or psychological status of the client. Contact, or attempts to contact the supervising occupational therapist will be documented in the record. (g) Occupational therapy assistants with more than one employer must have a primary supervisor at each job who has completed a Form #5, Verification of Supervision. (h) The evaluating occupational therapist will document transfer of care to the occupational therapist of record. **435:30-1-17. Role of Occupational Therapy Assistants in evaluations** An Occupational Therapy Assistant's participation in evaluations is not independent. The Occupational Therapy Assistant works in collaboration with and under the supervision of an Occupational Therapist. It is the Occupational Therapists responsibility to give appropriate supervision and the Occupational Therapy Assistant's responsibility to seek appropriate supervision. The Occupational Therapy Assistant may have a role in the evaluation process and in the administration of assessment tools and instruments under the supervision of an Occupational Therapist after competency has been established. It is the Occupational Therapist who initiates the evaluation process and delegates the appropriate assessment to be carried out by the Occupational Therapy Assistant. The Occupational Therapy Assistant may administer and score these assessments. The Occupational Therapist interprets the results with input from the Occupational Therapy Assistant to establish a treatment plan.
Oregon	**Statute: Oregon Revised Statutes Chapter 675** As used in ORS 675.210 to 675.340, unless the context requires otherwise: (4) “Occupational therapy assistant” means a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist. **Regulation: Oregon Administrative Rules Chapter 339, Division 10** **339-010-0005 Definitions** (1) "Supervision," is a process in which two or more people participate in a joint effort to promote, establish, maintain and/or evaluate a level of performance. The occupational therapist is responsible for the practice outcomes and documentation to accomplish the goals and objectives. Levels of supervision: (a) "Close supervision" requires daily, direct contact in person at the work site; (b) "Routine supervision" requires the supervisor to have direct contact in person at least every two weeks at the work site or via telehealth as defined in OAR 339-010-0006(9) with interim supervision occurring by other methods, such as telephone or written communication; (c) "General supervision" requires the supervisor to have at least monthly direct contact in person with the supervisee at the work site or via telehealth as defined in OAR 339-010-0006(9) with supervision available as needed by other methods. **339-010-0035 Supervision of an Occupational Therapy Assistant** (1) Any person who is licensed as an occupational therapy assistant may assist in the practice of occupational therapy only under the supervision of a licensed occupational therapist.

	(2) Before an occupational therapy assistant assists in the practice of occupational therapy: (a) The OTA must log into their online license portal with the board and record the name of the licensed OT who will supervise them, the site where supervision will take place and the supervision start date. (b) The licensed occupational therapist whose name is recorded in the online license portal with the board must log into their online license portal and confirm their supervision of the OTA by updating the approval status to "approved". (3) An occupational therapy assistant always requires at least general supervision. (4) The supervising occupational therapist shall provide closer supervision where professionally appropriate. (5) The supervisor, in collaboration with the supervisee, is responsible for setting and evaluating the standard of work performed.
Pennsylvania	**Statute: Pennsylvania Unconsolidated Statutes, Act No. 140 of 1982, Section 3. Definitions.** The following words and phrases when used in this act shall have, unless the context clearly indicates otherwise, the meanings given to them in this section: "Occupational therapy assistant." A person licensed to assist in the practice of occupational therapy, under the supervision of an occupational therapist. **Regulation: Pennsylvania Code Section 42.22 Supervision of occupational therapy assistants.** (a) Section 3 of the act (63 P. S. § 1503) provides that licensed occupational therapy assistants may assist in the practice of occupational therapy only under the supervision of an occupational therapist. ''Under the supervision of an occupational therapist'' means that an occupational therapist currently licensed by the Board: (1) Evaluates the patient/client. (2) Prepares a written program plan. (3) Assigns treatment duties based on that program plan to an occupational therapy assistant currently licensed by the Board who has been specifically trained to carry out those duties. (4) Monitors the occupational therapy assistant's performance. (5) Accepts professional responsibility for the occupational therapy assistant's performance. (b) Supervision includes the following: (1) Communicating to the occupational therapy assistant the results of patient/client evaluation and discussing the goals and program plan for the patient/client. (2) Periodically reevaluating the patient/client and, if necessary, modifying the program plan. (3) Case management. (4) Determining program termination. (5) Providing information, instruction and assistance as needed. (6) Observing the occupational therapy assistant periodically. (7) Preparing on a regular basis, but at least annually, a written appraisal of the occupational therapy assistant's performance and discussing that appraisal with the assistant. (c) Notwithstanding subsections (a)(1) and (b)(2), the supervisor may assign to a competent occupational therapy assistant the administration of standardized tests, the performance of activities of daily living evaluations and other elements of patient/client evaluation and reevaluation that do not require the professional judgment and skill of an occupational therapist. (d) The supervisor shall have supervisory contact with the occupational therapy assistant at least 10% of the time worked by the assistant in direct patient care. ''Supervisory contact'' means face-to-face individual contact, telephone communication, contact through written reports or group conferences among a supervisor and two or more supervisees. Face-to-face individual contact shall occur onsite at least

	once a month and shall include observation of the assistant performing occupational therapy. The specific mode, frequency and duration of other types of supervisory contact depend on the treatment setting, the occupational therapy assistant's caseload, the condition of patients/clients being treated by the assistant and the experience and competence of the assistant as determined by the supervisor. The supervisor shall ensure, however, that supervisory contact within each calendar month includes a combination of face-to-face, telephone and written communication. (e) The supervisor shall maintain a supervisory plan and shall document the supervision of each occupational therapy assistant. Documentation shall include evidence of regular supervision and contact between the supervisor and the assistant. (f) A supervisor who is temporarily unable to provide supervision shall arrange for substitute supervision by an occupational therapist currently licensed by the Board. The substitute shall provide supervision that is as rigorous and thorough as that provided by the permanent supervisor. (g) Failure to comply with this section constitutes unprofessional conduct under section 16(a)(2) of the act (63 P. S. § 1516(a)(2)).
Puerto Rico	**Statute: Laws of Puerto Rico Title 20, Chapter 51, Section 1031 Definitions** (3) Assistant in occupational therapy. — The person who under the supervision of a licensed occupational therapist performs selective tasks or activities proper to occupational therapy. **Regulation: L. Num 137, § 1.3 (translation)** The occupational therapy assistant is the person who assists or helps the occupational therapist in selected tasks or activities that require neither the ability, judgement nor extensive knowledge required of occupational therapists. The occupational therapy assistant's work is made under the immediate direction of the occupational therapist.
Rhode Island	**Statute: Rhode Island General Laws Title 5, Chapter 40** **Section 5-40.1-3. Definitions.** (j) "Occupational therapy assistant" means a person licensed to practice occupational therapy under the provisions of this chapter and the rules and regulations authorized by this chapter. (k) "Supervision" means that a licensed occupational therapist or occupational therapy assistant is at all times responsible for supportive personnel and students. **Section 5-40.1-21 Supervision.** (a) A licensed occupational therapist shall exercise sound judgment and shall provide adequate care in the performance of duties. A licensed occupational therapist shall be permitted to supervise the following: occupational therapists, occupational therapy assistants, occupational therapy aides, care extenders, occupational therapy students, and volunteers. (b) A licensed occupational therapy assistant shall exercise sound judgment and shall provides adequate care in the performance of duties. A licensed occupational therapy assistant shall be permitted to supervise the following: occupational therapy aides, care extenders, students, and volunteers. (c) Subject to the requirements of this section, a licensed occupational therapy assistant may practice limited occupational therapy only under the supervision of a licensed occupational therapist. Supervision requires at a minimum that the supervising licensed occupational therapist meet in person with the licensed occupational therapy assistant to provide initial direction and periodic on-site supervision. The supervising licensed occupational therapist working with the licensed occupational therapy assistant shall determine the amount and type of supervision necessary in response to the experience and competence of the licensed occupational therapy assistant and the complexity of the treatment program. The supervisor and the licensed occupational therapy assistant shall be jointly responsible for maintaining records, including patient records, to document compliance with this regulation.

	(d) A licensed occupational therapy assistant: (1) May not initiate a treatment program until the patient has been evaluated and the treatment planned by the licensed occupational therapist; (2) May not perform an evaluation, but may assist in the data gathering process and administer specific assessments where clinical competency has been demonstrated, under the direction of the licensed occupational therapist; (3) May not analyze or interpret evaluation data; (4) May participate in the screening process by collecting data and communicate the information gathered to the licensed occupational therapist; (5) Monitors the need for reassessment and report changes in status that might warrant reassessment or referral under the supervision of the licensed occupational therapist; and (6) Immediately discontinues any treatment procedure, which appears harmful to the patient and immediately notifies the supervising occupational therapist. (e) (1) An occupational therapy aide shall be a worker trained on the job. A licensed occupational therapist or licensed occupational therapy assistant using occupational therapy aide personnel to assist with the provision of occupational therapy services must provide close supervision in order to protect the health and welfare of the consumer. (2) The primary function of an occupational therapy aide functioning in an occupational therapy setting shall be to perform designated routine tasks related to the operation of an occupational therapy service. These tasks may include, but are not limited to, routine department maintenance, transporting patients/clients, preparing or setting up treatment equipment and work area, assisting patients/clients with their personal needs during treatment, assisting in the construction of adaptive equipment, and carrying out a predetermined segment or task in the patient's care. (f) The licensed occupational therapist or occupational therapy assistant shall not delegate to an occupational therapy aide: (1) Performance of occupational therapy evaluation procedures; (2) Initiation, planning, adjustment, modification, or performance of occupational therapy procedures requiring the skills or judgment of a licensed occupational therapist or licensed occupational therapy assistant; (3) Making occupational therapy entries directly in patients' or clients' official records; and (4) Acting on behalf of the occupational therapist in any matter related to occupational therapy, which requires decision making or professional judgment. **<u>Regulation:</u> Rhode Island Code of Regulations Title 216, Chapter 40, Subchapter 05, Part 12** **12.2 Definitions** A. Wherever used in this Part the following terms shall be construed as follows: 8. “Occupational therapy assistant” means a person licensed to practice occupational therapy under the provisions of the Act and this Part. 10. "Supervision" means that a licensed occupational therapist or occupational therapy assistant shall at all times be responsible for supportive personnel and students. **12.6 Licensure of Occupational Therapists and Occupational Therapy Assistants** E. Supervision of occupational therapist assistants is pursuant to R.I. Gen. Laws § 5-40.1-21.

South Carolina	**Statute:** **South Carolina Code of Laws Title 40, Chapter 36** **Section 40-36-20. Definitions.** (4) "Direct supervision" means personal, daily supervision, and specific delineation of tasks and responsibilities by an occupational therapist and includes the responsibility for personally reviewing and interpreting the results of a supervisee on a daily basis. (9) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist. (12) "Supervision" means personal and direct involvement of an occupational therapist in a supervisee's professional experience which includes evaluation of the supervisee's performance with respect to each client treated by the supervisee. **Section 40-36-290. Responsibilities and duties of occupational therapists; records; discharge notes.** (A) An occupational therapist: (1) has the ultimate responsibility for occupational therapy treatment outcomes and for all occupational therapy services performed under the therapist's supervision; (2) at a minimum, shall provide supervision as required by this chapter; (3) shall communicate regularly with a supervisee regarding assignments, plan of care, and any changes in the client's status and shall document this communication; (4) shall reevaluate a client where therapy has been significantly interrupted before reassigning an occupational therapy assistant to the case; (5) only shall assign to a supervisee those duties and responsibilities for which the supervisee has been trained specifically and for which the supervisee is qualified to perform; (6) must be accessible to supervisee each working day; (7) shall perform the initial evaluation of and establish the treatment plan for each client; (8) shall make a consultation/reassessment visit every seven treatments or thirty days, whichever comes first. (B) An occupational therapist is responsible for the occupational therapy record of a client. The occupational therapy record shall consist of: (1) the initial evaluation including a written report signed and dated by the occupational therapist performing the evaluation; (2) a plan of care, including: (a) treatment to be rendered; (b) frequency and duration of treatment; (c) measurable goals. Progress notes must be signed and dated by the person rendering treatment. When progress notes are written by an occupational therapy student or an occupational therapy assistant student or examination candidate, the notes are to be countersigned and dated by the occupational therapist or occupational therapy assistant who is providing supervision. A discharge note containing a statement of the client's status at the last treatment session must be written, signed, and dated by the occupational therapist or occupational therapy assistant rendering services. In the case of the occupational therapy assistant, the occupational therapist must co-sign and consult on all discharge notes. **Section 40-36-300. Responsibilities and duties of occupational therapy assistants and aides; restrictions.** (A) An occupational therapy assistant only shall assist in the practice of occupational therapy under the supervision of a licensed occupational therapist and shall: (1) only accept those duties and responsibilities for which the assistant has been specifically trained and is qualified to perform;

	(2) consult with the supervising occupational therapist every seven treatments or thirty days, whichever is first, for each client; (3) inform the occupational therapist of any changes in a client that may require reevaluation or change in treatment; (4) contribute to a client evaluation by gathering data, administering structured tests, and reporting observations but may not evaluate a client independently or initiate treatment before a licensed occupational therapist's evaluation. **Regulation:** No relevant regulations.
South Dakota	**Statute: South Dakota Codified Laws §36-31-1, Definition of terms.** Terms used in this chapter mean: (6) "Occupational therapy assistant," any person licensed to assist in the practice of occupational therapy, under the supervision of or with the consultation of a licensed occupational therapist and whose license is in good standing; **Regulation: South Dakota Administrative Rules §20:64:01:01, Definitions.** (2) "Direct supervision," the physical presence of an occupational therapist or occupational therapy assistant in the immediate room when remediative tasks are being performed by an occupational therapy aide; (3) "Supervision," the shared responsibility between an occupational therapist and an occupational therapy assistant that occurs in person or by telecommunications while the occupational therapist assistant is treating patients. **Regulation: South Dakota Administrative Rules §20:64:03:02, Supervision of occupational therapy assistant.** An occupational therapy assistant with less than one year of experience in the assistant's present area of practice must receive a minimum of 10 hours of supervision from an occupational therapist for each 40 work hours or 25 percent of the total scheduled work hours. An occupational therapy assistant with more than one year of experience in the assistant's present area of practice must receive a minimum of 4 hours of supervision from an occupational therapist for each 40 work hours or 10 percent of the total scheduled work hours. The supervising occupational therapist shall evaluate each patient with input from the occupational therapy assistant as appropriate, prepare a written treatment plan outlining the tasks and responsibilities that may be performed by the occupational therapy assistant, monitor patient progress and reevaluate the treatment plan, and determine the termination of treatment. The frequency and manner of supervision is determined by the supervising licensed occupational therapist based on the condition of the patient or client, the proficiencies of the occupational therapy assistant, and the complexity of the therapy method. If the supervision agreement is terminated, the occupational therapy assistant must notify the board in writing within 15 days of such termination. In addition, the supervising occupational therapist must also notify the board in writing within 15 days if the supervision agreement is terminated.
Tennessee	**Statute: Tennessee Code Annotated Title 63, Chapter 13** **63-13-103 Definitions.** (8) "Occupational therapy assistant" means a person licensed to assist in occupational therapy practice under the supervision of an occupational therapist; **63-13-206 Supervision of an occupational therapy assistant by an occupational therapist.** (a) A licensed occupational therapy assistant shall practice under the supervision of an occupational therapist who is licensed in Tennessee. (b) The supervising occupational therapist is responsible for all services provided by the occupational therapy assistant, including, but not limited to, the formulation and implementation of a plan of occupational therapy services for each client, and has a continuing

	responsibility to follow the progress of each client and to ensure the effective and appropriate supervision of the occupational therapy assistant according to the needs of the client. (c) The supervising occupational therapist shall assign to the occupational therapy assistant only those duties and responsibilities that the occupational therapy assistant is qualified to perform. (d) The board shall adopt rules governing the supervision of occupational therapy assistants by occupational therapists. Those rules may address the following: (1) The manner in which the supervising occupational therapist oversees the work of the occupational therapy assistant; (2) The ratio of occupational therapists to occupational therapy assistants required under different conditions and in different practice settings; and (3) The documentation of supervision contacts between the supervising occupational therapist and the occupational therapy assistant. (e) The rules adopted by the board shall recognize that the frequency, methods and content of supervision of occupational therapy assistants by occupational therapists may vary by practice setting and are dependent upon the following factors, among others: (1) Complexity of the client's needs; (2) Number and diversity of clients; (3) Skills of the occupational therapy assistant and the supervising occupational therapist; (4) Type of practice setting; and (5) Requirements of the practice setting. **<u>Regulation:</u> Rules and Regulations of Tennessee Chapter 1150-02** **1150-02-01 Definitions.** As used in these rules, the terms and acronyms shall have the following meanings ascribed to them. (21) Licensed Occupational Therapy Assistant (OTA) - Any person who has met the qualifications for licensed occupational therapy assistant and holds a current, unsuspended or unrevoked, license which has been lawfully issued by the Board. Such person assists and works under the supervision of a licensed occupational therapist. (27) Supervision is defined as the following: (a) Continuous: Within sight of the individual being supervised. (b) Close: Daily direct contact at the site of treatment. (c) Routine: Direct contact at least every two (2) weeks at the site of treatment, with interim supervision occurring by other methods such as telephone or written communication. (d) General: At least monthly direct contact with supervision available as needed by other methods. (e) Minimal: 1. For supervision of occupational therapists, minimal supervision may be provided on an as-needed basis and may be less than monthly. 2. For supervision of occupational therapy assistants, minimal supervision is not appropriate. **1150-02.10 Supervision.** The Board adopts, as if fully set out herein, and as it may from time to time be amended, the current “Guidelines for Supervision, Roles, and Responsibilities During the Delivery of Occupational Therapy Services” issued by the American Occupational Therapy Association but only to the extent that it agrees with the laws of the state of Tennessee or the rules of the Board. If there are conflicts with state law or rules, the state law or rules govern the matter.

(3) Supervision of an Occupational Therapy Assistant with permanent licensure means initial direction and inspection of the service delivery and provision of relevant in-service training, according to the level of supervision the occupational therapy assistant requires. It is the responsibility of the occupational therapist and the occupational therapy assistant to seek the appropriate quality and frequency of supervision that ensures safe and effective occupational therapy service delivery. This decision is based on client's level of care, OTA caseload, experience and demonstrated performance competency.

(a) The frequency of the face to face collaboration between the Occupational Therapy Assistant and the supervising Occupational Therapist should exceed direct contact of once a month if the condition of the patient/client, complexity of treatment, evaluation procedures, and proficiencies of the person practicing warrants it.

(b) The Occupational Therapist shall be responsible for the evaluation of the patient and the development of the patient/client treatment plan. The Occupational Therapy Assistant may contribute information from observations and standardized test procedures to the evaluation and the treatment plans.

(c) The Occupational Therapy Assistant can implement and coordinate intervention plan under the supervision of the licensed Occupational Therapist.

(d) The Occupational Therapy Assistant can provide direct services that follow a documented routine and accepted procedure under the supervision of the Occupational Therapist.

(e) The Occupational Therapy Assistant can adapt activities, media, environment according to the needs to the patient/client, under the supervision of the licensed Occupational Therapist.

(f) Therapists must maintain documentation of each supervisory visit, and must identify a plan for continued supervision. Records must include, at a minimum, the following information:

1. Location of visit; a method of identifying clients discussed
2. Current plan for supervision (daily, weekly, bi-monthly, monthly, other)
3. Type of supervision provided. These include but are not limited to
    (i) In person
    (ii) Phone contact
    (iii) Electronic contact
4. Identification of type(s) of interventions observed. These include but are not limited to:
    (i) Interventions
    (ii) Training
    (iii) Consultations
5. Other supervisory actions. These include but are not limited to:
    (i) Discussion/recommendation for interventions and/or goals
    (ii) Discussion/training in documentation
    (iii) Demonstration/training in intervention techniques
    (iv) Assessment/re-assessment/discharge
    (v) Additional Comments
6. An agreement statement signed and dated by both parties, that the supervisory visit did occur and met the needs of the supervisor and supervisee.
7. It is the responsibility of the supervising occupational therapist to provide and the occupational therapy assistant to seek a quality and frequency of supervision that ensures safe and effective occupational therapy service delivery. Both

	parties (supervisor and supervisee) must keep copies of the supervisory records. Visit records must be maintained for three (3) years, and must be provided to the Board and/or its representative, upon request. (6) Supervision parameters (a) Supervision is a collaborative process that requires both the licensed occupational therapist and the licensed occupational therapy assistant to share responsibility. Appropriate supervision will include consideration given to factors such as level of skill, the establishment of service competency (the ability to use the identified intervention in a safe and effective manner), experience and work setting demands, as well as the complexity and stability of the client population to be treated. (b) Supervision is an interactive process that requires both the licensed occupational therapist and the licensed occupational therapy assistant or other supervisee to share responsibility for communication between the supervisor and the supervisee. The licensed occupational therapist should provide the supervision and the supervisee should seek it. An outcome of appropriate supervision is to enhance and promote quality services and the professional development of the individuals involved. (c) Supervision of occupational therapy services provided by a licensed occupational therapy assistant is recommended as follows: 1. Entry level occupational therapy assistants are persons working on initial skill development (less than 1 year of work experience) or who are entering new practice environments or developing new skills (one or more years of experience) and should require close supervision. 2. Intermediate level occupational therapy assistants are persons working on increased skill development, mastery of basic role functions (minimum one - three years of experience or dependent on practice environment or previous experience) and should require routine supervision. 3. Advanced level occupational therapy assistants are persons refining specialized skills (more than 3 years work experience, or the ability to understand complex issues affecting role functions) and should require general supervision. 4. Licensed occupational therapy assistants, regardless of their years of experience, may require closer supervision by the licensed occupational therapist for interventions that are more complex or evaluative in nature and for areas in which service competencies have not been established. 5. Certain occupational therapy assistants may only require minimal supervision when performing non-clinical administrative responsibilities.
Texas	**Statute: Texas Statutes Sec. 454.002. DEFINITIONS.** In this chapter: (6) "Occupational therapy assistant" means a person licensed by the board as an occupational therapy assistant who assists in the practice of occupational therapy under the general supervision of an occupational therapist. **Regulation: Texas Administrative Code Title 40, Part 12, Chapter 362, Section 362.1 Definitions.** The following words, terms, and phrases, when used in this part shall have the following meaning, unless the context clearly indicates otherwise. (27) Occupational Therapy Assistant (OTA)-- An individual who holds a license to practice or represent self as an Occupational Therapy Assistant in Texas and who is required to be under the general supervision of an OT. This definition includes an Occupational Therapy Assistant who is designated as a Certified Occupational Therapy Assistant (COTA®). (33) Occupational Therapy Practitioners--Occupational Therapists and Occupational Therapy Assistants licensed by this Board.

	Regulation: Texas Administrative Code Title 40, Part 12, Chapter 372, Section 372.1 Provision of Services (f) Plan of Care. (1) Only an occupational therapist may initiate, develop, modify, or complete an occupational therapy plan of care. It is a violation of the Occupational Therapy Practice Act for anyone other than the occupational therapist to dictate, or attempt to dictate, when occupational therapy services should or should not be provided, the nature and frequency of services that are provided, when the client should be discharged, or any other aspect of the provision of occupational therapy as set out in the Occupational Therapy Practice Act and Rules. (2) Modifications to the plan of care must be documented. (3) An occupational therapy plan of care may be integrated into an interdisciplinary plan of care, but the occupational therapy goals or objectives must be easily identifiable in the plan of care. (4) Only occupational therapy practitioners may implement the written plan of care once it is completed by the occupational therapist. (5) Only the occupational therapy practitioner may train non-licensed personnel or family members to carry out specific tasks that support the occupational therapy plan of care. (6) The occupational therapist is responsible for determining whether intervention is needed and if a referral is required for occupational therapy intervention. (7) Except where otherwise restricted by rule, the occupational therapy practitioner is responsible for determining whether any aspect of the intervention session may be conducted via telehealth or must be conducted in person. (8) The occupational therapy practitioner must have contact with the client during the intervention session. (A) The contact must be either: (i) synchronous audio and synchronous visual contact that is in person, via telehealth, or via a combination of in-person contact and telehealth; or (ii) synchronous audio contact, provided that the occupational therapy practitioner makes use of store-and-forward technology in preparation for or during the intervention session. The synchronous audio contact may be in person and/or via telehealth. In this subsection, “store-and-forward technology” means technology that stores and transmits or grants access to a client’s clinical information for review by an occupational therapy practitioner at a different physical location than the client. (B) Other telecommunications or information technology may be used to aid in the intervention session but may not be the primary means of contact or communication. (9) Except where otherwise restricted by rule, the supervising occupational therapist may only delegate to an occupational therapy assistant tasks that they both agree are within the competency level of that occupational therapy assistant.
Utah	**Statute: Utah Code Title 58, Chapter 42a, Part 1, Section 102 Definitions.** (5) "Occupational therapy assistant" means a person licensed under this chapter to practice occupational therapy under the supervision of an occupational therapist as described in Sections 58-42a-305 and 58-42a-306. **Statute: Utah Code Title 58, Chapter 42a, Part 3** **Section 305 Limitation upon occupational therapy services provided by an occupational therapy assistant and an occupational therapy aide.** (1) An occupational therapy assistant:

(a) may only perform occupational therapy services under the supervision of an occupational therapist as described in Section 58-42a-306;
(b) may not write an individual treatment plan;
(c) may not approve or cosign modifications to an individual treatment plan; and
(d) may contribute to and maintain an individual treatment plan.

Section 306 Supervision requirements.
An occupational therapist who is supervising an occupational therapy assistant shall:
(1) write or contribute to an individual treatment plan before referring a client to a supervised occupational therapy assistant for treatment;
(2) approve and cosign on all modifications to the individual treatment plan;
(3) meet face to face with the supervised occupational therapy assistant as often as necessary but at least once every two weeks in person or by video conference, and at least one time every month in person, to adequately provide consultation, advice, training, and direction to the occupational therapy assistant;
(4) meet with each client who has been referred to a supervised occupational therapy assistant at least once each month, to further assess the patient, evaluate the treatment, and modify the individual's treatment plan, except that if the interval of client care occurs one time per month or less, the occupational therapist shall meet with the client at least once every four visits;
(5) supervise no more than two full-time occupational therapy assistants at one time, or four part-time occupational therapy assistants if the combined work hours of the assistants do not exceed 40 hours per week, unless otherwise approved by the division in collaboration with the board;
(6) remain responsible for client treatment provided by the occupational therapy assistant; and
(7) fulfill any other supervisory responsibilities as determined by division rule.

Regulation: Utah Administrative Code R156-1-102a. Global Definitions of Levels of Supervision. (regulation is not occupational therapy-specific and applies to multiple professions)
(1) Under Subsection 58-1-106(1)(a), except as otherwise provided by statute or rule, the following global definitions of levels of supervision apply to supervision terminology in Title 58, Occupations and Professions, and Title R156, and shall be referenced and used to the extent practicable in those statutes and rules to promote uniformity and consistency.
(a) “Direct supervision” and “immediate supervision” means the supervising licensee is present and available for face-to-face communication with the person being supervised when and where professional services are being provided;
(b) "Indirect supervision" means the supervising licensee:
(i) has given either written or oral instructions to the person being supervised;
(ii) is present in the facility or located on the same premises where the person being supervised is providing services; and
(iii) is available to provide immediate face-to-face communication with the person being supervised as necessary.
(c) "General supervision" means that the supervising licensee:
(i) has authorized the work to be performed by the person being supervised;
(ii) is available for consultation with the person being supervised by personal face-to-face contact, or direct voice contact by electronic or other means, without regard to whether the supervising licensee is present in the facility or located on the same premises where the person being supervised is providing services;
(iii) can provide any necessary consultation within a reasonable time; and
(iv) personal contact is routine.

	(d) "Supervising licensee" means a licensee who under statute or rule has satisfied the requirements to act as a supervisor and has agreed to supervise an unlicensed individual or a licensee in a classification or licensure status that requires supervision. (2) Except as otherwise provided by statute or rule: (a) unlicensed personnel allowed to practice a regulated profession shall practice under an appropriate level of supervision as defined in this section, as specified by the profession's licensing act or rule; and (b) a license classification required to practice under supervision shall practice under an appropriate level of supervision as defined in this section, as specified by the profession's licensing act or rule.
Vermont	**<u>Statute:</u> Vermont Statutes Title 26, Chapter 71, Section 3351. Definitions** (2) "Occupational therapy assistant" means a person who is licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist. **<u>Regulation:</u> Vermont Administrative Code §3.7, SUPERVISION STANDARDS.** (a) As used in this rule: "Supervision" means the responsible periodic review and inspection of all aspects of occupational therapy services by the appropriate licensed occupational therapist. "Close supervision" means daily, direct, face-to-face contact at the site of work and applies only to occupational therapists with initial skill development proficiencies or occupational therapy assistants, as appropriate for the delivery of occupational therapy services. "Routine supervision" means direct face-to-face contact at least every two weeks at the site of the work, with interim supervision occurring by other methods, such as telephonic, electronic, or written communication and applies only to occupational therapy assistants "General supervision" means at least monthly direct face-to-face contact, with interim supervision available as needed by other methods, and applies only to occupational therapists with increased skill development and mastery of basic role functions or occupational therapy assistants, as appropriate, for the delivery of occupational therapy services. (b) Supervision is a collaborative process that requires both the licensed occupational therapist and the licensed occupational therapy assistant to share responsibility. Appropriate supervision will include consideration given to such factors as level of skill, the establishment of service competency (the ability to use the identified intervention in a safe and effective manner), experience and work setting demands, as well as the complexity and stability of the client population to be treated. (c) The supervision of the occupational therapy assistant is a process that is aimed at ensuring the safe and effective delivery of occupational therapy services and fosters professional competence and development. (d) For effective supervision to occur that will ensure safety and effectiveness of service delivery and that will support the occupational therapy assistant's professional growth, a variety of types and methods of supervision should be used by the occupational therapist. Examples of methods or types of supervision include observation, co-treatment, dialogue/discussion, and teaching/instruction. (e) The occupational therapist develops a plan for supervision that includes input from the OTA in regard to the following: (1) the frequency of supervisory contact (2) the method(s) or type(s) of supervision (3) the content areas addressed

	(f) The supervisory plan is documented and a log of supervisory contacts is kept by both parties. The log includes the frequency and methods of supervision used. (g) Supervision of occupational therapy services provided by a licensed occupational therapy assistant shall be implemented as follows: (1) Entry level occupational therapy assistants are persons working on initial skill development (less than 1 year of work experience) or who are entering new practice environments or developing new skills (one or more years of experience) and shall require close supervision. (2) Intermediate level occupational therapy assistants are persons working on increased skill development, mastery of basic role functions (minimum one - three years of experience or dependent on practice environment or previous experience) and shall require routine supervision. (3) Advanced level occupational therapy assistants are persons refining specialized skills (more than 3 years work experience, or the ability to understand complex issues affecting role functions) and shall require general supervision. (4) Licensed occupational therapy assistants, regardless of their years of experience, may require closer supervision by the licensed occupational therapist for interventions that are more complex or evaluative in nature and for areas in which service competencies have not been established. (h) General statements regarding roles and responsibilities during the delivery of occupational therapy services: (1) The occupational therapist is responsible for the overall delivery of occupational therapy services and is accountable for the safety and effectiveness of the occupational therapy service delivery process. (2) The occupational therapy assistant delivers occupational therapy services under the supervision of the occupational therapist. (3) It is the responsibility of the occupational therapist to be directly involved in the delivery of services during the initial evaluation and regularly throughout the course of intervention. (4) Services delivered by the occupational therapy assistant are specifically selected and delegated by the occupational therapist. When delegating to the occupational therapy assistant, the occupational therapist considers the following factors: (A) the complexity of the client's condition and needs (B) the knowledge, skill, and competence of the occupational therapy assistant. (C) the nature and complexity of the intervention (5) Prior to delegation of any aspect of the service delivery process to the occupational therapy assistant, service competency must be demonstrated and documented between the occupational therapist and occupational therapy assistant. Service competency is demonstrated and documented for clinical reasoning and judgment required during the service delivery process as well as for the performance of specific techniques, assessments, and intervention methods used. Service competency must be monitored and reassessed regularly. (6) The role delineation and responsibilities of the occupational therapist and the occupational therapy assistant remain unchanged regardless of the setting in which occupational therapy services are delivered (i.e., traditional, non-traditional, or newly emerging practice settings). (i) An occupational therapist or occupational therapy assistant practicing under a temporary license must have daily, direct, on-site supervision by a licensed occupational therapist for the duration of the temporary license. The supervisor is available for advice and intervention, and will sign all notes entered into the patient's medical record.
Virginia	**<u>Statute:</u> Code of Virginia §54.1-2900 Definitions.** "Occupational therapy assistant" means an individual who has met the requirements of the Board for licensure and who works under the supervision of a licensed occupational therapist to assist in the practice of occupational therapy.

	<u>Regulation:</u> Virginia Administrative Code Title 18, Agency 85, Chapter 80 **18 VAC 85-80-10 Definitions.** B. The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise: "Occupational therapy personnel" means appropriately trained individuals who provide occupational therapy services under the supervision of a licensed occupational therapist. **18 VAC 85-80-90 General Responsibilities.** B. An occupational therapy assistant renders services under the supervision of an occupational therapist that do not require the clinical decision or specific knowledge, skills and judgment of a licensed occupational therapist and do not include the discretionary aspects of the initial assessment, evaluation or development of a treatment plan for a patient. **18 VAC 85-80-110 Supervisory Responsibilities of an Occupational Therapist.** A. Delegation to an occupational therapy assistant. 1. An occupational therapist shall be ultimately responsible and accountable for patient care and occupational therapy outcomes under his clinical supervision. 2. An occupational therapist shall not delegate the discretionary aspects of the initial assessment, evaluation or development of a treatment plan for a patient nor shall he delegate any task requiring a clinical decision or the knowledge, skills, and judgment of a licensed occupational therapist. 3. Delegation shall only be made if, in the judgment of the occupational therapist, the task or procedures do not require the exercise of professional judgment, can be properly and safely performed by an appropriately trained occupational therapy assistant, and the delegation does not jeopardize the health or safety of the patient. 4. Delegated tasks or procedures shall be communicated to an occupational therapy assistant on a patient-specific basis with clear, specific instructions for performance of activities, potential complications, and expected results. B. The frequency, methods, and content of supervision are dependent on the complexity of patient needs, number and diversity of patients, demonstrated competency and experience of the assistant, and the type and requirements of the practice setting. The occupational therapist providing clinical supervision shall meet with the occupational therapy assistant to review and evaluate treatment and progress of the individual patients at least once every tenth treatment session or 30 calendar days, whichever occurs first. For the purposes of this subsection, group treatment sessions shall be counted the same as individual treatment sessions. C. An occupational therapist may provide clinical supervision for up to six occupational therapy personnel, to include no more than three occupational therapy assistants at any one time. D. The occupational therapy assistant shall document in the patient record any aspects of the initial evaluation, treatment plan, discharge summary, or other notes on patient care performed by the assistant. The supervising occupational therapist shall countersign such documentation in the patient record at the time of the review and evaluation required in subsection B of this section.
Washington	**<u>Statute:</u> Revised Code of Washington §18.59.020 Definitions.** (6) "Occupational therapy assistant" means a person licensed to assist in the practice of occupational therapy under the supervision or with the regular consultation of an occupational therapist. (7) "Occupational therapy practitioner" means a person who is credentialed as an occupational therapist or occupational therapy assistant.

	Regulation: Washington Administrative Code Title 246, Chapter 847 **WAC 246-847-010 Definitions.** (9) "Professional supervision" of an occupational therapy aide as described in RCW 18.59.020(5) means in-person contact at the treatment site by an occupational therapist or occupational therapy assistant licensed in the state of Washington. When client-related tasks are provided by an occupational therapy aide more than once a week, professional supervision must occur at least weekly. When client-related tasks are provided by an occupational therapy aide once a week or less, professional supervision must occur at least once every two weeks. (10) "Regular consultation with an occupational therapy assistant" means at least monthly contact with the supervising occupational therapist licensed in the state of Washington, with further supervision available as needed. **WAC 246-847-135 Standards of supervision.** The following are the standards for supervision of occupational therapy assistants, limited permit holders, and occupational therapy aides: (1) A licensed occupational therapy assistant must be in regular consultation, as defined by WAC 246-847-010, with an occupational therapist licensed in the state of Washington. Regular consultation must be documented and the documentation must be kept in a location determined by the supervising occupational therapist or occupational therapy assistant. (2) A limited permit holder: (a) Who is waiting to take the examination for licensure must work in association with an occupational therapist licensed in the state of Washington with a minimum of one year of experience. "In association with" includes consultation regarding evaluation, intervention, progress, reevaluation and discharge planning of each assigned patient at appropriate intervals and documented by cosignature of all notes by the supervising occupational therapist. (b) Who has failed the examination must be directly supervised by an occupational therapist licensed in the state of Washington with a minimum of one year of experience. Direct supervision must include consultation regarding evaluation, intervention, progress, reevaluation and discharge planning of each assigned patient at appropriate intervals and documented by cosignature of all notes by the supervising occupational therapist. (3) An occupational therapy aide must be supervised and trained by an occupational therapist or an occupational therapy assistant licensed in the state of Washington. Professional supervision must include documented supervision and training. (a) The occupational therapist or occupational therapy assistant shall provide professional supervision as defined in WAC 246-847-010 to the occupational therapy aide on client and nonclient related tasks. (b) When performing client related tasks, the occupational therapist or occupational therapy assistant must ensure the occupational therapy aide is trained and competent in performing the task on the specific client. (c) The documentation must be maintained in a location determined by the supervising occupational therapist or occupational therapy assistant.
West Virginia	**Statute: West Virginia Code Chapter 30, Article 28** **§30-28-3 Definitions** (e) "Direct supervision" means the actual physical presence of a licensed supervising occupational therapist or licensed occupational therapy assistant, and the specific delineation of tasks and responsibilities for personally reviewing and interpreting the results of any habilitative or rehabilitative procedures conducted by the limited permit holder, occupational therapy student, or aide. Direct supervision includes direct close supervision and direct continuous supervision. (f) "Direct close supervision" means the licensed supervising occupational therapist or licensed occupational therapy assistant is in the building and has daily direct contact at the site of work.

	(g) "Direct continuous supervision" means the licensed supervising occupational therapist or licensed occupational therapy assistant is physically present and in direct line of sight of the occupational therapy student or aide. (h) "General supervision" means initial direction and periodic inspection of the activities of a licensed occupational therapist assistant by the supervising licensed occupational therapist, but does not necessarily require constant physical presence on the premises while the activities are performed. (l) "Occupational Therapy Assistant" means a person licensed by the board under the provisions of this article to assist in the practice of occupational therapy under the general supervision of an Occupational Therapist. **§30-28-4 Scope of practice; license and supervision requirements.** (d) An occupational therapy assistant may assist in the practice of occupational therapy under the general supervision of an occupational therapist. **Regulation: West Virginia Code of State Rules Title 13, Series 1** **§13-1-2 Definitions.** As used in this rule: 2.6. "General Supervision" means initial direction and periodic inspection of the activities of a licensed occupational therapist assistant by the supervising licensed occupational therapist, but does not necessarily require constant physical presence on the premises while the activities are performed. 2.13. Occupational Therapy Assistant means a person licensed by the Board under the provisions of W. Va. Code §30-28 to assist in the practice of occupational therapy under the general supervision of an occupational therapist. **§13-1-12 Responsibilities and Supervision Requirements of the Occupational Therapist, Occupational Therapy Assistant, or Limited Permit Holder.** 12.2. The occupational therapist is responsible for all aspects of occupational therapy service delivery and is accountable for the safety and effectiveness of the occupational therapy service delivery process. The occupational therapy service delivery process involves evaluation, intervention planning, intervention implementation, intervention review, and outcome evaluation. 12.2.a. The occupational therapist must be directly involved through a face-to-face visit with the patient during the initial evaluation and establishment of the intervention plan, and prior to any change in the plan, such as adding, changing, renewing, or discontinuing occupational therapy goals. 12.3. The occupational therapy assistant is responsible for delivering occupational therapy services under the supervision of and in partnership with the occupational therapist. 12.4. It is the responsibility of the occupational therapist and the occupational therapy assistant to seek the appropriate quality and frequency of supervision to ensure safe and effective occupational therapy service delivery. 12.4.a. The specific frequency, methods, and content of supervision may vary by practice setting and are dependent upon the 12.4.a.1. Complexity of client needs, 12.4.a.2. Number and diversity of clients, 12.4.a.3. Skills of the occupational therapist and the occupational therapy assistant, 12.4.a.4. Type of practice setting, 12.4.a.5. Requirements of the practice setting, and 12.4.a.6. Other regulatory requirements.

	12.4.b It is the responsibility of the occupational therapist supervising an occupational therapy assistant with less than one year experience to provide general supervision with direct contact at least every two weeks at the site of work and supervision available as needed by telephonic, electronic, or written communication. Documentation by the occupational therapist must reflect that this supervision has occurred. 12.4.c. It is the responsibility of the occupational therapist supervising an occupational therapy assistant with increased skill development and mastery of basic role functions for the delivery of occupational therapy services to provide general supervision with monthly direct contact and supervision available as needed by telephonic, electronic, or written communication. Documentation by the occupational therapist must reflect that this supervision has occurred. 12.4.d. General Supervision is demonstrated through co-signatures on all paperwork or electronic notes pertaining to the practice of occupational therapy for the person requiring general supervision. All paperwork or electronic notes pertaining to the practice of occupational therapy must be signed and dated, electronically or otherwise, by the supervising licensed occupational therapist. The supervisor need not be present or on the premises at all times where the licensed occupational therapy assistant is performing the professional services.
Wisconsin	**Statute: Wisconsin Statutes 448.96, Definitions.** In this subchapter: (6) “Occupational therapy assistant" means an individual who is licensed by the affiliated credentialing board to assist in the practice of occupational therapy under the supervision of an occupational therapist. **Regulation: Wisconsin Administrative Code Chapter OT 1, OT 1.02 Definitions.** (26) “Supervision" is a cooperative process in which 2 or more people participate in a joint effort to establish, maintain, and elevate a level of competence and performance. One of the participants, the supervisor, possesses skill, competence, experience, education, credentials, or authority in excess of those possessed by the other participant, the supervisee. **Regulation: Wisconsin Administrative Code Chapter OT 4, OT 4.04 Supervision and practice of occupational therapy assistants.** (1) An occupational therapy assistant must practice under the supervision of an occupational therapist. Supervision is an interactive process that requires both the occupational therapist and the occupational therapy assistant to share responsibility for communication between the supervisor and the supervisee. The occupational therapist is responsible for the overall delivery of occupational therapy services and shall determine which occupational therapy services to delegate to the occupational therapy assistant or non−licensed personnel based on the establishment of service competence between supervisor and supervisee, and is accountable for the safety and effectiveness of the services provided. (2) Supervision of an occupational therapy assistant by an occupational therapist shall be either close or general. The supervising occupational therapist shall have responsibility for the outcome of the performed service. (3) When close supervision is required, the supervising occupational therapist shall have daily contact on the premises with the occupational therapy assistant. The occupational therapist shall provide direction in developing the plan of treatment and shall periodically inspect the actual implementation of the plan. The occupational therapist shall cosign evaluation contributions and intervention documents prepared by the occupational therapy assistant. (4) (ad) In this subsection, “direct contact” means face−to−face communication or communication by means of telephone, electronic communication, or group conference.

	(ah) When general supervision is allowed, the supervising occupational therapist shall, except as provided under par. (ap), have direct contact with the occupational therapy assistant and face−to−face contact with the client by every tenth session of occupational therapy and no less than once per calendar month. (ap) When general supervision is allowed, and occupational therapy services are provided to a client once per calendar month or less frequently than once per calendar month, the supervising occupational therapist shall have direct contact with the occupational therapy assistant and face−to−face contact with the client no less than every other session of occupational therapy. (at) Direct contact with the occupational therapy assistant under pars. (ah) and (ap) shall include reviewing the progress and effectiveness of treatment, and may occur simultaneously or separately from face−to−face contact with the client. (b) The occupational therapist shall record in writing a specific description of the supervisory activities undertaken for each occupational therapy assistant. The written record shall include client name, status and plan for each client discussed. (5) Close supervision is required for all rehabilitation, neonate, early intervention, and school system services provided by an entry level occupational therapy assistant. All other occupational therapy services provided by an occupational therapy assistant may be performed under general supervision, if the supervising occupational therapist determines, under the facts of the individual situation, that general supervision is appropriate using established professional guidelines.
Wyoming	**Regulation: Wyoming Administrative Rules, Occupational Therapy Board, Chapter 1, GENERAL PROVISIONS** Section 3. Definitions. The definitions set out in the Act are hereby incorporated by reference into these Rules. In addition, as used in these Rules, the following definitions shall apply: (d) "Close Supervision" means weekly, direct contact at the site of work and applies only to OTs with initial skill development proficiencies or OTAs, as appropriate, for the delivery of occupational therapy services. (j) "Routine Supervision" means direct contact at least every two weeks at the site of work, with interim supervision occurring by other methods, such as telephonic, electronic or written communication and applies only to OTAs. **Regulation: Wyoming Administrative Rules, Occupational Therapy Board, Chapter 3, Standards of Practice of Occupational Therapy** Section 2. Delineation of Roles. (a) An OT currently licensed by the Board: (i) Evaluates the client using the appropriate evaluation tool(s) for condition. (ii) Prepares a custom written program plan and provides treatment as appropriate within the licensees scope of practice and training. (iii) When applicable, assigns treatment duties based on that program plan to a licensed occupational therapy assistant currently licensed who has been specifically trained to carry out those duties. (iv) Monitors the occupational therapy assistant's performance. (v) Accepts professional responsibility for the occupational therapy assistant's performance. (b) An OTA currently licensed by the board assists in the practice of occupational therapy and performs treatment and delegated assessment commensurate with their education and training. Section 3. Supervision of Occupational Therapy Assistants. (a) A licensed OTA may assist in the practice of occupational therapy only under the supervision of an OT.

	(b) The supervising OT shall determine the level of supervision the OTA requires, based on the competency the OTA demonstrates. The supervisory guidelines are as follows: (i) An entry-level OTA is an individual working on initial skill development or entering a new practice area. At this level the OT shall provide close supervision, including weekly meetings and oversight, which could take place in person or virtually with a video and audio component. (ii) An intermediate-level OTA is an individual working on increased skill development and mastery of basic role functions and demonstrates ability to respond to situations based on previous experience. At this level the OT shall provide routine supervision, including bi-weekly meetings and oversight, which could take place in person or virtually with a video and audio component. (iii) An advanced-level OTA is an individual refining specialized skills with the ability to understand complex issues affecting role functions. At this level the OT shall provide general supervision, including bimonthly meetings and oversight, which could take place in person or virtually with a video and audio component. (c) Each supervising OT shall maintain a supervisory plan and shall document the supervision of each OTA using the supervision form provided by the Board. The supervising OT shall include evidence of regular supervision and contact between the supervisor and the assistant and the OT's supervision records may be subject to Board review upon request. The supervising OT shall maintain records related to their supervision for three (3) years. Supervision shall include: (i) Communicating to the OTA the results of patient or client evaluation and discussing the goals and program plan for the patient or client; (ii) Providing information, instruction and assistance as needed; (iii) Annually, or more often if warranted, preparing a written appraisal of the OTAs performance and discussing the appraisal with the OTA; (iv) Review of the Board's rules and the Wyoming Occupational Therapy Practice Act on an annual basis. (iv) A supervising OT after initial record review is performed may assign the administration of standardized tests, activities of daily living evaluations, or other elements of patient evaluation and re-evaluation that do not require the professional judgment and skill of an OT to an intermediate or advanced OTA. Assignment under this subsection must be consistent with OTA's education and training. (d) More frequent supervision may be necessary as determined by the OT or the OTA, dependent on the level of expertise displayed by the OTA, the setting and the population characteristics. (e) A supervisor who is temporarily unable to provide supervision shall arrange for substitute supervision by a licensed OT. The substitute shall provide supervision that is as rigorous and thorough as that provided by the permanent supervisor.