

## **MINIMUM REQUIRED SKILLS OF PHYSICAL THERAPIST GRADUATES AT ENTRY-LEVEL BOD P11-05-20-49**

### **Background**

In August 2004, 28 member consultants convened in Alexandria, VA for a consensus conference on “Clinical Education in a Doctoring Profession.” One of the specific purposes of this conference was to achieve consensus on minimum skills for every graduate from a physical therapist professional program that include, but are not limited to, the skill set required by the physical therapist licensure examination.

Assumptions that framed the boundaries for the discussion during this conference included:

- (1) A minimum set of required skills will be identified that every graduate from a professional physical therapist program can competently perform in clinical practice.
- (2) Physical therapist programs can prepare graduates to be competent in the performance of skills that exceed the minimum skills based on institutional and program prerogatives.
- (3) Development of the minimum required skills will include, but not be limited to, the content blueprint for the physical therapist licensure examination; put differently, no skills on the physical therapist licensure blueprint will be excluded from the minimum skill set.
- (4) To achieve consensus on minimum skills, 90% or more of the member consultants must be in agreement.

Minimum skills were defined as foundational skills that are indispensable for a new graduate physical therapist to perform on patients/clients in a competent and coordinated manner. Skills considered essential for any physical therapist graduate include those addressing all systems (ie, musculoskeletal, neurological, cardiovascular pulmonary, integumentary, GI, and GU) and the continuum of patient/client care throughout the lifespan. Definitions for terms used in this document are based on the *Guide to Physical Therapist Practice*. An asterisk (\*) denotes a skill identified on the Physical Therapist Licensure Examination Content Outline. Given that consensus on this document was achieved by a small group of member consultants, it was agreed that the conference outcome document would be disseminated to a wider audience comprised of stakeholder groups that would be invested in and affected by this document.

The consensus-based draft document of Essential Skills of the Physical Therapist (previous title) was placed on APTA’s website and stakeholder groups, including APTA Board of Directors, all physical therapist academic program directors, Academic Coordinators/Directors of Clinical Education, and their faculties, physical therapists on CAPTE, component leaders, and a selected list of clinical educators, were invited to vote on whether or not to include/exclude specific essential skills that every physical therapist graduate should be competent in performing on patients. A total of 624 invitations to vote e-mails were sent out and 212 responses (34%) were received. Given the length of this document and the time required to complete the process, a 34% return rate was deemed acceptable for the purpose of this investigation. The “yes” and “no” votes were tabulated and analyzed.

The final “vote” was provided in a report to the Board of Directors in November 2005 for their review, deliberation, and action. The Board of Directors adopted the document Minimum Required Skills of Physical Therapist Graduates at Entry-level (revised title) as a core document to be made available to stakeholders including the Commission on Accreditation in Physical Therapy Education, physical therapist academic programs and their faculties, clinical education sites, students, and employers. The final document that follows defines Minimum Required Skills of Physical Therapist Graduates At Entry-level.

**MINIMUM REQUIRED SKILLS OF PHYSICAL THERAPIST GRADUATES AT ENTRY-LEVEL**  
**BOD P11-05-20-49**

<b>Skill Category</b>	<b>Description of Minimum Skills</b>
<p><b>Screening</b></p> <ul style="list-style-type: none"> <li>• <i>Systems review for referral</i></li> <li>• <i>Recognize scope of limitations</i></li> </ul>	<ol style="list-style-type: none"> <li>1. Perform review of systems to determine the need for referral or for physical therapy services.</li> <li>2. Systems review screening includes the following:               <ol style="list-style-type: none"> <li>A. General Health (GH)                   <ol style="list-style-type: none"> <li>(1) Fatigue</li> <li>(2) Malaise</li> <li>(3) Fever/chills/sweats</li> <li>(4) Nausea/vomiting</li> <li>(5) Dizziness/lightheadedness</li> <li>(6) Unexplained weight change</li> <li>(7) Numbness/Paresthesia</li> <li>(8) Weakness</li> <li>(9) Mentation/cognition</li> </ol> </li> <li>B. Cardiovascular System (CVS)*                   <ol style="list-style-type: none"> <li>(1) Dyspnea</li> <li>(2) Orthopnea</li> <li>(3) Palpitations</li> <li>(4) Pain/sweats</li> <li>(5) Syncope</li> <li>(6) Peripheral edema</li> <li>(7) Cough</li> </ol> </li> <li>C. Pulmonary System (PS)*                   <ol style="list-style-type: none"> <li>(1) Dyspnea</li> <li>(2) Onset of cough</li> <li>(3) Change in cough</li> <li>(4) Sputum</li> <li>(5) Hemoptysis</li> <li>(6) Clubbing of nails</li> <li>(7) Stridor</li> <li>(8) Wheezing</li> </ol> </li> <li>D. Gastrointestinal System (GIS)                   <ol style="list-style-type: none"> <li>(1) Difficulty with swallowing</li> <li>(2) Heartburn, indigestion</li> <li>(3) Change in appetite</li> <li>(4) Change in bowel function</li> </ol> </li> <li>E. Urinary System (US)                   <ol style="list-style-type: none"> <li>(1) Frequency</li> <li>(2) Urgency</li> <li>(3) Incontinence</li> </ol> </li> <li>F. Genital Reproductive System (GRS)                   <ol style="list-style-type: none"> <li>Male                       <ol style="list-style-type: none"> <li>(1) Describe any sexual dysfunction, difficulties, or concerns</li> </ol> </li> <li>Female                       <ol style="list-style-type: none"> <li>(1) Describe any sexual or menstrual dysfunction, difficulties, or problems</li> </ol> </li> </ol> </li> </ol> </li> <li>3. Initiate referral when positive signs and symptoms identified in the review of systems are beyond the specific skills or expertise of the physical therapist or beyond the scope of physical therapist practice.</li> <li>4. Consult additional resources, as needed, including other physical therapists, evidence-based literature, other health care professionals, and community resources.</li> <li>5. Screen for physical, sexual, and psychological abuse.</li> </ol>

Skill Category	Description of Minimum Skills
<b>Screening (continued)</b>	<u>Cardiovascular and Pulmonary Systems*</u> 1. Conduct a systems review for screening of the cardiovascular and pulmonary system (heart rate and rhythm, respiratory rate, blood pressure, edema). 2. Read a single lead EKG.
	<u>Integumentary System*</u> 1. Conduct a systems review for screening of the integumentary system, the assessment of pliability (texture), presence of scar formation, skin color, and skin integrity.
	<u>Musculoskeletal System*</u> 1. Conduct a systems review for screening of musculoskeletal system, the assessment of gross symmetry, gross range of motion, gross strength, height and weight.
	<u>Neurological System*</u> 1. Conduct a systems review for screening of the neuromuscular system, a general assessment of gross coordinated movement (eg, balance, gait, locomotion, transfers, and transitions) and motor function (motor control and motor learning).
<b>Examination/ Reexamination</b> <ul style="list-style-type: none"> <li>• <i>History</i></li> <li>• <i>Tests and Measures (refer to Licensure Examination Outline, Guide to Physical Therapist Practice, PT Normative Model: Version 2004)</i></li> <li>• <i>Systems Review for Examination</i></li> </ul>	<ol style="list-style-type: none"> <li>1. Review pertinent medical records and conduct an interview which collects the following data:               <ol style="list-style-type: none"> <li>A. Past and current patient/client history</li> <li>B. Demographics</li> <li>C. General health status</li> <li>D. Chief complaint</li> <li>E. Medications</li> <li>F. Medical/surgical history</li> <li>G. Social history</li> <li>H. Present and premorbid functional status/activity</li> <li>I. Social/health habits</li> <li>J. Living environment</li> <li>K. Employment</li> <li>L. Growth and development</li> <li>M. Lab values</li> <li>N. Imaging</li> <li>O. Consultations</li> </ol> </li> <li>2. Based on best available evidence select examination tests and measures that are appropriate for the patient/client.</li> <li>3. Perform posture tests and measures of postural alignment and positioning.*</li> <li>4. Perform gait, locomotion and balance tests including quantitative and qualitative measures such as*:               <ol style="list-style-type: none"> <li>A. Balance during functional activities with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment</li> <li>B. Balance (dynamic and static) with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment</li> <li>C. Gait and locomotion during functional activities with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment to include:                   <ol style="list-style-type: none"> <li>(1) Bed mobility</li> </ol> </li> </ol> </li> </ol>

Skill Category	Description of Minimum Skills
<b>Examination/ Reexamination (continued)</b>	<ul style="list-style-type: none"> <li>(2) Transfers (level surfaces and floor)*</li> <li>(3) Wheelchair management</li> <li>(4) Uneven surfaces</li> <li>(5) Safety during gait, locomotion, and balance</li> <li>D. Perform gait assessment including step length, speed, characteristics of gait, and abnormal gait patterns.</li> <li>5. Characterize or quantify body mechanics during self-care, home management, work, community, tasks, or leisure activities.</li> <li>6. Characterize or quantify ergonomic performance during work (job/school/play)*: <ul style="list-style-type: none"> <li>A. Dexterity and coordination during work</li> <li>B. Safety in work environment</li> <li>C. Specific work conditions or activities</li> <li>D. Tools, devices, equipment, and workstations related to work actions, tasks, or activities</li> </ul> </li> <li>7. Characterize or quantify environmental home and work (job/school/play) barriers: <ul style="list-style-type: none"> <li>A. Current and potential barriers</li> <li>B. Physical space and environment</li> <li>C. Community access</li> </ul> </li> <li>8. Observe self-care and home management (including ADL and IADL)*</li> <li>9. Measure and characterize pain* to include: <ul style="list-style-type: none"> <li>A. Pain, soreness, and nociception</li> <li>B. Specific body parts</li> </ul> </li> <li>10. Recognize and characterize signs and symptoms of inflammation.</li> </ul>
	<u>Cardiovascular and Pulmonary Systems</u> <ul style="list-style-type: none"> <li>1. Perform cardiovascular/pulmonary tests and measures including: <ul style="list-style-type: none"> <li>A. Heart rate</li> <li>B. Respiratory rate, pattern and quality*</li> <li>C. Blood pressure</li> <li>D. Aerobic capacity test* (functional or standardized) such as the 6-minute walk test</li> <li>E. Pulse Oximetry</li> <li>F. Breath sounds – normal/abnormal</li> <li>G. Response to exercise (RPE)</li> <li>H. Signs and symptoms of hypoxia</li> <li>I. Peripheral circulation (deep vein thrombosis, pulse, venous stasis, lymphedema)*</li> </ul> </li> </ul>
	<u>Integumentary System</u> <ul style="list-style-type: none"> <li>1. Perform integumentary integrity tests and measures including*: <ul style="list-style-type: none"> <li>A. Activities, positioning, and postures that produce or relieve trauma to the skin.</li> <li>B. Assistive, adaptive, orthotic, protective, supportive, or prosthetic devices and equipment that may produce or relieve trauma to the skin.</li> <li>C. Skin characteristics, including blistering, continuity of skin color, dermatitis, hair growth, mobility, nail growth, sensation, temperature, texture and turgor.</li> <li>D. Activities, positioning, and postures that aggravate the wound or scar</li> </ul> </li> </ul>

Skill Category	Description of Minimum Skills
<b>Examination/ Reexamination (continued)</b>	<p>or that produce or relieve trauma.</p> <ul style="list-style-type: none"> <li>E. Signs of infection.</li> <li>F. Wound characteristics: bleeding, depth, drainage, location, odor, size, and color.</li> <li>G. Wound scar tissue characteristics including banding, pliability, sensation, and texture.</li> </ul>
	<p><u>Musculoskeletal System</u></p> <ol style="list-style-type: none"> <li>1. Perform musculoskeletal system tests and measures including: <ul style="list-style-type: none"> <li>A. Accessory movement tests</li> <li>B. Anthropometrics <ul style="list-style-type: none"> <li>(1) Limb length</li> <li>(2) Limb girth</li> <li>(3) Body composition</li> </ul> </li> <li>C. Functional strength testing</li> <li>D. Joint integrity*</li> <li>E. Joint mobility*</li> <li>F. Ligament laxity tests</li> <li>G. Muscle length*</li> <li>H. Muscle strength* including manual muscle testing, dynamometry, one repetition max</li> <li>I. Palpation</li> <li>J. Range of motion* including goniometric measurements</li> </ul> </li> <li>2. Perform orthotic tests and measures including*: <ul style="list-style-type: none"> <li>A. Components, alignment, fit, and ability to care for orthotic, protective, and supportive devices and equipment.</li> <li>B. Evaluate the need for orthotic, protective, and supportive devices used during functional activities.</li> <li>C. Remediation of impairments, functional limitations, or disabilities with use of orthotic, protective, and supportive device.</li> <li>D. Residual limb or adjacent segment, including edema, range of motion, skin integrity and strength.</li> <li>E. Safety during use of orthotic, protective, and supportive device.</li> </ul> </li> <li>3. Perform prosthetic tests and measures including*: <ul style="list-style-type: none"> <li>A. Alignment, fit, and ability to care for prosthetic device.</li> <li>B. Prosthetic device use during functional activities.</li> <li>C. Remediation of impairments, functional limitations, or disabilities with use of prosthetic device.</li> <li>D. Evaluation of residual limb or adjacent segment, including edema, range of motion, skin integrity, and strength.</li> <li>E. Safety during use of the prosthetic device.</li> </ul> </li> <li>4. Perform tests and measures for assistive and adaptive devices including*: <ul style="list-style-type: none"> <li>A. Assistive or adaptive devices and equipment use during functional activities.</li> <li>B. Components, alignment, fit, and ability to care for the assistive or adaptive devices and equipment.</li> <li>C. Remediation of impairment, functional limitations, or disabilities with use of assistive or adaptive devices and equipment.</li> <li>D. Safety during use of assistive or adaptive equipment.</li> </ul> </li> </ol>
	<p><u>Neurological System</u></p> <ol style="list-style-type: none"> <li>1. Perform arousal, attention and cognition tests and measures to characterize or quantify (including standardized tests and measures)*: <ul style="list-style-type: none"> <li>A. Arousal</li> <li>B. Attention</li> </ul> </li> </ol>

Skill Category	Description of Minimum Skills
<b>Examination/ Reexamination (continued)</b>	<ul style="list-style-type: none"> <li>C. Orientation</li> <li>D. Processing and registration of information</li> <li>E. Retention and recall</li> <li>F. Communication/language</li> </ul> <ol style="list-style-type: none"> <li>2. Perform cranial and peripheral nerve integrity tests and measures*: <ul style="list-style-type: none"> <li>A. Motor distribution of the cranial nerves (eg, muscle tests, observations)</li> <li>B. Motor distribution of the peripheral nerves (eg, dynamometry, muscle tests, observations, thoracic outlet tests)</li> <li>C. Response to neural provocation (e.g. tension test, vertebral artery compression tests)</li> <li>D. Response to stimuli, including auditory, gustatory, olfactory, pharyngeal, vestibular, and visual (eg, observations, provocation tests)</li> <li>E. Sensory distribution of the cranial nerves</li> <li>F. Sensory distribution of the peripheral nerves</li> </ul> </li> <li>3. Perform motor function tests and measures to include*: <ul style="list-style-type: none"> <li>A. Dexterity, coordination, and agility</li> <li>B. Initiation, execution, modulation and termination of movement patterns and voluntary postures</li> </ul> </li> <li>4. Perform neuromotor development and sensory integration tests and measures to characterize or quantify*: <ul style="list-style-type: none"> <li>A. Acquisition and evolution of motor skills, including age-appropriate development</li> <li>B. Sensorimotor integration, including postural responses, equilibrium, and righting reactions</li> </ul> </li> <li>5. Perform tests and measures for reflex integrity including*: <ul style="list-style-type: none"> <li>A. Deep reflexes (eg, myotatic reflex scale, observations, reflex tests)</li> <li>B. Postural reflexes and reactions, including righting, equilibrium and protective reactions</li> <li>C. Primitive reflexes and reactions, including developmental</li> <li>D. Resistance to passive stretch</li> <li>E. Superficial reflexes and reactions</li> <li>F. Resistance to velocity dependent movement</li> </ul> </li> <li>6. Perform sensory integrity tests and measures that characterize or quantify including*: <ul style="list-style-type: none"> <li>A. Light touch</li> <li>B. Sharp/dull</li> <li>C. Temperature</li> <li>D. Deep pressure</li> <li>E. Localization</li> <li>F. Vibration</li> <li>G. Deep sensation</li> <li>H. Stereognosis</li> <li>I. Graphesthesia</li> </ul> </li> </ol>
<b>Evaluation</b> <ul style="list-style-type: none"> <li>• <i>Clinical reasoning</i></li> <li>• <i>Clinical decision making</i></li> </ul>	<ol style="list-style-type: none"> <li>1. Synthesize available data on a patient/client expressed in terms of the disablement model to include impairment, functional limitation, and disability participation restrictions.</li> <li>2. Use available evidence in interpreting the examination findings.</li> <li>3. Verbalize possible alternatives when interpreting the examination findings.</li> <li>4. Cite the evidence (patient/client history, lab diagnostics, tests and measures and scientific literature) to support a clinical decision.</li> </ol>

Skill Category	Description of Minimum Skills
<b>Diagnosis</b>	<ol style="list-style-type: none"> <li>1. Integrate the examination findings to classify the patient/client problem in terms of a human movement dysfunction (ie, practice patterns).</li> <li>2. Identify and prioritize impairments to determine a specific dysfunction towards which the intervention will be directed.*</li> </ol>
<b>Prognosis</b>	<ol style="list-style-type: none"> <li>1. Determine the predicted level of optimal improvement in function and the amount of time required to achieve that level.*</li> <li>2. Recognize barriers that may impact the achievement of optimal improvement within a predicted time frame including*:               <ol style="list-style-type: none"> <li>A. Age</li> <li>B. Medication(s)</li> <li>C. Socioeconomic status</li> <li>D. Co-morbidities</li> <li>E. Cognitive status</li> <li>F. Nutrition</li> <li>G. Social Support</li> <li>H. Environment</li> </ol> </li> </ol>
<b>Plan of Care</b> <ul style="list-style-type: none"> <li>• <i>Goal setting</i></li> <li>• <i>Coordination of Care</i></li> <li>• <i>Progression of care</i></li> <li>• <i>Discharge</i></li> </ul>	<p><u>Design a Plan of Care</u></p> <ol style="list-style-type: none"> <li>1. Write measurable functional goals (short-term and long-term) that are time referenced with expected outcomes.</li> <li>2. Consult patient/client and/or caregivers to develop a mutually agreed to plan of care.*</li> <li>3. Identify patient/client goals and expectations.*</li> <li>4. Identify indications for consultation with other professionals.*</li> <li>5. Make referral to resources needed by the patient/client (assumes knowledge of referral sources).*</li> <li>6. Select and prioritize the essential interventions that are safe and meet the specified functional goals and outcomes in the plan of care* (ie, (a) identify precautions and contraindications, (b) provide evidence for patient-centered interventions that are identified and selected, (c) define the specificity of the intervention (time, intensity, duration, and frequency), and (d) set realistic priorities that consider relative time duration in conjunction with family, caregivers, and other health care professionals).</li> <li>7. Establish criteria for discharge based on patient goals and functional status.*</li> </ol> <p><u>Coordination of Care</u></p> <ol style="list-style-type: none"> <li>1. Identify who needs to collaborate in the plan of care.</li> <li>2. Identify additional patient/client needs that are beyond the scope of physical therapist practice, level of experience and expertise, and warrant referral.*</li> <li>3. Refer and discuss coordination of care with other health care professionals.*</li> <li>4. Articulate a specific rationale for a referral.</li> <li>5. Advocate for patient/client access to services.</li> </ol> <p><u>Progression of Care</u></p> <ol style="list-style-type: none"> <li>1. Identify outcome measures of progress relative to when to progress the patient further.*</li> <li>2. Measure patient/client response to intervention.*</li> <li>3. Monitor patient/client response to intervention.</li> <li>4. Modify elements of the plan of care and goals in response to changing patient/client status, as needed.*</li> </ol>

Skill Category	Description of Minimum Skills
<b>Plan of Care (continued)</b>	<p><u>Progression of Care (continued)</u></p> <ol style="list-style-type: none"> <li>5. Make on-going adjustments to interventions according to outcomes including the physical and social environments, medical therapeutic interventions, and biological factors.</li> <li>6. Make accurate decisions regarding intensity and frequency when adjusting interventions in the plan of care.</li> </ol> <p><u>Discharge Plan</u></p> <ol style="list-style-type: none"> <li>1. Re-examine patient/client if not meeting established criteria for discharge based on the plan of care.</li> <li>2. Differentiate between discharge of the patient/client, discontinuation of service, and transfer of care with re-evaluation.*</li> <li>3. Prepare needed resources for patient/client to ensure timely discharge, including follow-up care.</li> <li>4. Include patient/client and family/caregiver as a partner in discharge.*</li> <li>5. Discontinue care when services are no longer indicated.</li> <li>6. When services are still needed, seek resources and/or consult with others to identify alternative resources that may be available.</li> <li>7. Determine the need for equipment and initiate requests to obtain.</li> </ol>
<b>Interventions</b> <ul style="list-style-type: none"> <li>• <i>Safety, Emergency Care, CPR and First Aid</i></li> <li>• <i>Standard Precautions</i></li> <li>• <i>Body Mechanics and Positioning</i></li> <li>• <i>Categories of Interventions (See NPTE List and Guide)</i></li> </ul>	<p><u>Safety, Cardiopulmonary Resuscitation Emergency Care, First Aid</u></p> <ol style="list-style-type: none"> <li>1. Ensure patient safety and safe application of patient/client care.*</li> <li>2. Perform first aid.*</li> <li>3. Perform emergency procedures.*</li> <li>4. Perform Cardiopulmonary Resuscitation (CPR).*</li> </ol> <p><u>Precautions</u></p> <ol style="list-style-type: none"> <li>1. Demonstrate appropriate sequencing of events related to universal precautions.*</li> <li>2. Use Universal Precautions.</li> <li>3. Determine equipment to be used and assemble all sterile and non-sterile materials.*</li> <li>4. Use transmission-based precautions.</li> <li>5. Demonstrate aseptic techniques.*</li> <li>6. Apply sterile procedures.*</li> <li>7. Properly discard soiled items.*</li> </ol> <p><u>Body Mechanics and Positioning</u></p> <ol style="list-style-type: none"> <li>1. Apply proper body mechanics (utilize, teach, reinforce, and observe).*</li> <li>2. Properly position, drape, and stabilize a patient/client when providing physical therapy.*</li> </ol> <p><u>Interventions</u></p> <ol style="list-style-type: none"> <li>1. Coordination, communication, and documentation may include:       <ol style="list-style-type: none"> <li>A. Addressing required functions:           <ol style="list-style-type: none"> <li>(1) Establish and maintain an ongoing collaborative process of decision-making with patients/clients, families, or caregivers prior to initiating care and throughout the provision of services.*</li> <li>(2) Discern the need to perform mandatory communication and reporting (eg, incident reports, patient advocacy and abuse reporting).</li> <li>(3) Follow advance directives.</li> </ol> </li> <li>B. Admission and discharge planning.</li> <li>C. Case management.</li> </ol> </li> </ol>

Skill Category	Description of Minimum Skills
<b>Interventions (continued)</b>	<ul style="list-style-type: none"> <li>D. Collaboration and coordination with agencies, including:               <ul style="list-style-type: none"> <li>(1) Home care agencies</li> <li>(2) Equipment suppliers</li> <li>(3) Schools</li> <li>(4) Transportation agencies</li> <li>(5) Payer groups</li> </ul> </li> <li>E. Communication across settings, including:               <ul style="list-style-type: none"> <li>(1) Case conferences</li> <li>(2) Documentation</li> <li>(3) Education plans</li> </ul> </li> <li>F. Cost-effective resource utilization.</li> <li>G. Data collection, analysis, and reporting of:               <ul style="list-style-type: none"> <li>(1) Outcome data</li> <li>(2) Peer review findings</li> <li>(3) Record reviews</li> </ul> </li> <li>H. Documentation across settings, following APTA's Guidelines for Physical Therapy Documentation, including:               <ul style="list-style-type: none"> <li>(1) Elements of examination, evaluation, diagnosis, prognosis, and intervention</li> <li>(2) Changes in impairments, functional limitations, and disabilities</li> <li>(3) Changes in interventions</li> <li>(4) Outcomes of intervention</li> </ul> </li> <li>I. Interdisciplinary teamwork:               <ul style="list-style-type: none"> <li>(1) Patient/client family meetings</li> <li>(2) Patient care rounds</li> <li>(3) Case conferences</li> </ul> </li> <li>J. Referrals to other professionals or resources.*</li> </ul> <p>2. Patient/client-related instruction may include:</p> <ul style="list-style-type: none"> <li>A. Instruction, education, and training of patients/clients and caregivers regarding:               <ul style="list-style-type: none"> <li>(1) Current condition (pathology/pathophysiology [disease, disorder, or condition], impairments, functional limitations, or disabilities)*</li> <li>(2) Enhancement of performance</li> <li>(3) Plan of care:                   <ul style="list-style-type: none"> <li>a. Risk factors for pathology/pathophysiology (disease, disorder, or condition), impairments, functional limitations, or disabilities</li> <li>b. Preferred interventions, alternative interventions, and alternative modes of delivery</li> <li>c. Expected outcomes</li> </ul> </li> <li>(4) Health, wellness, and fitness programs (management of risk factors)</li> <li>(5) Transitions across settings</li> </ul> </li> </ul> <p>3. Therapeutic exercise may include performing:</p> <ul style="list-style-type: none"> <li>A. Aerobic capacity/endurance conditioning or reconditioning*:               <ul style="list-style-type: none"> <li>(1) Gait and locomotor training*</li> <li>(2) Increased workload over time (modify workload progression)</li> <li>(3) Movement efficiency and energy conservation training</li> <li>(4) Walking and wheelchair propulsion programs</li> <li>(5) Cardiovascular conditioning programs</li> </ul> </li> <li>B. Balance*, coordination*, and agility training:               <ul style="list-style-type: none"> <li>(1) Developmental activities training*</li> <li>(2) Motor function (motor control and motor learning) training or retraining</li> <li>(3) Neuromuscular education or reeducation*</li> <li>(4) Perceptual training</li> </ul> </li> </ul>

Skill Category	Description of Minimum Skills
<b>Interventions (continued)</b>	<ul style="list-style-type: none"> <li>(5) Posture awareness training*</li> <li>(6) Sensory training or retraining</li> <li>(7) Standardized, programmatic approaches</li> <li>(8) Task-specific performance training</li> <li>C. Body mechanics and postural stabilization: <ul style="list-style-type: none"> <li>(1) Body mechanics training*</li> <li>(2) Postural control training*</li> <li>(3) Postural stabilization activities*</li> <li>(4) Posture awareness training*</li> </ul> </li> <li>D. Flexibility exercises: <ul style="list-style-type: none"> <li>(1) Muscle lengthening*</li> <li>(2) Range of motion*</li> <li>(3) Stretching*</li> </ul> </li> <li>E. Gait and locomotion training*: <ul style="list-style-type: none"> <li>(1) Developmental activities training*</li> <li>(2) Gait training*</li> <li>(3) Device training*</li> <li>(4) Perceptual training*</li> <li>(5) Basic wheelchair training*</li> </ul> </li> <li>F. Neuromotor development training: <ul style="list-style-type: none"> <li>(1) Developmental activities training*</li> <li>(2) Motor training</li> <li>(3) Movement pattern training</li> <li>(4) Neuromuscular education or reeducation*</li> </ul> </li> <li>G. Relaxation: <ul style="list-style-type: none"> <li>(1) Breathing strategies*</li> <li>(2) Movement strategies</li> <li>(3) Relaxation techniques</li> </ul> </li> <li>H. Strength, power, and endurance training for head, neck, limb, and trunk*: <ul style="list-style-type: none"> <li>(1) Active assistive, active, and resistive exercises (including concentric, dynamic/isotonic, eccentric, isokinetic, isometric, and plyometric exercises)</li> <li>(2) Aquatic programs*</li> <li>(3) Task-specific performance training</li> </ul> </li> <li>I. Strength, power, and endurance training for pelvic floor: <ul style="list-style-type: none"> <li>(1) Active (Kegel)</li> </ul> </li> <li>J. Strength, power, and endurance training for ventilatory muscles: <ul style="list-style-type: none"> <li>(1) Active and resistive</li> </ul> </li> <li>4. Functional training in self-care and home management may include*: <ul style="list-style-type: none"> <li>A. Activities of daily living (ADL) training: <ul style="list-style-type: none"> <li>(1) Bed mobility and transfer training*</li> <li>(2) Age appropriate functional skills</li> </ul> </li> <li>B. Barrier accommodations or modifications*</li> <li>C. Device and equipment use and training: <ul style="list-style-type: none"> <li>(1) Assistive and adaptive device or equipment training during ADL (specifically for bed mobility and transfer training, gait and locomotion, and dressing)*</li> <li>(2) Orthotic, protective, or supportive device or equipment training during self-care and home management*</li> <li>(3) Prosthetic device or equipment training during ADL (specifically for bed mobility and transfer training, gait and locomotion, and dressing)*</li> </ul> </li> <li>D. Functional training programs*: <ul style="list-style-type: none"> <li>(1) Simulated environments and tasks*</li> <li>(2) Task adaptation</li> </ul> </li> <li>E. Injury prevention or reduction:</li> </ul> </li> </ul>

Skill Category	Description of Minimum Skills
<b>Interventions (continued)</b>	<ul style="list-style-type: none"> <li>(1) Safety awareness training during self-care and home management*</li> <li>(2) Injury prevention education during self-care and home management</li> <li>(3) Injury prevention or reduction with use of devices and equipment</li> </ul> <p>5. Functional training in work (job/school/play), community, and leisure integration or reintegration may include*:</p> <ul style="list-style-type: none"> <li>A. Barrier accommodations or modifications*</li> <li>B. Device and equipment use and training*: <ul style="list-style-type: none"> <li>(1) Assistive and adaptive device or equipment training during instrumental activities of daily living (IADL)*</li> <li>(2) Orthotic, protective, or supportive device or equipment training during IADL for work*</li> <li>(3) Prosthetic device or equipment training during IADL *</li> </ul> </li> <li>C. Functional training programs: <ul style="list-style-type: none"> <li>(1) Simulated environments and tasks</li> <li>(2) Task adaptation</li> <li>(3) Task training</li> </ul> </li> <li>D. Injury prevention or reduction: <ul style="list-style-type: none"> <li>(1) Injury prevention education during work (job/school/play), community, and leisure integration or reintegration</li> <li>(2) Injury prevention education with use of devices and equipment</li> <li>(3) Safety awareness training during work (job/school/play), community, and leisure integration or reintegration</li> <li>(4) Training for leisure and play activities</li> </ul> </li> </ul> <p>6. Manual therapy techniques may include:</p> <ul style="list-style-type: none"> <li>A. Passive range of motion</li> <li>B. Massage: <ul style="list-style-type: none"> <li>(1) Connective tissue massage</li> <li>(2) Therapeutic massage</li> </ul> </li> <li>C. Manual traction*</li> <li>D. Mobilization/manipulation: <ul style="list-style-type: none"> <li>(1) Soft tissue* (thrust and nonthrust*)</li> <li>(2) Spinal and peripheral joints* (thrust and nonthrust*)</li> </ul> </li> </ul> <p>7. Prescription, application, and, as appropriate, fabrication of devices and equipment may include*:</p> <ul style="list-style-type: none"> <li>A. Adaptive devices*: <ul style="list-style-type: none"> <li>(1) Hospital beds</li> <li>(2) Raised toilet seats</li> <li>(3) Seating systems – prefabricated</li> </ul> </li> <li>B. Assistive devices*: <ul style="list-style-type: none"> <li>(1) Canes</li> <li>(2) Crutches</li> <li>(3) Long-handled reachers</li> <li>(4) Static and dynamic splints – prefabricated</li> <li>(5) Walkers</li> <li>(6) Wheelchairs</li> </ul> </li> <li>C. Orthotic devices*: <ul style="list-style-type: none"> <li>(1) Prefabricated braces</li> <li>(2) Prefabricated shoe inserts</li> <li>(3) Prefabricated splints</li> </ul> </li> <li>D. Prosthetic devices (lower-extremity)*</li> <li>E. Protective devices*: <ul style="list-style-type: none"> <li>(1) Braces</li> <li>(2) Cushions</li> </ul> </li> </ul>

Skill Category	Description of Minimum Skills
Interventions (continued)	<ul style="list-style-type: none"> <li>(3) Helmets</li> <li>(4) Protective taping</li> <li>F. Supportive devices*: <ul style="list-style-type: none"> <li>(1) Prefabricated compression garments</li> <li>(2) Corsets</li> <li>(3) Elastic wraps</li> <li>(4) Neck collars</li> <li>(5) Slings</li> <li>(6) Supplemental oxygen - apply and adjust</li> <li>(7) Supportive taping</li> </ul> </li> <li>8. Airway clearance techniques may include*: <ul style="list-style-type: none"> <li>A. Breathing strategies*: <ul style="list-style-type: none"> <li>(1) Active cycle of breathing or forced expiratory techniques*</li> <li>(2) Assisted cough/huff techniques*</li> <li>(3) Paced breathing*</li> <li>(4) Pursed lip breathing</li> <li>(5) Techniques to maximize ventilation (eg, maximum inspiratory hold, stair case breathing, manual hyperinflation)</li> </ul> </li> <li>B. Manual/mechanical techniques*: <ul style="list-style-type: none"> <li>(1) Assistive devices</li> </ul> </li> <li>C. Positioning*: <ul style="list-style-type: none"> <li>(1) Positioning to alter work of breathing</li> <li>(2) Positioning to maximize ventilation and perfusion</li> </ul> </li> </ul> </li> <li>9. Integumentary repair and protection techniques may include*: <ul style="list-style-type: none"> <li>A. Debridement*—nonselective: <ul style="list-style-type: none"> <li>(1) Enzymatic debridement</li> <li>(2) Wet dressings</li> <li>(3) Wet-to-dry dressings</li> <li>(4) Wet-to-moist dressings</li> </ul> </li> <li>B. Dressings*: <ul style="list-style-type: none"> <li>(1) Hydrogels</li> <li>(2) Wound coverings</li> </ul> </li> <li>C. Topical agents*: <ul style="list-style-type: none"> <li>(1) Cleansers</li> <li>(2) Creams</li> <li>(3) Moisturizers</li> <li>(4) Ointments</li> <li>(5) Sealants</li> </ul> </li> </ul> </li> <li>10. Electrotherapeutic modalities may include: <ul style="list-style-type: none"> <li>A. Biofeedback*</li> <li>B. Electrotherapeutic delivery of medications (eg, iontophoresis)*</li> <li>C. Electrical stimulation*: <ul style="list-style-type: none"> <li>(1) Electrical muscle stimulation (EMS)*</li> <li>(2) Functional electrical stimulation (FES)</li> <li>(3) High voltage pulsed current (HVPC)</li> <li>(4) Neuromuscular electrical stimulation (NMES)</li> <li>(5) Transcutaneous electrical nerve stimulation (TENS)</li> </ul> </li> </ul> </li> <li>11. Physical agents and mechanical modalities may include: <ul style="list-style-type: none"> <li><i>Physical agents:</i> <ul style="list-style-type: none"> <li>A. Cryotherapy*: <ul style="list-style-type: none"> <li>(1) Cold packs</li> <li>(2) Ice massage</li> <li>(3) Vapocoolant spray</li> </ul> </li> <li>B. Hydrotherapy*:</li> </ul> </li> </ul> </li> </ul>

Skill Category	Description of Minimum Skills
<b>Interventions (continued)</b>	<p>(1) Contrast bath  (2) Pools  (3) Whirlpool tanks*</p> <p>C. Sound agents*:  (1) Phonophoresis*  (2) Ultrasound*</p> <p>D. Thermotherapy*:  (1) Dry heat  (2) Hot packs*  (3) Paraffin baths*</p> <p><i>Mechanical modalities:</i></p> <p>A. Compression therapies (prefabricated)*  (1) Compression garments  (2) Vasopneumatic compression devices*  (3) Taping  (4) Compression bandaging (excluding lymphedema)</p> <p>B. Gravity-assisted compression devices:  (1) Standing frame*  (2) Tilt table*</p> <p>C. Mechanical motion devices*:  (1) Continuous passive motion (CPM)*</p> <p>D. Traction devices*:  (1) Intermittent  (2) Positional  (3) Sustained</p>
<b>Outcomes Assessment</b>	<ol style="list-style-type: none"> <li>1. Perform chart review/audit with respect to documenting components of patient/client management and facility procedures and regulatory requirements.</li> <li>2. Collect relevant evidenced-based outcome measures that relate to patient/client goals and/or prior level of function.*</li> <li>3. Select outcome measures for levels of impairment, functional limitation, and disability with respect for psychometric properties of the outcomes.</li> <li>4. Aggregate data across patients/clients and analyze results as it relates to the effectiveness of clinical performance (intervention).*</li> </ol>
<b>Education</b> <ul style="list-style-type: none"> <li>• Patients/clients, families, and caregivers</li> <li>• Colleagues, other healthcare professionals, and students</li> </ul>	<p><u>Patient/Client</u></p> <ol style="list-style-type: none"> <li>1. Determine patient/client variables that affect learning.*</li> <li>2. Educate the patient/client and caregiver about the patient's/client's current condition/examination findings, plan of care and expected outcomes, utilizing their feedback to modify the plan of care and expected outcomes as needed.*</li> <li>3. Assess prior levels of learning for patient/client and family/caregiver to ensure clarity of education.</li> <li>4. Educate patients/clients and caregivers to recognize normal and abnormal response to interventions that warrant follow-up.*</li> <li>5. Provide patient/client and caregiver clear and concise home/independent program instruction at their levels of learning and ensure the patient's /client's understanding of home/independent program.*</li> <li>6. Educate patient/client and caregiver to enable them to articulate and demonstrate the nature of the impairment and functional limitation and how to safely and effectively manage the impairment and/or functional limitation (eg, identify symptoms, alter the program, and contact the therapist).*</li> </ol>

Skill Category	Description of Minimum Skills
<b>Education (continued)</b>	<u>Colleagues</u> <ol style="list-style-type: none"> <li>1. Identify patient/client related questions and systematically locate and critically appraise evidence that addresses the question.</li> <li>2. Educate colleagues and other health care professionals about the role, responsibilities, and academic preparation of the physical therapist and scope of physical therapist practice.</li> <li>3. Address relevant learning needs, convey information, and assess outcomes of learning.</li> <li>4. Present contemporary topics/issues using current evidence and sound teaching principles (ie, case studies, in-service, journal article review, etc.).</li> </ol>
<b>Practice Management</b> <ul style="list-style-type: none"> <li>• <i>Billing/Reimbursement</i></li> <li>• <i>Documentation</i></li> <li>• <i>Quality Improvement</i></li> <li>• <i>Direction and Supervision</i></li> <li>• <i>Marketing and Public Relations</i></li> <li>• <i>Patient Rights, Patient Consent, Confidentiality, and HIPPA</i></li> </ul>	<u>Billing/Reimbursement</u> <ol style="list-style-type: none"> <li>1. Describe the legal/ethical ramifications of billing and act accordingly.</li> <li>2. Correlate/distinguish between billing and reimbursement.</li> <li>3. Include consideration of billing/ reimbursement in the plan of care.</li> <li>4. Choose correct and accurate ICD-9 and CPT codes.</li> <li>5. Contact insurance company to follow-up on a denial or ask for additional services including DME.</li> <li>6. Describe the implications of insurers' use of the <i>Guide</i> on billing/reimbursement.</li> </ol> <u>Documentation of Care</u> <ol style="list-style-type: none"> <li>1. Document patient/client care in writing that is accurate and complete using institutional processes.*</li> <li>2. Use appropriate grammar, syntax, and punctuation in written communication.</li> <li>3. Use appropriate terminology and institutionally approved abbreviations.</li> <li>4. Use an organized and logical framework to document care (eg, refer to the <i>Guide to Physical Therapist Practice</i>, Appendix 5).*</li> <li>5. Conform to documentation requirements of the practice setting and the reimbursement system.</li> <li>6. Accurately interpret documentation from other health care professionals.</li> </ol> <u>Quality Improvement</u> <ol style="list-style-type: none"> <li>1. Participate in quality improvement program of self, peers, and setting/institution.</li> <li>2. Describe the relevance and impact of institutional accreditation (eg, JCAHO or CARF) on the delivery of physical therapy services.</li> </ol> <u>Direction and Supervision of Physical Therapist Assistants (PTAs) and Other Support Personnel</u> <ol style="list-style-type: none"> <li>1. Follow legal and ethical requirements for direction and supervision.</li> <li>2. Supervise the physical therapist assistant and/or other support personnel.</li> <li>3. Select appropriate patients/clients for whom care can be directed to physical therapist assistants based on patient complexity and acuity, reimbursement, PTA knowledge/skill, jurisdictional law, etc.</li> <li>4. In any practice setting, maintain responsibility for patient/client care by regularly monitoring care and patient progression throughout care provided by PTAs and services provided by other support personnel.</li> </ol> <u>Marketing and Public Relations</u> <ol style="list-style-type: none"> <li>1. Present self in a professional manner.</li> <li>2. Promote the profession by discussing the benefits of physical therapy in all interactions, including presentations to the community about physical therapy.</li> </ol>

Skill Category	Description of Minimum Skills
<b>Practice Management (continued)</b>	<p><u>Patient Rights, Patient Consent, Confidentiality, and Health Insurance Portability and Accountability Act (HIPAA)*</u></p> <ol style="list-style-type: none"> <li>1. Obtain consent from patients/clients and/or caregiver for the provision of all components of physical therapy including*:               <ol style="list-style-type: none"> <li>A. treatment-related*</li> <li>B. research*</li> <li>C. fiscal</li> </ol> </li> <li>2. Comply with HIPAA/FERPA regulations.*</li> <li>3. Act in concert with institutional "Patient Rights" statements and advanced directives (eg, Living wills, Do Not Resuscitate (DNR) requests, etc.).</li> </ol> <p><u>Informatics</u></p> <ol style="list-style-type: none"> <li>1. Use current information technology, including word-processing, spreadsheets, and basic statistical packages.</li> </ol> <p><u>Risk Management</u></p> <ol style="list-style-type: none"> <li>1. Follow institutional/setting procedures regarding risk management.</li> <li>2. Identify the need to improve risk management practices.</li> </ol> <p><u>Productivity</u></p> <ol style="list-style-type: none"> <li>1. Analyze personal productivity using the clinical facility's system and implement strategies to improve when necessary.</li> </ol>
<b>Professionalism: Core Values</b> <ul style="list-style-type: none"> <li>• <i>Accountability</i></li> <li>• <i>Altruism</i></li> <li>• <i>Compassion/Caring</i></li> <li>• <i>Excellence</i></li> <li>• <i>Integrity</i></li> <li>• <i>Professional Duty</i></li> <li>• <i>Social Responsibility</i></li> </ul>	<p><u>Core Values</u></p> <ol style="list-style-type: none"> <li>1. Demonstrate all APTA core values associated with professionalism.</li> <li>2. Identify resources to develop core values.</li> <li>3. Seek mentors and learning opportunities to develop and enhance the degree to which core values are demonstrated.</li> <li>4. Promote core values within a practice setting.</li> </ol>
<b>Consultation</b>	<ol style="list-style-type: none"> <li>1. Provide consultation within the context of patient/client care with physicians, family and caregivers, insurers, and other health care providers, etc.</li> <li>2. Accurately self-assess the boundaries within which consultation outside of the patient/client care context can be provided.</li> <li>3. Render advice within the identified boundaries or refer to others.</li> </ol>
<b>Evidence-Based Practice</b> <ul style="list-style-type: none"> <li>• <i>Impact of Research on Practice</i></li> </ul>	<ol style="list-style-type: none"> <li>1. Discriminate among the levels of evidence (eg, Sackett).</li> <li>2. Access current literature using databases and other resources to answer clinical/practice questions.</li> <li>3. Read and critically analyze current literature.</li> <li>4. Use current evidence, patient values, and personal experiences in making clinical decisions.*</li> <li>5. Prepare a written or verbal case report.</li> <li>6. Share expertise related to accessing evidence with colleagues.</li> </ol>
<b>Communication</b> <ul style="list-style-type: none"> <li>• <i>Interpersonal</i></li> <li>• <i>Verbal</i></li> <li>• <i>Written</i></li> </ul>	<p><u>Interpersonal (including verbal, non-verbal, electronic)</u></p> <ol style="list-style-type: none"> <li>1. Develop rapport with patients/clients and others.</li> <li>2. Display sensitivity to the needs of others.</li> <li>3. Actively listen to others.</li> <li>4. Engender confidence of others.</li> <li>5. Ask questions in a manner that elicits needed responses.</li> <li>6. Modify communication to meet the needs of the audience.</li> </ol>

Skill Category	Description of Minimum Skills
<b>Communication</b> <ul style="list-style-type: none"> <li>• <i>Interpersonal</i></li> <li>• <i>Verbal</i></li> <li>• <i>Written</i></li> </ul>	<u>Interpersonal (including verbal, non-verbal, electronic) (continued)</u> <ol style="list-style-type: none"> <li>7. Demonstrate congruence between verbal and non-verbal messages.</li> <li>8. Use appropriate grammar, syntax, spelling, and punctuation in written communication.</li> <li>9. Use appropriate, and where available, standard terminology and abbreviations.</li> <li>10. Maintain professional relationships with all persons.</li> <li>11. Adapt communication in ways that recognize and respect the knowledge and experiences of colleagues and others.</li> </ol> <u>Conflict Management/Negotiation</u> <ol style="list-style-type: none"> <li>1. Recognize potential for conflict.</li> <li>2. Implement strategies to prevent and/or resolve conflict.</li> <li>3. Seek resources to resolve conflict when necessary.</li> </ol>
<b>Cultural Competence</b>	<ol style="list-style-type: none"> <li>1. Elicit the “patient’s story” to avoid stereotypical assumptions.</li> <li>2. Utilize information about health disparities during patient/client care.</li> <li>3. Provide care in a non-judgmental manner.</li> <li>4. Acknowledge personal biases, via self-assessment or critical assessment of feedback from others.</li> <li>5. Recognize individual and cultural differences and adapt behavior accordingly in all aspects of physical therapy care.*</li> </ol>
<b>Promotion of Health, Wellness, and Prevention</b>	<ol style="list-style-type: none"> <li>1. Identify patient/client health risks during the history and physical via the systems review.</li> <li>2. Take vital signs of every patient/client during each visit.</li> <li>3. Collaborate with the patient/client to develop and implement a plan to address health risks.*</li> <li>4. Determine readiness for behavioral change.</li> <li>5. Identify available resources in the community to assist in the achievement of the plan.</li> <li>6. Identify secondary and tertiary effects of disability.</li> <li>7. Demonstrate healthy behaviors.</li> <li>8. Promote health/wellness in the community.</li> </ol>