



MINIMUM REQUIRED SKILLS OF PHYSICAL THERAPIST GRADUATES AT ENTRY-LEVEL BOD G11-05-20-49 [Guideline]

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.

Skill Category	Description of Minimum Skills
Screening x Systems review for referral x Recognize scope of limitations	<ol style="list-style-type: none"> 1. Perform review of systems to determine the need for referral or for physical therapy services. 2. Systems review screening includes the following: <ol style="list-style-type: none"> A. General Health Condition (GHC) <ol style="list-style-type: none"> (1) Fatigue (2) Malaise (3) Fever/chills/sweats (4) Nausea/vomiting (5) Dizziness/lightheadedness (6) Unexplained weight change (7) Numbness/Paresthesia (8) Weakness (9) Mentation/cognition B. Cardiovascular System (CVS)* <ol style="list-style-type: none"> (1) Dyspnea (2) Orthopnea (3) Palpitations (4) Pain/sweats (5) Syncope

Skill Category	Description of Minimum Skills
<p>Screening (cont.)</p>	<ol style="list-style-type: none"> 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. 4. Consult additional resources, as needed, including other physical therapists, evidence-based literature, other health care professionals, and community resources. 5. Screen for physical, sexual, and psychological abuse. <p><u>Cardiovascular and Pulmonary Systems*</u></p> <ol style="list-style-type: none"> 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. <p><u>Integumentary System*</u></p> <ol style="list-style-type: none"> 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. <p><u>Musculoskeletal System*</u></p> <ol style="list-style-type: none"> 1. Conduct a systems review for screening of musculoskeletal system, the assessment of gross symmetry, gross range of motion, gross strength, height and weight. <p><u>Neurological System*</u></p> <ol style="list-style-type: none"> 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).
<p>Examination/ Reexamination</p> <ul style="list-style-type: none"> x History x Tests and Measures (refer to Licensure Examination Outline, Guide to Physical Therapist Practice, PT Normative Model: Version 2004) x Systems Review for Examination 	<ol style="list-style-type: none"> 1. Review pertinent medical records and conduct an interview which collects the following data: <ol style="list-style-type: none"> A. Past and current patient/client history B. Demographics C. General health status D. Chief complaint E. Medications F. Medical/surgical history G. Social history H. Present and premorbid functional status/activity I. Social/health habits J. Living environment K. Employment L. Growth and development M. Lab values N. Imaging O. Consultations 2. Based on best available evidence select examination tests and measures that are appropriate for the patient/client. 3. Perform posture tests and measures of postural alignment and positioning.*

Skill Category	Description of Minimum Skills
Examination/ Reexamination (cont.)	<p>H. Signs and symptoms of hypoxia</p> <p>I. Peripheral circulation (deep vein thrombosis, pulse, venous stasis, lymphedema)*</p> <p><u>Integumentary System</u></p> <p>1. Perform integumentary integrity tests and measures including*:</p> <ul style="list-style-type: none"> A. Activities, positioning, and postures that produce or relieve trauma to the skin. B. Assistive, adaptive, orthotic, protective, supportive, or prosthetic devices and equipment that may produce or relieve trauma to the skin. C. Skin characteristics, including blistering, continuity of skin color, dermatitis, hair growth, mobility, nail growth, sensation, temperature, texture and turgor. D. Activities, positioning, and postures that aggravate the wound or scar or that produce or relieve trauma. E. Signs of infection. F. Wound characteristics: bleeding, depth, drainage, location, odor, size, and color. G. Wound scar tissue characteristics including banding, pliability, sensation, and texture. <p><u>Musculoskeletal System</u></p> <p>1. Perform musculoskeletal system tests and measures including:</p> <ul style="list-style-type: none"> A. Accessory movement tests B. Anthropometrics <ul style="list-style-type: none"> (1) Limb length (2) Limb girth (3) Body composition C. Functional strength testing D. Joint integrity* E. Joint mobility* F. Ligament laxity tests G. Muscle length* H. Muscle strength* including manual muscle testing, dynamometry, one repetition max I. Palpation J. Range of motion* including goniometric measurements <p>2. Perform orthotic tests and measures including*:</p> <ul style="list-style-type: none"> A. Components, alignment, fit, and ability to care for orthotic, protective, and supportive devices and equipment. B. Evaluate the need for orthotic, protective, and supportive devices used during functional activities. C. Remediation of impairments in body function and structure, activity limitations, and participation restrictions with use of orthotic, protective, and supportive device. D. Residual limb or adjacent segment, including edema, range of motion, skin integrity and strength. E. Safety during use of orthotic, protective, and supportive device. <p>3. Perform prosthetic tests and measures including*:</p> <ul style="list-style-type: none"> A. Alignment, fit, and ability to care for prosthetic device. B. Prosthetic device use during functional activities.

Skill Category	Description of Minimum Skills
Examination/ Reexamination (cont.)	<ul style="list-style-type: none"> C. Remediation of impairments in body function and structure, activity limitations, and participation restrictions, with use of prosthetic device. D. Evaluation of residual limb or adjacent segment, including edema, range of motion, skin integrity, and strength. E. Safety during use of the prosthetic device. <p>4. Perform tests and measures for assistive and adaptive devices including*:</p> <ul style="list-style-type: none"> A. Assistive or adaptive devices and equipment use during functional activities. B. Components, alignment, fit, and ability to care for the assistive or adaptive devices and equipment. C. Remediation of impairments in body function and structure, activity limitations, and participation restrictions with use of assistive or adaptive devices and equipment. D. Safety during use of assistive or adaptive equipment.
C	<p><u>Neurological System</u></p> <p>1. Perform arousal, attention and cognition tests and measures to characterize or quantify (including standardized tests and measures)*:</p> <ul style="list-style-type: none"> A. Arousal B. Attention C. Orientation D. Processing and registration of information E. Retention and recall F. Communication/language <p>2. Perform cranial and peripheral nerve integrity tests and measures*:</p> <ul style="list-style-type: none"> A. Motor distribution of the cranial nerves (eg, muscle tests, observations) B. Motor distribution of the peripheral nerves (eg, dynamometry, muscle tests, observations, thoracic outlet tests) C. Response to neural provocation (e.g. tension test, vertebral artery compression tests) D. Response to stimuli, including auditory, gustatory, olfactory, pharyngeal, vestibular, and visual (eg, observations, provocation tests) <p>3. Perform motor function tests and measures to include*:</p> <ul style="list-style-type: none"> A. Dexterity, coordination, and agility B. Initiation, execution, modulation and termination of movement patterns and voluntary postures <p>4. Perform neuromotor development and sensory integration tests and F</p>

Skill Category	Description of Minimum Skills
Examination/ Reexamination (cont.)	F. Resistance to velocity dependent movement 6. Perform sensory integrity tests and measures that characterize or quantify including*: A. Light touch B. Sharp/dull C. Temperature D. Deep pressure E. Localization F. Vibration G. Deep sensation H. Stereognosis I. Graphesthesia

Evaluation
 x Clinical reasoning
 x

Skill Category	Description of Minimum Skills
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Plan of care

Skill Category

Skill Category	Description of Minimum Skills
Interventions (cont.)	<ul style="list-style-type: none"> (2) Changes in body structure and function, activities and participation. (3) Changes in interventions (4) Outcomes of intervention I. Interdisciplinary teamwork: <ul style="list-style-type: none"> (1) Patient/client family meetings (2) Patient care rounds (3) Case conferences J. Referrals to other professionals or resources.* <p>2. Patient/client-related instruction may include:</p> <ul style="list-style-type: none"> A. Instruction, education, and training of patients/clients and caregivers regarding: <ul style="list-style-type: none"> (1) Current condition, health condition, impairments in body structure and function, and activity limitations, and participation restrictions)* (2) Enhancement of performance (3) Plan of care: <ul style="list-style-type: none"> a. Risk factors for health condition, impairments in body structure and function, and activity limitations, and participation restrictions. b. Preferred interventions, alternative interventions, and

Skill Category	Description of Minimum Skills
Interventions (continued)	<ul style="list-style-type: none"><li>D. Flexibility exercises:<ul style="list-style-type: none"><li>(1) Muscle lengthening*<li>(2) Range of motion*<li>(3) Stretching* <li>E. Gait and locomotion training*:<ul style="list-style-type: none"><li>(1) Developmental activities training*<li>(2) Gait training*<li>(3) Device training*<li>(4) Perceptual training*

Skill Category	Description of Minimum Skills
Interventions (cont.)	<ul style="list-style-type: none"> D. Functional training programs*: <ul style="list-style-type: none"> (1) Simulated environments and tasks* (2) Task adaptation E. Injury prevention or reduction: <ul style="list-style-type: none"> (1) Safety awareness training during self-care and home management* (2) Injury prevention education during self-care and home management (3) Injury prevention or reduction with use of devices and equipment <p>5. Functional training in work (job/school/play), community, and leisure integration or reintegration may include*:</p> <ul style="list-style-type: none"> A. Barrier accommodations or modifications* B. Device and equipment use and training*: <ul style="list-style-type: none"> (1) Assistive and adaptive device or equipment training during instrumental activities of daily living (IADL)* (2) Orthotic, protective, or supportive device or equipment training during IADL for work* (3) Prosthetic device or equipment training during IADL * C. Functional training programs: <ul style="list-style-type: none"> (1) Simulated environments and tasks (2) Task adaptation (3) Task training D. Injury prevention or reduction: <ul style="list-style-type: none"> (1) Injury prevention education during work (job/school/play), community, and leisure integration or reintegration (2) Injury prevention education with use of devices and equipment (3) Safety awareness training during work (job/school/play), community, and leisure integration or reintegration (4) Training for leisure and play activities <p>6. Manual therapy techniques may include:</p> <ul style="list-style-type: none"> A. Passive range of motion B. Massage: <ul style="list-style-type: none"> (1) Connective tissue massage (2) Therapeutic massage C. Manual traction* D. Mobilization/manipulation: <ul style="list-style-type: none"> (1) Soft tissue* (thrust and nonthrust*) (2) Spinal and peripheral joints* (thrust and nonthrust*) <p>7. Prescription, application, and, as appropriate, fabrication of devices and equipment may include*:</p> <ul style="list-style-type: none"> A. Adaptive devices*:

Skill Category	Description of Minimum Skills
Interventions (cont.)	<ul style="list-style-type: none"> (1) Hospital beds (2) Raised toilet seats (3) Seating systems – prefabricated B. Assistive devices*: <ul style="list-style-type: none"> (1) Canes (2) Crutches (3) Long-handled reachers (4) Static and dynamic splints – prefabricated (5) Walkers (6) Wheelchairs C. Orthotic devices*: <ul style="list-style-type: none"> (1) Prefabricated braces (2) Prefabricated shoe inserts (3) Prefabricated splints D. Prosthetic devices (lower-extremity)* E. Protective devices*: <ul style="list-style-type: none"> (1) Braces (2) Cushions (3) Helmets (4) Protective taping F. Supportive devices*: <ul style="list-style-type: none"> (1) Prefabricated compression garments (2) Corsets (3) Elastic wraps (4) Neck collars (5) Slings (6) Supplemental oxygen - apply and adjust (7) Supportive taping 8. Airway clearance techniques may include*: <ul style="list-style-type: none"> A. Breathing strategies*: <ul style="list-style-type: none"> (1) Active cycle of breathing or forced expiratory techniques* (2) Assisted cough/huff techniques* (3) Paced breathing* (4) Pursed lip breathing (5) Techniques to maximize ventilation (eg, maximum inspiratory hold, breath stacking, manual hyperinflation) B. Manual/mechanical techniques*: <ul style="list-style-type: none"> (1) Assistive devices C. Positioning*: <ul style="list-style-type: none"> (1) Positioning to alter work of breathing (2) Positioning to maximize ventilation and perfusion

Skill Category	Description of Minimum Skills
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Interventions (continued)

- (1) Enzymatic debridement
- (2) Wet dressings
- (3) Wet-to-dry dressings
- (4) Wet-to-moist dressings

B. Dressings*:

- (1) Hydrogels
- (2) Wound coverings

C. Topical agents*:

- (1) Cleansers
- (2) Creams
- (3) Moisturizers
- (4) Ointments
- (5) Sealants

10. Electrotherapeutic modalities may include:

A. Biofeedback*

Skill Category	Description of Minimum Skills
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of physical therapist practice.

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

Skill Category	Description of Minimum Skills
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