Appendices

There are nine Appendices included in this section as follows:

Appendix A

Professionalism in Physical Therapy: Core Values

Introduction

In 2000, the House of Delegates adopted Vision 2020 and the Strategic Plan for Transitioning to a Doctoring Profession (RC 37-01). The Plan includes six elements: Doctor of Physical Therapy, Evidenced-Based Practice, Autonomous Practice, Direct Access, Practitioner of Choice, and Professionalism, and describes how these elements relate to and interface with the vision of a doctoring profession. In assisting the profession in its transition to a doctoring profession, it seemed that one of the initiatives that would be beneficial was to define and describe the concept of professionalism by explicitly articulating what the graduate of a physical therapist program ought to demonstrate with respect to professionalism. In addition, as a byproduct of this work, it was believed that practitioner behaviors could be articulated that would describe what the individual practitioner would be doing in their daily practice that would reflect professionalism.

As a part of the preparation for this consensus conference, relevant literature was reviewed to facilitate the development of the conference structure and consensus decision-making process. Literature in medicine[3, 18, 19, 25, 27] reveals that this profession continues to be challenged to define professionalism, describe how it is taught, and determine how it can be measured in medical education. The groundwork and advances that medicine laid was most informative to the process and product from this conference. Physical therapy acknowledges and is thankful for medicine's research efforts in professionalism and for their work that guided this conference's structure and process.

Eighteen physical therapists, based on their expertise in physical therapist practice, education, and research, were invited to participate in a consensus-based conference convened by APTA's Education Division on July 19-21, 2002. The conference was convened for the purpose of:

1) Developing a comprehensive consensus-based document on Professionalism that would be integrated into *A Normative Model of Physical Therapist Professional Education: Version 2004* to include a) core values of the profession, b) indicators (judgments, decisions, attitudes, and behaviors) that are fully consistent with the core values, and c) a professional education matrix that includes educational outcomes, examples of Terminal Behavioral Objectives, and examples of Instructional Objectives for the classroom and for clinical practice.

2) Developing outcome strategies for the promotion and implementation of the supplement content in education and, where feasible, with practice in ways that are consistent with physical therapy as a doctoring profession.

The documentation developed as a result of this conference is currently being integrated into the next version of *A Normative Model of Physical Therapist Professional Education: Version 2004.* The table that follows is a synopsis of a portion of the conference documentation that describes what the physical therapist would be doing in his or her practice that would give evidence of professionalism.

In August 2003, *Professionalism in Physical Therapy: Core Values* was reviewed by the APTA Board of Directors and adopted as a core document on professionalism in physical therapy practice, education, and research. (V-10; 8/03.)

We wish to gratefully acknowledge the efforts of those participants who gave their time and energies to this challenging initiative; a first step in clearly articulating for the physical therapist what are the core values that define professionalism and how that concept would translate into professional education.

Professionalism in Physical Therapy: Core Values

Seven core values were identified during the consensus-based conference that furthered defined the critical elements that comprise professionalism. These core values are listed below in alphabetical order with no preference or ranking given to these values. During the conference many important values were identified as part of professionalism in physical therapy, however not all were determined to be *core* (at the very essence; essential) of professionalism and unique to physical therapy. The seven values identified were of sufficient breadth and depth to incorporate the many values and attributes that are part of physical therapist professionalism. The group made every effort to find the optimum nomenclature to capture these values such that physical therapists could resonate with each value and would clearly understand the value as provided by the accompanying definition and indicators.

For each core value listed, the Table that follows explicates these values by providing a core value definition and indicators that describe what the physical therapist would be doing in practice, education, and/or research if these core values were present.

1. **Accountability**
2. **Altruism**
3. **Compassion/Caring**
4. **Excellence**
5. **Integrity**
6. **Professional Duty**
7. **Social Responsibility**

Table. Professionalism in Physical Therapy: Core Values

For each core value listed, a definition is provided and a set of sample indicators (not an exhaustive list) that describe what one would see if the physical therapist were demonstrating that core value in their daily practice.

Core Values	Definition	Sample Indicators
Accountability	Accountability is active acceptance of the responsibility for the diverse roles, obligations, and actions of the physical therapist including self-regulation and other behaviors that positively influence patient/client outcomes, the profession and the health needs of society.	1. Responding to patient's/client's goals and needs. 2. Seeking and responding to feedback from multiple sources. 3. Acknowledging and accepting consequences of his/her actions. 4. Assuming responsibility for learning and change. 5. Adhering to code of ethics, standards of practice, and policies/procedures that govern the conduct of professional activities. 6. Communicating accurately to others (payers, patients/clients, other health care providers) about professional actions. 7. Participating in the achievement of health goals of patients/clients and society. 8. Seeking continuous improvement in quality of care. 9. Maintaining membership in APTA and other organizations. 10. Educating students in a manner that facilitates the pursuit of learning.
Altruism	Altruism is the primary regard for or devotion to the interest of patients/clients, thus assuming the fiduciary responsibility of placing the needs of the patient/client ahead of the physical therapist's self interest.	1. Placing patient's/client's needs above the physical therapists. 2. Providing pro-bono services. 3. Providing physical therapy services to underserved and underrepresented populations. 4. Providing patient/client services that go beyond expected standards of practice. 5. Completing patient/client care and professional responsibility prior to personal needs.

Core Values	Definition	Sample Indicators
Compassion/Caring	Compassion is the desire to identify with or sense something of another's experience; a precursor of caring. Caring is the concern, empathy, and consideration for the needs and values of others.	1. Understanding the socio-cultural, psychological and economic influences on the individual's life in their environment. 2. Understanding an individual's perspective. 3. Being an advocate for patient's/client's needs. 4. Communicating effectively, both verbally and non-verbally, with others taking into consideration individual differences in learning styles, language, and cognitive abilities, etc. 5. Designing patient/client programs/interventions that are congruent with patient/client needs. 6. Empowering patients/clients to achieve the highest level of function possible and to exercise self-determination in their care. 7. Focusing on achieving the greatest well being and the highest potential for a patient/client. 8. Recognizing and refraining from acting on one's social, cultural, gender, and sexual biases. 9. Embracing the patient's/client's emotional and psychological aspects of care. 10. Attending to the patient's/client's personal needs and comforts. 11. Demonstrating respect for others and considering others as unique and of value.
Excellence	Excellence is physical therapy practice that consistently uses current knowledge and theory while understanding personal limits, integrates judgment and the patient/client perspective, embraces advancement, challenges mediocrity, and works toward development of new knowledge.	1. Demonstrating investment in the profession of physical therapy. 2. Internalizing the importance of using multiple sources of evidence to support professional practice and decisions. 3. Participating in integrative and collaborative practice to promote high quality health and educational outcomes. 4. Conveying intellectual humility in professional and interpersonal situations. 5. Demonstrating high levels of knowledge and skill in all aspects of the profession. 6. Using evidence consistently to support professional decisions. 7. Demonstrating a tolerance for ambiguity. 8. Pursuing new evidence to expand knowledge. 9. Engaging in acquisition of new knowledge throughout one's professional career. 10. Sharing one's knowledge with others. 11. Contributing to the development and shaping of excellence in all professional roles.

Core Values	Definition	Sample Indicators
Integrity	Integrity is the possession of and steadfast adherence to high ethical principles or professional standards, truthfulness, fairness, doing what you say you will do, and "speaking forth" about why you do what you do.	1. Using power (including avoidance of use of unearned privilege) judiciously. 2. Resolving dilemmas with respect to a consistent set of core values. 3. Being trustworthy. 4. Taking responsibility to be an integral part in the continuing management of patients/clients. 5. Knowing one's limitations and acting accordingly. 6. Confronting harassment and bias among ourselves and others. 7. Recognizing the limits of one's expertise and making referrals appropriately. 8. Choosing employment situations that are congruent with practice values and professional ethical standards. 9. Acting on the basis of professional values even when the results of the behavior may place oneself at risk.
Professional Duty	Professional duty is the commitment to meeting one's obligations to provide effective physical therapy services to individual patients/clients, to serve the profession, and to positively influence the health of society.	1. Demonstrating beneficence by providing "optimal care." 2. Facilitating each individual's achievement of goals for function, health, and wellness. 3. Preserving the safety, security, and confidentiality of individuals in all professional contexts. 4. Involved in professional activities beyond the practice setting. 5. Promoting the profession of physical therapy. 6. Mentoring others to realize their potential. 7. Taking pride in one's profession.
Social Responsibility	Social responsibility is the promotion of a mutual trust between the profession and the larger public that necessitates responding to societal needs for health and wellness.	1. .Promoting social policy that effects function, health, and wellness needs of patients/clients. 2. Ensuring that existing social policy is in the best interest of the patient/client. 3. Advocating for changes in laws, regulations, standards, and guidelines that affect physical therapist service provision. 4. Participating in political activism. 5. Participating in achievement of societal health goals. 6. Understanding of current community-wide, nationwide, and worldwide issues and how they impact society's health and well being and the delivery of physical therapy.

Core Values	Definition	Sample Indicators
Social Responsibility (continued)		7. Promoting social policy that effects function, health, and wellness needs of patients/clients. 8. Ensuring that existing social policy is in the best interest of the patient/client. 9. Advocating for changes in laws, regulations, standards, and guidelines that affect physical therapist service provision. 10. Promoting community volunteerism. 11. Participating in political activism. 12. Participating in achievement of societal health goals. 13. Understanding of current community-wide, nationwide, and worldwide issues and how they impact society's health and well being and the delivery of physical therapy. 14. Providing leadership in the community. 15. Participating in collaborative relationships with other health practitioners and the public at large. 16. Ensuring the blending of social justice and economic efficiency of services.

Appendix B

Tests and Measures

Preface

Practice Expectation 12, Examination, indicates that the graduate examines patients/clients by selecting and administering age-related tests and measures that are reliable, valid, and based on research and professional literature. The Tests and Measures Appendix provides a list of the 24 categories of tests and measures that are used by physical therapists as they examine patients/clients, based on the *Guide to Physical Therapist Practice* (Rev 2nd ed. Alexandria, Va: American Physical Therapy Association; 2003). Within each category of test and measures are bulleted items that indicate patient/client functions that may be examined.

In this version of the *Normative Model*, review groups have identified those categories of examinations that are appropriate for entry-level graduates and those that are not.

Examples are given in the appendix of types of tests that may be taught for each type of examination. The reader is also referred to the *Interactive Guide to Physical Therapist Practice With Catalog of Tests and Measures* on CD-ROM (Version 1.1. Alexandria, Va: American Physical Therapy Association; 2003), which includes a more exhaustive list of specific tests and measures with relevant reliability and validity data.

***Please Note: Starred items in *italics* indicate that knowledge level is required for competence; skill is not necessary for entry-level practice.**

Aerobic Capacity/Endurance

Tests and measures may include those that characterize or quantify:

- Aerobic capacity during functional activities.
- Aerobic capacity during standardized exercise test protocols.
- Cardiovascular signs and symptoms in response to increased oxygen demand with exercise or activity, including pressures and flow; heart rate, rhythm, and sounds; and superficial vascular responses.
- Pulmonary signs and symptoms in response to increased oxygen demand with exercise or activity, including breath and voice sounds; cyanosis; gas exchange; respiratory pattern, rate, and rhythm; and ventilatory flow, force, and volume.

Anthropometric Characteristics

Tests and measures may include those that characterize or quantify:

- Body composition.
- Body dimensions.
- Edema.

Arousal, Attention, and Cognition

Tests and measures may include those that characterize or quantify:

- Arousal and attention.
- Cognition, including ability to process commands.
- Communication.
- Consciousness, including agitation and coma.
- Motivation.
- Orientation to time, person, place, and situation.
- Recall, including memory and retention.

Assistive and Adaptive Devices

Tests and measures may include those that characterize or quantify:

- Assistive or adaptive devices and equipment use during functional activities.
- Components, alignment, fit, and ability to care for the assistive or adaptive devices and equipment.
- Remediation of impairments, functional limitations, or disabilities with use of assistive or adaptive devices and equipment.
- Safety during use of assistive or adaptive devices and equipment.

Circulation (Arterial, Venous, Lymphatic)

Tests and measures may include those that characterize or quantify:

- Cardiovascular signs, including heart rate, rhythm, and sounds; pressures and flow; and superficial vascular responses.
- Cardiovascular symptoms.
- Physiological responses to position change, including autonomic responses, central and peripheral pressures, heart rate and rhythm, respiratory rate and rhythm, and ventilatory pattern.
- Cranial and peripheral nerve integrity.

Cranial and Peripheral Nerve Integrity

Tests and measures may include those that characterize or quantify:

- *Electrophysiological integrity*. **(*requires knowledge level but not skill)**
- Motor distribution of the cranial nerves (eg, dynamometry, muscle tests, observations).
- Motor distribution of the peripheral nerves (eg, dynamometry, muscle tests, observations, thoracic outlet tests).
- Response to neural provocation (eg, tension tests, vertebral artery compression tests).
- Response to stimuli, including auditory, gustatory, olfactory, pharyngeal, vestibular, and visual (eg, observations, provocation tests).
- Sensory distribution of the cranial nerves.
- Sensory distribution of the peripheral nerves.

Environmental, Home, and Work (Job/School/Play) Barriers

Tests and measures may include those that characterize or quantify:

- Current and potential barriers.
- Physical space and environment.

Ergonomics and Body Mechanics

Tests and measures may include those that characterize or quantify:

Ergonomics **(*requires knowledge level but not skill)**

- *Dexterity and coordination during work (job/school/play).*
- *Functional capacity and performance during work actions, tasks, or activities.*
- *Safety in work environments.*
- *Specific work conditions or activities.*
- *Tools, devices, equipment, and workstations related to work actions, tasks, or activities.*

Body Mechanics

- Body mechanics during self-care, home management, work, community, or leisure actions, tasks, or activities.

Gait, Locomotion, and Balance

Tests and measures may include those that characterize or quantify:

- Balance during functional activities with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment.
- Balance (dynamic and static) with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment.
- Gait and locomotion during functional activities with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment.
- Safety during gait, locomotion, and balance.
- Gait and locomotion with or without the use of assistive, adaptive, orthotic, protective, supportive, or prosthetic devices or equipment.

Integumentary Integrity

Tests and measures may include those that characterize or quantify:

Associated skin

- Activities, positioning, and postures that produce or relieve trauma to the skin.
- Assistive, adaptive, orthotic, protective, supportive, or prosthetic devices and equipment that may produce or relieve trauma to the skin.
- Skin characteristics, including blistering, continuity of skin color, dermatitis, hair growth, mobility, nail growth, sensation, temperature, texture, and turgor.
- Wound.
- Activities, positioning, and postures that aggravate the wound or scar or that produce or relieve trauma.
- Burn.
- Signs of infection.
- Wound characteristics, including bleeding, contraction, depth, drainage, exposed anatomical structures, location, odor, pigment, shape, size, staging and progression, tunneling, and undermining.
- Wound scar tissue characteristics, including banding, pliability, sensation, and texture.

Joint Integrity and Mobility

Tests and measures may include those that characterize or quantify:

- Joint integrity and mobility.
- Joint play movements, including end feel (all joints of the axial and appendicular skeletal system).

Motor Function (Motor Control and Motor Learning)

Tests and measures may include those that characterize or quantify:

- Dexterity, coordination, and agility.
- *Electrophysiological integrity.* **(*requires knowledge level but not skill)**
- Hand function.
- Initiation, modification, and control of movement patterns and voluntary postures.

Muscle Performance (Including Strength, Power, and Endurance)

Tests and measures may include those that characterize or quantify:

- *Electrophysiological integrity.* **(*requires knowledge level but not skill)**
- Muscle strength, power, and endurance.
- Muscle strength, power, and endurance during functional activities.
- Muscle tension.

Neuromotor Development and Sensory Integration

Tests and measures may include those that characterize or quantify:

- Acquisition and evolution of motor skills, including age-appropriate development.
- *Oral motor function, phonation, and speech production.* **(*requires knowledge level but not skill)**
- Sensorimotor integration, including postural, equilibrium, and righting reactions.

Orthotic, Protective, and Supportive Devices

Tests and measures may include those that characterize or quantify:

- Components, alignment, fit, and ability to care for the orthotic, protective, and supportive devices and equipment.
- Orthotic, protective, and supportive devices and equipment use during functional activities.
- Remediation of impairments, functional limitations, or disabilities with use of orthotic, protective, and supportive devices and equipment.
- Safety during use of orthotic, protective, and supportive devices and equipment.

Pain

Tests and measures may include those that characterize or quantify:

- Pain, soreness, and nociception.
- Pain in specific body parts.

Posture

Tests and measures may include those that characterize or quantify:

- Postural alignment and position (static and dynamic), including symmetry and deviation from midline.
- Specific body parts.

Prosthetic Requirements

Tests and measures may include those that characterize or quantify:

- Components, alignment, fit, and ability to care for the prosthetic device.
- Prosthetic device use during functional activities.
- Remediation of impairments, functional limitations, or disabilities with use of the prosthetic device.
- Residual limb or adjacent segment, including edema, range of motion, skin integrity, and strength.
- Safety during use of the prosthetic device.

Range of Motion (Including Muscle Length)

Tests and measures may include those that characterize or quantify:

- Functional ROM.
- Joint active and passive movement.
- Muscle length, soft tissue extensibility, and flexibility.

Reflex Integrity

Tests and measures may include those that characterize or quantify:

- Deep reflexes (eg, myotatic reflex scale, observations, reflex tests).
- *Electrophysiological integrity.* **(*requires knowledge level but not skill)**
- Postural reflexes and reactions, including righting, equilibrium, and protective reactions.
- Primitive reflexes and reactions, including developmental.
- Resistance to passive stretch.
- Superficial reflexes and reactions.

Self-Care and Home Management (Including ADL and IADL)

Tests and measures may include those that characterize or quantify:

- Ability to gain access to home environments.
- Ability to perform self-care and home management activities with or without assistive, adaptive, orthotic, protective, supportive, or prosthetic devices and equipment.
- Safety in self-care and home management activities and environments.

Sensory Integrity

Tests and measures may include those that characterize or quantify:

- Combined/cortical sensations.
- Deep sensations.
- *Electrophysiological integrity.* **(*requires knowledge level but not skill)**

Ventilation and Respiration/Gas Exchange

Tests and measures may include those that characterize or quantify:

- Pulmonary signs of respiration/gas exchange, including breath sounds.
- Pulmonary signs of ventilatory function, including airway protection, breath and voice sounds, respiratory rate, rhythm, and pattern, ventilatory flow, forces, and volumes.
- Pulmonary symptoms.

Work (Job/School/Play), Community, and Leisure Integration or Reintegration (Including IADL)

Tests and measures may include those that characterize or quantify:

- Ability to assume or resume work (job/school/play), community, and leisure activities with or without assistive, adaptive, orthotic, protective, supportive, or prosthetic devices and equipment.
- Ability to gain access to work (job/school/play), community, and leisure environments.
- Safety in work (job/school/play), community, and leisure activities and environments.

Appendix C

Interventions

Preface

Practice Expectation 17, Intervention, indicates that the physical therapist provides physical therapy interventions to achieve patient/client goals and outcomes. The Intervention Appendix provides a list of the 10 categories of interventions that are used by physical therapists as they manage patients/clients, based on the *Guide to Physical Therapist Practice* (Rev 2nd ed. Alexandria, Va: American Physical Therapy Association; 2003). Within each category of intervention are bulleted items that indicate patient/client interventions that may be provided.

In this version of the *Normative Model*, review groups have identified those interventions that are appropriate for entry-level graduates and those which are not.

Examples are given in the appendix of types of interventions that may be taught for each category of intervention. The reader is also referred to the *Interactive Guide to Physical Therapist Practice With Catalog of Tests and Measures* on CD-ROM (Version 1.1. Alexandria, Va: American Physical Therapy Association; 2003), which includes a more exhaustive list of specific interventions and their relevant reliability and validity data.

***Please Note: Starred items in *italics* indicate that knowledge level is required for competence; skill is not necessary for entry-level practice.**

Coordination, communication, and documentation may include:

- Addressing required functions:
  - Advance directives
  - *IFSPs or IEPs* **(*requires knowledge level but not skill)**
  - Within the patient/client management process, the physical therapist and the patient/client 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.
  - Mandatory communication and reporting (eg, patient advocacy and abuse reporting)
- Admission and discharge planning.
- Case management.
- Collaboration and coordination with agencies, including:
  - Equipment suppliers
  - Home care agencies
  - Payer groups
  - Schools
  - Transportation agencies
- Communication across settings, including:
  - Case conferences
  - Documentation
  - *Education plans* **(*requires knowledge level but not skill)**
- Cost-effective resource utilization.
- Data collection, analysis, and reporting:
  - Outcome data
  - Peer review findings
  - Record reviews
- Documentation across settings, following APTA's *Guidelines for Physical Therapy Documentation*, including:
  - Changes in impairments, functional limitations, and disabilities
  - Changes in interventions
  - Elements of patient/client management (examination, evaluation, diagnosis, prognosis, intervention)
  - Outcomes of intervention
- Interdisciplinary teamwork:
  - Case conferences
  - Patient care rounds
  - Patient/client family meetings
- Referrals to other professionals or resources.

Patient/client-related instruction may include:

- Instruction, education, and training of patients/clients and caregivers regarding:
  - Current condition (pathology/pathophysiology [disease, disorder, or condition], impairments, functional limitations, or disabilities)
  - Enhancement of performance
  - Health, wellness, and fitness programs
  - Plan of care:
    - Risk factors for pathology/pathophysiology (disease, disorder, or condition), impairments, functional limitations, or disabilities
  - Transitions across settings
  - Transitions to new roles

Therapeutic exercise may include:

- Aerobic capacity/endurance conditioning or reconditioning:
  - Aquatic programs
  - Gait and locomotor training
  - Increased workload over time
  - Movement efficiency and energy conservation training
  - Walking and wheelchair propulsion programs
- Balance, coordination, and agility training:
  - Developmental activities training
  - Motor function (motor control and motor learning) training or retraining
  - Neuromuscular education or reeducation
  - Perceptual training
  - Posture awareness training
  - Sensory training or retraining
  - Standardized, programmatic, complementary exercise approaches
  - Task-specific performance training
  - Vestibular training

- Body mechanics and postural stabilization:
  - Body mechanics training
  - Postural control training
  - Postural stabilization activities
  - Posture awareness training
- Flexibility exercises:
  - Muscle lengthening
  - Range of motion
  - Stretching
- Gait and locomotion training:
  - Developmental activities training
  - Gait training
  - Implement and device training
  - Perceptual training
  - Standardized, programmatic, complementary exercise approaches
  - Wheelchair training
- Neuromotor development training:
  - Developmental activities training
  - Motor training
  - Movement pattern training
  - Neuromuscular education or reeducation
- Relaxation:
  - Breathing strategies
  - Movement strategies
  - Relaxation techniques
  - Standardized, programmatic, complementary exercise approaches
- Strength, power, and endurance training for head, neck, limb, pelvic-floor, trunk, and ventilatory muscles:
  - Active assistive, active, and resistive exercises (including concentric, dynamic/isotonic, eccentric, isokinetic, isometric, and plyometric)
  - Aquatic programs
  - Standardized, programmatic, complementary exercise approaches
  - Task-specific performance training

Functional training in self-care and home management may include:

- ADL training:
  - Bathing
  - Bed mobility and transfer training
  - Developmental activities
  - Dressing
  - Eating
  - Grooming
  - Toileting
- Barrier accommodations or modifications.
- Device and equipment use and training:
  - Assistive and adaptive device or equipment training during ADL and IADL
  - Orthotic, protective, or supportive device or equipment training during self-care and home management
  - Prosthetic device or equipment training during ADL and IADL
- Functional training programs:
  - Back schools
  - Simulated environments and tasks
  - Task adaptation
  - Travel training
- IADL training:
  - Caring for dependents
  - Home maintenance
  - Household chores
  - Shopping
  - Structured play for infants and children
  - Yard work
- Injury prevention or reduction:
  - Injury prevention education during self-care and home management
  - Injury prevention or reduction with use of devices and equipment
  - Safety awareness training during self-care and home management

Functional training in work (job/school/play), community, and leisure integration or re-integration may include:

- Barrier accommodations or modifications
- Device and equipment use and training:
  - Assistive and adaptive device or equipment training during IADL
  - Orthotic, protective, or supportive device or equipment training during IADL
  - Prosthetic device or equipment training during IADL
- Functional training programs:
  - *Back schools* **(*requires knowledge level but not skill)**
  - *Job coaching* **(*requires knowledge level but not skill)**
  - *Simulated environments and tasks* **(*requires knowledge level but not skill)**
  - *Task adaptation* **(*requires knowledge level but not skill)**
  - *Task training* **(*requires knowledge level but not skill)**
  - Travel training
  - Work conditioning
  - *Work hardening* **(*requires knowledge level but not skill)**
- *IADL training:* **(*requires knowledge level but not skill)**
  - *Community service training involving instruments*
  - *School and play activities training including tools and instruments*
  - *Work training with tools*
- Injury prevention or reduction:
  - Injury prevention education during work (job/school/play), community, and leisure integration or reintegration
  - Injury prevention education with use of devices and equipment
  - Safety awareness training during work (job/school/play), community, and leisure integration or reintegration
- Leisure and play activities and training.

Manual therapy techniques may include:

- *Manual lymphatic drainage.* **(*requires knowledge level but not skill)**
- Manual traction.
- Massage:
  - Connective tissue massage
  - Therapeutic massage
- Mobilization/manipulation:
  - Soft tissue (thrust and nonthrust)
  - Spinal and peripheral joints (thrust and nonthrust)
- Passive range of motion.

Prescription, application, and, as appropriate, fabrication of devices and equipment may include:

- Adaptive devices:
  - Environmental controls
  - Hospital beds
  - Raised toilet seats
  - Seating systems
- Assistive devices:
  - Canes
  - Crutches
  - Long-handled reachers
  - Percussors and vibrators
  - Power devices
  - Static and dynamic splints
  - Walkers
  - Wheelchairs
- Orthotic devices:
  - Braces
  - Casts
  - Shoe inserts
  - Splints
- Prosthetic devices (lower-extremity and upper-extremity).

- Protective devices:
  - Braces
  - Cushions
  - Helmets
  - Protective taping
- Supportive devices:
  - Compression garments
  - Corsets
  - Elastic wraps
  - *Mechanical ventilators* **(*requires knowledge level but not skill)**
  - Neck collars
  - Serial casts
  - Slings
  - Supplemental oxygen
  - Supportive taping

Airway clearance techniques may include:

- Breathing strategies:
  - Active cycle of breathing or forced expiratory techniques
  - Assisted cough/huff techniques
  - Autogenic drainage
  - Paced breathing
  - Pursed lip breathing
  - Techniques to maximize ventilation (eg, maximum inspiratory hold, stair case breathing, manual hyperinflation)
- Manual/mechanical techniques:
  - Assistive devices
  - Chest percussion, vibration, and shaking
  - *Chest wall manipulation* **(*requires knowledge level but not skill)**
  - *Suctioning* **(*requires knowledge level but not skill)**
  - Ventilatory aids
- Positioning:
  - Positioning to alter work of breathing
  - Positioning to maximize ventilation and perfusion
  - Pulmonary postural drainage

Integumentary repair and protection techniques may include:

- Debridement—nonselective:
  - Enzymatic debridement
  - Wet dressings
  - Wet-to-dry dressings
  - Wet-to-moist dressings
- *Debridement—selective:* **(*requires knowledge level but not skill)**
  - *Debridement with other agents (eg, autolysis)*
  - *Enzymatic debridement*
  - *Sharp debridement*
- Dressings:
  - Hydrogels
  - *Vacuum-assisted closure* **(*requires knowledge level but not skill)**
  - Wound coverings
- *Oxygen therapy:* **(*requires knowledge level but not skill)**
  - *Supplemental*
  - *Topical*
- Topical agents:
  - Cleansers
  - Creams
  - Moisturizers
  - Ointments
  - Sealants

Electrotherapeutic modalities may include:

- Biofeedback.
- Electrotherapeutic delivery of medications (eg, iontophoresis)
- Electrical stimulation:
  - Electrical muscle stimulation (EMS)
  - Electrical stimulation for tissue repair (ESTR)
  - Functional electrical stimulation (FES)
  - High voltage pulsed current (HVPC)
  - Neuromuscular electrical stimulation (NMES)
  - Transcutaneous electrical nerve stimulation (TENS)

Physical agents and mechanical modalities may include:

Physical agents:

- Athermal agents.
  - *Pulsed electromagnetic fields* **(*requires knowledge level but not skill)**
- Cryotherapy:
  - Cold packs
  - Ice massage
  - Vapocoolant spray
- Hydrotherapy:
  - Contrast bath
  - Pools
  - *Pulsatile lavage* **(*requires knowledge level but not skill)**
  - Whirlpool tanks
- Light agents:
  - Infrared
  - *Laser* **(*requires knowledge level but not skill)**
  - Ultraviolet
- Sound agents:
  - Phonophoresis
  - Ultrasound
- Thermotherapy:
  - Dry heat
  - Hot packs
  - Paraffin baths

Mechanical modalities:

- Compression therapies.
  - Compression bandaging
  - Compression garments
  - Taping
  - Total contact casting
  - Vasopneumatic compression devices
- Gravity-assisted compression devices:
  - Standing frame
  - Tilt table
- Mechanical motion devices:
  - Continuous passive motion (CPM)
- Traction devices:
  - Intermittent
  - Positional
  - Sustained

Appendix D

Prevention, Health Promotion, Fitness, and Wellness Supplement

This supplement is intended to augment information contained within *A Normative Model of Physical Therapist Professional Education: Version 2004* related to Prevention, Health Promotion, Fitness, and Wellness (Practice Management Expectation 19). Information provided in this document is based upon the work of the APTA Task Force on Prevention, Health Promotion, Fitness and Wellness (2000). This supplement provides more detailed information related to exercise in the column identified as Examples of Instructional Objectives. Primary content categories have been cross-referenced with corresponding pages found in Chapters 2, 3, and 4 or the *Normative Model*. Development of this supplement was predicated on the following educational outcomes that the graduate is able to achieve by completion of the professional programs that are associated with prevention, health promotion, fitness, and wellness.

Practice Management Expectation 19: Prevention, Health Promotion, Fitness, and Wellness

Educational Outcomes:

The graduate:

- Possesses expert knowledge, skills, and behaviors in exercise, health promotion, fitness, and wellness.
- Is an expert in exercise (prescription and implementation) across a variety of settings (eg, businesses, schools, government agencies, fitness/wellness centers, corporations, health spas, health care facilities, and other organizations).
- Models health promotion, fitness, and wellness, where feasible.
- Advocates (in the public arena, in legislative bodies, reimbursement agencies) for health promotion, fitness, and wellness for the public.
- Critically evaluates published studies related to exercise, health promotion, fitness, and wellness and demonstrates the ability to apply the knowledge from the studies in a scientific manner.
- Recognizes liability and limitations relative to providing exercise, health promotion, fitness, and wellness according to state and federal rules and regulations.
- Effectively collaborates with other exercise specialists.
- Possesses business and marketing skills sufficient to be able to develop a practice for health promotion, fitness, and wellness.

Foundational Sciences Matrix

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Exercise **(refer to pages 88-89)**		
Prescription, implementation, and modeling Strength training	• Analyze and implement an exercise program to build strength.	• Differentiate the use of exercise forms over the life span for building strength using: – Isometric exercise. – Isotonic (concentric, eccentric) exercise—classical DeLorme, Oxford, 1 Repetition RM, daily adjustable progressive resistive exercise (DAPRE). – Isokinetic exercise (velocity spectrum training, modified range training, incremental velocity spectrum, etc). • Analyze and select equipment/means to build strength using: – Body weight exercises (pull ups, push ups, bar dips). – Free weights (barbells, dumbbells, aquabells, cuff weights, vest weights). – Machines: multistation, cable, complementary and alternative medicine (CAM), plate loaded, Ground Base (Hammer Strength), hydraulics (Keiser), friction, air, isokinetic (eg, Biodex, etc), and Smith racks. – Plyometric techniques. – Exercise balls. – Elastic bands, tubing. – Body blade. – Pulley training. – Proprioceptive neuromuscular facilitation techniques. – Water, including water dumbbells and boots. – CAM (eg, Pilates, yoga, Feldenkrais, Tai Chi, Qigong). • Analyze and prescribe exercise parameters/principles to build strength using: – Frequency, intensity, and duration concepts by: - Increasing intensity - Increasing weight - Increasing sets and repetitions - Rest interval modification - Increasing frequency - Training versus no training – Relationship to gravity lever arm.

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Prescription, implementation, and modeling (continued) Strength training (continued)		– Exercise order/methods: - Super setting - Antagonist/agonist - Push/pull - Trisets - Pyramid - Split routine – Specificity and efficiency of training. – Periodization concepts: - Closed kinetic chain versus open kinetic chain - Sport/activity specific - Overload principle - Functional activities • Demonstrate and instruct the individual in exercise techniques to build strength using: – Single joint lifts/assistance exercises. – Multijoint lifts/core exercises. – Olympic lifts. – Machines. – Plyometric techniques. – Exercise balls. – Exercise bands. – Circuit training – Cross training. • Differentiate the use of exercise forms over the life span for developing power including: – Isotonic (concentric, eccentric) exercise. – Isokinetic exercise (velocity spectrum training, incremental velocity spectrum, etc). – Plyometric techniques (depth jumps, medicine ball exercises, bounding/leaping, etc). – Multijoint Olympic lifts.

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Power training	• Analyze and implement an exercise program to develop power.	• Analyze and select equipment/means to develop power using: – Body-weight exercises. – Ground base (Hammer strength). – Isokinetic exercises (eg, Biodex, etc). – Olympic lifts. – Plyometric techniques. – Aquatic exercises – Parachute or sled running/training (or similar principle). • Demonstrate and instruct the individual in exercise techniques to develop power through: – Multijoint lifts. – Olympic lifts. – Ground base. – Plyometric techniques. – Parachute or similar methods.
Aerobic/anaerobic/endurance conditioning or reconditioning	• Analyze and implement an aerobic/anaerobic/endurance conditioning or reconditioning program.	• Analyze and select methods of training over the life span for aerobic/anaerobic/endurance conditioning or reconditioning to include: – Outdoor: - Walking and wheelchair propulsion - Running - Bicycling - Cross-country skiing – Indoor: - Stair climbing - Steps - Bicycles – upright and recumbent - Cross country ski equipment - Treadmills - Cross trainers/ellipticals - Arm cranks - Rowing machines. - Swimming/water aerobics - Jumping rope

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Aerobic/anaerobic/endurance conditioning or reconditioning (continued)		– Class type activities (ie, low impact, high impact, step, hip-hop, funk, spin, dance, rowing). – Circuit training. – Cross training. – Interval training. – Detraining and tapering. – Threshold runs. – Peaking threshold runs. – Functional activities. • Analyze and prescribe exercise parameters/principles for aerobic/anaerobic/endurance conditioning or reconditioning through: – Frequency, intensity, and duration concepts.
Flexibility	• Analyze and implement a flexibility program.	• Differentiate the use of types of flexibility principles over the life span including: – Ballistic. – Passive. – Static. – Dynamic. – Proprioceptive neuromuscular facilitation (PNF). – Cybernetic stretch. • Analyze and select flexibility methods and techniques including: – Passive exercises. – Combination of passive and active exercises. – Active-assisted exercises. – Muscle energy techniques. – Strain/counterstrain. – CAM - (ie, Pilates, yoga, Alexander techniques, Feldenkrais). – Straps, bands, etc. – Functional activities. • Analyze and prescribe flexibility parameters through: – Duration, frequency, and intensity concepts.

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Balance, coordination, and agility	• Analyze and implement an agility, coordination, and balance program.	• Demonstrate knowledge, understanding, and application of principles for agility, coordination, and balance requiring proximal stability/distal mobility over the life span through: – Maintaining the center of gravity over the base of support. – Closed kinetic chain concepts. – Sport/activity specific movements. • Analyze and prescribe methods for developing agility, coordination, and balance over the life span through: – Varying the surface. – Varying the base of support. – Use of single/double extremity with the base of support. – Exercise balls. – Stability mats, discs, pads, boards, beams, balls, rollers. – Slide boards. – Ladders. – Eyes closed versus eyes open. – Exercise bands/cables. – Functional activities. – CAM (ie, yoga, Tai Chi/Qigong, Pilates).
Neuromotor development training	• Analyze and implement a neuromotor development training program. • Analyze and implement a neuromotor development training program.	• Demonstrate knowledge, understanding, and application of principles for neuromotor development over the life span by: – Achieving motor skills, including age-appropriate development. – Achieving oral motor function, phonation, and speech production. – Achieving sensorimotor integration, including postural, equilibrium, and righting reactions. • Analyze and prescribe methods used for neuromotor development over the life span, such as: – Dexterity, coordination, and agility training. – Head, trunk, limb, and hand movements: - Rolling - Quadruped - Creeping - Crawling - Coming to sit

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Neuromotor development training (continued)		- Sitting - Kneeling - Standing - Walking - Running, jumping, hopping, skipping, galloping – Strength, power, aerobic/anaerobic/endurance activities. – Behavioral modification. – Neurophysiological theories for therapeutic exercise (eg, Sherrington, Bobath, Brunnstrom, neurodevelopmental techniques [NDT], conductive education, patterning, and proprioceptive neuromuscular facilitation [PNF]). – Sensorimotor integration. – Voluntary, age-appropriate postures, and movement patterns.
Relaxation/stress management	• Analyze and implement a program of relaxation and stress management.	• Demonstrate, analyze, and prescribe forms of relaxation training over the life span, such as: – Meditation. – Breathing techniques. – Yoga. – Tai Chi/Qigong. – Guided imagery. – Stretching— reciprocal inhibition. – Exercise—all forms. – Jacobson (Edmond) relaxation exercises (maximum contraction/maximum relaxation). – Functional activities.
Body mechanics and postural stabilization	• Analyze and implement a program of body mechanics and postural stabilization.	• Demonstrate knowledge, understanding, and application of principles for body mechanics and postural stabilization over the life span by: – Maintaining correct dynamic postural alignment and position during all self-care, home management, work, community, or leisure actions, tasks, or activities. – Maintaining correct static postural alignment and position during all self-care, home management, work, community, or leisure actions, tasks, or activities.

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Body mechanics and postural stabilization (continued)		• Analyze and prescribe methods for developing body mechanics and postural stabilization over the life span by: – Appropriately utilizing all previous information for strength, power, aerobic/anaerobic/endurance, flexibility, balance, coordination, and agility training in order to achieve correct body mechanics and postural stabilization. – Body mechanics training. – Postural control training. – Postural stabilization activities. – Posture awareness training. – Dexterity and coordination training during work. – Functional performance during work actions, tasks, or activities.
Gait and locomotion training	• Analyze and implement a program of gait and locomotion training.	• Demonstrate knowledge, understanding, and application of principles for gait and locomotion training over the life span by: – Achieving static balance during functional activities. – Achieving dynamic balance during functional activities. – Achieving gait and locomotion on and in different physical environments. • Analyze and prescribe methods for developing gait and locomotion over the life span such as: – Appropriate utilization of all previous information for strength, power, aerobic/anaerobic/endurance, balance, coordination, agility, neuromotor training, and postural stabilization in order to achieve gait and locomotion. – Developmental activities training. – Gait training. – Perceptual training. – Wheelchair maneuverability and mobility.
Exercise Physiology **(refer to pages 86-88)**		
Thermoregulatory system and the effects on the environment	• Discuss mechanisms to exercise an individual to their maximum capacity.	• Describe the role of insulin and glucagons in relation to blood sugar. • Describe changes in electrolytes and water with an exercise program in the heat.

Primary Content	Examples of Terminal Behavioral Objectives *After the completion of the content, the student will be able to…*	Examples of Instructional Objectives
Muscle cell anatomy and physiology Fiber types: I, IIa, IIb, IIc Fat cells (adipocytes) Fat cell changes with: weight gain, weight loss Cellular adaptations to exercise Fat cell changes with diet and with exercise Muscle cell changes with exercise (eg, atrophy, hypertrophy) Fiber type changes Cardiac muscle adaptations		• Discuss the need for electrolyte replacement with endurance activity or heat. • Develop an exercise program for an individual exercising in a hot and/or cold environment. • Analyze the energy systems used in different weight-lifting regimens. • Describe clinical symptoms when exercising below or above anaerobic threshold. • Identify mechanisms to determine lactate threshold (anaerobic threshold) and calculate lactate thresholds during progressive exercises. • Describe the cellular changes that occur in overuse injuries. • Prescribe a muscle-training program for muscles that have atrophied from disuse. • Prescribe a muscle-training program to develop hypertrophy.
Hormonal changes with exercise and aging Cortisol Testosterone Estrogen Insulin Glucagons	• Discuss the role of and changes in calcium for bone strength and bone density. • Describe the affects of aging, gender, and exercise on hormones, including cortisol, testosterone, estrogen, insulin, and glucagons.	• Describe the affect of exercise on the hormonal system. • Discuss the affect of excessive exercise on the female hormonal system.
Nutrition Normal dietary intake: Carbohydrates Proteins Fats Vitamins and Minerals Electrolytes Water Performance-enhancing supplements and side effects	• Describe differences in diet depending upon an exercise regimen. • Describe the different diets used with exercise. • Discuss normal dietary intake of water and electrolytes. • Discuss performance-enhancing supplements commonly used in sports. • Understand the caloric intake and expen-diture balance as it relates to weight. • Describe the affects of various factors such as environment and culture on nutritional habits. • Discuss nutritional myths and fads in relation to health and weight. • Describe fluid replacement in relation to activity and exercise.	• Identify changes that occur in the use of carbohydrates, fats, and proteins depending upon intensity of exercise. • Discuss the optimal diet for an endurance athlete. • Discuss the affect of a high-protein or low-carbohydrate diet. • Discuss the affect of appetite suppressants. • Discuss water loss and water replacement with endurance activities.

Appendix E

Glossary of Terms

Academic coordinator/Director of clinical education (ACCE or DCE): Individual who is responsible for managing and coordinating the clinical education program at the academic institution, including facilitating clinical site and clinical faculty development. This person also is responsible for coordinating student placements, communicating with clinical educators about the academic program and student performance, and maintaining current information on clinical sites.

Accountability: Active acceptance of responsibility for the diverse roles, obligations, and actions of the physical therapist including self-regulation and other behaviors that positively influence patient/client outcomes, the profession and the health needs of society. (*Professionalism in Physical Therapy: Core Values,* August 2003.)

Activities of daily living (ADL): The self-care communication and mobility skills (eg, bed mobility, transfers, ambulation, dressing, grooming, bathing, eating, and toileting) required for independence in everyday living.

Americans With Disabilities Act (ADA): The 1990 federal statute that prohibits discrimination against disabled individuals in employment, public accommodations, etc. (Available at www.usdoj.gov/crt/ada/adahom1.htm.)

Adaptive devices: A variety of implements or equipment used to aid patients/clients in performing movements, tasks, or activities. Adaptive devices include raised toilet seats, seating systems, environmental controls, and other devices.

Advocacy: Defending or maintaining a cause or proposal.

Affective: Relating to the expression of emotion (eg, affective behavior).

Altruism: The primary regard for or devotion to the interest of patients/clients, thus assuming the fiduciary responsibility of placing the needs of the patient/client ahead of the physical therapist's self interest. (*Professionalism in Physical Therapy: Core Values,* August 2003.)

Assessment: The measurement or quantification of a variable or the placement of a value on something. Assessment should not be confused with *examination* or *evaluation*.

Assistive devices: A variety of implements or equipment used to aid patients/clients in performing movements, tasks, or activities. Assistive devices include crutches, canes, walkers, wheelchairs, power devices, long-handled reachers, and static and dynamic splints.

Assumptions: Statements accepted or supposed to be true without proof or demonstration; these statements formed the "boundaries" for discussion and decision making at the consensus conferences for *A Normative Model of Physical Therapist Professional Education*.

Attribute: A quality or characteristic belonging to a physical therapist.

Autonomy: The ability of a reflective practitioner to make independent judgments; open to initiate, terminate, or alter physical therapy treatment.

Beneficence: Doing or producing good; acts of kindness and charity.

"Better with less": A common retrenchment strategy for ensuring educational quality using fewer resources; generally achieved through cost-benefit analysis and/or increased efficiency/productivity.

Biopsychosocial: Concerned with or related to the interaction of the biological aspects, psychological well-being, and social relationships of humans.

Caring: The concern, empathy, and consideration for the needs and values of others. (*Professionalism in Physical Therapy: Core Values*, August 2003.)

Center coordinator of clinical education (CCCE): Individual who administers, manages, and coordinates CI assignments and learning activities for students during their clinical education experiences. In addition, this person determines the readiness of persons to serve as clinical instructors for students, supervises clinical instructors in the delivery of clinical education experiences, communicates with the academic program regarding student performance, and provides essential information about the clinical education program to physical therapy programs.

Clients: Individuals who are not necessarily sick or injured but who can benefit from a physical therapist's consultation, professional advice, or services. Clients are also businesses, schools systems, and others to whom physical therapists offer services.

Clinical decision making (CDM): Interactive model in which hypotheses are generated early in an encounter based on initial cues drawn from observation of the patient or client, a letter of referral, the medical record, or other sources.

Clinical education: That portion of a physical therapy program that is conducted in the health care environment rather than in the academic environment.

Clinical education agreement: A legal contract that is negotiated between academic institutions and clinical sites that specifies each party's roles, responsibilities, and liabilities relative to student clinical education. (Syn*: letter of agreement, affiliation contract*)

Clinical education experiences: That aspect of the curriculum in which students' learning occurs directly as a function of being immersed within physical therapy practice. These experiences comprise all of the formal and practical "real-life" learning experiences provided for students to apply classroom knowledge, skills, and professional behaviors in the clinical environment. These experiences would be further described by those of short and long duration (eg, part-time and full-time experiences, internships that are most often a full-time, postgraduation experience for a period of 1 year), and those that vary how learning experiences are provided (eg, rotations on different units within the same practice setting, rotations between different practice settings within the same health care system) to include comprehensive care of patients/clients across the lifespan and related activities. (Syn: *clinical learning experiences.*)

Clinical education site: The physical therapy practice environment in which clinical education occurs; that aspect of the clinical education experience that is managed and delivered exclusively within the physical therapy practice environment. (Syn: *clinical facility, clinical site, and clinical center.*)

Clinical educator: Includes all individuals who participate in providing student clinical education experiences in the practice environment, including CIs and CCCEs. (Syn: *clinical faculty.*)

Clinical instructor (CI): Individual(s) at the clinical site who directly instructs and supervises students during their clinical learning experiences. These individuals are responsible for facilitating clinical learning experiences and assessing students' performance in cognitive, psychomotor, and affective domains as related to entry-level clinical practice and academic and clinical performance expectations. (Syn: *clinical teacher, clinical tutor, and clinical supervisor.*)

Clinical reasoning: A systematic process used to assist practitioners in inferring or drawing conclusions about patients/client care under various situations and conditions.

Clinical sciences: Content includes both diseases that require direct intervention of a physical therapist for management and diseases that affect conditions being managed by physical therapists across systems.

Cognitive: Characterized by awareness, reasoning, and judgment.

Cognitive screening: Brief assessment of the patient's/client's thinking process (eg, ability to process commands).

Collaboration: Working together cooperatively, especially in the management of patient care.

Communication: A process by which information is exchanged between individuals through a common system of symbols, signs, or behavior.

Compassion: The desire to identify with or sense something of another's experience; a precursor of caring. (*Professionalism in Physical Therapy: Core Values*, August 2003.)

Competence: Possessing the requisite knowledge, abilities, and qualities to be a physical therapist.

Competency: A significant, skillfully performed, work-related activity.

Complementary and alternative medicine (CAM): A group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine. While some scientific evidence exists regarding some CAM therapies, for most there are key questions that are yet to be answered through well-designed scientific studies—questions such as whether they are safe and whether they work for the diseases or medical conditions for which they are used. Complementary medicine is used together with conventional medicine**.** Alternative medicine is

used in place of conventional medicine. (National Center for Complementary and Alternative Medicine. Publication No D156, May 2002. Available at: http://nccam.nih.gov/health/whatiscam/)

Computer literacy: A basic level of computer knowledge and competence, including the ability to use word processing, databases, spreadsheets, and graphics.

Conflict management: The act, manner, or practice of handling or controlling the impact of disagreement, controversy, or opposition; may or may not involve resolution of the conflict.

Consensus model: See: *Normative Model*.

Consultation: The rendering of professional or expert opinion or advice by a physical therapist. The consulting physical therapist applies highly specialized knowledge and skills to identify problems, recommend solutions, or produce a specified outcome or product in a given amount of time. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Consumers: Potential and enrolled students in higher education institutions.

Cost-effectiveness: Economical in terms of tangible benefits in relation to expenditures.

CPR: Cardiopulmonary resuscitation.

Creative utilization: Using alternative and/or innovative approaches to the assignment of roles and responsibilities, including the use of technology.

CSM (Combined Sections Meeting): Meeting held annually that is managed by APTA's special-interest sections for the purpose of addressing topics or issues relevant to the interests of the sections.

Cultural awareness: Refers to the basic idea that behavior and ways of thinking and perceiving are culturally conditioned rather than universal aspects of human nature. (Pusch MD, ed. *Multicultural Education.* Yarmouth, Maine: Intercultural Press Inc; 1999.)

Cultural competence: Cultural and linguistic competence is a set of congruent behaviors, attitudes and policies that come together in a system, agency or among professionals that enables effective work in cross-cultural situations. "Culture" refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious or social groups. "Competence" implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors and needs presented by consumers and their communities. (Working definition adapted from *Assuring Cultural Competence in Health Care: Recommendations for National Standards and an Outcomes-Focused Research Agenda*, Office of Minority Health, Public Health Service, U S Department of Health and Human Services; 1999.

Cultural sensitivity: Awareness of cultural variables that may affect assessment and treatment. (Paniagua FA. *Assessing and Treating Culturally Diverse Clients.* Thousand Oaks, Calif: Sage Publications; 1994.)

Diagnosis: Diagnosis is both a process and a label. The diagnostic process performed by the physical therapist includes integrating and evaluating data that are obtained during the examination to describe the patient/client condition in terms that will guide the prognosis, the plan of care, and intervention strategies. Physical therapists use diagnostic labels that identify the impact of a condition on function at the level of the system (especially the movement system) and at the level of the whole person. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Diagnostic process: The evaluation of information obtained from the patient examination organized into clusters, syndromes, or categories.

Differential diagnosis: The determination of which one of two or more different disorders or conditions is applicable to a patient or client.

Direct access: Practice mode in which physical therapists examine, evaluate, diagnose, and provide interventions to patients/clients without a referral from a gatekeeper, usually the physician.

Disability: The inability to perform or a limitation in the performance of actions, tasks, and activities usually expected in specific social roles that are customary for the individual or expected for the person's status or role in a specific sociocultural context and physical environment. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Disease: A pathological condition or abnormal entity with a characteristic group of signs and symptoms affecting the body and with known or unknown etiology. (*Guide to Physical Therapist Practice.* Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Discharge: The process of ending physical therapy services that have been provided during a single episode of care, when the anticipated goals and expected outcomes have been achieved. Discharge does not occur with a transfer (that is, when the patient is moved from one site to another site within the same setting or across setting during a single episode of care). (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Diversity: Refers to individual and/or group differences based on racial, ethnic, or cultural distinctives.

Dysfunction: Disturbance, impairment, or abnormality of function of an organ. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Education: Knowledge and development resulting from a process of learning and change.

Efficacy: The capacity or ability to achieve the desired effect or results (eg, in physical therapy treatment).

Empathy: The action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner.

Entry-level: The initial point of entry into the practice of physical therapy, characterized by successful completion of an accredited professional education program and the acquisition of a license to practice physical therapy. Also, a level of practice characterized by little or no experience as a licensed, practicing physical therapist.

Episode of physical therapy care: All physical therapy services that are 1) provided by a physical therapist, 2) provided in an unbroken sequence, and 3) related to the physical therapy interventions for a given condition or problem or related to a request from the patient/client, family, or other health care provider. A defined number of identified range of number of visits will be established for an episode of care. The episode of care may include transfers between sites within or across settings or reclassification of the patient/client from one preferred practice pattern to another. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Episode of physical therapy maintenance: A series of occasional clinical, educational, and administrative services related to maintenance of current function. Programs for maintenance of function are a vital part of the practice of physical therapy. No defined number or range of number of visits is established for this type of episode. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Episode of physical therapy prevention: A series of occasional, clinical, educational, and administrative services related to primary prevention, wellness, health promotion, and to the preservation of optimal function. Prevention services and programs that promote health, wellness, and fitness are a vital part of the practice of physical therapy. No defined number or range of number of visits is established for this type of episode. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Evaluation: A dynamic process in which the physical therapist makes clinical judgments based on data gathered during the examination. No defined number or range of number of visits is established for this type of episode. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Evidenced-based practice: Integration of the best possible research evidence with clinical expertise and patient values, to optimize patient/client outcomes and quality of life to achieve the highest level of excellence in clinical practice. (Sackett DL, Haynes RB, Guyatt GH, Tugwell P. *Clinical Epidemiology: A Basic Science for Clinical Medicine*. 2nd ed. Boston: Little, Brown and Company; 1991:1.) Evidence includes randomized or nonrandomized controlled trials, testimony or theory, meta-analysis, case reports and anecdotes, observational studies, narrative review articles, case series in decision making for clinical practice and policy, effectiveness research for guidelines development, patient outcomes research, and coverage decisions by health care plans.

Examination: A comprehensive and specific testing process performed by a physical therapist that leads to diagnostic classification or, as appropriate, to a referral to another practitioner. The examination has three components: the patient/client history, the systems reviews, and tests and measures. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Excellence: Excellence is physical therapy practice that consistently uses current knowledge and theory while understanding personal limits, integrates judgment and the patient/client perspective, embraces advancement, challenges mediocrity, and works toward development of new knowledge. (*Professionalism in Physical Therapy: Core Values,* August 2003.)

Expressive: Pertaining to or related to the act of conveying or representing in words, art, music, or movement.

Fiduciary responsibility: The responsibility owed to the patient/client by the therapist to exercise the highest standards of care possible. A fiduciary relationship exists between the therapist and the patient/client by virtue of the trust placed in the therapist by the patient/client and society to act solely in the best interest of the patient/client.

First-contact care: Care provided by a physical therapist through direct access to patients/clients who have been determined through the physical therapy screening and examination process to need physical therapy care.

Fiscal management: Ability to identify the fiscal needs of a unit and to manage available fiscal resources to maximize the benefits and minimize constraints.

Fitness: A dynamic physical state—comprising cardiovascular/pulmonary endurance; muscle strength, power, endurance, and flexibility; relaxation; and body composition—that allows optimal and efficient performance of daily and leisure activities. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Foundational sciences: Essential content that contributes to the development and understanding of physical therapy to include sciences that can be described as *basic* and *applied* and as *biological*, *physical*, and *behavioral*.

Functional limitation: A restriction of the ability to perform a physical action, activity, or task in a typically expected, efficient, or competent manner. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Functional outcomes: The desired result of an act, process, or intervention that serves a purpose (eg, improvement in a patient's ability to engage in activities identified by the individual as essential to support physical or psychological well-being). (See also: O*utcomes*.)

FWCT: Functional work-capacity testing.

Goals: The intended results of patient/client management. Goals indicate changes in impairment, functional limitations, and disabilities and changes in health, wellness, and fitness needs that are expected as a result of implementing the plan of care. Goals should be measurable and time limited (if required, goals may be expressed as short-term an d long-term goals.) (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Guide to Physical Therapist Practice: Document that describes the scope of practice of physical therapy and assists physical therapists in patient/client management. Specifically, the *Guide* is designed to help physical therapists: 1) enhance quality of care, 2) improve patient/client satisfaction, 3) promote appropriate utilization of health care services, 4) increase efficiency and reduce unwarranted variation in the provision of services, and 5) promote cost reduction through prevention and wellness initiatives. The *Guide* also provides a framework for physical therapist clinicians and researchers as they refine outcomes data collection and analysis and develop questions for clinical research. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Harassment: To annoy persistently; exhaust; fatigue.

Health promotion: The combination of educational and environmental supports for actions and conditions of living conducive to health. The purpose of health promotion is to enable people to gain greater control over the determinants of their own health. (Green LW, Kreuter MW. *Health Promotion Planning*. 2nd ed. Mountain View, Calif: Mayfield Publishers; 1991:4.)

Human resource management: Selection, training, and deployment of appropriately qualified persons for specific tasks/functions.

Individualized education plan (IEP): A specially designed program of instruction developed to meet the unique needs of a child, including instructional objectives, evaluation criteria, and the names of individuals who will implement the program. An IEP is required as part of PL 94-142, Individuals with Disabilities Education Act (IDEA).

Individualized family service plan (IFSP): A specially designed plan required under PL 99-457 for infants and toddlers with special needs. The IFSP requires that the infant or toddler and family receive multidisciplinary assessments and a written plan of intervention.

IMPACT document: The final report of the task force/conferences on curricular content for postbaccalaureate professional education programs (*APTA Curriculum Content in Physical Therapist Professional Education: Postbaccalaureate Level.* Alexandria, VA: American Physical Therapy Association; 1993.)

Impairment: A loss or abnormality of physiological, psychological, or anatomical structure or function. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Indicators: Knowledge, action, behaviors, attitudes that demonstrate the presence or absence of a particular concept, attribute, or variable.

Integrity: *S*teadfast adherence to high ethical principles or professional standards; truthfulness, fairness, doing what you say you will do, and "speaking forth" about why you do what you do. (*Professionalism in Physical Therapy: Core Values,* August 2003.)

Intervention: The purposeful interaction of the physical therapist with the patient/client, and, when appropriate, with other individuals involved in patient/client care, using various physical therapy procedures and techniques to produce changes in the condition. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Liberal arts: The general education component of the curriculum that is usually a prerequisite to any physical therapy professional program.

Management of care delivery: Planning, organizing, and implementing a plan of care for a patient/client that includes first-contact care, care in other settings, care provided in tertiary settings by the physical therapist, and care that involves other practitioners.

Manual therapy techniques: Skilled hand movements intended to improve tissue extensibility; increase range of motion; induce relaxation; mobilize or manipulate soft tissue and joints; modulate pain; and reduce soft tissue swelling, inflammation, or restriction. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Mastery: Consummate knowledge or skill and comprehensive command of the subject.

Mobilization/manipulation: A manual therapy technique comprising a continuum of skilled passive movements to the joints and/or related soft tissues that are applied at varying speeds and amplitudes, including a small amplitude/high velocity therapeutic movement. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Multicultural/multilingual: Characteristics of populations defined by changes in the demographic patterns of consumers.

Negotiation: The act or procedure of treating another or others in order to come to terms or reach an agreement.

Neuromusculoskeletal: The systems of the body that are responsible for normal and abnormal movement and posture.

NIOSH: National Institute for Occupational Safety and Health.

Normative model: A consensus-based model of physical therapy professional education that describes the profession's beliefs and values relative to professional education. Such a model includes the following components, among others: external and internal settings, essential academic and clinical curricula, prerequisites, and configuration of the preprofessional and professional aspects of the program. A consensus model can serve as a foundation or "norm" for existing and developing programs.

OSHA: Occupational Safety and Health Administration. (www.osha.gov)

Outcomes assessment of the individual: Performed by the physical therapist and is a measure (or measures) of the intended results of patient/client management, including changes in impairments, functional limitations, and disabilities and the changes in health, wellness, and fitness needs that are expected as the results of implementing the plan of care. The expected outcomes in the plan should be measurable and time limited.

Outcomes assessment of groups of patients/clients: Performed by the physical therapist and is a measure [or measures] of physical therapy care to groups of patients/clients including changes in impairments, functional limitations, and disabilities and the changes in health, wellness, and fitness needs that are expected as the results of that physical therapy.

Outcomes analysis: A systematic examination of patient/client outcomes in relation to selected patient/client variables (eg, age, sex, diagnosis, interventions performed); outcomes analysis may be used in quality assessment, economic analysis of practice, and other processes.

Paradigm: An example or model; a way of thinking about something.

Patients: Individuals who are the recipients of physical therapy and direct interventions.

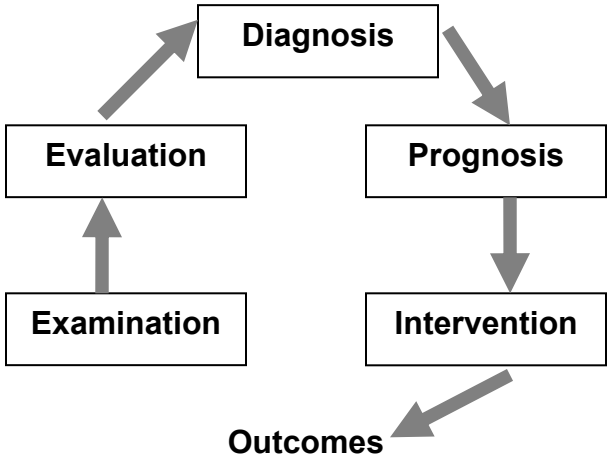
Patterns of best clinical practice: Care that is documented through evidence to reflect what is currently considered the optimum care for the patient/client diagnosis.

Physical function: Fundamental component of health status describing the state of those sensory and motor skills necessary for mobility, work, and recreation.

Physical therapist (PT): A person who is a graduate of an accredited physical therapist education program and is licensed to practice physical therapy. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Physical therapist of record: The physical therapist who is responsible for the patient for a given visit. The physical therapist of record may or may not be the physical therapist that conducted the initial examination of the patient and the subsequent evaluation.

Physical therapist patient/client management model:



(Adapted from the *Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Physical therapist assistant (PTA): A technically educated health care provider who assists the physical therapist in the provision of selected physical therapy interventions. The physical therapist assistant is the only individual who provides selected physical therapy interventions under the direction and supervision of the physical therapist. The physical therapist assistant is a graduate of a physical therapist assistant associate degree program accredited by the Commission on Accreditation in Physical Therapy (CAPTE). (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Physical therapist professional education: First level of education that prepares student to enter the practice of physical therapy.

Plan of care: Statements that specify the anticipated goals and the expected outcomes, predicted level of optimal improvement, specific interventions to be used, and proposed duration and frequency of the interventions that are required to reach the goals and outcomes. The plan of care includes the anticipated discharge plans. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Postbaccalaureate degree level: Professional program for physical therapy granting a master's degree or higher.

Power: An ability to act or produce an effect; legal or official authority, capacity, or right.

Practice expectations: A description of behaviors, skills, or knowledge that defines the expected performance of the physical therapist. When taken in aggregate, they describe the performance of the graduate upon entry into the practice of physical therapy.

Practice management: The coordination, promotion, and resource (financial and human) management of practice that follows regulatory and legal guidelines.

Practitioner of choice: Consumers choose the most appropriate health care provider for the diagnosis, intervention, or prevention of an impairment, functional limitation, or disability.

Prevention: Activities that are directed toward 1) achieving and restoring optimal functional capacity, 2) minimizing impairments, functional limitations, and disabilities, 3) maintaining health (thereby preventing further deterioration or future illness), 4) creating appropriate environmental adaptations to enhance independent function. *Primary prevention:* Prevention of disease in a susceptible or potentially susceptible population through such specific measures as general health promotion efforts. *Secondary prevention:* Efforts to decrease the duration of illness, severity of diseases, and sequelae through early diagnosis and prompt intervention. *Tertiary prevention:* Efforts to limit the degree of disability and promote rehabilitation and restoration of function in patients/clients with chronic and irreversible diseases. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Primary care: The provision of integrated, accessible health care services by clinicians who are accountable for addressing the majority of personal health care needs, developing a sustained partnership with patients/clients, and practicing in the context of family and community. (Institute of Medicine. *Defining Primary Care: An Interim Report.* Washington, DC: National Academy Press; 1995.)

Pro bono: Professional services rendered without charge.

Professional duty: Professional duty is the commitment to meeting one's obligations to provide effective physical therapy services to individual patients/clients, to serve the profession, and to positively influence the health of society. (*Professionalism in Physical Therapy: Core Values*; August 2003.)

Professional education: A subset of higher education that prepares individuals to practice a profession such as law, medicine, ministry, or physical therapy.

Professionalism: The conduct, aims, or qualities that characterize or mark a profession or a professional person**.**

Prognosis: The determination by the physical therapist of the predicted optimal level of improvement in function and the amount of time needed to reach that level. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Prospective Payment System (PPS): A generic term applied to a reimbursement system that pays prospectively rather than on the basis of charges. (Kongstvedt P. *The Managed Health Care Handbook*. 2nd ed. Gaithersburg, Md: Aspen Publishers; 1993.) Also: Medicare's terminology for determining fixed pricing for reimbursement of hospitals and facilities for care. The most well-known example of PPS is Diagnostic Related Groups (DRGs), but it also includes Ambulatory Payment Classifications (APCs). (Kongstvedt P (ed). *Essentials of Managed Health Care.* 4th ed. Gaithersburg, Md: Aspen Publishers Inc; 2001.)

Psychomotor: Refers to motor activity that is preceded by or related to mental activity.

Quality improvement (QI): A management technique to assess and improve internal operations. Quality improvement focuses on organizational systems rather than individual performance and seeks to continuously improve quality rather than reacting when certain baseline statistical thresholds are crossed. The process involves setting goals, implementing systematic changes, measuring outcomes, and making subsequent appropriate improvements. (www.tmci.org/other_resources/glossaryquality.html#quality)

Range of number of visits: All visits within a single episode of care. The range may be adjusted based on factors that may require a new episode of care or that may modify frequency of visits and duration of episode. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Receptive: Open and responsive to ideas, impressions, or suggestions.

Reexamination: The process of performing selected tests and measures after the initial examination to evaluate progress and to modify or redirect interventions. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Reflection: The process of "thinking in action" or reviewing in one's mind or aloud what is occurring or has occurred; the process focuses on what is occurring, why it is occurring, short-term and long-term implications, and alternative responses.

Research: Qualitative and quantitative scholarship studies that generate new or additional information about topics relative to physical therapy practice and education.

Resource constraints: Restrictions or limitations in a course of action due to financial means, including available insurance benefits.

Screening: Determining the need for further examination or consultation by a physical therapist or for referral to another health professional. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.) (See also: *Cognitive screening*.)

Social responsibility: The promotion of a mutual trust between the physical therapist as a part of the profession and the larger public that necessitates responding to societal needs for health and wellness. (*Professionalism in Physical Therapy: Core Values,* August 2003.)

Socialization skills: The knowledge, commitment, and ability to adapt to the culture of the academy (membership, governance, participation, and advocacy, etc).

Sociocultural: Involving a combination of social and cultural factors.

Stakeholder: An individual with an interest or share in any enterprise.

Taxonomy: A system of classification.

Tertiary care: Highly specialized care, usually including a referral. Tertiary care may be defined by the setting (eg, an organ transplant unit) or by the sophistication of the service.

Tests and measures: Specific standardized methods and techniques used to gather data about the patient/client after the history and systems review have been performed. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Treatment: The sum of all interventions provided by the physical therapist to a patient/client during an episode of care. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Triage: The sorting and/or allocation of treatment to patients/clients.

Underserved/underrepresented: Inadequately represented; provided with inadequate service.

Values education: Process of teaching core values such as respect, responsibility, trustworthiness, caring, fairness, and civic virtue. Facilitating learners in making moral and ethical decisions by internalizing and acting on the best values and moral standards. Comprised of four major historical movements—values realization, character education, moral education, and citizenship education. (Kirschenbaum H. Values clarification to character education: a personal journey. *Journal of Humanistic Counseling, Education, and Development*. 2000; 39(1):4.)

Visit: All physical therapy services provided within a 24-hour period. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Wellness: An active process of becoming aware of and making choices toward a more successful existence. (National Wellness Organization. *A Definition of Wellness*. Stevens Point, Wis: National Wellness Institute Inc; 2003.)

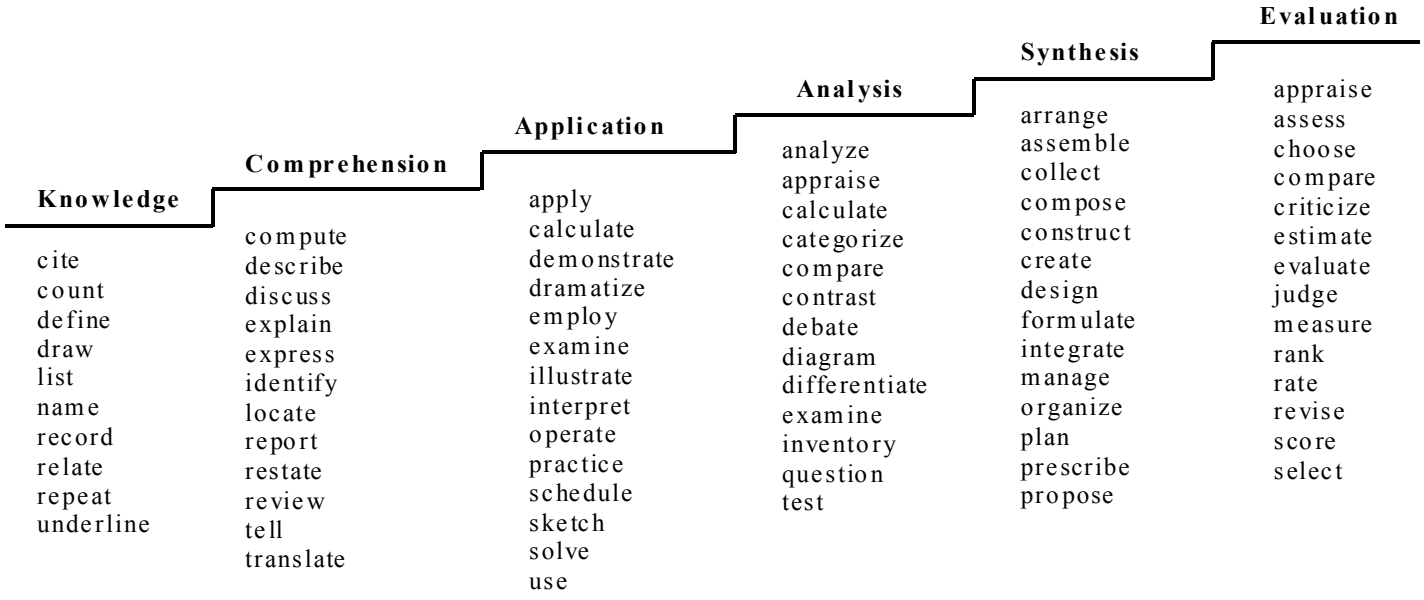
Work conditioning: An intensive, work-related, goal-oriented conditioning program designed specifically to restore systematic neuromusculoskeletal functions (eg, strength, endurance, movement, flexibility, motor control) and cardiopulmonary functions. The objective of the work conditioning program is to restore physical capacity and function to enable the patient/client to return to work. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Work hardening: A highly structured, goal-oriented, individualized treatment program designed to return the client to work. Work hardening programs, which are interdisciplinary in nature, use real or simulated work activities designed to restore physical, behavioral, and vocational functions. Work hardening addresses issues of productivity, safety, physical tolerances, and worker behaviors. (*Guide to Physical Therapist Practice*. Rev 2nd Ed. Alexandria, Va: American Physical Therapy Association; 2003.)

Appendix F

TAXONOMY OF EDUCATIONAL OBJECTIVES FOR LEARNING

The Cognitive Domain (Bloom, from Ford)



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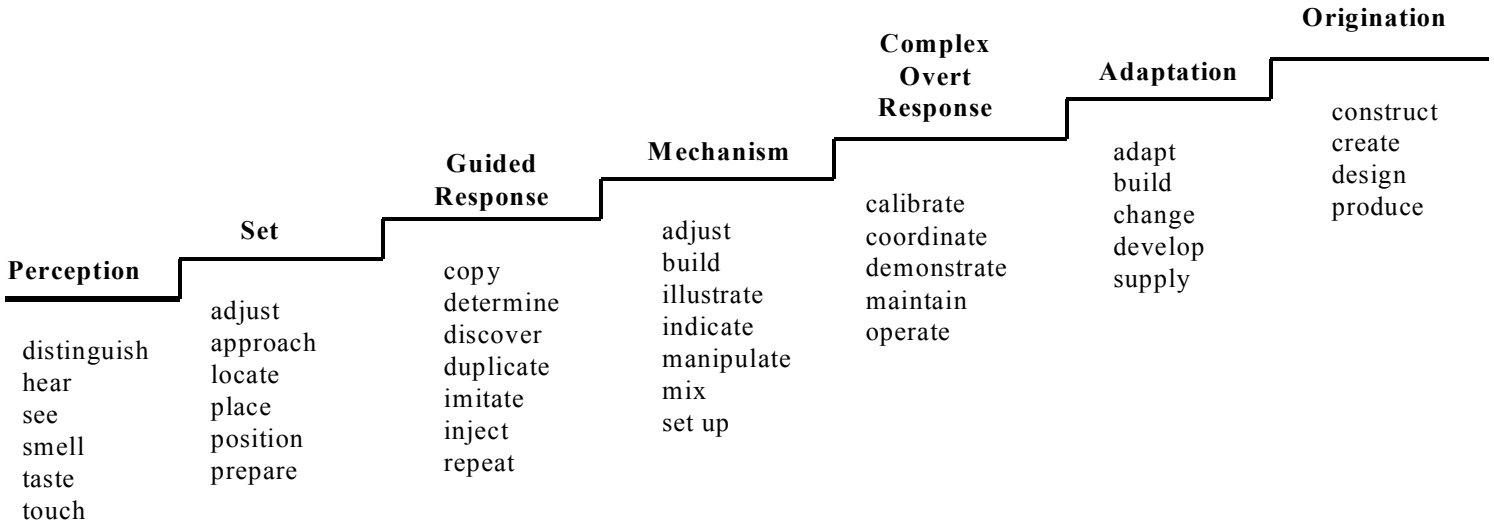
TAXONOMY OF EDUCATIONAL OBJECTIVES FOR LEARNING

The Psychomotor Domain (Simpson, from Ford)



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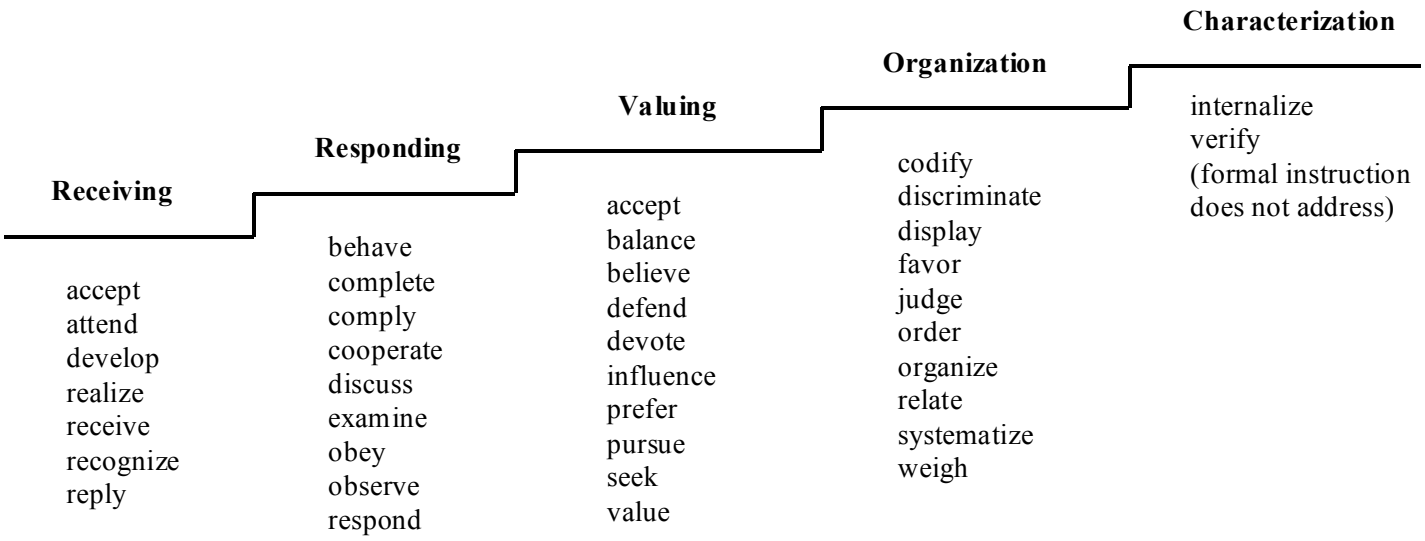
TAXONOMY OF EDUCATIONAL OBJECTIVES FOR LEARNING

The Affective Domain (Krathwohl, from Ford)



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Appendix G

A Summary of the Coalitions for Consensus Process

The Coalitions for Consensus process was initiated in September 1993 by the APTA Education Division with the support and endorsement of the APTA Board of Directors. The process was designed to address key issues confronting physical therapist professional education. The development of a consensus-based model of professional education was the mechanism chosen to move the process forward. The essential elements of the Coalitions for Consensus process included:

- An intensive visitation schedule with academic and clinical faculty, administrators, and clinicians associated with nearly 100 physical therapist professional education programs throughout the United States for the purpose of identifying and clarifying important educational issues before the profession.

- The enlistment of 136 member consultants representing the education and clinical/practice communities. The selection process, including nominations, was developed in cooperation with program administrators, APTA component leaders, and the APTA Board of Directors.

- Five conferences designed to address the curricular and noncurricular components of a normative model of professional education. The first conference was held in Crystal City, Virginia, on April 15-18, 1994; the second conference was held in Raleigh, North Carolina, on June 24-27, 1994. The roster for the second conference was expanded to include 71 observers appointed by their respective components, programs, clinics, or employers. The Content and Curriculum Consensus Conference was held in Alexandria, Virginia, on February 2-6, 1996. The final consensus conference on clinical education was held in Baltimore, Maryland, on April 12-16, 1996.

- The practice of physical therapy as a basis for the normative model, and the development of expectations related to the practice of physical therapy. These collaborative discussions were between the Practice and Education Divisions of APTA.

- Development of the consensus-based *working drafts* used for dissemination at appropriate forums and meetings throughout the education, practice, and health care communities. Although total agreement was not reached on every issue, there was a moderately high to high agreement level on a majority of issues addressed.

- An extended consensus-building timeline that allowed for discussion, comments, and suggestions on all revisions of the model by the communities of interest within and outside APTA. A major component of the timeline was a series of "road show" forums throughout the United States to allow for discussion and further refinement of the documentation. Over 1,200 members of the education and clinical communities registered for these regional forums.

- A commitment to ensure congruence between all revisions and all relevant APTA documents, including the *Guide to Physical Therapist Practice*, which includes a patient/client management model adopted by the House of Delegates in 1995.

- A final report, including specific recommendations, to the APTA Board of Directors in March 1997 and the House of Delegates in June 1997.

The Coalitions for Consensus effort was not an end in itself; rather, it was designed to provide a mechanism for the timely formulation, articulation, and ongoing evaluation of the profession's "voice" relative to physical therapist professional education. As stated earlier, the normative model is not intended to be a mandate or the final word. However, it should serve as a positive and sound foundation—an intentional, forward-looking, and unequivocal standard by which higher education, health care professionals, physical therapist professional education programs, and other "stakeholders" can plan, implement, and evaluate their programs, policies, and procedures relative to physical therapy and physical therapist professional education.

Appendix H

Additional Resources

Albanese M. Students are *not* customers: a better model for education. *Acad Med.* 1999;74(11):1172-1186.

American Medical Association. *Cultural Competence Compendium.* Chicago: AMA Press; 1999.

American Physical Therapy Association. *A Normative Model of Physical Therapist Assistant Education: Version 99.* Alexandria, Va: American Physical Therapy Association; 1999.

American Physical Therapy Association. *Clinical Site Information Form.* Alexandria, Va: American Physical Therapy Association; 1999.

American Physical Therapy Association. *Academic Coordinator/Director of Clinical Education Model Position Description.* Alexandria, Va: American Physical Therapy Association; 2001.

American Physical Therapy Association. *Physical Therapist Clinical Performance Instrument.* Alexandria, Va: American Physical Therapy Association; 1998.

American Physical Therapy Association. *Physical Therapist Student Evaluation: Clinical Experience and Clinical Instruction.* Alexandria, Va: American Physical Therapy Association; 2003.

American Physical Therapy Association. *Reference Manual for Center Coordinators of Clinical Education.* Alexandria, Va: American Physical Therapy Association; 2002.

American Physical Therapy Association Manipulation Education Committee of the APTA Manipulation Task Force. *Manipulation Education Manual (MEM).* Alexandria, Va: American Physical Therapy Association; 2004 [jointly sponsored by the American Association of Orthopedic Manual Therapist (AAOMPT), American Physical Therapy Association, Education Section, and the Orthopaedic Section].

Arnold L. Assessing professional behavior: yesterday, today and tomorrow. *Acad Med*. 2002;77(6).

Cary JR, Ness KK. Erosion of professional behaviors in physical therapist students. *Journal of Physical Therapy Education*. 2001;15(3):20-24.

Cohen CB, Wheeler, SE, Scott, DA and the Anglican Working Group in Bioethics. Walking a fine line: physician inquiries into patient's religious and spiritual beliefs. *Hastings Center Report 31*. 2001;5:29-39.

Coles R. The moral education of medical students. *Acad Med*. 1998;73(1):55-57.

Covey SR. *The Seven Habits of Highly Effective People: Powerful Lessons in Personal Change*. ; New York: Simon & Schuster Adult Publishing Group;1990.

Covey SR, Merrill RA, Merrill RR. *First Things First: To Live, To Love, To Learn, To Leave a Legacy*. New York,: Simon & Schuster Trade Paperbacks; 1995.

Covey SR. *Principled-Centered Leadership: Strategies for Personal and Professional Effectiveness*. New York: Simon & Schuster Adult Publishing Group; 1992.

DeRosa C. Innovation in physical therapy practice. *PT Magazine*. February 2000;8:40-46.

Epstein RM. Mindful practice. *JAMA*. 1999;282(9):833-839.

Fox,RC. Time to heal medical education? *Acad Med*. 1999;74(10):1072-1075.

Ginsburg S, Regehr G, Stern,D, Lingard L. The anatomy of the professional lapse: bridging the gap between traditional frameworks and students' perceptions. *Acad Med*. 2002;77(6).

Greenlick MR. Educating physicians for the 21st century. *Acad Med*. 1995;70(3):179-185.

Hayward LM, Noonan AC, Shain D. Qualitative case study of physical therapist students' attitudes, motivations, and affective behaviors. *J Allied Health*. 1999; 28:155-164.

Hensel WA, Dickey NW. Teaching professionalism: passing the torch. *Acad Med*. 1998;73(8):865-870.

Institute of Medicine. *Primary Care: America's Health in a New Era*. Washington, DC: National Academy Press; 1996.

Kirschenbaum H. Values clarification to character education: a personal journey. *Journal of Humanistic Counseling, Education, and Development*. 2000; 39(1).

Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err is Human: Building a Safer Health System*. Washington, DC: National Academy Press; 2000.

Kopelman LM. Values and virtues: how should they be taught? *Acad Med*. 1999;74(12):1307-1310.

Ludmerer KM. Instilling professionalism in medical education. *JAMA*. 1999;282(9):881-882.

MacDonald CA, Cox PD, Bartlett DJ, Houghton PE. Consensus on methods to foster physical therapy professional behaviors. *Journal of Physical Therapy Education.* 2002;16(1):27-35.

Manipulation Education Committee of the APTA Manipulation Task Force. *Manipulation Education Manual.* [Project funded by the American Physical Therapy Association, American Association of Orthopedic Manual Therapists (AAOMPT), and the APTA Orthopaedic Section.] Alexandria, Va: APTA; 2004.

Markakis KM, Beckman HB, Suchman AL, Frankel RM. The path to professionalism: cultivating humanistic values and attitudes in residency training. *Acad Med*. 2000;75(2):141-150.

Mathews Jane. *Practice Issues in Physical Therapy: Current Patterns and Future Directions*. Thorofare, NJ: Slack; 1989.

May WW, Morgan BJ, Lemke JC, et al. Model for ability-based assessment in physical therapy education. *Journal of Physical Therapy Education*. 1995;9.

Pellegrino ED. Toward a virtue-based normative ethics for the health professions. *Kennedy Institute of Ethics Journal*. 1995:5(3):253-277.

Perry J. Professionalism in physical therapy. *Phys Ther*. 1964;44(6):429-434.

Robins LS, Braddock III, CH, Fryer-Edwards KA. Using the American board of internal medicine's "elements of professionalism" for undergraduate ethics education. *Acad Med*. 2002;77(6).

Sullivan WM. What is left of professionalism after managed care? *Hastings Center Report 29.* 1999;2:7-13.

Swick HM, Szenas, P, Danoff, D, Whitcomb, ME. Teaching professionalism in undergraduate medical education. *JAMA*. 1999;282(9):830-832.

Triezenberg HL. Teaching ethics in physical therapy education: a delphi study. *Journal of Physical Therapy Education*. 1997;11(2):16-22.

Triezenberg HL, McGrath, JH. The use of narrative in an applied ethics course for physical therapist students. *Journal of Physical Therapy Education*. 2001;15(3):49-56.

Weidman JC, Twale DJ, Stein EL. Socialization of graduate and professional students in higher education: a perilous passage? *ASHE-ERIC Higher Education Report.* 2001;28(3).

Williamson JW, Weir CR, Turner CW, et al. *Healthcare Informatics and Information Synthesis.* Thousand Oaks, CA: Sage Publications; 2002.