Chapter 1. A Normative Model of Physical Therapist Professional Education: Version 2004

The Normative Model

A Normative Model of Physical Therapist Professional Education: Version 2004 consists of a consensus-based model that reflects contemporary entrylevel performance expectations for students who graduate from physical therapist professional education programs. The purpose of the *Normative Model* is to consistently define and describe entry-level physical therapist professional education that is reflective of a contemporary and forwardlooking perspective of practice, is responsive to physical therapy practice and the health care environment, and that incorporates the elements for the profession's vision. Included in the model are entry-level practice expectations listed by theme and characterized by educational outcomes to be achieved, a curricular matrix that includes content in support of the practice expectations (see Table, page 11), sample terminal behavioral objectives that demonstrate what the student should be able to do once the content is completed, followed by examples of instructional objectives that are to be achieved in the classroom (didactic education) and in clinical practice (clinical education). It must be acknowledged that content found in the "Foundational and Clinical Sciences" section initially was developed by content experts and refined by responses from users of this *Model* and from invited reviewers. In addition, work completed for Curricular Content in Physical Therapist Professional Education: Postbaccalaureate Level: A Resource from the IMPACT Conferences¹ was used in the initial development of content found in "Foundational and Clinical Sciences."

The Practice of Physical Therapy

"Physical therapy is a dynamic profession with an established theoretical and scientific base and widespread clinical applications in the restoration, maintenance, and promotion of optimal physical function. For more than 750,000 people every day in the United States, physical therapists: diagnose and manage movement dysfunction and enhance physical and functional abilities; restore, maintain and promote not only optimal physical function but optimal wellness and fitness and optimal quality of life as it relates to movement and health; and prevent the onset, symptoms, and progression of impairments, functional limitations, and disabilities that may result from diseases, disorders, conditions, or injuries....

"As essential participants in the health care delivery system, physical therapists assume leadership roles in rehabilitation: in prevention, health maintenance, and programs that promote health, wellness, and fitness; and in professional and community organizations. Physical therapists also play important roles both in developing standards for physical therapist practice and in developing health care policy to ensure availability, accessibility, and optimal delivery of physical therapy services. Physical therapy is covered by federal, state, and private insurance plans. The positive impact of physical therapists' services on health-related quality of life is well accepted." ^{2(p13)}

The practice of physical therapy necessitates that the individual physical therapist engages in specific and complex cognitive, psychomotor, and affective behaviors when providing services to patients/clients, families, or caregivers. Using their body of knowledge, physical therapists integrate five elements of care in a manner designed to maximize the patient's/client's outcome ^{2(pp34-39)}:

- **Examination.** A comprehensive screening and specific testing process leading to diagnostic classification or, as appropriate, to a referral to another practitioner. The examination has three components: (1) the patient/client history, (2) the systems review, and (3) tests and measures.
- Evaluation. A dynamic process in which the physical therapist makes clinical judgments based on data gathered during the examination.
- **Diagnosis.** Both a process and a label. The diagnostic process includes integrating and evaluating the 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.

- Prognosis. The determination of the predicted optimal level of improvement in function and the amount of time needed to reach that level, and also may include a prediction of levels of improvement that may be reached at various intervals during the course of therapy.
- **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 (eg. coordination, communication, documentation, patient-related instruction, procedural interventions including therapeutic exercise, functional training in self-care and home management (including ADL and IADL), functional training in work (job/school/play), community, and leisure integration and reintegration (including ADL, work hardening, and work techniques conditioning) manual therapy (including mobilization/manipulation), prescription, application and, as appropriate, fabrication of devices and equipment (assistive, adaptive, orthotic, protective, supportive, and prosthetic), airway clearance techniques integumentary repair and protection techniques, electrotherapeutic modalities, and physical agents and mechanical modalities to produce changes in the condition that are consistent with the diagnosis and prognosis.

Throughout the entire episode of care, the physical therapist determines the anticipated goals and expected outcomes for each intervention. Beginning with the history, the physical therapist identifies patient/client expectations, perceived need for physical therapy services, personal goals, and desired outcomes....As the patient/client reaches the termination of physical therapy services and the end of the episode of care, the physical therapist measures the global **outcomes** of the physical therapy services by characterizing or quantifying the impact of the physical therapy interventions on the following domains: pathology/pathophysiology (disease, disorder, condition), impairments, functional limitations, disabilities, risk reduction/prevention, health, wellness, and fitness, societal resources, and patient/client satisfaction. ^{2(p40)}

These complex processes, as delineated, reflect the needs of patients/clients, families, or caregivers for physical therapy services in the contemporary health care environment. As is necessary for any profession, physical therapists must routinely and systematically assess the external environment

to determine the context in which their services will be provided. Based on such an assessment, the profession develops a vision for the role and future practice of physical therapists that anticipates the changing needs and demands of society. Thus, to render such an assessment requires that the profession continually analyze the current health care environment and the complex issues that surround that dynamic system. The profession of physical therapy values the contributions and work of other organizations that influence health care and its delivery, such as the Institute of Medicine's core competencies for health care professionals, goals for Healthy People 2010, the Department of Health and Human Services with respect to cultural competence, and outcomes resulting from the Human Genome Project.

The Mission of Physical Therapist Professional Education

Physical therapist professional education refers to the education that prepares graduates for entry into the practice of physical therapy. (Education for the advancement of practicing physical therapists is termed postprofessional.)

The mission of physical therapist professional education is to graduate knowledgeable, service-oriented, self-assured, adaptable, reflective practitioners who, by virtue of critical and integrative thinking, lifelong learning, and ethical values, render independent judgments concerning patient/client needs that are supported by evidence; promote the health of the client; and enhance the professional, contextual, and collaborative foundations for practice. These practitioners contribute to society and the profession through practice, teaching, administration, and the discovery and application of new knowledge about physical therapy. This education is achieved through structured and varied experiences of sufficient excellence and breadth to allow the acquisition and application of essential knowledge, skills, and behaviors as applied to the practice of physical therapy. Learning experiences are provided under the guidance and supervision of competent faculty, in both the classroom and the clinic. (Adapted from materials from Coalitions for Consensus conferences by the American Physical Therapy Association [APTA] Education Division, 1994, and the APTA Consensus Conference on Alternative Models in Clinical Education, 1998.)

To fulfill this mission, the physical therapy profession must have a clear vision for professional education. This proactive view of the future must be consensus-based and exemplify the traditional values of the profession, including, among others, patient-centered service, rigorous professional education that includes classroom and clinical activities, independent judgment, and professional integrity.

The Environment for the Development Of the Normative Model

The curricular portions of this model translate practice expectations into educational outcomes, identify necessary content categories, and describe possible strategies to achieve these outcomes based on a conceptual framework that places the curriculum in the context of its immediate settings and the extended environment. This framework shows the interactions between the model's various components.

The curriculum of the normative model of physical therapist professional education exists within an uncertain health care environment, an increasingly accountable higher-education system, and an evolving body of physical therapy knowledge. These elements exist in a broader societal environment defined by myriad values, laws, regulations, and resources that influence professional education.

When planning, organizing, and implementing physical therapist professional education, the optimal setting must bridge the higher education, societal, and practice environments. More important, professional education must be sensitive to the interests of practitioners, patients/clients, families, caregivers, health care and educational systems, and society at large. These interests, expressed in terms of practice expectations, form the foundation of the curriculum and determine the mix and emphasis of content within the physical therapist professional curriculum. The practice expectations are achieved by the implementation of a curriculum that includes foundational sciences and clinical sciences and that is taught in both classroom and clinical environments. In addition, practice expectations and the rigor of the curriculum influence the prerequisites and admission criteria. The content expertise of program faculty and a system of student evaluation evolve from the practice expectations.

References

- American Physical Therapy Association. Curricular Content in Physical Therapist Professional Education: Postbaccalaureate Level. From the IMPACT Conferences, Alexandria, VA, 1993.
- 2 Guide to Physical Therapist Practice. Rev 2nd ed. Alexandria, Va: American Physical Therapy Association; 2003.
- 3 Institute of Medicine. Health professions education: a bridge to quality. The Core Competencies. Washington, DC: The National Academy of Science; 2003; 45-73.

Table. Practice Expectations

Practice expectations are 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.

1.0 Professional Practice Expectation: Accountability

- 1.1 Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
- 1.2 Has a fiduciary responsibility for all patients/clients.
- 1.3 Practice in a manner consistent with the professional code of ethics.
- 1.4 Change behavior in response to understanding the consequences (positive and negative) of his or her actions.
- 1.5 Participate in organizations and efforts that support the role of the physical therapist in furthering the health and wellness of the public.

2.0 Professional Practice Expectation: Altruism

- 2.1 Place patient's/client's needs above the physical therapist's needs.
- 2.2 Incorporate *pro bono* services into practice.

3.0 Professional Practice Expectation: Compassion/Caring

- 3.1 Exhibit caring, compassion, and empathy in providing services to patients/clients.
- 3.2 Promote active involvement of the patient/client in his or her care.

4.0 Professional Practice Expectation: Integrity

4.1 Demonstrate integrity in all interactions with patients/ clients, family members, caregivers, other health care providers, students, other consumers, and pavers.

5.0 Professional Practice Expectation: Professional Duty

- 5.1 Demonstrate professional behavior in all interactions with patients/clients, family members, caregivers, other health care providers, students, other consumers, and payers.
- 5.2 Participate in self-assessment to improve the effectiveness of care.
- 5.3 Participate in peer-assessment activities.
- 5.4 Effectively deal with positive and negative outcomes resulting from assessment activities.
- 5.5 Participate in clinical education of students.
- 5.6 Participate in professional organizations.

6.0 Professional Practice Expectation: Communication

6.1 Expressively and receptively communicate in a culturally competent manner with patients/clients, family members, caregivers, practitioners, interdisciplinary team members, consumers, payers, and policy makers.

7.0 Professional Practice Expectation: Cultural Competence

7.1 Identify, respect, and act with consideration for patients'/clients' differences, values, preferences, and expressed needs in all professional activities.

8.0 Professional Practice Expectation: Clinical Reasoning

- 8.1 Use clinical judgment and reflection to identify, monitor, and enhance clinical reasoning in order to minimize errors and enhance patient/client outcomes.
- 8.2 Consistently apply current knowledge, theory, and professional judgment while considering the patient/client perspective in patient/client management.

9.0 Professional Practice Expectation: Evidence-Based Practice

- 9.1 Consistently use information technology to access sources of information to support clinical decisions.
- O.2 Consistently and critically evaluate sources of information related to physical therapy practice, research, and education and apply knowledge from these sources in a scientific manner and to appropriate populations.
- 9.3 Consistently integrate the best evidence for practice from sources of information with clinical judgment and patient/client values to determine the best care for a patient/client.
- 9.4 Contribute to the evidence for practice by written systematic reviews of evidence or written descriptions of practice.
- 9.5 Participate in the design and implementation of patterns of best clinical practice for various populations.

10.0 Professional Practice Expectation: Education

10.1 Effectively educate others using culturally appropriate teaching methods that are commensurate with the needs of the learner.

11.0 Patient/Client Management Expectation: Screening

11.1 Determine when patients/clients need further examination or consultation by a physical therapist or referral to another health care professional.

12.0 Patient/Client Management Expectation: Examination

- 12.1 Examine patients/clients by obtaining a history from them and from other sources.
- 12.2 Examine patients/clients by performing systems reviews.
- 12.3 Examine patients/clients by selecting and administering culturally appropriate and age-related tests and measures.

13.0 Patient/Client Management Expectation: Evaluation

13.1 Evaluate data from the examination (history, systems review, and tests and measures) to make clinical judgments regarding patients/clients.

14.0 Patient/Client Management Expectation: Diagnosis

14.1 Determine a diagnosis that guides future patient/client management.

15.0 Patient/Client Management Expectation: Prognosis

15.1 Determine patient/client prognoses.

16.0 Patient/Client Management Expectation: Plan of Care

- 16.1 Collaborate with patients/clients, family members, payers, other professionals, and other individuals to determine a plan of care that is acceptable, realistic, culturally competent, and patient/client-centered.
- 16.2 Establish a physical therapy plan of care that is safe, effective, and patient/client-centered.
- 16.3 Determine patient/client goals and outcomes within available resources and specify expected length of time to achieve the goals and outcomes.
- 16.4 Deliver and manage a plan of care that is consistent with legal, ethical, and professional obligations, and administrative policies and procedures of the practice environment.
- 16.5 Monitor and adjust the plan of care in response to patient/client status.

17.0 Patient/Client Management Expectation: Intervention

- 17.1 Provide physical therapy interventions to achieve patient/client goals and outcomes.
- 17.2 Provide effective culturally competent instruction to patients/clients and others to achieve goals and outcomes.
- 17.3 Complete documentation that follows professional guidelines, guidelines required of the health care systems, and guidelines required by the practice setting.
- 17.4 Practice using principles of risk management.
- 17.5 Respond effectively to patient/client and environmental emergencies in one's practice setting.

18.0 Patient/Client Management Expectation: Outcomes Assessment

- 18.1 Select outcome measures to assess individual and collective outcomes of patients/clients using valid and reliable measures that take into account the setting in which the patient/client is receiving services, cultural issues, and the effect of societal factors such as reimbursement
- 18.2 Collect data from the selected outcomes measures in a manner that supports accurate analysis of individual patient/client outcomes.
- 18.3 Analyze results arising from outcomes measures selected to assess individual outcomes of patients/clients.
- 18.4 Use analysis from individual outcomes measurements to modify the plan of care.
- 18.5 Select outcome measures that are valid and reliable and shown to be generalizable to patient/client populations being studied.

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

- 19.1 Provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities.
- 19.2 Promote health and quality of life by providing information on health promotion, fitness, wellness, disease, impairment, functional limitation, disability, and health risks related to age, gender, culture, and lifestyle within the scope of physical therapy practice.
- 19.3 Apply principles of prevention to defined population groups.

20.0 Practice Management Expectation: Management of Care Delivery

- 20.1 Provide culturally competent first contact through direct access to patients/clients who have been determined through the screening and examination processes to need physical therapy care.
- 20.2 Provide culturally competent care to patients/clients referred by other practitioners and ensure that care is continuous and reliable.
- 20.3 Provide culturally competent care to patients/clients in tertiary care settings in collaboration with other practitioners.
- 20.4 Participate in the case management process.

21.0 Practice Management Expectation: Practice Management

- 21.1 Direct and supervise human resources to meet the patient's/client's goals and expected outcomes.
- 21.2 Participate in financial management of the practice.
- 21.3 Establish a business plan on a programmatic level within a practice.
- 21.4 Participate in activities related to marketing and public relations.
- 21.5 Manage practice in accordance with regulatory and legal requirements.

22.0 Practice Management Expectation: Consultation

22.1 Provide consultation within boundaries of expertise to businesses, schools, government agencies, other organizations, or individuals.

23.0 Practice Management Expectation: Social Responsibility and Advocacy

- 23.1 Challenge the status quo of practice to raise it to the most effective level of care.
- 23.2 Advocate for the health and wellness needs of society.
- 23.3 Participate and show leadership in community organizations and volunteer service.
- 23.4 Influence legislative and political processes.