APTA

American Physical Therapy Association
1111 North Fairfax Street
Alexandria, Virginia 22314

PHYSICAL THERAPIST
CLINICAL EDUCATION PRINCIPLES

Conference and Regional Forum Summaries

**A Consensus Conference on Standards in Clinical Education
December 13–15, 2007**

AND

**Integration of Feedback From Participants Involved in Regional
Forums
September 2008–October 2009**

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Introduction
A full description of the background and rationale for convening this conference can be found in detail in the Introduction (pp 1-9).

Consensus Conference Purpose
The purpose of the conference (p 4) was to achieve consensus on standards for clinical education in the preparation of the physical therapist graduate, including:

1. Performance expectations for the new graduate upon entry into clinical practice.
2. Expectations associated with clinical education stakeholders/groups including:
   - Performance expectations for clinical instructors (CIs) in mentoring students,
   - Relationship between academic programs and clinical facilities, and
   - Infrastructure necessary to provide clinical education.
3. Preferred expectations for the organization, delivery, and funding of clinical education best suited to the achievement of the performance expectations of the new graduate.

Conference Decision-making Process
During the 3-day conference, participants engaged in a systematic process of decision-making about key components of physical therapist clinical education congruent with Vision 2020 and the Doctor of Physical Therapy (DPT) professional degree. The conference used a structured process to ensure thoughtful and reflective discussion and deliberation about essential components of clinical education delineated by the conference purpose. Although some of the decision-making steps were completed in workgroups to ensure that issues were addressed thoroughly and comprehensively, all of the work completed by workgroups was subsequently discussed and vetted among all participants to reach consensus, where feasible (pp 5-7).

Physical Therapist Graduate Performance Outcome Principles
Physical therapist graduate performance outcomes standards were developed for 29 categories that were derived from key available profession resources and research that describe performance expectations for new graduates. Specific to this conference process was the need for member consultants to give full consideration to the current and emerging educational and health care environments for the new graduate performance expectations. Current and potential barriers to achieving the expected new graduate performance outcomes were identified for the following contexts: higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology (pp 10-29).

New graduate performance standards were identified for the following categories:

1. Autonomous practice and direct access
2. Documentation
3. Billing and coding
4. Cost effectiveness
5. Practice management
6. Evidence-based practice
7. Screening (includes review of systems)
8. Patient/client management examination
9. Evaluation
10. Diagnosis
11. Prognosis
12. Safe and skilled interventions
13. Outcomes assessment
14. Health policy
15. Cultural competence
16. Direction, supervision, and delegation
17. Interpersonal skills
18. Communication
19. Teaching and learning
20. Interprofessional collaboration
21. Emerging skills (eg, pharmacology, radiology/imaging)
22. Prevention, wellness, and health promotion
23. Quality improvement/assurance
24. Consultation

25. Professionalism
26. Accountability for ethical and legal expectations
27. Professional development

28. Involvement in professional organizations
29. Technology and informatics

Clinical Instructor Performance Principles for Student–Patient Mentoring

Physical therapist CI performance standards were developed for 17 categories that were derived from key available professional resources and research that describe performance expectations for CIs. Again, member consultants gave full consideration of the current and emerging education and health care environments for CI performance expectations. Current and potential barriers to achieving the expected CI performance outcomes were identified for the following contexts: higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology (pp 30-41).

CI performance standards were identified for the following categories:

1. Teaching/instruction
2. Learning expectations
3. Performance assessment/evaluation
4. Self-assessment
5. Planned learning experiences
6. Practice management
7. Communication
8. Interpersonal skills
9. Accountability for ethical and legal expectations

10. Professionalism
11. Cultural competence
12. Mentoring
13. Supervision
14. Modeling
15. Professional development
16. Level of practice performance/competence
17. Qualifications

Preferred Clinical Education Infrastructure

Member consultants achieved consensus for the preferred clinical education for 8 key components of the infrastructure. These included:

- Relationship at the organizational level between academic program and clinical facilities
- Relationship between academic faculty, clinical educators, and students;
- Communication (eg, types, frequency, purposes, etc);
- Clinical education contracts;
- Placement of students in clinical experiences;
- Performance evaluation and grading;
- Clinical education curriculum design, including locus of control, number, length, and types of clinical learning experiences; and
- Placement of clinical experiences within the entire curriculum, and use of technology.

Stakeholder groups were identified for each major component that would be involved to facilitate the successful design, implementation, and evaluation of that component. Given that proposed changes would require modification of existing clinical education infrastructure to varying degrees of the involved stakeholders, it was critical to identify potential barriers in higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology.

EXECUTIVE SUMMARY

Member consultants struggled with the challenge of defining a preferred clinical education infrastructure that would be sufficiently flexible, yet forward-looking, to accommodate all of the stakeholder interests. Thus, consideration was given to:

- Variability in academic program missions and geographic location.
- Clinical site variety, location, and needs of employers.
- Interests of regulators and payers.
- New graduate performance outcome standards to be achieved.
- CI performance capabilities, given performance standards.
- Facilitation of the CI-student-patient team, central to providing best practice in patient care and a quality learning experience for students (pp 42-50).

Summary of Clinical Education Consensus Decisions
This section summarizes all of the issues that required extensive discussion, deliberation, and a consensus vote. It was decided that to achieve consensus 90% or more of the member consultants needed to agree to move an issue forward in the conference documentation. Thus, at least 33 of the 36 member consultants had to agree when voting on a specific issue. For each of the steps of the process (student outcome performance standards, clinical instructor standards, and preferred infrastructure, including design, delivery, and evaluation) issues were raised that warranted further discussion and deliberation, followed by a consensus vote to determine the status on the issue. In some cases, based on the consensus vote, the specific issue does not appear as a standard or preferred infrastructure, while in another situation, the issue may have achieved consensus or been modified to be able to achieve consensus. Some of the issues raised were long-standing controversial topics in clinical education and for the profession (pp 51-57).

Funding
Funding alternatives generated by member consultants as potential resources for future exploration ranged from public and private grants and foundations, health care corporations, and regional employers to the creation of a new Foundation for Clinical Education. In the key assumptions, member consultants agreed to honor 2 explicit conditions in their discussion of funding alternatives, which included:

- Funding alternatives for clinical education must recognize and, when possible, minimize the profession's vulnerability to fluctuations in health care reimbursement.
- Funding alternatives for clinical education should not increase student debt (p 58).

Conference and Consensus Outcomes
Conference participants reached agreement on recommended performance standards for new graduates, CIs, preferred clinical education infrastructure, and organization and delivery. The preferred clinical education infrastructure included key components to enable CIs to facilitate students' ability to achieve the new graduate performance expectations. Alternative options for funding physical therapist clinical education were also generated for further exploration. The outcomes of this conference serve as an initial springboard for further discussion, dialogue, and subsequent revisions. With wide input, the end product and process can be something that all physical therapist educators, whether academic or clinical, can agree is feasible to implement in both settings. In 2008-2009, continued dialogue occurred throughout the United States through regional forums and national presentations (pp 7-8).

Embracing Standards in Physical Therapist Clinical Education
A Consensus Conference on Clinical Education
APTA Department of Academic/Clinical Education Affairs

Invited Member Consultants
Thirty-six invited member consultants (Appendix B) and 15 APTA staff (Appendix C) convened in Alexandria, Virginia, for a consensus conference on developing standards for clinical education. To identify the invited representative stakeholders for this conference, 135 nominees were interviewed using a standard set of questions that were designed to ensure representation of the greatest diversity of interests. The 36 participants selected (Appendix B) represented the variety, breadth, and depth of stakeholders required to engage in the conversation about physical therapist clinical education. Stakeholders included representatives from academic and higher education (ie, deans, program directors, faculty, academic coordinators/directors of clinical education), practice (ie, employers, clinical managers, center coordinators of clinical education, clinical instructors [Credentialed and non-Credentialed]), payers, members of the public, students, Credentialed Clinical Trainers, and other professions, including pharmacy, speech-language pathology, audiology, and nursing. Representatives also reflected a broad spectrum of clinical practice settings, areas of physical therapist practice, years of practice experience (range = 0–30), academic institutional settings, geographic location, earned degrees and credentials, and clinical education delivery approaches, including clinical residency.

Background and Rationale
This conference was a logical next step resulting from the outgrowth over the past 15 years of numerous education-related initiatives that have formed an infrastructure to support the administrative, curricular, evaluative, and training aspects of clinical education. These initiatives include:

- *Guidelines for Clinical Education*[1,2,3] adopted by the Board of Directors in 2003 and initially endorsed House of Delegates in 1993.
- *A Normative Model of Physical Therapist Professional Education: Version 2004*[4], with expectations for the preferred curriculum and quality clinical learning experience based on the current integrated model of clinical education.
- *Guide to Physical Therapist Practice*[5] that defines the scope and breadth of physical therapist practice.
- *Model Position Description for the Academic Clinical Coordinator/Director of Clinical Education* (ACCE/DCE)*[6] that provides a description, in the aggregate, of the roles and responsibilities of ACCEs/DCEs.
- *Clinical Site Information Form (CSIF)*[7] that collects information about clinical education facilities for use by academic programs and students and in association with information that is provided to the Commission on Accreditation in Physical Therapy Education (CAPTE) in response to some of the evaluative criteria.
- *Clinical Education: Dare to Innovate*[8] consensus conference convened in 1998 to identify viable alternative models of clinical education.
- *Minimum Required Skills of Physical Therapist Graduates at Entry-Level*[9] based on outcomes of a consensus conference on Clinical Education in a Doctoring Profession and adopted by the APTA Board of Directors in 2005 following a modified Delphi "vote."
- A series of workgroup sessions convened during national conferences in 2006 and 2007 on Transforming Academic and Clinical Partnerships and Enhancing Clinical Mentoring. At a minimum, session participants included the triad of a program director, ACCE/DCE, and clinical manager, along with a variety of "consultants" in the profession who were

using varied clinical education models that resulted in strengthened academic and clinical partnerships and enhanced clinical mentoring for students.

- Two studies funded by APTA, as required by the House of Delegates (RC 36 A/C-01), on alternative models of clinical education, with a final report to the 2004 House of Delegates. The two models investigated included MGH Institute of the Health Profession's internship model and Nova Southeastern University's self-contained collaborative service learning model.
- Clinical Instructor Education and Credentialing Program (CIECP)[10], initiated in 1997 with outcomes related to providing quality clinical instruction for students through the planning, implementation, and evaluation components. Today, there are more than 21,400 APTA Credentialed CIs and 174 active Credentialed Clinical Trainers.
- Advanced Clinical Instructor Education and Credentialing Program (Advanced CIECP)[11] for APTA Credentialed CI physical therapists, initiated in January 2008 with outcomes directed at best clinical teaching and best clinical practice.
- *Physical Therapist Clinical Performance Instrument (PT CPI)*[12, 13]*,* which provides a consistent method of evaluating physical therapist student clinical performance since 1997. In 2006, this instrument was revised consistent with entry-level performance at the DPT level along with conversion of this instrument to a Web-based product that incorporates online training required of all system users. The PT CPI Web[14] was launched on July 15, 2008, with a standardized online training and assessment program for all users accessing this system.

Given prior efforts in clinical education, the current environment in physical therapist professional education where the majority of accredited programs award the DPT professional degree, and Goal 1 of the "Education Roadmap 2006-2020" (formerly Education Strategic Plan 2006-2020)[15], it appeared to be the time to convene a consensus conference to develop standards in clinical education. Goal 1 of the Education Roadmap and its related objectives state the following:

> **Goal 1:** Establish a clinical education system for the physical therapist (PT) and physical therapist assistant (PTA) that is fiscally sound, collaborative with other professions, and based on a partnership model between the academic program and clinical site, with mutually agreed upon standards and outcomes that support contemporary physical therapy practice.
>
> *Objectives*
> - Define the essential elements of the partnership relationship.
> - Convene all stakeholders in clinical education (clinical faculty, students, higher education administrators, payers, regulators) to devise a strategic plan with standards and outcomes and alternative models (eg, service learning).
> - Establish and implement standard expectations for what constitutes the depth and breadth of clinical education within a curriculum.
> - Establish and implement mandatory minimum standards for clinical instructors, center coordinators of clinical education, and clinical sites, including the option of completing a credentialing process.
> - Explore licensure systems that can accommodate alternative clinical education models.

INTRODUCTION

Other related issues that spurred the need for this conference included the following:

- The House of Delegates discussed several motions, including an investigation of clinical education delivery models (01), clinical instructor credentialing (07), and financing clinical education (01) that have a relationship to determining standards in clinical education.
- Within the context of APTA's Vision 2020[16,17], expectations for the performance of graduates at entry level have changed over time with conversion to the DPT.
- In general, changes in clinical education have not been congruent with degree advancement at the post-baccalaureate level.
- *A Normative Model of Physical Therapist Professional Education*[4] addressed environmental issues related to clinical education in 2004 that are still contemporary. These issues include communication, availability of clinical education sites and quality clinical educators, a rapidly changing and uncertain health care delivery system, student readiness for clinical education, financial and resource constraints, productivity and staffing patterns, accelerated growth of physical therapist education programs, and global perspectives of physical therapy within service delivery.
- By more clearly defining performance expectations of physical therapist graduates at entry level that are associated with requirements for clinical education, the profession will be able to articulate the relationship of professional clinical education to post-professional clinical residencies and fellowships.

Initially, when conceptualizing this conference, consideration was given to convening a conference that would address both physical therapist and physical therapist assistant clinical education. Upon further consideration however, recognizing the time constraints and number of critical issues needing to be addressed during this conference, only physical therapist clinical education could be managed. Likewise, member consultants would have a challenging task defining standards for the components associated with clinical education (ie, student performance outcomes, clinical instructor qualifications, relationship between the student and clinical instructor, preferred infrastructure for clinical education), given the variety of stakeholders involved in the consensus-based decision-making process. Three pivotal controlling assumptions critical to the conference decision-making process and member consultants' deliberations included:

1. Given that 87% of physical therapist education programs were accredited at the time of this conference to award the professional DPT degree[18], discussions would occur within the context of Vision 2020 and the DPT professional degree.
2. Uniformity in professional clinical education resulting from the application of standards is of greater value than differences resulting from institutional or facility prerogative.
3. The student-CI-patient mentoring relationship is essential to learning in clinical education.

Thus, discussion was framed in the context of the professional DPT degree and Vision 2020, which set the boundaries for what the graduate of professional DPT programs would need to achieve to be prepared for contemporary and future clinical practice. The second assumption purports the value and benefit of applying standards in professional clinical education, rather than each institution and facility exercising individual prerogatives related to students' learning and patient care. Finally, critical to the development of this conference and its decision-making processes was the student-CI-patient mentoring relationship that is at the heart of the clinical learning experience (Figure 1). Once student and CI performance expectations are clearly defined, then the preferred infrastructure and relationship between the stakeholders in that

infrastructure can be determined. In order to successfully set consensus-based standards for clinical education, it is necessary to articulate expected student and CI performance outcomes. To ensure successful patient outcomes and student learning, the infrastructure must support and enhance the CI-student-patient relationship. Finally, a clinical education delivery model should include both the organizational structure and methods to fund the program.

CONFERENCE STRUCTURE

Delivery

Relationship of Stakeholders

Organization

Finance

Clinical Instructor
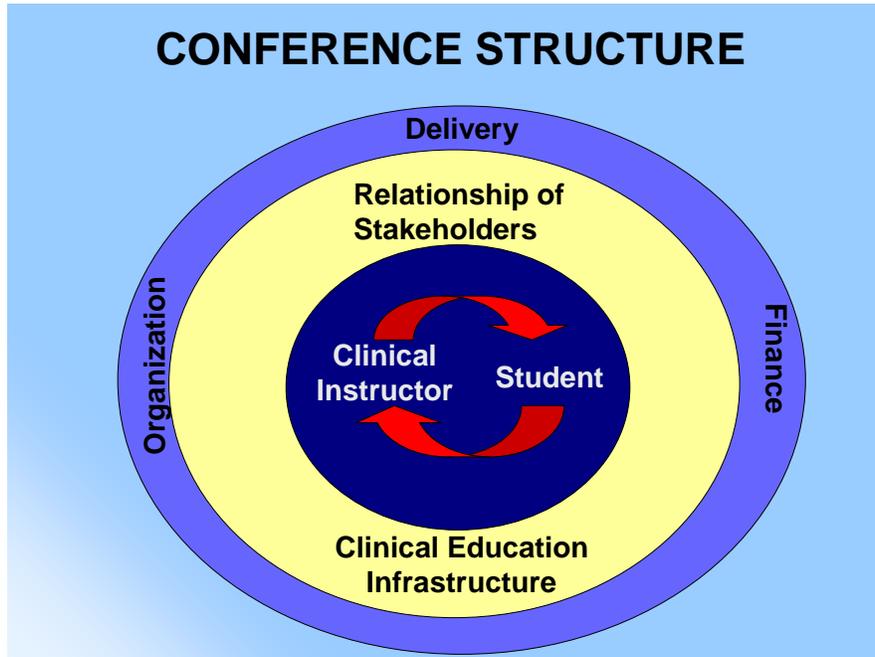
Student

Clinical Education Infrastructure

Figure 1. Consensus Conference Structural Elements

Conference Purpose
The purpose of this conference was to achieve consensus on standards for clinical education in the preparation of the physical therapist graduate, including:

1. Performance expectations for the new graduate upon entry into clinical practice, including full consideration of the current and emerging education and health care environments.

2. Expectations associated with clinical education stakeholders/groups in regard to the current and emerging education and health care environments, including:
   - Performance expectations for clinical instructors in mentoring students,
   - Relationship between academic programs and clinical facilities, and
   - Infrastructure and resources necessary to provide clinical education.

3. Preferred expectations for the organization, delivery, and funding of clinical education best suited to the achievement of the performance expectations of the new graduate.

Conference Decision-making Process
During the 3-day conference, participants engaged in a systematic decision-making process to determine the key components of physical therapist clinical education congruent with Vision 2020 and the DPT professional degree. First, the group reached a consensus on the

assumptions that would form the basis of the discussion and decision-making. "Controlling assumptions" set strict boundaries for dialogue and tasks. "Key assumptions" were viewed as important, but were considerably more general than those that were controlling. Critical professional documents such as the *Guide to Physical Therapist Practice[5]*, *A Normative Model of Physical Therapist Professional Education[4]*, and *Minimum Required Skills of Physical Therapist Graduates at Entry-Level[9]* were controlling in that these Board of Directors–approved and/or House of Delegates–endorsed documents were not open to modification or revisions as a part of the consensus process.

Key Assumptions
The following assumptions were controlling for the conference and formed the boundaries for the discussion:

- Given that 87% of physical therapist programs were accredited to award the professional DPT degree at the time of the conference[18], these discussions will occur within the context of Vision 2020 and the DPT professional degree.
- Although the performance expectations for graduates and for stakeholders involved in clinical education must be realistic and achievable, some performance expectations can be aspirational.
- Uniformity in professional clinical education resulting from the application of standards is of greater value than differences resulting from institutional or facility prerogatives.
- Physical therapist education programs will prepare graduates to achieve the performance expectations even where those expectations exceed those of an individual institution or facility.
- The capabilities of current PT practitioners should not minimize or compromise the expectations of future physical therapist practitioners.
- The student-CI-patient mentoring relationship is essential to learning in clinical education.
- The new graduate is prepared for general practice.
- Funding alternatives for clinical education must recognize and, when possible, minimize the profession's vulnerability to fluctuations in health care reimbursement and should not increase student debt.
- Consensus on the performance expectations of new graduates will require a 90% level of agreement among member participants.
- The outcomes of this conference will be shared with the education community and other interested stakeholder groups to achieve a broader consensus on standards for clinical education within doctoral professional education and Vision 2020[16].

Decision-making Process Steps
The conference used a structured process to ensure thoughtful and reflective discussion and deliberation about essential components of clinical education delineated by the conference purpose. Although some of the decision-making steps were completed in workgroups to ensure that issues were addressed thoroughly and comprehensively, all of the work completed by workgroups was subsequently discussed and vetted among all participants to reach consensus, where feasible.

Step 1: Review Controlling Assumptions and Performance Expectation Categories Based on APTA Framing Scenario
  Q1: Are there any missing or inappropriate categories?

Step 2: Identify the Performance Expectations for the New Graduate for the Assigned Performance Categories

Q1: What behaviors would you see if the new graduate's performance reflected the performance category?

Q2: Is the performance behavior achievable in all settings and situations?

Q3: Describe how the environmental factors (ie, higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology) limit the achievement of the performance expectation.

Resources Used to Assist in Identifying Expectations for Student Outcomes:

Taxonomy of Educational Objectives[19]

Professionalism: Core Values[20]

Minimum Required Skills of Physical Therapist Graduates at Entry-Level[9]

PT CPI 18 Performance Criteria[13]

Generic Abilities[21]

A Normative Model for Physical Therapist Professional Education: Version 2004[4]

Guide to Physical Therapist Practice[5]

Good Medical Practice – First Draft, National Alliance for Physician Competence[22]

Step 3: Final Test

Q1: Are performance expectations at the proper level for the entry-level new graduate?

Q2: Are performance expectations clear and comprehensive?

Q3: Do performance expectations in the aggregate reflect consideration of all of the assigned categories?

Q4: Could every new graduate meet all of the performance expectations?

Step 4: Identify Clinical Instructor (CI) Performance Expectations for Student-Patient Mentoring to Ensure Achievement of New Graduate Performance Expectations

Q1: If warranted, revise any performance expectation for the new graduate during this process.

Q2: If there are missing categories, add them to the table and complete the matrix.

Q3: What are the revised performance expectations of clinical instructors to ensure achievement of new graduate performance expectations?

Q4: How do current environmental factors (ie, higher education, health care facilities, the physical therapy profession, financial/economic conditions, and technology) limit achievement of CI performance expectations?

Step 5: Review of Performance Expectations for New Graduates and CIs

Q1: Are the performance expectations workable?

Q2: If not workable, revise the performance expectations.

Step 6: Identify the Preferred Infrastructure to Achieve Performance Expectations for the New Graduate and Clinical Instructors

Consider the relationships between clinical facilities and academic programs; connectivity between academic faculty, clinical educators, and students; communication; locus of control; clinical education curriculum; placement of students; length, types, and number of clinical learning experiences; placement of clinical education experiences within the entire curriculum; clinical education contracts; and performance evaluation and grading.

Q1: What is the preferred expectation for the infrastructure component?

Q2: Who are the stakeholders (eg, academic faculty, ACCE/DCE, program director, academic program, clinical educators, CI, CCCE, clinical facility, patient, family/caregiver, payer) involved in the preferred infrastructure component?

Q3: Is the preferred expectation feasible in light of the current environmental demands (ie, higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology)?

Q4: Describe how the current environment (higher education, health care/facility, physical therapy profession, financial/economic conditions, and technology) limits achievement of the preferred infrastructure component.

Step 7: Expectations for the Organization, Delivery and Funding of Clinical Education
Consider supervisory approach of students, delivery approaches for clinical education at different levels within the curriculum, sequencing of learning experiences, licensure, and methods for funding clinical education for all stakeholders.

Q1: What would be the expectations for organizing, delivering, and funding clinical education, given the environmental factors limiting clinical education, new graduate and CI performance expectations, and the preferred infrastructure?

Step 8: <u>Preferred</u> Expectations for the Organization, Delivery, and Funding of Clinical Education
Q1: What would be the preferred organization, delivery, and funding of clinical education?

Step 9: Achieve Consensus on Performance Expectations for the New Graduate and for Clinical Instructors
<u>Convert Performance Expectations Into Standards</u>
- Examples of standards for new graduates (eg, "The new graduate will…")
- Examples of standards for stakeholders/groups (eg, "The CI will…")

Step 10: Achieve Consensus on the Preferred Infrastructure for Clinical Education
Q1: What do we need to change in the future to achieve the preferred infrastructure?
Q2: If unable to change the infrastructure, how would we suggest modifying the preferred infrastructure?

<u>Conference Outcomes</u>
Participants reached agreement on recommended performance expectations for new graduates and clinical instructors (CIs). For CIs, consensus addressed level of clinical competence; minimum required years of clinical experience; currency in knowledge about professional policies, procedures, guidelines, code of ethics, and jurisdictional law; and required training as a clinical instructor, including as an APTA Credentialed CI or equivalent. In addition, participants agreed on the preferred clinical education infrastructure, as well as the key components of organization and delivery of clinical education that would enable clinical instructors to help students achieve the new graduate performance expectations. In addition, member participants offered alternative options for funding physical therapist clinical education for future exploration. It is important to note that measurement of student and CI outcome performance standards were not part of the conference outcomes, as this requires far more time and resources than this conference allowed. As an aside, the section on preferred infrastructure alludes to the development of a mechanism for students to track the achievement of the minimum skills throughout clinical education.

INTRODUCTION

Member participants are reviewing specific outcome draft documentation resulting from this conference for accuracy and clarity prior to the information being disseminated to a larger audience. The outcomes of this conference serve as an initial springboard for further discussion, dialogue, and subsequent revisions. With wide input, the end product and process can be something that all educators of physical therapist students, whether academic or clinical, can agree is feasible to implement in both settings. This dialogue occurred throughout the United States in 2008 and 2009 using a variety of mechanisms including national conferences, regional forums, and other mechanisms.

<u>Consensus Outcomes</u>

1. **Achieved consensus ($\geq$90% agreement) on recommended performance standards for:**
   - ✓ New graduates
   - ✓ Clinical instructors

2. *Achieved consensus ($\geq$90% agreement) on **preferred:***
   - ✓ Clinical education infrastructure, organization and delivery key components to enable CIs to help students achieve the new graduate performance expectations.

3. **Identified future alternative options for funding physical therapist clinical education that require further exploration.**

4. **Prepared outcome documentation from the conference.**
   - ✓ Participants will review outcome draft documentation for accuracy, completeness, and clarity.
   - ✓ Individuals interviewed but not selected for this conference, due to resource limitations, will be able to review and comment on the clarity of the draft documentation.
   - ✓ Outcome documentation will be made widely available to all interested stakeholders, including academic and clinical educators, employers, clinical managers, CCCEs, component leaders, Board of Directors, etc.

INTRODUCTION

<u>Regional Forums and National Presentations (February 2008 – October 2009)</u>

After sharing the final draft outcome documentation[23] with all consensus conference participants, the document was made widely available through the APTA Web site. Between February 2008 and October 2009, 15 regional forums were held throughout the United States, in addition to two 90-minute national presentations at the 2008 APTA Combined Sections Meeting and the 2009 Annual Conference & Exposition. In total, approximately 1,000 persons were involved in discussions of the draft clinical education standards.

Regional forums were cosponsored with clinical education consortia, state clinical education special-interest groups, and/or academic programs that volunteered to host a day-long program on this topic. Appreciation is given to all of the hosts sites for all of their time and effort in coordinating forum planning, marketing, invitations, and refreshments. With their collaboration, more than 800 participants were involved in discussions about clinical education standards that represented all stakeholders involved in clinical education. Participants included physical therapist and physical therapist assistant academic educators (academic administrators, ACCE/DCE, and faculty), clinical educators (CIs and CCCEs), managers, employers, clinical residency/fellowship faculty, students, and, where available, payers, physical therapist assistants, state licensure board representatives, and other health care professionals. Participants offered specific comments and suggestions to the new graduate outcome performance standards and the clinical instructor standards to clarify, organize, format, and revise the documents. In addition, participants described opportunities and resistances to achieving outcomes associated with a preferred organization and delivery of clinical education.

The following document integrates revisions including language, reorganization, and expected level of performance that were guided by the prevailing view of the majority ($\geq$70%) of the stakeholder participants from across the regional forums. In some cases, a straw vote was taken on performance expectations that were controversial during the conference to obtain a larger perspective about these issues across the country. This revised document was provided in a report to the APTA Board of Directors in March 2010.

Please note that this document reflects a consensus view of the approximately 1,000 individuals who were willing and able to participate in the refinement of these clinical education standards. However, there may be other perspectives from those involved in clinical education that were unable to participate at one of these forums. This document provides a consensus view about where physical therapist academic programs may determine how and if they choose to work toward these voluntary clinical education standards. The document does not in any way legislate or dictate changes that must occur in clinical education. It does, however, provide a framework for physical therapist academic programs and their respective clinical education sites that may be used to further discussion and future changes in clinical education based on the thoughts and deliberations of more than 1,000 individuals with a vested interest in clinical education.

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

The table below identifies the revised outcome performance principles for physical therapist graduates that reflect the consensus of member consultants and participants from the regional forums who provided further refinement and enhancements. The left column identifies the 26 categories for which the principles were delineated as found in the middle column. The right column provides a description for how current environmental factors may potentially limit the achievement of the physical therapist graduate performance principles. The environmental factors were related to higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology. Environmental factors are explained further in the key below. Where feasible, categories are grouped by related content and not in any order of priority. Items defined in the Glossary are marked with an asterisk (*). Although concepts related to cultural competence were initially woven throughout the document, consensus from forum participants was to highlight knowledge, skills, and behaviors related to cultural competence under its own content category to reduce repetition throughout the document.

Key to Environmental Factors:
Higher Education (HE) (includes current and future directions, resources, faculty, students, demographic trends, applicants, curriculum)
Health Care/Facility (HCF) (includes political climate, reimbursement, interprofessional roles, current and future trends, productivity demands, patient demographics, etc)
Physical Therapy Profession (PTP) (includes scope of practice, current and future directions and Vision 2020, roles and responsibilities)
Financial/Economic Conditions (FE) (includes funding for higher education, funding for health care, student debt, etc)
Technology (Tech) (includes use and access to technology, electronic documentation, online learning, discussion boards, etc)

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
1. Autonomous Practice* and Direct Access*	1. Understand, recognize, and practice within federal and state rules and regulations (what are the "rules" re: health policy* [practice acts, rules and regulations, reimbursement policy, federal laws such as HIPAA[24]*, etc.]) in terms of licensure, practice management*, and *Minimum Required Skills of Physical Therapist Graduates at Entry-Level*[9 (pp 14-15)]. 2. Recognize whether or not a patient/client has a need for skilled PT services. 3. Recognize scope of practice and refer as appropriate within and outside of physical therapy. 4. Identify individual role and responsibility for case management*. 5. Develop, articulate, and justify clinical hypothesis/differential diagnosis* selected.	HCF • Inability to access some of the information we need about the graduate's ability to function as an autonomous practitioner with direct access. • Inconsistent in our use of correct terminology to describe what we do as physical therapists (order vs. referral). • Some states do not have direct access. PTP • Autonomous practice is not transparent in all practice settings. • Inability to be recognized by payers and others as autonomous practitioners. • Inconsistent understanding of the definition of autonomous practice.

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	6. Be self-directed with current knowledge and seek assistance in unfamiliar/uncomfortable areas. 7. Participate actively in Interprofessional team care. 8. Advocate for direct access in all states/jurisdictions and for autonomous practice in all practice settings. 9. Recognize organizational arrangements that undermine independent decision making. 10. Utilize evidence-based processes that consider the developmental aspects of clinical decision-making and care relative to patient outcomes. 11. Provide competent care in collaboration, as appropriate, with other practitioners across a variety of clinical contexts and encounters, independent of source of referral (point of access). 12. Conduct patient/family/caregiver-centered conversations with the patient/client about cost/payment policy options (eg, level and type of reimbursement) in relation to referral or recommended plan of care*, and adjust care in relation to the outcome of the patient/client discussion to achieve the optimal outcome.	• Variability in the current professional culture about autonomous practice and its role in physical therapy. • Inconsistent application of the *Guide*. • Inability to make a differential diagnosis (referral to others, diagnostic testing and pharmacology) legally. • Some states do not have direct access. • Patient/family/caregiver-centered discussions about reimbursement and plan of care are not routinely performed.
13. Documentation	1. Produce defensible documentation (ie, accurate, complete, timely) that follows professional guidelines, guidelines required by health care systems, state practice acts, and guidelines required by the practice setting to support the delivery of physical therapy services (includes appropriate correction of documentation errors). 2. Use legible and appropriate grammar, syntax, spelling, and punctuation in communication (ie, paper and electronic). 3. Use appropriate terminology and institutionally approved abbreviations. 4. Use an organized and logical framework for documentation (eg, *Guide to Physical Therapist Practice* [5] [(Appendix 5)] that encompasses the patient's status, clinical decision-making and clinical reasoning processes,	HCF • Use of standard abbreviations within health care facilities. • Demands for increased productivity results in limited time and quality documentation. PTP • Variability in current practicing clinicians' documentation skills. • Inconsistency in user-friendly documentation and documents. HE • Documentation is not adequately taught in professional education. Tech

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	and level of professional judgment to determine the plan of care and meet requirements of the practice setting and the reimbursement system. 5. Interpret documentation accurately from other health care professionals. 6. Ensure establishment of a physical therapist of record and portability of a patient record.	• Infrequent use or lack of use of available technology by clinicians. • Current technology for documentation is not user-friendly, limits choices (too detailed, lists, and check boxes), and is not standardized. • Current technology for documentation is not user-friendly to payers.
3. Practice Management* and Quality Assurance	1. Accept responsibility to manage risks associated with the practice of physical therapy. 2. Participate in risk management program for self, peers, and setting/institution. 3. Describe the relevance and impact of institutional accreditation (eg, Joint Commission or CARF) or licensing (eg, skilled nursing facilities) on the delivery of physical therapy services. 4. Understand how contractual rates are negotiated on individual and organizational levels and how they impact practice decisions. 5. Discuss implications and consequences to the patient/client*, the facility, and third-party payers of different payment methodologies (ie, benefits, risks, costs, and incentives*) and their impact on clinical decisions. 6. Demonstrate all items under Practice Management under *Minimum Required Skills of Physical Therapist Graduates at Entry-Level*$^\rho$ including Billing/Reimbursement, Documentation of Care, Quality Improvement*, Support Personnel, Marketing and Public Relations, Patient Rights, Patient Consent, Confidentiality, and Health Insurance Portability, Informatics, Risk Management, and Productivity. 7. Self-assess and understand personal scope of practice. 8. Understand steps for assuring quality*. 9. Apply principles of quality* improvement to improve care professional and organizational outcomes. 10. Recognize the need for (ie, when patient is appropriate for	PTP • Perception of practitioners that a new graduate is not prepared or capable of managing a practice. HE • Variability in physical therapist professional curriculum. HCF • Since the student is not an employee, it may restrict access to information to assess quality improvement/assurance. • Limitations in access to information based on HIPAA requirements. Tech • Access to information needed to conduct quality assurance may be limited by technology.

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

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	inclusion) and be able to perform independent quality measure reporting (eg, OPTIMAL[25], SF-36[26]). 11. Seek continuous improvement in quality of care. 12. Assume responsibility to be an integral part in the continuing management of patients*/clients*.	
4. Billing, Coding, and Reimbursement	1. Describe the legal/ethical ramifications of billing and implement in patient/client management. 2. Correlate/distinguish between coding, billing and reimbursement. 3. Adhere to legal and ethical billing practices. 4. Billing/reimbursement options investigated within the plan of care. 5. Use correct and accurate intervention* and diagnostic codes (ie, International Classification of Diseases* [ICD], International Classification of Functioning, Disability* and Health [ICF][27], Healthcare Common Procedure Coding System [HCPCS][28], and Current Procedural Terminology [CPT][29]) for billing and seek assistance where needed. 6. Participate in the financial management (billing and reimbursement) of the physical therapy service consistent with regulatory, payer, legal, and facility guidelines. 7. Advocate for scope of practice using evidence to support reason for payment. 8. Request and confirm authorization for clinically necessary reimbursable visits. 9. Justify changes needed in individual patient benefits with reimbursement entities or decision makers, including follow-up on a denial or requesting additional services such as durable medical equipment (DME). 10. Describe the implications of insurers' use of the *Guide to Physical Therapist Practice*[5] on billing and reimbursement. 11. Submit billing charges accurately and on time with defensible documentation.	PTP • Perception among clinicians that billing and coding "is not my job." • Frequency of new changes in billing and coding make it difficult to keep current; trying to keep pace with a moving target. • Ethical issues of fraud and abuse associated with billing and coding. FE • Frequency of new changes in billing and coding make it difficult to keep current; equated with managing a moving target.
5. Business Resource Management	1. Set priorities for the use of resources and reorganize as needed to maximize patient and facility outcomes.	PTP • Inconsistent and infrequent access to the

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	2. Use scheduled time with each patient effectively. 3. Direct care to the PTA and appropriately delegate tasks to other support personnel. 4. Adhere to patient's schedule and accommodate unexpected changes in the facility's requirements for cost-effectiveness*. 5. Analyze personal productivity in the context of patient outcomes using the clinical facility's system with strategies to improve evidence-based quality of patient/client care. 6. Use current information technology, including word-processing, spreadsheets, and basic statistical software. 7. Provide patients/clients with cost of services as it relates to payment to deliver patient/client care, where feasible. 8. Use evidence when selecting appropriate equipment for interventions and for patients/clients. 9. Manage and use clinic resources (ie, space, personnel, equipment) effectively. 10. Coordinate physical therapy with other services to facilitate efficient and effective patient care. 11. Respond to patient/client goals* and needs while being responsive to costs. 12. Integrate concepts of cost effectiveness at individual, organizational, and societal levels. 13. Be aware of the economic impact of physical therapy services on patients/clients, health care providers*, organizations, and society.	literature, available knowledge, and supportive informatics. • Lack of knowledge about the actual costs of providing physical therapy services. • Resistance within the physical therapy professional culture regarding change; "not the way we have done things." HCF • Productivity expectations with respect to the use of group activities.
6. Evidence-based Practice*	1. Use multiple sources of information related to physical therapist practice, research, and education* consistently and critically and apply knowledge from these information sources in a scientific manner to support professional practice and decisions. 2. Access current literature using databases and other resources to answer clinical/practice questions. 3. Integrate the best available evidence consistently from sources of information with patient/client values and	PTP • Limited number of practitioners contributing to the evidence for physical therapist practice through written systematic reviews of evidence or written descriptions of practice. • Lack of a supportive environment for the CI and/or clinical manager to access evidence on premise and to encourage discussion of the evidence as it relates to patient/client plan of

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

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	practitioner clinical judgment/expertise to determine the best care for a patient/client and to support professional decisions. 4. Apply current knowledge, theoretical constructs, models, and professional judgment consistently while engaging the patient/client/family/caregiver in the discussion of the evidence to incorporate their perspective in clinical decision-making and patient/client management. 5. Define the limits/efficacy of current literature in its application to professional practice; use this information to self-assess where knowledge of current literature is lacking. 6. Demonstrate an understanding of varying approaches to clinical decision-making and that there may be more than one answer to any problem. 7. Improve clinical reasoning* to minimize errors and enhance patient/client outcomes. 8. Share expertise and knowledge with others related to using and accessing new knowledge and evidence. 9. Contribute to excellence* by advancing evidence in practice through a variety of mechanisms such as written scientific reviews and descriptions of practice, case reports, journal clubs, clinical pathways and protocols, clinical guidelines, Hooked on Evidence, etc. 10. Participate in the design and implementation of patterns of best clinical practice for various populations.	care. ● Lack of evidence or research and outcome measurement data. HE ● Limited number of practitioners contributing to the evidence for physical therapy practice through written systematic reviews of evidence or written descriptions of practice. HCF ● Limited access to current research. ● Demands on clinicians' time limits participation in "non-productive" tasks (ie, researcher, reading articles, etc). ● Infrastructure is an impediment at some clinical settings to approve research (no internal IRB or administration does not approve patient-based research).
7. Screening*	1. Use screening forms during initial examination* and review these forms with the patient/client. 2. Perform a review of systems* (ie, musculoskeletal, neurological, cardiovascular pulmonary, integumentary, gastrointestinal, genitourinary, smoking, general constitution, etc) using differential diagnosis to rule out serious pathology and refer to the appropriate health professional.	PTP ● Inconsistency in modeling patient screening in physical therapist practice. ● Unfamiliarity by patients with physical therapists performing screening. ● Perception by physical therapists that screening is "not our role." ● Screening has not been developed and

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	3. Demonstrate competence in performing all skills associated with screening as included in the *Minimum Required Skills of Physical Therapist Graduates at Entry-Level* [9 (pp 2-3)] as well as areas such as obesity, smoking, drinking, etc. 4. Recognize the limits of one's knowledge or expertise and seek assistance or make referrals as necessary. 5. Determine with each patient encounter, the patient's need for further examination or consultation* with a physical therapist or referral to another health care professional.	embraced by all practice settings given some legal restrictions in some states. • Infrequency of inclusion of "screening - review of systems" as a part of the learner's clinical education experience. HCF • Productivity demands of the physical therapist may limit the frequency with which screening is conducted by the physical therapist. HE • Infrequency of inclusion of screening as a part of the learner's clinical education experience.
8. Examination* (Patient/Client Management)	1. Examine patients/clients by obtaining a history* from them and from other sources. 2. Incorporate the sociocultural, psychological and economic influences on the patient/client/family/caregiver's life in their environment. 3. Incorporate a patient/client's perspective in the examination. 4. Examine patients/clients by performing screening and utilizing appropriate resources to select and administer tests and measures*. 5. Perform a physical therapy examination using available evidence-based tests and measures. 6. Demonstrate competence in performing all skills associated with examination/reexamination* as included in the *Minimum Required Skills of Physical Therapist Graduates at Entry-Level* [9 (pp 3-6)].	PTP • Not all clinical education settings may provide experience in examination skills across all systems and life span. • Not all clinical settings may use formal tests and measures with examination skills. HE • Not all clinical education settings may provide experience in examination skills across all systems and life span.
9. Evaluation* (Patient/Client Management)	1. Evaluate data from the patient examination (history, systems review, and tests and measures) to make clinical judgments regarding patients/clients. 2. Demonstrate competence in all skills associated with evaluation as included in the *Minimum Required Skills of*	PTP • Shift in physical therapist practice has not moved to the ICF model. • ICF model endorsed by the 2008 House of Delegates.

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Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	Physical Therapist Graduates at Entry-Level [9 (p 6)]. 3. Synthesize available data expressed in terms of the *International Classification of Function*, Disability, and Health (ICF)*[27] model to include body systems, functions, activity, and participation. 4. Reach clinical decisions efficiently, seeking guidance when necessary.	
10. Diagnosis* (Patient/Client Management)	1. Integrate the examination findings to classify the patient/client problem in terms of a body structure, function, activity, and participation (ie, ICF). 2. Identify and prioritize limitations in body structure, function, activity, restrictions, and limitations in participation to determine a specific body structure, function, activity, and participation towards which the intervention will be directed. 3. Identify the appropriate context in which to use different versions of diagnostic classification systems. 4. Determine a diagnosis that guides future patient/client management. 5. Obtain additional diagnostic information to assist in refining and narrowing the diagnosis. 6. Acknowledge and articulate individual limitations related to the diagnostic process*. 7. Demonstrate reflective practice* in the diagnostic process. 8. Determine effectiveness of the tests and measures and movements in establishing a diagnosis and in guiding the resultant plan of care. 9. Develop, articulate, and justify clinical hypothesis/differential diagnosis selected. 10. Openly explore, critically analyze, and discuss various ideas related to establishment of a diagnosis.	**HCF** • Lack of clinical experience, especially with reflective practice (duration, type, and exposure to diagnoses). • Limitations in the diagnostic process for short-term care and with the immediacy of care. • Variability in the diagnostic process across clinical settings. • Variability in the volume and patient productivity demands (high or low) by geographic area and setting. • Limited exposure to certain patient/client diagnoses may occur due to CI selection of patients/clients. **PTP** • Limitations in licensure and health care policy may restrict the practitioner's ability to diagnose based on scope of practice. • Confusion of practitioners between classification systems (eg, LBP) versus diagnosis. **HE** • Limitations in exposure to the diagnostic process in physical therapy based on student-driven selection of clinical experiences.

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Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
11. Prognosis* (includes Plan of Care) (Patient/Client Management)	1. Determine a prognosis that guides future patient/client management and disposition (eg, setting, rationale) 2. Integrate data to arrive at an accurate prognosis with regard to intensity and duration of interventions and discharge* status. 3. Establish a physical therapy plan of care that is safe, effective, culturally sensitive, evidence-based, and patient/client/family/caregiver-centered. 4. Collaborate with patients/clients, family members, payers, other professionals, and other individuals to determine a plan of care that is acceptable, realistic, culturally sensitive, and patient/family/caregiver-centered. 5. Consider and respond to patient's goals and needs in the context of the patient, clinic, and third-party resources. 6. Incorporate in the plan of care the sociocultural, psychological, and economic influences on the patient/client's life in their environment and respond accordingly. 7. Empower patients/clients to achieve the highest level of function and greatest well-being possible and to exercise active involvement and self-determination in their care. 8. Determine patient/client goals and outcomes within available resources, and specify expected length of time to achieve the goals and outcomes. 9. 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. 10. Monitor and adjust the plan of care in response to patient/client status and modify diagnoses when appropriate. 11. Demonstrate competence in all skills associated with interventions including plan of care as identified in the *Minimum Required Skills of Physical Therapist Graduates at Entry-Level* [9 (pp 7-8)].	**HCF** • Degree to which prognosis is established is highly dependent on the clinical experience. • Prognosis is increasingly driven by number of available visits/treatment and reimbursement, thereby limiting patients to a number of assigned/approved visits instead of best practice. • Lack of flexibility in distribution of allowed visits/treatments driven by reimbursement. **PTP** • Lack of data to support number of visits/treatments needed per patient diagnosis. • Limitations in practice culture that permits patients/clients to determine the extent of their care. **HE** • Degree to which prognosis is established is highly dependent on the clinical experience.

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
12. Safe and Skilled Interventions (Patient/Client Management)	1. Apply sound clinical reasoning and the use of evidence in the selection of interventions. 2. Perform physical therapy interventions in a competent manner to achieve patient/client goals and outcomes. 3. Practice using principles of risk management (eg, develop interpersonal relationship with patients; minimize risk to patient, self, and others; participate in quality assurance; complete incident reporting). 4. Preserve the safety, security, and confidentiality of individuals in all professional contexts. 5. Respond effectively to patient/client and environmental emergencies in one's practice setting. 6. Adapt delivery of physical therapy services with consideration for patients' differences, values, preferences, and needs. 7. Design patient/client programs/interventions that are congruent with patient/client needs and health literacy*. 8. Exhibit caring, compassion, and empathy* in providing interventions to patients/clients. 9. Provide effective and competent instruction to patients/clients and others to achieve goals and outcomes. 10. Demonstrate competence in all skills associated with prognosis including plan of care as identified in the *Minimum Required Skills of Physical Therapist Graduates at Entry-Level* [9 (pp 8-13)].	HE • Uncertainty whether every student must have all minimum skills completed on the list at entry-level. • We currently do not have a mechanism for knowing that every PT can perform the Minimum Required Skills of Physical Therapist Graduates at Entry-Level. • Limitations in licensure, state practice acts, and scope of practice may affect ability to provide all interventions on the minimum skills list to students. • Variations in physical therapist curriculum about intervention instruction. • Variation in equipment used to teach interventions. • Present structure of physical therapist academic and clinical education does not allow individual academic programs to set their minimum skills given variability in the number of clinical sites and timing of clinical experiences. PTP • Lack of a definitive mechanism to know that every physical therapist graduate can perform the Minimum Required Skills of Physical Therapist Graduates at Entry-Level. • Variations on available equipment for providing interventions in different practice settings HCF • Variation in the available equipment used to provide interventions in clinical practice. • Present structure of physical therapist academic and clinical education does not allow individual clinical facilities to set their minimum

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
		skills given variability in academic program curricula and timing of clinical experiences.
13. Outcomes Assessment* (Patient/Client Management)	1. Select outcome measures to assess individual and collective outcomes of patients/clients 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. 2. Select and use outcome measures that are valid, reliable, and shown to be generalizable to patient/client populations being studied. 3. Update solutions to problems based on current research and accept responsibility for implementing solutions. 4. Use analysis* from individual outcomes measurements to modify the plan of care. 5. Demonstrate competence in all skills associated with Outcomes Assessment identified in the *Minimum Required Skills of Physical Therapist Graduates at Entry-Level* [9 (p 13)].	HCF • Limited by exclusive use of predetermined facility outcome measures. • Outcome measures may not be used by all clinical facilities. • Potential threat for the clinical instructor if unfamiliar with the outcome measures. • Lack of funding by the facility to purchase outcome assessment instruments. • May require an approval processes by a facility to use an outcome tool in the facility-based documentation. • Limitations in available time due to productivity demands may limit the use of outcome assessment instruments. Tech • Limited access to technology to perform outcome assessments.
14. Health Policy*	1. Describe mechanisms for developing health policy at local, state, or federal levels. 2. Interpret and apply national public health care initiatives into practice, including with patients/clients. 3. Collaborate with practitioners to consistently work toward best practice in physical therapy. 4. Engage in efforts that may influence legislation and political processes related to health policy (eg, grassroots advocacy, writing letters to legislators, visits to legislators, voting, etc). 5. Advocate for the individual patient/client's need for quality care. 6. Advocate for public policy that improves public health. 7. Advocate for the health and wellness* needs of society.	PTP • Variability in clinicians' knowledge and attitude regarding health policy issues. • Lack of fear of consequences in physical therapist practice related to health policy. • Apathy about involvement in health policy issues.

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Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	8. Engage and show leadership in community organizations and volunteer services.	
15. Cultural Competence*	1. Elicit the "patient's story"* when taking a history to avoid stereotypical assumptions and to provide care in a non-judgmental manner. 2. Describe federally mandated requirements associated with *Culturally and Linguistically Appropriate Services (CLAS)*[30]*. 3. Determine personal biases, via self-assessment or critical assessment of feedback from others, and refrain from acting on one's social, cultural, gender, and sexual biases. 4. Be aware of his or her level of cultural competence. 5. Adapt access to and delivery of physical therapy services with consideration for patients/clients/families/caregivers' health and socioeconomic disparities* (eg, access to care, regional data, epidemiologic studies), health literacy, and patient differences, values, preferences, and needs. 6. Access pertinent information about various cultures. 7. Recognize individual and cultural differences and adapt behavior accordingly with families, colleagues, and other health professionals. 8. Use a framework of cultural competence* in practice. 9. Demonstrate respect for others by considering others as unique and of value. 10. Incorporate an individual/family/caregiver's perspective and respect his or her emotional and psychological aspects of care. 11. Use people-first language in all communications. 12. Identify possible communication barriers and seek methods to provide effective communication (eg, using a translator/interpreter). 13. Access and use an interpreter/translator effectively in communicating with patients/clients, family, and caregivers.	PTP ● Majority of physical therapists are not multilingual. ● Perception by practitioner that "I am already culturally competent." ● Diversity within the physical therapy profession is limited. FE ● Costs associated with interpretation nuances as related to various cultures. HE ● Lack of time within the physical therapist professional curriculum to integrate cultural competence.

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Categories	The physical therapist* graduate will…	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
16. Direction, Supervision, and Delegation	1. Supervise the PTA and/or other support personnel based on legal, regulatory, and ethical requirements for direction and supervision. 2. Differentiate those physical therapy services that can be directed to the PTA and delegated to other support personnel according to jurisdictional laws and regulations, practice guidelines and best practice, codes of ethics, facility policies, professional policies and positions, and payers. 3. Communicate respectfully and distinguish between direction to a PTA and delegation to other support personnel in ways to facilitate cooperation and collaboration. 4. Maintain responsibility for patient/client care by monitoring care and patient progression provided by physical therapist assistants* and services provided by other support personnel. 5. Design a patient plan of care that appropriately utilizes and directs patient/client interventions by the PTA as a part of the PT-PTA team. 6. Assess the abilities of the PTA in effectively providing components of interventions according to his or her knowledge and skill, the level of patient acuity and complexity*, and degree of risk management. 7. Seek out and confer with the PTA regarding interventions delivered and outcomes to determine if modifications to the plan of care are needed. 8. Addresses concerns about services provided by PTA and other supportive personnel.	HCF • Unethical or uninformed practice regarding direction, supervision, and delegation of PTAs and support personnel. • Lack of quality mentors providing mentored independence and able to support questions. • Productivity demands may lead to inappropriate utilization of PTAs and support personnel. • Health care infrastructure supports more cost-effective ways to provide patient care, leading to inappropriate utilization of PTAs and support personnel. HE • Poor communication with the clinical site regarding clear student performance expectations as related to the student's ability to direct, delegate, and supervise PTAs and support personnel. • Limited time for students to demonstrate clinical competence may shortchange this area. • Inability of student to self-assess their skills. Tech • Limited face-to-face interactions may lead to misuse of PTA and support personnel.

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Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
17. Interpersonal Skills	1. Demonstrate integrity in interactions with patients/ clients, family members, caregivers, other health care providers, students, other consumers*, and payers. 2. Identify, respect, and act with consideration for patients/clients' differences, values, preferences, culture, and expressed needs in all professional activities. 3. Respect the knowledge and contributions of others by conveying intellectual humility and confidence in professional and interpersonal situations. 4. Adapt behaviors in response to appropriate situational needs and appropriate requests of others. 5. Seek and responds to feedback from patients, colleagues, and others, and modifies behavior accordingly. 6. Provide constructive feedback to patients, colleagues, supervisors, and others to modify behavior. 7. Demonstrate unconditional positive regard* for the CI and others as it relates to their physical therapy care.	HE • Inability of student to self-assess their skills. • Unwillingness of student to be open to learning how to change interpersonal skills. HCF • Lack of flexibility of students and mentors in addressing interpersonal skills. • Inability of faculty to model how to: discuss issues in conflict, take risks, and admit he or she "does not know."
18. Communication	1. Effectively communicate in ways congruent with situational needs by adapting communication (verbal, nonverbal, and written) to meet the needs of different audiences. 2. Communicate, expressively and receptively, in a culturally sensitive manner with patients/clients, family members, caregivers, colleagues, other health care professionals and team members, consumers, payers, and policymakers. 3. Use appropriate professional communication (grammar, syntax, spelling, legibility, and punctuation) in all situations. 4. Demonstrate open, honest, constructive, and assertive communication (verbal, nonverbal and written) using people-first language. 5. Demonstrate closed-loop communication.	PTP • Productivity demands on the practitioner/CI may lead to compromised communication as a role model. HCF • Productivity demands may lead to inconsistent and poor communication due to competing demands. • Limited recognition of different situational contexts and audiences that influence communication. HE • Productivity demands may lead to inconsistent and poor communication due to competing demands. • Preparation of students related to the

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		importance of communication skills may be de-emphasized, including the proper use of medical terminology and "slang" abbreviations.
19. Teaching and Learning	1. Educate others (patients/clients, family/caregivers, staff, students, other health care professionals, business and industry representatives, school systems, public/community, payers) effectively using relevant and appropriate teaching methods and supporting evidence commensurate with and that adapt to the needs of the learner (eg, learning styles) throughout the lifespan. 2. Effectively use teaching methods that consider health literacy and the needs of the learner. 3. Assess learning styles of patients and adapt teaching preferences to meet the patient/client's needs accordingly. 4. Assess learning outcomes and modify as indicated to achieve educational objectives*. 5. Assess teaching to determine if learning objectives for the patient have been met. 6. Use knowledge and experience to foster growth in others in areas such as evidence-based practice skills, foundational knowledge, core professional documents, and the use of technology. 7. Assess personal learning needs. 8. Assess teaching effectiveness with different learners (eg, patients/clients, staff, family/caregivers, students, other health care professionals, business and industry representatives, school systems) and in different contexts. 9. Distinguish attributes of an effective mentor/mentee relationship. 10. Demonstrates knowledge of the skills and behaviors required to function as a clinical instructor*. 11. Advocate for the development, implementation, and/or enhancement of a clinical education program.	**HCF** • Limited available time and productivity demands affect time available to teach students. • Resistance by some practitioners to be willing to serve as clinical educators for students due to time commitment and other constraints. • Variability in students' confidence and competence about their knowledge and clinical experiences. **Tech** • Limited resource availability including clinical mentors, time, space, technology, etc. **HE** • Limited instruction on teaching/learning and CI modeling for clinical educators. • Interpersonal and communication skills of students may be devalued, given available technology and time constraints to practice these skills.

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Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
20. Interprofessional Collaboration	1. Describe current and evolving roles* and responsibilities of physical therapists and other professionals. 2. Demonstrate an ability to function effectively in an interprofessional team. 3. Respect and promote mutual trust for the contributions of other health care professionals and team members. 4. Participate and facilitate collaborative relationships with other health professionals to provide quality patient/client/family/caregiver-centered care. 5. Collaborate with other health care professionals to continually raise the level of physical therapist practice.	PTP • Expanding scope of physical therapist practice may impede interprofessional collaboration from an external perspective. HCF • Lack of incentives provided for interprofessional collaboration in health care–related payment for services. • Lack of opportunity for modeling and experiencing interprofessional collaboration in health care, and if the opportunity is available, may be influenced by the type of facility. HE • Primary focus of physical therapist professional education is on clinical competence in physical therapy and not on interprofessional education. • Clinical education objectives are not explicit about performance expectations related to interprofessional collaboration in classroom and clinical practice.
21. Prevention*, Wellness*, and Health Promotion*	*Principles of Prevention and Wellness* 1. Identify patient/client health risks (ie, BP, HR, smoking, obesity, wearing helmets, GI/GU) during the history and physical via the review of systems. 2. Assess and monitor vital signs of every patient/client upon initial encounter and during subsequent visits, based on identified and documented risk factors and response to interventions. 3. Collaborate with the patient/client to develop and implement a plan to address health risks. 4. Determine individual's readiness for behavioral change. 5. Identify available resources in the community to assist in the achievement of the plan. 6. Identify secondary and tertiary effects of disability.	PTP • Culture of clinical practice needs to change its paradigm to include wellness and prevention perspective in care. • Lack of advocacy for inclusion of prevention, wellness, and health promotion within the profession. HCF • Lack of funding and reimbursement for prevention, wellness, and health promotion.

Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	Wellness and Health Promotion 7. Facilitate each individual's achievement of goals for function, health, and wellness. 8. Promote health/wellness in the community (eg, chronic disability). 9. Participate in advocating for the health and wellness needs of society including access to health care and physical therapy services. 10. Promote social policy that affect function, health, and wellness needs of patients/clients. 11. Participate in achievement of societal health goals. 12. Understand current community wide, nationwide, and worldwide issues and how they influence society's health and well-being and the delivery of physical therapy.	
22. Consultation	1. Refer patients to other health care professionals when needed. 2. Encourage patient accountability to follow up with consultation from other health professionals. 3. Provide consultation within the context of patient/client management with physicians, family and caregivers, insurers, and other health care providers to maximize resources. 4. Provide consultation to businesses, schools, government agencies, other organizations, or individuals within the scope of practice and boundaries of expertise or refer to others. 5. Accurately self-assess the boundaries within which consultation outside of the patient/client care context can be provided.	HE • Limited opportunities during education program to be involved in consultation. HCF • Limited opportunities during the clinical education program to be involved in consultation.
23. Professionalism*	1. Exhibit behavior congruent with APTA Core Values[20]* (ie, accountability*, altruism*, compassion*/caring*, excellence*, integrity*, professional duty*, social responsibility*) in interactions with patients/clients, family members, caregivers*, other health care providers,	HE • Limitations inherent in students' internal belief and cultural value systems. • Inability to assess objective variables

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	students, employers, consumers, and payers. 2. Articulate and behave in accordance with stated ideals and values. 3. Demonstrate accountability for professional decisions and judgment and resolve dilemmas using a consistent set of core values (eg, setting priorities in situations with multiple commitments). 4. Identify resources to develop and promote core values within a practice setting. 5. Seek mentors and learning opportunities to develop and enhance the degree to which core values are demonstrated. 6. Act on the basis of professional values even when the results of the behavior may place oneself at risk. 7. Preserve the safety, security, and confidentiality of individuals in all professional contexts. 8. Use authority or power* inherent in professional status judiciously to value and respect others (ie, physical therapist and patient; CI and student; PT and PTA). 9. Participate in professional organizations such as the American Physical Therapy Association. 10. Explain the role and benefit of APTA in advocating for and protecting the scope of physical therapist practice. 11. Participate and show leadership in community organizations and volunteer service. 12. Demonstrate and communicate the value to the consumer of physical therapy services.	associated with applicants' noncognitive* abilities related to professionalism as part of the admissions process. • Lack of academic programs willing to require APTA membership for students. • Limited student financial resources to pay for APTA student dues. HCF • Not all clinical instructors are APTA members and may not be familiar with the APTA Core Values associated as a part of professionalism in order to model those values for learners. • Inconsistent value of, advocacy for, and modeling of practitioner/CI as a member of the professional organization. • Lack of advocacy and activism on the part of the practitioner to promote APTA membership with colleagues and the organization. PTP • State practice acts may limit the ability of the CI to demonstrate all of the Core Values. • As a part of the profession's maturation, core values associated with social responsibility/advocacy, excellence, and evidence-based practice are relatively new in the profession's history.
24. Ethical and Legal Practice	1. Practice in a manner consistent with established professional standards (eg, Standards of Practice[31]) and ethical guidelines (eg, APTA Code of Ethics[32]) that govern the conduct of professional activities. 2. Access and adhere to legal and regulatory practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management*. 3. Seek clarification in new and ambiguous situations related	PTP • Difficulty in resolving conflicts between ethical and legal issues and distinguishing between courses of action. • Lack of accountability for ethical and legal behavior by peers. HCF • Difficulty in resolving conflicts between ethical

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	to ethical, legal, and regulatory issues. 4. Demonstrate a fiduciary* responsibility for all patients/clients. 5. Identify, acknowledge, and accept responsibility for actions and report errors. 6. Communicate accurately to others (eg, payers, patients/clients, other health care providers) about professional actions.	and legal issues and distinguishing between courses of action. • Lack of accountability for ethical and legal behavior by peers. • May be unresolved conflicts between professional ethical and legal issues and facility-based and business issues. • Unethical or illegal billing to payers.
25. Professional Development	1. Participate in self-assessment to improve clinical and professional performance and the effectiveness of patient/client management. 2. Seek and respond to feedback from multiple sources. 3. Develop and implement a plan to effectively deal with positive and negative outcomes resulting from assessment activities. 4. Acknowledge and accept consequences of his/her actions. 5. Participate in and engage in conversation about peer-assessment activities (eg, case studies, co-treatments*, documentation*, performance evaluations). 6. Participate in additional learning experiences and mentoring opportunities to enhance clinical and professional performance and lifelong learning. 7. Demonstrate a commitment to learning and change through reflective practice and lifelong learning in remaining current in practice. 8. Engage in acquisition of new knowledge and evidence throughout one's professional career. 9. Describe the role of the clinical instructor and incorporate this role in their professional development. 10. Maintain currency in physical therapy practice in contemporary and emerging areas of practice and in fulfilling requirements for maintaining state licensure.	FE • Limited available funding and time to pursue professional development. HCF • Productivity demands may compete with pursuit of professional development opportunities. • Professional development may not be valued by the organization and leadership to the same degree as the practitioner/CI. • Lack of opportunity and time for the practitioner/CI to engage in career development planning and associated required professional development. HE • Lack of sufficient self-assessment skills embedded within the professional curriculum. • Uncertainty regarding the students' commitment and value to professional development. • Lack of opportunity and time for the student to engage in career development planning and associated required professional development.

PHYSICAL THERAPIST GRADUATE OUTCOME PERFORMANCE PRINCIPLES

Categories	The physical therapist graduate will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
26. Technology/ Informatics	1. Consistently use reliable information technology to access sources of information to support, document, and communicate clinical decisions. 2. Use evolving technology to provide patient/client management and education interventions.	HCF • Limited access to and familiarity of practitioners with available technology. Tech • Difficult to remain current with technology, given rapid changes and wide variety of technologies. HE • Limited access to technology due to costs. • Variable familiarity of faculty with contemporary technologies.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

The table below identifies the revised performance principles for the clinical instructor that that reflects consensus of member consultants and participants from the regional forums who provided further refinement and enhancements. The left column identifies the 16 categories for which the principles were delineated as found in the middle column. The right column provides a description for how current environmental factors may potentially limit the achievement of the clinical instructor performance principles. The environmental factors were related to higher education, health care/facility, physical therapy profession, financial/economic conditions, and technology. Environmental factors are explained further in the key below. Where feasible, categories are grouped by related content and not in any order of priority. Items defined in the Glossary are marked with an asterisk (*). Although concepts related to cultural competence were initially woven throughout the document, consensus from forum participants was to highlight knowledge, skills, and behaviors related to cultural competence under its own content category to reduce repetition throughout the document.

Environmental Factors
Higher Education (HE) (includes current and future directions, resources, faculty, students, demographic trends, applicants, curriculum)
Health Care/Facility (HCF) (includes political climate, reimbursement, interprofessional roles, current and future trends, productivity demands, patient demographics, etc)
Physical Therapy Profession (PTP) (includes scope of practice, current and future directions and Vision 2020, roles and responsibilities)
Financial/Economic Conditions (FE) (includes funding for higher education, funding for health care, student debt, etc)
Technology (Tech) (includes use and access to technology, electronic documentation, online learning, discussion boards, etc)

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
1. Teaching/Instruction	1. Use the entire clinical environment for potential learning experiences, both planned and unplanned. 2. Arrange a variety of learning experiences across the practice setting including, but not limited to, patient/client practice management and interprofessional care. 3. Integrate knowledge of various learning styles, personality inventories, and teaching methods to implement strategies that accommodate student's needs (ie, *Americans with Disabilities Act [ADA]*[33]) 4. Sequence learning experiences to promote progression of the student's personal and educational goals.	PTP • Variability in the preparation as a CI. • Variability in the acceptance and value of the APTA CI credential. • Variability in assessment of clinical sites, clinical instructors, and clinical experiences. • Limited time available for teaching given expectations for patient productivity. • Lack of recognition and support for teaching activities by the clinical facility. • Inconsistency between student expectations for teaching/learning and the CI's ability to provide

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	5. Monitor and modify learning experiences in a timely manner based on the quality of the student's performance and/or previous experience. 6. Instruct and foster student discussions of evaluations of the clinical experience, including learning opportunities, CI and CCCE performance, and the evaluation process. 7. Provide both formative and summative feedback to students that are timely, frequent, positive, and constructive. 8. Provide student feedback by collecting information through direct observation and discussion with students, review of the student's patient/client documentation, observations made by others, patient/client feedback, and student's self-assessments. 9. Review and analyze student feedback regularly and adjust the learning experiences accordingly. 10. Complete APTA CI Credentialing or equivalent training successfully. 11. Direct students to learning resources.	learning experiences. HE • Variability in assessment of clinical sites, clinical instructors, and clinical experiences. • Variability in the implementation of student assessments by academic programs (ie, PT CPI, PT MACS). HCF • Difficult finding privacy to provide student feedback. • Lack of workspace for students.
2. Planning and Learning Expectations	1. Ensures that the student, CI, and academic program develop and document, within the first week of the clinical experience, mutually agreed-on goals, objectives, and special needs for the clinical experience. 2. Collaborate in an ongoing manner with the student and the academic program as needed to develop further goals and objectives and address special needs. 3. Present clear performance expectations to students at the beginning and throughout the learning experience. 4. Incorporate the student's academic curriculum, level of didactic preparation, current level of performance,	PTP • Reliance on communication that is subject to human error (mail) to provide timely delivery of the clinical sites' learning expectations. • Challenge to get everyone together to address student remediation issues in a way that is positive and productive. HE • Inconsistent receipt of student information and learning objectives from the academic program to the clinic, clinic to program, clinic to student, and student to clinic in a timely manner. • Variability in physical therapist curriculum.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	and the goals of the clinical learning experience in planning learning experiences. 5. Accept responsibility for preparation for a student's learning experience. 6. Implement, facilitate, and evaluate planned learning experiences with students. 7. Demonstrate effective time management skills. 8. Plan, in collaboration with the student, CCCE, and ACCE/DCE, activities that continue to challenge the student's performance in areas where distinctive. 9. Plan, in collaboration with the student, CCCE, and ACCE/DCE, remedial activities to address specific deficiencies in areas identified as inadequate in student's performance. 10. Plan learning experience with PTAs, aides, and other professionals, where available.	• Reliance on communication that is subject to human error (mail) to provide timely delivery of the academic programs' learning expectations. • Variability in and reluctance of the academic program's policies about sharing information about previous student performance with subsequent clinical facilities, especially when remediation is necessary. HCF • Limited time available for planning and collaboration due to productivity and time management expectations in practice.
3. Performance Assessment/Evaluation	1. Engage in discussion with the student about clinical reasoning as a form of assessment by participating in frequent and ongoing discussions of patient care. 2. Collect information on student performance and professional behavior through direct observation and discussion with students, review of student's documentation, observations by others, and student self-assessments (performance evaluation). 3. Perform constructive summative and formative feedback of the student's performance. 4. Provide cumulative evaluations at least at midterm and at the completion of the clinical experience, including student's self-assessments. 5. Familiarize himself or herself with the student's evaluation instruments prior to the clinical experience. 6. Recognize and document student's progress, and identify areas of entry-level competence*, areas of distinction, and specific areas of performance that are	PTP • Assumed that everyone can be a CI, however there is a need to identify who should and should not be a CI. • Lack of mentoring by and for CIs • Lack of uniform, consistent, and valid tools to assess the CI's ability. • Expectation in the current professional culture that after 1 year (or less), physical therapists become CIs. • Differences in expectations about performance expectations within the profession. HCF • Assumed that everyone can be a CI, however there is a need to identify who should and should not be a CI.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle *(Categories: HE, HCF, PTP, FE, Tech)*
	unsafe, ineffective, or deficient in quality. 7. Demonstrate a constructive approach to student performance evaluation that is educational, objective, and reflective. 8. Identify student errors and facilitate reflection and correction. 9. Be aware of the role, relationship, and processes between the academic program and clinical facility concerning student performance evaluation, grading, remedial activities, and due process in the case of student failure. 10. Recognize the need to involve the CCCE and/or ACCE/DCE in a timely and appropriate manner. 11. Provide dedicated time for interaction and feedback with the student, as negotiated between the student and the CI. 12. Recognize personal biases and rater errors and how they can effect assessment of students' performance.	
4. Self-assessment	1. Be open to and encourage feedback from students, clinical educators, and other colleagues. 2. Reflect upon and share professional strengths and opportunities for development with students. 3. Engage in self-assessment, mentorship, and professional development to enhance skills as a clinical educator.	PTP • Lack of CIs as mentors. • Lack of knowledge about available self-assessment tools. HE • Variability in academic rules, processes, and ability to provide CIs with academic appointments and recognition.
5. Practice Management	1. Collaborate with administration in the PT service/health care institution to develop mutually agreed upon goals and objectives for clinical education delivery. 2. Advocate for and, where feasible, modify the patient schedule to maximize patient care and teaching opportunities.	PTP • Limited time available for teaching due to productivity expectations in practice. • Lack of support for teaching activities by the clinical facility. • Historical precedent for how clinical education is designed, managed, and evaluated is difficult

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
		to change. • Lack of a sense of empowerment by CIs.
6. Communication*	1. Communicate in ways congruent with situational needs by adapting communication (verbal, nonverbal, and written) to meet the needs of different audiences. 2. Communicate, expressively and receptively, in a competent manner with patients/clients, family members, caregivers, practitioners, students, interprofessional team members, consumers, payers, and policy makers. 3. Use appropriate professional communication (grammar, syntax, spelling, legibility, and punctuation) in all situations. 4. Demonstrate open, honest, constructive, and assertive communication (verbal, nonverbal and written) with students and others using people-first language. 5. Communicate in a way that demonstrates respect and professionalism. 6. Demonstrate closed-loop communication.	HCF • Limited time for frequent and consistent communication due to productivity expectations and time constraints. • Variability in communication styles, including use of technology for communication. • Existing tension about degree differentiation (ie, BS vs. MPT vs. DPT). • Lack of preparation and/or use of documents provided by the academic program. • Lack of CCCE preparation and support to ensure that communication moves to the necessary stakeholders involved in clinical education (eg, academic program to ACCE/DCE to the CCCE to CI to student and from student back to CI/CCCE where appropriate and the ACCE/DCE). Tech • Differences in availability of and user's capabilities for using technology.
7. Interpersonal Skills	1. Demonstrate an ability to integrate the student into the team environment. 2. Demonstrate unconditional positive regard* for the student, new graduates, patients/clients, colleagues, family/caregivers, and others. 3. Facilitate and demonstrate negotiation*/conflict management* skills.	HCF • Lack of personal space in the clinical environment. • Variability in interpersonal skills, including use of technology for communication. • Emphasis on productivity and business in health care may result in greater cynicism about physical therapist practice. • Apathy and burn-out, desensitization (HCF, CI) • Conflict between professions with respect to "turf" issues.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
		PTP • Limited number of available and qualified CIs. • Lack of CIs from minority groups • Limited exposure to cultural sensitivity*.
8. Ethical and Legal Practice	1. Practice in a manner consistent with established professional standards (eg, *Standards of Practice*[31]) and ethical guidelines (eg, *APTA Code of Ethics*[32]) that govern the conduct of professional activities. 2. Access and adhere to legal and regulatory practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management. 3. Seek clarification in new and ambiguous situations related to ethical, legal, and regulatory issues. 4. Demonstrate a fiduciary* responsibility for all patients/clients and students. 5. Communicate accurately to others (payers, patients/clients, other health care providers) about professional actions. 6. Know and adhere to the requirements for the *Family Educational Rights and Privacy Act (FERPA)*[34]* and the *Health Insurance Portability and Accountability Act (HIPAA)*[24]*. 7. Maintain educational focus and intent for student while ensuring quality patient/family/caregiver-centered care. 8. Maintain and protect clinical learning environment for the student. 9. Apply policies and procedures designed to protect the student (ie, sexual harassment). 10. Facilitate dialogue about ethical issues and dilemmas with the student and possibilities for resolution.	HCF • Limited awareness of ethical and legal practice expectations. • Inability to implement accountability for ethical and legal expectations effectively. • Culture in clinical practice does not consistently support accountability for ethical and legal expectations. • Frequent regulatory changes make it difficult to remain current about ethical and legal expectations. • Variations between states and payers with respect to reimbursement. • Pressure to maintain productivity runs counter to involvement with students with limited to no financial benefit and increased pressure to meet productivity demands. • Conflicting priorities, such as providing student clinical education versus providing patient coverage for a physical therapist who is ill. • Limitations of clinical instructor carrying an individual caseload when the caseload should be shared with the CI and student.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle *(Categories: HE, HCF, PTP, FE, Tech)*
9. Professionalism	1. Model and discuss professionalism in the clinical environment. 2. Demonstrate and provide learning opportunities to address the *APTA Core Values*[20]* (ie, accountability, altruism, compassion/caring, excellence, integrity, professional duty, social responsibility). 3. Demonstrate moral courage to do the right thing. 4. Promote core values within a practice setting. 5. Exhibit behavior congruent with *APTA Core Values*[20] (ie. accountability, altruism, compassion/caring, excellence, integrity, professional duty, social responsibility) in interactions with patients/clients, family members, caregivers, other health care providers, students, employers, consumers, and payers. 6. Articulate and behave in accordance with stated ideals and values. 7. Demonstrate accountability for professional decisions and judgment and resolve dilemmas using a consistent set of core values (eg, setting priorities in situations with multiple commitments). 8. Identify resources to develop and promote core values within a practice setting. 9. Seek learning opportunities for students to develop and enhance the degree to which core values are demonstrated. 10. Act on the basis of professional values even when the results of the behavior may place oneself at risk. 11. Manage patients/clients within scope of expertise. 12. Preserve the safety, security and confidentiality of individuals in all professional contexts. 13. Use authority and power* inherent in professional status judiciously to value and respect others (ie, physical therapist and patient; CI and student, PT and PTA).	PTP • Lack of understanding about generational issues. • Popular culture does not match healthcare culture – must be explicit regarding expected professional behaviors. • Lack of personal accountability. HCF • Lack of knowledge/comfort about professionalism. • CI discomfort with managing student related affective issues.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
10. Cultural Competence*	1. Elicit the "patient's story" when taking a history to avoid stereotypical assumptions. 2. Apply Federal mandated requirements associated with *Culturally and Linguistically Appropriate Services (CLAS)* [30]*. 3. Utilize information about health disparities[35]* (ie, socioeconomic status, access to care, epidemiologic studies) and health literacy* during patient/client care. 4. Determine personal biases, via self-assessment or critical assessment of feedback from others and refrain from acting on one's social, cultural, gender, and sexual biases. 5. Recognize individual and cultural differences and adapt delivery of physical therapy services with consideration for patients'/clients'/ families'/ caregivers' differences, values, preferences, and needs. 6. Recognize individual and cultural differences and adapt behavior accordingly with students, families, colleagues, students, and other health professionals. 7. Use a framework of cultural competence[36]* in practice. 8. Provide care in a non-judgmental manner by demonstrating respect for others and considering others as unique and of value. 9. Incorporate an individual's/family's/caregiver's perspective and respect his/her emotional and psychological aspects of care. 10. Identify possible communication barriers and seek methods to provide effective communication (ie, using a translator/interpreter). 11. Recognize individual and cultural differences in students and how it can effect assessment of students' performance.	PTP • Limited awareness of cultural issues. • Differences in expectations about cultural competence. • Lack of awareness of student cultural needs. • Conflicted social and cultural norms.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle *(Categories: HE, HCF, PTP, FE, Tech)*
	12. Implement strategies that accommodate student's needs (ie, *Americans with Disabilities Act [ADA]*[33]) 13. Promote resources for students and others as needed to develop cultural competence.	
11. Mentoring/Coaching	1. Facilitate the process of student self-assessment and peer assessment. 2. Support student professional growth and development. 3. Create active learning experiences to meet individual student needs, objectives, and interests. 4. Counsel and guide students to create and progress within their professional development plan by providing a framework for success. 5. Facilitate the opportunity to network with other health professions, leaders within the profession, and other students. 6. Discern when and how to intervene or allow the student to learn from their mistakes. 7. Support student's innovative yet evidence-based approaches to practice and provide professional development with constructive guidance. 8. Demonstrate authentic behavior with students by sharing own professional experiences and individual successes and challenges. 9. Discuss attributes of an effective mentor/mentee relationship.	HCF • Limited to time to mentor with increased demands for productivity. • Uncertain how to mentor students in the current health care environment. • Mentoring in physical therapist practice may not be valued and rewarded. • Lack of ownership in physical therapist practice. • Health care system infrastructure does not support mentoring. HE • Limited knowledge in how to translate faculty mentoring to student mentoring. • Academic program does not perceive its role in mentoring clinical faculty. • Assistance needed by clinical faculty to identify and facilitate where they need mentoring. PTP • Although the profession values mentoring, overt behavior and financial support are not readily apparent. • Limited body of knowledge related to pedagogy in mentoring in physical therapy.
12. Supervision	1. Supervise the student in learning environments by clarifying goals, objectives, and the learning experience. 2. Assess and respond to student concerns with empathy, support, or interpretation. 3. Provide both summative and formative feedback to	HCF • Limited time and productivity demands affect student supervision. • Regulations, such as Medicare, limit alternative supervisory approaches. • Lack of experience of CI in supervision.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle (Categories: HE, HCF, PTP, FE, Tech)
	students. 4. Adhere to legal and regulatory requirements re: supervision of students (eg, Medicare, Medicaid, state licensure laws and regulations, ADA, APTA). 5. Differentiate the need to contact clinical coordinator and/or academic program with respect to student supervision, learning and performance. 6. Assume responsibility for regularly monitoring student performance through planned learning experiences and modify as appropriate. 7. Maintain ultimate accountability for patients/clients with whom the student is working. 8. Contact the CCCE and/or ACCE/DCE to discuss the level of student supervision required.	HE • Accuracy of assessing student readiness for clinical education. • Limited resource availability of quality clinical sites that are able to provide the necessary level of student supervision. • Variability in length and timing of clinical experiences and levels of supervision required. PTP • Conflicted about supervising others versus being supervised by others. FE • Limited or no incentives to supervise students during clinical experiences (ie, lack of recognition through clinical ladder, lack of support to reduce caseload during early clinical experiences to increase time for student learning and at other times when deemed necessary by CI).
13. Modeling	1. Model behavior, conduct, instructional, and supervisory skills expected of the physical therapist professional, congruent with APTA core values. 2. Model reflective* and best practice. 3. Demonstrate a commitment to and advocate for clinical education. 4. Demonstrate role modeling and assess its effect on student performance and professional behaviors, colleagues, other health professionals, and patients/clients. 5. Participate in professional organizations such as the American Physical Therapy Association (APTA). 6. Participate in activities that promote and advance the profession. 7. Explain the role and benefit of APTA in advocating for	HCF • Lack of role models in clinical education. HE • Lack of role models in higher education. PTP • Lack of role models and awareness about the value and importance of modeling. • Lack of commitment to responsibility in modeling for others.

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle *(Categories: HE, HCF, PTP, FE, Tech)*
	and protecting the scope of physical therapy practice. 8. Participate and show leadership in community organizations and volunteer service.	
14. Professional Development	1. Represent the physical therapy profession positively by assuming responsibility for career and self-development and demonstrate this responsibility to students. 2. Seek out additional learning experiences and mentoring opportunities to enhance their skills as a clinical educator. 3. Demonstrate a commitment to reflective practice* and life-long learning in remaining current in practice. 4. Request opportunities, in addition to CI credentialing, to further develop clinical instructor skills to remain contemporary with the knowledge and skills of learners.	HCF • Lack of time for and value of the importance of professional development. • Lack of value in education and training to be clinical educator. HE • Lack of sufficient funding and support for professional development for clinical educators. PTP • Lack of a definition of continued competence. FE • Lack of sufficient funding and support for professional development for clinical educators.
15. Level of Practice Performance/ Competence	1. Apply an evidence-based* process for clinical reasoning and critical thinking to patient/client management. 2. Articulate the rationale, including the best available evidence for examination, diagnosis, prognosis, interventions, outcomes, and reexaminations. 3. Be open to augmenting knowledge in areas self-assessed as knowledge gaps using such resources as colleagues, students, continuing education programs, and academic programs. 4. Provide evidence-based and individualized patient/client/family/caregiver-centered care.	HCF • Lack of qualified clinical instructors. • Unknown number of clinical instructors that meet acceptable level of clinical competence. • Limited support of clinical facility to augment practitioner competence. • Lack of willingness to use alternative supervisory models. HE • Lack of resources to provide professional development for clinical instructor competence. • Lack of sufficient number and variety of clinical sites. PTP • Uncomfortable with dealing with conflict and avoid difficult conversations related to

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Categories	The clinical instructor will…	Description of how current environmental factors may limit achievement of the performance principle *(Categories: HE, HCF, PTP, FE, Tech)*
		practitioner competence. • Lack of consensus regarding best practice. FE • Limited investment of funds and resources that are required from all involved stakeholders. Tech • Limited use of available technology to address practitioner competence.
16. Qualifications	1. Demonstrate a desire to educate students by pursuing learning experiences to develop knowledge and skill in clinical teaching. 2. Be a licensed physical therapist when serving as the clinical instructor for the physical therapist student. 3. Successfully complete APTA CI Credentialing[10] or equivalent training. 4. Demonstrate effectiveness and proficiency in patient/client management. 5. Determine the contributions of other health professionals to the student's learning experience. 6. Engage in ongoing self-assessment in the role and responsibilities of a CI. 7. Maintain currency in professional policies, procedures, guidelines, code of ethics, and jurisdictional laws and regulations.	PTP • Limited number of available Credentialed Trainers to teach the CI Education and Credentialing Program. HCF • Lack of clinical instructor buy-in to clinical educator qualifications. • Lack of understanding of the link between clinical education training programs and practice management. • Lack of incentives to be a clinical instructor. FE • Lack of funding to support clinical instructor to meet qualifications.

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

The table below identifies the preferred infrastructure for clinical education that achieved consensus by member consultants. The left column identifies the 8 components for which the preferred infrastructure was developed. The 2 middle columns identify the specific components of the preferred infrastructure component and the stakeholders involved in implementing the preferred infrastructure component. The far right column provides a description for how current environmental factors may potentially limit the achievement of the preferred infrastructure component. The environmental factors were related to higher education, health care/facility, the physical therapy profession, financial/economic conditions, and technology. Environmental factors are explained further in the key below. *Appendix E* identifies opportunities and resistances to the preferred infrastructure and specific components that were offered by participants during the regional forums.

Environmental Factors
Higher Education (HE) (includes current and future directions, resources, faculty, students, demographic trends, applicants, curriculum)
Health Care/Facility (HCF) (includes political climate, reimbursement, interprofessional roles, current and future trends, productivity demands, patient demographics, etc)
Physical Therapy Profession (PTP) (includes scope of practice, current and future directions and Vision 2020, roles and responsibilities)
Financial/Economic Conditions (FE) (includes funding for higher education, funding for health care, student debt, etc)
Technology (Tech) (includes use and access to technology, electronic documentation, online learning, discussion boards, etc)

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
1. Relationship at the organizational level between academic program and clinical facilities	• The relationship needs to be tighter/closer predicated on the *preference* that students remain within the region with a mechanism to "allow" students to move across regions (in limited numbers) for full-time extended internships and with an ability to negotiate short-term integrated experiences that occur within the region. • Develop a regional organization of representatives from both academic programs and clinical sites (CIs, CCCEs, administration) to implement	• Representatives from the academic program • Representatives from clinical sites (CIs, CCCEs, and administration) • Students • Patients	FE • Finances to support and pay for the regional organization and the standardized documents and systems. HCF • Requires time to develop and implement the system at the clinical facility. • Inability to move past differences between clinical facilities to support a more cohesive system for clinical education and the profession. • Availability of limited resources.

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	national standards at the regional level. • Develop national standard expectations to be implemented regionally to include: ✓ Standardized documents ✓ Standardized timeframes (dates and lengths of clinical education experiences*) ✓ Standardized contracts ✓ Managing repository of clinical site information ✓ Regional consortia with credentialed/approved clinical sites (accountability) ✓ Standard evaluation and training of CIs and CCCEs and assistance in providing ongoing education, professional development, or remediation ✓ Evaluations of the site ✓ Ongoing education with consistent procedures (standardization of position descriptions and expectations for CIs, CCCEs, ACCEs/DCEs) with common expectations ✓ Regional communication patterns ✓ Regional meeting annually • Integrate academic faculty at the clinical site to enhance participation at the clinical site with students at the clinical site more often (nursing [preceptor] model)		• Stakeholder resistance to change. • Continued ties to the current culture. • Lack of the clinical organization to understand the need for structure in clinical education. • Developing and negotiating clinical contracts. • Ability to implement a change in the dates and time for the clinical experiences. HE • Requires time for development and implementation. • Inability to move past differences between academic programs to support a more cohesive system for clinical education and the profession. • Availability of limited resources. • Stakeholder resistance to change. • Continued ties to the current culture. • Developing and negotiating clinical contracts. • Ability to implement a change in the dates and time for the clinical experiences. • Geographic distribution of academic programs and their consortia that may not currently include all academic programs. • Current student expectations for input into selecting clinical experiences, in some cases across the US. PTP • Stakeholder resistance to change. • Continued ties to the current culture.

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles *(Categories: HE, HCF, PTP, FE, Tech)*
	• At the clinical facility, provide education modules such as gait analysis lab for students to obtain greater familiarity with the clinical setting and to increase the use of clinical faculty at the clinical site.		
2. Relationship between academic faculty, clinical educators, and students	• The relationship between the academic faculty, clinical educators, and students needs to be tighter/closer.	• Stakeholders would participate in the consortia	HCF & HE • Common understanding and implementation of expectations for experiences, including the preparation of CIs and needed documentation from the clinical site to the academic program, from the student to the clinical site, and from the academic program to the clinical site. • Clarity of student information/expectations for performance outcomes.
3. Communication (eg, types, frequency, purposes, etc)	• Develop centralized Web-based information about clinical sites. • Develop regional, Web-based, structured discussion forums for students, CIs, and faculty. • Create a list serve for CIs, CCCEs, and DCEs/ACCEs that include learning modules. • Create a standardized tool for communicating standards and assessing CIs', CCCEs', and ACCEs/DCEs' performance and for sharing information between CCCEs and ACCEs/DCEs. • Provide for ongoing reciprocal communication among and between	• Representatives from the academic program • Representatives from the clinical sites (CIs, CCCEs, and administration) • Students • Patients	PTP • Costs and time associated with the development of centralized information on clinical sites and standardized tools for communication. HE • Costs and time associated with the development of regional communication mechanisms and implementation of standardized tools. • Involvement of "helicopter parents" in the communication process.

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	all relevant and involved stakeholders before, during, and after the student's clinical education experience and to the extent that there is structure reflective of guidelines established by the consortium.		
4. Clinical education contracts	• Contract between the academic program and affiliated clinical sites is required. • Develop model clinical education contract that includes the essential elements to go beyond the standard contractual agreement taking into consideration regulatory constraints, learning experiences, payers, etc. • Costs associated with negotiated interprofessional contracts must be budgeted and resourced. • Negotiating contracts must occur early in the process of adding a clinical site. • Once a common contract is developed, individuals from all professions and the health care industry work collaboratively to establish a standard clinical education contract.	• Higher education and academic programs • Health care facilities • Society/consumers • Professional and industry associations • Students • Legal departments • Payers	PTP • Clinical education contracts are not a priority for all stakeholders. • Fiscal resources and planning require developing and implementing a model clinical education contract. • Impact of standard clinical education contracts on planned changes for continuing education. HCF • Clinical contract needs vary among clinical sites and academic programs, and according to state regulations. • Locus of control for the clinic with respect to contracts is with the site's legal department, not the physical therapy staff.
5. Placements of students in clinical experiences	• Provide a regional/national system for student final internship placements depending upon the regional credential/approval process.	• Students • Higher education • Health care facilities • Professional	PTP • There is limited evidence regarding differences between ACCE/DCE judgments for student placements versus

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	• Develop a common clinical calendar with standard monthly start dates for full-time experiences. • Standardized placement request forms. • Add optional interview of students by clinical sites.	associations	computer matching. • There is limited evidence that identifies the benefit of completing clinical experiences in multiple geographic regions. • System requires the buy-in of all involved stakeholders. • Required resources needed to develop and implement a national placement system. HE • Differences between the fiscal year of academic and/or clinical facilities. • System requires the buy-in of all involved stakeholders. HCF • Differences between the fiscal year of academic and/or clinical facilities. • Productivity demands on clinical educators may affect the number of available student placements. • System requires the buy-in of all involved stakeholders.
6. Performance evaluation and grading	• Provide a uniform evaluation process for students, CIs, and CCCEs that is expanded to include self-assessment tools for students for ongoing review and feedback. • Use technology and informatics to capture learning experiences and student performance, as well as the impact of clinical education on practice management (eg, productivity).	• Students • Higher education • Health care facilities • Professional associations	HE • Variations in definitions of *faculty* (eg, "clinical faculty") by academic programs. HCF • Barriers provided by regulators related to student supervision (eg, line-of-sight requirement for Medicare Part A). • Productivity demands on clinical educators. • Clinicians are not trained to be educators.

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	• Develop process that includes training for all users in how to appropriately access and use the tools. • Tools should be flexible enough for the academic program to assess student readiness for clinical education. • Clinical faculties provide data and observations to help the ACCE/DCE assign student grades for clinical education.		Tech • Lack of and comfort with technology. • Provide a new area for informatics platforms. PTP • Financial resources required for the training component for users in how to appropriately access and use the available tools.
7. Clinical education curriculum design, including locus of control, number, length, and types of clinical learning experiences, and placement of clinical experiences within the entire curriculum	***Early Integrated Exposure: Clinic – classroom – patient exposure*** • Students practice a definitive skill set to translate didactic coursework into clinical practice. • Reinforce knowledge from the classroom with minimum skills set and practice management (documentation, communication). • Early experiences include practice by doing, not just observation. • Clinical faculties are integrated into teaching within the academic program. • Embed practice experiences within the patient contact part of the didactic course. • Address "foundation" practice skills across all systems (musculoskeletal, neuromuscular,	• Clinicians • Manager/director in clinic/hospital • Administrator/ department administrator • Academic faculty (DCE/ACCE) • Program director • Dean • University president • Students (costs, tuition) • CAPTE • Private entities • Patients	HCF • Availability of sufficient number of acute and rehab clinical sites. • Existing culture of higher education and practice in how clinical education is provided. • Health care bureaucracy and policy changes required. • Health care policy and reimbursement limitations. HE • Academic bureaucracy and policy changes required in changing relationships. • Geographic limitations in availability of clinical sites. • Requires curricular change by academic programs. PTP • Ability to enforce changes in the infrastructure changes.

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	cardiovascular/pulmonary, and integumentary) in acute, rehabilitation, and outpatient practice settings. • Pediatric and geriatric experiences transcend practice areas in all settings without targeting facility-based learning by lifespan. This is supported by the APTA 2005 Practice Profile on Patient Types and Time Management. • Early experiences associated with academic program semesters. • Provides clarity regarding required settings and systems. • Compensation for involved academic and clinical faculties. • Approach identifies early student problems in foundation skills. • Locus of control vested with the academic program • CI is viewed as academic/clinical faculty. ***Internships: Longer experiences at end of the didactic program*** • Acutely ill/high-risk experience with a focus on cardiovascular/pulmonary and integumentary systems requires 10-12 weeks to achieve an outcome of entry-level. • Rehabilitation experience with a focus on neuromuscular and cardiovascular/pulmonary systems		

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles (Categories: HE, HCF, PTP, FE, Tech)
	requires 10-12 weeks to achieve an outcome of entry-level. • Outpatient/ambulatory care/community experience with a focus on cardiovascular/pulmonary, musculoskeletal, and neurologic systems requires 10-12 weeks to achieve an outcome of entry-level. • Each internships includes autonomous practice; clinical reasoning; reflective processes; practice management and coordination; patient/client management for commonly seen conditions; diagnosis; prognosis; plan of care with interventions; outcomes assessment; direction, delegation, and supervision; involvement with the interprofessional team; health care delivery systems; and professional socialization. Does not necessarily require a specific pediatric or geriatric clinical experience; however, lifespan can be part of the consideration. • Locus of control for the internship is with the clinical site while following established standards. • Academic program supports CI mentoring. • Develop 12 standard start dates for final experiences and any full-time clinical experiences.		

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Component Discussed	Preferred Infrastructure Component	Stakeholders Involved	Description of how current environmental factors may limit achievement of the performance principles *(Categories: HE, HCF, PTP, FE, Tech)*
8. Use of Technology	• Create an assessment mechanism, using technology, to track students' experiences relative to M*inimum Required Skills of Physical Therapist Graduates at Entry-Level*[9], *APTA Core Values*[20], *Generic Abilities*[21], etc (eg, Web-based system for students to check off items practiced on the list of *Minimum Required Skills of Physical Therapist Graduates at Entry-Level*).	• Academic programs • Academic faculty • Health care facilities • Clinicians • Students	HE • Students' and faculties' willingness and ability to use centralized system to track Minimum Required Skills HCF • CIs' willingness and ability to use a centralized system to track Minimum Required Skills Tech • Need to design technology-based system that is user-friendly for students, CIs, and academic programs to track Minimum Required Skills • Current costs associated with establishing and integrating technology into clinical education • Potential limited access to technology for monitoring check-lists

STUDENT PERFORMANCE OUTCOME STANDARDS

Consensus Question 1:
Can a new graduate be an independent practitioner (meaning an ability to set up a clinical practice by himself or herself)?

Discussion Points:
- This level of performance can be a part of an expected entry-level performance*.
- New professionals are capable of practicing at this level upon entry into practice; however, this level of performance was not identified as an ideal expectation for a new professional (new graduate).
- This would not be established as a preferred level of competence to enter practice.
- New professionals are not prepared at entry-level to be business managers.
- There would need to be an assessment by the state practice act if there were any limitations for a new professional to practice in this mode beyond holding a valid license.
- Competent practice differs from practice management, which deals with how the physical therapist establishes a relationship after graduation in the practice. For example, "How do I share equity?"
- Posed the question: Is there a second step that occurs after graduating from a physical therapist education program that would better prepare one as an independent practitioner, such as mentoring provided within a private practice?
- Students should be prepared as new professionals to understand the variety of options available in practice management.
- Concern about the debt load of the new professional and the attraction to higher salaries to address their ability to repay their debt.
- The need to recognize and demonstrate lifelong learning as a part of the role of the professional is paramount; new professionals must be vested with the ability to judge when they are capable to assume the role of independent practitioner. An additional resource to assist in this process is through an identified mentor.
- Clarified that the definitions of *autonomous practitioner* and *independent practitioner* are not the same and should not be confused. All new professionals need to be prepared as autonomous practitioners as a part of their entry-level competencies.

Consensus Decision:
The new professional is capable of being an independent practitioner. However, it is recommended that the new professional must pursue lifelong learning and mentoring as a part of their career path, regardless of practice setting or practice management model.

Consensus Question 2:
Should the new professional/new graduate be a member of APTA?

Consensus Decision:
- This question did not achieve consensus as written, so it would not appear as stated.
  - ✓ Vote: *Yes*   12   *No*   23
- Alternative wording: "Participates in professional organization activities such as APTA."
  - ✓ Vote: *Yes*   35   *No*   0

Decision: Add to the New Graduate Performance Outcome Principles: "Participates in professional organization activities such as APTA."

SUMMARY OF CLINICAL EDUCATION CONSENSUS DECISIONS FOR CONFLICTED VIEWS

CLINICAL INSTRUCTOR PERFORMANCE PRINCIPLES FOR STUDENT–PATIENT MENTORING

Consensus Question 1:
Should clinical instructors be APTA CI Credentialed?

Consensus Decision:
 ✓ Vote: *Yes* 35 *No* 0
Modify the CI standard to read: "CIs should successfully complete APTA CI Credentialing or equivalent training."

Consensus Question 2:
In 2020, should clinical instructors hold a DPT degree or higher?

Discussion Points:
- Some clinical instructors may not be able to complete a DPT (transitional) degree; however they can complete advanced courses in key content areas taught within the DPT (transitional) programs to include:
    1. differential diagnosis,
    2. radiology and imaging,
    3. evidence-based practice, and
    4. pharmacology.
- Recognize that some of the existing DPT (transitional) programs do not include the 4 identified courses.
- How would we be able to measure this desired outcome?
- Concern that we cannot remove the concept of having a DPT altogether.
- As a profession and education community, we have made a commitment to Vision 2020, which includes the DPT degree.
- What will best serve the needs of professional students in their educational preparation?
- We want CIs who want to teach students, who embrace Vision 2020, and incorporate these concepts in their clinical teaching and mentoring.
- This DPT (transitional) degree should be considered as part of a physical therapist's career path rather than an additional option.
- In time, this issue should resolve itself as the profession moves closer to 2020.
- Given current and future workforce issues related to physical therapists, requiring CIs to hold the DPT degree may negatively affect the availability of clinical educators, so we need to study this further prior to making a standard.
- Consider offering that the DPT degree is "preferred" for CIs or offer guidelines in the clinical education infrastructure to assist CIs in achieving this outcome.
- Consider new wording: The CI possesses the DPT or higher degree or possesses advanced knowledge in the areas including, but not limited to:
    1. differential diagnosis,
    2. radiology and imaging,
    3. evidence-based practice, and
    4. pharmacology.

SUMMARY OF CLINICAL EDUCATION CONSENSUS DECISIONS FOR CONFLICTED VIEWS

Consensus Decision:
This question did not achieve consensus so it was removed from the CI Performance Principles.
- ✓ Vote: *Yes*   12   *No*   23

Consensus Question 3:
Should the CI be required to be a member of APTA in addition to meeting the defined principles?

Discussion Points:
- Alternative wording: "The CI models professional behavior as a member of the APTA."
- Alternative wording: "There is a preference for the CI to be an APTA member." Concern about this, since we also would need to state the same for the student in order to prevent setting a double standard for the CI and the student.
- We need to raise the bar for the profession and for the CI. As part of professionalism, the CI must be a member of the professional organization, namely APTA.
- Academic programs need to encourage and advocate for CIs to be members of APTA.
- It is in the CI's self-interest to be a member of APTA.
- What evidence demonstrates that a CI who is an APTA member provides better clinical instruction than one who is not a member?
- Currently there is no requirement that academic faculty are required to be members of APTA, although 95% of faculty members are APTA members.

Consensus Decision:
- This question did not achieve consensus as written, so it would not appear as stated.
  - ✓ Vote: *Yes*   14   *No*   21
- Alternative wording: "Participates in professional organization activities such as APTA."
  - ✓ Vote: *Yes*   35   *No*   0

Add to the CI Performance Principles: "Participates in professional organization activities such as APTA."

PREFERRED INFRASTRUCTURE FOR CLINICAL EDUCATION

Consensus Question 1:
Should the implementation of the preferred infrastructure occur at the level of regional, national, or neither option?

Discussion Points:
- Regional level fosters closer communication, networking, discussions, and professional development.
- Less likely to duplicate documents required for clinical education and to eliminate duplication of effort regionally.
- Facilitates a more consistent student product within the region.
- Facilitates collaboration among regional academic programs through clinical site approval process.
- May positively or negatively impact competition for clinical sites.
- There is no regional matching or national matching system currently available.
- Benefits for all involved in the region need to be shared.
- There will need to be shared accountability for those involved at the regional level.

SUMMARY OF CLINICAL EDUCATION CONSENSUS DECISIONS FOR CONFLICTED VIEWS

- Requires trust among colleagues to ensure honest, open, and frequent communication.
- Regional coordination models academic program collaboration to students.
- Regional approach will not restrict communication or building relationships between individual academic programs with their clinical sites.
- Through collaboration, can build trust within a geographic region.
- Provides for a shared economy of resources, given limited available resources.
- Still requires the academic program to build a strong relationship with their clinical sites.
- Region needs to communicate clear expectations while providing clinics with the impression that they are "allowed" to communicate and interact with academic programs from other regions.
- The region needs to assume responsibility to educate the CI.
- For the ACCE/DCE, this model does not necessarily require fewer resources, but rather resources must be reallocated in support of the region.
- Communication can occur in many ways in addition to face-to-face for a good relationship to be established using available technology (eg, Web-cam).
- Fosters creativity to develop some well-designed online instructional modules for clinical educator professional development.
- This approach will also help to facilitate clinical education for PTA students through a regional approach.

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
Preferred approach for implementation of the preferred infrastructure is at the regional level.

Consensus Question 2:
Should there be a national approval process developed for clinical education that is implemented regionally?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
A process to approve clinical education sites with respect to the standards for clinical education will be designed nationally, with implementation of the approval process occurring at the regional level.

Consensus Question 3:
Should a technology-based assessment mechanism be developed to track students' experiences as related to the Minimum Required Skills of Physical Therapist Graduates at Entry-Level, Core Values, Generic Abilities?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
Develop a technology-based assessment mechanism to track students' experiences in relation to the Minimum Required Skills of Physical Therapist Graduates at Entry-Level, Core Values, Generic Abilities, etc.

Consensus Question 4:
Is it expected that by the end of each clinical internship, the student will achieve entry-level in that specific practice setting?

Discussion Points:
- Can each clinical setting have separate entry-level requirements?
- Changing the curriculum may prepare students to be better prepared to enter clinical education along with changing the level of the CI preparation.
- With all of the new grad performance outcome standards, after 12 weeks in each of 3 settings, including all experiences prior to these internships, can the graduate meet all of the entry-level expectations in that setting? Are they entry-level at the completion of each experience? Are there standard clinical performance expectations regardless of setting?
- The academic program determines the objectives for entry-level for its program graduates.
- May solve the problem by keeping the student longer (need more practice and more exposure) in each of the clinical settings as proposed by the model.
- Should students be required to perform at entry-level at the end of each clinical internship?
- Judgment call: There has to be some discussion between student, clinical instructor, and the academic program regarding performance outcome expectations.
- Setting the expectation that the student will achieve entry-level at the end of each clinical internship in all settings will eliminate situations where students select practice settings that they do not want to complete or settings where students do not perform as well for early experiences.
- Given that different skills can be accomplished at the end of each clinical experience, while some skills are cumulative and developed over time (eg, clinical decision-making), how does that impact this structure?
- Need to determine which skills are required to meet entry-level in each practice setting versus those skills that are not setting-specific.
- Perhaps we need to take the "leap" while simultaneously studying the approach. We need to determine a framework for what will work in each clinical setting.
- The consensus represents a **minimum** standard and an academic program could have or want more.
- Regions could conduct collaborative studies on this approach.

Consensus Decision:
- ✓ Vote: *Yes*   35   *No*   0
- **It is expected that the student will achieve entry-level performance at the end of each clinical internship in the specific practice setting.**
- **When this approach is implemented, we should conduct scholarly investigations of the model actually works by identifying strengths, limitations, barriers, opportunities, and student outcomes among other variables.**

Consensus Question 5:
Can the final clinical experience in the organizational structure occur in one or multiple settings for students?

Consensus Decision:
- ✓ Vote: *Yes*   35   *No*   0

The final clinical experience may occur in one or multiple settings in the new organizational structure.

SUMMARY OF CLINICAL EDUCATION CONSENSUS DECISIONS FOR CONFLICTED VIEWS

Consensus Question 6:
What should we call the terminal full-time experiences where the goal is achievement of entry-level?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
The terminal full-time experiences where the goal is achievement of entry-level are called internships.

Consensus Question 7:
Should there be consistent start dates for all students for their final clinical experiences?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
Identify 12 standard start dates for final full-time experiences for all academic programs with a standard date for each month.

Consensus Question 8:
Should a minimum standard length (eg, 30-36 total weeks) be established for each internship (with scholarly investigation during implementation) to be prepared for licensure?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
A minimum standard length of clinical education should be established for each internship (with scholarly investigation during implementation) for preparation for licensure.

Consensus Question 9:
Should the internship be paid or unpaid?
*Modified the question to: Should the internship allow for both paid and unpaid student options?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
The internship should allow for both paid and unpaid student options.

Consensus Question 10:
When should licensure occur in this preferred structure?

Consensus Decision:
✓ Vote: *Yes*   35   *No*   0
Following the successful completion of all 3 internships.

SUMMARY OF CLINICAL EDUCATION CONSENSUS DECISIONS FOR CONFLICTED VIEWS

Consensus Question 11:
If an academic program or the student adds a fourth internship, when should licensure occur?

Consensus Decision:
   ✓ Vote: *Yes* 35   *No*   0
Following the successful completion of the fourth internship.

FUNDING ALTERNATIVES FOR CLINICAL EDUCATION

Funding alternatives below were generated by member consultants as potential resources for future exploration in support of proposed changes in new graduate performance outcome principles, clinical instructor performance principles, changes in preferred infrastructure and model of delivery of clinical education. Recall from the key assumptions, there were 2 explicit conditions that member consultants agreed to honor in their discussion of funding alternatives, which were as follows:

- Funding alternatives for clinical education must recognize and, when possible, minimize the profession's vulnerability to fluctuations in health care reimbursement.
- Funding alternatives for clinical education should not increase student debt.

Funding Alternatives
- Underwrite CI Development and Training
  - ✓ Area Health Education Center (AHEC)—Mission is to enhance access to quality health care, particularly primary and preventive care, by improving the supply and distribution of health care professionals through community/academic educational partnerships. In some states and regions (eg, North Carolina, Alaska), AHECs provide funds and resources for clinical instructor training.
  - ✓ Vendors for equipment
- Provide Mechanisms to Support Students
  - ✓ Regional organization's communication may help to alleviate some of these issues
  - ✓ Housing list/sharing
  - ✓ Travel Web site (lists available housing)
  - ✓ Reallocate funds for position advertisements into student support (eg, fund student employees such as the Veterans Affairs scholarship)
  - ✓ Increased retention of interns/new graduates through recruitment
  - ✓ Create a Foundation for Clinical Education to support students and CIs. Provide financial resources to assist clinical sites and academic programs, fund professional student scholarships, pay for clinical instructors, etc. This could result in the following:
    - ➤ Saving money allocated to pay for "headhunters"
    - ➤ Providing support for rural health and underserved areas
    - ➤ Opportunity for inclusion in the National Health Service Corp (pending)
  - ✓ To address the ethical issue of paying student interns, scholarships could be provided as compared to the promise of a job
  - ✓ Market to large clinical facilities to provide student support
  - ✓ Hospitals pay for academic faculty and to have students assigned to their facility
  - ✓ Private foundation grants
  - ✓ Alumni associations for the academic programs through targeted endowments
    - ➤ Raised the issue if funds can be directed to individualized programs within an academic program and institution.
  - ✓ Major employers in a region
  - ✓ Health care corporations (eg, AmeriCorps)

Academic coordinator/Director of clinical education (ACCE/DCE): "An 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 the academic program and student performance and for maintaining current information on clinical sites."[13] (p 38)

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."[20] (p 4)

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."[20] (p 4)

APTA Core Values: APTA endorsed a defined set of 7 values (altruism, accountability, compassion/caring, excellence, integrity, professional duty, social responsibility), which are identified as central to the concept of *professionalism*.[20]

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*."[13] (p 38)

Autonomous practice: "Autonomous physical therapist practice is characterized by independent, self-determined, professional judgment and action. Physical therapists have the capability, ability, and responsibility to exercise professional judgment within their scope of practice, and to professionally act on that judgment."[37]

Caring: The concern, empathy, and consideration for the needs and values of others.[20] (p 4)

Caregiver: "One who provides care, often used to describe a person other than a health care professional."[13] (p 38)

Case management: "The coordination of patient care or client activities."[13] (p 38)

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 individuals 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 therapist education programs."[13] (p 39)

Client: An individual who is not necessarily sick or injured but who can benefit from a physical therapist's consultation, professional advice, or services. A client also is a business, a school system, or other entity that may benefit from specific recommendations from a physical therapist.[5] (p 677)

Clinical decision making: "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 resources."[13] (p 39)

Clinical education experiences: "These experiences comprise all of the formal and practical real-life learning experiences provided for students to apply classroom knowledge and skills in the clinical environment. Experiences would include those of short and long duration (eg, part-time, full-time, internships) and those that provide a variety of learning experiences (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 across the life span and related activities."[13 (p 39)]

Clinical instructor (CI): "Individual at the clinical education site who directly instructs and supervises students during their clinical learning experiences. CIs 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*)"[13 (p 39)]

Clinical reasoning: "A systematic process used to assist students and practitioners in inferring or drawing conclusions about patient/client care under various situations and conditions."[13 (p 39)]

Cognitive: "Characterized by awareness, reasoning, and judgment."[13 (p 39)]

Communication: "A process by which information is exchanged between individuals through a common system of symbols, signs, or behavior."[13 (p 39)]

Compassion: "The desire to identify with or sense something of another's experience; a precursor of caring."[20 (p 4)]

Competence: "The possession, application, and evaluation of requisite professional knowledge, skills, and abilities to meet or exceed the performance standards, based on the physical therapist's roles and responsibilities, within the context of public health, welfare, and safety."[38]

Competency: "The possession and application of contemporary knowledge, skills, and abilities commensurate with an individual's (physical therapist or physical therapist assistant) role within the context of public health, welfare, and safety."

Complexity: "Multiple requirements of the tasks or environment (eg, simple, complex) or patient (see "Complex patient"). The complexity of the tasks or environment can be altered by controlling the number and types of elements to be considered in the performance, including patients, equipment, issues, etc."[13 (p 39)]

Complex patient: "Refers to patients presenting with multiple comorbidities, multi-system involvement, needs for extensive equipment, multiple lines, cognitive impairments, and multifaceted psychosocial needs. As a student progresses through clinical education experiences, the student should be capable of managing patients with increasingly complex conditions, with fewer elements or interventions controlled by the CI."[13 (p 40)]

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."[13 (p 40)]

APPENDIX A.
GLOSSARY OF TERMS

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."[5 (p 678)]

Consumer: "One who acquires, uses, or purchases goods or services; any actual or potential recipient of health care."[13 (p 40)]

Cost-effectiveness: "Economically worthwhile in terms of what is achieved for the amount of money spent; tangible benefits in relation to expenditures."[13 (p 40)]

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.[39]

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 as an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities."[36]

Cultural sensitivity: Awareness of cultural variables that may affect assessment and treatment.[40]

Culturally and Linguistically Appropriate Services (CLAS): The CLAS federal standards are mandates for all recipients of federal funds and are primarily directed at health care organizations. However, individual providers are also encouraged to use the standards to make their practices more culturally and linguistically accessible. The principles and activities of culturally and linguistically appropriate services should be integrated throughout an organization and undertaken in partnership with the communities being served. The 14 standards are organized by themes: Culturally Competent Care (Standards 1-3), Language Access Services (Standards 4-7), and Organizational Supports for Cultural Competence (Standards 8-14). Within this framework, there are 3 types of standards of varying stringency: mandates, guidelines, and recommendations.[30]

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, 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.[5 (p 678)]

Diagnostic process: "The evaluation of information obtained from the patient examination organized into clusters, syndromes, or categories."[13 (p 40)]

Differential diagnosis: "The determination of which of 2 or more different disorders or conditions is applicable to a patient or client."[13 (p 41)]

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."[5 (p 678)]

Disease: "A pathological condition or abnormal entity with a characteristic group of signs and symptoms affecting the body and with known or unknown etiology."[5 (p 678)]

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 (ie, when the patient is moved from one site to another within the same setting or across settings during a single episode of care)."[5 (p 678)]

Documentation: "All written forms of communication provided related to the delivery of patient care, including written correspondence and electronic record-keeping."[13 (p 41)]

Education: Knowledge or skill obtained or developed by a learning process. A process designed to change behavior by formal instruction and/or supervised practice that include teaching, training, information sharing, and specific instructions. [13 (p 41)]

Efficiency: The ability to perform in a cost-effective and timely manner (eg, inefficient/slow vs. efficient/timely). As the student progresses though clinical education experiences, efficiency should progress from a high expenditure of time and effort to economical and timely. [13 (p 41)]

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. [13 (p 41)]

Entry-level performance: "A student who requires no guidance or clinical supervision with patients with simple or complex conditions. Consults with others and resolves unfamiliar or ambiguous situations. At this level, the student is consistently proficient and skilled in simple and complex tasks for skilled examinations, interventions, and clinical reasoning. The student is capable of maintaining 100% of a full-time physical therapist's caseload in a cost-effective manner." [13 (p 41)]

Episode of physical therapy prevention: "A series of occasional, clinical, educational, and administrative services related to primary prevention, wellness, health promotion, and 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."[5 (p 679)]

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."[5 (p 679)]

APPENDIX A.
GLOSSARY OF TERMS

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 and to achieve the highest level of excellence in clinical practice. 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.[41]

Examination: "A comprehensive and specific testing process performed by a physical therapist that leads to diagnostic classification or, as appropriate, a referral to another practitioner. The examination has 3 components: the patient/client history, the systems reviews, and tests and measures."[5 (p 679)]

Excellence: "Physical therapist practice that consistently uses current knowledge and theory while understanding personal limits. It integrates judgment and the patient/client perspective, embraces advancement, challenges mediocrity, and works toward development of new knowledge."[20 (p 5)]

Federal Education Rights to Privacy Act (FERPA): The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the US Department of Education.[34]

Fiduciary: Law pertaining to the relation between a professional and his or her principal (patient or client) based on, or in the nature of trust and confidence, as in public affairs.

Fiscal management: An 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."[5 (p 679)]

Function: "The special, normal, or proper action of any part or organ. An activity identified by an individual as essential to support physical and psychological well-being, as well as to create a personal sense of meaningful living. The specific action for which a person or thing is fitted or employed. An act, process, or series of processes that serves a purpose. To perform an activity or to work properly or normally."[13 (p 42)]

Functional limitation: "A restriction of the ability to perform a physical action, activity, or task in a typically expected, efficient, or competent manner."[5 (p 679)]

Goals: "The intended results of patient/client management. Goals indicate changes in body function and structure (impairment), activities (limitations), and participation (restriction) 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 and long-term goals."[5 (p 679), 27]

Guide to Physical Therapist Practice: Publication that describes the scope of practice of physical therapists 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.[5]

Health care provider: "A person or organization offering health services directly to patients or clients."[13 (p 42)]

Health disparities: Health disparities refer to differences between groups of people. These differences can affect how frequently a disease affects a group, how many people get sick, or how often the disease causes death. Many different populations are affected by disparities, which include racial and ethnic minorities, residents of rural areas, women, children, elders, and persons with disabilities.[35]

Health Information Portability and Accountability Act (HIPAA): Law mandating that anyone belonging to a group health insurance plan must be allowed to purchase health insurance within an interval of time beginning when the previous coverage is lost. The law protects employees, especially those with long-term health conditions who may be reluctant to leave jobs because they are afraid pre-existing condition clauses will limit coverage of any such conditions under a new insurance plan, from losing health insurance due a change in employment status. The law also created standards dealing with the privacy of health information, which helps prevent improper use of one's medical record.[24]

Health literacy: "The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."[42]

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.[43 (p 4)]

Health policy: Health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within society. The three major aspects of health care policy include services provided, organization and delivery of those services, and the financing of services. Health policy decisions affect overall health care resulting in regulations that affect the quality of services provided, the education of health professionals, the safety and effectiveness of pharmaceutical medications, and the coverage for medical care for society.[44]

Health status: "The level of an individual's physical, mental, affective, and social function. Health status is an element of well-being."[5 (p 679)]

History: "An account of past and present health status that includes the identification of complaints and provides the initial source of information about the patient. The history also suggests the patient's ability to benefit from physical therapy services."[13 (p 43)]

Impairment: "A loss or abnormality of physiological, psychological, or anatomical structure or function."[5 (p 680)]

Incentive: "An incentive is any factor (financial or non-financial) that enables or motivates a particular course of action, or counts as a reason for preferring one choice to the alternatives. It is an expectation that encourages people to behave in a certain way."[45 (p 31)]

Integrity: "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."[20 (p 6)]

Intervention: "The purposeful interaction of the physical therapist with the patient/client and, when appropriate, other individuals involved in patient/client care, using various physical therapy procedures and techniques to produce changes in the condition."[5 (p 680)]

Multicultural/multilingual: "Characteristics of populations defined by changes in the demographic patterns of consumers."[13 (p 43)]

Negotiation: "The act or procedure of treating another or others in order to come to terms or reach an agreement.´[13 (p 43)]

Objective: "A measurable behavioral statement of an expected response or outcome. Something worked toward or strived for. A statement of direction or desired achievement that guides actions and activities."[13 (p 43)]

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 the plan of care. The expected outcomes in the plan should be measurable and time-limited."[13 (p 44)]

Outcomes assessment of groups of patients/clients: "Performed by the physical therapist and a measure [or measures] of physical therapy care delivery to groups of patients/clients. This includes changes in impairments, functional limitations, and disabilities and the changes in health, wellness, and fitness needs that are expected as the results of the physical therapy."[13 (p 44)]

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."[13 (p 44)]

Patients: Individuals who are the recipients of physical therapy examination, evaluation, diagnosis, prognosis, and intervention and who have a health condition (disorder/disease) with limitations in body function and structure (impairment), activities (limitation), and/or participation (restriction).[5, 27]

Patient/client management model[5 (p 35)]

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              Diagnosis
Evaluation              Prognosis

Examination             Intervention

              Outcomes
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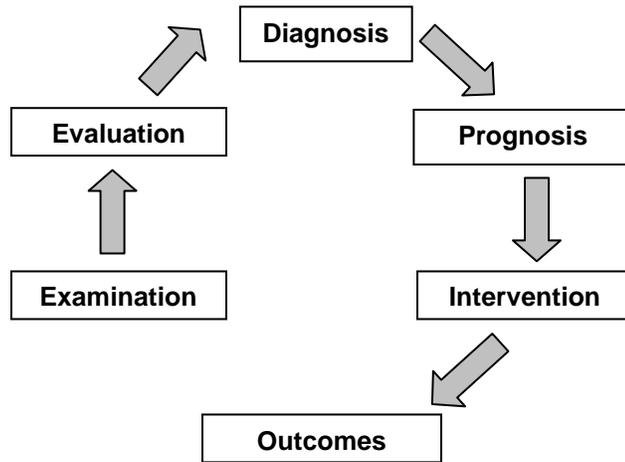
Physical therapist/physiotherapist: "A licensed health care professional who offers services designed to preserve, develop, and restore maximum physical function."[13 (p 44)]

Physical therapist assistant: "An educated health care provider who performs physical therapy procedures and related tasks that have been delineated in the plan of care as provided under the direction and supervision of the physical therapist."[13 (p 44)]

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."[5 (p 681)]

Power: Control and influence over other people and their actions; authority to act or do something according to a law or rule.

Practice management: The coordination, promotion, and resource (financial and human) management of practice that follows regulatory and legal guidelines, including management of a patient/client caseload. Practice management occurs in all practice settings and is not intended to refer exclusively to a private practice. [13 (p 45)]

Practitioner of choice: Consumers choose the most appropriate health care provider for the diagnosis, intervention, or prevention of an impairment, functional limitation, or disability.[16]

Presenting problem: The specific health condition that causes an individual to seek attention or intervention (ie, chief complaint).[13 (p 45)]

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); and 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."[5 (p 681)]

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."[20 (p 6)]

Professionalism: The conduct, aims, or qualities that characterize or mark a profession or a professional person; A systematic and integrated set of core values that through assessment, critical reflection, and change, guides the judgment, decisions, behaviors, and attitudes of the physical therapist, in relation to patients/ clients, other professionals, the public, and the profession.[20]

Prognosis: "The physical therapist's predicted optimal level of improvement in function and the amount of time needed to reach that level." [5 (p 682)]

Quality: "The degree of skill or competence demonstrated (eg, limited skill, high skill), the relative effectiveness of the performance (eg, ineffective, highly effective), and the extent to which outcomes meet the desired goals. A continuum of quality might range from demonstration of limited skill and effectiveness to a highly skilled and highly effective performance."[13 (p 45)]

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."[46]

Reflective practice: Reflective practice, or reflection-in-action is defined as the ability of professionals to "think what they are doing while they are doing it" or "action-present." This involves an ability to think on your feet, and apply previous experience to new situations. The reflective process to some degree is conscious, although not necessarily verbalized. Reflection-in-action is about challenging our assumptions and thinking about a problem we have encountered in a new way.[47]

Role: "A behavior pattern that defines a person's social obligations and relationships with others (eg, father, husband, son)."[13 (p 45)]

Reexamination: "The process of performing selected tests and measures after the initial examination to evaluate progress and to modify or redirect interventions."[5 (p 682)]

Review of systems (ROS): "Data collected during the patient interview that when used in conjunction with a patient's medical history and symptoms and signs facilitates the physical therapist's role in medical screening and differential diagnosis. The ROS includes the use of checklists of common symptoms relevant to each of the body systems. The purpose of the ROS is to identify symptoms that may have been overlooked during the investigation of the patient's chief presenting symptoms."[48 (p 87)]

Screening: "Determining the need for further examination or consultation by a physical therapist or for referral to another health professional."[5 (p 682)]

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."[20 (p 7)]

Standard: Something established by authority, custom, general consent as a model or example. Something established by authority as a rule for the measure of quantity, weight, extent, value, or quality. Has recognized and permanent value and wide acceptance

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."[5 (p 682)]

Treatment: "The sum of all interventions provided by the physical therapist to a patient/client during an episode of care."[5 (p 683)]

Unconditional positive regard: An essential element of the patient/therapist relationship demonstrated by warm caring that is based on trust, respect, compassion, and empathy and without any conditions of worth or personal gratification.[49 (p 283)]

Wellness: An active process of becoming aware of and making choices toward a more successful existence.[50]

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APPENDIX D.
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APPENDIX D.
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APPENDIX E.
REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Host and Location	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
			2008 Regional Forums	
October 7, 2008	**Annual IACCC/CEF Clinical Education Workshop** **Pomona, CA**	50	ACCEs/DCEs = 13 PT Academic Admin = 7 CIs = 25 CCCEs = 17 Employers = 0 Clinical Managers = 4 Consumers = 1 Residency Faculty = 3 Students = 2 State Licensure Board = 2 State Association = 2 Reimbursement Chairs = 2 PTA Clinicians = 0 Other Health Professionals = 0	Acute Care/Hospital = 20 Rehab/Neuro = 11 Woman's Health = 2 Pediatrics = 5 Outpatient Geriatrics = 19 Sports Physical Therapy = 4 Private Practice = 2 Orthopedics = 10 Cardiovascular Pulmonary = 1 Integumentary = 2 Aquatics = 1 Industry/Work Hardening = 0 Vestibular Rehab = 3
October 29, 2008	**The New England Consortium of ACCE's** **Springfield, MA**	56	ACCEs/DCEs = 19 PT Academic Admin = 6 PT Faculty = 6 CIs = 8 CCCEs = 23 Employers = 0 Clinical Managers = 11 Consumers = 0 Residency Faculty = 0 Students = 0 PTA Clinicians = 0 Other Health Professionals = 0	Acute Care/Hospital = 14 Rehab/Neuro = 9 Woman's Health = 2 Pediatrics = 6 Geriatrics = 3 Sports Physical Therapy = 3 Orthopedics = 18 Integumentary = 1

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REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
			2009 Regional Forums	
March 13, 2009	**Florida Consortium of Clinical Educators** **Orlando, FL**	30	**ACCEs/DCEs = 12** **PT Academic Admin = 4** **PT Faculty = 4** **PTA = 2** **CIs = 18 (Credentialed CIs=26; Advance Credentialed CIs=5)** **CCCEs = 11** **Employers = 5** **Clinical Managers = 6** **Residency Faculty = 1** **Students = 5** **Associate Deans = 1**	**Acute Care/Subacute= 12** **Rehab/Neuro = 24** **Private Practice = 2** **ECF/SNF = 2** **Pediatrics = 3** **Geriatrics = 3** **Orthopedics = 6** **Cardiovascular Pulmonary = 2** **Integumentary = 1** **Oncology = 1**
March 20, 2009	**University of Nebraska Medical Center** **Omaha, NE**	73	**ACCEs/DCEs = 3** **PT Academic Admin = 1** **PT Faculty = 11 (PT = 9; PTA = 2)** **CIs = 18 (Credentialed CIs=6, Advance Credentialed CI=1)** **CCCEs = 14** **Employers/Clinical Managers = 12** **Associate Deans = 1** **Clinical Managers = 4** **Military CIs = 2** **Consumers = 0** **Residency Faculty = 3** **New Professionals = 1** **Students = 4** **State Licensure Board = 3** **PTAs = 0** **Other Health Professionals = 0**	**Acute Care/Hospital = 7** **Rehab/Neuro = 10** **Home Health = 4** **Outpatient = 7** **School System = 5** **Private Practice = 5** **ECF/SNF = 3** **Woman's Health = 1** **Pediatrics = 16** **Geriatrics = 13** **Orthopedics = 21** **Cardiovascular Pulmonary = 1** **Integumentary = 6** **Oncology = 1** **Aquatics = 2** **Industry/Work Hardening = 2**

REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
March 25, 2009	Philadelphia Consortium of ACCEs Bryn Mawr, PA	56 (PTs = 53, PTAs = 1)	ACCEs/DCEs = 17 PT Academic Admin = 6 PT Faculty = 5 CIs = 18 (Credentialed CIs=41; Advance Credentialed CIs=5) CCCEs = 21 Employers/Clinical Managers = 6 Deans = 1 Clinical Managers = 4 Consumers = 1 Residency Faculty = 4 Students = 3 PTAs = 1 Other Health Professionals = 2 (Psychology, Chiropractic/ Nurse)	Acute Care/Hospital = 11 Rehab/Neuro = 11 Home Health = 4 Outpatient = 13 Private Practice = 4 ECF/SNF = 5 (OT = 1) Woman's Health = 1 Pediatrics = 8 Geriatrics = 10 Orthopedics = 20 Cardiovascular Pulmonary = 5 Integumentary = 1 Oncology = 3 Aquatics = 2 Industry/Work Hardening = 1
March 28, 2009	Wisconsin, Iowa, and Minnesota Clinical Education Consortium La Crosse, WI	57	ACCEs/DCEs = 17 PT Academic Admin = 3 PTA Academic Admin = 1 PT Faculty = 6 CIs = 16 (Credentialed CIs=45; Advance Credentialed CIs=19) CCCEs = 12 Employers = 5 Deans = 1 Hospital Administrator = 2 Clinical Managers = 5 Consumers = 0 Residency Faculty = 2 Students = 2 PTAs = 0 Other Health Professionals = 2 (OT)	Acute Care/Hospital = 3 Rehab/Neuro = 7 Home Health = 4 Outpatient = 4 ECF/SNF = 2 Pediatrics = 1 Geriatrics = 2 Orthopedics = 6 Oncology = 1 Aquatics = 2

APPENDIX E.
REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
April 3, 2009	Duke University/DPT Division, University of NC–Chapel Hill/Div of PT, and Carolina Clinical Education Consortium (NC & SC) Durham, NC	40	ACCEs/DCEs = 9 PT Academic Admin = 4 PT Faculty = 4 CIs = 16 (Credentialed CIs=27; Advance Credentialed CIs=10) CCCEs = 10 Employers = 4 Deans = 1 Clinical Managers = 4 Consumers = 1 Residency Faculty = 2 Students = 3 PTAs = 0 Other Health Professionals = 2 (OT, PA) Payers = 2 State Licensure Board = 1 Administrative Assistants = 1	Acute Care/Subacute = 12 Hospital System = 22 Rehab/Neuro = 7 Home Health = 1 Outpatient = 4 Private Practice = 1 ECF/SNF = 2 Pediatrics = 2 Geriatrics = 1 Orthopedics = 7 Cardiovascular Pulmonary = 1 Integumentary = 6 Sports Physical Therapy = 1 Oncology = 1 Aquatics = 2
April 6, 2009	Virginia/District of Columbia Consortium for Clinic Education and in collaboration with Maryland Physical Therapy Education Programs Arlington, VA	58	ACCEs/DCEs = 17 PT Academic Admin = 4 PTA Academic Admin = 1 PT Faculty = 4 PTAs = 3 CIs = 25 (Credentialed CIs=39; Advance Credentialed CIs=4) CCCEs = 20 Employers = 8 Clinical Managers = 13 Consumers = 1 Residency Faculty = 2 Students = 2 State Licensure Board = 1 Other Health Professional = 1 (OT)	Acute Care/Subacute= 7 Rehab/Neuro = 6 Home Health = 4 Outpatient = 9 Private Practice = 8 ECF/SNF = 2 Woman's Health = 4 Pediatrics = 8 Geriatrics = 9 Orthopedics = 21 Cardiovascular Pulmonary = 1 Integumentary = 3 Oncology = 1 Aquatics = 1 Wellness/Prevention = 4

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
April 23, 2009	Michigan Physical Therapy Association, Special-Interest Group for Clinical Education Lansing, MI	61	ACCEs/DCEs = 8 PT Academic Admin = 5 PT Faculty = 6 CIs = 36 CCCEs = 40 Employers = 4 Clinical Managers = 9 Consumers = 1 Residency Faculty = 1 PTA Clinicians = 1 Students = 0 Other Health Professionals = 2 (SLP, OT)	Acute Care/Hospital = 26 Rehab/Neuro = 17 Home Health = 0 Woman's Health = 3 Pediatrics = 6 Geriatrics = 12 Sports Physical Therapy = 5 Orthopedics = 23 Cardiovascular Pulmonary = 1 Integumentary = 1 Aquatics = 1 Industry/Work Hardening = 4
May 12, 2009	Mt Hood Community College and Pacific University Gresham, Oregon	45 (PT = 38; PTA = 7)	ACCEs/DCEs = 7 (2 PT; 3 PTA) PT Academic Admin = 2 PTA Academic Admin = 4 PT Faculty = 1 CIs = 17 (Credentialed CIs=23; Advance Credentialed CIs=4) CCCEs = 13 Employers = 5 Clinical Managers = 4 Deans = 1 Clinical Managers = 4 Consumers = 0 Residency Faculty = 2 Students = 4 (PTA) Other Health Professional = 1 (OT)	Acute Care/Hospital = 8 Rehab/Neuro = 2 Outpatient = 13 Private Practice = 4 ECF/SNF = 5 (OT = 1) Pediatrics = 4 Geriatrics = 5 Sports Physical Therapy = 3 Orthopedics = 13 Cardiovascular Pulmonary = 1 Integumentary = 1 Oncology = 1 Aquatics = 2 Hand Rehabilitation = 1

APPENDIX E.
REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
May 29, 2009	Saint Louis, Maryville, and Washington Universities St Louis, MO	34	ACCEs/DCEs = 13 PT Academic Admin = 2 PT Faculty = 8 PTAs = 1 CIs = 3 (Credentialed CIs=17; Advance Credentialed CIs=9) CCCEs = 3 Employer/Clinical Managers = 3 Consumers = 1 Residency Faculty = 1 Students = 2 Deans = 1 Other Health Professionals = 0	Acute Care/Subacute= 7 Rehab/Neuro = 4 Home Health = 4 Outpatient = 9 Private Practice = 2 ECF/SNF = 2 Pediatrics = 1 Geriatrics = 17 Orthopedics = 17 Cardiovascular Pulmonary = 7 Integumentary = 7 Aquatics = 2 Industry/Work Hardening = 2 Wellness/Prevention = 5
June 19, 2009	New York/New Jersey PT Clinical Education Consortium Newark, NJ	81	ACCEs/DCEs = 22 PT Academic Admin = 4 PT Faculty = 7 CIs = 20 (Credentialed CIs=42; Advance Credentialed CIs=11) CCCEs = 19 Employers/Managers = 5 Deans = 1 Clinical Managers = 4 Consumers = 0 Residency Faculty = 0 Students = 0 State Licensure Board = 2 NJPTA Executives = 1 PTA Clinicians = 0 Other Health Professionals = 0	Acute Care/Hospital = 7 Rehab/Neuro = 19 Home Health = 6 Outpatient = 13 School System =7 Private Practice = 3 ECF/SNF = 1 Woman's Health = 2 Pediatrics = 14 Geriatrics = 17 Sports PT = 3 Orthopedics = 14 Cardiovascular Pulmonary = 1 Integumentary = 1 Oncology = 1 Aquatics = 2

APPENDIX E.
REGIONAL FORUMS ON CLINICAL EDUCATION DEMOGRAPHICS

Forum Date	Location and Host	Total No. of Participants	Stakeholders Represented (may represent >1 category)	Areas of Practice (may represent >1 category)
July 18, 2009	Texas Consortium for Physical Therapy Clinical Education, Inc. Dallas, TX	90	ACCEs/DCEs = 10 PT Academic Admin = 10 PT Faculty = 4 CIs = 14 (APTA Credentialed = 12; Texas Credentialed = 25; Advance Credentialed CIs=2) CCCEs = 12 Employers/Managers = 5 Consumers = 0 Residency Faculty = 3 Students = 30 PTAs = 3 Other Health Professionals = 0	Acute Care/Hospital = 20 Rehab/Neuro = 11 Home Health = 1 Woman's Health = 2 Pediatrics = 5 Geriatrics = 19 Sports Physical Therapy = 4 Private Practice = 2 Orthopedics = 10 Cardiovascular Pulmonary = 1 Integumentary = 2 Aquatics = 1 Vestibular Rehab = 3 VA = 1
August 17, 2009	Alabama, Mississippi, and Louisiana Physical Therapy Programs Birmingham, AL	20	ACCEs/DCEs = 3 (1 Credentialed CIs) CIs = 4 CCCEs = 7 Clinical Managers/Admin = 4 Students = 2 PTAs = 0 Other Health Professionals = 0	Acute Care/Hospital = 2 Rehab/Neuro = 2 Outpatient = 2 School System =1 ECF/SNF = 1 Pediatrics = 2 Geriatrics = 1 Sports Physical Therapy = 1 Orthopedics = 1
September 12, 2009	Northwest Intermountain Consortia Denver, CO	39	ACCEs/DCEs = 4 PT Academic Admin = 1 PTA Academic Admin = 1 PT Faculty = 3 CIs = 11 CCCEs = 11 Employers = 4 Residency Faculty = 1 Students = 7 State Licensure Board = 1 PTAs = 0 Other Health Professionals = 0	Acute Care/Subacute = 7 Rehab/Neuro = 3 Home Health = 4 Outpatient = 9 Woman's Health = 2 Pediatrics = 3 Geriatrics = 4 Orthopedics = 9 Cardiovascular Pulmonary = 1 Integumentary = 4 Sports Physical Therapy = 4 Oncology = 4 Aquatics = 3 Clinical Electro = 1

APPENDIX F.
PREFERRED CLINICAL EDUCATION INFRASTRUCTURE
OPPORTUNITIES AND RESISTANCE

Clinical Education Infrastructure Component	Opportunities	Resistances
<u>Organizational Relationship Between Academic/Clinical Settings</u> • The relationship needs to be tighter/closer. It is preferable that students remain within the region for their clinical experiences, with a mechanism to "allow" students to move across regions (limited numbers) for full-time extended internships and with an ability to negotiate short-term integrated experiences that occur within the region. • Develop a regional organization of representatives from both academic programs and clinical sites (CIs, CCCEs, administration) to implement national standards at the regional level. • Develop national standard expectations to be implemented regionally.	• National standards could define both quality and quantity issues associated with clinical education. • National standards could facilitate clear expectations and greater consistency* for clinical sites and clinical educators in providing clinical education. • Provide a set of learning objectives from both the academic program and the clinical sites for students that clarifies and strengthens expectations for the clinical experience. • Expand regions across more than one clinical education consortium. • With a consistent standard, a clinical facility may be able to accommodate more students. • Provides for a formal structure that maximizes the use of resources and technologies. • Use current data collected about clinical sites to determine quality. • For clinical sites unable to meet the standards, provide mechanisms to improve the clinical site through the regional organization to be able to meet the standards. • Regional oversight provides for greater investment and collaboration and use of shared resources among academic programs that often use many of the same clinical sites. • The locus of control to determine clinical education quality is vested at the regional rather than national level where the region may have greater investment.	• Limitation in students' ability to access clinical sites outside of the region to obtain variety. • Programs that promote their clinical education experiences are available throughout the US and internationally. • There currently are no national standards for clinical sites, CCCEs, and CIs, only voluntary guidelines. • Difficulty in developing a set of national standards that would be agreeable to all involved stakeholders given programmatic, geographic, and resource differences. • Lack of available tools that allow regions to implement the standards consistently. • Definition of "region" is not clear and could be difficult to manage depending upon the composition, size, and availability of resources in the region. • Discomfort in addressing clinical sites that did not meet the standards and that may be classified as "inferior." • Availability of sufficient number of clinical sites that meet the standards to accommodate all physical therapist students for any given year in the region. • This process will require "buy-in" from all key stakeholders to accommodate these changes. • Clinical sites, CCCEs, and CIs may resist the achievement of specific standards as a clinical site given their limited resources, available time, and costs associated with providing student clinical education without extrinsic motivators.

Clinical Education Infrastructure Component	Opportunities	Resistances
	Suggested Remedy • Credentialing of clinical sites would voluntary. • Develop a system to classify a clinical site as "with distinction" or other nomenclature to identify excellence rather than credentialing all clinical sites.	• Amount of additional work required of a regional organization to approve and monitor clinical sites to maintain standards given already current time constraints. • Costs associated with instituting an approval process for clinical sites without a clear understanding of which entities would assume those costs. • Risk of losing clinical sites if required to meet a national standard. • Regional accountability and costs associated with helping clinical sites to meet the standards, where needed. • Increased competition among programs for using clinical sites that meet standards. • Regions do not have the authority to currently "police" a clinical site. • Staff turnover is common, making ongoing assessment of the ability to meet the clinical standards difficult.
Relationship Among Stakeholders The relationships between the academic faculty, clinical educators, and students need to be tighter/closer.	• Facilitates increased investment and involvement in clinical education between all parties and could reduce the disconnect between academic and clinical environments. • Models collaboration with all stakeholders with the inclusion of patients as primary in the partnership. • Provides a more formalized, interdependent, and collaborative approach among stakeholders.	• Reframe issues associated with locus of control for clinical education from one stakeholder group to a shared locus of control. • May favor clinical sites in closer proximity to academic programs in strengthening clinical education partnerships.
Communication Provide for ongoing reciprocal communication among and between all relevant and involved	• Maximizes resources and technologies to enhance ongoing and reciprocal timely communication.	• Variability in the knowledge and use of and access to technologies by different stakeholders.

Clinical Education Infrastructure Component	Opportunities	Resistances
stakeholders before, during, and after students' clinical experiences, using available and accessible vehicles and technologies (eg, Websites, e-communities, list serves, online learning, standard tools) to communicate standards and assess clinical educator and ACCE/DCE performance.	• Enhanced communication among all stakeholders can lead to clearer understanding and further refinement of how clinical education is provided. • Promotes a sharing of resources among stakeholders.	• May require additional training to ensure that stakeholders can access and use the various technologies. • Costs associated in using various technologies to all stakeholders.
Contracts Develop model clinical education contract that includes the essential elements to go beyond the standard contractual agreement taking into consideration regulatory constraints, learning experiences, payers, etc.	• Having a model contract with standard language might make the negotiation process easier for all parties. *Suggested Remedy* • Develop a model template that could be useful as a starting point in the contract development and negotiation process.	• Practically, variability in clinical education contract requirements at academic programs and clinical sites and in meeting state regulatory requirements vary significantly. • Legal council is involved representing the different parties to ensure that the language meets the liability and risk management needs of these parties with varied interests. • Some contracts are defined at the institutional level similarly for all health professions programs in the institution while others are defined to be profession specific. • Contracts are managed and approved at the institutional level, regardless of using a model contract.
Placement of Students in Clinical Experiences • Provide a regional/national system for student final internship placements depending upon the regional credential/approval process. • Develop a common clinical calendar with standard monthly start dates for full-time clinical experiences with a standardized placement request form.	• Standardized system may increase the number of students that a facility can accommodate. • Elevate the standard for clinical education sites to more consistently provide quality experiences for students across the country. • Standard start dates, one per month, could make it easier to schedule students in the	• Development of consistent standards for clinical education sites for regional use will be challenging. • Academic programs that are on a fixed academic calendar do not have the flexibility to change the semester calendar to coincide with the 12 dates for sending students out to full-time clinical experiences.

Clinical Education Infrastructure Component	Opportunities	Resistances
	clinic with some clinics indicating that they could take more students simultaneously. • Students could exchange housing if clinical experiences were in different geographic regions of the country. • Standardized calendar may allow for increased data collection about clinical education performance outcomes. • Could develop a more time-effective and cost-effective student clinical site orientation, where required. • Increased opportunity to use collaborative learning models such as a 2 students: 1 CI supervisory approach. • Some regions reported attempting standard placement requests, which was fraught with complications due to length of internships, type of internship, number of internships, and variability of start dates. Standard start dates might facilitate this process.	• In some cases, academic programs would need to redesign their entire curriculum to accommodate standardized start times for student clinical education, which also would impact federal mandates and funding. • Students need to have input into the selection process to promote problem-solving, reflection, and critical thinking. • May increase workload for clinical sites where orientation is provided by Human Resources. • For some, standard start dates would decrease the variety of clinical settings and the number of students that a clinical facility could accommodate throughout the year. • Twelve standard start dates may practically translate into 11 start dates, given holidays and academic calendars, further compressing access to clinical education sites.
Performance Evaluation and Grading • Provide a uniform evaluation process for students, CIs, and CCCEs that includes training for all users in how to access and use the tools and includes self-assessment tools for students for ongoing review and feedback. • Tools should be flexible enough for use by the academic program to assess readiness of the student for clinical education and should incorporate technology and informatics to capture learning experiences. • Clinical faculties provide data and	• Uniform evaluation process makes it easier for all stakeholders involved in clinical education to assess student performance with learning a consistent system. • A uniform evaluation process allows physical therapist programs to access and compile programmatic and national outcomes data about aspects of clinical education and student performance. • Tools that are sufficiently rigorous and flexible can accommodate the various needs in different clinical settings and	• Training in the use of uniform evaluation tools may be difficult for all to be able to access electronically. • Development, maintenance, and refinement of uniform tools may be costly. • Currently the selection and use of student performance assessment instruments is voluntary and based on the institution's mission, program philosophy, and defined student performance outcomes.

Clinical Education Infrastructure Component	Opportunities	Resistances
observations to assist the ACCE/DCE in assigning the grade to the student for clinical education.	academic institutions. • Use of technology in performance evaluation can facilitate ease in data collection and be more environmentally mindful.	
<u>Early Integrated Practice Exposure</u> • Early integrated clinical experiences provide clinic-classroom-patient exposures to enable students to practice a definitive set of skills to translate didactic into clinical practice, reinforce knowledge from the classroom associated with Minimum Required Skills of Physical Therapist Graduates at Entry-Level across all systems, the continuum of care, lifespan, and practice management. • Clinical faculties (CI is viewed as academic/clinical faculty) are integrated into the academic program, providing practice experiences and patient contact as part of the didactic coursework. • Integrate academic faculty into the clinical experience to enhance participation at the clinical site, placing students at the clinical site more often (nursing preceptor model).	• May be able to maximize the use of clinical sites with a smaller number of staff for specific learning objectives in the integrated practice exposures that may not otherwise be able to commit to a 10-12-week experience. • Use of technology and practice simulators could help meet the need for early integrated practice experiences. • Early integrated experiences may involve more clinical educators with varying levels of experience/expertise that can provide student supervision and teaching. • Expand the number of academic faculty for "grassroots" development. • Build career ladders for clinical educators throughout clinical education. • Early integrated experiences may optimize clinical instructor's knowledge and skills in providing instruction for students in clinical practice. • Integrating clinical experiences using faculty and clinicians may allow for greater consistency in the evaluation of students' competence for fundamental clinical skills. • Increase the value and investment of academic faculty in clinical education. *Suggested Remedy* • Consider "early integration" for clinical	• Academic faculty supervising students in the clinic will need to meet all employee requirements to practice at a clinical facility, which can be cumbersome and time consuming. • Negotiating faculty roles in the clinic related to patient management, productivity, billing, and revenue generation while supervising students. • There are potential risk management and professional liability issues with multiple students to one faculty based on program or facility policies. • Space limitations to accommodate the number of students that may be placed in a clinical site for short-term and collaborative learning experiences. • Approach favors clinical sites in close geographic proximity to the academic program that can accommodate a small group of students (eg, rural sites may not be able to participate). • Given that clinical sites in close proximity to the academic program are favored, the full complement of desired learning opportunities may not be available to students. • Requires an expansion in the number of faculty with increased financial compensation for clinical faculty teaching

Clinical Education Infrastructure Component	Opportunities	Resistances
	experiences rather than part-time clinical education. • Eliminate core CIs/faculty as the faculty to provide this integration.	students given the increased expectations of these individuals. • Addressing practice management experiences such as directing and supervising PTAs and other support personnel may be overlooked in this approach. • Logistics of coordinating multiple integrated experiences with academic and clinical faculties to meet specific learning objectives is difficult and complex. • Additional knowledge and skills may be required for the ACCE/DCE and CCCE to coordinate theses experiences to ensure that learners obtain the breadth of required experiences. • Reimbursement and student billing are problematic in this approach, given current and future requirements of Medicare Part A and Part B. • May cause burn-out of clinical faculty because of the number of students involved in these experiences. • Increased work to develop clinical faculty for teaching integrated experiences directed toward specific skills. • Requires additional faculty to implement this component of the infrastructure, which is labor intensive and adds to overall faculty workloads. • Requires increased workforce to implement and creative schedules to manage academic and clinical faculties teaching time. • Challenge to provide a sufficient number of clinical experiences to expose all

Clinical Education Infrastructure Component	Opportunities	Resistances
		students to the breadth of patients across the lifespan. • Lack of evidence to support that short-term and integrated experiences produce better student performance outcomes. • Concern about whether students with clinical performance problems will be identified early using this approach. • Inability to follow patients throughout the continuum of care. • Lack of criteria for determining how students are assigned to the different integrated experiences. • Requires a redesign of the curriculum to accommodate this approach, which may affect the number of credits that can be assigned for the learning experiences by institutions.

<u>Internships: Full-time and Longer Experiences at the End of the Didactic Program</u>
• Three defined experiences of 10-12 weeks in length that include student learning experiences to address, with an expected outcome of entry-level performance:
   o Patients with acute cardiovascular/pulmonary and integumentary systems conditions
   o Patients with rehabilitation neuromuscular and cardiovascular/pulmonary systems condition
   o Patients in outpatient settings with musculoskeletal, cardiovascular/pulmonary, and neurologic systems conditions.
	• Clinics could set better weekly learning objectives if students completed experiences that were all the same length and occurred at the end of the program.
	• Expectations of entry-level performance at the end of each clinical experience could address the issue of new graduates meeting entry-level performance with patient conditions commonly managed in physical therapy.
	• Potential to elevate the standard for DPT graduates to achieve entry-level performance in each of 3 core aspects of clinical practice with the possibility of translating into best practice for patients.
	• Address the needs of employers for new graduate performance preparation to enter
		• Approach may favor clinical sites with large teaching centers or corporate models where students could be provided rotations in any one facility for 10-12 weeks.
		• Lack of sufficient numbers of available clinical facilities to accommodate student experiences in each of these defined areas may limit the number of available sites (identified shortage consistently noted in acute care and inpatient rehabilitation settings).
		• Situating all 3 full-time experiences at the end of the curriculum with no opportunity for didactic coursework following these experiences may not allow for final class discussions and feedback.

PREFERRED CLINICAL EDUCATION INFRASTRUCTURE
OPPORTUNITIES AND RESISTANCE

Clinical Education Infrastructure Component	Opportunities	Resistances
• Each internship includes autonomous practice; clinical reasoning; reflective processes; practice management and coordination; patient/client management for commonly seen conditions; diagnosis; prognosis; plan of care with interventions; outcomes assessment; direction, delegation, and supervision; involvement with the interprofessional team; and professional socialization. Does not necessarily require a specific pediatric or geriatric clinical experience. • Locus of control for the internship is with the clinical site, while following established standards. • Academic program supports CI mentoring.	clinical practice having achieved entry-level performance in each of the 3 full-time experiences. *Suggested Remedy* • Provide 4 internships for fewer weeks to allow students to experience multiple clinical settings while still meeting the necessary depth in practice experiences.	• Some concepts may not be fully appreciated by students until after completing a clinical internship that warrants an opportunity for discussion within the curriculum. • Opportunities to engage students in the discussion of their clinical internship in the classroom allows faculty to gain a better understanding of current clinical practice, which in turn enables faculty to better prepare future practitioners. • Situating clinical internships early in the curriculum allows the remaining academic coursework to be more meaningful for students, to identify potential gaps in their knowledge that can be addressed throughout the curriculum and that leads to preferences in elective coursework. • Requires changes in the academic curriculum to include 3 terminal full-time experiences, how learners are assessed relative to entry-level performance for each experience, and changes in the timing of clinical education and didactic coursework within some programs. • Concern that students cannot achieve all of the entry-level performance expectations for each of the 3 full-time experiences by the end of each experience. • Lack of evidence about whether some aspects of the performance criteria are cumulative; that is, they can only be achieved at entry-level in the final clinical experience. • Lack of evidence that supports the

Clinical Education Infrastructure Component	Opportunities	Resistances
		preferred length (10-12 weeks) for each of the final full-time clinical experiences in the 3 designated areas. • Current licensure system prevents students from being considered qualified practitioners by Medicare and would require changes in state practice licensure regulations. • May be resistance by other health professions or CEO of facilities to using this infrastructure. • This approach separates academic and clinical education where they should be more fully integrated and intertwined with full-time clinical education provided at the end of the curriculum. • Changing too many variables in clinical education at the same time makes it difficult to discern those changes that lead to any positive or negative differences in performance outcomes of students and new graduates. • Lack of data to demonstrate the ideal length of clinical education in any of the practice settings that leads to a defined set of performance outcomes for students. • Students may not have opportunities for experiences in pediatrics, geriatrics, and home care, etc, since these are not formally included in this design. • May increase costs associated with the academic program for students. • Lack of evidence that new graduates are not meeting the expectations of employers upon entry into clinical practice. • Some facilities rotate staff between

Clinical Education Infrastructure Component	Opportunities	Resistances
		- settings every 6 months where the student would need to rotate with the staff or have 2 different clinical instructors in the same setting. - Possibility that a 12-week internship would become two 6-week internships in the same facility, but in two different settings, resulting in greater breadth and less depth of experience in each setting. - Longer internships may interfere with staff holiday and vacations resulting in taking fewer students.
<u>Use of Technology</u> Create an assessment mechanism, using technology, to track students' experiences relative to the Minimal Required Skills of Physical Therapist Graduates at Entry-Level, APTA Core Values, Generic Abilities, etc.	- Enhances an ability to provide more opportunities for clinical faculty professional development, greater efficiency* in administrative aspects associated with clinical education, and collect data using available technologies. - Use of technology can provide stronger academic and clinical networking and social communities, thereby strengthening the partnership and overall relationship. - Provides mechanisms to connect clinical facilities in different geographic regions that may be more isolated (eg, rural practices) to enhance networking and communication. - Additional assessment tools used to track students' clinical experiences through technology provide more opportunities for data collection and the development of evidence about clinical education in an evolving system.	Inconsistency with which clinical facilities can accommodate different technologies as well as their access to these technologies during practice.