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BEST PRACTICE FOR PHYSICAL THERAPIST CLINICAL EDUCATION (RC 13-14)

ANNUAL REPORT TO THE 2017 HOUSE OF DELEGATES

EXECUTIVE SUMMARY

In 2014, the House of Delegates approved 2 motions specific to investigating the future of physical therapist education: *RC 12-14: Promoting Excellence in Physical Therapist Professional Education*, and *RC 13-14: Best Practice for Physical Therapist Clinical Education*. In response to RC 12-14, The APTA Board of Directors (Board) established the Excellence in Physical Therapist Education Task Force (EETF) that presented 8 recommendations to the Board in 2015. At its November 2015 meeting, the Board approved the recommendations forwarded by the EETF, which included establishment of the Education Leadership Partnership as the vehicle to address those recommendations. Similarly, in response to RC 13-14 the Board created the Best Practice for Physical Therapist Clinical Education Task Force (BPCETF). The work of the BPCETF began in January 2016 and concluded in January 2017.

The Board's charge to the BPCETF was *to consider strategies and provide a recommendation(s) to the Board of Directors to identify best practice for physical therapist clinical education, from professional level through postprofessional clinical training, and propose potential courses of action for a doctoring profession to move toward practice that best meets the evolving needs of society.* The Board identified 4 specific points for the BPCETF to review for the report due to the 2017 House of Delegates.

The BPCETF identified 3 principle challenges as it engaged in its work: (1) A comparison of current clinical education models suggested that inadequate clinical education and postgraduate professional development experiences contribute to unwarranted variation in physical therapist practice; (2) The overall capacity for clinical education placements is limited, leading to competition among physical therapist academic programs; and, (3) Economic factors affecting academic institutions, students, and facilities providing clinical education experiences significantly impact clinical education.

Six assumptions guided the work of the BPCETF: (1) There are complex factors involved in clinical education and no simple solutions to address the issues of unwarranted variability, capacity, and quality in current models; (2) Recommendations being made are interrelated; (3) Implementation of these recommendations will require engagement of multiple stakeholders; (4) Other professions are facing similar challenges in clinical education; (5) There is no evidence supporting a single superior physical therapist clinical education model; and, (6) Economic factors must be a primary consideration in future physical therapist clinical education, and recommendations should not result in increased student debt.

After engaging in a year-long review process, including 2 face-to-face meetings and over 20 conference calls, the BPCETF submitted 5 content recommendations and 1 dissemination recommendation to the Board:

1. That formal preparation for practice includes physical therapist professional education, followed by a clinical internship and mandatory postprofessional residency, and is accomplished through a process of staged licensure and specialty certification;
2. That a structured physical therapist clinical education curriculum be developed and implemented;
3. That a framework for formal partnerships between academic programs and clinical sites that includes infrastructure and capacity building, and defines responsibility and accountability for each (eg, economic models, standardization, sustainable models), be developed;
4. That clinical education be incorporated into the recommendations approved by the Board and forwarded to the Education Leadership Partnership regarding education data management systems;
5. That the physical therapy profession's prioritized education research agenda include a line of inquiry specific to clinical education; and,
6. That the BPCETF report submitted for the January 2017 Board meeting be made available to the Education Leadership Partnership and other stakeholders within the physical therapist education community.

The BPCETF report was submitted for consideration to the January 2017 Board meeting. After reviewing the scope of the BPCETF's work and recommendations, the Board adopted a revised version of recommendation 6: That APTA design a plan for dissemination of the BPCETF report for receiving widespread stakeholder input prior to consideration by the Board for adoption at its November 2017 meeting. The rationale for this recommendation was based on an appreciation for the need to allow all stakeholders to engage in a review of the BPCETF's recommendations, and to let the collective community bring its thoughts and suggestions forward. The Board recommended that the Education Leadership Partnership be charged with leading this stakeholder review and action process, similar to how the recommendations of the EETF were addressed in 2015. The complete BPCETF report to the Board is appended. Clarifications and updates have been added to the BPCETF's report in response to Boards' discussions and questions that emerged during the review process.

BEST PRACTICE FOR PHYSICAL THERAPIST CLINICAL EDUCATION TASK FORCE REPORT

BACKGROUND

The 2014 House of Delegates adopted **RC 13-14 Best Practice for Physical Therapist Clinical Education**:

> That the American Physical Therapy Association, in collaboration with relevant stakeholders, identify best practice for physical therapist clinical education, from professional level through postgraduate clinical training, and propose potential courses of action for a doctoring profession to move toward practice that best meets the evolving needs of society with a report to the 2017 House of Delegates.
>
> This effort shall include, but not be limited to, the examination of:
> - Current models of physical therapist clinical education from professional level through postgraduate clinical training;
> - Mandatory postgraduate clinical training;
> - Stages of licensure;
> - Findings from related studies and conferences; and
> - Models and studies of clinical education in other health care professions.

(House of Delegates, 2014, pp. 232-244)

CHARGE

The Best Practice in Clinical Education Task Force (BPCETF) will consider strategies and provide a recommendation(s) to the Board of Directors to identify best practice for physical therapist clinical education, from professional level through postprofessional clinical training, and propose potential courses of action for a doctoring profession to move toward practice that best meets the evolving needs of society.

The Board of Directors' determined charge for the BPCETF is as follows. The task force will be disbanded as appropriate by the Board of Directors when the charge has been met.

- Investigate current models of physical therapist clinical education from professional level through postprofessional clinical training, including findings from related studies and conferences in physical therapy and other health professions.
- Define the scope of current and anticipated future needs in clinical education with particular investigation into how to best prepare physical therapists for practice in an evolving health care environment.
- Investigate options for future clinical education models, including but not limited to relationships between academic institutions and clinical education sites, mandatory postprofessional clinical training, and staged licensure.
- Describe the feasibility of future clinical education models, including pros and cons.
- Provide options to the Board of Directors with recommendations for action and a report to the 2017 House of Delegates.

All APTA appointed groups will conduct their work with the Association Organizational Values in mind and in the context of (1) APTA's mission, vision, and strategic plan; and (2) the potential for their work

to have implications related to physical therapist assistants, women, diversity, and risk management.

(Board of Directors, November 2014, pp. 13-14)

SCOPE OF THE PROBLEM

The 2014 House of Delegates' call to identify "best practice in physical therapist clinical education" in order to produce practitioners capable of meeting the ever-evolving societal health care needs is not a new call to action. Rapid proliferation of new physical therapist education programs and expanding class sizes leading to intense competition for clinical sites; burdensome evaluations required of clinical educators, students, and academic faculty; increased variability in academic and clinical education; and lack of absolute standards of clinical performance are among the challenges that have been repeatedly noted over the past 50+ years. (Worthingham, 1965; Hislop, 1975; Moore & Perry, 1976). Compounding these issues are economic factors including the increased debt load of graduates, and changes in reimbursement for physical therapist services. While the entry-level physical therapist degree has evolved over time to the clinical doctorate (DPT), the basic model of clinical education remains relatively unchanged from the early days of physical therapist education.

In her 1965 McMillan Lecture, Catherine Worthingham described physical therapy as a profession able to acknowledge "present and obvious inadequacies" when compared with professions that were already established. Many of her thoughts, ideas, and suggestions delivered in that speech continue to ring true for us as a profession today. Worthingham stated, "Physical therapists, both teachers and practitioners, have need for further education, whether in continuous residence, short courses, or by means not yet foreseen or devised" (Worthingham, 1965, p. 939). Worthingham recognized the challenge of establishing a partnership between academic and clinical sites/clinical educators in part attributed to the variability in educational pathways through which one could enter the profession. Ten years after Worthingham's McMillan lecture, Helen Hislop revisited a continued list of professional challenges and provided multiple solutions, stating that "… we must set up absolute standards of clinical performance rather than remain lost in morass of relativity" (Hislop, 1975, p. 1077). Hislop was careful to promote the burgeoning need for clinical specialization amidst the challenge of "capacity of any practitioner to encompass the entire field" of physical therapy knowledge and practice. Furthermore, she recognized that advances in medical science are enormously impactful and drive modifications in our practice, as they continue to do today.

Since 1975, multiple professional work groups and task forces have been formed with subsequent consensus conferences or summits to specifically address issues facing physical therapist student clinical education. A partial list of these activities includes:

- 1976: "Clinical Education in Physical Therapy: Present Status/Future Needs" (Moore & Perry, 1976)
- 1981: "Standards for Clinical Education in Physical Therapy: A Manual for Evaluation and Selection of Clinical Education Centers" (Barr, Gwyer, Talmor, 1981)
- 1992-1994: "Task Force on Clinical Education" (APTA)
- 1998: "Clinical Education: Dare to Innovate" (APTA, 1998)
- 2004: "Clinical Education in a Doctoring Profession" (APTA, 2004)
- 2007: "Embracing Standards in Clinical Education: A Consensus Conference" (APTA, 2007)
- 2014: "Clinical Education Summit" (ACAPT, 2014)
- 2015: "Excellence in Education Task Force Report" (APTA, 2015)

- 2016: “Physical Therapist Education for the 21st Century” (PTE-21) Report (Jensen et al, 2016)

Despite an extensive list of recommendations, innovations, and potential solutions that resulted from these collective works, physical therapist student clinical education training has changed little over the past several decades. The status quo persists because by some measures the current models have been effective, in that the educational community continues to produce graduates who successfully become licensed. Additionally, significant changes to academic and clinical education models will require a degree of consensus and cooperation among multiple stakeholders with competing priorities and varied perspectives, that could or might result in uncharted disruptions to practice and education.

However, the BPCETF believes the time has come for the profession to acknowledge that DPT program graduates cannot be fully prepared at the conclusion of entry-level education to manage the care of clients and patients of all diagnoses and conditions across the lifespan. The current licensure process, the National Physical Therapy Examination (NPTE), provides a level of competency evaluation, and promotes patient and client safety, by assessing a basic level of knowledge and problem-solving abilities. The current licensure process is limited by assessing competency at a single point in time, and the NPTE does not assess important clinical skills. While opportunities for postprofessional education exist, there is no cultural expectation or requirement driving this phase of learning. Outcomes associated with postprofessional education clinical residency and fellowship programs include improvements in physical therapist clinical reasoning abilities, and patient and client outcomes (Rodeghero et al, 2015; Robertson & Tichenor, 2015). Professional sentiment has long existed that entry-level graduates are novices and require additional support, education, or training to achieve the desired level of physical therapist competence (Black et al, 2010; DiFabio et al, 1999; Furze et al, 2016; Tichenor, 2000; Kulig, 2014). This type of educational structure and professional development ladder has been present in allopathic medical education for decades, representing an understanding that medical school preparation is designed to be the beginning, not the end, of professional training. Even the initial phase of a medical residency includes acquisition of additional general knowledge and skill development before the resident is considered prepared for advancing to higher levels of training and specialization (AAMC, 2016).

In the 2012 APTA McMillan Lecture, Alan M. Jette (2012) described 3 major societal storms: lack of access to health care, the age wave, and costs of health care. Jette proposed that to meet societal needs, “physical therapists must possess and use critical systems skills” including “… universal standardized measurement and data collection, widespread quality and improvement and implementation techniques, interprofessional coordination and care management, diffusion of practice innovations and standardized practice models, and health policy leadership for widespread change” (Jette, 2012). Physical therapist education must continue to evolve as physical therapists increasingly position themselves to function as points-of-entry in the complex and evolving health care system focused on outcomes, value, and efficiency. Physical therapist professional education programs should build capacity to increase emphasis related to didactic content and clinical practice experiences in chronic care management, interprofessional collaboration, primary care practice, and population health and wellness.

Regarding physical therapist clinical education, we must ask ourselves whether we have met the challenges described by Catherine Worthingham, Helen Hislop, and other past leaders, or whether we are indeed no further along than we were 50 years ago. **Based on recent opinions and events, and feedback from multiple stakeholders, it is the opinion of this task force that current clinical**

education models are unsustainable, suboptimal, and not designed to produce practitioners required by the health care system of the future, nor will they help the profession achieve our vision.

The BPCETF took a global approach when forming its recommendations, not wanting to be prescriptive but to provide a framework for future consideration. **The task force recognizes that the details of any formative plan for the future of clinical education will come from the collective involvement of multiple stakeholders, and that the transition process could take decades.**
The BPCETF reviewed the 2015 Excellence in Physical Therapist Education Task Force report and recommendations (APTA, 2015) All 8 of the principle challenges in pursuing excellence in education identified in that report were relevant to clinical education, with 2 specifically including clinical education:

- There are widespread concerns that students are not optimally prepared for clinical education, practice, and the evolving health care environment
- There is unwarranted variation in student qualifications, readiness, and performance across the professional education continuum that impacts academic and clinical faculty's ability to plan and implement a quality educational experience that will optimize patient outcomes

The recommendations adopted by the APTA Board of Directors (Board) also included 2 that are most directly relevant to clinical education:

- That essential resources to initiate and sustain physical therapist education programs that include, but are not limited to, faculty, clinical sites, finances and facilities, be determined
- That the adoption of a system of standardized performance-based assessments that measure student outcomes and establish benchmarks be developed and promoted

Standardized assessment for physical therapist students entering their terminal clinical experience was identified as a priority in the second recommendation.

Although not specific to clinical education, the Board also approved in November 2015 the development and implementation of a steering committee comprising core member groups—the American Council of Academic Physical Therapy, APTA, and the Education Section—to oversee the implementation of efforts designed to move physical therapist education forward. That steering committee's efforts led to the development of the Education Leadership Partnership (ELP), which was formally ratified in a Memorandum of Understanding in October 2016. The ELP is intended to be a global, decision-making group that brings all stakeholders together to speak with 1 voice toward enhancement of the common cause of promoting excellence in physical therapist education.

MEETING HISTORY

The BPCETF met 24 times, including 22 web conferences and 2 onsite meetings (APTA headquarters in Alexandria, Virginia, on March 13-14 and November 6-7, 2016) between January 8, 2016, and January 4, 2017. Multiple stakeholders were engaged during the year-long process of the task force's work. While these stakeholders do not serve as a substitute for the larger physical therapy community, receiving diverse views and options helped shape the recommendations that evolved.

<u>Stakeholders Engaged</u>

- American Board of Physical Therapist Residency and Fellowship Education (ABPTRFE): staff and external consultant

- American Board of Physical Therapy Specialties (ABPTS)
- American Council of Academic Physical Therapy (ACAPT) NCCE
- American Physical Therapy Association (APTA): workforce/policy/payment/legislative staff
- Clinical sites/settings: administrators/clinical educators
    - Acute care (including academic medical centers)
    - Skilled nursing facility/care
    - Veterans Administration
    - Outpatient orthopedics private practice, large corporation, and hospital-based practices
    - Outpatient neurological rehabilitation
    - Outpatient pediatrics
    - School-based services
- Commission on Accreditation in Physical Therapy Education (CAPTE)
- Education Researchers: PTE-21 investigators
- Federation of State Boards of Physical Therapy (FSBPT)
- New professionals (PTs in first 5 years of practice after graduation)
- Other health professions' clinical education representatives; nursing, pharmacy, and physician assistant
- Residency graduates
- Education Section, Clinical Education Special Interest Group
- Students

TASK FORCE MEMBERS

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DISCUSSION:

FINDINGS OF THE BEST PRACTICES IN CLINICAL EDUCATION TASK FORCE

Based on its work, the BPCETF identified the following principle challenges facing clinical education:

- A comparison of current clinical education models suggested that inadequate clinical education and postgraduate professional development contributes to unwarranted variation in physical therapist practice. There is significant variability in the quality of physical therapist clinical education in structure, process, and outcomes (Jette et al, 2014). Much of the quality is

dependent on the clinical instructor, who may or may not be an effective teacher and may lack a strong connection to the academic program.

- The overall capacity for clinical education placements is limited, leading to competition among physical therapist academic programs. This capacity problem is exacerbated by the proliferation of new physical therapist education programs and increasing class sizes. Overall capacity is also affected by other demands on clinical sites, including longer clinical experiences, establishment of residency and fellowship programs, observation and volunteer hours for prospective students, physical therapist assistant clinical education programs, and nonphysical therapy internships.
- Economic factors significantly impact clinical education. Recent trends of clinical sites requiring payment for student placements intensifies the debate over the typical current model of financing clinical education. Typically, clinical sites are not paid for their contributions to physical therapist student education, while the student continues to pay tuition to the academic program for clinical education courses (Jette et al, 2014). The static payment for provision of services that does not keep pace with increased costs has resulted in an increased financial burden on clinical sites. This is compounded by the demands for increased practitioner clinical productivity, and the inability to receive reimbursement for work performed by nonlicensed students under supervision. Payer policies are likely to become even more restrictive in the future.

<u>As the BPCETF progressed through its charge, the following guiding assumptions supported the development of recommendations.</u>

- There are complex factors involved in clinical education and no simple solutions to address the issues of unwarranted variability, capacity, and quality in current models.
- Recommendations are interrelated.
- Implementation of these recommendations will require engagement of multiple stakeholders.
- Other professions are facing similar challenges in clinical education.
- There is no evidence supporting a single superior physical therapist clinical education model.
- Economic factors must be a primary consideration in future physical therapist clinical education, and recommendations should not result in increased student debt.

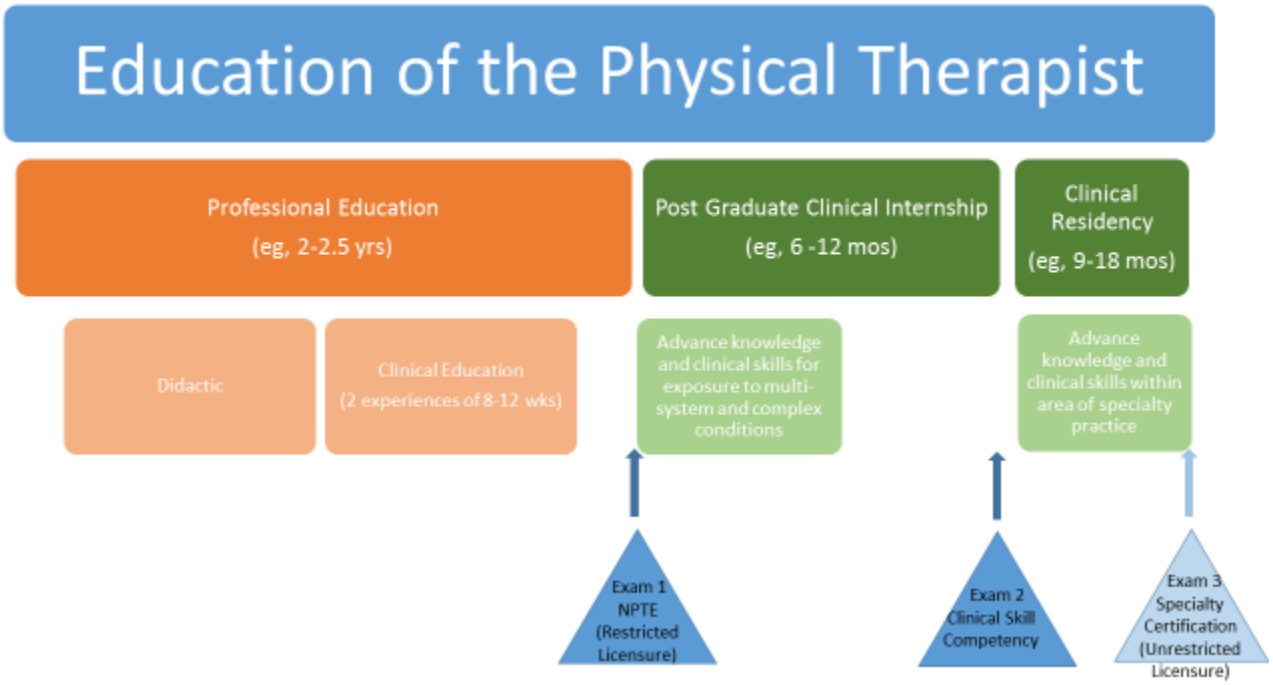
RECOMMENDATION 1:

That formal preparation for practice includes physical therapist professional education, followed by a clinical internship and mandatory postprofessional residency, and is accomplished through a process of staged licensure and specialty certification (Note: The model in Figure 1 is provided to serve as an example only, as it includes the criteria identified in the recommendation. The task force recognizes that any standard process model adopted by the profession will emerge during dialog among all stakeholders).

SS: The physical therapy profession continues to evolve and now includes: all graduates earning the DPT degree, all licensure jurisdictions having some form of direct access and practitioners assuming varying degrees of primary care responsibilities highlighted by long-established models in the uniformed services divisions of the United States military and Public Health Service. Additionally, postprofessional residency and fellowship programs continue to grow at an exponential rate. Considering these examples of growth and the escalation of higher education costs, corresponding

student debt, decreased payment for provision of clinical services, increased productivity demands on clinicians serving as clinical instructors, and the current variation in student readiness—there is a need for an alternative clinical education model. Any such new model should consider the quality of clinical education experiences, clinical instructor experience and expertise, types of clinical practice experiences, and length of clinical education experiences. The BPCETF developed and considered 5 models for consideration (see Appendix A). After deliberation, and in consideration of key stakeholder comments during the past year, the task force recommends the following framework:

Figure 1. Model Example of Education of the Physical Therapist.



In today's health care environment, the expectation that a new graduate is prepared to practice in any setting, providing care to all age groups, is unrealistic (IOM, 2011; Rapport et al, 2014). There is evidence that new graduates, while possessing the knowledge and skills to ensure patient and client safety and provide care for less-complex patients and clients, may benefit from having exposure to additional clinical skill-development opportunities in order to best meet the needs of society in the fast-evolving health care arena (Curtis & Martin, 1993). Yet, many practice settings do not provide the additional mentorship and postgraduate education for new graduates to further develop the necessary clinical skills. The BPCETF also believes it is time to move away from the concept of graduating a "generalist" practitioner, a concept that appears to have evolved without formal adoption or direction. The term "generalist" in the context of physical therapy does not appear to be defined by the Commission on Accreditation in Physical Therapy Education (CAPTE), the *Normative Model of Physical Therapist Education* (APTA, 2004), or any other seminal APTA documents.

This suggestion does not discount the necessity that a core knowledge base and set of clinical skills should be required of all graduates. This foundational level of competence, as determined by the initial (restricted) licensure examination (See Figure 1), would represent a practitioner best described as a "basic-ist": a practitioner capable of independently managing less-complex patients and clients and capable of recognizing when a patient or client referral to another practitioner is indicated.

Removing the expectation that a new graduate can, as a "generalist," treat patients and clients of all ages, with any condition, and in every setting, would allow new graduates to begin clinical practice under the expectation that they would continue their formal educational experience and begin a path toward specialization. The concept of graduating a DPT with core knowledge and skills, followed by an intense, structured clinical internship and finally specializing in an area of practice through an accredited clinical residency program, aligns with other doctoring professions (eg, medicine, optometry, pharmacy, podiatry, psychology) (Rapport et al, 2014). The educational pathway portrayed in Figure 1 consists of 3 required phases: (1) professional education, (2) postgraduate clinical internship, and (3) a mandatory clinical residency.

While timeframes marked by ranges are presented for each phase, the BPCETF hopes the numerous benefits of reduced variability will lead the educational community to reach consensus and adopt universally accepted timeframes. One goal should be a reduction in the total amount of time required to attain the DPT degree, shifting a significant portion of the clinical training to the postgraduate phase. This shift would require that programs graduate practitioners who have a well-defined core set of knowledge and skills, and are beginning to identify potential desired areas of clinical specialization. Upon completion of the postgraduate clinical internship, where core practice skills are refined the physical therapist will enter an accredited clinical residency program.

The professional education curriculum will include a didactic phase combined with integrated clinical education experiences, allowing students to acquire the core set of foundational knowledge and skills to prepare them for the stage of restricted licensure. A structured curriculum will be developed for the integrated clinical education experiences (see Recommendation 2). A written examination, analogous to the current National Physical Therapist Examination administered by the Federation of State Boards of Physical Therapy (FSBPT), would assess student readiness and provide a validation of progression of clinical skills and clinical reasoning, required for the progression to the pathway's second phase, postgraduate clinical internship.

Other health care professions (eg, medicine and dentistry) use staged licensure to ensure the progression of knowledge during several developmental time points throughout the educational process and to assess a provider's "ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centered skills, that are important in promotion of health and management of disease" (USMLE, 2017). Upon successful completion of the written examination and graduation, the physical therapist graduate would enter a mandatory postgraduate clinical internship. A structured curriculum (See Recommendation 2) would provide a core set of benchmarks, milestones, competencies, or core entrustable professional activities (Ten Cate, 2013; AAMC, 2012) that the graduate would need to achieve before being eligible to proceed to the next pathway phase, mandatory clinical residency. Once the clinical internship is successfully completed, the physical therapist would begin clinical residency training.

It is essential to establish clinical residencies as the final required phase of the formal physical therapist professional education pathway; the final step prior to entry into unrestricted licensure (second stage of licensure) clinical practice. The second stage of licensure would consist of an examination consistent with the American Board of Physical Therapy Specialties clinical specialist certification examination. The clinical residency model and curriculum would evolve to build upon physical therapist professional education and postgraduate clinical internships phases. The required postprofessional clinical

residency phase of education would promote the following:

- Development of physical therapists who demonstrate high levels of professionalism, clinical skills, knowledge for specialty practice, communication, clinical reasoning, evidence-based practice, and systems-based practice; (Furze et al, 2016)
- Development of physical therapists who are adequately trained to manage complex patients and clients within general and specialty practice settings;
- Development of physical therapists who are able to successfully function in leadership roles within the health care system;
- Promotion of physical therapy as a valued service within health care by consumers, payers, and regulators;
- Establishment of physical therapists as a portal to the health care system for individuals with movement impairments; and
- Improvement of patient and client outcomes and value within the health care system.

There would remain an important role for a general practice physical therapist. Physical therapists working in large medical centers, acute care settings, rural hospitals, or home health care provide services that are highly specialized, requiring extensive knowledge and skill. Therefore, the physical therapy profession should expand specialty options and define the general care specialist as akin to the "specialty" of family practice or family medicine in physician medicine, and create a Description of Specialty Practice (DSP) to support this residency option.

By successfully passing the second and final stage of licensure, the physical therapist will be recognized as having advanced knowledge in a specific clinical specialty area, including clinical reasoning and clinical skills for provision of care to more complex patient and client populations. There is a notable increase in the level of professional growth and development that occurs in the first year of clinical practice when the novice practitioner receives the appropriate mentorship (Tryssenarr & Perkins, 2001; Corb et al, 1987; Schwertner et al, 1987; Jensen et al, 1992; Black et al, 2010; Wainwright et al, 2011). Mentorship provided by experienced clinicians, who have been vetted during the residency program accreditation and reaccreditation processes, is a key element of the clinical residency experience (See Recommendation 3).

The development and universal adoption of the formal physical therapist professional education pathway with staged licensure would lead to more structured didactic and clinical education curricula, more standardized and structured levels of student preparedness, reduce the students' overall cost of professional education, and produce a practitioner better prepared to meet the demands of the ever-evolving health care system.
Upon successful completion of the first stage of licensure the graduate could begin billing for services, thereby reducing the financial stress on clinical education sites. Adjustments in pay levels based on stages of licensure might help facilities budget more appropriately for novice clinicians, residents, and, finally, the more-advanced clinicians practicing with an unrestricted license. The ability for employers of interns and residents to be reimbursed for clinical services provided by these restricted-license practitioners would help to support this economic model (FSBPT, 2011).

Finally, the BPCETF believes this model of physical therapist professional education will also establish a firm foundation for graduates who wish to pursue postprofessional masters and doctoral degrees, and

postprofessional fellowship opportunities. Discussion of these learning opportunities was outside the scope of the task force's work but should be considered, in context, by stakeholders as a universal adoption of a new model of professional education is developed and implemented.

RECOMMENDATION 2:
That a structured physical therapist clinical education curriculum that includes, but is not limited to, the following elements be developed and implemented:

- Determination of a minimum and maximum amount of full-time clinical education that can be integrated into the didactic phase (prelicensure) of physical therapist professional education. Once determined, this standard shall be universally adopted;
- Define the role and structure for clinical education experiences within the didactic phase of physical therapist professional education programs;
- Define essential clinical education settings, experiences, and exposure to patient and client populations that shall be required for all physical therapist students in the didactic phase of physical therapist professional education programs Define minimal student competencies required for engaging in integrated full-time clinical education experiences during professional education and postgraduate clinical internship phases, including knowledge, skills, and behaviors;
- Define the roles of simulation and learning technologies as part of clinical education in the phase of professional education;
- Define essential competencies for transition into entry-level (restricted license) practice, including knowledge, skills, and behaviors;
- Enhance existing residency and certification processes to complement the total of the professional education and postgraduate clinical internship phases;
- Develop and implement standardized tools for measurement of expected student competencies at all phases of physical therapist education to ensure that student and graduate competencies are consistent with expected student outcomes; and
- Identify opportunities for standardization of clinical rotation schedules, onboarding requirements, or other factors that may influence program and site capacities and efficiencies.

SS: Graduates from physical therapist professional education programs, beginning with the first day of their employment, are expected to be skilled, productive, and contributing members of an interprofessional health care team. The health care environment has rapidly evolved to one in which physical therapists will encounter higher productivity demands, greater acuity and chronicity of patients and clients in all settings, limited time and resources, and payment tied to patient and client outcomes. These conditions leave little to no time for a new graduate to "ramp up" their knowledge, skills, and behaviors, especially without significant mentorship and support. As referenced in the support statement for Recommendation 1, the current models of clinical education, combined with the lack of required postgraduate education experiences, do not support the needs of the evolving physical therapy profession.
The BPCETF Recommendation 2 is consistent with Recommendation 2 from the Excellence in Physical Therapist Education Task Force (2015), "That essential, rigorous, and progressively higher levels of outcome competencies [knowledge, skills, and attitudes] for physical therapist graduates that are responsive and adaptive to current and future practice be identified and adopted, and with its Recommendation 5, "That the adoption of a system of standardized performance-based assessments

that measure student outcomes and establish benchmarks be developed and promoted". As Jette and colleagues (2014) stated, "Although the problem is complex, to successfully manage clinical education, improve outcomes, and reduce costs, some degree of profession-wide consensus must be reached about best practices related to structure, processes, and outcomes."

Based on information gathered by BPCETF members during their work—including interviews with several stakeholders and group deliberations, and individual and collective experiences of task force members, it has become clear that there is a need for a structured approach to physical therapist clinical education to reduce unwarranted variation in education that leads to unwarranted variation in clinical practice (Jette et al, 2014).

RECOMMENDATION 3:
That a framework for formal partnerships between academic programs and clinical sites be developed that includes infrastructure and capacity building, and defines responsibility and accountability for each (ie, economic models, standardization, sustainable models, etc.). Infrastructure and capacity must be developed across all stages of clinical education, to include:

- Models of clinical supervision (eg, trainee to instructor ratios, academic faculty as preceptors);
- Mandatory clinical instructor training, certification, and recertification;
- Effective communication among all stakeholders across all phases of clinical training;
- Student readiness to enter each stage of clinical education; and
- A comprehensive evaluation plan for clinical education.

SS: In a 2002 *PTJ* editorial, Jules Rothstein (2002, p. 127) offered the following challenge to the physical therapy profession: "Without a proper ongoing partnership between faculties in schools and people in practice, clinical education will never prepare our new graduates to the level necessary, to the level described by our Association's vision statement, and to the level that justifies the professional doctorate."

Despite continuing professional discussions about this concept, little has changed in Rothstein's observation over the past 15 years (Applebaum et al, 2014). Thus, this recommendation is based on sentiments and a vision expressed by leaders in the physical therapy profession for decades.

Formal partnerships between academic programs and clinical sites should be expanded to include defined accountabilities for all parties. These partnerships should include opportunities for innovative relationships and care delivery models. During the physical therapist professional education, clinical instruction of students in integrated clinical experiences should be overseen by academic institutions that have close, formal relationships with clinical faculty who serve as clinical instructors. The clinical instructors must be vested in the program's curriculum and held accountable to the academic program in some way.

A culture of excellence in clinical education requires all stakeholders to have a shared responsibility for setting and upholding standards during every phase of clinical education. The challenges of limited capacity in number and variety of settings, and the variability in the quality of clinical instruction, while not unique to the physical therapy profession, has been a consistent concern among physical therapy leaders for decades (AAMC, 2014). It is impossible to judge whether the current pool of licensed

physical therapists is adequate to provide quality clinical education within the current model of clinical education or in the model of clinical education being proposed by the BPCETF. Academic programs face challenges placing students in settings that meet accreditation requirements. The lack of clinical placements is a common reason for CAPTE to deny candidacy status.

Two significant challenges to the current models of physical therapist clinical education are (1) a lack of standards that foster excellence in clinical education, and (2) inadequate capacity to provide quality clinical training from the earliest clinical exposure through post-licensure residency and fellowship experiences. Consistency in clinical education is hampered by varied communication strategies among academic programs and clinical sites regarding students' competency level prior to them entering clinical education and the myriad outcome expectations of all stakeholders. Improving quality in clinical education depends on addressing structure, process, and outcomes of clinical education (Jette et al, 2014). A concerted effort to achieve an adequate supply of excellent clinical training sites that are configured to meet trainee needs at every stage of their professional development is vital to the future of the physical therapy profession.

Joint development of standards for excellence in clinical education by all stakeholders, with mechanisms to evaluate compliance is necessary to address the quality and capacity challenges facing physical therapist education. CAPTE provides minimum standards for physical therapist education programs, and the standards specific to clinical education have become more defined over that past 10 years. Academic programs are held accountable to CAPTE through the accreditation process. Clinical training sites currently have no direct accountability to CAPTE, and accountability to the academic programs is limited to what is included in written agreements between each academic program and clinical site. The ability of academic programs to hold sites accountable is limited to not sending students to the site for training; an approach that does nothing to motivate training sites to improve their clinical training programs. Likewise, the only recourse of clinical sites that are dissatisfied with the preparation of students, communication with the academic program faculty, or other aspects of clinical education is not to accept students. Including a clinical education accountability model, similar to that found in current residency and fellowship standards, into formal professional education standards would promote consistent quality, to the benefit of the student and ultimately to the profession.

Quality clinical instruction and clinical mentoring are at the heart of clinical education. Clinical instructors must demonstrate a commitment to advancing clinical practice, including developing skills relevant to the role of a clinical preceptor. Education for clinical instructors is available but not mandatory. Mandatory education, to include certification and recertification, will advance clinical educators' skills and will decrease unwarranted variation, improve efficiency, and assist with students' skill development. Physical therapists choose to become clinical instructors for a variety of reasons, including a desire to give back to the profession, to stimulate their own learning, or for the enjoyment in the role of teaching. Disincentives to serving as a clinical instructor include difficulty meeting productivity requirements, the paperwork burden, and a perceived lack of support or inadequate resources to address students with challenging problems in the clinic. Creation of standards, and incentives to meet those standards, will build capacity and encourage higher levels of participation by physical therapists in clinical education.

RECOMMENDATION 4:

That clinical education be incorporated into the recommendations approved by the Board of Directors that were forwarded to the Education Leadership Partnership regarding education data management

systems, and include but not be limited to the following elements:

- A unique "professional (secure, or protected) lifetime" identifier is assigned to individuals at the time application or acceptance.
- A national clinical education matching program is used for assigning students to clinical education sites.
- Outcomes of care provided by physical therapist students/interns/residents are included in patient/clinical outcome registries.
- Data entry and data management systems are interoperable with other data systems relevant to physical therapist education (eg, CAPTE, FSBPT, ABPTRFE, CPI, CSIF).
- Data is accessible to researchers, academic programs, regulatory bodies, program evaluators, clinical training sites, and interested parties.

SS: The critical need to understand the existing state of all aspects of physical therapist clinical and residency education is hampered by the paucity of relevant research (Jette, 2014). Although data related to physical therapist clinical and residency education is available from various sources (eg, CPI/CSIF, PTCAS, NPTE, ABPTRFE, Physical Therapy Outcomes Registry), these data sets are not connected through a common interoperable framework. Subsequently, the available data is fragmented and does not use common elements, making it difficult to evaluate and compare current models of, and outcomes associated with, pre-licensure and post-licensure education. A unique identifier would connect data among various databases.

Besides creating a common database framework, other strategies are needed to facilitate the generation of relevant research. Identifying data elements for the management system that could be aggregated securely should be a high priority. The ROMEO (Research on Medical Education Outcomes) Registry is 1 example of a health professions education data registry that should be reviewed. The establishment of a unique "professional lifetime" identifier for each DPT program applicant would enable longitudinal mapping of student educational and postgraduate career paths and outcomes. The longitudinal data would be invaluable for educational program and workforce evaluation.

A national data management system would potentially allow for matching trainees to clinical education sites and residency programs. A great deal of variability exists among academic programs with regard to the number of clinical sites with which they have formal written agreements to provide clinical education. For many academic programs, many of these sites rarely or no longer provide clinical education experiences for their students (http://www.apta.org/CSIF/). A national data management system could include required compliance information (eg, immunizations, criminal background checks, HIPAA), which would facilitate "onboarding" at each clinical education site.

RECOMMENDATION 5:
That the physical therapy profession's prioritized education research agenda include a line of inquiry specific to clinical education.

SS: Recent calls for changing physical therapist education to meet the ever-evolving health care delivery climate have been frustrated by the limited research and scientific data necessary to make informed decisions. The profession of physical therapy has long called for an increase in education-related research to identify best practices and improve on them (Education Section APTA, 2013, APTA

Excellence in Education Task Force Report, 2015; Gwyer et al, 2015; Jensen et al, 2013; Jensen et al, 2016). However, these calls have frequently been unanswered due to the dearth of research funding and infrastructure, or to the lack of researchers with the requisite skill set. The need to promote interest in education research, and to invest in the development of educational researchers has also been identified (Jensen et al, 2016). In October 2016, the newly established ELP created a subgroup to develop a prioritized educational research agenda and strategy focused on funding, prioritization, and faculty development programming. Building on the education research-related work completed and the recommendations included in those resources, there is a need to ensure the inclusion of clinical education-related topics in any national research agenda. Answers to research questions relative to clinical education costs, best models, culture, environments, outcomes, standardization, variability, and other variables have been cited as a critical need. Future research should address student learning in multiple clinical environments and scenarios, whether they are integrated clinical experiences, terminal internship experiences, residencies, or fellowships as elements of an ongoing learning process. Developing new data repositories and enhancing access to, and quality of, existing data sets (eg, CPI, CSIF, PTCAS, NPTE, Physical Therapy Outcomes Registry) will be essential to aiding education researchers in their work.

RECOMMENDATION 6:

That the Best Practice in Clinical Education Task Force (BPCETF) report submitted for the APTA Board of Directors January 2017 meeting be made available to the Education Leadership Partnership (ELP) and other stakeholders within the physical therapist education community.

SS: Making this report available to the ELP and other stakeholders within the physical therapist education community (eg, FSBPT) will facilitate transparency, trust, and collaboration. The intent is to share the contents of this report, regardless of what recommendations are adopted. Sharing the information with the ELP will help the represented organizations begin to understand the discussions and ideas considered by the BPCETF, and to identify areas of collaboration and different strategies to achieve the common goal of excellence in clinical education. If other recommendations are adopted, successful implementation will only occur with full participation and collaboration among all relevant parties.

JANUARY 31, 2017 BOARD OF DIRECTORS ACTION:

V-1 PASSED (Saladin)

That APTA design a plan for the dissemination of the Best Practice in Clinical Education Task Force report for receiving widespread stakeholder input prior to consideration by the APTA Board of Directors for adoption at the November 2017 Board of Directors meeting.

SS: Making this report available to the ELP and other stakeholders within the physical therapist education community (eg, FSBPT) will facilitate transparency, trust, and collaboration. The intent is to share the contents of this report, regardless of what recommendations are adopted. Sharing the information with the ELP will help the represented organizations begin to understand the discussions and ideas considered by the Best Practice in Clinical Education Task Force, and to identify areas of collaboration and different strategies to achieve the common goal of excellence in clinical education. If

other recommendations are adopted, successful implementation will only occur with full participation and collaboration among all relevant parties.

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APPENDIX A

Time	2 to 2.5 years entry-level												6 months to 1 year				37.5+ wks (1500 hrs) Min			Total Time for Full Licensure
	Responsibility of the DPT Program												Responsibility of Clinical Educators							
Cost	No income, Tuition paid to program												Income Begins, No Tuition				Income Continues, No Tuition			
Models	Total Length of DPT Prg	Approx Length of CE in DPT Prg	Min Length of Each CE Exp	Max Length of Each CE Exp	# of Exp	Types of Exposure Standardized	Standard CE Start/ End Times	Integrated ICE	Modified NPTE	Restricted Licesure at	Preceptor	Ratio of Preceptor to Student	Internship	Length	Unrestricted License	Exam	PostProf/ Residency	Final Exam	Length	
Option 1	2 to 2.5 yrs (104 to 130 wks)	16 to 24 wks	8 wks each	No one more than 12 wks each	2+	Yes, includes structured observation	Y	Y	Y	Y	N	Not less than 2 to 1	Y	24 wks to 1 year	N	Y	Req	CS Exam	current critera	4 to 4.5 years
Option 2										Y	N	Not less than 2 to 1	Y	24 wks to 1 year	**Y**	Y	**Suggested**	CS Exam	current critera	3 to 4.5 years
Option 3										**N**	N	Not less than 2 to 1	**N**	N/A	N/A	N/A	Req (cultural expecta	CS Exam	current critera	3 to 3.5 years
Option 4										Y	**Y**	~5 to 1	Y	24 wks to 1 year	N	Y	Req	CS Exam	current critera	4 to 4.5 years

Model	Total Length of DPT Prg	Approx Length of CE in DPT Prg	Min Length of Each CE Exp	Max Length of Each CE Exp	# of Exp	Types of Exposure Standardized	Standard CE Start/ End Times	Integrated ICE	Modified NPTE	Restricted Licesure at	Preceptor	Ratio of Preceptor to Student	Internship	Length	Unrestricted License	Exam	PostProf/ Residency	Final Exam	Length	Total Time for Full Licensure
CURRENT	~3 yrs (no less than 6 sem)	Min of 30 wks, Mean 36 wks, Max 58	N/A	N/A	N/A	Not Defined in Standards	N	Y	Y	N	N	N/A	N	N/A	N/A	N/A	Opt	CS Exam	current critera	~3 yrs