

## CHAPTER 1

# Clinical Education: Introduction for the Transition from Student to Clinical Instructor

**Debra F. Stern**, PT, DPT, DBA

*Becoming a clinical instructor as a physical therapist or physical therapist assistant is an evolutionary journey that starts at the beginning of the educational process. It should be a goal of every physical therapy professional when qualified, in order to insure the future of the profession.*

—**Debra F. Stern**

### CHAPTER OUTLINE

- Introduction
- History
- CAPTE Accreditation
- CI Practice Principles
- Curricula Influences on Students and Clinical Education
- Summary
- Conclusion

### LEARNING OBJECTIVES

At the end of this chapter, readers will be able to:

1. Identify the purpose of this text.

(continues)

**LEARNING OBJECTIVES***(continued)*

2. Synthesize the importance of clinical education in physical therapy.
3. Integrate the importance for PTs and PTAs to serve as clinical instructors.
4. Understand the role of the Commission on Physical Therapy Education (CAPTE) in requiring clinical instructor training for students.
5. Integrate the role and requirements to serve as a CI according to the American Physical Therapy Association (APTA).

**KEY TERMS**

Academic Coordinator of Clinical Education (ACCE)  
 American Physical Therapy Association (APTA)  
 Clinical education  
 Clinical education experiences  
 Clinical Education Facility (CEF)  
 Clinical Educator  
 Clinical Instructor (CI)  
 Collaborative models

Commission on Accreditation of Physical Therapy Education (CAPTE)  
 Director of Clinical Education (DCE)  
 Independent Model  
 Integrated Clinical Education (ICE)  
 Integrated Model  
 Interprofessional Education  
 Self-Contained Clinical Education  
 Site Coordinator of Clinical Education (SCCE)

**KEY POINTS**

- Clinical education is a critical element in physical therapy education.
- With increasing length of curricula and the Doctor of Physical Therapy as the entry-level degree for physical therapists, commitment of PTs to serve as CIs is critical to the future of physical therapy practice. It is also critical in physical therapist assistant education.
- CAPTE is now requiring entry-level programs to include CI training in preparation for the postgraduate opportunity to serve in the CI capacity.
- Although there is minimal external compensation for serving as a CI, it is a professional responsibility and critical to education in the current, traditional, clinical education model.

**► Introduction**

Becoming a **clinical instructor (CI)** should be a goal of every physical therapist or physical therapist assistant to insure the future of the profession. Physical therapy professionals are educators by the nature of the work itself, whether it is educating patients, caretakers/partners and families, other professionals, or students.

The purpose of this text is to provide a guide to facilitate professional development of the PT/PTA student for the transition from classroom learner to

clinical-site learner, from clinical education student to entry-level clinician, and from practicing clinician to CI after at least 1 full year in clinical practice. Content is consistent with the **Commission on Accreditation of Physical Therapy Education (CAPTE)** requirement to “teach students how to be clinical instructors” (CAPTE, 2015). According to CAPTE, clinical education is a key component of entry-level physical therapy education as well as that for physical therapist assistant (PTA) education. In the current model of clinical education, which is primarily 1:1 student to CI, clinical instructors are critical to the survival of the profession. With the role of CI being voluntary, the decision to supervise and mentor students is most frequently intrinsically motivated.

With a changing healthcare environment and changes in staffing patterns, challenges are emerging that are creating increased burdens, both real and perceived in physical therapy practice. The need to balance internal requirements of the workplace and the needs of the profession requires support from the academic institutions to ensure appropriate student preparation at minimum. Students should be placed in venues that align with the academic curriculum and student skill set in the three domains of learning: Cognitive, affective, and psychomotor with relevant and appropriate clinical reasoning (Delany & Bragge, 2009).

Becoming a CI as a physical therapist (PT) or physical therapist assistant (PTA) is a transformational journey and a privilege. The **American Physical Therapy Association (APTA, 2018)** Standards of Practice state in section IV. Education, “The physical therapist is responsible for individual professional development. The physical therapist assistant is responsible for individual career development. The physical therapist and the physical therapist assistant, under the direction and supervision of the physical therapist, participate in the education of students.” Regardless of whether a PT or PTA is an association member, policies and behavioral expectations of professional organizations are generally accepted as applicable to all physical therapy practitioners.

Individual educational programs may offer incentives such as continuing education credits at no or low cost, professional development programming or promotional items that are useful tools in the clinic such as tape measures or stop watches, but there is little overall compensation. Some larger organizations with programs such as clinical ladders may value serving as a CI in the progression up the ladder. The requirement to serve as a CI is generally not in PT/PTA job descriptions. In teaching institutions, it may be common practice to have a student program, but based on the content on the Liaison International CPI site ([https://cpi2.amsapps.com/user\\_session/new](https://cpi2.amsapps.com/user_session/new)), the majority of PT clinical education is not occurring in large medical institutions. Therefore, it is the individual commitment of the PT professionals in a healthcare organization to commit to educating students.

Clinical education varies in a variety of aspects between schools. The components usually include full-time experiences either at the end of a curriculum or positioned throughout, and in more recent years, ICE or integrated clinical education. The ICE experiences may range from half a day of clinical exposure to several days integrated throughout the curriculum, but most commonly prior to full-time terminal experiences. In the ICE experiences, PT/PTA students may or may not be supervised by a PT or PTA. Non hands-on experiences that are related to physical therapy practice, but not considered PT practice, may be supervised by non PT professionals. Examples may be time in a radiology facility or observing

other rehabilitation professionals. In some cases, it may be observation in homeless assistance centers, special education environments, or other settings in which students may gain psychosocial experiences contributing to their cultural sensitivity and practice. It is the responsibility of the program to determine who, under each circumstance, may supervise PT/PTA students. For direct hands-on care, PTs may supervise PT and PTA students. PTAs may only supervise PTA students.

In 2012, the FSBPT, based on a systematic review of the literature, described four common clinical education models. Student learning outcomes were the same in all of the following four models: Integrated, Independent, Self-Contained, and Hybrid. Regardless of the model and literature, the full-time experiences remain primarily the traditional 1:1 student to CI instruction and supervision (FSBPT, 2012). This same model has been favored since the inception of clinical education over 50 years ago.

Regardless of the curricular model, the outcomes should specifically relate to the curricular objectives and facilitating development of a clinically competent entry-level professional (Jensen, Mostrom, Gwyer, Hack & Nordstrom, 2015; Weddle & Sellheim, 2011; Wilson, 2006). The final bridge between the academic curricular components and clinical practice is clinical education. The CI plays a critical role in this evolution.

Ultimately, the rewards are primarily intrinsic for each individual CI or SCCE.

## ► History

Clinical education has always been essential in physical therapy education. Not all PTs or PTAs choose to participate in the clinical education process once they qualify, however, as it is a voluntary process. This may also be as a result of their personal experiences as a student. It is, however, a professional standard.

The traditional 1:1 model has changed minimally throughout the history of the profession. The root of the profession sprang from the need to facilitate recovery of WWI soldiers and veterans in the early 20th century. Although the American Women's Physical Therapeutic Association was formed in 1921, as early as the late 1800s, there was emergency training for reconstruction aides (APTA.org). The first formal training is considered to be post-WWI emergency training, which averaged 163 hours of a total of 620 educational hours (Gwyer, Odom, Gandy, 2003). Learning was primarily on the job, occurring in clinical settings (APTA.org, History).

By the 1920s, minimum standards for physical therapy education were established. Out of a 1,200 hour curriculum, 539, or almost half, were specific to clinical training. Over time, 1,200 hours became 12 months. This was also a time during which PT education began to move to the college level or post-college certification, which included didactics in addition to learning in the clinical setting through the middle of the 20th century.

In the 1940s and 1950s, as a result of WWII and the Korean War, coupled with the polio epidemic, the need for rehabilitation not only led to the growth of physical therapy as a profession but also to the transition from technician to professional with the growing need for and commitment to research (Gwyer, Odom, & Gandy, 2003; APTA, 2011). With the introduction of the first licensing exam by the American Physical Therapy Association (APTA) [founded in 1928] in 1954, the profession took a great leap in being recognized by other professionals and the public as legitimate healthcare

providers. By 1955, 600 clinical education hours became essential. Even though physical therapy education moved into the classroom, critical clinical skill acquisition remained in the clinical setting. By the 1960s, with the expansive knowledge base needed for PTs to practice in an evolving and changing healthcare environment, PT education had evolved from on-the-job to college-level education in the course of a century. There was an increasing number of clinical education hours in which single instructors were responsible for a single student in a defined period of time or the 1:1 model, with minimal to no standard guidelines. In the 1970s, Hislop suggested 9–12 months of clinical experiences at the end of academic programming (Gwyer, Odom, & Gandy, 2003). Moore and Perry wrote that a combination of integrated experiences culminating in a full-time block of 11–20 weeks was optimal. Moore and Perry's 1976 document, published by APTA, is consistent with the general model of clinical education in place as of 2018, 40+ years later, with clinical education ranging from 30–55 weeks, with a minimum of 30 full-time weeks (CAPTE, 2015; FSBPT, 2012).

As of 2018, the entry-level degree for PTs is the Doctor of Physical Therapy (DPT), while the PTA degree remains at the Associate level. With the progression to the DPT, the need came for teaching and learning of entry-level skills with expanded didactic content and clinical education. This implies that there is a need for competent and willing clinical instructors. In 2004, APTA published guidelines for clinical instructors (APTA, 2004). The intent was to “provide academic and **clinical educators** with direction and guidance in the development and enhancement of clinical education sites and physical therapist and physical therapist assistant CIs and SCCEs (APTA, 2009).”

Although the requirement to become a CI is a minimum of 1 year of clinical experience, potential CIs should be willing and able to abide by the APTA Guidelines. They should also be comfortable and knowledgeable about the APTA minimum skills document (APTA, 2009), core competencies for acute care practice as applicable by setting (Greenwald, et al., 2015), and core competencies of interprofessional education because of the potential enhanced patient care outcomes and current emphasis in education and clinical practice (CAPTE, 2015). According to IPEC, Interprofessional Education Collaborative, 2016, the competencies are as follows:

### Competency

Work with individuals of other professions to maintain a climate of mutual respect and shared values. (Values/Ethics for Interprofessional Practice)

### Competency 2

Use the knowledge of one's own role and those of other professions to appropriately assess and address the healthcare needs of patients and to promote and advance the health of populations. (Roles/Responsibilities)

### Competency 3

Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease. (Interprofessional Communication)

### Competency 4

Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient,

effective, and equitable (Teams and Teamwork) (IPEC, Interprofessional Education Collaborative, 2016).

IPEC. (2015). Measuring the Impact of Interprofessional Education (IPE) on Collaborative Practice and Patient Outcomes <https://ipecollaborative.org/>. April. National Center for Interprofessional Practice and Education. Institute of Medicine. (2013). <https://nexusipe.org/Update>: 2016

In an effort to create standardized education for clinical instructors, the APTA developed two CI certifications: The Credentialed Clinical Instructor Program (CCIP), in updated 2018. While the two APTA CI certifications, basic and advanced, are voluntary and not required to become a CI, they do serve as valuable educational tools and resources. There is an associated cost that may be covered by an employer or the individual. Training is available in most states by APTA-trained instructors throughout the calendar year. Information can be found on the APTA website or through CAPTE-accredited educational programs.

This text builds on the guidelines and presents content that expands on the guidelines, encompassing the challenges of practice in a changing healthcare delivery system. It includes both direct components of being a CI and associated issues.

## ► **CAPTE Accreditation**

CAPTE, the Commission on Physical Therapy Education, is the sole accrediting body for physical therapy and physical therapy assistant programs in the United States and its territories. All programs require accreditation to accommodate professional students who are eligible to sit for the National Physical Therapy Exam (NPTE) for PTs and PTAs. It is CAPTE that sets the standards for physical therapy education and modifies them, including the guidelines for clinical education. The maximum program accreditation period is 10 years. On the other hand, programs that do not meet the standards may be put on probation with plans for correction or closed, if remediation is not satisfactory. As of 2018, there are approximately 242 accredited programs with additional schools in the candidacy process (CAPTE online.org, 2018). Information about accredited schools and schools with programs that have been granted candidacy can be found on the APTA website at: <http://aptaapps.apta.org/accreditedschoolsdirectory/default.aspx?UniqueKey=>

As in most large organizations, CAPTE has both a mission and vision, (adopted by CAPTE 4/04). Both the mission and vision are relevant to clinical education as it is an element of their purpose.

### **Mission**

The mission of the Commission on Accreditation in Physical Therapy Education is to serve the public by establishing and applying standards that assure quality and continual improvement in the entry-level preparation of physical therapists and physical therapist assistants and that reflect the evolving nature of education, research, and practice.

### **Vision**

CAPTE will be recognized and valued by all stake-holders as the leader in accreditation of entry-level physical therapy education, serving as a model of best practices in specialized accreditation in the United States.

Reproduced from CAPTE Accreditation Update, August 2004, American Physical Therapy Association, Retrieved from [http://www.capteonline.org/uploadedfiles/capteorg/about\\_capte/resources/accreditation\\_update/accreditationupdate\\_0804.pdf](http://www.capteonline.org/uploadedfiles/capteorg/about_capte/resources/accreditation_update/accreditationupdate_0804.pdf)

According to PART 2 of the revised 2015 CAPTE manual, the PURPOSE (Revised 4/02, 10/04, 4/05, 4/10, 11/11) of CAPTE is “To provide a nationally recognized accreditation agency for physical therapy education programs” (CAPTE 2015). The purpose is the same for physical therapist assistant programs.

CAPTE defines its own tasks, with specific relevance to clinical education when extrapolated.... “CAPTE will pursue this vision through:

- Collaborative processes that foster a culture of assessment, accountability, and continual improvement to support program and institutional excellence
- Standards that are influenced by contemporary and evolving practice and that help ensure that physical therapy continues to meet the needs of a diverse public
- Standards that foster consistency in educational programs and that allow for innovation, resulting in improvement in educational practices and in the profession
- Decisions based on systems of review that are discerning, objective, and accepted as trustworthy, effective, and valid by its communities of interest”

Reproduced from CAPTE Accreditation Update, August 2004, American Physical Therapy Association, Retrieved from [http://www.capteonline.org/uploadedfiles/capteorg/about\\_capte/resources/accreditation\\_update/accreditationupdate\\_0804.pdf](http://www.capteonline.org/uploadedfiles/capteorg/about_capte/resources/accreditation_update/accreditationupdate_0804.pdf)

CAPTE’s decision to require physical therapy curricula to include CI training, section 7D, is consistent with its self-directed tasks. It is part of their efforts to meet the needs of the public, innovate, improve educational practices, and make discerning decisions (CAPTE, 2015).

As of 2014, in order for a graduate PT or PTA to be able to work in organizations that receive federal funds and obtain licenses to practice in most states, he or she must have graduated from a CAPTE-accredited program. Therefore, it is CAPTE that establishes the key policies and requirements for entry-level PT/PTA educational programs.

The most recent CAPTE requirement, 2015, for PT clinical education is ~1/3 of the curriculum, or 30 weeks, evidencing its importance. As most entry-level PT programs are ~3 years in length at the DPT entry level, 1/3 of a curriculum translates to almost a full year. However, most academic years are not 52 full weeks. According to the Federation of State Boards of Physical Therapy (FSBPT), in 2012, “Typical physical therapist clinical education programs ranged from 20 weeks to 55 weeks of full-time clinical experiences; the average 35 weeks. The DPT clinical education program is 36 weeks or roughly 20% of the curriculum, and the length of the final clinical experience varies from four to 48 weeks, with the average at 19 weeks” (FSBPT, Summer 2012 forum). This has since been determined by CAPTE to be, as previously stated, 30 weeks. PTA curricula average 2 years, with clinical education hours ranging from ~450 hours to 700+ hours.

While CAPTE recognizes primarily full-time clinical experiences only in the 1/3 curricula recommendation, many programs have a combination of part-time and full-time experiences. Referred to as ICE, integrated clinical education experiences, and addressed previously in this chapter, part-time experiences are often integrated into the didactic curricula as single days or several clustered days. These experiences may be self-contained with faculty serving as clinical instructors or using community-based clinical instructors or other supervising individuals. They may be traditional 1:1 models or collaborative, ranging from 2:1 to 10:1, similar to the nursing model. The **collaborative models** with larger ratios, require CIs that are amenable to the model, and understand the differences and expectations relative to the 1:1 or 2:1 models. Longer full-time clinical experiences may occur throughout the curriculum, but longer full-time final clinical education experiences in entry-level education usually occur in the final year and are considered terminal, senior, or final clinical experiences in which entry-level status is expected upon completion.



They are conducted most commonly in a 1:1 model with one community-based PT/PTA to a single student. Collaborative models, 1 CI to 2 or more students (colloquially referred to as 2:1), which may be PT students, a combination of a PT student and a PTA student, or 2 PTA students are becoming more common but are not accepted on a large-scale basis. In spite of the literature supporting similar outcomes to the 1:1 model, there continues to be resistance from CIs and SCCEs (DeClute 1993; Rindfleisch 2009; Triggs 1996; Pabian, Dyson, & Levine, 2017).

Another CAPTE guideline that must be considered in the context of clinical education and the evolution from student ultimately to CI is the requirement of venues or settings in which clinical education should occur. The guideline is for “common venues” (CAPTE, 2015) in which physical therapy occurs or is practiced. Although physical therapy services may be provided in a broad variety of settings, the most common are acute care hospital, with adult and/or pediatric services; out-patient adult and/or pediatric in a hospital-based facility or free-standing facility; rehabilitation, including but not limited to management of neuromuscular impaired individuals, which may occur in a skilled nursing facility; free-standing, rehabilitation hospital; hospital-based rehabilitation unit, home, or LTACH (long-term acute-care hospital); and hospital based out-patient or free standing out-patient. Within each category are additional subcategories. The combination of requirements differs from program to program.

Physical therapy services in the 21st century are also being offered in conventional and unconventional, or non-traditional, venues, with a mix of traditional western medicine techniques and incorporation of more eastern and alternative approaches. As CAPTE does not define “common,” it is up to an individual educational program and the clinical education team to determine what combination of experiences in total will result in the achievement of the minimum entry-level skills determined by the APTA (APTA, 2005). Additionally, some settings or venues may be more appropriate than others for entry-level students, with some better suited for students earlier in a curriculum and others later as more knowledge and skills are acquired and required. However, as long as full-time supervision is available from a PT with 1 year of experience for a student physical therapist or student physical therapist assistant or a full-time PTA with 1 year of experience for a student PTA, any setting may be deemed appropriate by the academic institution, assuming that a valid contract is in place and that there are qualified CIs. PT and PTA students must be directly supervised for any direct patient care by an on-site physical therapist. Student PTAs may also be supervised by a PTA.

As of 2005 to 2006 and updated CAPTE standards in 2015, there is a requirement to teach students how to become CIs. While no other guidelines were included, evidence was and is required of every accredited program that students receive instruction on how to be a CI. Because little formal training is available except through voluntary APTA CIs, and basic and advanced CCIP credentialing (APTA) is only available to graduate PTs, each CAPTE-accredited program is expected to develop its own curricular content for CIs. While several of the state or regionally based clinical education consortia had or do have CI training programs, they were consortia or program developed and not standardized. The APTA CCIPP credentialing is not intended for students, however, and does require tuition. It is geared toward practitioners who are planning to become CIs or who have been serving as CIs and are seeking the training as additional professional development. It is voluntary. As of 2018, the cost of the CCIP training in Florida is \$250.00 for 2 days, which includes the



materials and testing. However, cost does vary state to state. The APTA credentials the CCIP course trainers who contract their services individually on a regional basis. It should be noted that much of the cost is directly related to the training materials from the APTA.

It is challenging to take on the task of teaching a PT/PTA student how to be a CI when they are just integrating minimal entry-level skills. However, it is a program's responsibility to comply with all accreditation requirements in order to maintain accreditation status. As all students are mentored and taught by CIs, each student has experience with CI characteristics they like and dislike. They have the experience of modeled behavior in the clinical education process, which, although it should be positive and constructive, may not be. Therefore, some students may have negative experiences from which to learn. It is the school's responsibility to ensure the competence of the CIs as well as a CAPTE requirement. How this is done varies, but it is essentially the responsibility of the Director of Clinical Education at the academic institution or the Clinical Education team.

## ► CI Practice Principles

The chapters in this text are designed to facilitate the development of a student from classroom to clinic, clinic to workplace, and ultimately, once in clinical practice, to CI and beyond. The CI role will potentially evolve into **Site Coordinator of Clinical Education (SCCE)**, in any facility with any number of PTs and PTAs. It is understood that a PT/PTA will know the state regulations, basic policies and procedures of the specific site in which they work, reimbursement policies, rules, regulations, and accreditation requirements relevant to their facility. This information must be transmitted to students in writing, verbally, through technology, or as a component of formal orientation or onboarding processes online or onsite. Each professional must also know about the continuum of care options for patients to impart to the student and where in the continuum their setting fits. Although this is also included in professional education, it is out of context when presented. Once in the clinical setting, the context facilitates the acquired academic knowledge.

The text also includes basic information on how to develop a clinical education program in sites/facilities in which there are none; if revisions or review in existing programs are needed, supervision of CIs and students and how to evolve into and manage a clinical education program as a SCCE, contracting, international considerations, and other relevant clinical education topics would be valuable. In the spirit of integrating the CAPTE directive, this text is meant as a guide for a student to "learn how to become a CI" in theory and as a complement to each student's individual experiences as a student learner in the clinical setting. In addition to APTA's Consensus conference guidelines summarized below, the CI serves as a coach, facilitator, and inspirational leader. It is not the purpose of this text to delineate specific state rules that may also play a role in student clinical education experiences.

### Physical Therapist Clinical Education Principles

Clinical Instructor Performance Principles for Student Patient Mentoring

Physical therapist CI performance guidelines revised by the APTA in 2004 and updated in 2009 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 healthcare environments for CI performance expectations. Current and potential barriers to achieving the expected CI performance outcomes were identified for the following contexts: Higher education, healthcare/facility, the physical therapy profession, financial/economic conditions, and technology (pp. 30–41).

Reproduced from *Physical Therapist Clinical Education Principles*, American Physical Therapy Association. Retrieved from [http://www.apta.org/uploadedFiles/APTAorg/Educators/Clinical\\_Development/Education\\_Resources/PTClinicalEducationPrinciples.pdf](http://www.apta.org/uploadedFiles/APTAorg/Educators/Clinical_Development/Education_Resources/PTClinicalEducationPrinciples.pdf)

CI performance standards were identified for the following categories and remain relevant. They also align with the performance criteria for student assessment in the Clinical Performance Instrument (CPI):

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

Although not explicitly stated, enthusiasm and integrity are also helpful.

Commission of Accreditation in Physical Therapy Education. (2015, 2016, 2017). <http://www.captionline.org/home.aspx>

It is the responsibility of every student, PT, and PTA to know the rules governing clinical education in the state in which they are practicing. These should be found in the Practice Act of each state. Entry-level PT students must be clinically supervised by a licensed PT for all direct patient care skills. Entry-level PTA students may be clinically supervised by a PT or PTA. For full-time experiences, CIs must have a minimum of 1 year of clinical practice and a license to practice in the state they are practicing in. While there may be some controversy about 1-year adequacy, with mentoring available for the novice CI, many PTs and PTAs fulfill the role. Mandating the direct supervision of students depends on state-specific laws and may be dictated by payers. It is the responsibility of each PT or PTA to know who can provide direct client/patient care based on payer source. Payers may or may not allow students, PTs, or PTAs to provide reimbursable services. For example, CMS does not reimburse for student-provided services to Medicare B beneficiaries unless there is constant, side-by-side direct supervision by the PT at all times. There are some instances in which PT/PTA students may be supervised by others. Examples include observation of other professionals such as occupational therapists (OTRs), speech language pathologists (SLPs or Speech Therapists [STs]), nurses, Minimum Data Set (MDS) coordinators in skilled nursing facilities (SNFs), case managers, social workers, physician assistants (PAs), respiratory therapists, and clergy, especially in the commitment to interprofessional education (IPE) IPEC.

While the identified principle categories are listed here, within each category are additional items. Additional information is available through the APTA and elsewhere in this text.

## ► Curricula Influences on Students and Clinical Education

CAPTE-directed education includes basic medical sciences, professional development content, and PT-specific content preceding or integrating clinical education experiences. There is a combination of classroom teaching and learning in all three learning domains: Cognitive, affective, and psychomotor, including psychomotor skills and therapeutic presence training in laboratory courses. The Normative Model developed in 2004 provides a template for basic educational content. In the didactic component of the curriculum, psychomotor skills are usually practiced on a classmate. Although there may be use of patient surrogates or standardized patients, virtual patients with avatars, volunteers with pathology or dysfunction, or most recently, simulators, the interactions are closely supervised by faculty and may have limited carryover into the clinic under unplanned circumstances. As of 2015, CAPTE requires ICE experiences to expose students to out-of-classroom, real-life clinical exposure. It is, however, up to the school to determine what these experiences should be and how they will align with curricula objectives. Curricula content should be designed to facilitate minimum entry-level skills (APTA, 2012) that equate to general practice skills upon graduation, although the term generalist does not appear in the accreditation guidelines. This is extrapolated from the accreditation guide and the minimum skills document. However, different programs may have greater strengths in some areas than others, which may influence the curriculum and student-acquired clinical skills. Because not every clinical approach can be included in the didactic component of the curriculum, students are often exposed to alternative approaches during their clinical experiences. Students must be prepared for this by their academic faculty and learn to cope with the seeming inconsistencies. Students may want to initiate dialog with CIs who practice alternative approaches. Competent CIs should welcome the dialog and use it to demonstrate mutual teaching. CIs should keep in mind that academic programs teach to basic requirements, and not all approaches to patient/client management are included. Therefore, an effective CI will facilitate dialogue and clinical reasoning with students and teach “on the job” as applicable. Students may challenge CI approaches with recent evidence but need to understand that it should be an open discussion and not disdainful from either party.

Becoming an effective clinical student learner who is appropriately supervised by a competent CI is a critical step in becoming an effective clinical instructor. All experiences, whether considered positive or negative by a student, contribute to the development of clinical instruction skills. The more positive a student experience is, perhaps the more likely the student will want to be a CI. Conversely, a poor experience, if not discouraging to a student, may stimulate the desire to become a CI in order to facilitate learning in the way that he or she would have liked. Until recently, it was generally accepted that by becoming licensed to practice and completing 1 year in practice, the skills to become a clinical instructor would be there, requiring

only willingness. In reality, how a novice physical therapist clinically “teaches” is often based on his or her own experiences, which may or may not be the most effective or efficient. With changes in the healthcare system, healthcare reform, productivity requirements, concerns over liability, confusing reimbursement guidelines, and lack of individual professional commitment to the APTA standards of practice and the future of PT, finding adequate student placements with willing and prepared CIs is an increasing challenge for educational programs. With a better understanding of the reality of clinical instruction and responsibility that each practicing PT and PTA has in preserving the future of physical therapy, adequate knowledge is a practical tool.

The goals of individual clinical education experiences are to move students from beginner status on the APTA’s Clinical Performance Instrument (CPI) (or any other instrument that may be used) to entry-level competence. As of 2014, with the exception of some of the accredited programs in Texas and elsewhere, most PT programs are using the APTA’s CPI for assessment of students in full-time clinical education experiences. The PTA CPI is newer, but is the most common assessment tool in use as of 2018. The intention of the CPI is for a CI to objectively assess student clinical performance based on 18 criteria as well as for the student to self-assess, although the information provided by the CI is comment based, and its objectivity, unless comments provide copious examples, may be more subjective. Some of the clinical education management programs, such as Acadaware or EXXAT, which have developed their own electronic assessment instruments, have also been adopted in place of the CPI by some schools. The tools, however, as of 2018 have not been determined as reliable and valid, which is a CAPTE expectation and is insuring adequate standardized training for using the tools.

## ► Summary

Clinical education in the 21st century is much like it has been for decades although longer with inclusion of expanded content. Until there are major changes or different models, SCCEs, CCEs, CIs, facilities, and organizations that support clinical education are critical to the profession of physical therapy. All PTs and PTAs practicing today are able to do so because they had a SCCE willing to manage a clinical education program and CIs who voluntarily committed to being a CI. Choosing to be a SCCE and/or a CI is to give back to the profession; a thank you for the contribution made by their CIs when they were students. Although participation in clinical education is an APTA Standard of Practice, many PTs and PTAs are not members of the association and choose not to abide by this standard. Many people who are members choose not to abide by the standard. In order for the profession to survive in a challenging healthcare environment, clinical education must survive.

Regretfully, there is little external reward associated with the process. Some organizations may have career ladders for which serving as a CI is an incentive for pay raises or promotion. However, this is disappearing as employment arrangements are changing. Rarely is serving as a CI included in job descriptions. Many schools offer continuing education or the opportunity to take classes at the college or university or provide in-service style professional development on site. There is some talk on the APTA education list serve about payment to facilities for clinical

education, but the talks are in early stages. Serving as a CI does demand personal organization, organizational support, and encouragement, time, and commitment. The basic education to fulfill the role of a CI is now a CAPTE-dictated curricular component. With appropriate education, perhaps willingness to serve as a CI without perceived stress and extra work will increase.

## ► Conclusion

It is a privilege to serve the profession as a CI or SCCE and to ensure the professional future of physical therapy. Until the model of clinical education changes, the need for CIs is increasing with the increasing number of accredited educational programs. Although residencies and fellowships are expanding in number, they remain, in 2018, available to a small number of PT graduates only.

The rewards of becoming a CI are primarily intrinsic and balancing the management of students and the rigors of the clinical environment can be challenging. Often, the stress related to supervising students, regardless of the model, comes from lack of training or lack of support from the academic institution. A CI should understand that a student learner will not, even in a full-time clinical education experience, end that clinical education with the same knowledge as an experienced practitioner. Once that concept is integrated, it should minimize some of the stress associated with expecting adherence to the same intensity of patient schedules and the associated work. A CI should also look to the SCCE, if there is one, or the academic institution to facilitate the CI-student teaching-learning process. A CI should never have to stay beyond his or her scheduled workday because he or she has accepted a student. It may, however, be part of the learning process.

A year of clinical experience is good preparation for remaining a clinician, not automatically having the skills to be a CI. CAPTE recognized this and developed criteria for training students to be CIs as a curricular component. In addition to having the experience of training under a CI, all students are now required to have CI training prior to graduation. The contents of this book are designed to make the process easier and provide guidelines to transition from the classroom to the clinic as a student physical therapist, from the final clinical education experiences to clinical practice, and from clinical practice to being a CI and/or a SCCE. CI training is not, however, limited to the educational component in the entry-level programs. While students learn basic information and experience modeling by their own CIs, the learning experience continues upon entering practice and throughout one's professional career. The APTA sponsors both basic and advanced CI training courses. Novice PTs can work with experienced PTs/PTAs in their workplace, if available. Early introduction may include covering occasionally for an experienced CI. Some facilities may have formalized mentoring programs that may include longtime CIs or SCCEs or the academic programs through the clinical education faculty; Directors of Clinical Education; Academic Coordinators of Clinical Education; professional organizations; studying relevant documents; and both formal and informal educational opportunities. One's own experience as a student, which is beneficial from a modeling perspective, is sometimes positive and sometimes not. Either way, a student learns how he or she would like to perform CI responsibilities and how he or she may not.

Altruism, a core value of physical therapy, means giving. As givers, one of the most critical acts of giving that PTs and PTAs can do is preserving the future of PT by contributing to clinical education as CIs.

## Discussion Questions

1. Are most practicing PTs or PTAs a member of the APTA?
2. Which organization is responsible for accrediting physical therapy programs?
3. Is the entry-level PT degree required to be a DPT?
4. What is the role of the CI? The SCCE?
5. Who can serve as a CI for a student physical therapist? A student physical therapist assistant?
6. What is common compensation for serving as a CI?
7. What is considered a traditional model of clinical education?
8. What is collaborative clinical education?
9. What is interprofessional education?
10. Why is education about being a CI required prior to graduation from entry-level programs?

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