Background and Purpose. Clinical education experiences (CEEs) provide physical therapist (PT) students with opportunities to be immersed in clinical practice to develop professional skills and behaviors under the supervision of a clinical instructor (CI). Essential characteristics and qualities of CIs and of the clinical practice environments in which CEEs take place that promote student learning are clearly described in the literature and in professional documents. However, there are currently wide variations in the quality of CEEs. Factors that appear to contribute to this variability include the CIs’ teaching skills, the culture of the clinical site, and supports extended by physical therapist (PT) education programs. The purpose of this paper is to define the baseline qualifications and essential characteristics of CIs and of practice environments that our profession should consider as standards for clinical education and to make recommendations for changes that are needed to promote consistently high quality CEEs.

Position and Rationale. It is our position that all stakeholders in clinical education need to engage in a deliberate effort to ensure that all students have access to quality CEEs that demonstrate agreed upon, evidence-based professional standards. We propose that the development of CIs is analogous to the development of a skilled PT, such that CIs move from being novice to expert clinical teachers. Clinical instructors and clinical education sites should be assessed in a standardized manner and the results shared across PT education programs education programs to cultivate high quality CEEs. Directors of clinical education (DCEs), working together through regional consortium, can meet the identified professional development needs of CIs and of center coordinators of clinical education (CCCEs) in an efficient and timely manner. Furthermore, we recommend that the expert CI be recognized as a clinical education specialist in the same way other specialists are recognized by the American Board of Physical Therapy Specialties (ABPTS). Physical therapist education programs, clinical education sites, and the profession at large must acknowledge the benefits of quality CEEs and assume responsibility to foster the development of expert CIs and of learning environments conducive to student learning.

Discussion and Conclusion. Physical therapist education programs and clinical sites need to be held accountable to ensure that evidence-based and agreed upon standards for CEEs are available to all students. This will require negotiation and compromise by administrators at both settings. National-level discussion is required to develop a strategic plan to determine how these recommendations might be implemented so that professional standards for all CEEs are realized.

Key Words: Clinical education, Faculty development, Educational leadership.

BACKGROUND AND PURPOSE

Physical therapist (PT) education programs devote up to 48% of contact/clock hours in the curriculum to clinical education experiences (CEEs) where students engage in experiential learning activities with real patients under the supervision of a clinical instructor (CI). In recent years numerous professional studies, across several health occupations, have provided insight regarding the essential components of quality CEEs. In addition, physical therapy professional documents articulate the qualities and characteristics PT education programs should meet in order to promote quality CEEs. Based on national level conversations it is apparent that, in spite of these evidence- and consensus-based parameters, the quality of students’ CEEs is inconsistent.

Multiple factors contribute to the variability in quality that students encounter during CEEs. These include, but are not limited to, the CIs’ competence and confidence as a teacher, the clinical practice setting’s motivation and ability to provide a high-quality teaching environment, supports provided by the PT education program, and fiscal and regulatory pressures at the clinical site. Studies demonstrate that CIs are conflicted by opposing demands on their time in filling their dual roles as practitioners and as teachers of students. Furthermore, health care administrators may value clinical education...
conceptually; however, in reality, patient care and productivity often take precedence over providing tangible resources to support CEs. These factors create considerable tension for the CI who attempts to balance clinical practice demands with student-focused clinical teaching\textsuperscript{14,15} and can impact the quality of a CEE.

It is widely agreed that CEs are an essential component of the preparation for professional practice.\textsuperscript{16-18} However, there is currently a critical shortage of quality CEs and insufficient mechanisms in place to ensure that evidence-based and agreed-upon professional standards are consistently present. The purpose of this paper is to articulate the necessary qualifications and characteristics of CIs and practice settings that are essential to the provision of quality CE. In addition, we make recommendations that should be implemented by PT education programs, clinical sites, and the profession at large to achieve greater consistency in producing high quality CEs.

**POSITION AND RATIONALE**

It is our position that all stakeholders in clinical education must engage in a deliberate effort to ensure that all students have access to high-quality CEs that demonstrate evidence-based professional standards. Clinical education experiences should be monitored in a standardized manner, such that PT education programs, working in collaboration with clinical practice sites, will provide the supports to meet the developmental needs of CIs and center coordinators of clinical education (CCCEs) in their roles as clinical educators. Physical therapist education programs must dedicate adequate resources, commensurate with the significant percentage of the curriculum devoted to clinical education, in order to achieve these outcomes. The clinical community must also recognize its essential responsibility in the education of PTs who are prepared to meet public health care needs and create environments conducive to learning at practice sites. Ultimately, PT education programs and clinical practice sites must be held accountable for ensuring that all students consistently have access to quality CEs that consistently exemplify agreed-upon professional qualifications, qualities, and characteristics.

**Baseline Qualifications of CIs**

In setting baseline qualifications for CIs, we attempted to balance visionary pursuit of excellence with the reality of constraints of the current health care environment, higher education, and the physical therapy profession. Following an extensive review of professional documents,\textsuperscript{9,19-21} reflection on our cumulative experiences, and shared dialogue, we propose that to qualify for consideration as a CI, one must:

- be a licensed PT in the state in which the CEE occurs,
- demonstrate competence as a clinician,
- practice in a legal and ethical manner consistent with the American Physical Therapy Association (APTA) Code of Ethics\textsuperscript{22} and governing laws and regulations,
- demonstrate a desire to educate students, and
- display evidence of teaching skills.

These recommendations are well supported in professional documents;\textsuperscript{9,19-21} however, there are currently limited mechanisms in place to ensure that all CIs meet these baseline qualifications. Direct oversight of each student’s experience by the PT education program and communication between the DCE, student, CI, and CCCE should be required to assess CIs’ qualifications and baseline skills and to identify professional development needs. While the Commission on Accreditation in Physical Therapy Education (CAPTE) requires PT education programs to include instruction in clinical teaching skills as part of the curriculum,\textsuperscript{9} CIs may have limited or no formal preparation to be a clinical educator. Physical therapist education programs, working individually or collectively through clinical education consortia, should be held accountable to provide professional development programs to promote adherence to these baseline qualifications.

**Developing Characteristics of CIs: From Novice to Expert**

The baseline qualifications described above do not assure high quality CEs. A review of health care literature and relevant physical therapy professional documents\textsuperscript{10,19,21,23} reveals a set of characteristics of effective CIs that, for organizational purposes, can be broadly categorized as:

- Interpersonal/communication skills\textsuperscript{24-29}
- Professional behaviors\textsuperscript{4,6,24,27,30-32}
- Instructional/teaching skills\textsuperscript{4,24,28,33-36}
- Evaluation/performanc skill\textsuperscript{5,24-26,28,32,33}

The essential characteristics of CIs and sample indicators linked to each of the categories are displayed in Table 1. The development of these essential clinical teaching skills is analogous to clinicians’ development of skills in clinical practice,\textsuperscript{37} such that CIs move from being novice to expert clinical teachers.\textsuperscript{36,38,39}

Research in physical therapy demonstrates that as CIs develop greater expertise in their teaching roles, they become highly skilled and reflective communicators, striving to develop positive relationships with students and promote learning in authentic situations.\textsuperscript{4,6,7,36,40}

The highly complex role of CIs requires them to adapt their supervisory styles in response to real-time assessment of teaching and learning, and in response to students’ skill level and learning style, across variable clinical situations.\textsuperscript{3,38} In addition to taking the time to explain and demonstrate techniques, they engage students in discussion and foster higher-level thought processes with challenging, thought-provoking teaching strategies.\textsuperscript{4,35,36,41} Skilled CIs provide ongoing formative and summative feedback, that is specific and timely, and they encourage students to reflect and engage in self-assessment.\textsuperscript{3,5,7,38,42,43}

It would be faulty to assume that all CIs inherently possess the related knowledge, skills, and behaviors consistently observed in experienced and expert CIs. Research has indicated that CIs are inconsistent in the use of effective teaching strategies, such as providing time for student dialogue or in using questions to prompt reflection and complex clinical decision making.\textsuperscript{44,45} and are reluctant to share negative feedback with students, especially when deficits are related to professional behaviors.\textsuperscript{46} The development of these essential teaching skills demands ongoing assessment of CIs’ areas of strengths, weaknesses, and needs for continuing professional development. Ultimately, it should be recognized that the development of a skilled CI is an evolving process that needs to be assessed and supported by the PT education program, the clinical practice, and through individual motivation and action.

There is currently limited formal recognition for CIs (eg, PT education program or consortia award) who consistently demonstrate expertise in the qualities and characteristics displayed in Table 1. A recent survey of employers of PTs who have American Board of Physical Therapy Specialties (ABPTS) certifications indicate that these specialists assume non-patient care roles (eg, educator, researcher, consultant) more effectively than PTs without these credentials.\textsuperscript{47} We propose that the profession identify a mechanism to provide recognition for a Clinical Education Specialist (CES) analogous to current ABPTS certifications in order to elevate the role of the CI. The presence of a CES may also enhance the learning environment of a clinical practice.
<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics of a CI</th>
<th>Sample Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Skills/</td>
<td>• Demonstrates motivation to teach</td>
<td>• Is enthusiastic</td>
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<tr>
<td>Communication</td>
<td>• Conveys a positive attitude towards teaching</td>
<td>• Exhibits genuine interest in student learning</td>
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<td></td>
<td>• Creates a positive learning environment</td>
<td>• Makes time for student discussions</td>
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<td></td>
<td>• Communicates effectively</td>
<td>• Is open to student ideas</td>
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<td></td>
<td>• Reflects in, on, and for teaching actions</td>
<td>• Creates a comfortable atmosphere</td>
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<td></td>
<td></td>
<td>• Encourages the safe sharing of knowledge</td>
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<td>Professionalism</td>
<td>• Models APTA Core Values</td>
<td>• Engages students in dialogue with positive regard</td>
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<td></td>
<td></td>
<td>• Responds to students’ ideas and learning needs</td>
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<td>• Demonstrates competence in clinical practice (knowledge, skills, and behaviors)</td>
<td>• Seeks student feedback on the effectiveness of CI/student interactions</td>
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<td></td>
<td></td>
<td>• Modifies teaching strategies to enhance effectiveness</td>
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<tr>
<td>Instruction/Teaching</td>
<td>• Creates and adapts learning experiences appropriate for student needs</td>
<td>• Delivers evidence-based therapy that is patient-focused and outcomes-oriented</td>
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<td></td>
<td>• Participates in a collaborative practice with the intraprofessional team members</td>
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<td>• Engages students as active members of the health care team (eg, participation in rounds, meetings, communications)</td>
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<td></td>
<td>• Engages the student as an adult learner</td>
<td>• Promotes students’ accountability for their own learning</td>
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<td></td>
<td>• Seeks and considers students’ input regarding pace of learning and the planning of learning activities</td>
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<td></td>
<td>• Uses multiple types of instructional strategies</td>
<td>• Adjusts the teaching style to accommodate students’ learning styles</td>
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<td></td>
<td>• Modifies preferred styles based on situational needs</td>
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<td></td>
<td>• Promotes student self-assessment and reflection</td>
<td>• Asks questions before, during, and/or after patient interactions</td>
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<td></td>
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<td>• Reviews and discusses students’ weekly reflection sheets</td>
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<td></td>
<td>• Facilitates student decision making</td>
<td>• Encourages students to verbalize clinical reasoning</td>
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<td></td>
<td></td>
<td>• Safely allows students to implement their own ideas</td>
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<td></td>
<td>• Seeks continual self-improvement as a teacher</td>
<td>• Considers feedback about teaching performance</td>
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<td>• Employs self-improvement strategies and seeks professional development activities to meet identified teaching needs</td>
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<tr>
<td>Evaluation/Performance</td>
<td>• Analyzes multiple data sources in developing feedback to provide to students</td>
<td>• Uses feedback to identify students’ strengths and areas needing improvement</td>
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<tr>
<td>Assessment</td>
<td></td>
<td>• Offers real-time input</td>
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<td></td>
<td>• Provides formative and summative feedback that is accurate, objective, timely, and</td>
<td>• Completes the PT CPI and reviews it with students in a timely manner</td>
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<tr>
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<td>specific</td>
<td>• Collaborates with the physical therapist education program and CCCE to promote students’ outcomes</td>
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</table>

Abbreviations: APTA, American Physical Therapy Association; CCCE, center coordinator of clinical education; CI, clinical instructor; PT CPI, Physical Therapy Clinical Performance Instrument.
Table 2. Essential Characteristics of Clinical Practice Environments

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics of the Clinical Practice</th>
<th>Sample Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture of the Clinical Learning Environment</td>
<td>All levels of administration and staff: • Value the clinical education of students</td>
<td>• Learning and teaching is embedded and informs all aspects of clinical practice • Administration encourages relationships with academic institutions (eg, contract development, research relationships, conjoint appointments) • Clinical teaching performance is used as a criterion for promotion/ career ladders • The health care team demonstrates high morale and harmonious work experience in which student contributions are valued</td>
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<td>• Contribute to the creation of a supportive learning environment</td>
<td>Students: • Feel accepted and are encouraged to participate in professional dialogue with all team members • Interact informally with staff (eg, have lunch together, share a common workspace) • Are encouraged to become autonomous practitioners</td>
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<td></td>
<td>• Integrate evidence-based education, research, and patient care</td>
<td>The health care team: • Models principles of best practice in patient management and in clinical teaching • Participates in activities to support best practice (eg, presenting at conferences, engaging in research, publishing)</td>
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<tr>
<td>Structure of the Clinical Learning Environment</td>
<td>The CCCE: • Evaluates the clinical education program with outcomes, which are shared with multiple stakeholders</td>
<td>The CCCE: • Solicits feedback from students, CIs, DCEs, and all staff to ensure quality teaching and learning • Uses feedback from multiple sources to determine strengths and areas which need development</td>
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<td></td>
<td>The clinical practice • Values and provides tangible supports to the CCCE</td>
<td>The clinical practice: Provides time and opportunity for the CCCE: • To participate in continuing professional development related to clinical education (eg, attend clinical education consortia activities) • To mentor CIs • To communicate with DCEs</td>
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<td></td>
<td>The clinical practice: Provides dedicated teaching time to CIs</td>
<td>Provides time for CIs to participate in activities related to clinical teaching (eg, development of teaching modules, dialogues with student, formative and summative student assessment, communication with the academic institution)</td>
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<td></td>
<td>The clinical practice: Provides adequate resources to support clinical education</td>
<td>Provides and funds professional development opportunities explicit to clinical education (eg, in-services, journal clubs, research activities, participation in professional conferences) • Provides administrative supports as needed</td>
</tr>
</tbody>
</table>

Abbreviations: CCCE, Center Coordinator of Clinical Education; CI, clinical instructor; DCE, director of clinical education.
Baseline Qualifications of a Clinical Practice

The importance of a positive clinical environment with a supportive culture was referenced by students as being influential in their assessment of the CEE and is a critical component in determining the success of the learning experience. 

Although the literature supports the premise that effective CIs utilize specialized skills in their role as clinical educators, there has been less focus on identifying the environmental, administrative, and personnel factors of an effective clinical education setting. We recommend that, to qualify for consideration as a clinical affiliation site, a facility must:

- establish an affiliation agreement with the academic institution.
- promote staff involvement in clinical education.
- appoint a CCCE who is dedicated to clinical education.

A CCCE must be appointed to organize, direct, evaluate, and develop the clinical education program at the clinical facility (Table 2). Among other essential qualities, this individual should have expertise in effective clinical teaching and understand the expected student clinical performance outcomes for each CEE. The ability of the CCCE to perform in a manner consistent with professional expectations is, to a large extent, contingent upon the cultural and structural characteristics of the practice environment.

Cultural and Structural Characteristics of a Clinical Practice Environment

Students thrive in an environment that recognizes the importance of lifelong learning, provides a culture that promotes integration and inclusion of students, and is structured to support these ideals. Evidence-based characteristics of clinical practice environments that facilitate learning are displayed in Table 2. In order to create an environment that meets these standards, the appointed CCCE must remain current in contemporary issues regarding clinical education at local, regional, and national levels, disseminate relevant information to clinical education stakeholders at the clinical site, and engage in ongoing communication with CIs, students, and PT education programs. Similar to the development of a CI from novice to expert, these cultural and structural characteristics take time, resources, and intentional effort by the personnel at the clinical site to cultivate.

Administrators at clinical sites need to be made aware of the potential benefits to investing resources to create an environment conducive to hosting CEEs. A 2012 unpublished survey study of PT clinical site directors/managers, undertaken by members of the New York/New Jersey Physical Therapy Clinical Education Consortium, inquired about reasons for participation in clinical education. Among other reasons, directors reported staff recruitment, staff professional development, fulfilling the mission of the site, and strengthening the reputation of the facility as incentives for hosting students’ clinical education. A majority of the respondents reported the same or increased productivity and enhanced quality of patient care during CEEs.

In addition to the allocation of time and resources by the clinical site, we recommend that CCE-specific continuing professional development activities be developed and made available by PT education programs and consortia. CCEs should also be formally recognized for the pivotal role that they play for direction of the clinical education program at the clinical site and be provided with the opportunity to attain clinical or adjunct faculty appointments by affiliating PT education programs. Lastly, we recommend ongoing, standardized assessments of the CCE and clinical site by PT education programs to ensure that there is consistency in the presence and quality of the sample indicators displayed in Table 2.

Effective Mechanisms for PT Education Program Evaluation of Clinical Learning Environment

CAPTE requires PT education programs to provide a comprehensive evaluation of their individual clinical education programs that includes assessment of each student’s CEE. The director of clinical education (DCE) is the primary faculty member from the PT education program who is responsible for evaluating all aspects of clinical education, including the quality of the clinical learning environment. Visit sites provide the most direct mechanism for the DCE to assess the overall quality of the CEE. Key components of site visits include face-to-face communication with the student, CI, and CCCE, and observation of essential teaching characteristics of CIs and the clinical learning environment as described in Tables 1 and 2. During site visits, DCEs can readily identify the teaching and learning needs of clinical education facility and the barriers or challenges to a quality CEE. Alternate means of assessment include information gleaned from telephone conferences, video-calls, e-mails, the APTA Physical Therapist Clinical Performance Instrument (PT CPI), and the Physical Therapist Student Evaluation: Clinical Experience and Clinical Instruction. These methods collectively provide information for the DCE to make determinations about the strengths, challenges, and developmental needs of the clinical learning environment.

Currently, DCEs from each PT education program perform independent evaluations of CEEs using assessments unique to their institution. There should be a uniform assessment tool available to all PT education programs that would require DCEs to evaluate the characteristics and qualities in tables 1 and 2. Clinical sites may be unaware of the criteria on which they are being assessed and a uniform tool would inform them about the developmental needs of their clinical education program. Therefore, we propose that a standardized instrument be developed and implemented to permit the systematic collection and analysis of data related to teaching and learning at a clinical practice site, similar to the instruments used in other professions. Training modules could be developed for DCEs in the use of this tool to promote consistency in its use. Information collected in an aggregate manner could be shared between PT education programs to promote communication regarding the quality of the teaching and learning experiences available. This mechanism should promote efficiency for PT education programs to determine how to individually and collectively support clinical sites’ continuing professional development needs. Data could also be used to identify and recognize clinical sites that consistently exemplify the attributes of a high-quality clinical learning environment.

The Influence of Caseload and CI–Student Ratio on Clinical Teaching

There is a known challenge to secure and retain student placements in sufficient quantity and quality to meet the demands of PT education program class sizes and increasing lengths of required CEEs. This reality is reflected in the most recent CAPTE Fact Sheet in which 21.8% of PT education programs reported that they had changed a requirement that students have certain types of experiences (eg, acute care, rehabilitation). Fiscal and regulatory challenges of contemporary health care practice affect the learning environment and demand exploration of strategies that will promote quality CEEs and meet the needs of PT education programs and clinical settings.

One proposed strategy to increase the number of student placements that has not been widely embraced by clinical practice settings, is to assign multiple students to 1 clinical instructor. The physical therapy literature...
has demonstrated that students who participate in these experiences value the opportunity to collaborate with peers, gain access to multiple philosophies of patient management, and have greater opportunities to make clinical decisions independently. CIs have also described satisfaction with this clinical education model as they feel it has fostered the development of their own management and clinical teaching skills. There is some evidence to support the premise that this model increases clinical productivity; however, in the current reimbursement climate, regulations imposed by third-party payers may be a barrier to implementation. Recent literature demonstrates that this model may be a very effective means of providing instruction for integrated and short-term CEEs. Professional development activities geared towards CCCEs and CIs should include topics on alternate delivery models for clinical education. With continuing professional development and support from PT education programs and clinical administrators, some sites may find ways to implement the multiple student to 1 CI model in a mutually beneficial manner.

PT education programs and clinical practices need to promote effective CEEs in an environment that requires clinicians to be highly productive. A study by Silén et al demonstrated the importance of allowing physician clinical educators dedicated time to the role of supervising students. Participants in this study were assigned primary responsibilities related to clinical teaching versus patient care. This model allowed them to be more focused on observing student performance, developing students’ reasoning, and supporting students’ sense of being a physician. Another study indicated that increasing the number of patient encounters did not enhance medical students’ learning and that the quality of student supervision was of greater importance. Literature in both physical therapy and medicine has indicated that fast-paced workloads and limited time for student reflection impede deep learning.

The physical therapy profession needs to consider how productivity demands on students and CIs have the potential to compromise the quality of the CEE. Available evidence suggests that when students are given the time to engage in reflection and discuss their clinical performance with the CI, it strengthens their clinical reasoning skills in a meaningful and timely manner. Although CIs expect students to be efficient during patient interactions, their assessments of students are based on holistic, intuitive determinations about student performance and may not strictly adhere to expected productivity requirements. Therefore, we recommend that CIs consistently be provided with dedicated time to perform their role as clinical teachers. The PT CPI may over-emphasize the role of caseload in student assessment, consequently causing greater stress to the CI who feels pressured to unnecessarily increase the number of patients seen with students. The student–CI team might benefit from removing the pressure of holding students responsible to manage a full caseload, thereby providing the student with time to reflect and CI time to maintain productivity levels. Based on these considerations, we encourage national-level discussion of this dimension of the grading criterion of the PT CPI to assess the current efficacy and consistency of its use across CEEs, and to consider possible revisions. Additionally, research is needed to explore the relationship between productivity, designated time for CI–student meetings, and student learning outcomes to inform decision making and follow-up activities by the profession at large.

Responsibilities of Key Stakeholders to Foster Excellence in Clinical Education

PT education programs, clinical sites, and the profession at large (working through national-level organizations) have a responsibility to provide students with quality CEEs that will prepare them for professional practice upon graduation. To achieve this outcome we propose the following recommendations for these stakeholder groups.

PT education programs need to:

• Consider the challenges faced by clinical facilities when providing clinical education programs and limit class sizes to match the availability of quality CEEs.
• Have formal mechanisms in place to assess student readiness for upcoming full-time CEEs.
• Assess DCEs’ unique, nontraditional teaching position and provide DCEs with adequate resources and administrative support commensurate with class size and scope of responsibilities to permit them to fulfill this complex role.
• Enlist other core academic faculty to assist the DCE(s) by investing time and resources to effectively provide traditional and nontraditional continuing professional development activities to enhance CI teaching skills.
• Routinely extend supports and benefits (eg, library privileges, clinical and/or adjunct faculty appointments, access to online resources, participation in academic courses, etc) to clinical educators to demonstrate that they are valued and valuable members of the PT education program.
• Instill in students a professional commitment to becoming a CI. Authentic opportunities provided within the academic program to develop core competencies for this teaching role may enhance students’ confidence and motivation to become a CI.

Clinical education sites should:

• Appoint a CCCE and provide adequate supports and resources to assist this individual in performing functions identified in Table 2.
• Promote staff involvement in clinical education as a professional practice expectation and include the role of CI in performance appraisals, clinical ladders, and other incentive programs.
• Offer CEEs to PT education programs commensurate with the number of CIs who are motivated to develop qualities and characteristics identified in Table 1.
• Provide time for CIs to meet with students to facilitate productive learning and patient care outcomes.
• Provide supports for CCCEs and CIs to promote their development as clinical educators.

The American Council of Academic Physical Therapy (ACAPT), working in partnership with the newly formed National Consortium of Clinical Educators (NCCE) and Clinical Education Special Interest Group (CESIG) of the APTA Education Section, must spearhead attainment of the initiatives outlined above and should:

• Develop a CEE standardized assessment tool to promote consistently high-quality learning environments.
• Explore the development of a specialist designation similar to the current ABPTS certifications, the Clinical Education Specialist (CES), to recognize CIs with advanced clinical teaching skills.
• Fund research to better define the fiscal impact of clinical education on PT education programs and clinical sites.

DISCUSSION AND CONCLUSION

PT education programs and clinical sites need to be held accountable to ensure that evidence-based and agreed-upon standards for CEEs, as displayed in Tables 1 and 2, are realized. PT education programs must consider clinical education sites with which they
hold contractual agreements as extensions of the academic programs. As such, they need to devote adequate resources to support the clinical education portion of the academic program. The development and implementation of a standardized assessment tool for CEEs is recommended. These assessments should be conducted and results shared among PT education programs to determine the developmental needs of the clinical education site. Clinical education consortia can work collaboratively to promote efficiency and economy in the development and delivery of continuing professional development activities and supports to meet identified needs. National continuing professional development activities that focus on CCCE-specific skill development and on CI progression from novice to expert should be readily available. Clinical education sites need to strategically and intentionally build a culture that fosters quality CEEs by appointing CCCEs who will work in collaboration with DCEs at PT education programs to support clinical education initiatives. Clinical instructors and CCCEs, who attain the certification of a CEE will support the development of quality CEEs that will benefit clinical sites and PT education programs.

Clinical sites and PT education programs must function in greater partnership with each other to ensure all students have access to quality CEEs to ensure preparation for professional practice. This will require negotiation and compromise by administrators at both settings. Administrators at clinical sites need to acknowledge the potential benefits of hosting CEEs and demonstrate a commitment to developing an optimal learning environment. PT education programs must recognize that clinical facilities need tangible assistance to achieve this outcome. Ultimately, PT education programs and clinical facilities need to reach agreement as to the models of clinical education that are financially sustainable for both entities and that will permit CIs to effectively function as both clinical educators and clinicians. National-level discussion, spearheaded by members of AACP, NCCE, and CESIG is required to develop a strategic plan for implementing these recommendations so that professional standards for all CEEs are realized.

REFERENCES