# Task Force on Clinical Education Placement Capacity and Process Innovation

**Final Report Summary – April 3rd 2024**

# Table of Contents

## Section I. Task Force Charge and Summary of Work

### Introduction and Overview

The topic of clinical education(CE) and the placement process dates back to 1976 with the work of Moore and Perry,[1] who found that people, place, and processes all impact CE.  In 2014, a national Clinical Education Summit[2] yielded several recommendations to improve the efficiencies and intricacies associated with CE. This included specifics related to innovative research and pilot initiatives to promote and foster best practices in CE. Over the past decade, the dramatic increase in the number of physical therapist education programs and in turn growing cohorts of students to offset the shortage of healthcare workforce has, in turn, created a substantial need for clinical sites and instructors across various practice settings[3].  As academic programs, sites, site coordinators of clinical education (SCCEs) and clinical instructors (CIs) continue to engage in CE experiences, further exploration on the challenges and issues in capacity and process will strengthen the existing model and contribute to preparing future physical therapists in the profession.

In 2018, The Clinical Education Placement Process Taskforce was assembled, with the primary charge of conducting a deep, comprehensive investigation examining the issues related to placing students during CE experiences. Emerging evidence from this task force suggests that the current placement process used in full-time CE experiences may not be sufficient to sustain current demands and maintain program viability.[4] The work of this task force further resulted in nine recommendations, one of which included a call to expand CE research to explore topics related to capacity in greater depth.  The Task Force on Clinical Education Placement Capacity and Process Innovation (CEPCPITF) was convened in 2021 to assist in this call.

The CEPCPITF was originally formed under the American Council of Academic Physical Therapy (ACAPT) National Consortium for Clinical Education (NCCE). The NCCE was sunset in fall of 2023, and with the reorganization and restructuring of ACAPT, the Commission on Clinical Education is now functioning in its place.  This final report is submitted to ACAPT's Commission on Clinical Education. We hope these recommendations will be moved forward to the Board of Directors (BOD) of ACAPT.

### Purpose

The purpose of the CEPCPITF was to gather data regarding current and projected future CE capacity (supply and demand), to determine if capacity issues are affecting the placement process, and to explore options for transforming the current placement process.

### Objectives

The CEPCPITF used two data sources to answer the charges. This included conducting a scoping review of the literature regarding the placement processes in other health science professions with a CE component. In addition, the CEPCPITF created and piloted an extensive survey that was distributed widely to SCCEs in an effort to gather input from those working in inpatient and outpatient settings.  The following objectives were met through analysis of this data:

1. Determine the demographics of existing and potential clinic sites
2. Recommend definitions for the term capacity and its related concepts (i.e. supply, demand, surplus, distribution, etc.).
3. Determine supply and demand trends for CE experiences (actual or perceived, current, and projected).
4. Estimate the impact of capacity on the future of the placement process.
5. Provide recommendations for ensuring sustainability of CE capacity for the future of the profession.

6. Provide a scoping review of the placement processes used in other health professions focusing on the benefits and challenges related to capacity, placement rates, efficiency, and academic-clinical partnership relations.
7. Suggest opportunities for transforming the current placement process to enhance efficiency and capacity while building upon existing individual and regional partnerships.


## Task Force Structure and Organization

The CEPCPITF was composed of one chair and 13 members who were assigned to one of two subgroups. Each subgroup had an identified lead.  Attributes of the CEPCPITF included the following: At least one member from each CE stakeholder group (Director of Clinical Education [DCE], SCCE, CI), at least one clinic site administrator, at least one academic program administrator, at least one clinical educator who is actively engaged in managing CE for other health professions (may or may not be a physical therapist), and at least one recent graduate or early career professional. Every effort was made to have equal representation from academicians and clinicians, as well as representation from diverse geographic and practice settings. Members of the full task force included:

> **Task Force Chair**: Jamie L. Greco PT, DPT, EdD
> **Placement Process Subgroup Lead**: Janet Jackson-Coty PT, DPT
>> **Subgroup Members:** Peter Haywiser PT, DPT; Anjanette Nunez PT, DPT; Colette Pientok PT, DPT; Valerie Teglia PT, DPT; Barbara Wasilk MA CCC/SLP-L
> **Capacity Subgroup Lead:** Janet Konecne PT, DPT, PhD
>> **Subgroup members:** Tabitha Bonney Rozeboom PT, MPT; Thuha Hoang PT PhD; Mari Knettle PT, DPT, EdD; Jessica Maxwell PT DPT, PhD; Tiffany Marulli PT, DPT,PhD; Michael Brents PT, DPT, MHA (Consultant)


## Meeting History

The full CEPCPITF met all together a total of 5 times, one of which was in person at ELC 2022. Concurrently there were many subgroup virtual meetings averaging about once per month, with additional monthly meetings between both subgroup leads and the task force chair, as well as a several meetings with individual leads and the task force chair. Ongoing communication was also accomplished virtually through the use of several shared cloud-based written documents as well as via email. Two update presentations were held at ELC 2022 and 2023 during the annual NCCE meeting with membership present.

## Methods

**Review of the Literature:**

The Placement Process subgroup conducted a scoping review of the existing literature in other health professions. This review was conducted using the following databases: PubMed, CINAHL and Scopus and a comprehensive list of search terms. All articles identified were stored in a shared cloud-based database. To be included in the review, a study had to focus on the placement process used by an academic healthcare program to place students in a full-time learning experience in the clinic setting and include information about the benefits and challenges of the process related to capacity, placement rates, efficiency, and academic-clinical partnership relations. The article titles, abstracts, and full papers were reviewed independently by two Placement Process subgroup members for inclusion.  Disagreements or uncertain inclusions were resolved with the input of a third subgroup member. References from included articles were also reviewed with the same process to identify additional articles for potential inclusion. Data from the included studies were extracted by two of the authors using a review-specific form developed following a pilot of one included paper. The following data items were extracted: Placement process, benefits and challenges of placement process related to capacity, placement rates, efficiency, and academic-clinical partnership relations.

## Survey Research:

The Capacity subgroup designed, constructed, piloted, distributed, and analyzed a survey to address some of the objectives of the CEPCPITF.  The survey was designed to capture demographics of existing clinical sites, obtain feedback on definitions regarding terminology surrounding capacity for students, and identify supply and demand trends. This included the discovery of barriers and facilitators to hosting students for CE experiences and capturing suggestions for sustainability and future transformation of the current CE model.  The Capacity subgroup initially defined capacity for the purpose of the survey prior to distribution to assist in the data collection.  The Ishikawa fishbone diagramming method[5] was utilized to guide an initial brainstorming session of possible causes and effects regarding CE capacity and facilitated further development of categories surrounding both causes and effects. This process led to the creation and revisions of survey questions that best addressed the charges of the capacity subgroup.  An outside statistician was consulted during survey development. Upon completion of data collection, the statistician conducted quantitative analysis of the data from both surveys.  ACAPT's Data Advisory Committee reviewed and approved the survey prior to distribution. The survey and its distribution was a collaborative effort between ACAPT and Exxat.  Exxat is a company that provides a CE data management platform to many Colleges and Universities who have a CE curriculum, including those with Doctor of Physical Therapy (DPT) programs.  The Exxat database contains information from many programs, including information about clinical sites with whom they have contracts with.  This includes email contacts of SCCEs at clinical sites across the United States.

This project was determined exempt by the IRB from Western University of Health Sciences.

*Target population:*
SCCEs across the United States

*Survey development*
The purpose of the survey was to address the many objectives set forth by the NCCE Board, including:
1) Determine the demographics of existing and potential clinical education sites
2) Recommend a definition for DPT student capacity.
3) Determine supply and demand trends for CE experiences
4) Collect data to help estimate the impact of current capacity on future CE placements
5) Collect data to assist in providing recommendations for sustainable options for DPT CE
6) Collect data to assist in developing recommendations for transforming current placement processes

The Capacity subgroup met on a regular basis and also worked individually to complete the construction and edits for the survey.  Meetings for development were held approximately monthly over an 11-month period (between June 2022 and May 2023), and then again for 3 more meetings once the survey data had been obtained and analyzed.  After determining the final categories that were essential to meet the objectives of study, 10 revisions of the survey were completed based on the continued input from the Capacity subgroup members, the task force chair, and ACAPT Data Advisory Committee feedback prior to distribution. After the final version was completed, a pilot survey was provided to 3 SCCEs for additional feedback prior to general distribution.  These 3 SCCEs were selected purposefully to include variations in regional location, site size, and student attendance so that survey revisions could anticipate ease and accuracy of completion.  Additional revisions, based on the feedback from the pilot survey, were made and approved by the CEPCPITF and ACAPT Data Advisory Committee.

Distribution process:

To facilitate acquisition of the best data possible and an optimal return rate, the Task Force Chair and Capacity subgroup decided to divide the finalized survey into two separate parts. Part one which captured data from SCCEs pertaining to the inpatient setting, and Part two which captured data from SCCEs pertaining to the outpatient setting. Part one (inpatient survey)was launched first, followed by part two (outpatient survey) approximately one month following the launch of Part one.  Part two of survey was identical to Part one, however all questions referring to "inpatient" were edited to reflect "outpatient".  Categories of facilities were based on the ACAPT definition for sites.[6] Overall distribution of the survey was a collaborative effort between ACAPT and Exxat. The distribution list for surveys was generated through the general SCCE database in Exxat, and Exxat sent SCCEs an anonymous Qualtrics link (provided by ACAPT) through the Exxat management system. The survey instructions were specific in requesting data from SCCEs pertaining to the inpatient setting for the first launch, and data pertaining to the outpatient setting from SCCEs for the second survey launch.

Both survey launches had clearly stated closing dates, and email reminders were sent for completion and submission. Each survey consisted of 36 multiple choice type response questions with some questions allowing for an "other/please write" response.  There were three separate open-ended questions at the end of each survey where participants were invited to respond to prompts about factors impacting capacity in their specific setting, potential solutions to increasing capacity, and any additional information they wanted to share with the CEPCPITF members.

Although we were unable to capture responses from all SCCEs across the country, we believe the responses received provide a clear picture of concerns, barriers, opportunities, and representation of capacity. There were 39,862 surveys initially sent out electronically using the Exxat distribution list for SCCE's described above.  A total of 31,642 surveys were distributed on 6/12/2023 (after bounce backs and opt outs were removed) for the initial inpatient survey (part one), and 30,717 were distributed on 7/5/2023 for the outpatient survey (part two).  Survey data was collected and stored in the ACAPT database following data collection from ACAPT's Qualtrics survey account.

*Analysis of survey responses*

**Analysis of quantitative survey data:** Descriptive statistics were used to analyze closed ended responses to the survey. with frequency counts for responses that allowed for "other" as a choice. Data transfer from the ACAPT Qualtrics database to the CEPCPITF and statistician produced challenges due to corrupt data that needed to be further analyzed. Some of the data was not able to be reconciled due to this transfer challenge.  Statistical analysis of the quantitative data was done by the statistician, using the model and aims described in Recruiting and Maintaining US Clinical Training Sites from the Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey.[7]

**Analysis of open ended survey responses**: There were three open-ended questions at the end of the survey soliciting information about additional influences on capacity, suggestions to increase the national capacity, and other comments that participants wanted to communicate to the CEPCPITF.  Due to the nature of this data and length of these responses, these were analyzed separately from the other questions in the survey, using qualitative methodology. Each of these three questions were analyzed using summative content analysis[8] by two to three Capacity subgroup members for each question, resulting in three small groups. Each member analyzed responses individually, and then with their small group to discuss collective findings and categories. The three groups then met together to discuss the categories, resolve

discrepancies, and agree on final categories. From these final categories, overarching themes were developed, which were then triangulated with other results from both the literature review and the other survey responses to formulate the final recommendations.

## Summary of Scoping Review

A total of 16,422 articles were included in the original screening process for the scoping review. Following several rounds of screening (title, abstract, full paper) a total of 33 articles were included in the review of literature. The Placement Process subgroup is in the currently writing a manuscript summarizing the process and results of the scoping review. These results were considered when formulating the recommendations to ACAPT. A general summary is included here.

The studies included in the review were grouped into the following placement process themes: Centralized Management, Collaboration, and Computerized Placement. Computerized Placement had two sub themes- computer driven and human driven. The following illustrates a summary of each theme:

1. **Centralized Management:** Creation and use of a centralized system to provide information about potential placements and/or final placements was one placement process theme. Multiple articles described a system outside of the academic institutions and outside of the clinical partners to manage the placement process and placements. Several also described the use of paid staffing positions outside of the academic institutions or clinical partners to facilitate placements.

2. **Collaboration:** Collaboration was another placement process theme seen throughout most of the studies reviewed, even those that included other processes. Collaboration between various stakeholders was described including academic institution with clinical partners, consortia, and students. Some themes or processes related to collaboration include the following:

    a. **Standardized timeframes**: The use of standardized or coordinated timeframes. It was surmised that a clinical partner may be able to place more students if the academic partners could coordinate the schedule of clinical placements to be more evenly spread throughout the year

    b. **Nontraditional clinical partners:** Described collaboration with nontraditional partners including rural placements, community-based placements, and placements within interprofessional settings.

    c. **Interprofessional placements**: Development of an Interdisciplinary Clinical Training Network (ICTN) placing students with other health professionals. The professions included Nursing, Occupational Therapy, Physical Therapy, Podiatry, Social Work and Speech and Language Pathology.

    d. **Collaboration with students**: Process included having students assist in finding their own clinical placements in collaboration with the school.

3. **Computerized Placement:** Referring to the use of software to assist and organize components of the placement process. This included the use of computer driven algorithms to place students at certain clinical sites and organization of student input into the matching process.

## Summary of Survey Research

Quantitative and qualitative data gathered through our data collection processes were analyzed, synthesized, and triangulated using a thematic approach and results contributed to recommendations offered to ACAPT. The Capacity subgroup is in the process of writing a manuscript for submission which will contain full detailed results of the survey. This report highlights the key findings of our survey results which contributed to the final recommendations presented at the end of the report.

## Inpatient survey results summary

**Sample characteristics:** There were 885 individuals who responded to the survey, and 72% of respondents (n=640) agreed to have their responses included in the survey. Sample characteristics included the majority of SCCEs indicated their professional designation as physical therapists, with varying years of experience and with representation of student placements across all CAPTE regions. Most of the sample manages primarily the acute care/inpatient hospital setting with the remainder of the sample primarily managing long term care, extended care, and subacute settings.

**Capacity(closed ended survey questions):** When asked about capacity, the majority (75%) of SCCEs indicated they were unable to take additional physical therapist students in their setting, suggesting that they are currently at full capacity. Several factors were identified as barriers impacting capacity, with capital resources (space, desks, technology, etc.) being the most cited barrier, and the relationship with the University viewed as the most cited facilitator. Rankings about the perceived impact of participant-selected barriers and facilitators indicated that willingness to serve as a CI was both the most impactful barrier and facilitator, closely followed by the relationship with the University/DCE as a highly ranked facilitator, and capital resources as the second highest impactful barrier. When asked about how student CE experiences are prioritized, the most important factor was availability at the site. When asked about preferences for accepting certain level(s) of students (first, intermediate, terminal), the majority indicated that level does not matter. Participants indicated in several places within the survey (when given the choice of "other") additional reasons why available slots are not used, including cancellations by the academic program, academic program not assigning a student and therefore the slot was not used, staffing challenges, and remaining impacts of the pandemic. Approximately 63% of the full-time equivalent (FTE) staff are acting as CIs.

A logistic regression analysis was conducted to investigate the impact of state/region, hospital setting, and the number of FTEs at the site on the presence of students in clinical facilities throughout the year. The model's predictive accuracy was modest, only marginally better than chance, and it especially struggled to identify facilities that experienced periods with no students. Of the predictor variables considered, only the number of FTEs was statistically significant, with a positive coefficient, indicating that facilities with more FTEs were more likely to report periods without students. Note that this finding is counterintuitive, as one would typically expect that more full-time staff would correlate with greater student placement capacity. These results suggest that other factors may play a larger role.

## Outpatient survey results summary

**Sample characteristics:** There were 1698 individuals who responded to the survey, and 86% (n = 1471) agreed to have their responses included in the survey. Sample characteristics included the majority of SCCEs having a professional designation as physical therapists, with varying years of experience, and with representation of placing students across all CAPTE regions. The majority of the sample (58%) manages primarily the ambulatory/outpatient setting with most of the remaining sample (28%) managing the private practice setting.

**Capacity (closed ended survey questions):** When asked about capacity, the responses were split, as 43% of SCCEs indicated they could accept more students for clinical education experiences, while 35% of SCCEs indicated they were unable to take additional physical therapist students in their setting, suggesting that they are currently at full capacity. Some (22%) SCCEs left this question blank. Several factors were identified as barriers impacting capacity. Capital resources was the most frequently selected barrier, while willingness to serve as a CI was identified as the most impactful barrier as determined by the rankings of participant-selected barriers. The University/DCE relationship was determined to be the most frequently selected and, according to participant rankings, the most impactful facilitator.

When asked about how student CE experiences are prioritized, the most important factor was availability at the site, followed next by geography (nearness of school to the site). When asked about preferences for accepting certain level of students (first, intermediate, terminal), the majority indicated that level does not matter. Participants indicated in several questions (when given the choice of "other") several reasons why available slots are not used, including slots that were not cancelled but were unused by the academic program, student cancellations, lack of requests from the academic programs, and timing issues of clinicals compared to availability of the clinic.

Lastly, regression analyses investigating the factors influencing the placement of Doctor of Physical Therapy (DPT) students in various settings across different years, several consistent trends and key findings emerged. The number of clinical education contracts consistently appears as a significant predictor, suggesting that increased contracts correlate with higher student placement numbers. In addition, the total Physical Therapist Full-Time Equivalent (FTE) points showed a positive association with student placements, albeit with variations in the strength of this relationship across the different models. This indicates that the availability of FTE physical therapists may facilitate increased numbers of student clinical experiences, which notably conflicts with the inpatient survey data.

**Open-ended response questions (both surveys):**
Analysis of three open ended response questions at the end of each survey revealed several themes, most of which were consistent across both surveys and inclusive of both inpatient and outpatient settings. Participants expanded upon their thoughts **regarding factors further impacting capacity and willingness to accept students for clinical education experiences including**: needing more staffing and/or current staffing being too "new" to supervise a student, staff attitude towards being a CI, clinic culture not being supportive of students, variations in length and timing of different clinical placements being a challenge for scheduling, dissatisfaction with current evaluation methods for students, and limitations in space and other resources. **Suggestions for future** included the need for meaningful incentives for CIs, increasing the importance of being a CI, establishing more partnerships between schools and sites, having more communication from academic programs regarding unused slots, revisiting the current assessment tools used to evaluate students, and that a standardization and/or centralization of the placement process is needed. **There were two themes that were different for each setting**. Participants from the **inpatient setting** suggested that there is some lack of 'readiness' on the part of the student for the challenges associated with this environment. Participants from the **outpatient setting** suggested that reimbursement challenges negatively impacted their capacity.

## Section 2. Final Recommendations
Based on the synthesis of both sets of data and following several robust subgroup and full committee discussions, the task force assembled ten recommendations related directly to the findings. They are listed below. Recommendations #1-#5 pertain to the placement process, Recommendations #6 and #7 pertain to the CI/SCCE and Recommendations #8-#10 pertain to the inpatient setting.

## Recommendation #1: Explore centralization of the placement process
Rationale: Findings from the literature review in other health science professions[9–17] as well findings from the CEPCPITF survey participants suggest that more standardization in communication and in the placement process itself would establish greater efficiency and consistency. More specifically, a centralized computer process, also supported by the literature[18–27] may improve visibility of available placements and ultimately increase percentages of students receiving placements at sites of their choice while maximizing available capacity. Any centralization process should be intentional

of both maximizing efficiency and doing so in a fiscally responsible manner for all interested parties. This recommendation is in line with recommendation #2 as well as other recent recommendations investigating the placement process in physical therapist education[4]

## Recommendation #2: Establish a standardized process for unused slots across all settings

Rationale: This recommendation was supported by the literature search in other health professions[9–16], which suggests benefits to standardization processes. The CEPCPITF survey data, which suggests that that unused slots are an untapped resource for availability of placements, also supports this recommendation. Of additional importance, survey findings indicated that relationships with the DCE/University was a strong facilitator for accepting students for clinical placements.  Giving back an unused slot serves as a means of strengthening the academic/clinical relationship. More communication from the academic institution and giving the site the ability to plan when for slots will not be used may nurture a greater sense of trust and respect, and thus allow more capacity in the future. Knowledge and access to unused slots has some potential help to increase otherwise unused capacity. Processes could include using centralized, streamlined communication methods and/or identification of standard timeline(s) for notification of slot release by academic institutions to clinical sites. It is important to note that our work did not assess the potential impact on giving back unused slots, and this may be an area for future study should this recommendation come to fruition.

## Recommendation #3: Consider collaboration, standardization, and/or use of blocked timeframes for clinical education experiences

Rationale: Research in other health professions shows that blocked scheduling[15] and other means of collaboration and coordination of placements[13,14,28,29] have been in used with some success. Some CEPCPITF survey participants felt that the variability in clinical (length, time of year) impacts scheduling abilities, staff availability, and administrative support and thus negatively impacts capacity. In addition, CEPCPITF survey data indicated that clinical experiences between 7 and 14 weeks are the easiest to provide in both inpatient and outpatient settings, which is useful information when considering blocked timeframes or other standard timelines. Investigating collaborative opportunities and standardized timeframes may be an option to mediate some of these issues.

## Recommendation #4: Invest in collaborative opportunities related to assessment of students

Rationale: Surveys indicated that some assessment tools used by academic programs to evaluate student competency in the clinical setting contribute to challenges in accepting students. In some cases, the assessment process discourages clinicians from serving as clinical instructors. Currently the academic institution selects an assessment tool that is acceptable for their program. We recommend that academic institutions collaborate with clinical faculty by increasing communication to provide rationale for these choices, and to obtain and implement feedback from these clinical faculty about assessment tools.

## Recommendation #5: Consider including a definition of 'capacity' to the clinical education terminology glossary

Rationale: After much discussion with input from clinical and academic interested parties, and due to the current lack of standardization in length and number of clinical experiences, the task force established a definition of clinical education capacity. We propose this definition be considered for inclusion in the CE terminology glossary: Clinical education capacity is defined as the number of full-time physical therapist student-weeks per year a facility can accommodate and commit to. To calculate student-weeks, one calculates the sum of the number of weeks each individual physical

therapist student is scheduled to be in the clinic. This may add to more than 52 (considering availability of multiple students at a time or collaborative models).

## Recommendation #6: Identify meaningful ways to best prepare and incentivize clinical instructors

Rationale: This is an area identified in need of further study. Determining what CIs and SCCEs deem as meaningful incentives may help to facilitate and encourage a positive culture towards, participation in, and commitment to, CE. The CEPCPITF survey responses indicated that methods to incentivize CIs is lacking and that willingness to serve as a CI is both an impactful barrier and facilitator in both the inpatient and outpatient settings.  Further, there are barriers related to productivity standards and other pressures on CIs that may influence the culture and attitude toward CE. In our survey, some suggestions were made by participants as possible CI incentives, including lower productivity expectations, extra pay, and continuing education, to name a few. Incentives would likely vary and many factors related to the environment and organization would need to be considered. Since the relationship with the academic institution/DCE was also deemed highly impactful, we recommend leveraging this relationship as a means of initiating this discovery. We recommend conducting investigations with multiple interested parties at various levels of leadership across different clinical settings to discover what is working well, where improvements can be made, and what specific incentives are desired and feasible.

## Recommendation #7: Leverage successful site coordinators of clinical education (SCCEs) to educate and train others in running a successful clinical education program

Rationale: Findings from the literature review discussed scenarios related to successful development of clinical relationships that utilized established academic and clinical resources to assist.[29–38] Drawing upon the expertise of those individuals already engaged in the process of successfully managing a CE program at a clinical site leverages established resources to improve efficiency in the process. The APTA Academy of Education Clinical Education SIG is currently working on a "Roadmap to Being an SCCE" which can serve as a launching point for this recommendation. It was also noted that in the survey data, sub-acute rehab and skilled nursing facility practice settings were underrepresented. These types of inpatient sites might directly benefit from assistance in developing their CE programs, which in turn could increase the number of inpatient placements that are available to students, thus improving capacity. This recommendation is in line with Recommendation #6. Part of running a successful program is leadership creating a culture that values CE and having students at the site; fostering an environment where it is not a burden to have students. This positive CE culture has a foundation consisting of intentional systems, programs, and program designs that intentionally support the CIs.

## Recommendation #8: Explore alternative ways to expose students to contemporary practice related to the inpatient setting as a means of satisfying clinical competence.

Rationale: The CEPCPITF survey results indicate a severe challenge in current and predicted capacity in the inpatient setting.  According to the most recent CAPTE standards, CE curriculum is required to include practice in settings representative of those in which physical therapy is commonly practiced across the lifespan and continuum of care and is inclusive of involvement in interprofessional practice.[39] Exploring alternative learning experiences in which these requirements can be met, along with assessment of clinical competencies in the inpatient setting can be achieved, is needed. Findings from the literature review describe alternative or nontraditional clinical experiences that may provide opportunity for students to achieve competencies that are expected in the inpatient clinical experiences.[31–33,35,36,40,41]

These may include placements where there is interprofessional collaborative practice, primary healthcare settings, rural settings, or longitudinal placements. Defined competencies for what is expected for entry level practice in the acute care environment already exist.[42,43] These competencies could serve as a foundation to help identify the necessary competencies for successful entry to practice in the general inpatient setting (not exclusive to acute care but encompassing all inpatient settings).  This is in alignment with the recent call to action for transforming physical therapist education.[44]

## Recommendation #9: Academic program re-assessment, revision, and reimagination of clinical education curricula to reflect current and future state of capacity in the inpatient setting

Rationale: Survey results suggest that many inpatient settings are at capacity, with no expected future increases in this capacity. Academic programs should consider adjustment of outpatient and inpatient clinical setting requirements for students to reflect setting capacity. This recommendation aligns with recommendation #8.

## Recommendation #10:  That ACAPT engage CAPTE in discussions to consider evaluating the current methods by which commitments for student placements from clinical sites are assessed for initial accreditation of new and expanding programs.

Rationale: The CEPCPITF survey data supports that the inpatient setting is at current capacity, and that there is little if any, room for increasing this capacity. Continual expansion of existing programs and accreditation of new programs continues to stress this system. Evaluating the current process by which newly developing programs report and document clinical sites that agree to place students is needed. This would help clarify in what ways CE capacity, particularly in the inpatient setting, can be preserved. This recommendation is critical for the charge of ensuring sustainability of CE capacity for the future of the profession.

# References

1.    Moore ML, Perry JF. *Clinical Education in Physical Therapy: Present Status/Future Needs. Final Report of the Project on Clinical Education in Physical Therapy*.; 1976.
      http://eric.ed.gov/?q=clinical+education+&ft=on&pg=3&id=ED127868

2.    American Council of Academic Physical Therapy [ACAPT]. Clinical education summit report and recommendations. Published online 2014. http://www.acapt.org/docs/default-source/pdfs/clinical-education-summit-2014-final-report-1.pdf

3.    Commission on Accreditation in Physical Therapy Education. Aggregate Program Data: 2023 Physical Therapist Education Programs Fact Sheet. Published online 2023:1-21.
      http://www.capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/Aggregate_Program_Data/AggregateProgramData_PTPrograms.pdf

4.    Rindflesch A, Flom-Meland C, McCallum C, et al. Toward standardization of the placement process used in full-time clinical education experiences: Findings and recommendations of the placement process task force. *J Phys Ther Educ*. 2021;35(3):171-181. doi:10.1097/jte.0000000000000193

5.    Wong KC, Woo KZ, Woo KH. Ishikawa Diagram. In: O'Donohue W, Maragakis A, eds. *Quality Improvement in Behavioral Health*. Springer International Publishing; 2016:119-132. doi:10.1007/978-3-319-26209-3

6. Therapy[ACAPT] AC of AP. Physical Therapy Clinical Education Glossary. Accessed January 6, 2022. https://acapt.org/glossary

7. Erikson C, Hamann R, Levitan T, Stanley J, Whatley M. Recruiting and maintaining US clinical training sites: joint report of the 2013 multi-discipline clerkship/clinical training site survey. *Members Aamc Org/Eweb/Upload/13-2*. 2014;25.

8. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res*. 2005;15(9):1277-1288. doi:10.1177/1049732305276687

9. Gruppuso PA, Adashi EY. Residency placement fever: Is it time for a reevaluation? *Acad Med*. 2017;92(7):923-926. doi:10.1097/ACM.0000000000001468

10. Magnusson C, O'Driscoll M, Smith P. New roles to support practice learning - Can they facilitate expansion of placement capacity? *Nurse Educ Today*. 2007;27(6):643-650. doi:10.1016/j.nedt.2006.09.013

11. McBride JM, Drake RL. Longitudinal cohort study on medical student retention of anatomical knowledge in an integrated problem-based learning curriculum. *Med Teach*. 2016;38(12):1209-1213. doi:10.1080/0142159X.2016.1210113

12. McBride LJ, Fitzgerald C, Morrison L, Hulcombe J. Pre-entry student clinical placement demand: Can it be met? *Aust Heal Rev*. 2015;39(5):577-581. doi:10.1071/AH14156

13. Hodges J, Kline K. The clinical placement consortium: Where education and practice meet. *J Nurses Staff Dev*. 2005;21(6):267-271. doi:10.1097/00124645-200511000-00005

14. McKenna L, Cant R, Bogossian F, Cooper S, Levett-Jones T, Seaton P. Clinical placements in contemporary nursing education: Where is the evidence? *Nurse Educ Today*. 2019;83(August). doi:10.1016/j.nedt.2019.104202

15. Rosenwax L, Gribble N, Margaria H. GRACE: An innovative program of clinical education in allied health. *J Allied Health*. 2010;39(1):11-16.

16. Kline K, Hodges J. A rational approach to solving the problem of competition for undergraduate clinical sites. *Nurs Educ Perspect*. 2006;27(2):80-83.

17. Hatcher RL. The internship imbalance in professional psychology: Current status and future prospects. *Annu Rev Clin Psychol*. 2014;10:53-83. doi:10.1146/annurev-clinpsy-032813-153737

18. Bronfman S, Hassidim A, Afek A, et al. Assigning Israeli medical graduates to internships. *Isr J Health Policy Res*. 2015;4(1):1-7. doi:10.1186/2045-4015-4-6

19. MacPhee M. Developing a practice-academic partnership logic model. *Nurs Outlook*. 2009;57(3):143-147. doi:10.1016/j.outlook.2008.08.003

20. Van Swearingen JM. Systematic clinical placement of physical therapy students. *Phys Ther*. 1987;67(3):394-398. doi:10.1093/ptj/67.3.394

21. James R. Reducing overcrowding on student practice placements. *Nurs Times*. 2005;101(48):28-32.

22. Roth AE, Shorrer RI. The redesign of the medical intern assignment mechanism in Israel. *Isr J Health Policy Res*. 2015;4(1):10-12. doi:10.1186/s13584-015-0014-y

23. Burns P, Williams SH, Ard N, Enright C, Poster E, Ransom SA. Academic partnerships to increase nursing education

capacity: Centralized faculty resource and clinical placement centers. *J Prof Nurs*. 2011;27(6):14-19. doi:10.1016/j.profnurs.2011.07.004

24. Brownstein C. Practicum issues: A placement planning model. *Clin Superv*. 1989;6(3-4):93-104. doi:10.1300/J001v06n03_08

25. Hill P, Bullpitt S, Dean S, O'Flanagan S, Fishburn N. Opening up placement opportunities for students. *Nurs Times*. 2014;110(38):20-22.

26. Cho JH, Gontar A. Online Adaptation of Clinical Placement Process for Students. *J Med Imaging Radiat Sci*. 2012;43(2):139. doi:10.1016/j.jmir.2012.03.018

27. Plavskin A. Undergraduate nursing student clinical placement optimization. *CIN - Comput Informatics Nurs*. 2020;38(4):167-173. doi:10.1097/CIN.0000000000000629

28. Lyle D, Morris J, Garne D, et al. Value adding through regional coordination of rural placements for all health disciplines: The Broken Hill experience. *Aust J Rural Health*. 2006;14(6):244-248. doi:10.1111/j.1440-1584.2006.00841.x

29. Lee P. Clinical placement exchanges for pre-registration nursing students: Maximising opportunities. *Nurse Educ Pract*. 2002;2(2):119-124. doi:10.1054/nepr.2002.0063

30. LeGris J, Côté FH. Collaborative partners in nursing education: a preceptorship model for BScN students. *Nursingconnections*. 1997;10(1):55-70.

31. Hunt SG. A practice placement education model based upon a primary health care perspective used in South Australia. *Br J Occup Ther*. 2006;69(2):81-85. doi:10.1177/030802260606900206

32. van Doren ES, vander Werf M. Developing nontraditional community health placements. *J Nurs Educ*. 2012;51(1):46-49. doi:10.3928/01484834-20111116-04

33. Kerr A, Boland F, Pawlikowska T, Strawbridge J. Early longitudinal community pharmacy placements: Connection, integration and engagement. *Res Soc Adm Pharm*. 2021;17(7):1313-1320. doi:10.1016/j.sapharm.2020.10.001

34. Overton A, Clark M, Thomas Y. A review of non-traditional occupational therapy practice placement education: A focus on role-emerging and project placements. *Br J Occup Ther*. 2009;72(7):294-301. doi:10.1177/030802260907200704

35. Taylor C, Angel L, Nyanga L, Dickson C. The process and challenges of obtaining and sustaining clinical placements for nursing and allied health students. *J Clin Nurs*. 2017;26(19-20):3099-3110. doi:10.1111/jocn.13658

36. Kruger E, Tennant M. Short-stay rural and remote placements in dental education, an effective model for rural exposure: A review of eight-year experience in Western Australia. *Aust J Rural Health*. 2010;18(4):148-152. doi:10.1111/j.1440-1584.2010.01149.x

37. Hutchings A, Williamson GR, Humphreys A. Supporting learners in clinical practice: Capacity issues. *J Clin Nurs*. 2005;14(8 A):945-955. doi:10.1111/j.1365-2702.2005.01239.x

38. Doherty CL, Fogg L, Bigley MB, Todd B, O'Sullivan AL. Nurse practitioner student clinical placement processes: A national survey of nurse practitioner programs. *Nurs Outlook*. 2020;68(1):55-61. doi:10.1016/j.outlook.2019.07.005

39.    Committee on Accreditation of Physical Therapy Education [CAPTE]. *Standards and Required Elements for Accreditation of Physical Therapist Education Programs*.; 2023. https://www.capteonline.org/globalassets/capte-docs/2024-capte-pt-standards-required-elements.pdf

40.    Kevin J, Callaghan A, Driver C, Ellis J, Jacobs B. A Possible alternative model of clinical experience for student nurses. *J Nurses Staff Dev*. 2010;26(5):E5-E9. doi:10.1097/NND.0b013e3181b1ba07

41.    Hyde S, Smith B, Lawrence J, Barry R, Carey A, Rogers C. Co-designing community-focused rural placements for collaborative practice. *Aust J Rural Health*. 2021;29(2):284-290. doi:10.1111/ajr.12718

42.    Greenwood K, Stewart E, Hake M, Milton E, Mitchell L, Sanders B. Defining Entry-Level Practice in Acute Care Physical Therapist Practice. *J Acute Care Phys Ther*. 2017;8(1):3-10. doi:10.1097/jat.0000000000000048

43.    Greenwood K, Stewart E, Milton E, Hake M, Mitchell L, Sanders B. *Core Competencies for Entry-Level Practice in Acute Care Physical Therapy*.; 2015. https://www.aptaacutecare.org/

44.    Timmerberg JF, Chesbro SB, Jensen GM, Dole RL, Jette DU. Competency-Based Education and Practice in Physical Therapy: It's Time to Act! *Phys Ther*. 2022;102(5):1-9. doi:10.1093/ptj/pzac018

.