ACADEMY OF
PHYSICAL THERAPY EDUCATION

PTA Education Trends:

A Report of the Task Force for the Academy of Physical Therapy Education

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Overview of Purpose and Process

The work of this report began with conversations between the Academy of Physical Therapy Education's (APTE) President Pamela Levangie, PT, DSc, DPT, FAPTA, and Physical Therapist Assistant (PTA) Education SIG chair Kathrine Giffin, PTA, MS Ed., during the summer of 2018. It resulted in the decision to form a task force to review available data to determine current trends affecting Physical Therapist Assistant Education. A call went out in the fall of 2018, and seven individuals were selected based upon their experience in PTA education (see appendix A). Becky McKnight, PT, MS, and Justin Berry, PT, DPT, PhD were chosen to co-chair the task force.

An initial video conference meeting occurred on November 5, 2018, in which the group outlined the purpose of the task force, formed a strategy for accomplishing the task and agreed upon a general timeline. The purpose of the group was three-fold, with the ultimate goal of providing a report to the APTE Board of Directors. The three components of the purpose included: 1) gathering data regarding PTA education; 2) analyzing existing data, and 3) creating a report to submit to the APTE Board. (See table 1) The initial plan indicated submitting the report by the May 2019 meeting; however, the timeline was extended to provide the group additional time to adequately prepare the report. The seven-member task force determined seven areas of investigation, and sub-groups were formed to locate documents, analyze available data and resources, and summarize their findings. The seven sub-groups were 1) American Physical Therapy Association (APTA), 2) Commission on Accreditation in Physical Therapy Education (CAPTE), 3) Federation of State Boards of Physical Therapy (FSBPT), 4) Academy of Physical Therapy Education (APTE), 5) Research, 6) Higher Education Trends, and 7) Market trends.

As part of the work, the group determined it would be helpful to administer a scientific survey completed by PTA Program Directors nationwide regarding the current state of PTA education.

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I. Introduction

This report provides a summary of the findings of the Task Force and the documents reviewed, an overview of trends in PTA education, the results of a survey on the state of PTA education completed by PTA Program Directors, and areas for consideration for future review and research.

The Commission on Accreditation in Physical Therapy Education (CAPTE) Aggregate Program Fact Sheets provide average demographics and outcomes for DPT and PTA Programs. A majority of PTA programs[1] are housed in public institutions (72.4%) and have a Carnegie Classification of Associates (77%; all Associate's only categories). The average credit load is 74.4 credits for general education, technical, and clinical courses, with an average of 47.9 credits of program-specific coursework. There are, on average, 2.6 full-time and 0.50 part-time core faculty members and 2 associated faculty per PTA program. The average PTA program director's workload is 50.03% teaching, 36.23% administrative, and 0.49% scholarship. The average director of clinical education workload is 58.82% teaching, 28.02% administration, and 0.33% scholarship. The average PTA program graduates 18 students annually with an average graduation rate of 83.65%. The average ultimate NPTE pass rate is 92.3%, and the average graduate employment rate is 98%.

In comparison, a majority of DPT programs[2] are housed in private institutions (52.2%) with the most common Carnegie Classification of Master's College – larger (30%). The average DPT program length is 120.1 credits for all program and clinical courses, and 94.8 credits on average for the professional phase of the program. DPT programs have, on average, 11 full-time and 1 part-time core faculty members and 8 associate faculty positions. The average program director's workload is 26.37% teaching, 44.43% administrative, and 14.67% scholarship. The average director of clinical education's workload is 38.59% teaching, 35.32% administration, and 10.62% scholarship. The average PT program graduates 43 students a year, with an average graduation rate of 93.7%. The average ultimate NPTE pass rate is 98.59%, and the average employment rate is 99%. (See Appendix B for a side-by-side comparison of the above and other data)

II. Historical Background of PTA Education

Within the physical therapy profession, there are two distinct occupations, the physical therapist (PT) and the physical therapist assistant (PTA). According to the *Guide to Physical Therapist Practice,* "Physical therapists are health care professionals who help individuals maintain, restore, and improve movement, activity, and functioning, thereby enabling optimal performance and enhancing health, well-being, and quality of life. Their services prevent, minimize, or eliminate impairments of body functions and structures, activity limitations, and participation restrictions. "[3]. According to the 2007 Version of the *Normative Model of Physical Therapist Education*, PTA's "provide physical therapy services under the direction and supervision of the physical therapist"[4].

In the United States, PTs evolved from "reconstruction aides" who were trained during and after World War I to provide physical rehabilitation to wounded and disabled soldiers.[5] After the war, demand for physical therapy services increased, as did the number of PT educational programs.

A dialogue began within the physical therapy profession in the 1940s regarding the possible need for a trained technician to assist PTs with treatment interventions.[6] Around the time of these initial discussions, the Hill-Burton Act of 1946[7] funded the development of hundreds of new hospitals and public health centers, which led to an even higher demand for physical therapy services.[5,6] The poliomyelitis outbreaks in the 1940s and 1950s also increased the need for physical therapy services.[6]

In the 1960s, studies in California demonstrated that PTs spent 36.32% of their time on duties they could delegate to nonprofessional personnel.[6] During a speech at the 1964 Annual Conference of the American Physical Therapy Association (APTA), former APTA vice-president Catherine Worthington stated, "The dilemma with which physical therapy is faced is there are not enough physical therapist to perform the [current] essential physical therapy services."[5] In response to the studies from California, the continually increasing demand for physical therapy services, and the remarks by Worthington and other physical therapy leaders caused the

In 1964, during a House of Delegates (HOD) meeting of the APTA, a resolution was approved to form an ad hoc committee to investigate the use of nonprofessional physical therapy personnel. This committee was to develop a policy proposal regarding the position of the APTA on the title, education, training, supervision, and the role regarding nonprofessional physical therapy personnel. After three years, the committee concluded that it would be in the best interest of the physical therapy profession to establish an assistant role.[6] The committee decided that with a trained paraprofessional available for the delegation of specific tasks, PTs would have more time available for activities involving patient evaluation, management, and clinical research.

Due to the committee's findings, the APTA HOD in 1967 adopted *The Policy Statement on Training and Utilization of the Physical Therapist Assistant*, which created the position of "physical therapy assistant".[8] The HOD adopted the policy statement despite the unanimous opposition of the Board's Executive Committee.[5] The first two PTA education programs, at Miami Dade Community College in Florida and St. Mary's Campus of the College of St. Catherine in Minnesota, were approved in 1967.[9] In 1969, the term "physical therapy assistant" was changed to "physical therapist assistant".[5]

By 1970, nine PTA education programs had been established,[5] with the growth of programs continuing throughout the next four decades. As of July 12, 2019, there were 376 PTA Programs accredited by the Commission on Accreditation in Physical Therapy Education, with another 32 developing PTA programs.[10] CAPTE is the only accreditation agency recognized in the United States for accrediting programs for the education of physical therapists and physical therapist assistants. 2019 marks the 50th anniversary of the first PTA graduates in the country. Throughout the 50-year history, the physical therapist assistant entry-level degree has remained at the associate degree level.

Before the development of the first PTA programs in 1969, many PT programs were certificate programs. It was not until 1960 that the APTA-HOD passed a resolution that the baccalaureate degree should be the minimum educational qualification of the physical therapist. At around the same time, the first entry-level master's degree program was developed. In 1979 the APTA-HOD adopted a resolution that the entry-level education should be at the post-baccalaureate level. However, the baccalaureate degree remained the most common entry-level PT degree through the next couple of decades. During this time, Creighton University developed the first entry-level DPT degree in 1993. From this time until 2015, CAPTE accredited programs at all three degree levels. Although slow, the move from the baccalaureate to the master's degree as the entry-level degree did finally occur, and in 2002 CAPTE ceased to accredit programs that did not offer a post-baccalaureate degree. By this time, there were 146 Master's degree programs and 67 DPT programs. By 2015 all PT programs accredited by CAPTE were required to be at the entry-level DPT level.[11]

The Academy of Physical Therapy Education (APTE), formerly the APTA's Education Section, is the home of the PTA Educators Special Interest Group (SIG). The APTE's focus is on supporting both PT and PTA educators, distinguishing itself with inclusive "physical therapy" language instead of the phrase "physical therapist practice," found throughout APTA documents.

The APTE has attempted to consider the global education issues regardless of degree level. However, in doing so, they often have not considered the significant differences between PT and PTA programs that are a function of several factors, not the least of which is academic setting. The transition of the PT degree to the DPT has only further exacerbated the difference between the needs of PT and PTA programs. This left the PTA Educator's SIG as the only group recognizing and working to address the unique needs of PTA educators and PTA programs.

The creation of the Education Leadership Partnership between the APTE, APTA, and the American Council of Academic Physical Therapy (ACAPT) in 2016 included the statement, "That the feasibility of addressing issues related to physical therapist assistant education be explored."[12] In the Annex to the Memorandum of Understanding between the Partners. This acknowledgment provided the first opportunity in a decade for direct communication between the PTA Educators SIG and APTA. It resulted in the 2019 appointment of a PTA Educator as a community member who participates in all Partnership meetings.

The PTA Educators SIG meets twice a year at APTA's Combined Sections Meeting and the Education Leadership Conference. According to the statement of purpose, "The PTA Educators SIG serves as the advocate and expert resource for the education and role of the PTA. Members provide leadership, mentorship, and expertise in teaching and learning to support all persons concerned with education that ensures PTAs are prepared for contemporary practice."[13]

Section III. Summary of APTA Documents Related to PTA Education

APTA Documents

A review of APTA documents revealed most documents regarding PTA Education are over a decade old, are not current with CAPTE's newest PTA Standards and Elements and may not be congruent with all aspects of contemporary physical therapy practice. Outdated documents include *Minimum Required Skills of Physical Therapist Assistant Graduates at Entry-Level*[15], last updated in 2007; *A Normative Model of Physical Therapist Assistant Education*[4]*, last updated in 2007*; the *Physical Therapist Assistant Clinical Performance Instrument*[15], last updated in 2008; and a model position description for PTA Program ACCE/DCE's[16], which was last updated based upon aggregate data from 2002. See *Figure 1* for a timeline for these and other documents related to PTA Education.

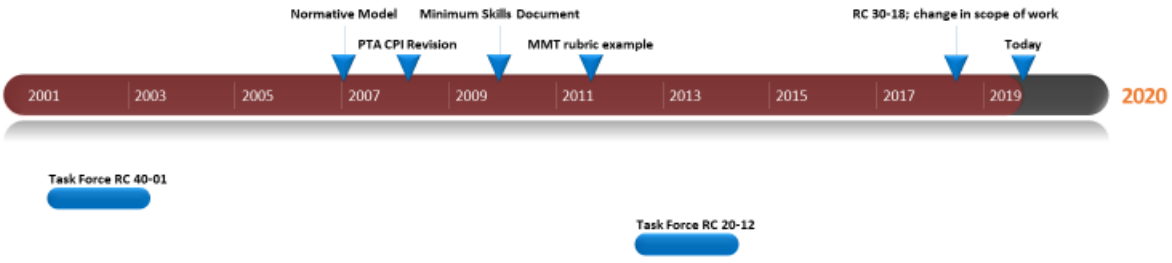
The document *Minimum Required Skills of Physical Therapist Assistant Graduates at Entry-Level*, indicates the listed skills "are indispensable for a new graduate physical therapist assistant to perform on patients/clients in a competent and coordinated manner under the direction and supervision of the physical therapist."[14] No formal review or revision of this list has occurred over the past 12 years to ensure it is up to date with contemporary physical therapy practice.

Likewise, *A Normative Model of Physical Therapist Assistant Education: Version 2007* was intended to be a guide for existing and developing PTA educational programs for developing and assessing their curriculum. "The intent of this document is to reflect current perspectives of the profession, provide a foundation for educational programs, promote consistency in PTA education, and serve as a guide for CAPTE in its review of programs."[4] Due to the time elapsed since the last publication, appropriateness for its continued use is questionable.

Similarly, since the model position description for the PTA Program ACCE/DCE is based upon aggregate data from 2002, one questions whether it continues to address the contemporary needs of clinical education.

In addition to the formal documents created and published by the APTA, peer-reviewed teaching and assessment resources for PTA Educators are available on the APTA website. These resources were shared by PTA educators and reviewed by peers. These resources include an excel spreadsheet curriculum map based upon the pre-2016 CAPTE evaluative criteria as well as a sample MMT skills check rubric, which was reviewed and published in 2011.[17] These represent additional examples of outdated documents with limited value for PTA Educators today.

Figure 1. Timeline of Documents Regarding PTA Education



APTA House of Delegates (HOD)

Review of APTA HOD minutes and other documents reveal the following actions related to PTA education:

- RC 40-01 created a task force to study the preferred role of the PTA, including education level. The task force provided reports with recommendations to the HOD in 2002 & 2003.[18,19]
- RC 20-12 created a task force to study the feasibility of transitioning the PTA degree to a baccalaureate degree.[20]
- A staff report in 2015 summarizing the actions taken by the BOD regarding the work related to the 2012 task force.[21]
- There were two HOD decisions in 2018, to amend the document that defined the role and education of Physical Therapist Assistants: "*Direction and Supervision of the Physical Therapist Assistant*," and "*Educational Degree Qualification for Physical Therapists*." [22,23]

THE FUTURE ROLE OF THE PHYSICAL THERAPIST ASSISTANT (RC 40-01)[18,19]

In 2001, the BOD appointed a task force following passage of RC 40-01, which was charged to study the preferred role of the PTA, including education level, the scope of work within physical therapy, employment, and potential market factors. The task force submitted an interim report in 2002 and a final report to the 2003 HOD. The task force summary statement regarding PTA education was "an education program culminating in the awarding of an Associate degree is sufficient to prepare the PTA for entry into the workforce."

The task force rationale for this summary statement was as follows:

> "The education level of the PTA will remain at the Associate degree level because 1) regardless of any future changes in role, the scope of work of the PTA in the future will continue to exclude initial examinations, evaluations, diagnoses, and prognoses (This does not significantly alter the current defined scope of work of the PTA), 2) enhanced PTA skills (e.g., wound care, pediatrics) are more appropriately addressed in post entry-level education thereby permitting PTA programs to better focus on essential core foundation and entry-level skills rather than trying to address skills more appropriately acquired through post entry-level education opportunities, and 3) post entry-level education will be designed to address the need for expanded training in areas that remain within the scope of work of the PTA."[19]

Although the task force recommended keeping PTA Programs at an Associate degree level, a task force survey of PT and PTA clinicians found gaps in entry-level PTA education. 73.2% of survey respondents found manual therapy curricular content as insufficient, while 64.3% of respondents found coursework in the area of outcomes measurement was inadequate. Other curricular areas believed to be covered insufficiently within PTA education by more than 50% of the respondents included administration; clinical teaching; clinical problem solving and judgments, the health care delivery system and health policy; goal-setting/designing programs; airway clearance; as well as integumentary protection and repair." More than half of the survey respondents also found the current preparation of PTA students in the areas of data collection/components of examination as insufficient to meet the needs of the workplace in 2020. 58.4% of survey respondents believed the purpose of PTA entry-level education was to prepare graduates for all facets of work throughout their career. In comparison, 23.6% of survey respondents thought the appropriate preparation should be only for the first employment experience.

FEASIBILITY STUDY FOR TRANSITIONING TO AN ENTRY-LEVEL BACCALAUREATE PHYSICAL THERAPIST ASSISTANT DEGREE (RC 20-12)[20]

The BOD appointed this 2012, task force after the passage of RC 20-12 (RC 20-12 Feasibility Study for Transitioning to an Entry-level Baccalaureate Physical Therapist Assistant Degree. In 2013 the RC20-12 task force provided the BOD with the Supplemental Report to the 2014 HOD, in which they noted that "there appeared to be significant changes in the NPTE-PTA Content Outline due to the FSBPT's most recent PTA Analysis of Practice in 2011. An article from FSBPT's Federation [Fall 2012] Forum described the federation's decision to revise the NPTE-PTA content so that it reflected a higher minimum standard of competence consistent with the health care environment in which PTAs work. Specific changes within the healthcare environment included an increased demand for physical therapy that appeared to have a corresponding increase in remote or limited supervision of PTAs; that PTAs are recognizing red flags and seeking assistance more frequently; that PTAs are treating more medically complex patients; that PTAs need to be consumers of research; and that PTAs are using more medical terminology in their documentation and need the appropriate education."

The 2012 task force included four workgroups, each assigned to explore specific charges related to entry-level PTA education. One group was charged to explore baccalaureate-level educational models for entry-level PTA, including required and elective discipline-specific and liberal arts curriculum. The General Summary by this workgroup was as follows:

> "The task force reviewed a wide variety of literature to create the following two summary tables. The task force preferred the General Education Model should the baccalaureate degree be adopted because the general education content, traditionally considered foundational content, precedes the PTA-specific content. The task force believed that the General Education Model was aligned with the curricular design practices typically selected in physical therapy education. Although the task force explored current technical education models, none of the technical models were selected because the task force believed that the curricular content for PTA education is clinical in nature as it includes the life sciences, therapeutic techniques, and activities that require ongoing observation and decision-making."[20]

A second 2012 task force workgroup was charged to explore mechanisms for PTA educational programs housed in 2-year institutions to award a baccalaureate degree. A general summary of the workgroup was as follows:

> "The task force concluded that mechanisms for PTA educational programs housed in 2-year institutions to award a baccalaureate degree were already in place. However, the task force needed to know the feasibility of developing a baccalaureate degree for two-year institutions."[20]

The third 2012 task force workgroup was charged to explore educational models for PTAs educated at the associate level to transition to a baccalaureate PTA degree. The workgroup summary was as follows:

> "The task force found that there is one program that could be used as a model for transitioning to a baccalaureate degree. The task force was unable to obtain data that would inform decision-making regarding the educational needs of PTA graduates, which prompted the APTA Board of Directors to adopt the motion: "That mechanisms to identify and promote best practices in the work and relationships of the Physical Therapist(PT)/Physical Therapist Assistant (PTA) Team in a variety of practice settings be identified and implemented in collaboration with the sections, American Council of Academic Physical Therapy (ACAPT), Commission on Accreditation in Physical Therapy Education (CAPTE), and PTA Caucus."[20]

A fourth 2012 task force workgroup was charged with conducting a gap analysis to determine if there were differences in curricular content required by CAPTE; in those identified in the 2013 FSBPT NPTE-PTA Content Outline; and in those recommended in APTA documents including The Normative Model of PTA Education and the Minimum Required Skills of PTA Graduates at Entry Level. This workgroup determined there were inconsistencies regarding entry-level PTA curricular expectations between these guiding documents. The workgroup found that the NPTE-PTA included content in many areas which were not included within a CAPTE criterion, including educating community groups on lifestyle and behavioral changes; assigning tasks to other personnel (e.g., physical therapy aides) to assist with patient/client care; light-based therapeutic interventions (infrared, laser (knowledge only), ultraviolet; Breathing strategies with respect to delivery of an intervention and relaxation techniques with respect to delivery of an intervention; desensitization training; mechanical positioning for vestibular dysfunction; training in genitourinary management; assessing nerve integrity; and assessing reflex integrity. It should be noted that some of these items have now been added to the updated CAPTE Standards and Elements as required curricular content areas as of January 1, 2016.

PLAN TO INFORM ASSOCIATION WORK RELATED TO THE ROLE AND EDUCATION OF THE PHYSICAL THERAPIST ASSISTANT AND THE USE OF OTHER INDIVIDUALS IN THE PROVISION OF PHYSICAL THERAPIST SERVICES[21]

An APTA staff report created in February 2015 summarized the actions taken by the BOD regarding the work analysis authorized by RC 20-12 with the decision that no action or money was to be spent on any further tasks relating to this RC. The 2015 Plan to Inform returned to the assessment and outcomes from the RC 40-01 report in 2003 with no mention of the curricular gaps identified by the task group survey from 2002; and no mention of the potential identified inconsistencies between FSBPT, CAPTE, and the APTA for PTA entry-level educational expectations identified in the work of the 2012 task force.

DIRECTION AND SUPERVISION OF THE PHYSICAL THERAPIST ASSISTANT (HOD P06-05-18-26)[22]

In 2018, RC 30-18 *Amend: Direction and Supervision of the Physical Therapist Assistant* (HOD P06-05-18-26) passed, resulting in document changes that impacted the PTA including that PTAs may now be utilized in "components of intervention and in collection of selected examination and outcomes data"; the definition of the PTA was revised, removing the words "is a technically educated health care provider," "associate degree" was removed when describing the program that PTAs graduate from; and in reference to utilization, performing “selected physical therapy interventions” was replaced with “provide services.”

EDUCATIONAL DEGREE QUALIFICATIONS FOR PHYSICAL THERAPISTS (HOD P06-12-15-04)[23]

In 2018, RC 34-18 *Amend: Educational Degree Qualification for Physical Therapists* (HOD P06-12-15-04) passed, affirming that the “APTA shall consider attainment of an associate degree from a program accredited by CAPTE the minimum educational qualification for a physical therapist assistant.”

Physical Therapist Assistant Caucus

The Physical Therapist Assistant Caucus (PTAC) holds an annual June business meeting two days before the APTA House of Delegates. Minutes from each meeting are available on the online HUB through the PTAC community.

A review of PTAC Business meeting minutes found no discussion of PTA education in 2014, or from 2016-2017. Within the 2015 meeting minutes, discussion related to HOD RC-7 resulted in an action to be taken to investigate how many PTAs have attained a higher degree level prior to entering a PTA educational program. Meeting minutes include a statement about the 2015 House report by David Harris, "Future education of the PTA (moving to bachelors): APTA board not investing any more time, money, or resources. Schools have the option to move to bachelors if they want." There is no further discussion in the minutes on this topic.[24] There is a Committee Report from the Education Committee with the word ATTACHMENT next to it, but the attachment was unable to be located. During the 2017 Meeting, there was an open forum discussion on PTA education, but no summary of this discussion is included within the minutes.[25] There has been no further documented discussion of PTA education in the PTAC business meeting minutes since that time.

Education Leadership Partnership (ELP)

The Education Leadership Partnership (ELP) was established in 2016 through a Memorandum of Understanding (MOU) between the American Council of Academic Physical Therapy (ACAPT), American Physical Therapy Association (APTA), and the Academy of Physical Therapy Education (APTE, formerly the Education Section of APTA). The MOU states the Partnership "shall strive to bring together all relevant stakeholders having an interest in promoting excellence in physical therapist education." An annex to the MOU included "That the feasibility of addressing issues related to physical therapist assistant education be explored"[12], which opened the door for inclusion of PTA education interests. In January of 2019, the Partnership adopted the following purpose statement, "Partnering to drive excellence in physical therapy education."[26]

The ELP 2017 Annual Report acknowledged a PTA education subgroup that started work in 2016. In 2016-17 the PTA Education subgroup worked toward inclusion of PTA educators into the other ELP subgroups (which are essential resources, educational research, data management, faculty development, outcome competencies, student debt, and performance-based student outcomes). It facilitated discussion between the PTA Education subgroup, the PTAE-SIG, and the PTA Caucus.[27] The ELP 2018 Annual Report includes reports and actions related to PT education with the acknowledgment that the PTA education subgroup did continue work and "initiated a discussion in October to revisit the role of the ELP to address issues of PTA education".[28] The December 2018 minutes indicate discussion of "How do we best integrate the PTA community into the discussion?", resulting in the January 2019 decision to seek nominations and appoint a PTA educator representative to ELP.[29]

Summary of Findings Regarding APTA Documents

The PTA Education Trends Task Force had the following general findings regarding APTA documents:

- In the aggregate, there is a lack of content available on APTA related documents relating to PTA education.
- The majority of related documents with substance, such as the *A Normative Model,* are over 10 years old; they are no longer fully congruent with CAPTE Standards & Elements and may not be congruent with all areas of contemporary physical therapy practice.
- APTA documents and work activities are highly focused on physical therapist education with little to no mention of PTA education.
- In minutes and reports, the theme tends to be "find ways to incorporate PTA education into the work already being done in PT education." There is little documented evidence of work being done on the quality of PTA education or the advancement of PTA education.
- Work by the APTA regarding PTA entry-level education seems to have been discontinued after the Special Report to the HOD in 2014. There is little to no documented evidence of APTA involvement in PTA education after this point.
- APTA documents reference the Report to the *2003 HOD: THE FUTURE ROLE OF THE PHYSICAL THERAPIST ASSISTANT* (RC 40-01), which is now 16 years old, as the evidence supporting no change in the educational model for entry-level PTA education.
- The Supplemental Report to 2014 HOD: *RC 20-12 Feasibility Study for Transitioning to an Entry-level Baccalaureate Physical Therapist Assistant Degree* is the most meaningful and substantial current document available regarding PTA education.

Section IV. PTA Education & Practice

Commission on Accreditation of Physical Therapy Education (CAPTE)

The mission of the Commission in Accreditation of Physical Therapy Education is “to ensure and advance excellence in physical therapy education.”[30] The current CAPTE accreditation standards and elements for PTA education became effective in January 2016, following significant revisions to the previous Evaluative Criteria. The 2016 revisions aligned the overall accreditation standards of PTA academic programs with the standards for PT educational programs, with individual accreditation elements still different between PT and PTA programs.

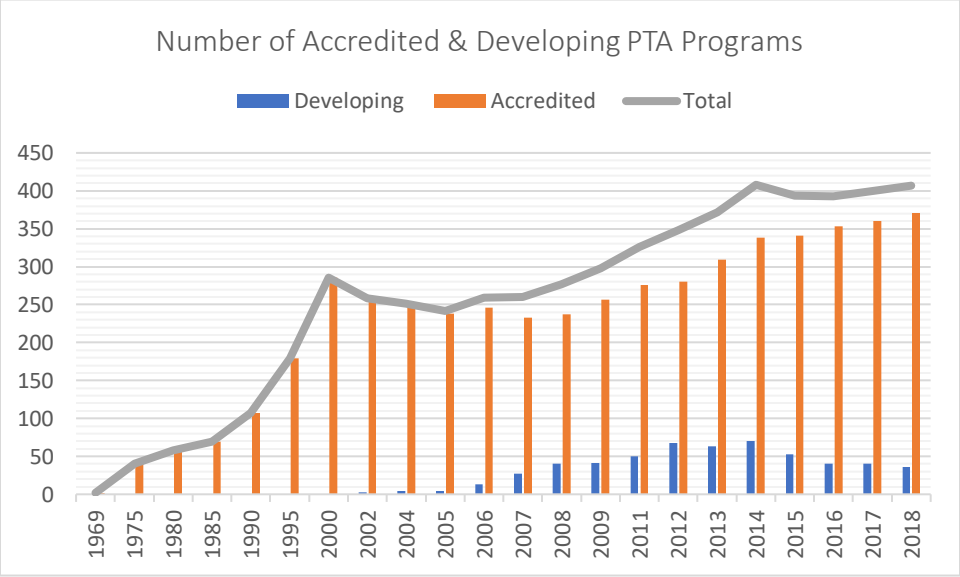
CAPTE also adopts and publishes position papers within their Accreditation Handbook. The CAPTE position on Entry Level Degree for Physical Therapist Assistants, published in November 2015, “reinforces the appropriateness of the associate degree as the entry point credential for physical therapist assistants," with this position stating that "the associate degree still represents the expected level of knowledge required in practice."[31] The position paper cited the Normative Model and the Minimum Required Skills of PTA Graduates at Entry Level as representing the consensus of PTA program stakeholders and the professional community.

In November 2015, CAPTE revised the "Role and Qualifications of the Director of a PTA Program" document, to increase program director requirements to include, "experience in educational theory and methodology, instructional design, student evaluation and outcome assessment, including the equivalent of nine academic (semester) credits of coursework in educational foundations."[31] The position revisions continued the expectation that PTA Education Programs maintain a minimum of two-full-time core faculty, yet recognized program workload needs with the addition of "preferably three, full-time core faculty members dedicated to the PTA program".[31]

CAPTE provides the public with data related to PTA programs through annual reports of aggregate data. The following is a summary of data and trends gleaned from all PTA program fact sheets publicly available from CAPTE and includes the reports published in 2006[32], 2007[33], 2008[34], 2011[35], 2012[36], 2013[37], 2015[38], 2016[39], 2017[40], 2018[41] and 2019[1].

The number of PTA programs has steadily grown since the first two programs started in 1969. In the late 1980's an explosion of new PTA programs developed with a 167% increase in the number of accredited programs between 1990 and 2000. After 2000 there was a slight decrease in the number of programs (loss of 53 programs between 2000 and 2007). After 2007, program development slowly started to increase again, with the most significant number of new programs being developed between 2012 and 2014 (a 10% increase). However, the rate has not come close to matching the development seen in the late 80s and 90s. The overall rate of increase in accredited programs between 2008 and 2018 was 57%. Per the CAPTE 2018-2019 Aggregate Program Data for Physical Therapist Assistant programs, there are 407 programs, 371 of which are accredited and 36, which are developing (*Figure 2).*

Figure 2, Number of Accredited and Developing PTA Educational Programs



The majority of PTA educational programs have historically been housed in public institutions. Currently, 71.82% of PTA programs are housed at public institutions, and 28.18% are housed at private institutions. Although a typical associate degree is 60 credit hours of academic work, PTA program averages have stayed above 72 credits since at least 2002. Average credit hours have fluctuated between 72.1 and 77.8. The current mean number of credit hours is 74.4, even while some states are limiting all associate degree programs to 60-65 credit hours. The total average of academic weeks within PTA programs fluctuated between 62.6 and 68 weeks between 1999 and 2015 but has been stable at 77 weeks since the 2015-16 academic year.

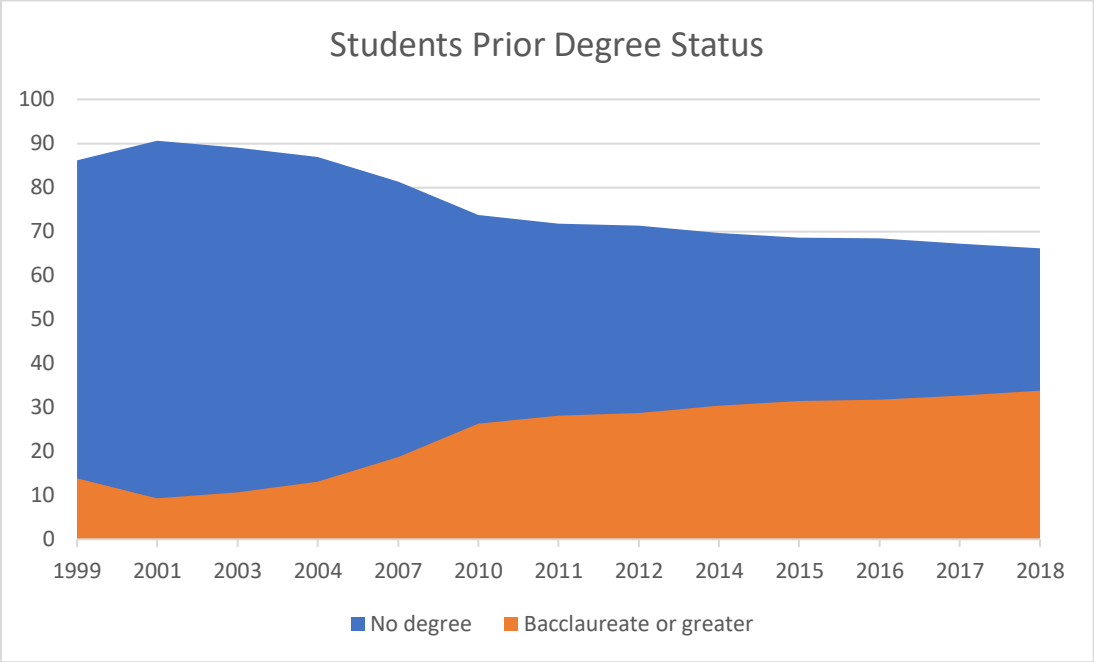
Historically, the integrated 2-year curricular model has dominated, with over 75% of PTA programs using this model. Beginning in 2015, there has been a significant shift with more programs adopting alternative models, with only 47% of programs now utilizing a 2-year integrated curricular model. CAPTE defines an integrative model in the following way, "In an integrated two-year (0+2) design, students are enrolled in prerequisite, general education and technical education courses in the first (freshman) year and may be enrolled in general education and technical education courses during part or all of the second (sophomore) year." All other models (53% of programs) require students to complete some prerequisite general education courses prior to entering the PTA courses.

Average program outcome data demonstrate graduation rates have stayed relatively stable since 1995. With 17 years of data published by CAPTE since 1997, only four years (2002-2005) recorded less than a 70% average. Average program first-time NPTE pass rates have fluctuated between 75.4% (2005) and 93.1% (2011). Between 1997 and 2006, average NPTE first-time pass rates remained at or below 80% and have been at or above 85% since that time. Average employment rates demonstrated a precipitous drop in 1999 after significant changes in Medicare reimbursement was enacted. However, rates then improved over the next few years and have been above 95% since 2004, except for 2015, when they dropped to 80%.

Planned class size has remained close to 24 students per cohort between 1999 and 2018 (23.7 – 29; median 24). Qualified applicants were at the all-time low in 2001 at 21.2 applicants and remained low between 2000 and 2003. The qualified applicant numbers grew to an all-time high in 2011 at 74.7 students and have slowly been trending down since then, with 45 qualified applicants per program in 2018.

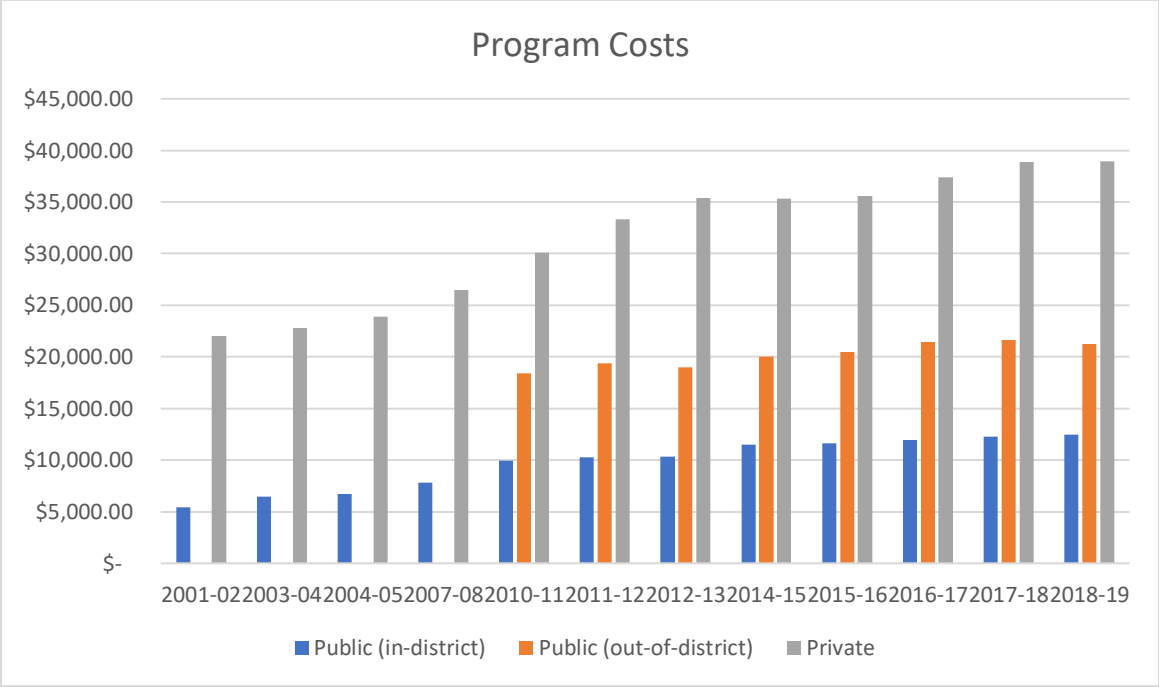
Since 2001 there has been a steady increase in the number of students who hold a baccalaureate, masters, or doctoral degree upon entry to a PTA program (*Figure 3*). CAPTE does not report the number of students who hold other associate degrees or certificates or who have completed additional college coursework not directly associated with the PTA prerequisites.

Figure 3, Prior degree status of PTA students



There has been a steady increase in the cost of the PTA program from $5,402 at a public institution and $22,013 at a private institution for the 2001-2002 academic year to $12,448 at a public institution and $38,922 at a private institution for the 2018-2019 academic year (*Figure 4*).

Figure 4, Average costs of PTA Educational Programs



Federation of State Boards of Physical Therapy (FSBPT)

FSBPT is responsible for developing and maintaining the National Physical Therapy Examination (NPTE) for the physical therapist assistant to assure that candidates for licensure are competent to provide safe and effective physical therapy services. The process of developing the exam acknowledges the evolution of physical therapy services with periodic practice analysis. On behalf of the FSBPT, Human Resources Research Organization (HumRRO) conducted the two most recent surveys and Analysis of Practice for the Physical Therapy Profession: Entry-Level Physical Therapist Assistant, which were published in 2011[42] and 2016[43] in preparation for revisions to the NPTE PTA in 2013[44] and 2018[45].

The 2011 FSBPT Analysis of Practice informed the decision by FSBPT to drop two work activities, light therapies and hydrotherapy, from the list of Critical Work Activities of the PTA, as well as "knowledge of teaching and learning strategies, theories and techniques" with quantitative changes to the NPTE blueprint that reduced the weight of integumentary Systems (23%), professional issues (41%), and system interactions (55%). Simultaneously new content was added in "knowledge of pharmacological management of metabolic and endocrine system" and "knowledge of the function and implications and related precautions of intravenous lines, tubes, catheters and monitoring devices"; and quantitative shifts were made to increase the weight of cardiovascular/ pulmonary and lymphatic systems (24%), musculoskeletal system (18%); neuromuscular and nervous System (9%).[42]

The Fall 2012 FSBPT Federation Forum elaborated on the planned changes to the 2013 NPTE PTA blueprint as follows:

> "Increasing demand for PT and PTA services have made remote or limited supervision arrangements more common, such as when a PTA is called upon to provide in-home care. It is becoming increasingly important for PTAs to recognize "red flags" or contraindications and respond accordingly by stopping treatment and contacting the appropriate healthcare providers as necessary. The PTA panel also noted the increase in medically complex cases and the need for PTAs to be effective consumers of research. The PTA panel also noted the influence of insurance reimbursement issues in changing the standard for entry-level PTAs, specifically by requiring PTAs to be more familiar with a broader range of medical terminology used to document treatment and outcomes."[46]

The 2016 FSBPT Analysis of Practice for the Physical Therapy Profession: Entry-Level Physical Therapist Assistants resulted in an updated blueprint that was very similar to the blueprint developed in 2011, resulting in a list of 197 Critical Work Activities for the entry-level PTA. The most significant structural change involved "separating the Cardiovascular/Pulmonary & Lymphatic System into two distinct content domains, knowledge related to the Lymphatic System. FSBPT also dropped three content areas from the NPTE Blueprint: "Knowledge of non-pharmacological medical management of the lymphatic system," "Knowledge of pharmacological management of the genitourinary system," and "Knowledge of the applications, indications, contraindications, and precautions of diathermy."[43]

Although the 2018 analysis did not result in any significant revisions to the NPTE PTA Blueprint, new/increased passing standards (A passing score requiring approximately three additional correct answers) were established for the 2018 NPTE and justified in a September 2017 Webinar by FSBPT for the following rational:

- With shorter stays, PTAs need to be more proactive and effective with progressing treatments,
- Greater need for critical thinking must have a foundational understanding of patient safety and effective, efficient treatments,
- A more informed patient population is expecting better outcomes.
- The expanded role of patient education,
- Just as PTs are expected to be more autonomous so are PTAs with many settings transitioning to less direct supervision of PTAs.[47]

Recently FSBPT initiated a new multi-year survey methodology to collect and analyze practice analysis data annually through 2021. The HumRRO Practice Analysis Report Memo documents the results of first annual practice analysis survey conducted in January 2018 and recommends future reports include criticality comparison bar charts, computed mean difference indices highlighting statistically significant results, and subgroup differences by primary practice setting and primary population.[48]

Summary of Findings Regarding PTA Education & Practice

The PTA Education Trends Task Force had the following general findings regarding PTA Education and Practice:

- The depth and breadth of entry-level PTA curricular content have continued to increase as evidenced by increasing curriculum expectations within the CAPTE Standards and Elements, as well as within the FSBPT Practice Analysis and NPTE-PTA blueprint.
- Inconsistencies are noted between the role of the PTA as documented by the FSBPT Practice Analysis in comparison to current APTA positions and documents.

Section V. Prior Research on PTA Education

There is a lack of published research on non-pedagogical issues regarding PTA education, with most known research occurring through national conference presentations and PhD dissertations. Below are summaries of known research studies related to the task force report areas from within the past ten years.

Berry & McCartney, 2009[49]
This was a research survey on the perceptions of PTA Program Directors on PTA education presented at APTA CSM 2009. The survey was completed by 156 PTA Program Directors (Response rate of 67%). 38.8% of subjects stated PTA Programs should be transitioned to an entry-level bachelor degree model, while 61.2% stated PTA Programs should remain at an associate degree model. 44.8% of subjects stated that the CAPTE maximum length for PTA Educational Programs was sufficient, while 55.2% stated the maximum length was insufficient.

Druse, 2012[50]
This was a research survey within a PhD dissertation to determine if stakeholders were supportive of elevating entry-level physical therapist assistant education to a bachelor's degree. 2,354 respondents were divided into one of three stakeholder groups: physical therapy educators, physical therapists who are supervisors of physical therapist assistants, and physical therapist assistant graduates. There was not a significant difference among group recommendations of educators, supervisors, and physical therapist assistants, but half (49.5%) of the overall participants agreed. In comparison, close to one-third (34.3%) disagreed that the bachelor's degree should be entry-level. Respondents with less experience and higher terminal degrees were more likely to recommend baccalaureate-level education, with exception to those categorized as other doctorate.

Berry & Becker, 2013[51]
This was a research survey on the perceptions of PTA Program Directors on the increasing number of PTA Educational Programs presented at APTA CSM 2013. The survey was completed by 136 PTA Program Directors (response rate of 48.6%). 72.1% of subjects stated the increasing number of PTA Programs will have a negative effect on their PTA Program; 85.4% of subjects stated the increased number of PTA programs will make obtaining clinical education sites more difficult to obtain. 64.2% of subjects stated the increasing number of PTA Educational Programs is a negative development for the physical therapy profession; and 71.4% stated the increasing number of programs is a negative development for PTA Education.

Berry et al., 2014[52]
This was a research survey on the perceptions of PTA students on PTA education presented at APTA CSM 2014. The survey was completed by 545 PTA students scheduled to graduate over the next three months. 66.6% of students stated that PTA educational programs should be transitioned to a bachelor's degree model. 42.9% of students stated that the amount of time it took to complete their specific PTA program was too short and should be extended. 29.9% of students stated that they would not have attended a PTA program if it was offered at the bachelor's degree level.

Berry et al., 2015[53]
This was a research survey on the perceptions of PTA students on PTA education presented at APTA CSM 2015. The survey was completed by 872 PTA students scheduled to graduate within the next three months. 68.7% of students stated that PTA educational programs should be transitioned to a bachelor's degree model. In comparison, 47% of students stated that the amount of time it took to complete their specific PTA program (Associate degree) was at the correct length. 35.8% of students stated that they would not have attended a PTA Program if it was offered at the bachelor's degree level.

For students who were in favor of PTA educational programs transitioning to a bachelor's degree, the following were found to be the reasons ranked from most to least important: 1. Will enable additional time to learn required information; 2. Will lead to increased respect for the PTA position; 3. May lead to a higher salary; 4. Would narrow the gap between PT and PTA educational levels; 5. May lead to increased PTA scope of practice; 6. May make it easier to transition to a DPT program; 7. Will allow additional time for elective coursework in specialty areas.

For students who were not in favor of PTA educational programs transitioning to a bachelor's degree, the following were found to be the reasons ranked from most to least important: 1. Would increase student loan debt; 2. Would not increase salary; 3. Would increase years of schooling; 4. Would not lead to increased scope of practice; 5. The majority of additional coursework would be non-PT general education courses.

Berry et al, 2016[54]
This was a research survey on the perceptions of DPT students on PTA education and Clinical Practice presented at APTA CSM 2016. The survey was completed by 533 DPT students who would be graduating within four months of completing the survey. 59.7% of respondents stated that entry-level PTA programs should be transitioned to a bachelor's degree model. 61% of respondents stated that they do not think treatment provided by a PTA should be reimbursed at the same level as the same treatment performed by a PT.

Jewell et al., 2016[55]

This was a research survey presented at APTA CSM 2016 regarding the role of the PTA to meet the vision of the PT Profession. Subjects (n = 1,683; 47% PTs & 53% PTA) were asked their perceptions of the current challenges for the PTA, with the following found to be the biggest challenges: Productivity Requirements; Underutilization of PTAs; Lack of opportunities for the PTA; Reimbursement differences between PTs and PTA; and state practice act limitations. Subjects were also asked their perception of what the future career path for entry-level PTAs should be. 35% of subjects recommend PTAs obtain a four-year degree; 45% recommended PTAs obtain a two-year degree and utilize either continuing education and advanced proficiency to advance skills and for professional development, and 20% recommend obtaining a two-year degree and follow up with formal college coursework for a bachelor's degree in PTA for more advanced physical therapy skills.

Summary of Findings Regarding Prior PTA Research

The PTA Education Trends Task Force had the following general findings regarding prior PTA Research:

- There is a lack of related published, peer-reviewed articles on PTA education
- Most available research regarding PTA education has been in the form of research platforms and posters at APTA national conferences

Section VI. PTA Education Task Force Survey of PTA Program Directors

The participants of this survey were PTA Program Directors at CAPTE accredited entry-level PTA educational programs. An email with a survey link (SurveyMonkey) was sent to all 369 PTA Program Directors at accredited PTA Programs (there are 371 PTA Programs housed within 349 institutions, with some directors being the director of more than one program within an institution) during the 2019 spring semester. Email addresses were obtained from a CAPTE online directory of accredited programs. A total of 183 surveys were returned for a response rate of 49.6%. The participants who volunteered to take the survey consented by their participation, which was explained in the first page of the survey. This study was approved by the Institutional Review Board of Northland and Community and Technical College in East Grand Forks, Minnesota.

The survey consisted of questions asking participants' institutional and individual demographics; their perceptions on the preferred length and degree model of PTA Education; their perceptions regarding issues related to a potential transition to an entry-level bachelor's degree model; and their past and potential future concerns regarding their programs. Descriptive statistics were used to present the participants' responses to the demographic and content questions. Independent t-tests were used with a Type 1 error rate of 0.05 to determine associations between variables.

Results

The demographic information for participants is shown in Table 1. A majority of participants were physical therapists. A majority of participants' institutions were public, and a majority of participants were from institutions that cannot grant bachelor's degrees. More than half (53.8%) of the participants are from programs that have been accredited for more than 20 years.

Table 1.
Demographic Information

Demographic Category	Overall Sample Count (n = 183)	%
Physical Therapy Background		
Physical Therapist	155	84.7
Physical Therapist Assistant	28	15.3
Institutional ability to grant bachelor's degrees		
Can Grant	80	44
Cannot Grant	103	56
Type of Institution		
Public	131	71.6
Private	52	28.4
Number of years PTA program has been accredited		
0-4 years	23	12.6
5-8 years	25	13.1
9-12 years	24	14.2
13-16 years	2	1.1
17-20 years	11	6.0
> 20 years	98	53.6
Number of years in current PTA program director position		
0-4 years	34	18.6
5-8 years	48	26.2
9-12 years	37	20.2
13-16 years	12	6.6
17-20 years	4	2.2
> 20 years	20	10.9

Is the Current Length of PTA Programs Appropriate?

Participants were asked if the current CAPTE maximum length for PTA education programs is appropriate through a five-point Likert-type scale (Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Disagree). The percent of some form of agreement for this question was 52.5%, with the percent of some form of disagreement being 47.5%. There was a statistically significant difference in responses between Program Directors at institutions that can and cannot grant bachelor's degrees ($p < .001$). 65% of Program Directors from institutions that cannot grant a bachelor's degree agreed that the current CAPTE maximum length for PTA education is appropriate compared to 36.3% of Program Directors from institutions that can grant a bachelor's degree. There was no statistically significant difference in responses to this question between Program Directors at public and private institutions.

Cognitive load of PTA students

Participants were asked if the expected cognitive load for PTA students is appropriate for the expectations of an associate degree through a six-point Likert-type scale (Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Disagree). The percent of some form of agreement for this question was 38.3%, with the percent of some form of disagreement being 61.7%. There was a statistically significant difference in responses from Program Directors at institutions that can and cannot grant bachelor's degrees ($p < .001$). 54% of Program Directors at institutions that cannot grant a bachelor's degree agreed that the cognitive load is appropriate for an associate degree compared to 33.3% of Program Directors at institutions that can grant a bachelor's degree. There was no statistically significant difference in responses to this question between Program Directors at public and private institutions.

Participant Preference for entry-level PTA Educational Program Length & Degree

Participants were asked their preference regarding the length and degree for entry-level PTA Educational Programs. 17.% of participants preferred to keep programs at their current maximum length; 28.4% of participants preferred to keep entry-level PTA Educational Programs at an associate degree level, but to allow programs to choose their own program length. 29% of participants preferred to allow entry-level programs to choose their degree (associate or bachelor's) and length, and 23% of participants preferred to require all entry-level PTA Programs to be at a bachelor's degree level. Four participants choose "other," with their recommendations including offering associate degree to bachelor's degree transitional programs; investigating programs with both degree models; and move programs to bachelor's degree model with courses that will transfer to other degrees. Table 2 includes response data for this question.

Table 2.
Preference for entry-level PTA Educational Program Length

Preferred entry-level PTA program length	Overall sample count	%
Decrease length of PTA Programs	0	0
Keep programs at current maximum length	32	17.5
Keep at Associate's degree, but choose own length	52	28.4
Programs should choose own degree and length	53	29.0
All Programs at bachelor's degree level	47	23.0
Other	4	2.2

Importance of Transitioning PTA Education to a Bachelor's Degree Model

Participants were asked to rank the importance of transitioning PTA Education to a bachelor's degree model for ten different statements on a 4-point Likert type scale (1 = Very unimportant; 2 = Unimportant; 3 = Important; 4 = Very Important). The mean results for each statement are presented in Table 3. The most important reasons for a potential transition to a bachelor's degree model for participants were a potential positive effect on reimbursement of services provided by PTAs; providing additional time to prepare students for CAPTE standards and the NPTE; and a potential increase in the respect of the PTA position. The least important reasons were allowing the ability for additional prerequisite coursework and the ability to provide elective coursework in specialty areas. The mean results for each question are provided in Table 3.

Table 3.
Importance of Transitioning Entry-level PTA Programs to a Bachelor's Degree

Survey Statement	Mean (SD)
Additional time to prepare students for CAPTE standards and NPTE preparation	3.0 (0.9)
Ability to provide electives in specialty areas	2.6 (0.8)
Allow ability for additional prerequisite coursework	2.4 (0.9
Narrow the gap between PT and PTA Programs	2.8 (1.0)
Potentially will allow for additional PTA-DPT bridge programs	2.9 (0.9)
Increase the respect of the PTA position	3.0 (0.9)
Potential positive effect on reimbursement for services provided by PTAs	3.2 (0.8)
Alignment of PTA Programs with other bachelor-level allied health fields	2.9 (0.9)
Better prepare graduates for entry-level clinical expectations	3.1 (0.9)
Potentially leading to increased PTA scope of practice	2.8 (0.9)

There were several statistically significant differences between the responses of program directors at institutions that can grant bachelor's degrees and those that cannot grant bachelor's degrees. Program directors from institutions that can grant bachelor's degrees ranked the importance of the following statements significantly higher than program directors at institutions that cannot grant a bachelor's degree: Additional time for CAPTE standards and the NPTE, narrow the gap between PT and PTA educational levels, alignment of PTA Programs with other bachelor's degree allied health fields and better prepare new graduates for entry-level clinical expectations. These differences are presented in Table 4.

Table 4.
Independent t-test results for statements regarding the importance for bachelor's degree transition (Institutions that can grant bachelor's degrees vs. those that cannot grant bachelor's degrees)

	Cannot grant Mean (SD)	Can grant Mean (SD)	t (df)	p
Additional time for CAPTE standards and NPTE preparation	2.83 (0.9)	3.6 (0.8	-3.33 (176)	.001
Narrow the gap between PT and PTA educational levels	2.65 (1.0)	3.0 (0.9)	-2.44 (172.7)	.017
Alignment of PTA Programs with other bachelor's degree allied health fields	2.81 (0.9)	3.11 (0.8)	-2.3 (178)	.020
Better prepare new graduates for entry-level clinical expectations	2.93 (1.0)	3.34 (0.8)	-3.1 (178)	.002

There were several statistically significant differences between the responses of program directors at public and private institutions. Program directors from private institutions ranked the importance of the following statements significantly higher than program directors at public institutions: Additional time for CAPTE standards and the NPTE; narrow the gap between PT and PTA educational levels; alignment of PTA Programs with other bachelor's degree allied health fields; and better prepare new graduates for entry-level clinical expectations. These differences are presented in Table 5.

Table 5.
Independent t-test results for statements regarding the importance for bachelor's degree transition (Public Institutions vs. Private Institutions)

	Public Mean (SD)	Private Mean (SD)	t (df)	p
Additional time for CAPTE standards and NPTE preparation	2.90 (0.9)	3.32 (0.8)	-2.93 (176)	.004
Narrow the gap between PT and PTA educational levels	2.68 (1.0)	3.12 (1.0)	-2.92 (117.4)	.004
Alignment of PTA Programs with other bachelor's degree allied health fields	2.97 (0.9)	3.47 (0.7)	-2.52 (116.4)	.013
Better prepare new graduates for entry-level clinical expectations	2.93 (1.0)	3.34 (0.8)	-3.5 (178)	.001

Common concerns regarding transitioning PTA Educational Programs to a bachelor's degree model

Participants were asked to rank the importance of nine common concerns regarding transitioning PTA Educational Programs to a bachelor's degree model on a 4-point Likert type scale (1 = Very unimportant; 2 = Unimportant; 3 = Important; 4 = Very Important). The mean results for each statement are presented in Table 6. The most important concerns for participants were increased student loan debt, that the transition would not result in increased salary for PTAs, and the ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree. The least important concerns for participants were keeping PTA educational programs aligned with other associate degree level allied health programs and decreased potential for PTAs to practice in rural areas.

Table 6.
Importance of Common Concerns Regarding an Entry-level Bachelor's Degree Transition

Survey Statement	Mean (SD)
Increase in student loan debt	3.4 (0.7)
Would not result in increased salary for PTAs	3.4 (0.8)
Additional general education courses to meet bachelor's degree requirements	3.0 (0.8)
The ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree	3.3 (0.9)
Current PTA faculty may not be qualified by institutions to teach at a bachelor's degree level	3.0 (0.9)
Does not correspond with an increased PTA scope of practice	3.0 (0.9)
A majority of programs are currently meeting CAPTE requirements for NPTE pass rates	3.2 (0.9)
Keeps PTA educational programs aligned with other allied health Associate degree programs	2.7 (0.9)
Decreased potential for PTAs to practice in rural areas	2.7 (0.9)

There were several statistically significant differences between the mean responses of program directors at institutions that can grant bachelor's degrees and those that cannot grant bachelor's degrees. Program directors at institutions that cannot grant bachelor's degrees placed significantly more importance on increases in student loan debt; that a transition to a bachelor's degree would not correspond with increased PTA salary or increased PTA scope of practice; the inclusion of additional general education requirements; the qualifications of current PTA faculty to teach at a bachelor's degree level; the ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree; that the majority of PTA Programs are currently meeting CAPTE requirements for NPTE pass rates; and decreased potential for PTAs to practice in rural areas. These results are presented in Table 7.

Table 7.
Independent t-tests results regarding entry-level bachelor's degree concerns (institutions that cannot grant bachelor's degrees vs. institutions that can grant bachelor's degrees)

	Cannot grant Mean (SD)	Can grant Mean (SD)	t (df)	p
Increase in student loan debt	3.55 (0.6)	3.28 (0.7)	2.86 (180)	.005
Would not result in increased salary for PTAs	3.57 (0.7)	3.16 (0.8)	3.53 (145.9)	.001
Additional general education requirements to meet bachelor's degree expectations	3.19 (0.8)	2.76 (0.8)	3.63 (178)	< .001
The ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree	3.66 (0.7)	2.86 (0.9)	6.7 (142.1)	< .001
Current PTA faculty may not be qualified by institutions to teach at a bachelor's degree level	3.14 (1.0)	2.85 (0.8	2.1 (178)	.033
Does not correspond with an increased PTA scope of practice	3.21 (0.8)	2.75 (1.0)	3.4 (157.3)	.001
A majority of programs are currently meeting CAPTE requirements for NPTE pass rates	3.25 (0.8)	2.71 (0.9)	4.3 (180)	< .001
Decreased potential for PTAs to practice in rural areas	2.82 (0.9)	2.43 (0.9)	2.9 (152.8)	.004

There were several statistically significant differences between the responses of program directors at public institutions and private institutions Program directors at public institutions placed significantly more importance on increases in student loan debt; that a transition to a bachelor's degree would not correspond with increased PTA salary or increased PTA scope of practice; the ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree; that the majority of PTA Programs are currently meeting CAPTE requirements for NPTE pass rates; and decreased potential for PTAs to practice in rural areas. These results are presented in Table 8.

Table 8.
Independent t-tests results regarding entry-level bachelor's degree concerns (public vs. private institutions)

	Public Mean (SD)	Private Mean (SD)	t (df)	p
Increase in student loan debt	3.50 (0.7)	3.3 (0.7)	2.1 (180)	.037
Would not result in increased salary for PTAs	3.48 (0.7)	3.17 (0.8)	2.4 (178)	.016
The ability of institutions currently housing entry-level PTA Programs to award a bachelor's degree	3.47 (0.8)	2.90 (0.8)	4.2 (179)	< .001
Does not correspond with an increased PTA scope of practice	3.21 (0.9)	2.76 (0.9)	2.2 (179)	.027
A majority of programs are currently meeting CAPTE requirements for NPTE pass rates	3.15 (0.9)	2.69 (0.8)	3.2 (180)	.001

Program Impacts over the past five years

Participants were asked to rate how six different elements have been impacted on their programs over the past five years on a five-point Likert type scale (Very Negative, Negative, No change, Positive, Very Positive). Percentages of some form of agreement, some form of disagreement, and percentage of no change over the past five years are presented in Table 9. A majority of participants reported a negative impact due to the increased number of PTA Programs as well as a decrease in clinical site availability. A majority of participants reported no program impacts due to institutional factors or state education requirements over the past five years.

Table 9.
Impacts on Program Over the Past Five Years

Survey Statement	Negative impact	No change	Positive impact
Changes in CAPTE standards	14.3%	45%	40.7%
Changes in the FSBPT NPTE-PTA Blueprint	19.2%	48.9%	31.9%
Clinical site availability	53.6%	37%	9.4%
The increase in the number of PTA programs	68.1%	31.3%	0.6%
Institutional Factors	23.8%	64.1%	12.2%
State education regulations	22.6%	71.4%	6%

Predicted changes over the next five years

Participants were asked to predict how six different elements may impact their programs over the next five years on a five-point Likert type scale (Very Negative, Negative, No change, Positive, Very Positive). Percentages of some form of agreement, some form of disagreement, and percentage of no change over the past five years are presented in Table 10. A majority of participants predicted negative program impacts due to clinical site availability and the increasing number of PTA programs. A majority of participants predicted no program impacts due to changes in the FSBPT NPTE-PTA blueprint, institutional factors, or state education regulations over the next five years.

Table 10.
Predicted Program Impacts Over the Next Five Years

Survey Statement	Negative impact	No change	Positive impact
Changes in CAPTE Standards	21.4%	42.9%	35.8%
Changes in the FSBPT NPTE-PTA Blueprint	14.8%	55%	30.2%
Clinical site availability	68.6%	24.7%	6.6%
Increase in the Number of PTA Programs	77.6%	21.3%	1.1%
Institutional Factors	23.1%	62.6%	14.3%
State Education Regulations	18.5%	76.5%	4.9%

Program element/outcome changes over the past 5 years

Participants were asked how nine different program elements/outcomes have changed over the past five years on a five-point Likert type scale (Significant Decrease, Decrease, No change, Increase, Significant Increase). Percentages of some form of decrease, some form of increase, and percentage of no change over the past five years are presented in Table 11. A majority of participants reported a decrease in clinical site availability and full-time entry-level employment opportunities for graduates over the past five years, and a majority of participants reported no change in graduate employment rates or graduate NPTE pass rates over the past five years.

Table 11.
Program element/outcome over the past five years

Survey Statement	Decreased	No change	Increased
Number of applicants	45.9%	28.4%	25.7%
Quality of applicants	45.6%	31.9%	22.5%
Student retention	35.6%	44.3%	20.2%
Graduation rate	33.9%	44.8%	21.4%
Graduate employment	18.6%	73.8%	7.7%
Graduate NPTE pass rates	20.9%	51.1%	28%
Clinical site availability	57.7%	30.8%	11.5%
Clinical site variety	60.6%	29.5%	9.8%
Full-time entry-level employment opportunities for graduates	50.3%	41%	8.8%

Program element/outcome changes over the next 5 year

Participants were asked to predict how nine different program elements/outcomes will change over the next five years on a five-point Likert type scale (Significant Decrease, Decrease, No change, Increase, Significant Increase). Percentages of some form of decrease, some form of increase, and percentage of no change over the past five years are presented in Table 12. A majority of participants predict decreases in clinical site availability and variety, as well as full-time entry-level employment opportunities for graduates.

Table 12.
Program element/outcome over the next five years

Survey Statement	Decreased	No change	Increased
Number of applicants	36.6%	34.4%	28.9%
Quality of applicants	31.2%	40.4%	28.4%
Student retention	20.4%	48.9%	30.8%
Graduation rate	19.5%	54.4%	26.1%
Graduate employment	33.8%	54.4%	11.9%
Graduate NPTE pass rates	7%	64.7%	28.3%
Clinical site availability	53.6%	34.4%	12.1%
Clinical site variety	55.9%	31.5%	12.5%
Full-time entry-level employment opportunities for graduates	50.3%	36.6%	13.1%

Summary of Findings Regarding PTA Education Survey

A majority of surveyed PTA program directors stated that the cognitive load within PTA educational programs is inappropriate for an associate degree, but that the current length of entry-level PTA educational programs is appropriate. There was no clear consensus for a preferred entry-level program length of surveyed PTA program directors, with more research needed to determine other related factors regarding PTA program length and degree model. The most important statement regarding a transition to a bachelor's degree was a potential positive impact on reimbursement for services performed by PTAs, while the most important concern was the impact on student loan debt.

A majority of surveyed PTA programs may be having challenges in regard to the number and quality of applicants, student retention, full-time graduate employment opportunities, as well as clinical site availability and variety. A majority of participants reported that the increasing number of PTA programs as having negative impacts on their program. Further research is recommended to determine how these potential challenges are impacting the success and sustainability of PTA educational programs.

CONCLUSIONS

The task force makes the following conclusions:

- Available professional documents regarding PTA education are outdated and not congruent with current practice or the CAPTE Standards and Elements.
- Recent APTA position statements and available research indicate the expanding role of the PTA and concurrent additions to entry-level PTA skills and knowledge over the past 17 years.
- Recent changes to APTA HOD position statements provide the opportunity for entry-level PTA educational programs to move beyond the associate degree level. There is a significant lack of research on PTA education and practice.
- Prior work by APTA task force groups focused on PTA education has identified curricular gaps within PTA education, which have not yet been formally addressed.
- A majority of surveyed PTA program directors stated that the cognitive load within PTA educational programs is inappropriate for an associate degree, which is congruent with higher curricular expectations placed upon programs by CAPTE and increased outcome expectations regarding the NPTE-PTA.
- Critical work analysis data identifies increased market expectations from entry-level PTAs.
- Although there was no clear consensus for a preferred entry-level program length of surveyed PTA program directors, the majority (53%) prefer either all PTA programs to be at a bachelor's degree level or to allow institutions to determine the degree level awarded for PTA entry-level education.

The following are the recommendations of this task force:

- Update evidence-based guidelines and professional documents regarding PTA education
- Provide resources for PTA educators that are in line with current practice. contemporary educational methodologies, and the CAPTE Standards and Elements.
- Allow multiple entry-level degrees (associate and bachelor) for PTA educational programs.
- Encourage and support research regarding the most-appropriate model(s) of PTA education. This includes curricular requirements, as well as potential implications for students, graduates, institutions of higher learning, current PTA educational programs, and PTA faculty.

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Appendix A
PTA Education Trends Task Force Membership

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Appendix B

Comparison of PT and PTA Educational Programs

CAPTE DATA 2017-2018	PTA	PT
Average program		
Type	Public (72.4%)	Private (52.2%)
Carnegie Classification	Associates (77%)	Master's College (larger) (29.5%)
Costs		
Total cost of Program (public)	$12,589 (in-district)	$65,170
Total cost of Program (private)	$38,922	$112,714
Admissions/Enrollment		
Planned class size (mean)	24	45
Total applicants (mean)	65	499
Applicants qualified (mean)	45	312
Applicants enrolled (mean)	22	45
Total students enrolled	35	136
Outcomes		
Graduates per program (mean)	18	43*
Graduation rate (mean)	83.65%	93.88% (’18)
Percent graduates minority (mean)	26.10%	21.8%
Licensure Pass Rate - 1st time (mean)	87%	92.39% (’17)
Licensure Pass Rate – ultimate	92.3%	98.59%
Employment rate, post 6 mo grad (mean)	98%	99%
Length of Program		
Weeks in class (didactic/lab) (mean)	62	86.1
Weeks in Class (FT clinical) (mean)	15	36
Total weeks in program (mean)	77	123
Curriculum		
Curricular Format	(2yr integrated) 47%	(4+3) 64.3%
Total Semester Credits Required to complete	74.4	120.1
Semester Credits in Professional Phase	47.9	94.8
Semester Credits in Prerequisite Phase	26.6	119.9
Clinical Education		
Clinical Education Sites (mean)	140.6	537
Credentialed CIs (mean)	39.9	53
Faculty		
Total # core FT faculty	956.9	2,733
Total # core PT faculty	200.5	191
Core Faculty FTE	3.2	13.17
Total current vacancies in allotted positions	30**	173

Total projected vacancies	22**	116
Total new positions	7**	33
FT Core Faculty (mean)	2.6	11
PT Core Faculty (mean)	0.5	1
Associated Faculty (mean)	2	8
Core Faculty to Student Ratio (mean)	1:14.76	1:12
Faculty to Student Ratio (lab) (mean)	1:11.27	1:14
PD Total years as faculty	12	21
DCE Total years as faculty	9	11
Faculty years as faculty	8	13
PD workload allotted to teaching (program)	50.03%	26.37%
PD workload allotted to administration	36.23%	44.43%
PD Workload allotted to scholarship	0.49%	14.67%
DCE Workload allotted to teaching (program)	58.82%	38.59%
DCE Workloads allotted to administration	28.02%	35.32%
DCE Workload allotted to scholarship	0.33%	10.62%
Faculty workload allotted to teaching (program)	79.17%	50.79%
Faculty workload allotted to scholarship	0.36%	21.31%
*2017-2018 report **2015 data		

Appendix C

Comments from PTA Program Director survey participants (asked through the survey question: "Any other comments for the PTA Education Task Force?")

The students at my program represent significant diversity - age, second and third career changers, ethnic and racial groups reflective of my diverse community. Mandating bachelor's degree preparation may alter these critically important factors for our profession.

I feel changing to a Bachelors degree will possibly hurt 2-year rural colleges unless some exception can be made. I also feel the increase in PTA programs definitely hurts the applicant pool, but also will affect employment, specifically in more urban areas. In the rural community, a program opening a few years ago over an hour away has decreased the number of applicants, making it more difficult to achieve a 100% graduation rate because there are lower quality students.

The current push at my institution is to decrease the amount of time to complete the AAS degree to 5 semesters or less. Even if CAPTE allowed flexibility of choice in this area, my institution would not allow me to expand beyond the current 5 semesters. -There always has been and will continue to be a need for the entry level PTA at the associate degree level. And I think that is extremely important - community colleges are designed to provide opportunities for people to lift themselves out of poverty or to change their current economic status. It is the mission of 2-year schools, and we are successful in dramatically changing lives, many of whom will never achieve any further education, nor do they have the desire to do so. But there is also a need for PTA advancement opportunities. I see a need for a PTA bachelors degree that would allow PTAs to further their education, focusing on business/management topics, manual skills, specialized intervention topics, etc. If this step was widely available out there, I would feel less of a push to try to introduce topics that are truly not entry-level. I believe that true entry-level PTA education can fit into the associate level, but we are currently trying to meet market demands for content that is not entry-level. There just isn't a good mechanism for professional growth at this point in time.

I believe PTA should be a BS degree since most students take one plus years to complete pre-reqs before beginning a 2-year AAS program. I would love to have a little more time to expand on clinical application and would love to see the PTA take on some of the simpler evaluations. But I think we need to find a model that allows the PTA programs in community colleges to stay where they are to keep costs down - by partnering with 4 year schools in a reverse model (2 years or less at 4 year school first, with final 2+ years at community college). PTAs need to increase their education to align with the DPT education. They are an underutilized asset that are not viewed as worthy even within our own profession. We need to strengthen our profession from within which starts with increasing the educational level of the PTA and recognizing the strength they bring to the team. Thank you for taking on this challenge.

A Bachelor's level PTA degree does not seem warranted or feasible for the profession. Cannot foresee it changing patient outcomes given the current scope of practice for a PTA

Our institution is able to grant bachelor degrees but the model we would be required to follow would add mostly general education courses to the curriculum and very few technical PTA courses if we were to move to the bachelor degree for PTA education.

If we are going to 60 credits that is a concern for PTA and the current culture of the role of PTA in healthcare. We will have to make more shortcuts in a discipline that is a hand's on treatment and simple assessment. I feel we are watering down our discipline by mandating 60 credits. I see and hear some programs are exempt as well as some disciplines, but it is not a consistent structured plan state by state or discipline to discipline.

CAPTE and FSBPT have become overbearing and no longer serve the profession or individual programs. Each of them appears to have placed their own concerns above the concerns of programs. Each of them has shifted workload from themselves to the programs. CAPTE requires extensive data and triangulation for any decision that a program makes, but they appear to make unilateral decisions that are not based upon data - example is the current threshold for employment of graduates. FSBPT unilaterally changes the entire NPTE testing sequence and content outline, and fee schedule, without due process being provided to programs and students. So, in my opinion, the current length of the curriculum would be fine if both CAPTE and FSBPT developed a model of supporting programs and trying to understand our needs and limitations, instead of shoving unrealistic requirements at us.

I feel it is critical to bridge the gap between DPT and PTA degrees. I feel that ultimately having a bachelor programs will lead to improved reimbursement for PT services provided by the PTA.

My concern with PTA education going to bachelors degree is the 60-64 credit hours of general education that doesn't necessarily enhance the quality of the PTA education and it will reduce accessibility of programs for people that don't have the time frame to go 4 years. I think we need to focus on how to increase the bridge programs for the PTA's that want to continue on to the DPT. The quality of DPT's would rise if they had 5-10 years of experience being a PTA and then transitioned to DPT. We need to get PTA's on the ground and running and then allow them to increase their knowledge and skills to progress to a DPT.

I hope CAPTE gets involved in state mandated credits with a letter of support

Would like to see transition to BS degree but feel it would deter second career and adult learners, which tend to be most successful students.

While there are advantages to moving to the bachelor degree, there are also significant limitations that need to be considered.

We do not have a graduating class for 2017 but we do have data for our 2018 graduates as follows: ultimate NPTE pass rate = 100% employment rate = 100% We do not have employer feedback for this group yet. Also, what is the NPTE-PTA Test blueprint? I use test blueprints in all of our PTAP courses but have never heard that there is one available for the licensure exam. Please advise & thank you!

Program has a 100% employment rate; majority are prn or part-time, not full-time. I believe the employment rate has been affected by the proliferation of PTA Programs; it has not been affected by associate degree. Comments have been made by CAPTE and college administrators that if the Program has quality graduates, employment rate should not be an issue as employers will want our graduates rather than another Program's graduates. This shows a disconnect in what employers want - the employers want quality graduates that they can hire "cheaply." Employers are thrilled with the surplus. They can hire quality PTAs at a discounted rate. Of course, students aren't interested in having a degree where the salary pays not much more than Wal-Mart. The applicant pool and quality of applicants will decrease, graduation rates and pass rates will fall, and eventually the pendulum will swing back. When the job market self-corrects, we just have to ask ourselves, do we want to still be the same (associates), or do we want to make ourselves more marketable (bachelors)? If we do decide a bachelors degree is best, I hope that we will be able to add more technical and clinical education courses, rather than just accumulate a mass of general education courses toward the degree.

I feel strongly that PTAs would benefit from education beyond the AS or AAS degree. Either after their entry-level degree or in a BSPTA type of degree. I also feel strongly that it is difficult to predict what a BSPTA looks like and how they can practice without having some BSPTAs out there paving the way. We need more flexibility as programs to explore these post-entry level options and find ways to provide the best care for our patients and meet the needs of the changing health care environment.

I believe that the increased scope of practice for the PTA needs to come before the advanced degree is put into play.

Thank you for surveying us! This is long overdue, and we need to change something in our mix. There were over 130 skills/competencies that our students are expected to master in 1.5 years. The cognitive load for students and workloads for faculty are forcing many to seek medical attention, anti-anxiety meds. It's unethical to harm them psychologically and equally not fair to grant them an associate’s degree for BS level work.
the current situation is holding back not only the PTA profession, but the field of physical therapy itself.

Recommend continuing at the AAS Degree level

CMS recent payment reduction is going to have a big impact on PTA employability. I am not certain that changing to a Bachelor's degree is going to change that - the Medicare bag of money is not changing, and they are looking for cost savings. I think the big picture of the future of Physical Therapy reimbursement is what we should be most concerned about.

This is a tough subject. I would be interested in insurance companies and CMS feedback on PTAs receiving a Bachelor's degree-- would that help reimbursement? If we did go to a Bachelor's degree, I would want more physical therapy content, not just extra classes.

I believe raising the PTA to a bachelor's degree is detrimental on two levels. Our classes have up to 75% of the incoming students with bachelor's degrees already. These students are not eligible for federal aid and increasing the requirements will drive many of these potential applicants away. Also, I believe the PTA degree is an excellent entry into health care for underserved populations. We graduate a number of students each year that could have been PT's but the financial burden is too great. By increasing the degree to a bachelor's you will be preventing a number of students from entering the field. It seems like PT is not the most diverse field and I believe by increasing the requirements to attain the degree you will be limiting the diversity even more. I believe it would be a tragedy to deny many individuals with the intelligence and interactive skills entry into the field because they cannot afford to take on the financial burden of earning a BS or DPT. I also believe you will be decreasing the number of non-traditional students that have found a passion for helping others later in life but are not in a position to take on the burdens of a 4-year degree. Some of our most impressive graduates are single moms with minimal support trying to make their lives better. It seems like when deciding to "improve" the field we need to consider the people in the profession and the people served not just the "profession". Limiting the field to the financially well off and super intelligent may not offer the best service and outcomes for our patients.

I strongly believe PTAs would be in a much better position if the entry level degree would be a bachelor's degree. We have many students in our program who are 17 and 18 years old when they start, and many are not ready to jump right into very demanding PTA classes and Biology classes. I don't like seeing so many PTA programs requiring many, many prerequisites before students can even apply. I feel like in many cases, students are already taking 3-4 years to complete their degrees, we just don't recognize that fact. I also think it would make a lot of sense for PTAs to come out of their PTA educations (with a bachelor's degree) in a position to have more autonomy in the clinic. PTs used to graduate with a bachelor's degree, and they were fully autonomous practitioners with the BS. I don't know that patient care suffered because of that. I'm in a state where the PTA is very limited until they can attain a license to practice without direct supervision. I think if we had a 4-year degree, the need for that restriction would go away, and PTAs would be in much greater demand in the clinic. I think the perception of the PTA would also improve from technician to clinician. This is a change that needs to happen. Thank you for your work on this important topic.

If the role and function of the PTA remains unchanged there is no demonstrable need to expand the educational level of the PTA to a bachelor's degree level. Increasing educational requirements with no change in physical therapy practice responsibilities or salary is not justified.

My concern is that with OTA moving to AS or BS and PTA does not that PTAs will be perceived as techs by clinic owners, third party payers, and the public.
I believe our students are prepared to work as PTA's in a five-semester timeframe. This is supported by the pass rate and placement rate. I believe we will see a drop-in applicant for a bachelors degree, at least from the current population who are predominately nontraditional students who wish to stay local after graduation. These students are not able to commit time and money to a bachelors degree. We also have articulation agreements with upper division schools to accept our PTA designated courses as health science electives to afford students wishing to continue their education a shorter pathway. I also fear that increasing the educational requirements to a bachelors level will not increase wages, but will increase student debt.
I am getting rid of as many of the electives as possible and adding more PTA courses to get everything in.

Different institutions have different required matrices for a BS degree with some situations resulting in less credits for PTA content. Allowing institutions to decide on AAS or BS based on institutional constraints and to eliminate the time limit may improve time for PTA content and time for mastery of content. Most graduates describe satisfaction with amount of content but have dissatisfaction with the "pace" of the content over five terms.

Regarding the length of the program, I selected to keep at the Associates degree, but allow the institution to determine the length because I don't feel that PTA's need all the extra general education courses for a Bachelor's degree. I think more time (maybe a year) to primarily complete PTA courses would be better.

Thanks for surveying. We are seeing a trend to PRN for the first 6 months then FT, but not something I am interested in recruiting a student into. PTA need FT livable wages

Concerns regarding reimbursement for Medicare (2022) and Tricare are still an issue for PTAs in addition to the overall level of respect and scope of practice. We would love to see improvement in the PT-PTA relationships as many DPT programs are still resistant to partnerships with PTA programs. In MD, there has been several new PTA programs imitated which has affected the amount of clinical slots available, in addition to a noticeable decrease in employment opportunities in general for PTAs compared to several years ago.

Thank you for the survey. My understanding is that total weeks of a program can be up to 104 calendar weeks (vs 5 semesters stated in survey). That is a moot point with the focus on the need for advancing education from AS to BS level to encompass the skills needed to be a

provider in 21st Century healthcare. Do our graduates meet accreditation requirements (CAPTE), yes. Do graduates' skills meet the evolving workforce needs, No.

I feel all PTA's should be awarded the same entry level degree whether is be associates or bachelors (just like all PT schools changed to DPT). It is too confusing for employers and payers to have 2 different degree levels for clinicians with the same scope of practice. Doubt that the bachelors will change reimbursement. The cost and increased time commitment will deter a number of non-traditional or first-generation students from choosing PTA. May attract more higher-level students to PTA.

Put priority on elevating the perception and use of PTA's in the PT profession. Make it easier for eligible PTA's that have the skills to transition to DPT programs should they aspire to do so. I have 36+ years as a PT and I am tired of witnessing the poor recognition and treatment of PTA's in our profession AND in the APTA.

I do feel that there is a lot to cover in 5 semesters. I think it should become a bachelor degree so students can learn more concepts and techniques. Also, it would lessen the disparity between the PTA and the DPT. Community Colleges in many states can now offer Bachelor of Applied Science Degrees.

We need better support, and more efficient methods for educational administrative functions such as program assessment, even for the old timers, because technology keeps changing. CAPTE needs to be an advocate for program directors; competitive salaries, administrative training; director retention.
Our state allows essentially no ability for a public community college to award bachelor degrees. I don't see that the public universities would be interested in housing a program. Private, overpriced colleges would definitely be willing. I also think that it is unrealistic to think that insurance reimbursement will increase.

Basically, the biggest feedback that students provide is that they would like a "little" extra time but feel they are prepared to do the job as an entry level PTA. As an instructor, I would like 4-8 more weeks to provide a bit more time for content to be absorbed and reinforced and for students to not be so heavily stressed. I am concerned with the current status of reimbursement and how the APTA and the PT/PTA community are going to respond and defend the rights of the PTA. I am also concerned with the potential employment issues that may affect the PTA. Ultimately, I am also concerned with our PT/PTA profession in general and how we are received and reimbursed for our services. We have so much to offer and continue to have reimbursement be whittled away.

If the degree requirement for the PTA moves to a bachelors level, I have concerns with the increased cost that it would place upon my students. Also, the increased requirements for Gen. Ed courses, I feel are unnecessary. I can see some of these courses but not all. The change in degree would not add more technical courses only Gen. Ed. to get the bachelors degree. I think would decrease the number of students applying due to the cost (at least

with my informal survey I have conducted with my students). This would also close a number of programs that cannot offer a bachelor degree through their institution even if the faculty could teach at this level.

students are aware of potential impact of reimbursement changes related to jobs and they are worried. Multiple entry points to PTA education seems to be the wave of the future but we must keep costs of education in check. The use of our schools' food pantry has skyrocketed. They can't sustain any more hikes in tuition, books, etc.

Debt load is my primary concern.

I have students that say the PTA Program was more difficult than their bachelor degree. One exit survey question that I ask the students, is would the program have been better over 4 years and 94.8% over the past 4 years have agreed that it would have been better for them and they also stated that they would have been better prepared. Thank you for looking into this and I am very happy data is finally being collected at a higher level.

I am torn about this topic. I think, on one hand, that the Bachelor's degree is an appropriate goal. I am afraid the transition will result in loss of faculty due to qualifications.
Changing the PTA Degree to Bachelor Degree will not help train the PTA student for entry level because it would be additional humanities, social science courses. The PTA at the Associate level needs more PTA Classes for Didactic and Psychomotor training of Acute Care, Cardiopulmonary Rehab, Treatment of Pediatric conditions and Neurological etc.

I think if there is a way to make PTA programs the precursor to PT programs it would allow PTA programs to be housed in institutions that better understand their needs and it will also better prepare both PT and PTA's of the future.

I have looming concerns of the viability of the PTA due to decreased reimbursement for PTA providers, competing with multiple PT and PTA programs for clinical host sites, availability of full time employment as a new graduate, elevated market driven expectations of PTA performance given the amount of specialized clinicians in the field and the opening of programs.... Maybe PTA should offer multiple degrees like nursing (LPN, RN, BSN, MSN, NP) - AAS PTA, BS-PTA and let the student decide how much debt they want to incur or which degree they want to pursue.... I'm conflicted.

Students choose PTA over PT due to the 2-year availability. This may deter change of career students and other students may just go straight to DPT instead if they are already having to get a bachelor's degree. This may potentially cut down on PTA's.
Thanks for researching this topic. PTA education is lagging behind and our future clinicians should be given the benefit of furthering their education to keep up with the profession and societal needs/expectations.

We have been actively preparing a 2+2 PTA bachelor degree since our institution recently was granted the ability to grant bachelor degrees. (Ohio just recently allowed a LIMITED number of bachelor degrees to be given by the community colleges - VERY limited!) We HOPE to offer it, some day. Demand among graduates and PTA community is high for the degree. They want to increase skills, education level, status, etc. They know it means no more money. They are realistic. There is a lot of trepidation and push back from employers and PT's though - MUCH more than we expected. Many are not supportive.

Changing to BS might affect those seeking career change, but I agree that the rigor is more aligned with higher degree level. AAS is very misleading to those interested in the program. They are shocked at how intense and compressed it. Overall, I feel that a BS is more appropriate given the current state of healthcare and the health statuses of those we serve who get admitted with multiple co-morbidities and discharged quicker and sicker than ever before.

As a newly accredited program, it's hard to comment on many of these areas. My greatest concern in moving from an associate's degree to a bachelor's degree would be the increase in debt that would be incurred without the needed increase in starting salaries. But, that is the same concern that I had regarding movement from the PT degree to the DPT entry level degree!

I feel strongly that each institution should have the choice of awarding an associate or bachelor degree.

No graduates in 2017. Graduates in 2018. Ultimate pass rate 100%. Programs are obviously graduating students who can pass the NPTE, so cognitive knowledge is sound. The biggest concern is the quality of clinical skills upon graduation. Passable? Yes? Entry-level? Yes. But, could the graduates be better prepared? Yes!

hard to fit it all in so I understand the push toward a BS degree; but most of our students are choosing PTA because they need to work as soon as possible and obtaining a DPT is too long. I don't want to burden our students with more school/debt if we have a high success rate on the NPTE. The only way I would support a Bachelor's level PTA program is if we could increase payment or salary options for the services of a PTA.

The gap in education has negative impact on perception of PTA's in the workforce. It would be much more difficult to justify a reduction in reimbursement for PTA's if the educational gap with PT's was narrowed. The resistance to this move is unfortunate. Expectations for PTA's continue to increase while time and credit for that additional knowledge is not provided. The cost of going to bachelor level is of minimal concern in my opinion. Students graduating with many bachelor degrees make less than a starting PTA currently or must continue their education to even obtain employment in their chosen field.

Health care dollars for care is decreasing, the profession can't afford to increase the cost of education for the PTA and in exchange no increase in pay. There was no change in salary for a PT to go from masters to doctoral. To have autonomy this is important, but this was at a high increase in cost to the new graduates. I believe it would be wrong to force this upon PTAs.

We need to be reasonable but progressive we have had the same model for 50 years, but more and more is demanded of the students to be considered entry level.
With the upcoming Medicare reimbursement changes for PTAs and OTAs, we really need to advocate for our graduates. Any information, resources to help us with that would be greatly appreciated. Thank you for your efforts on this!

Health care is getting more and more complicated in comparison to how it use to be - and those who work in it need to have the most current information available to do the best job possible. Due to time constraints related to a 2-year program, PTA Programs are limited in how much new information can be added to an already loaded curriculum; and additional student stress is always a concern. To keep putting out PTA graduates who can practice at entry level is a challenge for both these reasons and having more time (e.g. a 4-year degree) would allow for a more well-rounded, educated graduate. I would support increasing the PTA to a four-year degree. Thanks!

I understand the interest in wanting to pursue the bachelor's degree for the PTA, however, it would place an undue financial burden on students who are not going to see a difference in pay whether they have an AAS in PTA or BS in PTA. This change would also place an undue strain on institutions not able to grant bachelor degrees and need to go through the approval process to be able to confer one. It would also make it very difficult to try to recruit qualified faculty. For PTAs, they would need to possess the appropriate qualifications, especially in rural areas or areas where the pay received in academia cannot compete with what clinicians earn in the clinic. It is very difficult to recruit PTs to my geographic location to practice in the clinical setting and would be much more so to try to recruit to academia. Such a change may result in closure of many PTA Programs, including both established and new programs.
Based on advisory board, CI and employer feedback, our program graduates possess the appropriate skills expected of an entry-level PTA. Perhaps a better option might be to encourage PTA graduates to pursue programs similar to the BS in PTA offered at PIMA. Once graduates have been practicing, they can better identify specialty areas they may want to pursue or areas they may want to strengthen (pharmacology, exercise physiology, leadership, etc.). A BS in PTA post-graduation from a PTA Program can help prepare graduates with more advanced knowledge in select areas. For institutions wanting a BS in PTA, perhaps this may be the direction that they may want to take. Those institutions can create tracks for the PTA wanting to continue practicing as a PTA in inpatient or outpatient but can also offer a track that prepares the PTA wanting to move on to a DPT bridge program/entry-level DPT program. We encourage all of our graduates to continue on with their education upon graduation from our program and pursue a bachelor's degree in an area of their interest.

By making a PTA program a BS degree an entire demographic will be eliminated. If diversity is important to the profession (which it says it is), moving in this direction will ensure decreased diversity. Community colleges are attended because of financial constraints and time restraints. Most all our students have families and have to work during the program in order to survive. It frustrates me that the current PTA's are quality therapists and that if PTA becomes a bachelor degree, they would not have been able to even consider being a PTA. Our graduates love what they do and are passionate about physical therapy and the positive impact they have in the healthcare world by helping people. If a bachelor degree, I can only think of a handful of graduates between 2009 and now that would have possibly been able to attend/complete a BS program. The community college demographic deserves the opportunity to contribute to healthcare/physical therapy while making a living to sustain their families/lives. I know our community college offers a lot of scholarships to our students, paid for by us employees, to help our students graduate. This topic of going to a BS degree I feel is totally unfair to so many people who are great PTA's and would not be if a bachelor degree because they cannot afford the money nor the time. It truly breaks my heart that our profession is thinking about this since it will eliminate an entire demographic group of people. Instead of eliminating people from being PTAs, I feel our profession should be really focusing on the insurance companies as they are the ones making the rules regarding our healthcare. Care provided by a licensed PTA should not be considered a lower reimbursement rate. Insurance companies are all about their profits, not quality healthcare. In conclusion, I am definitely opposed to a bachelor PTA degree because of the negative impact on those students that can only afford to attend a community college and they would no longer be able to become a PTA. Thank you.

Students at a community college are typically non-traditional students with many commitments beyond academic...children, day care, employment, etc. The majority of our students could not have pursued a PTA degree if it were at a four-year institution due to financial limitations and time constraints.

Questions were indicated as neither increase/decrease because we are at 25 student cohort with 100% retention, graduation, licensure, and employment. We have been that way for years, and I do not anticipate a change.

thank you for your continued work and efforts. The clinical arena is becoming more scarce and not sure what we can do to remedy it.

The Bachelor degree will not necessarily mean a change in scope of practice but it will 100% mean an increase in student debt. Many instructors will not be eligible to teach at this level and it would be a significant loss in the quality of instruction. We have had an 11-year 100% first-attempt pass-rate on the licensing exam and some of my faculty would not be eligible to teach if the program went to a Bachelor degree. Without a guaranteed increased scope of practice, I am adamantly opposed to this.
Current benchmarks used for PTA programs such as exam pass rate are not indicative of program length needs. The exam is not indicative of what clinics expect of PTA’s as new

grads. I teach in a mostly rural area and students need to be ready to see the typical rural variety in both possible diagnosis and pt population. Clinical education is also not currently sufficient to produce quality graduates. We must raise our expectations of PTA students and PTA clinicians if we are to competently treat our patients.

A degree format similar to Respiratory therapy would be best for PTA. It would allow both Associate and Bachelor programs but, add a restriction that new program be bachelors and old programs are grandfathered in if the programs existed prior to a certain date. This is the current stance for the accrediting body for respiratory therapy programs. This would allow the community colleges to continue to have their programs and feed into the rural areas, and we could develop online associates to bachelor programs similar to the RN to BSN programs.

I believe a huge part of the future success of the PTA profession is to have better informed PTs and PT students about what PTAs education and entry-level graduate requirements are at more than a knowledge level, but at an IPE level. (I=intra in this case). I taught a course this past weekend at our state student conclave which mostly PT students attended and they were all shocked at what PTA students actually learn in school, the books they use that are similar to theirs, and the types of questions their board exam includes. I do believe the amount of content we have to include in the short amount of time we have with the students is overwhelming for the instructors and the students; however; I am not certain that moving the program to a Bachelor degree is the answer. I do feel that if I had one more semester it would help immensely, but to add years, may not be the solution. We actually have quite a few students who already come in with Bachelor degrees and are excited to finish another degree in 20 months. I am not sure if they would be as willing to come back and get another Bachelor degree. To address the employment issues, again, I believe we need to do a much better job of educating PTs and PT students in the level of education and training that PTAs receive so they can become more confident in utilizing them as they are trained to be used, not as glorified technicians, which, at least in this area, tends to be what happens. Increasing the degree to a Bachelor level, may or may not solve this underlying problem. Thank you for putting together this survey and for starting to look at this :)

Do not believe a Bachelors degree will increase anything for the role of the PTA in our profession except student incurred debt. Carefully consider this. What other skills are we prepared to delegate to a PTA? No. Do we have solid EVIDENCE that a Bachelors is needed? No. Would wages go up? No. I have worked in health care for over 20 years and strongly oppose moving the PTA to a Bachelors degree.

Some items were not answered as "no change" is anticipated and that option was not available in the choices. Employment rate noted in my responses is based upon part-time or prn employment and not full-time employment. Most of our graduates are not able to find full-time employment in our area now.

Note that the vast majority of questions are working off the assumption that the only option is to move to a BS degree. There are other solutions, including a stair-step model. My

responses reflect the need for change, but not necessarily the need to move to a BS. Our field is plagued by poor diversity. The move to a DPT has created a sea of white, upper to middle class graduates who have the ability to pay upwards of $75-100k for their degree. Changing entry from as AS to a BS will harm diversity in our profession. I feel that PTA education needs to change, but we must find a compromise to remain inclusive.

The state of Florida has exploded in the number of programs available. There are approximately 35 programs already licensed and more applying currently. I live in the rural part of north Florida. Within a 75 mile radius of my PTA program there are 5 additional PTA programs. This has decreased the number of clinical sites available and decreased the quality of applicants and students graduating, with most graduates able to find only part-time or prn work.

focus should remain on entry level skills, not specialization. License exam is getting increasingly difficult for an associates level degree.

The most important question in the AAS vs BS discussion should be what evidence is there that the current level of education is not meeting the needs of patients and employers.
I agree that the education level difference between DPT and PTA is vast. Some additional time would help to make the graduates better well-rounded students with maturity and general knowledge and skills, but also better PTA in scope of knowledge. Making the PTA Bachelors degree would be essentially what the Bachelors of PT degree would be 30 years ago. The educational difference between MD and PA or DPN is less (2-3 years) than it is for DPT and PTA (4-5 years). If we are to use the PTA like the MD uses a PA, why are we ok with that great a difference in education and maturity?

This topic has been discussed for so very long. I can see the graduate shift in opinion more and more towards the BS degree. It makes sense with regards to the PTA's skills, but it makes me sad that a lot of their educational time and $$ will be spent on more liberal arts versus an equal amount of more clinical courses. I don't think there will be payback with higher salaries to help offset the higher student debt load. Again, can't continuing education courses meet the needs rather than more formal education?

Please push to get rid of chest PT

There has been a progression in the physical therapy profession but it has not encompassed the physical therapist assistant. In order to ensure the continued use of the PTA in healthcare more thought needs to be given to the progression of the educational system from an Associates degree to a Bachelors degree.

The option for a bachelor level program has the possibility to reduce the strain programs feel when trying to bring students to entry-level on all skills and knowledge required to adequately assist the DPT.

Most of our graduates are not able to find full-time positions. They are taking multiple PRN positions.

the amount of information that is now required; including number of skills checks and comps has made the program very difficult to manage; for example this semester we have 4 classes full of information/tests/comps which requires us to perform those assessments on non scheduled class days so that all can be completed. This in turn makes faculty "loading" higher than it appears to be since the college does not recognize our non class days of testing in our productivity standard. Whichever method chosen to allow this additional faculty workload (to get all the required information relayed to the students) would be best; whether it be longer time allowed or a bachelors program where the class credit hours could be adjusted.

Employment rate is 100% but students are having difficulty finding full time, in the desired setting, and without commute times less than 1.5 hours.

Please consider the market and the healthcare environment. There are bachelor and master's level degrees that are currently being utilized in the clinical setting in lieu of PTA's.

Student debt is a huge issue; moving to a bachelor degree would lose a significant pool of qualified applicants who already have a bachelor degree.