AN ANALYSIS OF THE PHYSICAL THERAPIST ASSISTANT EDUCATION AND THE IMPLICATIONS DEGREE PROGRESSION WOULD HAVE ON EXISTING PROGRAMS IN KANSAS

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The field of physical therapy has seen significant change over the years with the continuously evolving health care system. The increase in knowledge and responsibilities required by physical therapists has led to the progression of education requirements to a doctoral degree for entry-level practice. Physical therapist assistants have not seen a similar elevation in education, and degree requirements remain at the associate level. Limitations on the PTA program length hinder the addition of informational material. Many program directors feel the current time constraints create a challenge to complete the education standards. Progressing educational requirements to a baccalaureate level may be challenging with many of the current programs located in community colleges. A discussion on the community college baccalaureate degree and articulation agreements will serve as a potential solution to facilitate degree progression. An analysis of the current PTA program curriculum at Washburn University will lead to recommendations for curricular expansion for degree progression. Utilizing the respiratory therapy program as a model for the transition of degree requirements from an associate’s degree to a baccalaureate, recommendations will be made to guide the conversion of the PTA program to the baccalaureate level. Reviewing the course work requirements in DPT education will serve as a guide to enhance the foundational knowledge delivered in PTA education.
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An Analysis of the Physical Therapist Assistant Education and the Implications Degree Progression Would Have on Existing Programs in Kansas

The field of physical therapy has grown and evolved over many decades. With the continuously changing health care system physical therapy has adapted and emerged as a major component of health care. With advancements in medical technology and the changing scope of practice in physical therapy, the education requirements for practice in the field continue to transform (Plack & Wong, 2002). An increase in chronic disease, an aging population, and growing cultural diversity have contributed to the changing educational requirements for health care providers (Threlkeld, Jensen, & Royleen, 1999). Physical therapists have recognized the need for degree progression, but an elevation of the minimum level of education for physical therapist assistants has not occurred.

Problem Statement

With the entry-level education requirements for a physical therapist elevated to the doctoral level, the disparity between physical therapist (PT) and physical therapist assistant (PTA) education increased. The changing health care system, along with advancements in medical technology, created a need for additional education for PTs (Brudvig & Colbeck, 2007; Plack & Wong, 2002), but no degree elevation has occurred in the PTA profession. Limitations on PTA program length have created a challenge to incorporate the required educational information into a restricted timeframe (Berry & McKnight, 2012). Investigation into the need to further PTA education has occurred, but consensus has not been made.

With the minimum level of education for a PTA set at an associate’s degree, the majority of educational programs reside in community colleges (Commission on Accreditation in Physical Therapy Education [CAPTE], 2016; Durse, 2012). An elevation in degree requirements would
require consideration of the community college’s role in attaining a PTA baccalaureate. Allowing community colleges to grant baccalaureate degrees would provide continued program availability for the profession. Articulation agreements between community colleges and universities are an alternative for degree progression without exclusion of community colleges for PTA education (Durse, 2012; Solberg, 2013)

**Project Significance**

Discussion on societal and professional needs for degree elevation can facilitate continued investigation on the topic. Understanding the role PTAs plays in the delivery of physical therapy services, as well as the extent of information provided in a limited timeframe, will endorse the elevation of education requirements to the baccalaureate level. Examination of the role community colleges will play in baccalaureate degree attainment will provide possible solutions for current programs housed in two-year institutions. Recommendations on program and curricular structure will encourage additional studies on PTA program curriculum.

**Project Objectives**

Controversy exists throughout the physical therapy community on the current standards of education for the PTA profession. Many believe the current associate level education is adequate in the preparation of students for entry-level practice as a PTA (CAPTE, 2015; Dougherty, 2014; Durse, 2012). Others feel the current educational requirements are too demanding to be completed in a two year program (Berry & McKnight, 2012; Durse, 2012). An analysis and discussion of the educational requirements for entry-level PTA practice will provide insight on whether the current level of education is suitable for the skill development of PTAs.

As most PTA programs reside in two-year institutions, progressing to a baccalaureate degree presents a challenge to the profession (Durse, 2012; Solberg, 2013). A growing number
of states are allowing community colleges to grant baccalaureate degrees in certain fields (Daugherty, Goldman, Butterfield, & Miller, 2014; Durse, 2012; Solberg, 2013). Other community colleges are collaborating with local universities to provide degree completion programs to grant a bachelor’s degree (Bers, 2013; Durse, 2012; Zinser & Hanssen, 2006). A discussion of potential program development to accommodate a degree expansion for PTA programs at the university and community college level will provide possible solutions for institutions granting a baccalaureate degree.

Progressing the PTA education to a baccalaureate degree would require a change to the current curriculum. The allied health profession of respiratory therapy (RT) has recently recommended progressing entry-level education requirements from an associate’s to a bachelor’s degree (Barnes, Kacmarek, Kageler, Morris, & Durbin, 2011). Reviewing the structure of the baccalaureate RT program will provide insight on how to construct a similar degree plan for the PTA program. A review of the current curriculum from the PTA program at Washburn University along with the educational requirements for the doctorate of physical therapy (DPT) will be used to create a suggested program curriculum.

**Background of the Problem**

The physical therapy profession emerged in the early 1900’s in response to the growing need for rehabilitative services for individuals suffering from poliomyelitis and soldiers injured in World War I. The first physical therapy programs provided education focusing on technical skills and granted certificates of completion. With progressive advancements in medical technology and the changing scope of physical therapy practice, the minimum education for a physical therapist was elevated to a baccalaureate degree in 1960. Continued discussion on the minimum level of education needed to prepare PT students for practice led to the elevation of
requirements to the level of a master’s degree by 1990 (Plack & Wong, 2002). In 2000, the standards for entry-level degree requirements were once again elevated to the doctoral level. The change was made in order to improve autonomy of practice, promote direct access to physical therapy services, and to reflect the continued growth of knowledge, skill, and responsibilities required by PTs (American Physical Therapy Association [APTA], 2015).

The first physical therapist assistants emerged in 1969 as a result of the growing demand for physical therapy services. With a shortage of PTs available to meet public need, the PTA profession was developed to assist PTs in providing therapy services. It was determined PTs needed assistants with an educational background in physical therapy practice. An associate’s degree was established as the standard requirement for entrance into the PTA profession. This would provide students with a solid foundation of the basic principles and theories of physical therapy practice to deliver quality services under the direction of a PT (Wojciechowski, 2003). At the time of inception, an associate’s degree was the logical requirement for PTAs, as the minimum educational requirement for an entry-level PT was set at the baccalaureate level (Plack & Wong, 2002).

In 2000, the American Physical Therapy Association (APTA) approved Vision 2020, which included a statement on the necessity to progress the entry-level education for PTs to a doctoral degree. The APTA cited a growth in the knowledge and responsibilities required to provide optimal care for patients receiving physical therapy services as part of the justification for degree enhancement (APTA, 2015). The educational requirements for PTAs remain at the associate degree level. Vision 2020 failed to identify the level of skill and knowledge required by PTAs in providing optimal patient care. As the physical therapy profession continues to
advance toward higher standards of practice, PTA education remains an oversight in the progression of the field.

**Conceptual Framework**

The PTA profession has seen substantial growth over the last decade. The number of students enrolled in PTA programs across the country has nearly doubled from 6,568 students in 2004-2005, to 12,726 students in 2015-2016. The number of accredited programs has risen from 223 in 2006 to 341 in 2015, with 53 additional programs in development. With the current educational requirements set at the associate degree level, over 80 percent of PTA programs reside in two-year institutions (CAPTE, 2016). As an associate’s degree, the program length is limited to five semesters, or 104 calendar weeks, to complete all educational requirements for the degree (Berry & McKnight, 2015).

Physical therapist assistants work under the direction and supervision of a physical therapist to provide quality physical therapy services. It is the responsibility of the supervising PT to determine which aspects of patient treatment should be delegated to a PTA. A PT must assess whether the individual PTA has the knowledge and skill to perform select interventions, the complexity of the patient’s condition and whether continuous assessment is required, the predictability of patient outcomes, and the setting in which the services are provided. State laws and individual insurance guidelines also influence which services are allowed to be performed by a PTA. Physical Therapists are the only providers permitted to perform the initial examination and evaluation of a patient, create a physical therapy diagnosis, determine patient prognosis, create and modify a plan of care, perform a re-evaluation, determine and document when a patient is discharged from their plan of care, and decide which interventions can be delegated to a PTA (APTA, 2012; CAPTE 2015; Kansas State Board of Healing Arts [KSBHA], 2013).
Leaving the delegation of treatment interventions up to the individual PT opens the door for debate on which tasks can and should be provided by PTAs. An example is the controversial issue of PTAs performing joint mobilization and manipulation. The position of the APTA is joint mobilization and manipulation should only be performed by PTs due to the need for continuous examination and evaluation of the patient during the intervention. A survey conducted in 2011 by the Federation of State Boards of Physical Therapy (FSBPT), the agency responsible for creating PT and PTA licensure examinations, found many PTAs are performing these interventions. Nearly 43% of PTAs surveyed reported performing mobilizations on peripheral joints, and 28% reported performing mobilizations to the spine. After determining PTAs were performing mobilization and manipulation techniques, the FSBPT added questions to the PTA board exams related to these techniques. The Commission on Accreditation in Physical Therapy Education (CAPTE) is a branch of the APTA which determines the educational standards for PT and PTA programs. Although the position of the APTA is firmly set against PTAs performing joint mobilization and manipulation, CAPTE does not oppose accredited PTA programs teaching the theory and application of this intervention (Berry & McKnight, 2012, 2015; CAPTE, 2015; Hayhurst, 2012).

The lack of agreement between the governing body of the physical therapy profession, the agency responsible for creating educational standards, the federation charged with creating licensure exams, and the current practice of therapy providers creates confusion in the field. It is left up to PTs to determine whether the PTAs they supervise have the proper education and skill to perform an intervention. Progressing the PTA education to a bachelor’s degree and providing a strong foundation in the theory and application of joint mobilizations may lead to consensus on the appropriateness of PTAs performing the intervention (Hayhurst, 2012).
In 2012, a proposal to progress PTA education to a bachelor’s degree was presented to the APTA House of Delegates. This led to the passing of motion RC 20-12 which instigated a feasibility study on the degree transformation. The APTA elected members to form a task force to perform the feasibility study. In 2014, the task force presented their findings and recommendations to the APTA. The group determined a potential need for additional content in PTA education to improve consistency in the current educational curriculum and to better prepare students to enter the health care environment. The task force did not determine if PTA education should progress to a bachelor’s degree, but instead recommended further analysis on current work requirements of PTAs and best practices to identify the need for degree progression (Berry & McKnight, 2015). No further reports on a PTA work analysis have been presented to the APTA to date.

The current position of CAPTE is the entry-level education for PTAs should remain at the associate degree level. CAPTE cites the current standards for PTA education outlined in *A Normative Model of Physical Therapist Assistant Education*, as well as the APTA’s delineation of the *Minimum Required Skills of Physical Therapist Assistant Graduates at Entry Level* as justification for the continuance of PTA education at the associate level (CAPTE, 2015). The problem with CAPTE’s position is the aforementioned documents were published in 2007 and 2008 respectively, prior to the 2014 recommendation for further evaluation of the role of a PTA (APTA, 2009, 2016). Completion of the proposed PTA work analysis should occur prior to determination of the appropriate level of education.

Over half of the PTA programs surveyed in 2008 reported the five semester limitation for program completion was not sufficient to achieve the required education standards (Berry & McKnight, 2012). Another recent survey revealed nearly 66% of students graduating from a
PTA program were in favor of elevating the PTA degree to the baccalaureate level. Many students feel additional time is needed to learn the required information and the elevation to a bachelor’s degree would earn more respect for PTAs. Nearly 28% of graduating students reported they would not have chosen to attend a PTA program if it required a bachelor’s degree. Student debt was a main concern for respondents opposing the elevation in education requirements (Berry & McKnight, 2015).

Another concern in PTA education is the growing number of PTA programs. Many PTA program directors believe the growing number of programs may be detrimental to the field. The increased volume of students could lead to an oversaturation of the PTA job market. Ensuring clinical sites for an increasing number of students may present an additional challenge (Berry & McKnight, 2012).

The Education Debate

As the education requirements for physical therapists have been elevated from a bachelor’s to master’s degree, and again from a master’s degree to a doctorate, many wonder why the requirements for PTAs remain unchanged. The field of health care is continuously evolving and the educational requirements to be successful in the field are growing. Many in favor of progressing PTA education to the baccalaureate level argue five semesters is not enough time to fulfill education requirements and properly prepare PTAs for entry into the health care system (Berry & McKnight, 2012; Durse, 2012).

The PTA education originated to provide a foundation in the principals and theories behind the skills utilized in physical therapy services (Wojciechowski, 2003). Increasing PTA education to a baccalaureate degree would provide more time to facilitate an increase in foundational knowledge and refine skills (Durse, 2012), as well as improve critical thinking and
decision making abilities (Durse, 2012; Solberg, 2013). This would help advance the PTA profession and better meet the needs of patients, employers, and society (Durse, 2012; Solberg, 2013).

Vision 2020 called for PTs and PTAs to utilize evidence-based practice in order to “enhance patient/client management and reduce unwarranted variation in the provision of physical therapy services” (APTA, 2015). Providing a structured, enhanced education with content defined by CAPTE would be the optimal way of reducing unwarranted variation for services provided by a PTA. Many PTAs learn new skills from continuing education courses or their supervising PT. On-the-job training focuses on the needs of the employers and supervisors, and may provide information on a bias level. Incorporating the skills desired by PTs into an enhanced, formal education at the baccalaureate level will ensure core concepts are taught at standards warranted to meet accreditation requirements. This will ensure students have the skills needed to best serve their profession rather than just the company they work for (Neill, 2014).

Not everyone agrees progressing PTA education would be beneficial to the profession. Many argue PTAs have been meeting the needs of patients for many years, and there is a lack of evidence to necessitate a degree enhancement. A change in the level of education will not necessarily provide an increase in salary for PTAs (Dougherty, 2014; Durse, 2012), and increasing the time requirements for graduation may put a strain on the profession (Dougherty, 2014).

With the majority of PTA programs housed in community colleges, many believe elevating education requirements to the level of a baccalaureate degree may result in the closure of several programs. Although community college baccalaureate degrees are a growing trend, it is unclear whether institutions will change in order to provide the higher degree level
Dougherty, 2014; Durse, 2012). The increased cost and time commitments to complete
program requirements may also dissuade potential students from applying to the program (Berry
& McKnight, 2012; Dougherty, 2014; Durse, 2012). A reported 68% of students surveyed stated
they chose the PTA field partly because of the length of the program (Berry & McKnight, 2012).
Increasing degree requirements may also inhibit access for minorities and reduce diversity in the
profession (Dougherty, 2014; Durse, 2012).

The Role of Community Colleges in Baccalaureate Education

As an associate’s degree, the majority of PTA programs currently reside in community
colleges (CAPTE, 2016; Durse, 2012). This should not prevent the elevation of PTA education
to a baccalaureate degree as community colleges can remain an integral part of the education
process. Many states have adopted legislation on articulation agreements to improve the process
of transferring credits from community colleges to universities for degree completion (Bers,
2013). Another growing trend in higher education is community colleges granting baccalaureate
degrees (Daugherty et al., 2014; Durse, 2012, Solberg, 2013).

Articulation agreements between community colleges and universities exist in a variety
of formats. Many states have legislative polices to guide the transfer of credits from two-year
institutions to four-year institutions, although the policies for course transfer varies by state.
Program articulation and 2 + 2 agreements allow students to complete the lower level courses at
the community college level and then transfer to a university to fulfill the upper level course
requirements to finish the degree. Dual admission allows students to be enrolled in both the
community college and university simultaneously in order to ease the transfer process once the
lower level courses are complete (Bers, 2013).
Program-to-program articulation and 2 + 2 agreements are ideal for occupational degrees, such as the PTA. Students are able to achieve an inverted degree where the technical courses are completed first, followed by the completion of the upper level general education requirements needed for a baccalaureate. Students benefit from the lower costs of completing the first two years of their education at the community college as well as easing the transfer of credits to the university level to finish education requirements (Zinser & Hanssen, 2006).

The community college baccalaureate is gaining favor in higher education. In 2016, twenty-one states allowed select community colleges to grant baccalaureate degrees (Community College Baccalaureate Association [CCBA], n.d.). While some states have set restrictions on the educational programs allowed at the baccalaureate level in community colleges, other states are more lenient with fewer limitations (Daugherty et al., 2014). Allowing community colleges to grant baccalaureate degrees provides many benefits to students. Community colleges improve access to higher education for minorities and non-traditional students by offering courses at a lower cost with more schedule flexibility. As smaller institutions, community colleges are known for being learner-centered and offer more support for students (Daugherty et al., 2014; Zinser & Hanssen, 2006). Recognizing and incorporating the role of community colleges into the elevation of PTA education will help facilitate the transition to the baccalaureate degree.

**Literature Review**

There is a significant lack of peer reviewed scientific studies performed on the need for degree progression to the baccalaureate level for PTAs. Only one research study was found on PTA education, but the study was part of a doctoral dissertation and was not located in a peer-reviewed journal. Recent degree elevation has occurred for physical therapists as well as respiratory therapists (RT). A review of literature on the progression of PT education will
explain the need for advanced education in the physical therapy profession. An analysis of the transition from an associate to baccalaureate degree in respiratory therapy will reflect the process of degree elevation occurring at the same level as PTA education.

**PTA Education**

In 2012, a quantitative research study was conducted by Durse to determine if the primary stakeholders of PTA education were supportive of the degree elevation to the baccalaureate level. Durse identified the primary stakeholders for PTA education to be: credentialed PTA graduates, PTA educators, and PTs who supervise PTAs. Surveys were sent via e-mail in a cluster sampling of practitioners and educators spread across five different regions of the country. The primary question analyzed in the study was whether or not the stakeholders surveyed agreed with the elevation of PTA education to the baccalaureate level. Responses were set on a five-point Likert scale with strongly disagree, disagree, neutral, agree, and strongly agree, as acceptable answers. The responses were then categorized by the stakeholder group, years of practice, and highest degree level held by respondent (Durse, 2012).

The results of the study show 46% of credentialed PTAs agreed or strongly agreed with degree progression to the baccalaureate level, while 35% disagreed or strongly disagreed. For PTA educators, 47% agreed or strongly agreed, while 34% disagreed or strongly disagreed to degree progression. Physical Therapists who supervise PTAs reported 50% agreed or strongly agreed with a PTA baccalaureate. When survey results were calculated by the number of years of experience, respondents with less experience were more likely to favor the higher education. Nearly 64% of stakeholders with 0-5 years of experience were in favor of degree elevation. When survey results were calculated by the highest degree level held by respondents, 67.4% of respondents with a DPT degree agreed or strongly agreed with PTA degree elevation. The study
showed new graduates and those with advanced degrees placed more emphasis on the importance of the level of education for practitioners. Limitations of the study included a small sampling size of the profession as only stakeholders in nine states were included in the survey. A low response rate of only 6.3% was reported. The author also reported no manipulation of independent variables due to the research design (Durse, 2012).

**Physical Therapy Doctorate**

Changes to the health care system along with advancements in medical technology have created a need for the progression of educational requirements in the PT profession. An increase in the knowledge and skill required by PTs to provide autonomous care was identified as part of the justification of degree elevation (Brudvig & Colbeck, 2007; Plack & Wong, 2002). Controversy ensued with the recommendation to elevate PT education to the doctoral level. Arguments against elevating the PT degree to the doctorate level included: a lack of research requiring the need for degree elevation, lack of evidence an increase in education would produce increased skill or productivity, a decrease in access for minorities, and questions on the qualification requirements for faculty of DPT programs. Many argued the educational requirements for PT students had nearly reached the doctoral level of education already, which justified degree enhancement (Plack & Wong, 2002).

In 2007, a research report was published by Brudvig and Colbeck on the changes in curriculum for DPT programs desired by clinical and academic PTs. A survey was sent to practicing PTs who were members of the APTA, as well as PT educators in accredited PT programs asking what content areas should be added to the DPT curriculum. The majority of survey participants agreed pharmacology, radiology, differential diagnosis, evidence-based practice, pathology, administration, reimbursement, legal issues, ethics, and managed care should
be added to the DPT curriculum. The survey found radiology, pharmacology, pathology, and evidence-based practice were commonly added to the majority of DPT curriculum, while the other content areas were not added. The limitations of the study included the neglect of the current curricular content at established PT programs (Brudvig & Colbeck, 2007).

**Respiratory Therapy**

Respiratory therapy has recognized the need for increased formal education from the associate to baccalaureate level. In 2007, the American Association of Respiratory Care (AARC) created a task force to analyze the changing roles and responsibilities required by RTs. Three conferences occurred between 2008 and 2010, each focusing on a particular area of concern in the field. The first conference identified the need for evidence-based practice, disease management and prevention, and interdisciplinary collaboration to improve the quality of care in the changing health care system. The second conference defined the knowledge, skills, and attributes required for RTs. This led to the identification of required competencies for future graduates of RT programs. The third conference established recommendations to facilitate the conversion of current RT programs to grant baccalaureate degrees (Barnes et al., 2011).

During the analysis of degree elevation for the RT profession, many concerns arose regarding the change of education requirements. With the minimum level of education set at the associate’s degree, 87% of the RT programs were located within community colleges. Concern was expressed that degree progression may result in the closure of some RT programs. Many students choose to enter the RT profession due to the length of the program for an associate’s degree. Arguments were also made against progressing to a baccalaureate education due to the lack of evidence to suggest degree elevation is required for the field, or the elevation in education would lead to improved competency or skill of practitioners (Barnes, et al., 2011).
Supporters of the advancement of RT education report the changing health care environment has led to an increase in the role and responsibilities for RTs and require an expansion of education. The current education requirements at the associate degree level is too demanding to incorporate additional components, and critical areas of information, such as evidence-based practice, are being neglected. Changes in the policy, regulation, and reimbursement of health care practice require additional knowledge for the health care provider. Society views on the profession should also be considered. Third-party payers, government agencies, and legislators view the baccalaureate education as the level of distinction between a technician and a profession. Ultimately the benefits outweighed the concerns for degree progression, and the AARC recommended an elevation of RT education requirements from an associate’s degree to a baccalaureate. The AARC recommended a ten year time frame to transition education programs to the baccalaureate level (Barnes, et al., 2011).

**Societal Needs for Baccalaureate Education**

An increasing demand has been seen for baccalaureate education in the workforce. Employers express desire for increased knowledge, skill, and abilities achieved at the baccalaureate level (Daugherty et al., 2014; Zinser & Hanssen, 2006). As society continues to change, the population is becoming more diverse with changing health care needs. There is an increasing need for cultural competence and a broad knowledge of health beliefs and behaviors. Health care professionals must be patient advocates with strong ethics in the provision of care. A strong foundation in liberal arts and humanities, as well as the social sciences, improves the understanding of the diverse population and the social environment of the health care system (Threlkeld, Jensen, & Royleen, 1999).
PTA Program Evaluation

There are currently five PTA programs within the state of Kansas. Four of the programs are housed within community colleges, and the remaining program resides at Washburn University (CAPTE, n.d.). An evaluation of the PTA program at Washburn University will serve as a guide in the discussion of degree elevation for the PTA profession. A discussion on the allied health field of respiratory therapy will demonstrate how a profession can progress education requirements from an associate to baccalaureate degree. The current curriculum for the DPT program and the RT bachelor’s degree program at KU will serve as models for recommendations on curricular change for PTA programs.

The Commission on Accreditation for Physical Therapy Education provides guidelines for PT and PTA programs to ensure a quality education is provided to meet professional standards and student outcomes. While CAPTE limits the length of PTA programs to five semesters, or up to 104 calendar weeks (Berry & McKnight, 2015), there is no regulation on the number of credit hours or a standard curriculum required for each program (Brudvig & Colbeck, 2007). Without a standardized curriculum, programs can enhance student learning with the addition of courses focusing on more demanding concepts if the degree were to be elevated to the baccalaureate level.

Washburn University awards degrees at the certificate, associate, baccalaureate, and graduate level. University requirements at the associate degree level include a minimum of 60 credit hours, including the following requirements: a three hour course on the Washburn Experience, Freshman Composition, College Mathematics or College Algebra, and 18 hours of general education requirements dispersed between the categories of arts and humanities, natural science and mathematics, and social science. The Washburn Experience course requirement can
be negated if a student transfers from another institution with over 24 credit hours. A minimum of 120 credit hours is required at the baccalaureate level. Advanced composition is added to the previously stated course requirements, along with a total of nine hours in each of the categories of humanities, natural science and mathematics, and social science (Washburn University, n.d.).

At the current level of an associate’s degree, the PTA program at Washburn University can be completed within the CAPTE standards of 104 calendar weeks. With 73 credit hours necessary for program completion, the minimum number of required credit hours for the associate’s degree is met. The essential course work includes 30 credit hours of major courses, 17 credit hours in required correlate courses, and 26 hours of University requirements. The major courses include physical therapy procedures, musculoskeletal assessment, cardiopulmonary assessment, therapeutic modalities, neurophysiology, integumentary assessment, health policy and systems, current rehab techniques, physical therapy issues, and three clinical rotations. Correlate courses required for the degree include foundations of health care, human disease, anatomy, physiology, kinesiology, biology, and library research strategies for health care (Washburn University, n.d.).

Respiratory therapy recently recommended an elevation in education from the associates to baccalaureate level. Reviewing the structure of the RT program at the baccalaureate level can assist in generating recommendations for change in the PTA program structure for degree elevation. The RT program at KU was utilized for this review. As a part of the baccalaureate education, the RT program consists of 60 credit hours specific to respiratory therapy. Course work in the RT program is completed in 5 semesters over a two year time frame. Prerequisites for the RT program include anatomy, physiology, microbiology, chemistry, physics, college algebra, statistics, English composition, critical reading and writing, public speaking, medical
terminology, philosophy, psychology, and one additional course in both humanities and social science. Students are responsible for ensuring the remaining elective hours are met in order to complete the 120 credit hour requirement for obtaining a baccalaureate degree from KU. A degree completion program is also offered at KU. The program includes 30 credit hours of upper division course work specific to the RT field. Course work completed from an RT associate’s degree program may be transferred, but the student is responsible for ensuring the remaining baccalaureate degree requirements for KU are met (University of Kansas Medical Center [KUMC], 2015).

The PTA education was created to provide a foundation of the principals and theories in physical therapy practice as well as training for the skills necessary to be effective in the field (Wojciechowski, 2003). While the skills necessary to perform the job requirements of a PT exceed those of a PTA, there is certainly an overlap of foundational knowledge required for practice in the physical therapy field. Reviewing required course work for the DPT program will provide a guide for enhancing educational standards for a PTA baccalaureate. The DPT program at KU was utilized to create the review.

A baccalaureate degree is required prior to admittance to the DPT program. Prerequisite course work requirements include chemistry, physics, anatomy, physiology, biology, English composition, algebra, trigonometry, and statistics. The core course work in the DPT program includes 110 credit hours spread out over nine semesters in three years. Major course work includes documentation and informatics, PT interventions, extended course work in anatomy, kinesiology, orthopedics, musculoskeletal conditions, evidence-based practice, ethics, exercise physiology, cardiopulmonary assessment, medical imaging, pediatric PT, neurologic
rehabilitation, pharmacology, administration, pathophysiology, specialties in PT, and three to four clinical rotations (KUMC, 2016).

Utilizing the RT program as a model for the structure of an allied health baccalaureate, recommendations can be made to guide the transition of the PTA program to the baccalaureate level. The PTA program requirements can be increased to 60 credit hours of course work directly relating to the practice of physical therapy, to be completed over a two year time frame. The current 30 credit hour curriculum for major course work can be expanded to accommodate additional courses necessary to enhance PTA education. Prerequisites and university requirements will be completed prior to acceptance into the program.

Reviewing the course work required for DPT education can serve as a guide to enhance the foundational knowledge provided in PTA education. Without a standardized curriculum set by CAPTE, each PTA program can customize courses to emphasize skills as deemed necessary by the program faculty. The following generalized recommendations build upon the current curriculum at Washburn University. The addition of a documentation and informatics course would help improve the documentation skills necessary for practice, and help to ensure compliance with the standards of third party payers. An additional course on orthopedic physical therapy can build on the musculoskeletal course to provide a strong foundation in orthopedic conditions and interventions. A course in pediatrics will prepare PTAs to work with children in a variety of health care settings. With the health care field emphasizing evidence-based practice (EBP), adding a course on research techniques will prepare PTAs to utilize EBP to ensure quality care in the field. A course in pharmacology will help PTAs understand the physiologic changes that occur when patients are taking medications for pain control and other conditions. A course in ethics will help support the APTA standards of ethical practice in physical therapy. With an
increased level of education with a baccalaureate degree, providing a course in leadership will help prepare PTAs for administrative positions and community activism. A course in lifetime wellness will help PTAs to educate patients and the community to lead healthy lifestyles. Finally, an additional clinical rotation will provide extra hands on experience to prepare for future employment in the physical therapy field.

The advancement to the baccalaureate education increases the university requirements for credit hours to 120 for degree attainment. The addition of advanced composition is required by Washburn University for a bachelor’s degree. Review of the prerequisites for the RT and DPT programs at KU were used to make recommendations for prerequisites, or recommended correlate courses, for a PTA baccalaureate. Recommendations for additional prerequisite courses include microbiology, chemistry, physics, statistics, public speaking, philosophy, and human psychology. A degree plan and curriculum outline is provided in Appendix A. With many of these courses included in the prerequisites for the DPT program, PTAs will be better prepared if they choose to continue their education and apply for the doctorate degree program.

**Implementation Plan**

Completion of the recommendations made by the feasibility study task force should occur to evaluate the current work requirements of a PTA in order to make appropriate changes to current education requirements (Berry & McKnight, 2015). Thorough and complete studies should be conducted on curricular development to establish stakeholder opinion of appropriate educational material. Studies which expand on the physical therapy stakeholder opinion for PTA degree elevation would be beneficial in better determining the need for a PTA baccalaureate degree (Durse, 2012). A ten year time frame for program transition to the baccalaureate level would allow programs time to determine how to complete the degree transformation.
Accreditation standards must be revised by CAPTE to reflect degree elevation to the baccalaureate level. There is currently a five semester, or 104 calendar week, limitation to complete a PTA program including prerequisite, general education, and technical education courses (Berry & McKnight, 2015). Changes to the standards and required elements for accreditation will be needed to reflect the elevated knowledge and skills required for PTA practice. The APTA would likely need to revise the document *Minimum Required Skills of Physical Therapist Assistant Graduates at Entry-Level* to reflect the change in educational standards.

To facilitate elevation of PTA education to a baccalaureate degree, community college involvement needs to be considered. Over 80 percent of PTA programs reside in community colleges (CAPTE, 2016), including four of the five PTA programs in Kansas (CAPTE, n.d.). Allowing community colleges to grant baccalaureate degrees would help fulfill the need for higher education while meeting workforce needs (Daugherty et al., 2014). Kansas does not currently allow community colleges to grant baccalaureate degrees (CCBA, n.d.). A change in legislation would be required to allow the community colleges in Kansas to grant a PTA baccalaureate. Otherwise, improved articulation agreements for program to program transfer from the community college to university would need to be created to culminate in a PTA baccalaureate. This would require an inverted degree where the technical program requirements are completed at the community college and the general education and correlate course requirements would be completed at the university level (Zinser & Hanssen, 2006).

The Kansas Physical Therapy Practice Act does not place limitations on the interventions provided by a PTA, nor the degree level required for PTA practice. The Kansas Physical Therapy Practice Act specifies PTAs shall work under the direction and supervision of a licensed
PT and perform tasks as delegated by a supervising PT (KSBHA, 2013). No modifications would be required for the PTA practice act in Kansas to facilitate degree elevation to the baccalaureate level.

**Project Summary**

Elevation of education requirements for PTAs to the baccalaureate level would be beneficial to the physical therapy profession. The APTA task force for the feasibility study for PTA degree elevation reported there may be a need to add content to the PTA education to improve consistency and better prepare students to enter the health care field (Berry & McKnight, 2015). However, the current demand on PTA students to learn the information necessary to obtain the skills required for practice is exorbitant. Many program directors report the current limitations on program length do not allow enough time to achieve educational standards (Berry & McKnight, 2012). The logical solution would be to increase entry-level education requirement to the baccalaureate degree.

A change to the current curriculum to increase foundational knowledge and provide additional time to achieve competency in required skills would be necessary to progress to the baccalaureate level. Studies on curriculum development should be done to determine the most appropriate courses and competencies required for a PTA baccalaureate. Analysis of educational requirements for DPT programs and other allied health baccalaureate programs can assist with curriculum development. Surveys of stakeholders in the physical therapy field can provide further suggestions on courses to include in an updated curriculum.

Consideration of the community college role in a PTA baccalaureate is essential. With the majority of PTA programs housed in community colleges (CAPTE, 2016; Durse, 2012), maintaining community college involvement will be vital for the profession. Allowing
community colleges to grant baccalaureate degrees would aide in PTA degree elevation. Students would also benefit from the lower tuition, schedule flexibility, and supportive environment. Improved access for nontraditional and minority students would be an additional benefit (Daugherty et al., 2014). Articulation agreements between community colleges and universities could also facilitate the degree progression for PTAs. Students could take the occupational courses at the community college level and then transfer to the university to complete the general education requirements to obtain a baccalaureate degree (Zinser & Hanssen, 2006).

**Conclusion**

Growing recognition of the benefits of higher education has led to degree elevation for PTs and RTs. Disagreement on the need for degree advancement occurred in both professions, with similar arguments made against changing education requirements; a lack of evidence of the need for degree elevation, lack of evidence an increase in competency and skill would occur with increased education, and a possible shortage of qualified faculty (Barnes, et al., 2011; Plack & Wong, 2002). Concern from the RT community in elevating education requirements from an associate level to a baccalaureate also included a decrease in enrollment as many students choose the profession due to the length of the program, and the number of programs housed in community colleges (Barnes, et al., 2011). The same concerns have been expressed in the debate over the progression of PTA education. The PT and RT professions determined the benefits of progressing the profession outweighed the concerns preventing change.

Increasing educational requirements reflects positively on the profession. The APTA has high standards for the physical therapy profession. Accountability and excellence are two of the core values issued by the APTA (Solberg, 2013). The governing organization of the PTA
profession should be held accountable for ensuring excellence by affording PTA students the
time and depth of knowledge necessary to provide excellent care. When discussion of degree
advancement occurred in the RT profession, Barnes et al. (2011) stated “the profession’s current
failure to demand an adequate entry-level education negatively affects the perception of the
profession, suggesting a more technical and less professional career” (p. 685). This certainly
rings true for the PTA profession. The level of education should reflect the professional
standards guiding PTA practitioners.
References

https://www.apta.org/uploadedFiles/APTAorg/About_Us/Policies/BOD/Education/MinReqSkillsPTAGrad.pdf

https://www.apta.org/uploadedFiles/APTAorg/About_Us/Policies/Practice/DirectionSupervisionPTA.pdf

http://www.apta.org/Vision2020/


Berry, J., & McKnight, B. (2015). *PTA update: What are the current issues relating to the physical therapist assistant?* Retrieved from


Appendix A

Recommended Degree Plan - Year 1

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