



# AMERICAN COUNCIL OF ACADEMIC PHYSICAL THERAPY

## Board Report

**DATE:** January 4, 2016

**NAME OF COMMITTEE/TASK FORCE/CONSORTIA:** Diversity Task Force

**Purpose (charge):** Define “under-represented minorities” in physical therapist education and affirming a rationale for promoting a diverse student population and workforce in physical therapy. The task force’s efforts will culminate in the development of related resources and recommended strategies to enhance minority student recruitment in physical therapy. The task force may survey PT education programs on minority outreach, recruitment, and retention initiatives; and summarize best practices. It may also review the literature to identify successful tactics adopted by other health profession institutions. The task force will explore and promote partnership opportunities for APTA, Academic Council (now referred to as American Council of Academic Physical Therapy or ACAPT), the Student Assembly, PT education programs, and other organizations to advance student diversity initiatives.

### **TASK FORCE MEMBERS:**

- Bernadette Williams-York (Alabama State University) Chair
- Salome Brooks (Springfield College)
- Jesus Dominguez (University of Southern California)
- Zoher Kapasi (Emory University) ACAPT Board Liaison
- Victoria Moerchen (University of Wisconsin-Milwaukee)
- Denise Wise (The College of St. Scholastica)

**STAFF LIAISON:** Libby Ross (APTA)

**ADDITIONAL STAFF:** Johnette Meadows (APTA) and Sandy Rossi (ACAPT)

**SUMMARY OF ACCOMPLISHMENTS TO DATE:** The ACAPT Diversity Task Force met 16 times since January 2013, including 13 web conferences and 3 onsite meetings: 2013 Combined Sections Meeting in San Diego, CA; and APTA Headquarters in Alexandria, Virginia on July 24-25, 2014 and November 14-15, 2015. The following accomplishments have been achieved to date:

**URM Definition:** The Diversity Task Force developed a definition of underrepresented minorities (URM) in physical therapist education in response to a charge established by the ACAPT Board of Directors in 2013. The URM definition extends beyond traditional racial and ethnic categories to also include individuals from educationally disadvantaged backgrounds (eg, first-generation college students), individuals with low socioeconomic status, and geographically underrepresented areas (eg, Appalachia). The Task Force reviewed documents of other health professions’ education associations to inform their work. ACAPT adopted the URM definition during the Educational Leadership Conference in October 2013 to drive changes in what data are collected by physical therapist education programs, help give credence to arguments for greater diversity, focus the limited resources of ACAPT and APTA, and achieve greater diversity in physical therapist education and the profession.

The URM definition was subsequently adopted by the APTA House of Delegates in June 2014 and expanded to include physical therapist assistant (PTA) education to ensure consistency in terminology

across the spectrum of physical therapy education. The definition of underrepresented minority populations in physical therapy education [HOD P06-14-13-08 Position] is as follows:

*“The American Physical Therapy Association defines ‘Underrepresented’ in physical therapy education as the racial and ethnic populations that are underrepresented in physical therapy education relative to their numbers in the general population, as well as individuals from geographically underrepresented areas, lower economic strata, and educationally disadvantaged backgrounds.”*

**Why I Chose Physical Therapy” Video:** ACAPT and APTA collaborated in the development and promotion of a 4-minute video, “[Why I Chose Physical Therapy](#)”, in July 2014. The video is available online and features physical therapist students and new professionals from diverse backgrounds. Its purpose was to promote both physical therapist careers to prospective students and diversity within the profession.

**Disadvantaged Items on the PTCAS Application:** APTA added new questions to the 2015-16 Physical Therapist Centralized Application Service (PTCAS) application in response to the development of a new definition of underrepresented minorities in physical therapy education. These questions are intended to assist participating programs in identifying applicants from educationally, economically, or geographically disadvantaged backgrounds.

**Surveys:** In spring 2014 the task force conducted a study to determine the most significant challenges facing doctor of physical therapy (DPT) education programs relative to minority student recruitment and retention efforts, and the strategies most successful in overcoming them. A modified survey was also released to physical therapist assistant (PTA) education programs in summer 2014. In 2015 the task force obtained IRB approval to conduct 2 additional studies of current DPT students and pre-health profession advisors in colleges and universities. These studies were designed to better understand what factors influence the decision of URM students to pursue a physical therapist career and apply to particular programs. The task force examined the data using axial coding, cross-factor analysis, and qualitative analysis methods.

**Minority Student Recruitment Strategies for Physical Therapist Education Programs:** The task force developed a set of strategies for individual DPT education programs to consider implementing at local or institutional levels. (See Appendix A.)

**National Association of Advisors for the Health Professions (NAAHP) Session:** A proposal, titled "Advising Minority Students on Journey toward a Physical Therapist Career", was submitted and accepted in fall 2015 for a concurrent session at the June 2016 NAAHP National Meeting in Minneapolis, Minnesota. The 55-minute session will be presented by a member of the task force, Denise Wise, who will share evidence-based strategies advisors can use to enhance advising for URM undergraduate students interested in physical therapy as a career.

## **BACKGROUND**

Physical therapist education and practice has fallen short of meeting the benchmark of “representation of the general population”. Major themes of recent reports from the Institute of Medicine (IOM), now the National Academy of Medicine, relative to cultural competence, health disparities, and inequities in workforce diversity are relevant to the physical therapist profession. Healthy People 2020 Access to Health Services identified the necessity of bridging the gap between patient satisfaction and patient acknowledgment as integral to the care process. These gaps can be filled by creating culturally competent clinicians via enhanced professional education. (US Department of Health and Human Services)

The APTA vision is “Transforming society by optimizing movement to improve the human experience”. The [Guiding Principles to Achieve the Vision](#)” discusses 3 main areas to integrate cultural competence that speaks to the need to pursue diversity to achieve the vision: consumer-centricity, access/equity, and advocacy.

- Consumer-centricity refers to the patient as a consumer. The values and goals central to their care is based upon cultural considerations, as represented by the diversity of the general population. A profession representative of the general population has a stronger possibility of meeting healthcare needs.
- Access/Equity refers to reaching the healthcare needs of the community “at the point of entry” and factually looking at the issues of eliminating the influences of disparity and the “social determinants of health.” Alignment of the profession with the consumer mix would again address the need for an investment in URM students considering and entering the profession.
- The physical therapy profession will advocate for patients/clients/consumers both as individuals and as a population, in practice, education, and research settings to manage and promote change, adopt best practice standards and approaches, and ensure that systems are built to be consumer-centered. (“Cultural Competence and the Vision”)

The core concepts that form the underpinning of the Values and Ethics Competency within the Interprofessional Educational Collaboration are in alignment with the APTA Guiding Principles. The first competency domain values the cultural competence of the clinician, patient and the population at large being served. Interprofessional education emphasizes the responsibility of educational programs to consider health disparities, cultural competence and minorities as professionals from an ethical standpoint. Increasing the number of care providers without examining and aligning the demographics of care providers with the community being served diminishes the observation of cultural affiliation with “representation”. (“Interprofessional Collaborative Practice Competencies”)

Race and Ethnicity Demographics: Race and ethnicity, as defined by the United States Office of Management and Budget (OMB) and reported by the United States Census Bureau, are self-identification data items for which residents choose the race or races with which they most closely identify. The Census Bureau considers race and ethnicity as separate and distinct identities and includes a separate question on the Hispanic or Latino origin of the individual. (See table [1](#) in Appendix B.)

The following populations are currently underrepresented in physical therapist education programs as compared to the US population: Hispanic/Latino, African-American/Black, American Indian/Alaskan Native, and Hawaiian/Pacific Islander. Whites (not of Hispanic origin) and Asians are not currently underrepresented in the profession at the national level, but may be at the local or regional levels.

During the 2014-15 admissions cycle, a total of 12.7% of all applicants and 9.1% of accepted applicants in PTCAS identified race and ethnicity categories on the application that were underrepresented as compared to the US population. An additional 4.6% of all applicants and 4.2% of accepted applicants in PTCAS designated 2 or more races and ethnicities during the cycle. Therefore, a combined total of 17.4% of all applicants and 13.3% of accepted applicants in PTCAS were underrepresented as compared to the US population. (See tables [2](#), [3](#), and [4](#) in Appendix B.)

The distribution of students enrolled by race and ethnicity in physical therapist education programs has not changed significantly in recent years, as demonstrated by data provided by the Commission on Accreditation in Physical Therapy Education (CAPTE). During the 2014-2015 academic year, a total of 8.7% of students were identified by programs in the CAPTE Fact Sheet for Physical Therapist Education Programs as an underrepresented minority. An additional 1.3% of students were designated by programs in the “two or more races” category for a combined total of 10.0%. Notably, the percentage of African Americans enrolled in physical therapist education programs declined from 4.8% in 2004-2005 to 3.1% in 2014-2015. (See table [5](#) in Appendix B.)

The following race and ethnic groups are deemed underrepresented in the APTA membership: American Indian/Alaska native, African American/Black, Hispanic/Latino, and Native Hawaiian/Pacific Islander. Asian members are not underrepresented in the membership based on the population of the United States. As of November 2015 6.0% of APTA members self-identified as an underrepresented minority versus 7.2% in April 2014. An additional 1.9% of APTA members self-identified as “other” in both years for a combined total of 7.9% of members in November 2015 versus 9.2% in April 2014.

The percentage of all minority physical therapist student members increased from 16.3 in 2014 to 17.6 in 2015 primarily due to changes in the Asian and Hispanic/Latino student memberships. The percentage of other minorities in the physical therapist student membership category remained steady or declined between 2014 and 2015. (See tables [6](#) and [7](#) in Appendix B.)

Gender Data: Males are not considered underrepresented in physical therapist education or APTA membership, and were not included in the URM definition adopted by ACAPT or APTA. The number of males who applied to and enrolled in programs participating in PTCAS has increased by approximately 1% every year since 2008. Males represented 40.8% of all PTCAS applicants in the 2014-15 admissions cycle.

Disadvantaged Data: APTA collects data regarding the current address of members and could determine whether an individual currently resides in a geographically underserved area. This data could not, however, be used to determine whether the member is from a geographically disadvantaged background. APTA does not currently collect data from members regarding disadvantaged backgrounds (educational, geographic, or economic) and has no immediate plans to do so. PTCAS began to collect disadvantaged data from applicants in the 2015-16 admissions cycle. Data regarding the disadvantaged status for all versus accepted applicants will be available in October 2016.

Minority Student Recruitment: According to a 2015 survey of current DPT students conducted by the task force, personal experiences and interactions with physical therapists, more than any other factor, motivated students from all backgrounds to pursue the profession. Exposure to the profession was identified as a more influential factor in career choice among URM students than white students. However, white students are 5 times more likely to have had direct or indirect personal experience with a physical therapist than their URM counterparts.

CAPTE Criteria: The CAPTE Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapists (November 2013) requires programs to demonstrate in section R-1 that “The enrolled student body is consistent with the mission and goals of the program, the profession’s need for qualified, competent practitioners, and the societal need for diversity among physical therapists.” As evidence of compliance, programs must “Describe the characteristics of the enrolled students, including the gender, racial, cultural, and economic diversity of the students.” The CAPTE 2013 Physical Therapist Education Program Annual Accreditation Report (AAR) includes items relative to the race and ethnicity of physical therapist applicants, students, and graduates.

The new CAPTE Standards and Required Elements for Accreditation of Physical Therapist Education Programs will be effective in January 2016 and define diversity as follows: “Includes group/social differences (ie, race, ethnicity, socioeconomic status, gender, sexual orientation, country of origin, as well as cultural, political, religious, or other affiliations) and individual differences (ie, age, mental/physical ability, personality, learning styles, and life experiences).” Moreover, the CAPTE 5A Standards require programs to “Describe the efforts of the program to recruit a diverse student population.”

Affirmative Action and Admissions: Decisions of the United States Supreme Court relative to Affirmative Action may make it more difficult for physical therapist programs to consider race and ethnicity as a factor in the admissions process.

- The Supreme Court ruled in the cases of *Grutter v. Bollinger* and *Gratz v. Bollinger* (2003) that the use of affirmative action in school admission is constitutional if it treats race as 1 factor among many, its purpose is to achieve a "diverse" class, and it does not substitute for individualized review of an applicant. Affirmative Action is unconstitutional if it automatically increases an applicant's chances over others simply because of his or her race. The *Grutter* case involved a lawsuit against the admission process at the University of Michigan's Law School. AAMC referenced the *Grutter v. Bollinger* case as the impetus for developing a new definition of an underrepresented minority in medicine due to the need to pursue race-neutral alternatives to achieving achieve diversity. (“The Status of the New AAMC Definition of Underrepresented in Medicine”).

- In the case of *Fisher v University of Texas at Austin* (2013) the Supreme Court's opinion explained that a university's use of race must meet a test known as "strict scrutiny." Under this test, a university's use of affirmative action will be constitutional only if it is "narrowly tailored." The use of race in the admissions process must be deemed necessary and there must be no other realistic alternatives that do not use race that would also create a diverse student body. (Schmidt) The case was brought back to the Supreme Court in December 2015 and the outcome is still pending.
- In the case of *Schutte v Coalition to Defend Affirmative Action* (2013) the Supreme Court considered whether an amendment to the Michigan constitution that bans (rather than encourages) the use of affirmative action at public universities violates the Constitution. The state solicitor for Michigan argued that the amendment was spurred by other alternatives that could result in a diverse student body without considering race, such as eliminating special preferences for the children of alumni or focusing on socioeconomic status rather than race. The Supreme Court ruled in 2014 that an amendment to a state's constitution to prohibit race-and sex-based discrimination and preferential treatment in public university admission decisions did not violate the Equal Protection Clause of the Fourteenth Amendment. As a result, other states may pass similar legislation. (Huhn)

The new URM definition will assist ACAPT and programs in revising diversity goals so they are in line with the trend toward race neutral admission strategies resulting from these Supreme Court decisions.

## **RECOMMENDATIONS**

The goal of the following recommendations is to enroll more students into physical therapist education programs who are representative of the general population, so the profession can meet the needs of an increasingly diverse society and provide patient-centered care. The task force used a holistic approach to review these issues and grouped URM student recruitment, retention, graduation, and licensure in the recommendations. ACAPT should collaborate with APTA and other stakeholders to pursue a multimodal approach to address each recommendation, including, but not limited to, conference programming, webinars, social media, and print resources.

### **Recommendation 1: Promote physical therapy as a viable career option for URM students.**

SS: The physical therapist profession is not adequately promoted as an attractive or viable career option for URM students in elementary, secondary, and higher education. URM lack of access to the profession, underrepresentation in DPT program applications and acceptance, as well as reduced program completion once admitted, all impact long term outcomes in a workforce demographic that does not match the general population and; therefore, cannot reduce health disparities. (Gabard 165, Nuciforo and Litvinsky 112, Xu et al 817; Perrin and Ver Ploeg)

According to the research conducted by the task force in 2015, URM students receive minimal to no exposure to or encouragement toward seeking it as a career choice. The results have raised questions as to when and how "encouragement" should be delivered to be most effective. The amount and significance of the information that can be disseminated to URM students at any level of education to support them in making informed career decisions is also vital. Barriers to exposure to the profession include lack of recruitment and career resources, lack of access to technology, and few role models. These complexities need to be considered when developing strategies to work with URM students at every level of education.

Organizations, such as the Area Health Education Collaboration, provide information about careers in various health professions. The importance of coordination of their activities with the stage of the student, potentially middle school, allows the focus of high school preparation to meet the necessary college requirements that frame the path of clinical doctorate studies. Targeting middle school students matches the successful path of decision making as outlined by Saha et al.

A modern focus to reach the young mind includes the creative use of accessible media and URM celebrity stories. Capturing the attention of the URM student whereby they realize that they can be a doctor of physical therapy is a priority that the profession cannot ignore.

The following suggestions serve as examples of strategies to better promote the profession to URM students.

- Recommend collaborative strategies to APTA Board of Directors.
  - Direct public relations staff to seek ways to better promote positive and realistic physical therapist role models in fictional movies and TV shows.
  - Create social media outlets specifically targeting pre-DPT students.
  - Develop a “media kit” about physical therapist careers for feeder programs.
  - Collaborate with the Health Careers Opportunities Program (HCOP), Area Health Education Collaboration (AHEC), and Health Resources Services Administration (HRSA), and other organizations and pipeline initiatives.
  - Lobby the appropriate agencies to do additional advocacy to support URM student recruitment.
- Promote a national Shadow-a-Physical Therapist Day.
- Pursue grants from federal or other sources, such as the Robert Wood Johnson (RWJ) Foundation and the National Institutes of Health (NIH), to support minority student recruitment initiatives.
- Identify the advantages of a physical therapist career in a format that programs can adapt for their local use.
- Provide resources for promoting physical therapist careers in local and social media.
- Develop alternative ways to reach URM individuals who do not have easy access to online resources and social media, and are impacted by the “digital divide”.
- Develop resources that are more accessible and tailored to middle school students, including printed material and seminars.
- Create a “You Can Be Me” type video that includes diverse representatives in multiple and diverse clinical settings.
- Develop separate resources for students in elementary school, secondary school, and college that include “tracks” that focus on STEM and health science careers.
- Diminish the physical therapy objection to marketing the profession to the public, therefore leveraging the influential power of strategic branding.
- Use “living room” advertisements to promote physical therapist services during prime time news with an awareness of indirectly marketing to time slot generational viewing and cost prohibitive barriers.
- Use celebrities connected to physical therapy to promote careers to URM students (ie, Tracie Morgan, Gabby Giffords, and Olympia Dukakis).

**Recommendation 2: Develop resources to help middle school, high school, community college, and 4-year college advisors mentor pre-DPT students.**

SS: To promote and support a culture of diversity in physical therapist education, efforts aimed at facilitating access to and navigation within the healthcare education pathway should begin when children from URM backgrounds begin to imagine a life beyond school. That is to say, these measures should be introduced at the level of elementary education (Riegle-Crumb et al 458). This initial exposure to a career in physical therapy can further be reinforced and supported during the middle and high school years, when judicious selection of coursework balanced with constructing manageable course loads is critical to fostering participation and success in higher education (Bhattacharyya et al 345; Wang 1081; Aschbacher et al 564). The final and most telling steps in preparation for entry into a professional doctoral program are taken during undergraduate education; a time when the academic and personal demands of adulthood can prove to be a daunting challenge that requires not only an astute advisor to shepherd URM student achievement, but an entire academic community that fosters a supportive, nurturing, and inclusive college experience (Palmer et al 491).

At each time point, physical therapist education programs and all other stakeholders have a unique opportunity to positively influence future successes of URM students as physical therapists. To these ends, ACAPT, APTA, physical therapist education programs (both through faculty and current student participation), and URM clinicians should partner to dedicate attention and commitment to developing resources that will ensure successful outreach and support to URM students throughout their academic experience. The educational pipeline model has been leveraged by many undergraduate institutions for successful recruitment, matriculation, and retention of URM students, yet very few physical therapist education programs invest in its proven success (Cantor et al 772, Nuciforo 39). Efficacious outcomes stem from direct interaction of the aforementioned stakeholders with middle school, high school, and 2-year/4-year college URM students, but also by creating a robust infrastructure that includes informing middle school and high school teachers and counselors about what physical therapists do. Educating undergraduate and graduate school advisors about the most attainable coursework loads and direct pathways (ie, course selection and major designation) to secure access to and facilitate entry into a professional physical therapy education program is critical.

The following suggestions serve as examples of viable and implementable resources for establishing and supporting a self-sustaining URM student pipeline into physical therapist education:

- Begin outreach efforts at the elementary school level to take advantage of a developmental “impressionable” period that utilize current DPT students to reinforce the “you can be me” marketing approach.
- Emphasize the “Doctor” of Physical Therapy as an alternative track to the “Doctor” of Medicine.
- Help URM students to navigate and access the system properly by educating influential figures (ie, elementary and high school science teachers, high school counselors, coaches and physical educators, undergraduate and graduate advisors, etc.) about successful preparation for a physical therapist career that includes self-exploration, coursework selection, class load, remediation, and test preparation.
- Develop audience-targeted workshops, such as the planned session at the 2016 NAAHP National Meeting, that outline and highlight curricular and extracurricular requirements for entry into physical therapist education programs, academic support resources, shadowing and clinical exposure opportunities, etc.
- Enlist the efforts of practicing URM clinicians in building a vision of physical therapist as a high job satisfaction and rewarding career choice in the minds of URM students.
- Foster a culture of “pay it back” by “paying it forward” among practicing URM clinicians that enhance their participation in outreach efforts.
- Emphasize and highlight aspects of the profession that might resonate with many students (ie, the opportunity to build relationships with patients, the role of physical therapists as teachers/coaches/educators of their patients, and the opportunity to develop private practices within their communities).
- Identify first generation students as a URM subset that is particularly disadvantaged and would benefit from recurring interactions and formal relationships with role models/mentors affiliated with physical therapist education programs.
- Establish a progression pathway of URM student to clinician to mentor.

**Recommendation 3: Develop a new task force to create a pre-DPT admissions structure to simplify and standardize prerequisites across programs and revise the course prerequisites policy to state that programs should not exceed the standardized set.**

SS: Despite ACAPT’s policy regarding standardized prerequisite coursework, considerable variation exists across physical therapist education programs; there are no universal core prerequisites that satisfy application and admission requirements for all currently accredited programs. (See table 8 in Appendix B.) Thus, the lack of consensus continues to represent another barrier for URM student preparedness and access to educational opportunities. With the advent of PTCAS, logic would suggest that the ease and convenience afforded by the service may itself be an impetus for all programs to align with common or core prerequisites to avoid a measureable shrinkage of their applicant pools. Current data attests that this

has not been the case for absolute numbers, but the URM applicant pool has remained consistently lower than desirable and impedes progress in increasing diversity within the profession. Further studies are required to determine if having a larger number of unique prerequisites is associated with a less diverse applicant pool and student body and further undermines diversity goals. If so, this finding itself would advocate for implementation and application of a universal prerequisite course plan.

The strides made by ACAPT in adopting a common set of prerequisites for recommendation to all physical therapist education programs need to be bolstered and advanced with renewed vigor to continue making a significant impact on increasing diversity in physical therapist education. A new task force should be created to highlight points of commonality and identify the factors that reinforce program-specific deviations preventing the adoption of a unified prerequisite core set. By encouraging programs to revisit the rationale behind applying unique or uncommon prerequisites, the new task force will help to lay the foundations of mindful dialogue culminating in consensus. Without this focused effort, URM students and their advisors will continue to experience difficulties in crafting a plan of study that prepares them for the application process and positions them for success.

Additionally, the Graduate Record Examination (GRE) is not required by all physical therapist education programs, and an argument can be made that it is not the best indicator of exemplary and desirable attributes for prospective DPT students, nor is it the best predictor of academic and licensure success (Dockter 60, Kosmahl 52, Thieman et al 32). This disparity may discourage some URM students from applying to programs that require the test in favor of applying to those that have no such requirement, potentially blocking access to better aligned aspirations and opportunities. Other health professions have successfully developed and implemented profession-specific entrance examinations, such as the Medical College Admission Test (MCAT), Pharmacy College Admission Test (PCAT), Dental Admission Test (DAT), and Miller Analogies. ACAPT should advocate for an alternative standardized examination for the DPT admissions process.

The following suggestions serve as examples that should be included in the charge of the new task force:

- Replace the GRE with a physical-therapy specific examination to measure foundational knowledge and assess a critical thinking skillset and preparedness for physical therapist education.
- Explore what advances programs have made to map course prerequisites to college majors and course tracks at undergraduate institutions with the overarching goal of highlighting best practices.
- Promote the alignment of course prerequisites for physical therapist education programs with college majors/tracks that do not conflict or are otherwise irreconcilable with undergraduate degree requirements. Both advisors and students should be aware of the possibility that within a specific major, the Bachelor of Science degree (over the Bachelor of Arts degree) usually aligns more closely with the prerequisite coursework and better prepares the student for success once admitted to a physical therapist education program.
- Identify roadblocks to broadly and universally applying a common core of coursework and experiential prerequisites so that access to a larger number of physical therapist education programs by URM students is facilitated and valued.

**Recommendation 4: Provide programming and resources to help promote the use of holistic admissions strategies at physical therapist education programs.**

SS: The terms “holistic” and “whole file review” refer to the practice of evaluating applicants in accordance with criteria that extend beyond the usual metrics: grades and standardized test scores. AAMC defines holistic review as “a flexible, highly-individualized process by which balanced consideration is given to the multiple ways in which applicants may prepare for and demonstrate suitability as medical students and future physicians. Under a holistic review framework, candidates are evaluated by criteria that are institution specific, broad-based, and mission-driven and that are applied equitably across the entire candidate pool.” (Addams et al)



One goal of a holistic process is the assembly of a diverse student body. A key tenet of holistic review is the creation of a diverse learning environment to benefit all students and provide teaching and learning opportunities that more homogenous environments do not. (Milem 126) With the growing recognition that standardized test scores and GPAs do not capture the breadth of experiences and personal qualities an applicant brings to the university and the profession, many schools have begun to incorporate “holistic review” into the admission process, with the goal of admitting a diverse body of students that will not only excel academically, but will also have the qualities needed for success in the current work environment.

Holistic review is an effective strategy for schools that seek to increase the number of URM students and develop an inclusive, positive learning environment that supports all student success. Moreover, the impact of this holistic admissions process on matriculating student qualifications, retention, and outcomes is not adverse and in some cases may improve these metrics. (“Holistic Admissions in the Health Professions”)

The following suggestions serve as examples of strategies to better promote the use of holistic admissions in the DPT admissions process.

- Develop a hands-on guide on holistic admissions, consultants, workshops, collection of resources for programs to use.
- Develop programming at the Educational Leadership Conference (ELC) that is focused on holistic admissions.
- Help programs in PTCAS to better navigate and consider data to enhance URM applicant selection.
- Provide resources to assist programs in evaluating coursework completed at a community college in context of an individual’s full history: academic, personal, and work.
- Develop flexible degree options for undergraduate or professional students.
- Include URM student recruitment among the benchmarks of excellence measured by ACAPT, so it is embedded as permanent goal.

**Recommendation 5: Advocate for greater financial assistance for URM physical therapist students.**

SS: URM students identify the cost of education and lack of scholarships and grants as a leading barrier to pursuing a physical therapist career. Many of these URM students are the first in their families to earn a college degree (Student Survey of Minority DPT Students”; Nuciforo, 2014). Since income is closely related to educational attainment, first generation students likely do not have the financial support of their families to aid them in attaining a DPT degree. Due to the increased credit load and length of entry-level DPT programs, the cost of education increased; working while enrolled as a full-time DPT student is ill-advised. These URM students have likely already incurred greater debt attaining their undergraduate degrees than non-URM students and; therefore, the fields of medicine, pharmacy and dentistry may be more attractive because of the increased earning potential compared to a physical therapist. According to the qualitative analysis of data obtained from our student survey, competition from other health professions is one of the biggest challenges to recruitment of URM to the profession. While medicine, pharmacy, and dentistry are currently included in the list of health professions eligible for reimbursement under the National Health Service Corps (NHSC) Loan Repayment Program, physical therapy is not. Although, the APTA Minority Awards Program does provide support to 3<sup>rd</sup> year URM students, there is currently no award that provides support for 1<sup>st</sup> and 2<sup>nd</sup> year URM students.

Physical therapist education programs need to explore new and creative avenues to support URM students that meet their educational needs and do not adversely affect their financial aid packages from the institution. Loans are available, but few grants, scholarships, and awards are offered to students. Programs need to include other non-tuition based support for URM students. For example, at a program located at a Historically Black College and University (HBCU), DPT students can work in the department for an hourly rate of \$11.50 up to 40 hours per month. Because they are technically employed by the university, the money the students earn does not affect their financial aid package. Another innovative way to offset the high cost of attending a physical therapist education program is to assist URM students with meal and food expenses. At one university, DPT students who have a demonstrated financial need, are given access to a

food pantry supported by faculty and staff who provide monetary or non-perishable donations. These donations do not affect the amount of financial aid these students receive. In order to decrease financial restraints as a barrier to URM student recruitment and retention efforts, the following strategies should be given serious consideration:

The following suggestions serve as examples of strategies to enhance financial assistance for URM DPT students:

- Support APTA's efforts to add physical therapists to the list of health professionals eligible for the National Health Service Corps (NHSC) Loan Repayment Program.
- Create a new foundation to support awards for URM students in physical therapist education programs.
- Support programs in developing scholarship and/or award programs to recruit, retain, and graduate URM students who become licensed professionals.
- Provide financial support to DPT students early in their professional training.
- Explore other avenues of providing URM students support throughout their professional DPT education (ie, Create a loaning library to offset textbook costs; support conference attendance; provide donated laptops; create a network of volunteer physical therapists to provide URM students housing during clinical internships, etc).
- Collaborate with APTA Government Affairs, APTA Student Assembly and educational programs to achieve this objective.

**Recommendation 6: Recommend PTCAS explore the feasibility of automatically identifying applicants from medically underserved areas (MUA) and applicants who may be from underrepresented areas or educationally disadvantaged backgrounds using the applicants' permanent addresses and the Health Resources and Services Administration (HRSA) MUA list or other sanctioned documents that indicate geographic or educational disadvantages.**

SS: The Health Resources and Services Administration (HRSA) defines a medically underserved area (MUA) as an area "having too few primary care providers, high infant mortality, high poverty or a high elderly population"<sup>1</sup>. Health professional shortage areas (HPSAs) are defined as "having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center or other state or federal prisons)." ("MUA Find") The 2015 survey of currently enrolled DPT students conducted by the task force showed 4.4% of respondents indicated they are from a MUA or HPSA.

Evidence indicates students from MUAs tend to return to practice in their home region or a similar type location (Daniels 62). The ability for programs to more readily identify applicants through PTCAS from a MUA or HRSA adds to the benefits of a holistic application process in identifying characteristics of students who will meet societal needs and patient centered care.

**Recommendation 7: Collaborate with APTA and Student Assembly to develop [reinvent] a mentoring network to match URM prospective students with current URM DPT students, and current URM DPT students with new URM professionals.**

SS: Establishing a mentored-pipeline mechanism within the profession will support the development of URM clinician and academic leaders. Evidence from physical therapy, as well as dentistry and pharmacy, indicates that ethnicity and racial composition of the mentoring pair support comfortable and meaningful connections that reinforce coping and professional development (American Dental Education Association; Sin, Pathickal, & Li 1619). The DPT degree may be a barrier to URM students, and our survey indicated that 20% or more of students in ethnic and racial minority groups report being first-generation college students. These facts combine to make the need for mentoring at every level from pre-DPT to practice and beyond imperative to achieve a professional demographic that matches the US population, both in the clinic and in academe. See recommendation #9.

The following suggestions serve as examples of strategies to develop a network of URM physical therapist students, faculty, and clinicians:

- Develop multimodal educational programming focused on training URM mentors, developing mentoring programs, and establishing evidence for mentoring models that target URM outcomes (eg, APTA Learning Center course on mentoring).
- Provide support for participants and trainees.
- Establish a registry for each level of the “PT Pipeline” that is not best-served by program-specific mechanisms, and recruit and identify the following:
  - URM DPT students willing to serve as peer mentors.
  - New URM graduates willing to serve as student mentors.
  - URM clinicians and URM academics willing to serve as mentors.
- Promote mentoring network, once developed, to APTA Sections.
  - Connect experienced URM PTs with new URM professionals within specialty areas of practice, research, and teaching.
- Create incentives to keep new URM physical therapists engaged in this mentoring pipeline.
- Develop an awards program to recognize mentoring efforts of URM faculty and clinicians. (Previously, a member-based, financial award to members.)
- Award new URM graduates for going into underserved communities to promote the profession with goal of increasing diversity in the pipeline. (Idea is consistent with existing minority awards program and will require communication between ACAPT and APTA regarding ongoing and overlapping efforts and programs.)

**Recommendation 8: Promote the development of faculty and clinical residencies for URM graduates at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs).**

SS: The physical therapist profession is lacking URM faculty in educational programs which may be an unidentified barrier to recruiting and retaining URM students. According to Nuciforo, URM applicants are significantly more likely to apply to physical therapist programs that have URM faculty. (Nuciforo 39) Program faculty who are themselves members of an URM can serve as role models and mentors for prospective and current URM students. Currently, there does not exist a “pathway” or “pipeline” for URM graduates to become academicians in DPT education programs. In fact, there are no physical therapy faculty or clinical residency programs located in or affiliated with any of the 8 DPT programs located at HBCUs or the 14 DPT programs located at HSIs. DPT programs at HBCU and HSI institutions enroll on average a larger percentage of URM students. The deliberate development of physical therapy faculty and clinical residency programs at HBCUs and HSIs would provide a direct pipeline for those URM students who have an interest in academia and prepare better prepare them for faculty positions. By increasing the number of URM students in DPT education programs and providing a pipeline for these URM graduates to become faculty members, the profession will come full circle in its efforts to meet the needs of an increasingly diverse society and deliver better patient care outcomes.

The following suggestions serve as examples of strategies to develop faculty and clinical residencies for URM graduates:

- Collaborate with APTA to offer assistance to programs at HBCUs and HSIs in developing faculty or clinical residency programs.
- Offer special invitation to faculty at HBCUs and HSIs to attend workshop to guide them in the development of faculty or clinical residency programs.
- Solicit faculty from existing faculty or clinical residency programs to mentor faculty from HBCUs/HSIs in developing their faculty/clinical residency programs.

**Recommendation 9: Prioritize a research agenda to further understand factors and provide evidence to support URM student choice of a physical therapist career.**

SS: Review of the literature on increasing URM diversity in health professions and of the task force survey (soon to be submitted to JOPTE) have identified several factors that may enhance recruitment and retention of URM students. However, additional and ongoing studies are needed to refine our understanding of these factors, particularly as the demographics of our society continue to change over the next several decades. For example, we know that awareness of and exposure (direct or indirect) to the profession play a pivotal role in a URM student's decision to pursue a physical therapist career. However, we do not know the relative hierarchy of these influences in impacting URM student choice. A more refined understanding of the prioritization and relative weights of these factors on URM student choice may result in better allocation of resources to steer URM students towards a physical therapist career.

A number of relatively recent studies have examined factors that predict graduation and licensure success of physical therapist students. (Williams et al 14; Fell et al 13; Kosmahl 52; Nuciforo 112; Zip et al 138). Although demographic data may have been analyzed in these studies, they only addressed age, race, or ethnicity attributes of students. Three studies specifically included race and ethnicity and their relation to student success in physical therapist education programs (Dillon & Tomaka 14; Shiyko & Pappas 29; Utzman, Riddle, & Jewel 1164) However, no studies have investigated all aspects of URM DPT students (students from underrepresented races and ethnicities and from geographically underrepresented areas, lower economic strata, and educationally disadvantaged backgrounds) in relation to their abilities regarding retention, graduation, and licensure pass rates. The low number of URM students in a given program may preclude such a study. The pooling of URM students' data across programs may instruct on the set of factors that predict their graduation/licensure success. Such a study and the factors it identifies would go a long way toward increasing our understanding of successful strategies with URM student recruitment and retention in physical therapy.

The following suggestions serve as examples of additional studies of URM students that could be pursued:

- What is the hierarchy of influences in choosing a physical therapist career and program, and what is the impact of different types of exposure on career choices?
- Are patient experiences with a physical therapist more influential to URM students than experiences with a family member or shadowing?
- If volunteer physical therapy observation hours were eliminated as an admission requirement across all programs, would fewer URM applicants pursue the profession because they were not exposed to it?
- What are the predictors of success for URM students (versus all students)?
- Is “resilience to adversity”, “grit” score, or underdog story a predictor of success in a physical therapist education programs?
- What do alternative progression plans look like?
  - What number of students on average per year are moved into or elect to progress via these alternative options?
  - What percentage of students who enroll in these alternative programs graduate and achieve first-time pass of the licensure exam?
  - How do programs leverage resources (financial and faculty) to support these alternative plans?

**Minority Student Recruitment Strategies for Physical Therapist Education Programs**

Achieving a physical therapist professional body that represents our evolving patient-demographics will arguably require that all educational programs participate in the recruitment and retention of URM students. Understanding that each physical therapist education program will have its own assets and constraints, the following menu of strategies extend from extant literature (ADEA, 2011; Haskins & Kirk-Sanchez, 2006), our review of exemplar physical therapist education programs, and our survey of programs and students.

The ACAPT Board of Directors is encouraged to share the following recommendations with physical therapist education programs to support the recruitment and retention of URM students:

- A. Recruitment. To make efforts toward growing the number of URM applicants and enrollees, programs should adopt one or more of the following strategies:
  - 1) Include URM student recruitment as part of the program mission.
  - 2) Include URM students, faculty, and clinicians in URM student recruitment efforts.
  - 3) Acknowledge applicant efforts and mastery of course content by not penalizing applicants in the admissions process who have repeated courses; accept an applicant's highest grade achieved for a given course.
  - 4) Use social media to connect to pre-DPT students. (Twitter, Facebook, Instagram and other social media were identified in the task force student survey as effective, desired, and low-cost gateways.)
  - 5) Create more scholarships to attract and support URM DPT students.
  - 6) Access the ACAPT website to develop specific recruitment materials to encourage URM students to consider physical therapy as a career choice.
  
- B. Retention. To make efforts toward growing the number of URM DPT students and graduates, programs should adopt one or more of the following strategies:
  - 1) Create more scholarships to support URM DPT students throughout didactic and clinical training.
  - 2) Develop and enhance pipeline mentoring and related resources to support URM DPT student confidence and sense of belonging.
  - 3) Develop individualized learning supports for students at-risk for deviation from direct progression; make a commitment to graduating admitted URM students.
  - 4) Develop and enhance URM DPT student and graduate opportunities to pursue a career in academia.

**APPENDIX B**

**Table 1: United States Census Bureau: Percent of Population by Race and Ethnicity (2010)**

	Total	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian, Other Pacific Islander	Two or More Races
US Population: Non-Hispanic/Non-Latino	83.7%	63.9%	12.3%	0.7%	4.7%	0.2%	1.8%
US Population: Hispanic/Latino	16.3%	14.5%	0.8%	0.5%	0.2%	0.1%	0.4%
Percent of Total US Population	100.0%	78.4%	13.0%	1.2%	4.9%	0.2%	2.3%

**Table 2: Comparison of the US Population to the PTCAS Applicant Pool in the 2014-15 Cycle**

	Hispanic /Latino*	Black or African American	American Indian and Alaska Native	Native Hawaiian, Other Pacific Islander	URM Sub-Total of %	2 or More Races **	Total URM %
US Population	16.3%	13.0%	1.2%	0.2%	30.7%	2.3%	33.0%
All PTCAS Applicants in 2014-15	7.7%	4.8%	0.1%	0.1%	12.7%	4.6%	17.4%
Accepted PTCAS Applicants in 2014-15	6.2%	2.7%	0.1%	0.1%	9.1%	4.2%	13.3%

Race and ethnicity categories in Tables 3 and 4 are mutually exclusive. The percentage of Hispanic and Latino applicants appears to be significantly higher in the 2013-14 and 2014-15 cycles because Hispanic or Latino applicants who also selected a race on the PTCAS application in previous cycles were categorized as “2+ Races/Ethnicities”.

**Table 3: Percent of All PTCAS Applicants by Admissions Cycle, Race, and Ethnicity**

<b>RACE/ETHNICITY</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Hispanic/Latino	0.6%	2.5%	2.2%	2.3%	7.3%	7.7%
African-American/Black (non-Hispanic)	4.5%	4.9%	4.7%	4.8%	4.5%	4.8%
American Indian/Alaskan Native	0.3%	0.3%	0.3%	0.2%	0.2%	0.1%
Asian	6.8%	6.6%	7.3%	7.3%	8.4%	9.2%
Hawaiian/Pacific Islander	0.7%	0.6%	0.5%	0.4%	0.1%	0.1%
White (not of Hispanic origin)	68.4%	66.0%	65.7%	66.1%	65.8%	66.1%
Decline to State	9.8%	13.8%	13.5%	12.2%	9.4%	7.3%
2+ Races/Ethnicities & Other	7.3%	5.4%	5.8%	6.6%	4.4%	4.6%

**Table 4: Percent of Accepted PTCAS Applicants by Admissions Cycle, Race and Ethnicity**

<b>RACE/ETHNICITY</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Hispanic/Latino	0.5%	1.9%	1.5%	1.8%	5.8%	6.2%
African-American/Black (non-Hispanic)	2.7%	2.8%	2.7%	2.7%	2.3%	2.7%
American Indian/Alaskan Native	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%
Asian	6.3%	5.6%	5.9%	5.8%	6.7%	7.6%
Hawaiian/Pacific Islander	0.5%	0.3%	0.3%	0.2%	0.0%	0.1%
White (not of Hispanic origin)	72.0%	69.8%	71.0%	70.9%	72.2%	72.1%
Decline to State	10.1%	14.2%	13.4%	12.6%	8.9%	7.0%
2+ Races/Ethnicities and Other	6.4%	5.2%	5.2%	5.8%	4.0%	4.2%

**Table 5: Percent of Students Enrolled in DPT Education Programs by Race and Ethnicity**

2014 – 15 Fact Sheets Physical Therapist Education Programs								
Enrollment								
Table 20 Percentage of students enrolled in programs, by race/ethnicity (%)								
	2004 – 05 N = 15,798	2006 – 07 N = 17,733	2007 – 08 N = 20,193	2009 – 10 N = 23,361	*2010 – 11 N = 22,332	2011 – 12 N = 24,848	2012 – 13 N = 25,945	2014 – 15 N = 28,514
African American	4.8 %	4.7 %	4.7 %	3.8 %	3.5 %	3.4 %	3.3 %	3.1 %
American Indian / Alaskan Native	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Asian	-	-	-	-	6.2	5.9	6.2	6.7
Asian/Pacific Islander	5.5	5.2	5.3	6.0	-	-	-	-
Caucasian	79.4	81.2	81.5	81.4	81.7	81.3	80.6	79
Hispanic/Latino	4.8	4.4	4.5	4.4	3.9	4	3.99	4.7
Native Hawaiian / Other Pacific Islander	-	-	-	-	#	0.5	0.4	0.5
Other	1.4	1.8	1.8	1.4	-	-	-	-
Two or more races	-	-	-	-	#	0.8	1	1.3
Unknown	3.6	2.3	1.8	2.6	3.4	3.7	4.1	4.3

- Not available.  
# Rounds to zero.  
\*In 2010 the categories changed due to change in IPED definitions.

*Race and ethnicity categories in Table 5 were revised by CAPTE in 2010 due to changes in the Integrated Postsecondary Education Data System [IPEDS] definitions set by the Department of Education.*

**Table 6: Percent of APTA Members by Race and Ethnicity (as of 4/4/2014)**

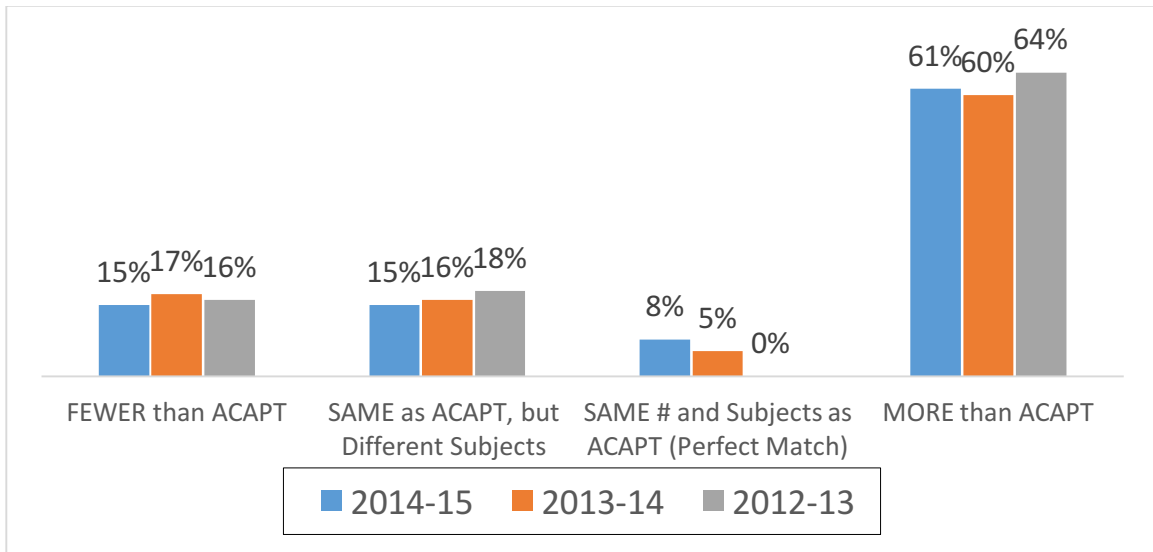
Race/Ethnicity – April 2014	PT	PTA	DPT Student	PTA Student	Post-Prof Masters Students	Post-Prof Doctoral Students	Life	TOTAL
American Indian, Alaska Native	0.5%	0.9%	0.4%	0.8%		0.3%	0.8%	0.5%
Asian	6.0%	2.8%	5.6%	4.0%	33.3%	10.9%	1.6%	5.8%
African American, Black	2.1%	3.0%	3.1%	4.8%		4.2%	2.7%	2.6%
Hispanic/Latino	2.8%	5.0%	4.6%	9.2%		3.9%	0.8%	3.7%
Native Hawaiian, Pacific Islander	0.3%	0.4%	0.6%	0.9%		0.0%	0.3%	0.4%
Other	1.9%	1.6%	2.1%	2.2%		4.2%	0.6%	2.0%
Total Percent of Minorities in APTA Member Category	13.6%	13.7%	16.3%	22.0%	33.3%	23.4%	6.9%	15.0%

**Table 7: Percent of APTA Members by Race and Ethnicity (as of 11/16/2015)**

Race/Ethnicity – November 2015	PT	PTA	PT Student	PTA Student	Post-Prof Masters Students	Post-Prof Doctoral Students	Life	TOTAL
American Indian, Alaska Native	0.4%	0.9%	0.3%	0.9%		0.3%	0.9%	0.5%
Asian	6.3%	3.4%	6.3%	4.9%	25.0%	7.8%	1.5%	6.0%
African American, Black	2.3%	2.9%	2.9%	5.3%		2.3%	2.7%	2.6%
Hispanic/Latino	2.9%	5.7%	5.4%	10.8%		4.9%	0.8%	4.0%
Native Hawaiian, Pacific Islander	0.4%	0.6%	0.5%	0.9%			0.3%	0.4%
Other	1.9%	1.9%	2.1%	1.7%		2.6%	0.6%	1.9%
Total Percent of Minorities in APTA Member Category	14.2%	15.5%	17.6%	24.7%	25.0%	17.9%	6.7%	15.5%



**Table 8: Course Prerequisites Comparison for Physical Therapist Programs in PTCAS**



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