

2017 BU PA Program Report Achieving our Program Goals

This document was created 3.5 years after the PA program at BU matriculated its first class. Most of the outcome data presented below relates to the final outcomes of the first two classes. The program goals are listed below and the corresponding achievements are italicized.

The goals of the PA Program are to prepare students intellectually and socially to:

Establish a therapeutic rapport with their patient which facilitates an accurate, patient-centered interview and physical examination,

- Review of our curriculum mapping and student evaluations suggests the program has sufficient and effective didactic and skills-related instruction in history taking and physical examination.
- In the last four months of the clinical phase, Classes of 2016 and 2017 preceptors rated our students as consistently effective for history-taking and physical examination skills. Relationships with patients were rated as consistently effective to exceeds expectations using the same scale.
- 2017 PA certification exam (PANCE) results revealed our students performed slightly higher than the national mean of other first-time test takers on the "History Taking and Performing Physical Exam" Questions.

Order appropriate diagnostic studies, interpret the findings, formulate a differential diagnosis, and in collaboration with both the supervising physician and the patient, develop an appropriate treatment plan,

- Review of our curriculum mapping and student evaluations suggests we have sufficient and effective didactic and skills-related instruction in clinical evaluation, formulating a differential diagnosis and developing treatment plans.
- In the last four months of the clinical phase, Classes of 2016 and 2017 preceptors rated our students as consistently effective in utilizing their knowledge of diagnostic studies, clinical reasoning and development of effective clinical managements plans.
- All students in the Class of 2016 passed the PANCE (PA certifying exam) on the first attempt (100%) and performed at the national mean of first-time test takers on ordering and interpreting diagnostic studies, formulating differential diagnoses and developing treatment plans.
- To date, all students in the Class of 2017 who have taken the PANCE exam have passed on their first attempt.

Be effective observers, listeners, communicators and diagnosticians,

- In the last four months of the clinical phase, Classes of 2016 and 2017 preceptors rated our students consistently effective to exceeds expectations in their relationships with patients and interactions with peers, physicians and other health care professionals. Students also were rated as consistently effective to exceeds expectations as clinical problem solvers and critical thinkers.
- Review of our curriculum mapping and student evaluations of the curriculum suggests we have sufficient didactic and skills related curricula to communication. Despite this fact, we will be

piloting some new approaches to communication skill development and assessment for the Class of 2020.

Use culture sensitivity to maintain empathy while caring for patients

- Our students are exposed to a variety of cultures at our clinical training sites and learn to communicate with patients of different races, religions, and nationalities including how to properly interact with interpreters.
- Preceptors for the classes of 2016 and 2017 report our students are consistently effective to exceeds expectations during their interactions with patients.
- The Class of 2016 self-reported that 42% of their patients were from African-American, Hispanic-Latino, or multiple racial backgrounds, which afforded them the opportunity to practice caring for a diverse population of patients. The Class of 2017 reported that 48% of their patients were from a background other than Caucasian.

Develop a trusting relationship with their supervising physician, while adhering to the concept of team-based care

- Our students learn to interact and work with physicians early on by giving them multiple opportunities to interact with attending physicians and medical students in various ways.
- The BU PA faculty model this goal as our team consists of full and part-time PAs and physicians.
- We provide a medical education fellowship to several rising second year medical students each summer to learn about PA education and to provide teaching assistance to our new PA students.
- PA students spend two semesters in the didactic year in the same classroom as BUSM second year medical students learning medicine, pathology and pharmacology. PA students take the same examinations and participate in the small group sessions with the medical students. Performance of the 2016, 2017, and 2018 first-year PA students demonstrate that the PA students achieved mean exam scores comparable to the medical students in each module exam.
- We also provide an interprofessional oral health curriculum where PA students get to learn from dentists and dental students and broaden their understanding of team-based care.
- In a novel primary care interprofessional collaboration, select PA students participate in a longitudinal primary care clinic with medical students, social work students and nutrition students.
- Evaluation by preceptors for the Classes of 2016 and 2017 students report that BU PA students are consistently effective to exceeds expectations in their interaction with the physician team.

Identify and respond to medical emergencies

- Each student completes an EM didactic module in the first year and a mandatory rotation in emergency medicine during the clinical phase. The Class of 2016 was rated consistently effective in the clinical preceptor evaluation of the student by the EM preceptors.
- All of our students are certified in ACLS before they begin their clinical rotations.
- On average, each PA student in the Classes of 2016 and 2017 self-reported caring for 100 patients in the emergency department during their clinical training.

Advocate for patient safety and participate in quality improvement

• Review of our curriculum mapping and student evaluations suggests we have sufficient and

effective didactic and skills-related instruction related to patient safety and quality improvement. In addition, certain clinical rotations have students participate in longitudinal QI projects.

- Our students are invited to join the BU student chapter of the Institute for Healthcare Improvement (IHI), which is an internationally recognized organization that promotes patient safety and quality improvement.
- Each 2016 and 2017 PA student successfully completed an analysis of a QI project in their Preventive Medicine course.

Practice medicine in an ethical and professional manner

- All of our students become certified by the Collaborative Institutional Training Initiative (in conjunction with the BU Institutional Review Board) in biomedical research ethics as well as both research and clinical HIPAA training.
- Preceptors evaluated the Classes of 2016 and 2017 students' professionalism mean score as consistently effective to exceeds expectations during the clinical phase of the program.

Identify gaps in the medical and educational literature by critical analysis and propose a novel research project to address the issues

- BU offers a rigorous research curriculum, which includes coursework, journal clubs, and culminates in the production of a hypothesis-driven thesis that helps students hone their skills in using medical literature to practice medicine and critical evaluate evidence.
- Each students' thesis project is archived in the BU Mugar library (n=54).
- Preceptors evaluated the Classes of 2016 and 2017 students' ability to use Evidence-Based Medicine as consistently effective in the clinical environment.

Care for patients from vulnerable populations in all health care settings, including patient centered medical homes and accountable care organizations,

- Our three major teaching hospitals: Boston Medical Center, Veterans Affairs-Boston (and Manchester NH) Healthcare System, and Roger Williams Medical Center care for large proportions of the NE region's vulnerable patient populations. The VA sites use the patient-centered medical home model and Boston Medical Center utilizes the accountable care organization model.
- According to the class of 2016 and 2017student logs, 24% of the patients seen by students were covered by Medicare whereas up to 40% of the patients seen either had no insurance coverage or Mass Health/Medicaid coverage.
- On average. each PA graduate has completed at least two rotations in the Veterans Health systems which exposed them to caring for veterans and the unique care environment.
- While students were educated in an environment caring for vulnerable populations, to date 26% are caring for underserved patients.

Demonstrate leadership by participation in volunteer and professional organizations.

• Our students established a tobacco cessation booth as well as an oral health screening booth in collaboration with Boston Healthcare for the Homeless. They performed volunteer screenings and education during a homeless women's health fair in the fall of 2014-2016 and will do so again in a few weeks (2017).

- One of our 2016 students completed an Albert Schweitzer Fellowship; the student was among the first PA students to be awarded this fellowship. The fellowship is an internationally renowned opportunity for rising leaders in community health. She completed a project called "Health Hearts for the Homeless" at a homeless shelter in Boston.
- Our students participate in the yearly Massachusetts State "PA Students on the Hill Day "in which students learn about the government and policy side of healthcare. They are given a crash course in lobbying and sent out to meet with state senators and representatives to advocate for the PA profession.
- One of our students in the Class of 2016 was in the inaugural class of PAEA Future Educators.
- In addition, 6 students have attended the AAPA Advocacy events in Washington, DC in order to learn more about leadership and advocating for the PA profession. Since the program's inception, more than 12 students have attended the AAPA annual PA conference.
- PA faculty are involved in many professional leadership activities. Drs. Berkowitz and White led the Massachusetts initiative to create PA competencies around safe opioid prescribing. Dr. White is the chair of one of the PAEA End of Rotation Exam committees). Ms. Reffel has attended her first PAEA Forum and served as a Moderator in 2016 and is slate to attend in 2017. Ms. Aliza Stern attended her first PAEA education workshop this spring and will attend the PAEA Forum in 2017. Ms. Warner is a feature editor for the Journal of PA Education, Chair of the NCCPA Board of Directors and an accreditation site visitor.