

COMPARING POSTBACCALAUREATE MASTER'S DEGREE PROGRAMS DESIGNED FOR PREMEDICAL AND OTHER HEALTH PROFESSIONS STUDENTS

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Background: Approximately 15% of medical students participate in post baccalaureate programs (PBPs) between college graduation and medical school matriculation.¹ Despite the number of PBPs growing rapidly, they remain a somewhat “hidden step” on the path to health professions school matriculation. Additionally, there is little to no comprehensive information available for students to use in comparing PBPs on measures of cost, program content, and student outcomes.

Objectives: To conduct a descriptive study of a subset of PBPs similar to the Duke School of Medicine Master of Biomedical Sciences program. To identify characteristics of the program's basic structure, curriculum design, faculty/student composition, and student outcomes.

Methods: We searched the publicly available PBP database created by the Association of American Medical Colleges². We identified 69 programs that 1) granted master's degrees and 2) were associated with schools of medicine. We developed an online survey and emailed these programs in March 2017 soliciting details regarding program structure, curriculum design, faculty/student composition and student outcomes. The Duke University School of Medicine IRB approved the project as exempted educational research.

Results/Outcomes/Improvements: Twenty-nine programs completed the survey, a 42% response rate. The duration of almost two-thirds of programs is 10-12 months. The average number of students who matriculate is 57, but the range is quite large (3-271). The average tuition is \$35,292, but varies ten-fold across programs (\$7000-\$70000). Most programs offer courses separate from the medical school (62%) and do not offer students clinical experience (77%). 57% of programs indicate recruiting students underrepresented in medicine is a priority. The majority of programs reported that 50% or more of their students have a strong science background. Less than half of programs (54%) do not know if their students' MCAT scores increase following program completion, or assist students in finding employment during any additional gap years (58%). Only a fifth guarantee interviews to medical school. PBP students matriculate to many types of health professions schools/programs, including medical school (both allopathic and osteopathic), dental school, nursing and PA programs. Students also matriculate to Ph.D. programs after completion of the PBP.

Significance/Implications/Relevance: Our study showed a lack of continuity among PBPs. In addition, we found that the AAMC database is not optimally maintained. This may impede both students in finding the program that best suits their needs and programs networking with one another. A standardized approach to describing program design, curricula, assessment strategies and student outcomes and implementing a mechanism to update this information annually would add significant value to students and programs.

References:

1. Grumbach K. Commentary: Adopting postbaccalaureate premedical programs to enhance physician workforce diversity. *Acad Med.* 2011;86(2):154-157.
2. Colleges AoAM. Postbaccalaureate Premedical Programs. 2017; <https://apps.aamc.org/postbac/#/index>.