

MEDICAL EDUCATION: PART II

#PROUDTOBEGIM EVENT INCREASES MEDICAL STUDENT INTEREST AND KNOWLEDGE ABOUT GENERAL INTERNAL MEDICINE CAREERS

Keri T. Holmes-Maybank, MD, MSCR; Marc E. Heincelman, MD; Zemin Su, MAS; Leah Snipe, MD; William P. Moran, MD, MS

Dr. Holmes-Maybank (holmek@musc.edu) is an assistant professor, Division of General Internal Medicine, Geriatrics, and Hospital Medicine, Medical University of South Carolina. Dr. Heincelman (heincelm@musc.edu) is an assistant professor, Division of General Internal Medicine, Geriatrics, and Hospital Medical University of South Carolina. Mr. Su (suzzem@musc.edu) is an instructor, Division of General Internal Medicine, Geriatrics, and Hospital Medicine, Medical University of South Carolina. Dr. Snipe (Leah.Snipe@gmail.com) is an internal medicine resident, Wake Forest School of Medicine. Dr. Moran (moranw@musc.edu) is a professor, Division of General Internal Medicine, Geriatrics, and Hospital Medicine, Medical University of South Carolina.

Background

shortage of 31,000 primary care physicians is predicted by 2025.1 The number of medical students choosing internal medicine residencies is much lower than in previous decades.^{2,3} Recent literature demonstrates only 20-25% of residents who chose internal medicine make a career in General Internal Medicine(GIM) compared to 54% in 1985.^{2,3} A previous study of U.S. medical students found intellectual challenge, patient care, lifestyle, commitment to patients, role models, and personal/professional satisfaction were important factors for choosing internal medicine careers.4 In 2015, the Society of General Internal Medicine (SGIM) launched the #ProudtobeGIM campaign to increase awareness about the field of GIM and encourage medical students and residents to pursue careers in GIM. Our institution hosted #ProudtobeGIM(PTBG) events for medical students in 2017 and 2018 with the objectives to increase medical student knowledge and interest in GIM; evaluate the effect of faculty "speed-dating" on medical student knowledge and interest in GIM; and assess medical student attitudes regarding career and lifestyle factors.

Fifty-one pre-clinical and clinical medical students in 2017 and 46 in 2018 at an academic tertiary care medical center attended a two-hour event which included dinner, three short PTBG videos (developed and distributed by SGIM), and faculty "speed-dating" that was comprised of inpatient and outpatient GIM faculty with diverse careers including research, education, leadership, and quality improvement. Faculty rotated six times to tables of five students for eight minutes to engage in discussions

with students about their passion for GIM and address any student questions. Forty-three students in 2017 and 39 in 2018 completed pre- and post-event surveys including demographics, interest in GIM, and knowledge of GIM. In 2018, surveys assessed the importance of lifestyle, patient population, income, intellectual challenge, career opportunities, commitment to patients, work hours, and mentors when considering a GIM career using a five point likert scale (strongly agree to strongly disagree). Additional post survey questions queried the impact of the event on knowledge and interest in GIM. The change in proportion for the paired categorical data was analyzed using McNemar's test. SAS 9.4 was used to perform all statistical analysis. For analyses, the likert scale data was collapsed into categories of "strongly agree and agree" as "important" and "neutral, disagree, and strongly disagree" as "not important".

Results

Participant characteristics were statistically consistent across the 2 years. Eighty-four and one-half percent (84.5%) of students completed pre- and post-surveys. Pre- and post-survey comparison found a statistically significant increase in medical student knowledge (*p*<0.0001) and medical student interest (*p*=0.0006) in GIM post event. And 100% of students felt faculty "speed-dating" increased interest and knowledge in GIM. On the pre-survey, students reported that commitment to patients, career opportunities, intellectual challenge, mentors, lifestyle, patient population, and work

continued on page 2

MEDICAL EDUCATION: PART II (continued from page 1)

hours were important factors when choosing a career in GIM. Students felt income was least important. All of these factors slightly increased after the event.

Discussion

The #ProudtobeGIM event held at our institution significantly increased medical student knowledge and interest in GIM. The increased interest in GIM was likely due to the "speed-dating" portion of the event in which faculty enthusiastically recalled the numerous reasons they chose a career in GIM as well as displaying the diversity of career options present in GIM. Previous studies revealed the importance of positive role modeling and attitudes among GIM faculty and residents for students choosing GIM.⁴

Similar to previous studies, medical students interested in GIM felt lifestyle, intellectual challenge, and commitment to patients were important factors to consider when choosing a career.⁴ Earlier studies have shown conflicting results regarding the positive influence of

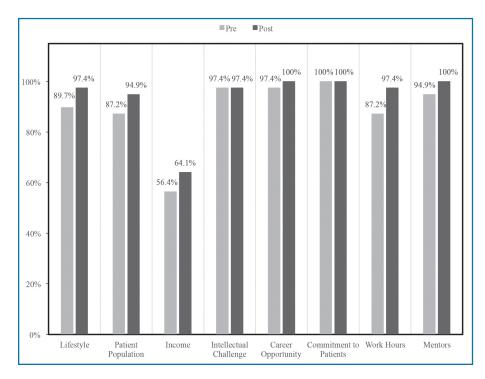
the patient population for choosing GIM.⁴ Our students strongly agreed that the patient population served by GIM was important to choosing a career. Income was not an important factor when choosing GIM which is consistent with previous studies.⁵

Limitations in this study include a single institution, small sample size, selection bias due to students self-selecting to attend the event, use of unvalidated survey items, and no measure of previous personal exposure to GIM.

This study suggests that an event incorporating multimedia presentations and "speed-dating" encounters with faculty can successfully educate students about careers in GIM and generate increased interest in GIM. Future studies will include follow-up on residency and career choices.

Ethical Considerations

This study was considered a Quality Improvement project instead of human subjects research by the Medical University of South Carolina and did not require review by the Institutional Review Board.



Acknowledgements

We would like to thank MUSC GIM faculty for their participation in the #ProudtobeGIM event.

Preliminary data was presented as an oral presentation at the Southern Society of General Internal Medicine in New Orleans, LA in 2018.

References

- Colleges AAM. The complexities of physician supply and demand: Projections from 2013 to 2025. Washington, D.C.: IHS, Inc.; 2015.
- 2. Internal medicine residency match results virtually unchanged from last year:
 American College of Physicians. https://acphospitalist.org/weekly/archives/2014/03/26/2.htm. Published March 26, 2014. Accessed May 1, 2019.
- 3. West CP, Dupras DM. General medicine vs. subspecialty career plans among internal medicine residents. *JAMA*. 2012;308(21):2241–2247. doi: 10.1001/jama.2012.47535.
- 4. Hauer KE, Durning SJ, Kernan WN, et al. Factors associated with medical students' career choices regarding internal medicine. *JAMA* 2008;300(10):1154-64.
- 5. Dorsey ER, Jarjoura D, Rutecki GW. Influence of controllable lifestyle on recent trends in specialty choice by medical students. *JAMA*. 2003;290(9):1173-1178. doi:10.1001/jama.290.9.1173.

SGIM