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Speed date our specialty: a novel event to increase students' understanding of family medicine

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ABSTRACT

The number of primary care physicians must increase in order to meet growing demand. Encouraging students' interest in primary care is an essential part of strengthening the primary care workforce. The Mayo Medical School Family Medicine Interest Group (FMIG) held an event modeled after "speed-dating" to introduce first- and second-year medical students to the specialty of family medicine. Pre- and post-event surveys were used to assess the impact of the event on students' understanding of family medicine. Students rated the event as valuable and reported significant improvements in their level of understanding of all aspects of family medicine queried with the exception of income of family practitioners. The Speed Date Our Specialty event was wellreceived by students and did improve their understanding of the scope of family medicine. Suggestions for improvements for future events include lengthening amount of time at each table and allowing more free time at the end of the event for students to speak further with individual physicians.

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INTRODUCTION

The challenge facing primary care today is one of increasing demand matched with decreasing supply. By 2025, the workload of primary care physicians is projected to increase by 29% from 2005, with only a 7% increase in the number of primary care physicians. [1]. In order to meet demand, an estimated additional 3,600 primary care graduates will be needed annually [1]. These generalists provide sweeping benefits to the systems in which they work. Patients with primary care providers tend to have lower health care costs, and healthcare systems that are based on primary care have better outcomes and quality than those that are not [2-5].

Given the need, the question becomes, "How can we encourage medical students to enter primary care?" Studies seeking to answer this question have found that students often identify a "lack of understanding of the specialties as a major impediment to their career decisions" [6]. Students have also reported that faculty role models played an important part in their choice of specialty, both positively and negatively [7,8]. Researchers have found that negative messages regarding family medicine are commonplace in medical education, and that early and accurate information about this specialty is needed [9,10]. The Family Medicine Interest Group (FMIG) at Mayo Medical School, Rochester, Minnesota, USA, decided to host an event recognizing National Primary Care Week that was designed to address these aforementioned issues concerning medical students' interest in primary care.

Utilizing an innovative approach modeled after "speeddating," small groups of medical students would spend a short amount of time at a table with experienced family medicine clinicians and then rotate to another table. Events using the "speed-dating" model have been reported in the literature as an effective method for pairing research mentees with mentors [11,12]. In our case, we needed an event that would raise awareness of family medicine while fitting within the tight time constraints experienced by medical students and faculty. Our intent was that students' understanding of the specialty of family medicine would be improved through this event.

METHODS

One hundred medical students from the first and second-year classes at Mayo Medical School (50 per class) were invited to the event via Outlook invitations. The research was exempted by the Mayo Clinic Institutional Review Board.

Description of event

The "Speed Date Our Specialty" event opened with a 20-minute presentation from a family medicine physician whose practice had spanned many roles within one community in an urban setting. The event was attended by 10 family medicine physicians. Four of the physicians were male and six were female. The goal was to showcase a variety of family medicine practices. The physicians that attended the event expressed interest and experience in rural health, global health, research, administration, obstetrics, women's health and residency training.

The speed-dating, or round-robin conversation, took place after the introductory presentation. Students sat in groups of four to six at five tables with one or two invited family physicians. They were given approximately 10 minutes to converse with the physician(s) at their table and learn about her or his practice. The conversations included discussion of specific practice interests, lifestyle, and how the physicians made their career decisions.

Evaluation

Pre- and post-event surveys were administered to the student attendees. Both pre- and post-event surveys contained questions asking students to rate their level of understanding of different aspects about a career in family medicine, including "Scope of care provided by FPs" and "Career opportunities for FPs" on a 1-5 Likert scale (Table 1). These one-page surveys are available from the AAFP's Virtual Family Medicine Interest Group [13].

In the pre-event survey, two additional qualitative questions were included that asked students to describe the most valuable source(s) of information they had previously used to learn about specialty choice in general and about family medicine in particular. The survey also inquired after students' questions about family medicine.

In the post-event survey, students were also asked to specifically rate eight characteristics of the event, including "Value of the topic," "Quality of speaker(s) delivery," "Length of presentation," "Time for discussion," and "Overall rating of presentation" on a 1-5 Likert scale. Students were also asked whether they felt the presentation was a valuable source of information about the specialty of family medicine (Table 2).

Data analysis

Table 1 demonstrates the comparison of the average scores between questions asked in both the pre and post event surveys along with the percentage difference. Unpaired t-test was used to evaluate for any significant changes in average scores. Average Likert scores were calculated for questions asked solely in the post-event survey (Table 2).

Table 1. Comparison of pre- and post-event ratings of students' understanding of different aspects of family medicine

Rate level of understanding of:	Pre-event average	Post-event Average	Percentage change	P-value
Scope of care provided by family physicians (FPs)	3.57	4.43	+24.1%	0.0006
Settings in which FPs practice	3.57	4.36	+22.1%	<0.001
Income of FPs	2.43	2.93	+20.6%	0.0867
Hours worked by FPs	2.86	3.71	+29.7%	0.005
Career opportunities for FPs	3.0	4.43	+47.7%	<0.001
Scope of FM residency training	2.79	3.71	+33.0%	0.034
Innovations in FM	1.92	3.39	+76.6%	0.001

Table 2. Post-event evaluation ratings

Topic evaluated	Mean score
Value of the topic	4.57
Quality of the content	4.43
Quality of the speakers delivery	4.64
Quality of visual aids	3.86
Usefulness of handouts (if applicable)	3.64
Length of presentation	4.29
Time for discussion	3.71
Overall rating of presentation	4.43

RESULTS

Out of the 100 students who received Outlook invitations to the event, 14 medical students attended the event and completed pre-event and post-event evaluations.

Thirteen out of 14 students reported that the speeddating event was a valuable source of information about the specialty of family medicine. One attendee did not respond to this question. Students reported significant improvements in their level of understanding of all aspects of family medicine queried with the exception of income of family practitioners.

The event was rated as average or above average with scores in the average to good range for usefulness of handouts (3.64 on a 1-5 scale), quality of visual aids (3.86), and time for discussion (3.71). All other aspects of the event received average scores in the good to excellent range (Table 2).

Students also responded to open-ended questions. Before the event, students were asked to comment on their previous sources of information about family medicine. Eight replied that shadowing had been a source of information, six received information from mentors or speaking with family medicine practitioners, and three had used the AAFP as a resource.

In the post-event survey, students were asked to note any remaining questions they had about family medicine. There was one student request each for discussion of income and fellowship opportunities. Global health and/or practicing abroad and questions about residency were mentioned by two students each.

DISCUSSION

The Speed Date Our Specialty event was generally well received by students. In particular, students rated the topic itself and the quality of the speaker particularly highly.

Students' understanding of all areas evaluated (except for income of family practitioners) improved significantly. Group conversations were fluid and undirected so we interpret this to mean that students felt comfortable inquiring about areas of interest.

Areas for improvement include visual aids, time for discussion, and handouts. The event program included brief information about physicians' training and current practice, as well as a summary of their unique interests.

The event went smoothly, although we would make some changes for future iterations. First, in order to ensure better student attendance, the event should be scheduled during a quieter period in students' studies. Because of stipulations of the American Medical Student Association (AMSA) grant, which was specifically to fund events for National Primary Care Week, we scheduled the event during the first-year Anatomy course, a typically hectic time for students. Consulting the school's academic calendar and working with students can help mitigate this problem. Second, it was difficult to encourage students to transition between tables. We would recommend a longer time period at each table, especially given students' lower rating for "Time for discussion". Another option would be to provide for more free time at the end of the event, so students could speak with the physicians whose practices they found most interesting. Third, judging from students' responses, improving quality of the handout and visual materials could improve this event. In order to facilitate networking between students and physician attendees, it may have been helpful to provide contact information on the handout in case students wanted to arrange educational experiences with the physician in the future.

Although this event was designed for the FMIG, a similar style of round robin conversations could be utilized to introduce medical students to either the variety of practices within a specialty or multiple medical specialities.

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Declaration: The authors declare that they have no competing interests.

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