

An orthopedic career fair: a novel recruitment event

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Since 1996, surgical residency programs across Canada have seen a steady decline in the number of applicants.¹ In the 2004 Orthopaedic Residency Match, 3 positions were not filled in Canada in the first iteration of the match.² According to results taken from the Canadian Resident Matching Service (CaRMS), from Match Reports and from the Postmatch Survey Reports from 1994 to 2004, the number of applications to orthopedic programs have decreased, and on 2 occasions during that time, several positions remained vacant after the first round of the match open to North American applicants. The lack of applicants for demanding surgical positions is not limited to Canada. The American Academy of Orthopedic Surgeons has recently introduced a video education program for medical students, entitled *Follow Your Path*.³ The program is described as a “grass-roots communications program designed to attract medical students to orthopedic residency programs.”³ Although interest in surgical programs has declined, applications to specialties perceived to have a better lifestyle, such as anesthesia and diagnostic radiology, have seen an increase in applicant numbers.^{1,4}

The importance of reference let-

ters in the CaRMS process has made the selection of electives critical in preparing a strong application, forcing students to consider their career choice early in their medical education. Traditional program recruitment strategies, such as journal clubs, career sponsored dinners, email lists and elective rotations, have not been sufficient in educating students about potential career choices. Faculty intervention tactics such as appropriate inpatient and outpatient clinical experience and role modelling may be needed to make surgery more attractive.⁵ It appears that an early positive surgical experience was the most influential factor in career decisions made by surgeons who are happy with their career choice.⁶ To assist medical students in evaluating orthopedic surgery as a possible career path, we designed, implemented and evaluated a 2-day orthopedic fair.

Career fair design and outcome

The fair provides students with valuable first-hand exposure to both academic and community orthopedists. We intended for the exposure to help students make insightful career choices, minimize the need for later

program transfers and improve overall career satisfaction.

The fair was scheduled during a break in the students' academic schedule and coincided with the completion of the musculoskeletal block. On the first day of the orthopedic fair, the students were paired one-on-one with a community orthopedic surgeon. Most students spent all or a portion of the first day in the operating room observing various surgeries. The remaining time was spent in office practice. The second day was a half-day of seminars presented by the academic teaching staff in a conference-style setting. The fair concluded with a lunch with orthopedic faculty members, which further facilitated active discussion.

Over 2 years (2003 and 2004), 37 undergraduate medical students from the Department of Orthopaedics at the University of British Columbia have attended the orthopedic fair. All 37 students submitted an application form and completed an exit questionnaire at the end of the weekend. The students enjoyed the time spent in the community with the orthopedic surgeons the most. As well, for the second day of instructional sessions, the students generally expressed a desire for a

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Accepted for publication Dec. 12, 2006

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more hands-on approach, such as the ability to participate in a saw bones session. Examples of student evaluations are presented in Table 1 and Box 1.

Discussion

The orthopedics fair was a novel recruitment event that was designed and implemented in response to a significant decline in the number of applications to orthopedic residency programs across Canada. Conventional recruitment strategies have not attracted enough students to a career in orthopedic surgery. Traditionally, factors such as specialty content, prestige, role modelling, opportunities for cognitive performance, personality characteristics and future financial remuneration have been important in the choice of specialty training by graduating medical students.⁵ Lifestyle issues are increasingly important to the current generation of students⁷; a recent study reported that medical students in the

top 10% of their class were increasingly choosing specialties that allowed the physician to control the number of hours devoted to practice.⁵

During the course of their early medical training, students do not have the opportunity to fully appreciate the complexities, demands and attractions of some of the specialized areas of medicine, which creates difficulty in choosing a residency. Also, students may be exposed to a specialty late in their education. As a result, they may not have sufficient time to complete an elective in that area, resulting in less competitive CaRMS applications. Our goal in creating the orthopedic fair was to improve students' ability to make an educated career choice by providing different aspects of the specialty early in their medical training. The students were exposed to a 2-day cross-section of orthopedic surgery. It has been established that increased exposure to procedures may influence students' career choices.⁸ Students

participated in surgery, office practice and subspecialty seminars and met with faculty and residents.

The most well-received components of the orthopedics fair were the students' individual time with the surgeons and the opportunity to assist in the operating room. This echoed the findings of O'Herrin and colleagues⁸ that surveyed students' experiences during their junior year of clerkships and found that the experiences that most influenced their ultimate residency and career choices were the number of surgical cases in which they participated and faculty interaction.⁸ Clinical faculty in private community practice may represent a large untapped resource for medical students, because their experience is often with surgeons with academic links to their university medical school.⁹

Part of our responsibility as medical educators is to ensure that students make an educated choice of focus within medicine. The orthopedic fair has been well-received by both the student and staff participants; we plan to continue the annual event. Other specialties have become interested in the event. As a result, it may be feasible to include a career fair week during the second year of medical school, which might allow students to select 2 or 3 areas of participation for the week. A concentrated event such as this allows for a focused introduction to specialty areas of interest early enough during training to facilitate educated elective choices. This early introduction may minimize errors in specialty selection and reduce transfers during the postgraduate year 1 (PGY-1) or PGY-2. Timing of the fair is critical; competition for residency positions in some specialties requires students to direct their electives at an early stage in their training. To obtain reference letters and exposure in different programs in Canada before the November CaRMS deadline, students must select their electives early in their junior year of training.

In summary, based on our experience, the orthopedic fair is a valuable

Table 1

Cumulative average for the first 4 questions in the exit survey

Question	Rating*	
	2003	2004
How well did the "fair" increase your understanding of surgery in general?	3.7	3.4
How well did it increase your understanding of orthopedic surgery in particular?	4.7	4.2
How well did it influence your choice of electives in the undergraduate program?	4.0	3.7
How well did it influence your choice of postgraduate training?	4.0	3.4

*Scale, 1 = not at all, 5 = extremely.

Box 1: Student testimonials after completing the 2-day orthopedic career fair

Comments

- "I found the experience in the operating room to be most enjoyable."
- "Community experience was very useful — nice to see community side rather than academic."
- "I enjoyed the diversity of presentations and the added personal stories about the practice."
- "Great spectrum presented and great opportunity for advice/ asking questions."
- "I really enjoyed scrubbing in and assisting with various surgeries."
- "The conversations with the different doctors helped me get an appreciation for what life is like in an orthopedic situation."

tool for students considering a career in orthopedic surgery. Further expansion of the fair concept may provide students with early exposure to specialty areas of interest.

Competing interests: None declared.

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