

SHADOWING PROGRAM

Students Get Early Exposure to Surgery

BY MARY HOPKINS

Tracey Dechert, MD, knows from experience that medical students are exposed to misinformation about the field of surgery. As a woman, she was actively discouraged from becoming a surgeon; as the faculty advisor to the student Surgical Society at BUSM, she often hears students tell her that before their surgical rotation they had never considered surgery because they either didn't understand the field, or held negative perceptions of it.

When Dechert came to BU's Medical Campus as an attending at Boston Medical Center (BMC), she never intended to focus on teaching. "I love the work because trauma, critical care, and emergency surgery are very busy. I also like the patient population of a safety net hospital and serving people who traditionally have not had access to high-quality care."

As Dechert got farther along in her training and career, she realized how much she enjoyed teaching and was named associate program director for the residency program in general surgery at BMC. "That is when it really hit. I started meeting with students who thought they were interested in surgery and who were brimming with ideas of what it meant to be a surgeon, many of which were inaccurate.

"I heard the stories and the rumors about surgeons when I was a student, and they weren't nice ones," recalls Dechert, associate professor of surgery and trauma surgeon at BMC. "I thought, after all of these years, this is still what students are hearing—and for women it is even worse. Students have told me about being discouraged not just by family members, but doctors in other fields of medicine and other students."

From her experience in the field, Dechert knew that perception and reality were quite divergent. She thought that if these students could be exposed to surgical care and practicing surgeons early in their medical school experience, they could make more informed decisions about their careers. "First and second years of medical school are learning all of the basics, but we can't wait until third year to let them see what surgery is about," she says. "Also, early student opportunities to experience medicine and surgery in practice can help motivate them. Seeing the light at the end of the tunnel, as it were."

As the faculty advisor to the surgery interest students, Dechert had a ready-made group of first- and second-year students who were considering surgery as a career path and who could benefit from a shadowing program. With the backing of the Department of Surgery, Dechert put together a program that offers students access to surgical situations and to both resident and attending surgeons years before their required surgical rotation.

A little more than a year ago, first- and second-year students began shadowing the trauma service. Dechert feels that with classes and

studying for exams students may only be able to shadow at night or on weekends, making the trauma service a good fit. The team works 24 hours a day, 7 days a week, and weekends and holidays. "A student can come in on a Saturday morning or Sunday night and our whole team is here—attending, fellows, chief residents, residents, interns, and third-year medical students," explains Dechert. "Students have the opportunity to learn about the different roles and gain experience at the different levels of training and providing care. They are linked with various members of the team—they can go to the Emergency Department to see what's happening with new patients or the OR, and if there is no surgery happening, they can go to the ICU."

Because each day and night can be different in trauma service, Dechert says the students are never bored, and they can shadow as many times as they want.

"The first night I shadowed the surgery team I witnessed a patient with penetrating trauma, a stab wound that required no surgical intervention, and the placement of a chest tube in a patient who had suffered bilateral pneumothoraces subsequent to an automobile accident," says David Cholak '16. "During perhaps my most arresting experience, I observed a patient with a ruptured abdominal aortic aneurysm. I was surprised by the willingness of surgeons and residents to facilitate my learning experience. As long as I wasn't immediately in the way, everyone was respectful and more than willing to shed light on what was going on at any particular moment."

Approximately 30 students have taken advantage of the program, and Dechert wants to increase this number significantly. She is looking for ways to get the word out to students, especially those who may not have considered surgery as an option. Dechert notes that surgery shadowing is not unique to BUSM, as in most medical

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schools, students can seek out surgeons to observe. "But the onus is on the student," she says. "Our program facilitates the experience for students, alleviating what may seem to them a daunting task of approaching an already-busy surgeon and asking for his or her time. The initiative comes from us, the surgeons."



Learning is enhanced by the firsthand exposure of shadowing, which connects students to the living, breathing expression of their studies. “The first year of medical school involves a significant amount of classroom and study time,” says Chris LaChapelle ’16, a program participant. “One can forget the reasons for embarking on the voyage of becoming a doctor.”

Students get to see the anatomic structures they have been studying in the lab in a live patient while the surgical team describes each step in a gall bladder removal or an appendectomy, for example. Step stools are provided for viewing surgeries from above, and students are encouraged to ask questions along with their third-year student counterparts who are on their surgical rotation.

“The most important learning moments for me have been unexpected and unplanned,” notes Tyler Robinson ’15, who has shadowed in surgery a number of times. “Chatting informally with interns, resi-

dents, fellows, and medical students has given me many different perspectives on surgery, career development, and work-life balance. It’s been great to be a second-year medical student and to shadow in my free time. I’ve been able to ask all the questions I’ve wanted without being responsible for knowing much or seeing to patient duties. My observations of serious cases being handled in the OR and ED have been pretty awe-inspiring, too.”

Robinson first met Dechert at a breakfast seminar to introduce general surgery to first- and second-year medical students. The seminar’s panel included two BMC surgical attendings and two recently matched BUSM fourth-years. “I was happy to see that all four were women, and I asked whether this perhaps signaled a change in the field of surgery, in being more accommodating to family and personal needs,” he says. “They all affirmed that surgery remained tougher than many other fields, but that it in no way prohibits you from having a quality personal life.”

Members of the Department of Surgery—as well as patient care providers from the specialties involved with surgical services like emergency medicine, anesthesiology, and radiology—have been very supportive of the shadowing program, and because the trauma service works as a team, members are used to being observed as well as teaching. Exposure to postgraduate training is another benefit of shadowing. “I got a snapshot into the life of interns and residents in a surgical program,” notes LaChapelle. “They offered invaluable information on how best to tackle med school and the pros and cons of surgical residency.”

Cholok describes his shadowing experiences as “illuminating.” He was struck not only by the mechanics of the surgical specialty, but also by the dynamics of comprehensive patient care. “I was able to witness the progression and transitions from emergency care, to radiology, and finally to the operating room, and was cognizant of the intricate collaboration between specialties at each stage,” he says. “My shadowing experience helped to actualize this ideal of teamwork in health care delivery, especially when manifested in an emergency or life-threatening situation. And, of course, I was amazed at the skill and dedication exhibited by the surgeons I shadowed.”

“This program allows medical students, before they define themselves, to have firsthand experience of real-life surgery in real time,” says Peter Burke, MD, BUSM professor of surgery and chief of acute

care and trauma surgery at Boston Medical Center. “Shadowing helps students make better decisions about what they want to do in an organized fashion. Mature and informed decision making helps to create better physicians who are really happy with the choice they make.”

To Burke, it is a win-win situation—students experience surgery early and deepen their clinical knowledge, while the field benefits by developing prospective candidates for surgical careers.

“We owe it to our students and their future patients to clarify and demystify the field of surgery,” says Gerard Doherty, MD, James Utley Professor and Chair of the Department of Surgery and surgeon-in-chief at BMC. “Through this shadowing program, students can learn how diverse the field is, and how interdisciplinary the practice is when done well. Many students who believe that they are destined for some other field (like I was) only find out how interesting surgery is when they are exposed to it directly. For me, that was late in my third year of medical school—it would have been much better for me if my school had had a program like this!” ■

(Left) Dr. Dechert, center, faculty advisor to the BUSM student Surgical Society, talks with medical student Brian Currie (BUSM ’15), a participant in the Department of Surgery’s shadowing program.

(Below) Medical students observe surgery as part of the shadowing program.

