



TAKEN FOR GRANITE: DMS and the University of New Hampshire are the lead institutions on a \$15.5-million federal grant to bring research opportunities to students and faculty members at eight undergraduate schools throughout the Granite State.

A \$4-million “ah-ha moment” in the OR

New bureaucratic procedures are never popular, especially among surgeons, who have a reputation for autonomy. Yet a process for bringing new products into DHMC’s operating rooms (ORs) has gained the support of surgeons and holds the promise of saving \$4 million a year for Dartmouth-Hitchcock. The process was devised in part by a team of students from Dartmouth’s Tuck School of Business, including two students in the M.D.-M.B.A. program.

Afford: “I know a lot of us are very independent sorts and resent people telling us what to do,” says Dr. John Nutting, an orthopaedic surgeon at DHMC. But, he explains, hospitals can no longer afford the luxury of surgeons saying, “Get it in here because I want it.”

Under the new protocol, surgeons must complete a product request and cost analysis form any time they wish to begin using a new product in the OR that is not already on the hospital’s formulary—such as a specific tool, piece of equipment, device, or implant. A committee reviews the request, meets with the surgeon, and either approves the new product request or denies it. The protocol was built based on recommendations from the Tuck team, led by Kenton Allen, a DMS ’11. The committee meets bimonthly, but surgeons can also get quick, one-time approval for a product in emergency situations.

So far the committee hasn’t had to say “no” to any requests,

says Dr. Giridhar Venkatramen, an otolaryngologist who serves on the committee and advised the Tuck team on the project. Venkatramen, who himself has an M.B.A., has also worked as a business consultant. Surgeons often have what he calls “this ‘ah-ha’ moment” once they do the cost analysis. “Just going through the process educates the surgeons about the cost of what they are doing,” he says.

It’s important to get surgeons thinking about costs because every year, more and more new and expensive products are developed and marketed to surgeons. These products can represent a disproportionate share of total OR costs. For example, in 2009 at DHMC, implants that made up only 14% of total usage accounted for 26% of implant costs in Nutting’s specialty, shoulder surgery. (Implants can be as simple as a screw or as complicated as an artificial joint.)

Devices: Having so many different and often duplicative products in the operating rooms is not only expensive but also inefficient. Nutting and a fellow shoulder surgeon, Dr. John Bell, identified this problem several years ago when they realized that they each used different

equipment and devices to perform the same procedures.

“I’m an old guy,” says Nutting, “so I had been using certain equipment for a lot of years.” Bell, who had just completed his training, used different equipment. So the two decided to observe one another in the OR and learn how to use the equipment and devices that the other preferred. They then settled on one standard inventory that would meet both their needs.

They also had the DH purchasing department solicit bids from vendors to become the primary supplier for the shoulder surgery service. Over the next two years, from 2007 to 2009, those efforts shaved 23% off the total cost of implants for shoulder surgery alone.

Allen and his team studied

what Nutting and Bell had done and used that information as the basis for designing the new protocol. They also used the 23% savings to calculate the total potential savings—\$4.6 million per year—if DHMC implements the changes Nutting and Bell made across all surgical specialties. That would be “a real success,” says Allen.

Process: The Tuck students’ biggest contribution, says Nutting, was in defining and refining the process that he and Bell had devised. “I had the sense that things were better, but it hadn’t been quantified,” he explains. “There is a better process in place now.”

The new process may be “cumbersome,” he admits, and surgeons may “gripe and moan . . . but the reality is, in the long run, we’re going to be better off.”

JENNIFER DURGIN

“Just going through the process educates the surgeons” about costs.

JUNIPER TRAILS



M.D.-M.B.A. student Kenton Allen, right, confers outside the OR with surgeon John Nutting.