



Vanderbilt leaders are among those taking the patient safety training class. Left to right: Robert H. Ossoff, M.D., Vice Chancellor Harry R. Jacobson, M.D., (receiving his "flight wings"), Steve Harden of LifeWings Partners LLC, and Gerald S. Gotterer, M.D. Photo by Dana Johnson

## VUMC invests in patient safety training

by Paul Govern , May 21, 2004

Because no one has a great way to keep track of medical error and the harm it causes, gross estimates are all that experts can offer.

The Institute of Medicine puts U.S. deaths caused by medical error at between 44,000 and 98,000 per year. The lower of these figures is still more deaths than are caused by motor vehicle accidents.

Taking very steady aim at the problem, Vanderbilt has set out to do the utmost to keep patients from the harm posed by preventable human error.

“We’re putting Vanderbilt on a course to become one of the safest medical centers in the country,” said Harry R. Jacobson, M.D., vice-chancellor for Health Affairs.

Vanderbilt has long since earned distinction for network computer applications that support clinical decision-making, and in particular for creating an application called WizOrder that alerts users to potential medical errors.

It was just nine months ago, however, that Vanderbilt launched its greatest offensive against medical error, committing all clinical staff and faculty to changing the way work is performed in the hospital and clinic. The change began last August with the start of daylong training in crew resource management. The training is based on safety practices used throughout U.S. military and commercial aviation. Participants are awarded flight wings.

Though Jacobson no longer treats patients himself, he recently took the training.

“It’s very important for everyone who is responsible for the care our patients get to understand what crew training is about as a means of assuring safety,” Jacobson said. “That I and the rest of the leadership team are going through the training ourselves is in part also meant as a sign of how important we think this new approach will be for our patients and our organization. I am proud of my wings.”

According to F. Andrew Gaffney, M.D., associate dean for Clinical Affairs and chief quality and safety officer, several medical centers have begun to explore this approach to safety, but none are pursuing it to the depth and breadth that Vanderbilt is. Some 1,200 Vanderbilt employees have been trained, and the remaining 4,300 or so clinical faculty and staff will be trained soon.

The training is only an initial step, Gaffney said. The ultimate goal is nothing short of culture change. For that, VUMC has created a new job position devoted entirely to helping clinical teams apply the principles and practices covered in the training to their particular clinical areas. On April 12, safety expert Jeffrey R. Hill joined Vanderbilt’s Center for Clinical Improvement as associate director, crew resource management.

“We are fortunate to be able to call upon Jeff’s considerable experience in both military and commercial aviation as well as his expertise in teaching and implementing CRM in the health care field,” said Rhea Seddon, M.D., assistant chief medical officer. Gaffney and Seddon lead the safety program.

With budgets tight as ever in health care, large training programs and internal consulting positions must prove their worth.

“We’re confident that this is money and time well spent,” Jacobson said. “When you make an investment, you think not only of the cost, but also of the return. If we can improve safety and demonstrate that care is safer at Vanderbilt than elsewhere, then, in even greater numbers, people will want to work here and patients will want to come here.”

“What is missing in patient safety is the person who gets up and tells you, ‘I’m going to tell you how we made our hospital safe,’” Gaffney said. Vanderbilt intends to originate that role, he said, adding, “I don’t think we can fulfill our ambitions of becoming a top-10 medical school without having achieved a dramatic increase in patient safety.” He also said a 5 percent reduction in Vanderbilt malpractice costs would pay for the training program.

As aviation technology improved during the late 20th century, the role of human error in plane crashes became more apparent. Crashes were increasingly traced to poor communication among pilots, crew and ground control. Decades of study led the military to develop training to make safety awareness and good communication a habit among flight crews. Training in crew resource management is now mandatory for all U.S. military aviation units and airline crews.

After a national search, Vanderbilt engaged Memphis-based LifeWings Partners LLC, as a partner in the crew resource management program. Class size is around 40. Participants learn where patient safety breakdowns tend to occur, and good habits for avoiding them; the topics include team building, recognizing adverse situations, cross-checking and communication, decision-making and performance feedback.

“As humans, we all make mistakes. That’s predictable, but so are the fixes,” Gaffney said. “There is nothing proprietary or religious about this approach. Whatever you call it, if you have a safe, high-reliability organization, you are doing it.”

Gaffney said Vanderbilt surgeons and OR teams got a jump on this approach last May when they began doing group briefings before surgical procedures and running a checklist before starting any procedure.

“This is a perfect example of what we’re talking about,” he said.

The benefits have been dramatic. When hospitals measure wrong surgeries they count all unbeneficial surgeries, including those done on the wrong site, those begun and then cut short because no one made sure that the needed equipment was on hand, and so on. Vanderbilt completes around 35,000 surgical cases per year. Gaffney said that since May 2003 at Vanderbilt there have been no wrong surgeries, compared with 15 to 20 wrong surgeries per 100,000 surgical patients nationwide in the same period.

“It’s often repeated,” Seddon said, “that the most valuable person in any process is the one who has the information that’s needed, when it’s needed. The ‘resource’ in crew resource management is the information and skill that each person brings to the problem or task. Everyone is a resource.”

She said some clinicians have expressed concern that this approach may erode the team leader’s authority.

“What really happens is that leadership skills are enhanced,” Seddon said. “This approach makes you a better leader and you get more from your team, including their trust and respect, because you’re giving it to them.”

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