Examining patient Mr. Yao in the ED (l to r): 3rd-year medical student Seunggu Han, surgeon John Maa, MD, and emergency physician Steve Polevoi, MD, with the patient's daughter observing on the right.

Photo: Majed

It is 2 p.m. at the emergency department (ED) of a major teaching hospital, and a patient with abdominal pain is waiting to see a surgeon who can determine whether surgery is necessary to relieve an intestinal obstruction.

At most hospitals nationally, it takes nearly four hours on average before the surgeon on call becomes available, and even longer before the operation is finally begun. At UCSF Medical Center, the goal is for the patient to be seen by a "surgical hospitalist" in less than 30 minutes.

UCSF is the first academic teaching hospital in the nation to employ surgical hospitalists: doctors who are dedicated to evaluating patients in the emergency department, as well as those on inpatient wards who need a surgical consultation, and then caring for patients after surgery.

"Over the first year of our program, the average waiting time was 20 minutes," says Hobart Harris, MD, Professor of Surgery at UCSF and Chief of the Division of General Surgery. Hobart co-founded the surgical hospitalist program with UCSF Assistant Professors Jessica Gosnell, MD, and John Maa, MD. "It enhances both patient satisfaction and quality of care, and addresses vexing national problems: ED overcrowding and surgeon availability."
Emergency Care System in Crisis

Overcrowding is one of many problems confronting emergency medicine cited in two recent reports by the Institute of Medicine and by the American College of Emergency Physicians (ACEP) that describe an emergency care system in crisis. From 1993 to 2003, ED visits grew by 26 percent, while the number of EDs and hospital beds declined, forcing hospitals to "board" patients for 48 hours or more.

Surgeon availability is another major obstacle to timely quality care in the ED. General surgeons have been in short supply for many reasons, including the rising costs of uncompensated care, liability concerns, declining reimbursement, and increasing surgeon subspecialization.

In the past, at UCSF, surgeons took calls on a 24-hour basis. They were often busy during the day with elective procedures and clinics, delaying consultations for hours. In the meantime, patients in the ED or acute care ward were forced to wait for hours for the on-call surgeon to see them.

"Surgical care is increasingly complex, due to increased disease acuity and patient volume. So the dangers are greater, as you attempt to both teach and provide care simultaneously," Maa says.

With these problems in mind, UCSF reorganized its acute general surgery services into a hospitalist model, starting in July of 2005. Under the surgical hospitalist model, three full-time, board-certified general surgeons provide coverage on a rotating weekly basis, dedicating all of their time to ED and inpatient consults. Surgical hospitalists lead daily rounds, care for surgical inpatients and consults, and evaluate patients in the ED.

The program also makes them more available to oversee and teach the residents, nurse practitioners, and medical students who staff the hospitalist service. "This has helped to fulfill the traditional academic hospital mission to educate medical students and residents while delivering optimal and timely patient care", says program co-founder Jessica Gosnell.

In less than two years, the surgical hospital program has reaped tangible benefits: 85 percent of patients see a surgeon within 45 minutes, the majority in five to ten minutes. In a survey of UCSF emergency department physicians, all respondents felt that the surgical hospitalist program had improved timeliness of care, ED length-of-stay, resident supervision, patient satisfaction and the professionalism of the surgical staff.

Since the program was instituted in July 2005, waiting times for patients to get necessary surgery have been dramatically reduced, one...
of the program’s primary goals. The waiting time -- from ED triage to skin incision -- for the most common procedure, appendectomy, decreased 50 percent.

"When on-site surgeons are dedicated to emergency care, they can better understand problems with the institutional healthcare delivery system that need to be addressed through quality improvement efforts. That’s been an unanticipated benefit," says Maa.

The hospitalist model of care has also had success in other departments at UCSF. The medical hospitalist model, which was pioneered and instituted at UCSF in the 1990s, has helped reduce hospital stays and improve patient safety and quality of care. Medical hospitalists (a term coined by UCSF professor of medicine Robert Wachter) focus on caring for hospitalized patients of primary care providers during their hospital stay. This model has gained widespread acceptance, with nearly 20,000 hospitalists now working nationwide.

National Impact of Pioneering Programs

"The hospitalist field is the fastest growing specialty in the history of American medicine", states Robert Wachter. "The UCSF medical and surgical hospitalist programs, having improved the quality and efficiency of care on their own services, are now poised to partner to develop innovative ways to improve patient care and medical education."

Maa has presented results from the UCSF surgical program at national meetings, and the response has been very favorable. A first-year program report will shortly appear in the Journal of the American College of Surgeons. Several academic teaching hospitals across the country are considering implementing hospitalist programs. "Our program bears great relevance to academic teaching hospitals across the nation," say Maa. There is the potential to use this foundation to improve care in every type of practice setting."

"With surgical hospitalists, everybody wins," concludes Jonathan Carter, MD, a UCSF general surgical resident who has trained within the new model of care. "Patients wait less, referring physicians are happier, and residents benefit from the concentration of emergency surgical care onto a single surgical teaching service."

Future plans for the program include studying long-term outcomes, patient satisfaction, resident autonomy and quality of care, "which are very active areas of discussion nationally," according to Maa.

The Surgical Hospitalist program has also expanded in its second year, with the addition of Assistant Professors of Surgery Guilherme Campos, Eric Nakakura and Electron Kebebew.

**Source: Elaine Gottlieb and John Maa**