

# Hospitals Find Barriers to Rapid Response Teams

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PITTSBURGH — As more hospitals try to establish rapid response teams to handle decompensating patients, they often encounter entrenched cultures that may prevent the teams from proving their utility, several speakers said at a meeting on emergency response systems sponsored by the University of Pittsburgh Medical Center.

The teams go by different names: medical emergency teams (METs), rapid response teams, or critical care outreach teams. They are charged chiefly with trying to prevent cardiac arrest by intervening as early as possible. Typically, they are called when a patient is in respiratory distress, is hypotensive, has tachycardia, or has a change in consciousness (FAMILY PRACTICE NEWS, June 1, 2006, p. 64).

However, the teams frequently are seen as a challenge to the established order, and they may be met with resistance, said Dr. Michael Buist, director of intensive care at Dandenong Hospital in Melbourne, Australia. If a nurse calls in a team, the nurse may be perceived as going over the head of the attending surgeon or resident, Dr. Buist said at the meeting. Several other speakers described incidents in which nurses were left in tears by angry physicians, even though the patient was better off for the intervention.

At Dandenong, a study showed that even when criteria existed for calling a rapid response team, nurses did not make the calls in 17% of the episodes. This was partly because the nurses did not want to go against the established culture, he said.

Rapid response teams are set up to prevent codes, but many physicians and hospital staff enjoy the drama of a code, said Dr. Geoff Lighthall, of Stanford (Calif.) University. He noted that incoming residents in particular might savor those opportunities. "There's a machismo that goes with answering codes," he said.

At the University of California, San Francisco, Medical Center, the formation of a rapid response system was met with little enthusiasm, said Dr. Sumant Ranji, a professor of medicine. The hospital began a small rapid response program in mid-

2005, rolling it out slowly by talking about it at monthly ward nurses' staff meetings and through e-mails to physicians and announcements at house staff conferences.

Most of the coverage was during the day, by a team comprising a hospitalist, a second-year resident, and a clinical nurse-specialist. At night, coverage was by an on-call resident from the intensive care unit. Usage was low initially—about 1-2 calls per week, which amounted to 2-3 calls per 1,000 patients. This can be compared with the 25 calls per 1,000 patients seen with long-established programs at the University of Pittsburgh Medical Center hospitals, for instance, Dr. Ranji said.

He and his colleagues set out to determine why no one was taking advantage of the rapid response team. One finding was that there was a misperception about when the teams would arrive. During the education process, nurses and physicians were told to call the primary team first and then the rapid response team if there was no response or an inadequate response within an hour. What they heard was that the team would not come at all until an hour had elapsed and that if they called the team, the patient would definitely be taken to the ICU, he said.

Nurses were reluctant to break the chain of command, especially on surgical wards, he said. "This is not a culture that can change by one intervention," Dr. Ranji said. He also discovered that nurses and residents weren't calling the rapid response team because they made ample use of "curbside consults"—pulling ICU nurses or fellows aside in the hallway to get an informal opinion. "This might cut into our call rate for formal consults," he said.

There has been no change in the number of codes called or in the rate of in-hospital cardiac arrest or mortality, even though the response teams are now available 24 hours a day, 7 days a week, Dr. Ranji said.

As a result, the San Francisco university is questioning whether it is using the right model. The hospital is considering using an ICU clinical nurse-specialist or a nurse-practitioner as the point person for the teams in the hopes that ward nurses will be more likely to call on these colleagues for help—as opposed to having to

call physicians who aren't the primary ones on the patient team, he said.

It's been smoother sailing at the 300-bed Allegheny General Hospital, a tertiary care facility for Drexel University, Philadelphia. In the spring of 2006, the hospital added MET coverage to its code team. The MET has a hospitalist, ICU nurse, bed nurse, respiratory therapist, and intravenous team. The code team has a senior resident, ICU nurse, respiratory therapist, nurse-anesthetist or anesthesiologist, and senior surgical resident.

To facilitate use of the MET, ward staff are given laminated cards describing the teams—essentially who's on them and guidelines for when to call them—Dr.

Sharon Kiely, an internist at Allegheny, said at the meeting.

In March, there were 12 calls, 11 of which truly needed an MET; 46% of the nursing units had made calls. By April, there were 30 calls, 28 of which needed an MET. The numbers of calls were the same the following month, but 85% of the nursing units had made calls, Dr. Kiely said. Overall, 66% of the patients were transferred to a higher level of care, 26% were stabilized in their rooms, and the remaining 8% died.

Dr. Kiely said it appeared that the MET concept was well received. During meetings with house staff, almost all had agreed that it made sense, and there had been no complaints from nurses, she added. ■

## Rapid Response Pays, If Billed Correctly

Hospitals that employ rapid response teams are finding that it can be quite profitable—as long as they bill correctly for the services, Dawn Moody, R.N., a senior medical auditor, said at the meeting.

The care delivered by rapid response teams is considered critical care, which requires very different documentation than that provided for traditional evaluation and management, said Ms. Moody, who is in the division of general internal medicine at the University of Pittsburgh Medical Center.

First, it must meet the definition of critical care—the patient must have an illness or injury that impairs one or more vital organ systems to the point where there is a high probability of imminent or life-threatening deterioration of the patient's condition, she said.

The care does not necessarily have to be given in a critical care area, but the physician has to be completely devoted to that patient and not seeing any other patient during the time billed.

Time spent with the patient must be documented very specifically. A good way to do that is to include a note at the end of a patient's file stating that the physician spent 3 hours and 10 minutes managing the case. Physicians can include the time they spend away from the bedside if it is directly related to the patient's care. For instance, dictating or writing notes can be billed, as can time with families, if it is to get a

medical history, review a condition, or deliver a prognosis, Ms. Moody said.

There are two current procedural terminology codes used for critical care Evaluation & Management: 99291, which is used for the first 30-74 minutes, and 99292, which is used for each additional 30-minute increment. In western Pennsylvania, the local Medicare carrier reimburses the first 30 minutes of critical care at \$201.38, Ms. Moody said. That compares with a level V consult, which is reimbursed at \$189. The second unit of critical care and each unit thereafter is reimbursed at \$101, she said.

However, certain services can't be billed separately, including the interpretation of cardiac output measurements, chest x-rays, pulse oximetry, blood gases, gastric intubation, temporary transcutaneous pacing, ventilatory management, and vascular access procedures, Ms. Moody said.

There are also fairly strict criteria for critical care delivered in the academic setting. Critical care time can only be reimbursed when the resident and teaching physician both managed the patient together, or if the teaching physician was alone with the patient. Any time the resident spends alone with the patient—without the teaching physician around—can't be billed, she said, and most insurers will pay for only one physician's services per critical care episode.

## Simple Read-Back System Drops Pediatric Unit's Medical Errors to Zero

SAN FRANCISCO — Implementing a simple system of reading back medical orders reduced the error rate from 9.1% to zero in an inpatient pediatric unit, according to a poster presentation at the annual meeting of the Pediatric Academic Societies.

"Although this was a small study, these results are very encouraging," Dr. Michael Vossmeier of Cincinnati Children's Hospital Medical Center said in a

prepared statement. At Cincinnati Children's Hospital, rounds are conducted inside patients' rooms. The attending physician or chief resident communicates the order orally, and the resident physician enters it into the computer system.

Baseline data were gathered on 5 consecutive days. Each day, all orders entered during rounds were audited by an attending physician without the knowledge

of the residents. Of 77 consecutive orders, 7 were found to contain errors. Most of the errors were in dosages that would not have affected patient safety, but in two instances the intern wrote down the wrong drug.

Then Dr. Vossmeier instituted the new process. Before leaving the patient's room, the resident would read back the orders to the attending physician, and the attending would sign the orders

only if they were correct.

The procedure added less than 90 seconds to each patient visit, and it was well accepted by the staff.

Once again, data were collected on 5 consecutive days without the knowledge of the residents. Of 75 orders, there was not a single error.

"We're doing a follow-up study to determine if the results are sustainable and the process is re-

liable, but they appear to be very generalizable," Dr. Vossmeier said in the statement. "That's particularly important for tertiary patients, such as children with organ transplants, where proper doses mean so much." The meeting was sponsored by the American Pediatric Society, Society for Pediatric Research, Ambulatory Pediatric Association, and American Academy of Pediatrics.

—Robert Finn