

Rapid Response Teams: Best Option for Emergency Care?

- BY
- MICHAEL SMITH AND KATIE MOISSE
- ABC NEWS MEDICAL UNIT IN COLLABORATION WITH MEDPAGE TODAY
- Sept. 22, 2010
-
-



ABCNEWS.com

It's a scene played out in hospitals all over the United States -- a patient outside the intensive care unit begins to deteriorate and a highly trained rapid response team swings into action to perform a rescue.

It's the stuff of a television drama, and such teams -- widely used across the country -- "do save human lives," according to Eugene Litvak of the Institute for Healthcare Optimization in Newton, Mass.

But Litvak and colleague Dr. Peter Pronovost of Johns Hopkins University School of Medicine in Baltimore argue in the Sept. 22/29 issue of the Journal of the American Medical Association that they are a Band-Aid solution, needed only because hospital beds are poorly managed in the first place.

In fact, Litvak told MedPage Today, rapid response teams could save even more lives -- all hospitals would have to do is "throw patients in the parking lot, instead of providing a bed, and send the rapid response team."

"We would save even more lives because we would endanger more lives in the first place," he said.

In a commentary article in the journal, Litvak and Pronovost argue that the issue of rapid response teams is often debated but the central -- and often forgotten -- question should be: "Why are RRTs [rapid response teams] needed in the first place?"

But some physicians argue, when used properly, rapid response teams are very effective and can help keep patients out of intensive care units.

"They are not used as a replacement for intensive care. In many cases the RRT [rapid response team] is able to intervene on the floor care unit and avoid having to transfer a patient to intensive care," said Dr. M. Michael Shabot, chief medical officer at Memorial Hermann Healthcare System in Houston, Texas.

"In some of our largest hospitals we have months without a single floor care cardiac arrest and that can be fully attributed to [rapid response teams]. This is routine in our smaller hospitals."

Dr. Donald Goldmann, senior vice president of the Institute for Healthcare Improvement and professor of pediatrics at Harvard Medical School in Boston, said such approaches are crucial.

"If the intensive care unit is full, the hospital should have a system in place to unclog it," Goldman said. "If a patient in need of intensive care came into the emergency department and, because the system was clogged, got sent to a routine ward and 'went south,' that's not a good thing. Every patient who has signs suggesting that they could get in trouble should be sent somewhere where they can get the appropriate care."

What's So Bad About Rapid Response Teams?

The basic problem, the researchers argue, is periodic overcrowding, despite an average bed occupancy rate of about 66 percent. That periodic crowding increases stress on nurses and other care-givers and often makes it impossible to assign a patient an appropriate bed with an appropriate level of care.

As a result, some patients deteriorate suddenly and require the rapid response team, they argue.

"The cause is variability in patient flow," Litvak said -- as much as a 30 percent swing from one day to the next.

And the chief cause of the variability is not -- as most people would expect -- the ups and downs of accidents and sudden illnesses causing the emergency department to stagger under an unexpected load, he said.

Instead, the main cause of the unpredictability is elective surgery.

"The way we schedule our elective admissions is less predictable than when patients break their legs and come into the emergency department," Litvak said.

The way elective admissions are scheduled in most hospitals, he said, is a holdover from several years ago, when hospitals could afford to have enough staff to cover any peak load. Scheduling of admission was essentially left up to individual doctors, who consulted their own needs -- perhaps attending a conference or some other outside activity -- rather than those of the institution.

It was "absolutely un-coordinated," he said.

Today, when staffing levels are much lower, that system by and large hasn't changed, Litvak said, but now it causes problems.

Should Hospitals Explore Other Emergency Care Solutions?

Where it has changed -- using Litvak and his colleagues' ideas about patient flow -- the difference has been dramatic, he said.

At Cincinnati Children's Hospital, administrators took over scheduling elective surgery, reserving some operating rooms at all times for emergencies. Combined with other changes, that smoothed out patient flow.

The result, Litvak said, was that the average bed occupancy rate went from about 76 percent to about 90 percent, avoiding the need for a planned 100-bed expansion. Periodic overcrowding became much less common. And the streamlining meant the hospital increased its revenue by about \$137 million a year.

Litvak argues that if such changes took place across all U.S. hospitals, the saving would be about \$1 trillion over 10 years.

Rather than focus on the best way to organize and operate rapid response teams, Litvak and Pronovost argue in the journal, researchers should be looking at ways to improve patient flow "to provide each patient with the right care at the right time, not more and not less."

Goldmann, however, said such institutional reflection is already occurring, and there still exists a place for RRTs.

"We actively look at the patients who require a rapid response or a code and we try and determine if it was something that should have been predicted -- was there something we should have done differently," he said.

"I would be surprised if there aren't hospitals that are so overwhelmed by the volume in emergency rooms and the number of patients requiring intensive care that placing patients in a timely way in ICU is a challenge. I would hope that those hospitals are examining ways to unload their systems. It's like many other areas of quality

improvement where there are gaps and some institutions are further ahead than others, some are more challenged than others."