



Before Code Blue: Who's minding the patient?

Little-known 'failure to rescue' is most common hospital safety mistake

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High-profile medical errors such as operating on the wrong body part or receiving a mistaken dose of drugs should take a back seat to a far more common and insidious mistake, a new report reveals.

For the fifth straight year, an analysis of errors in the nation's hospitals found that the most reported patient safety risk is a little-known but always-fatal problem called "failure to rescue."

The term refers to cases where caregivers fail to notice or respond when a patient is dying of preventable complications in a hospital.

Between 2004 and 2006, failure to rescue claimed more than 188,000 lives, amounting to about 128 deaths for every 1,000 patients at risk of complications, according to the latest report from HealthGrades, a health care ratings organization.

That's far more than any other measure found in [the new study, which detected 1.12 million safety problems during nearly 41 million hospital stays](#) logged by the country's Medicare recipients. The mistakes, tracked in 16 areas, accounted for more than 238,000 preventable deaths over three years and an estimated \$8.8 billion in unnecessary medical costs, the report showed.

The numbers included 6-year-old Christian Padilla of Fort Wayne, Ind., who sailed through a successful heart surgery to correct a birth defect in 2005, only to die days later from the preventable complications that characterize a failure to rescue case.

"The nurse didn't recognize his symptoms as something of concern," said the boy's father, Jim Padilla, 38, an assistant professor at a local university. "She described him in her medical notes as 'acting fidgety.'"

In reality, the child was unconscious and suffering seizures as a result of the brain swelling that killed him, said Padilla, who received a \$1.25 million combined settlement from the Indiana Patient's Compensation Fund and Riley Children's Hospital, according to the Indiana Department of Insurance.

It's not clear whether a drug reaction or another problem caused the swelling, said Padilla, who was at his son's side, frantic, throughout the ordeal.

"We got to the point where I had asked multiple times: 'Should he be sleeping so long?'" he said. "Over and over, I was told this was normal."

The nurse's failure to notice Christian's subtle but increasing symptoms of distress is a key element of this measure of how well hospitals respond to unexpected complications — or don't, said Dr. Samantha Collier, chief medical officer for HealthGrades.

"As an example, somebody comes in for an elective surgery like a knee replacement and turns up with vague symptoms, like shortness of breath, and the next thing you know, somebody dies," explained Collier. "It's obvious that if you go in for a knee surgery, you shouldn't die."

When simple procedures go wrong

Failure to rescue is a marker that should concern anyone who's ever been a patient in a hospital. It predicts whether even simple procedures suddenly could go wrong, said Dr. Michael DeVita, a professor of critical care medicine at the University of Pittsburgh School of Medicine.

"It's before Code Blue," he said, referring to the common term for patients in acute distress. "Somewhere between two-thirds and fourth-fifths of Code Blue incidents are preceded by this."

Every year, at least 61,000 people die from failure to rescue mistakes, the report showed. The deaths have decreased by more than 11 percent since 2004, a bright spot in a study where about half of the patient safety indicators improved, but the rest didn't. Four important post-operative indicators got worse: respiratory failure, pulmonary embolism or deep vein thrombosis, sepsis and abdominal wounds that split open after surgery.

Overall, the rate of patient safety problems has remained steady at about 3 percent of Medicare hospitalizations, the report indicated. The percent of patients who died after enduring one or more mistakes dropped by nearly 5 percent, to about 26 percent.

Although HealthGrades has been measuring failure to rescue since 2002, when it counted some 200,000 cases during a three-year reporting period, the agency has changed how it analyzes data from the federal Agency for Healthcare Research and Quality, Collier said.

Critics charged that the agency was including patients who might have been predisposed to complications, artificially inflating the results, but Collier said those patients have been excluded from the new analysis.

Still, even 11 percent improvement isn't nearly enough in a condition that should be preventable, said Sean Clarke, associate director for the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing in Philadelphia.

"Failure to rescue is not whether you get the wrong IV in the first place," said Clarke. "It's how fast do people pick up that you're going south and turn it around?"

Too often, overworked, overwhelmed and inexperienced nurses and other hospital workers fail to notice basic problems, or to accurately interpret their meanings, said Clarke.

Surgery, painkillers raise risk

The two trickiest situations involve patients who've just come from surgery, or those who are taking medications for pain, Clarke said. In each case, subtle reactions can escalate from mild concern to near catastrophe within a matter of hours.

"It's the basics. It's about breathing, it's about circulation, it's about bleeding. Breathing issues are a huge, huge, huge deal," he said.

The situation is hardly new. The term "failure to rescue" was first coined in the early 1990s by Dr. Jeffrey H. Silber, director of the Center for Health Outcomes and Policy Research. He was looking for a way to characterize the matrix of institutional and individual errors that contribute to patient deaths.

Staffing ratios aren't everything

The ratio of nurses to patients is one measure of how well a hospital might control its failure to rescue rate, Clarke said. Just as important, however, is the education and experience of the nurses and whether they have the resources available to do their jobs.

"You can have what looks like a beautiful ratio of four patients to one nurse on a unit, but depending on how sick they are, that might not be enough," Clarke said. "And what about support? Is there someone there to answer the phone? Is there someone to get supplies?"

DeVita has spent two decades working to avert deaths caused by such lapses.

So far, the best way to deter the problem has been through the use of rapid response medical teams, DeVita said. Last year, small teams of specialists responded to 2,600 incidents in DeVita's hospital, rushing to a patient's bedside whenever several core triggers were tripped.

"The notion is to build an intensive care unit around any patient anywhere in the hospital building in just a

few minutes," said DeVita, who has cut unexpected deaths from 6.5 per 1,000 admissions to half that number.

The concept has been so successful that the Joint Commission, the national nonprofit hospital accreditation agency, now requires hospitals to have a system to detect patients in crisis and to respond immediately.

"For consumers, if a hospital doesn't have a rapid response team, I think they shouldn't be there," DeVita said.

That's only the first step patients and their families should take to avoid failure to rescue complications, said Collier. Family members should expect to become advocates for patients, watching for subtle signs of change and notifying staff if they occur.

"So let's say Mom goes in and she was sharp as a tack before surgery," Collier said. "You're sitting there and suddenly mom's not acting right. She knows who you are, but she thinks she's at home. That's the beginning of delirium."

Similarly, shortness of breath could indicate a growing circulation problem, and nausea could be a sign of an imminent heart attack, she noted.

Call 'Condition H'

In growing numbers of hospitals across the country, patients are allowed, even encouraged, to speak up by activating 'Condition H,' a code that summons immediate help. Patients call the same emergency number that doctors and nurses use. Worries of false alarms have proved generally groundless, Collier said.

Still Clarke worries about burdening patients and family members with the responsibility of monitoring.

"The onus shouldn't be on the patient to do our job," he said.

True enough, Collier said. But if consumers want to be certain they're not victims of the most common safety error in the country, they'll take on some of the responsibility themselves.

"Patients need to know that care varies widely," she said.

At Riley Children's Hospital, Christian Padilla's death sparked several changes, including an acute response team and a program that urges parents to seek information or voice concerns about their children's care, administrators said.

That's a comfort to Jim Padilla, now a volunteer patient advocate who often speaks to nurse's groups.

"I don't blame the nurses, I blame the system," he said. "But I still tell them, 'When you think you know the answer, you don't.'"

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