



Reducing ambulance diversions without compromising care

How one community hospital uses Code Gray and other tactics to avoid a saturated ED and ambulance diversions

By Debra Delaney, MS, RN, CEN

IN THE UNITED STATES, emergency department (ED) visits have increased by two million a year, while the number of EDs has decreased by 12%. In the past decade, we have had a net loss of 425 EDs. And this trend has led to a dramatic increase in the number of ambulance diversions.

For our small community hospital system, diversions became a reality when two struggling hospitals in a neighboring town merged, leaving one ED (and a satellite Urgent Care Center) to serve the two communities.

Responding to diversions

In response to the diversion problem, our hospital created an Emergency Department Performance Improvement team and invited representatives from both campuses. The membership included a representative of each ED staff position: a charge nurse, three staff nurses (one from each shift), a physician, a physician extender (a physician's assistant or nurse practitioner),

a secretary, a critical care tech, an ED educator, and a staff pharmacist.

The Emergency Department Performance Improvement team recommended these initiatives:

- Instituting a five-level triage system based on an Emergency Severity Index (ESI) to allow us to better identify critical patients and keep the charge nurse aware of the acuity level
- Bringing patients inside for in-room triaging, whenever possible
- Using wireless laptops to register patients at the bedside
- Implementing guidelines that address expected treatment plans for common diagnoses
- Using standing orders for the most common complaints, such as chest pain, abdominal pain, and pediatric fever, so care can begin before an ED physician sees the patient
- Identifying peak census times and adjusting staffing patterns
- Designating a prompt care area staffed by physician extenders

Assessing ED status

during peak hours to minimize delays for less urgent cases.

After we implemented these changes, patients moved more quickly through the ED, but we continued to back up because patients weren't moving from their ED beds to inpatient rooms. Despite our many improvements in the ED, throughput, boarding, diversion, and delays were still threatening patient care.

Hospital-wide flow team

Aware of the issues, management established a hospital-wide, patient flow team. Co-chaired by the ED and Inpatient Unit directors, the team includes senior administrators, nursing supervisors, the bed coordinator, physician leaders, registrars, and case managers. Ancillary adjunct members are invited to join when issues arise that require their input.

This team recommended several successful changes:

- *Conduct daily "bed huddles" at 9:30 a.m.* We assess the capacity status, using data from each department. When 80% capacity is reached, we plan a follow-up meeting for 12:30, and, if needed, a third meeting for the second shift charge nurses and house supervisors at 4:30 p.m.
- *Establish an 11 a.m. discharge goal.* Planning discharges for earlier in the day allows more patient movement. Hospitalists now assist by doing discharge assessments.
- *Have a patient-care facilitator.* Our hospital hired a person



This template helps staff determine the need for Code Gray.

whose sole responsibility is to determine who is coming and going.

- *Move patients to their rooms quickly.* Within 30 minutes of making a room assignment, we make sure the patient is moved to the room.
- *Initiate the hospitalist program 24/7.* To eliminate delayed admissions from the ED while waiting for physicians' orders, hospitalists are available 24/7 to admit, discharge, and assist, as needed.
- *Place patients in temporary boarding.* Admitted patients now remain in the ED until a bed is available.
- *Convert private rooms to semi-private rooms, when necessary.*

Code Gray

Our most recent tactic is a Code Gray policy, which is a mechanism to alert the entire hospital community that the ED is nearing saturation. Each department is responsible for having a plan that allows the ED to immediately decompress and delay or diminish the need for diversion.

On a template, inpatient managers update their unit's statistics regarding bed census, staffing ratios, pending admissions, dis-

charges, and available telemetry monitors throughout the day. During the other shifts, nursing supervisors update these statistics. On all inpatient computers, the staff can view the template as a read-only document to measure capacity and determine the need for diversion.

The criteria used to assess ED saturation include information such as the number of ambulance arrivals in the past hour, the number of mental health patients awaiting placement, the number of potential admissions, the number of ESI level 1 and level 2 patients, and the number of high-acuity patients. (See *Assessing ED status*.) When a combined capacity is reached, the ED charge nurse and attending physician or administrator call a *Code Gray alert*: A message then goes out as an overhead page by the hospital switchboard, by e-mail to all units and doctors' offices, and by pager to the rapid response team and supervisors.

We've had roadblocks to overcome: poor attendance at meetings (until attendance was made mandatory), staff frustration with computer technology, and difficulty learning how to use new, im-

proved templates. But for the first time in recent memory, the ED staff is feeling as though the rest of the hospital is on the same page and that we all understand the impact of bottlenecks and delays.

The managers and supervisors as well as the rapid response team members all have a role in averting diversion. Their roles can include transporting patients to different areas, reassessing monitored patients, and even making beds.

Physicians must consider discharges, direct admissions, and elective procedures—and the impact of each on the ED patients. The hospitalists help in making many of these decisions, and the physician office managers help by notifying, rescheduling, reassigning, and redirecting patients, as needed.

Code Gray success

During the past 6 months, we've called a Code Gray 32 times, but

because of the changes we've put in place, we've had to divert ambulances only 12 times. The most common days for a Code Gray are Mondays and Thursdays, so we're looking at possible causes, such as weekend overflow and OR schedules on the days before the crowding. The most common time for Code Gray is the second shift.

The continued success of the Code Gray policy will depend on the teamwork and cooperation of all units in this community hospital. We anticipate continued involvement from all staff in all areas, and we have been fortunate to have the support and financial backing of the senior administrators for many of the programs, such as the hospitalists program. Fortunately, many of the initiatives aren't expensive. Our success doesn't require a huge financial commitment, but it does require the complete dedication of the staff. ★

Selected references

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For a complete list of selected references, visit www.AmericanNurseToday.com.

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