

# The Journey to Destination Zero

## ETCH Uses Principles of High Reliability to Decrease Preventable Codes

“The first principle of high reliability is to be preoccupied with failure,” said Jeanann Pardue, MD, FAAP, a pediatric hospitalist and Chief Quality Officer at East Tennessee Children’s Hospital. That preoccupation is the driving force behind the hospital’s journey to employ situational awareness to decrease preventable codes.

Tracking the days without a patient exhibiting a cardiac and/or respiratory arrest outside of critical care supervision has become an important measuring stick. “There is a lot of evidence in the literature that shows if you have a loss of respiration or heart rate that is unanticipated, then you have greater morbidity and mortality,” Pardue explained of the benchmark.

While a thorough evaluation of processes and the adoption of the five principles of high reliability are key components on the hospital’s journey, Pardue noted, “The undergirding of that is our culture. Our goal is to eliminate all preventable harm for patients in our care.”

In addition to a preoccupation with failure, Pardue said the four other principles ETCH works on daily are sensitivity to operations, reluctance to simplify interpretations, deference to expertise and commitment to resilience.

### Operations

One of the first steps, Pardue said, was to gauge the culture of situational awareness. ETCH has adopted a ‘watchers program’ where the nursing and medical staff identify patients they are worried about for any number of reasons. Those patients are then included on a daily operations briefing – News at 9 – which is a morning huddle led by senior administration for the leadership of every department. Additionally, each day the hospital has an administrator on call and identifies a medical officer of the day to help with any patient concerns or high-risk patients.

The information shared during News at 9 is then disseminated to the entire staff. Pardue added an intensivist could review the watchers and offer care advice to the attending physician. Similarly, the Emergency Department would have key information about watched patients at hand in case conditions were to deteriorate.

### Reluctance to Simplify

The freedom to ask questions is central to the safety journey. Pardue said team members are trained in key quality programs including STAR (Stop, Think, Act, Review) and ARC, which calls on individuals to ask a question, raise a concern. She said error prevention training calls on individuals to personally commit to safety, commit as a team by using good communications tools, and to support a questioning attitude. “Everyone in our organization went through this training so that’s how we embedded this culture of questioning,” she explained. “New staff goes through this training, as well.”

Not only are staff members allowed to ask questions, but nurses and families also have the authority to deploy a rapid response team if worried. Pardue said it’s important for families ... who know their children’s habits and personalities best and often are the first to see subtle warning signs ... to have the power to speak up. “It welcomes the families to be part of the culture of questioning and preoccupation with failure,” she noted. By raising concerns, it escalates the hospital’s care policy and puts a process in place to resolve an issue or quickly move it through the chain of command until the problem is resolved.

Perhaps the most important tenet of this principle is to avoid glossing over concerns. “You don’t want to accept things at face value,” Pardue said. “You take time to really think about it, dig in deeper.”

### Deference to Expertise

As part of the hospital’s commitment to due diligence, Pardue said the team found the majority of unanticipated codes were tied to respiratory distress ... often from bronchiolitis. “We created a care map to get a higher level of care to the patient on the floor,” she explained, adding ETCH allowed high flow nasal cannulas, which are typically only used in PICU settings, to be used on other floors for high-risk patients.

In addition to allowing higher level care to be deployed outside critical care areas, the staff also shifted perception on ‘expertise’ with the realization that in a given circumstance the expert might be a parent, nurse, safety coach, therapist, or even written information. “It’s not always the person with the most degrees by their name,” she pointed out.

### Results & Resilience

After going 592 days without a preventable code, Pardue noted, “We recently had to reset, which was really hard.” However,

she continued, “We want to recover well if we have an event. If we have a code on the floor, we do a debrief and a deep dive.”

That debriefing includes a case review of all unplanned transfers to the PICU to see if there were missed warning signs. To build confidence in and a comfort level in staff members, Pardue noted, “We do a lot of scripted simulation exercises to improve our knowledge and ability to respond well in these situations.”

By the end of spring 2018, the hospital plans to broaden the recovery process by implementing a “second victim” program to support bedside caregivers by helping them process emotions and the series of events leading up to a code or unexpected outcome.

### Culture Starts at the Top

Changing the culture requires everyone but starts at the top. “The staff has to feel that in senior leadership’s mind that safety is first and foremost – not money, not finances, not patient experience,” Pardue said.

That commitment has been evident at East Tennessee Children’s Hospital where the leadership team was quick to adopt the safety and quality focus central to their Hospital Improvement Innovation Network (HIIN) participation.

“We have a very committed staff who have embraced these principles and embraced these goals,” she said of the ongoing safety journey. After all, she concluded, the sweet smiles of the hospital’s young patients are powerful motivators to strive to deliver ideal patient care each and every day.

*The Tennessee Center for Patient Safety, a department of the Tennessee Hospital Association, develops and shares hospital and health system success stories and promotes best practices.*



Dr. Jeanann Pardue

