In Pursuit of High Reliability

At Main Line Health, achieving the goal of Zero Harm is a team effort.

By Erin Graham

If anyone working at Main Line Health were asked what phrase best describes the organization, it would be "culture of safety," said Denise Murphy, RN, vice president of quality and safety. It's a remarkable accomplishment, and it didn't happen overnight. The safety journey began in 2009. As part of Main Line Health's drive for improvement, Murphy initiated a partnership with HPI (Healthcare Performance Improvement), now part of Press Ganey, to become a "high reliability organization"—that is, a place where zero preventable harm comes to any patient or staff member.

AT A GLANCE

- To achieve high reliability, Main Line Health partnered with HPI to identify the cause of harm events, design and implement interventions, measure the results and build a culture to sustain the improvements.
- As of January 2016, the health system had achieved an 81% reduction rate in serious safety events.

"I knew I couldn't do it by myself," she said. "I didn't have the experience or know which tools to use; how to build a lasting infrastructure or how to measure it." In HPI, Murphy found partners who could define the scope of the hospital's harm events, find causes, design and implement interventions, measure the results and build a culture to sustain the improvements. HPI conducted a diagnostic survey that looked at a three-year period (Jan. 2006–Oct. 2009) and reviewed 73 safety events in-depth. The team also facilitated discussions with more than 500 staff members.

To identify harm events, the survey team used proprietary algorithms to define deviation from generally accepted practice standards.

"The process revealed a number of factors that contributed to human errors that were not on our radar and could become the focus of prevention efforts going forward," said Murphy. "Working with HPI taught us that events we thought were inevitable, like very sick patients and a complex environment with many human interactions, could actually be prevented. So we had a new lens through which to look at risk reduction.

"It was astounding to learn that we had 25 to 30 cases of harm a year," Murphy continued. The statistics gained context when HPI compared the results with more than 300 hospitals and health care facilities throughout the country.

A Jump-Shift in Setting the Tone

Together with HPI, Murphy and Main Line President and CEO, Jack Lynch, held a meeting to share the survey results with top administrative, nursing and medical leaders from across the organization. The team opened the discussion in a quiet, dimly-lit room, with a silent review of the names of patients who had been harmed and those who had died. Their intention was to make the events seem less removed and more personal. "A lot of people in the room were horrified at the number of harm events," Murphy remembered.

Emotions ran high as leaders took in the analytics and heard the message about the importance of personalizing harm. One physician in particular reacted strongly, having seen the name of his patient on the list, along with the date that she'd died while on his watch. "Right out of the gate we were challenged by one of our own leaders, who said to us, 'How dare you think this isn't personal to the people involved!'" said Murphy. "We learned such a valuable lesson from that."

That discussion changed the team's entire approach to rolling out a plan for high reliability culture transformation. Rather than presenting harm as something that staff should make more personal, Lynch reshaped the message to one of positivity.

"Jack's message reminded us that our commitment was that every patient deserves the same great outcome: no preventable harm," said Murphy. This, she said, was paramount in the initiative's success, by allowing staff to show their already-strong personal commitment to safety while embracing the new goal of zero preventable harm outcomes.

A Top-Down Approach

Creating engagement across a large network, which includes four acute-care hospitals, a rehabilitation hospital and physicians' practices, required the support and participation of highly visible, highly vocal leaders whose enthusiasm would cascade into every aspect of daily operations.

"Every leader at every site had to have a unanimous, unrelenting commitment to a culture of safety," Murphy said. "This set the stage for what everyone pays attention to on a daily basis." Starting at the board level, the core team of senior leaders and HPI partners held discussions about making safety the core value at Main Line, as opposed to one of many core values. They took the conversation to leadership and eventually gained unanimous agreement on making it the number one priority. Leaders reviewed the high reliability tools and protocols established by HPI, voted on the ones they wanted to include and adapted these to fit Main Line's structure and needs.

Senior leadership set an ambitious goal: a 50% reduction in patient harm one year after high reliability safety training was completed. While Murphy readily admits there were times when this seemed impossible—her large, complex organization has about 10,000 employees and 2,000 physicians—working with HPI to break it down into three crucial steps was enormously helpful.

Leaders were to set clear expectations for everyone's role in patient safety; provide education, tools and training; and build and sustain accountability. Along with specific error-prevention tools, leaders adopted new methods for building high reliability:

> Make safety a core value

- Start every meeting with a safety topic or story
- Recognize courageous people who are stepping up and asking questions or "stopping the line for safety"

> Find and fix system problems

- Daily check-ins

> Build accountability

- Rounding to influence

Culture-of-safety leadership teams were established at the system level, and at each campus. Most importantly, leaders committed to modeling high reliability behaviors. As champions for change, they implemented initiatives such as daily safety huddles, leadership rounds to influence, embedding teams with safety coaches and "just culture" strategies.

Innovative Education

An internal curriculum team and HPI partners worked with employees and medical staff from across the network to identify the high reliability tools that would work best for various areas. They educated 150 high reliability trainers and spent 12 months training senior and medical staff managers, the board and all front-line staff. They then expanded to train every single Main Line caregiver and employee. "We needed everyone to be part of the transformation," said Murphy.

Murphy hasn't been afraid to take education in creative directions, and she has put unique structures into place to sustain the culture of work safety. "We make education innovative and very much fun, but not silly, since we take safety so seriously," she said. Some examples of these initiatives include:

- Physician videos: Instead of bringing medical staff working off-site into a classroom for simulation and role modeling, a training team created a series of educational videos made by and for physicians. Feedback on these videos has been overwhelmingly positive.
- SBAR videos: This library of department-specific videos includes many practical examples of how to use the SBAR (Situation, Background, Assessment, Recommendation) communication technique, based on real Main Line safety events. The videos are stored on a shared drive for managers to easily access when they do staff training.
- Safety fairs: Last year's fair drew 4,000 people to its interactive learning stations, where staff are presented with a simulated problem and attempt to solve it using a high reliability error prevention tool.
- Team challenges: Throughout the year, groups show their competitive spirit. During a Halloween contest, staff members decorate pumpkins to illustrate a story about using an error prevention tool. On Valentine's Day, leaders judge departments for the best decorative "Our heart belongs to our culture of safety" display. At Christmas, tree-decorating contests are tied to themes of high reliability.

- Awards: Every month, each campus chooses a safety-related Great Catch winner, and once a year, senior leaders select the best of the monthly champs. Winners receive a medal and a cash award. Each year ends by selecting staff Safety Heroes—the Main Line version of the Academy Awards.

The culture of safety is now so pervasive that employees at one hospital planted a "culture-of-safety garden," which they ardently maintain. "It's fantastic. It gives me the chills to think of the ideas our staff comes up with," said Murphy.

Physician Engagement

The journey has not been without its challenges, and engaging physicians tops Murphy's list of pain points. "Physician buy-in is so key and it's so hard, because you just can't get their time," she said. For her, a lot of work has gone into shifting the "captain of the ship" mentality into one of teamwork and shared accountability.

"I believe that 99.9% of physicians believe in their hearts that there is no one more committed to patient safety than they are," she said. "But I don't believe they think of patient safety as a team sport—they have been trained to work as soloists. That said, today, physicians thank Great Catch winners for having their backs and preventing errors."

While leadership engagement was the biggest factor in flipping the culture at Main Line, the key to engaging physicians was sharing data so that the physicians could see the analytics themselves. In presenting the data to them, Murphy and her team focused on the inevitable vulnerabilities in health care. They stressed that safety is not under any one person's control.

"Even what seems to be under one clinician's control isn't, because of interruptions, multitasking, mechanical problems—and because we're all human," said Murphy. One strategy that paid off particularly well was creating a role for a medical director to co-lead the effort with Murphy. "Having a surgeon heading the group with me has been unbelievably helpful," she said. "He was able to get to some of our hardest key players, who are the people doing the procedures."

Another strategy was using the physician culture-of-safety leadership team's limited time judiciously. Regular meetings with that group focused on safety topics that weren't purely operational. "We decided that all of the leaders didn't have to be in the same room to go over the same things," Murphy said. The physician meetings focused particularly on how the doctors keep their patients safe and how high reliability processes could improve their workflow.

The Payoff

Main Line's laser focus on high reliability has paid off. The health system surpassed its June 2013 goal to halve its Serious Safety Event Rates and reached an impressive 79% reduction. Over the next six months, it went up to 81%, and the reduction rate has held steady through January 2016.

ERROR PREVENTION TOOLKIT

I commit to the following safety behavior expectations:

Attention to Detail
Communicate Clearly
Handoff Effectively
Speak Up for Safety
Got Your Back!

I commit by practicing the following error prevention tools:

Attention to Detail
STAR [**S**top, **T**hink, **A**ct, **R**eview]
Communicate Clearly
Handoff Effectively
SBAR [**S**ituation, **B**ackground, **A**ssessment, **R**ecommendation]
Speak Up for Safety
Use **ARCC**
[**A**sk a Question, Make a **R**equest, Voice a **C**oncern, Use the **C**hain of Command]