A journey toward high reliability

How Northwestern Medicine Lake Forest Hospital used standard work to reduce hospital-acquired pressure injuries

Northwestern Medicine Lake Forest Hospital

Northwestern Medicine Lake Forest Hospital (LFH) is a 201-bed community-based hospital in Lake Forest, Illinois, with 800 physicians board-certified in 73 medical specialties. LFH has earned national rankings in both orthopedics and pulmonary and lung surgery.

Challenge and opportunity

Lindsay Werth, patient safety program manager and Kathryn Thomas, director of quality and patient safety at LFH, found it challenging to implement and sustain their improvement efforts. They knew they could improve by becoming a high reliability organization: one that provides high-quality care effectively, efficiently and predictably. They decided to participate in the Vizient® Safety, Reliability and Management Systems Workshop to learn more. This workshop delved into the components of safety culture, the principles of high reliability and the foundations of improving and sustaining management systems. Werth and Thomas embraced the experience and were excited to adopt these principles at LFH.

However, they quickly learned that to achieve their goals, they would have to adjust staff and leadership expectations. Although they strived for “zero harm,” everyone needed to acknowledge that problems will occur, and that these problems present opportunities for learning. Rather than focusing on failures after they occur, LFH needed to implement well-defined processes (known as standard work) to prevent the failures from occurring in the first place. Ultimately, what’s important is how an organization responds to unintended results and ensures safety today and in the future.

Approach

After attending the Vizient workshop, LFH started small, with an initiative focused on reducing hospital-acquired pressure injuries (HAPIs). One of the biggest challenges seen with this initiative was ensuring everyone understood their roles and responsibilities in preventing HAPIs. This concept of standard work required a change in mindset.

Standard work engages each level of the organization, with interlocking accountabilities between the front line, the midlevel managers and the executives. Defining everyone’s roles, responsibilities and associated work processes on a daily, weekly, monthly, quarterly and yearly basis reduces work and leads to a higher functioning team. It’s also the best way to identify any deviation in the process before it leads to a problem. Understanding the concept of standard work and creating the management systems to support it makes improvement more sustainable.

An important step in implementing standard work is going to “Gemba” — the site where the work is being done. This enables leaders to observe and learn from front-line staff. This also provides them with the chance to coach and empower staff to effect change for improvement. The aim is to shift the focus from outcomes to process steps, and then remove existing barriers in order to complete the defined standard work.

During Gemba walks, the teams huddle and engage in conversations about the visual management boards used to define the issues, design new initiatives, deploy changes and sustain the gains. The goal is to ensure everyone involved in the process has a clear understanding of intent.

With these principles in mind, an existing component of the LFH initiative — having “four eyes” on the patient during skin assessment — was revisited due to variation in process and inconsistent documentation. Based on front-line staff recommendations, the staff standardized the work and began performing skin assessments on every shift instead of two to three days a week. The electronic health record was changed to require this documentation, providing a greater ability to identify process variations in real time.

The staff also decided the skin timeout assessment could be performed by a nurse and a care technician, rather than two nurses. This reduced delays and interruptions, and integrated teamwork into the standard work.

Results

One patient care unit went 150 days without a HAPI as a result of incorporating these new learnings into its improvement work. HAPIs cause significant harm, can cost anywhere from $14,000 to $70,000 to treat, extend length of stay and contribute to premature mortality.

With this success, LFH is now similarly focused on reducing falls, catheter-associated urinary tract infections, central line-associated bloodstream infections and other hospital-acquired infections.

Lessons learned

One of the most important lessons learned was that managers shouldn’t always fix problems; rather, they should build and coach a team of problem solvers. One principle learned at the workshop is to defer to those closest to the work. At LFH it is now the norm for front-line staff to be involved in improvement. For example, physical therapists joined a clinical improvement team to help optimize prone positioning, a therapy specific to the care of COVID-19 patients. By engaging them in the design of the solution, LFH reduced the risk of positional injuries to these patients.
In addition, going to Gemba and conducting huddle conversations empowered front-line staff to speak up and to be agile. They learned that when there is a problem, it is critical to identify and understand the root cause and make real-time adjustments. Leaders also recognized that rather than relying solely on performance data and analytics, work should be directly observed to fully understand the context.

**Applied learning during COVID-19**

“COVID-19 threw us for a loop,” said Werth and Thomas. “We had to put a lot of work on hold to support everyone with COVID-19 initiatives.” That said, they were able to apply the same reliability principles and management systems to the new set of challenges. “Honestly, we wouldn’t have recovered as quickly as we did if we didn’t have these principles in place.”

**Next steps**

LFH continues to roll out new initiatives to other areas of the organization using the principles and practices discussed above. They no longer think of improvement efforts as projects; rather, it is simply the way they do things. Werth and Thomas maintain it would be beneficial for others in their organization to receive the same training on these reliability principles. This would also help accelerate the necessary cultural shift.

Werth and Thomas agreed that the Vizient workshop was very interactive and made it easy to envision how the principles would work in real life. In addition, participants were encouraged to bring a real problem to solve, “… which made us feel more ownership,” they said. “It was hands-on. We wouldn’t have been engaged if it wasn’t. We did hard work in addition to working during the workshop, and it made a difference.”

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**About the Safety, Reliability and Management Systems Workshop**

During our two-day workshop, participants explore the core components of safety culture, the principles of high reliability and the foundations of management systems to improve and sustain safety more effectively. Building this level of excellence requires specific skills, behaviors and coordination at every level of the organization. This workshop brings it all together with an organizational assessment, diverse content expertise, group exercises, individual coaching and a customized action plan.

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