## MEMBER PERSPECTIVE

## From Research Request to Beta Test: HBI Brings Experts Together to Develop Patient Safety Tool



East Tennessee Children's team members are trained on the Learning eBoard application



An East Tennessee Children's nurse beta tests the Learning eBoard



For more information on the Cost & Quality Academy's research and Analyst Advisory services, contact HBI at 888.700.5223.

Since frontline clinicians are often in the best position to identify barriers to providing excellent patient care, organizations have attempted to harness their insights by implementing tools to promote continuous improvement. One such tool that has a track record of success is the Learning Board—a visible display in a clinical unit that highlights where defects exist and tracks progress in correcting them.

Jackie Hāgg, Corporate Clinical Workforce Insights Consultant at Dignity Health, had done her own research on Learning Boards, but she still needed actionable strategies for rolling out this type of tool.

"[The research] talked about the Boards, but did not include details on *how* they can be implemented," Hāgg says. "I wanted to lead our organization by providing that kind of detail."

As an HBI Cost & Quality Academy member, Hāgg submitted an Analyst Advisory request for information on how Learning Boards could be put in place. The Academy's research team identified East Tennessee Children's Hospital as an organization that had experience implementing Learning Boards. The Academy conducted a case study with Isaac Mitchell, Director of Lean Continuous Improvement, and produced the white paper Improving Patient Care with Continuous Improvement Boards. The Academy also facilitated a virtual conference with Mitchell as the presenter, Utilizing Continuous Improvement Boards – A Case Study in Implementing Lean

Problem-Solving to Optimize Patient Care. Finally, The Academy connected Hāgg and Mitchell to network and exchange ideas.

When so much can be accomplished at the touch of a smartphone, Hāgg surmised nurse participation could be greatly improved by using an application to automate the process, particularly if made easily accessible by mobile devices. Increased nurse engagement and immediate feedback on participation, as all studies suggest, would be able to drive significant improvements to patient safety. With Hāgg's clinical experience and Mitchell's engineering background as a foundation, the business case for developing a Learning Board application was strong enough to attract a team with venture capital backing.

The primary dashboard in the application represents the manual Learning Board itself, with categories for tracking improvement projects—Idea, In Process, and Resolved. Using most modern cell phones, frontline staff can text in their ideas, which automatically populate the dashboard and provide immediate feedback to the user. The application can also be accessed via desktop computer at a nursing station. Additionally, the application includes a reporting dashboard for managing the ideas through resolution, as well as data analysis on ideas that have been implemented and resolved.

In February, the Learning eBoard application was beta tested at East Tennessee Children's Hospital by over 50 nurses. Furthermore, another beta test was scheduled for April in an ICU and two medical-surgical units at Dignity Health. The expectation is that data from the beta tests will show how correcting defects and improving clinical workflow translates to better patient experiences and outcomes. By capitalizing on the knowledge and insight of nurses, the Learning eBoard has great potential to improve patient care.

"With the industry moving toward more patientcentered care, more 'bottom-up' as opposed to top-down approaches to care improvement are where we have to be moving," Hāgg says.

Although Hāgg's case is unique, it underscores the productive directions a customized Analyst Advisory research request can take—helping improve operations at not just one organization, but many.