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Einstein's Comprehensive Unit-Based Safety Program

In 2010, Einstein Healthcare Network adopted a new approach to improve the culture of safety throughout the organization. The Comprehensive Unit-based Safety Program (CUSP) is a framework to improve patient safety through the establishment of unit-based teams.

CUSP was originally developed at The Johns Hopkins Hospital and has since been implemented in healthcare facilities in all 50 states. The Agency for Healthcare Research & Quality (AHRQ) has since endorsed the CUSP framework as a mechanism for hospitals to reduce hospital-acquired infections (HAIs).[1] An early example of the impact of implementing CUSP across over 100 intensive care units (ICUs) in Michigan was known as the "Keystone Project," which saved more than 1,500 lives and nearly $200 million over 18 months.[1]

Although the CUSP initiatives focused on reducing HAIs in ICU settings have shown sizeable cost savings and infection prevention,[1] the CUSP framework is a model that can be adopted throughout an organization as a strategy to address a broad range of safety concerns. To date, Einstein has established CUSP teams on nine inpatient units, including a medical ICU, a labor and delivery unit, a medical-surgical unit, a trauma-surgical unit, a surgical ICU, a neonatal ICU, two medical progressive care units, and a hepatology unit.

Every CUSP unit team is comprised of local leadership, frontline representatives (eg, nursing, residents, therapists, housekeeping, health unit coordinators, pharmacy), a physician champion, a senior executive sponsor, and a coach. The team focuses on local safety priorities and creating a culture of safety and teamwork using the basic principle that culture is local.

Implementing CUSP on a unit begins with training all staff on the "science of patient safety;" that is, training staff on how to view their unit's environment from the patient's perspective and identify potential risks of harm to patients and staff. Staff are then asked to describe how the next patient in their unit/clinical area could be harmed and what could be done to minimize that harm.

Using this initial data, the team prioritizes projects and partners with the Executive Sponsor (a Vice President or other senior leader in the organization) on improvement efforts. The CUSP framework also includes tools such as the "Learning from Defects" tool, which is designed to allow frontline staff to analyze cases and identify systems issues and process breakdowns that can lead to patient harm. At Einstein, we combine the CUSP framework with the Model for Improvement (i.e., the Plan-Do-Study-Act)[2] approach to improve processes. Once the staff-identified safety issues are prioritized, the team is led through the process of assessing the issue using data, developing an intervention to test, and analyzing the results of the test of change.

One example of the framework in action can be seen with our 52-bed medical-surgical unit, which implemented CUSP in April 2012. Supported by the nurse and clinical managers, a hospitalist as the physician champion, and the network COO as the executive sponsor, the team has worked on a variety of issues that have had an impact throughout the medical center. From the outset, the team led efforts to replace medication carts, improve nurse-physician communication, and reduce transfers to a higher level of care.

More recently, the CUSP team's physician champion has spearheaded efforts to improve earlier identification of delirium in patients on the medical-surgical floor using the Confusion Assessment Method (CAM) tool.[3] The CUSP project has been supported with guidance from the nurse educator and the addition of a geriatrician to the team. The team's work has sparked an effort to begin introducing the CAM tool throughout the inpatient units, including the surgical ICU.

Our other CUSP teams are working on a diverse array of improvement projects, including developing a new maternal triage process (labor and delivery unit); piloting new bar-code medication administration equipment (trauma-surgical unit); and establishing protocols for visitor control and improved security (surgical ICU).

As we continue to expand the program, we are pursuing opportunities to demonstrate the financial return on investment for the initiatives undertaken by the CUSP teams. However, some of the benefits to the teams and the organization are not quantifiable financially. CUSP teams are breaking down silos and forging strong partnerships between nurses, physicians, administration, and frontline staff. Indeed, the CUSP framework supports bringing leadership closer to the frontline staff while allowing frontline staff to see more clearly how their work can have an impact on other areas in the organization. ■

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