Improving operating room safety through standardization of the surgical checklist

Humility of Mary Health Partners (HMHP) consists of three hospitals in Youngstown, Ohio, and Warren, Ohio, including St. Elizabeth Health Center, St. Joseph Health Center and St. Elizabeth Boardman Health Center. HMHP provides a wide range of services from anticoagulation clinics and behavioral health to robotic surgery and trauma. St. Elizabeth Health Center is the only Level I trauma center between Pittsburgh and Cleveland, and its leading services include cardiac, vascular and emergency medicine.

Project Summary:
Through Cardinal Health Foundation E3 Patient Safety Grant funding HMHP’s standardized surgical safety checklists by replacing their paper checklist with a whiteboard in each operating room (OR). Upon receipt and installation of the whiteboards, HMHP’s surgical department was trained on the use and importance of the whiteboards, with a strong emphasis on patient safety. Various roll-played situations were also utilized to present the staff with real life situations. The whiteboard surgical safety checklist provided standardization for every surgical procedure. In addition to the standardization goal, this new tool allowed the opportunity for the entire surgical team to engage and participate in completion of the checklist. This encouraged ownership and accountability within the department while enhancing patient safety and decreasing medical errors through improved team communication.

Objectives:
1. Standardize every surgical procedure with a preoperative whiteboard checklist.
2. Engage the entire surgical team to participate in the completion of the checklist through improved team communication.
3. Stimulate ownership and accountability while enhancing patient safety and decreasing medical errors.

Administration:
Robert Shroder, President and CEO

Primary Investigator(s):
Nathan Mast

Humility of Mary Health Partners implemented a surgical checklist initiative, which contributed to reducing readmission rates from 21.3% in 2011 to 14.7% in 2012.

31% decrease in readmission rates in the first year

$2,003,500 in savings
“Implementation of the white board checklists has not only improved the safety of our patients, but has also increased accountability and communication in the ORs.”

- Crystal Jones, Grants Director, The HMHP Foundation

Results:
The ORs at HMHP now utilize the WHO surgical safety checklist via a highly visible 2-by-3 ft. whiteboard. The implementation requires participation by nursing, anesthesia, and physicians in all steps of the processes, focusing solely on the safety of patients and reduction of preventable harmful events. By creating an environment where each member of the operative team is responsible for the safety of the patient, HMHP has been able to increase focus on the reduction and elimination of preventable harm events in surgical suites.

HMHP’s hospital readmission rates were reduced from 21.3 percent in 2011 to 14.7 percent in 2012. While it is difficult to compute the exact quantitative contribution of the whiteboard surgical checklist, it is clear that this initiative, as well as other ongoing quality initiatives, have yielded the demonstrated reduction.

Project Continuation:
Through Cardinal Health Foundation E3 Patient Safety Grant funding, HMHP has continued its focus and efforts around the surgical safety whiteboard checklist in all the ORs across its four facilities. The utilization is critical to the “Brief, Timeout, Debrief” process, every patient, every surgery, every time. In addition to assuring that the healthcare team performed the correct procedure at the right site on each patient, the surgical safety checklist has supported the efforts to achieve targeted benchmarks for the Surgical Improvement Care Project (SICP). Meeting these targets increases the likelihood of positive outcomes for patients. Additionally, at this point, HMHP is working on a plan to update the whiteboards to include a prompt to assess Surgical Fire Risk.

Statistics/Data Continuation:
- Readmission rates have continued to decrease and now stand at 12.6 percent, down from 14.7 percent, which has generated an additional $225,516 savings.
- There is a decrease of approximately 210 patient readmissions from 2012 resulting in 875 fewer hospital days, with an aggregate savings of $2,229,016.

At Cardinal Health giving back is fundamental — a commitment focused on improving healthcare and building stronger and healthier communities. The E3 Patient Safety Grant Program was established in 2008 to reduce healthcare errors, save dollars and, most importantly, improve patient outcomes. In the past six years the Cardinal Health Foundation has invested $6.15m in E3 grants with the most recent grantees reporting an 11:1 return on our investment.