Using Evidence-Based Interventions and the Surgical Unit-based Safety Program (SUSP) to Reduce Surgical Site Infections and other Surgical Complications: A National Project to Improve Surgical Outcomes

The Armstrong Institute for Patient Safety and Quality

About the Project
Nearly 50 million people have surgery each year in the U.S., approximately one million develop serious complications and over 150,000 patients die within 30 days. The Agency for Healthcare Research and Quality (AHRQ) is funding a national Surgical Unit-based Safety Program (SUSP) to reduce surgical site infections (SSI) and other surgical complications.

Benefits
Proven Methods To improve surgical care requires three pillars: performance measures clinicians believe are valid, methods to engage front-line clinicians and hospital leaders and ensure patients receive evidence-based therapies, and a process to improve teamwork, safety culture, and learn from mistakes. This program will provide these pillars and build on the approach that led to large-scale successful improvement efforts such as the Michigan Keystone ICU program, the national program to reduce central line associated bloodstream infections (CLABSI), and international efforts to improve quality of care including the World Health Organization Safe Surgery Saves Lives campaign.

Comparative Data that are valid and feasible Evaluating surgical outcomes is challenging and complex. Our partner, the American College of Surgeons (ACS), runs the National Surgery Quality Improvement Program (NSQIP). Initially funded by AHRQ, NSQIP collects robust data on surgical complications and outcomes using rigorous quality control. Participating hospitals will receive real-time individual and comparative reports to track progress towards improving surgical care. All hospitals will benefit from the rich data collected by NSQIP, but hospitals do not need to participate in NSQIP to be in this project. In fact, most hospitals in the project will not be NSQIP participants.

National Project Goals
- To achieve significant reductions in surgical site infection and surgical complication rates. Project will focus on one outcome measure: SSI rate; one process measure: use of checklist like methods to improve surgery safety (briefings/debriefings), and a measure of safety culture: Hospital Survey of Patient Safety (HSOPS).
- To achieve significant improvements in safety culture.

Project Sponsor and National Project Team
This project is sponsored by AHRQ, and includes faculty time, training materials, standard reports and national networking across the project teams. The National Project team includes world renowned experts from AHRQ; The Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality led by Dr. Peter Pronovost; the American College of Surgeons led by Dr. Clifford Ko; Dr. Charles Bosk; and his team from The University of Pennsylvania, and the World Health Organization Patient Safety Programme (PSP). In addition, the National Project Team includes faculty who helped develop and implement the Department of Defense and AHRQ funded TeamSTEPPS program.

Key Interventions
SSI reduction remains an elusive goal. This is understandable; SSIs are multifactorial in etiology and a single ‘SSI Prevention Bundle’ is unlikely to reduce SSIs. Together, we can reduce SSIs.

In this program, we will work together to:

2. Review other tools focused on improving adherence with evidence-based practice and explore opportunities to implement selected tools based on the types of defects identified by participating sites.
3. Review, adapt and implement the Comprehensive Unit-based Safety Program (CUSP) and selected TeamSTEPPS tools to improve teamwork, communication and safety culture.
4. Review emerging evidence for the prevention of SSI and explore opportunities to implement selected interventions based on local resources and culture.
5. Help participating sites gain ‘ground truth’ by tapping into the wisdom of frontline staff and conducting several time-limited audits to identify defects in care processes that may be contributing to SSI within their hospital.
6. Explore opportunities to prevent other surgical complications, including retained foreign objects, wrong sided surgery,
Using Evidence-Based Interventions and the Surgical Unit-based Safety Program (SUSP) to Reduce Surgical Site Infections and other Surgical Complications: A National Project to Improve Surgical Outcomes

The Armstrong Institute for Patient Safety and Quality

Program Requirements

Coordinating Organizations (State Hospital Associations, HENS, Regional Organizations, etc...): commit to funding and coordinating monthly team calls and annual face-to-face meetings (or a suitable alternative).

Hospital units: commit to participation for 24 months and:

- Assemble a multidisciplinary team to include team members from surgery, PACU (post-Anesthesia care unit) and the medical/surgical unit.
- Identify an executive sponsor for the project and meet with the executive monthly.
- Regularly meet as a team to implement interventions and monitor performance.
- Participate in annual face-to-face meetings, weekly immersion calls, and monthly content and coaching calls.
- Implement selected audit tools, the World Health Organization Safe Surgery Checklist, and other selected tools to improve care.
- Implement CUSP to improve teamwork, communication and safety culture.
- Submit minimal set of standardized surgical outcome data monthly.
- Administer the AHRQ HSOPS culture survey annually and use results to inform site specific improvement targets.
- Share what you are learning with other participating sites.

Opportunities to Participate:

We are recruiting coordinating entities now, with a goal of project launch in late spring. Hospital engagement networks (HENS), state hospital associations (SHAs) and other state/regional/system level safety groups are eligible to enroll as a coordinating entity. HENS may use this to meet previously specified contract expectations.

We aim to launch the program with a cohort of hospitals from 10 states or Hospital Engagement Networks (HENS). We will focus on ACS/NSQIP hospitals first since they have readily available baseline data. In Fall 2012 we will begin enrolling non-NSQIP hospitals and additional states or HENS in the program. The overarching goal is that a majority of hospitals in all states, the District of Columbia and Puerto Rico will participate over the course of the project.

Interested in enrolling or learning more?

Contact Dr. Lisa Lubomski at 410.614.4037 OR Email: lluboms1@jhmi.edu