






Project JOINTS: Joining Organizations In Tackling SSIs

May 15, 2012



Today's Agenda

- Overview of Project JOINTS
- Enhanced SSI Prevention Bundle
- California Participation/Opportunities
- Website/tools overview and tour
- Q & A

What is Project JOINTS?

- An IHI initiative funded by the federal government
- Participants will receive support from IHI in the form of in-person and virtual **coaching on how to test, implement and spread the enhanced SSI prevention Bundle** comprised of three new evidence-based practices
- Exclusively for 10 states right now

Why focus on hip and knee arthroplasty?

- Over 1.1 million hip and knee arthroplasty procedures per year in the U.S.
- Knee arthroplasty surgical site infection (SSI) rates range from 0.68% to 1.60% and hip arthroplasty SSI rates range from 0.67% to 2.4% depending on patient risk. *At these rates, between 6,000 and 20,000 SSIs occur annually.*
- Estimated hospital costs alone: hip arthroplasty \$100,000 and knee arthroplasty \$60,000 with 22 day increase in length of stay
- **Substantial impact on patients**

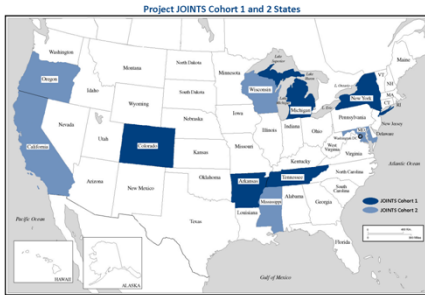


Who

- IHI
- RAND
- Expert faculty
- 10 states – AR, CA, CO, DC/MD, MI, MS, NY, OR, TN, WI
- Professional Organizations in support:
 - American Academy of Orthopaedic Surgeons (AAOS/Academy)
 - > *The JOINTS project is a remarkable endeavor and the Academy looks forward to working with you to accomplish the goal of eliminating preventable SSIs.*
 - AORN



Participating States



Field Team

Wave 2 States	Partners
California	Health Services Advisory Group California Hospital Association California Hospital Patient Safety Organization Cynosure Health Hospital Council of Northern and Central California Hospital Association of Southern California Hospital Association of San Diego and Imperial Counties Association of California Nurse Leaders
D.C./Maryland	Delmarva Foundation Maryland Patient Safety Center DC Hospital Association
Mississippi	Information & Quality Healthcare Mississippi Hospital Association
Oregon	Oregon Medical Association Oregon Association of Hospitals and Health Systems Acumentra Oregon Patient Safety Commission State Office of Rural Health Oregon Nurses Association
Wisconsin	Metastar Wisconsin Hospital Association Wisconsin Medical Society

Project JOINTS Team



Kathy Duncan, RN Project Director
 Deborah Yokoe, MD Content Expert
 Brian Hamlin, MD Surgeon Expert
 Tony DiGioia, MD Surgeon Expert
 Richard Scoville Improvement Advisor



Kate O'Rourke Network Manager
 Anita Hussaini Project Manager
 Aka Kovacicova Project Coordinator
 David Kim WebEx Host



California Hospitals to date.....

Adventist Health System	Alameda County Medical Center	California Pacific Medical Center
Citrus valley Health Partners	Doctors Hospital of Manteca	El Camino Hospital
Keck Hospital of USC	Long Beach Memorial	Palm Drive Hospital
Saint Agnes Medical Center	San Francisco General Hospital	San Ramon Regional Medical
Santa Paula Hospital	Sonoma Valley Hospital	Ukiah Valley Medical Center
University of California Davis	Ventura County Medical Center	



Enhanced Surgical Site Infection Prevention Bundle

- **New Practices:**
 - Use of an alcohol-containing antiseptic agent for preop skin prep
 - Preop bathing or showering with chlorhexidine gluconate (CHG) soap
 - *Staph aureus* screening and use of intranasal mupirocin and CHG bathing or showering to decolonize *staph aureus* carriers
- **Applicable SCIP practices:**
 - Appropriate use of prophylactic antibiotics
 - Appropriate hair removal



Use an alcohol-containing antiseptic agent for preoperative skin preparation

- Adequate preoperative skin preparation to prevent entry of skin flora into the surgical incision is an important basic infection prevention practice.
- Preoperative skin preparation of the operative site involves use of an antiseptic agent with long-acting antimicrobial activity, such as chlorhexidine and iodophors.
- Two types of preoperative skin preparations that combine alcohol (which has an immediate and dramatic killing effect on skin bacteria) with long-acting antimicrobial agents appear to be more effective at preventing SSI than povidone-iodine (an iodophor) alone:
 - CHG plus alcohol
 - Iodophor plus alcohol



Use an alcohol-containing antiseptic agent for preoperative skin preparation

Behavioral Objective: *Change the operating room skin prep for hip and knee arthroplasty to a long-acting antiseptic agent in combination with alcohol.*

- Assess your current process and potential barriers:**
- Identify surgeons currently using an alcohol-based skin prep to champion the change in practice with their peers.
 - Determine the high-volume surgeons and focus your efforts on working with them.
 - Conduct brief interviews with representative surgeons to identify any misconceptions or key barriers to using an alcohol-based skin prep.
 - Provide a brief summary of the scientific evidence supporting change to an alcohol-containing skin prep to influence change of habit/tradition.



Ask Patients to bathe or shower with CHG soap for at least 3 days prior to surgery

- Studies show that *repeated* use of CHG soap for bathing or showering results in progressive reductions in bacterial counts on the skin
- Patients may benefit from bathing or showering with CHG soap **for at least 3 days** before surgery in order to achieve the most benefit. It is unknown whether using CHG soap for longer time periods (e.g., five days) has additional benefit.
- No clear evidence that CHG bathing reduced the risk of SSI, although most studies used only 1-2 applications of CHG washes.

— Webster J, et al. *Cochrane Database of Systematic Reviews* 2007, Issue 2. Art. No.: CD004985. DOI: 10.1002/14651858.CD004985.pub



Ask patients to bathe or shower with chlorhexidine gluconate (CHG) for at least 3 days prior to surgery

Behavioral Objective: *Provide patients with chlorhexidine soap, and have them use the soap in bathing or showering for at least three days before surgery.*

Assess your current process and potential barriers:

- Assess where most preoperative assessments take place
- Assess current preoperative communication between the hospital OR department and the offices of orthopaedic surgeons inside and outside the hospital.
- Tailor the implementation process to your setting
- Develop a process flow diagram to define all components of the process



Screen patients for Staphylococcus aureus (SA) carriage and decolonize carriers with 5 days of intranasal mupirocin and at least 3 days of CHG prior to surgery

- Patients who carry SA in their nares or on their skin are more likely to develop SA SSIs. This is true for methicillin-resistant as well as methicillin-sensitive
 - SA Kluytmans et al. *J Infect Dis* 1995;171:216-9
 - Huang SS, Platt R. *Clinical Infectious Diseases*. 2003;36(3):281-5.
- The combination of intranasal mupirocin and CHG bathing or showering eliminates SA, at least temporarily, from the nares and skin, the natural reservoirs where SA is most often carried
- Results of several studies, including studies in orthopedic surgery, suggest that preoperative intranasal mupirocin reduces the risk of SSI for SA carriers.
 - Kalmeyer MD, et al. *Clin Infect Dis*. 2002;35(4):353-8
 - van Rijen MM, et al. *J Antimicrob Chemother* 2008;61(2):254-261



Screen patients and Decolonize SA carriers w/5 days intranasal mupirocin & 3 days CHG

Behavioral Objective: *Screen all patients for Staphylococcus aureus prior to surgery, allowing enough time for those who screen positive to be decolonized with five days of intranasal mupirocin.*

Assess your current process and potential barriers:

- Assess where most preoperative assessments take place
- Tailor the intervention to the setting in which preoperative assessment is done
- Work with Lab to assure screening includes both MRSA and MSSA
- Develop a process to assure info on screening and decolonization is available at the time of surgery
- Develop a process flow diagram to define components of the process






What are we learning?

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Canton-Potsdam Hospital Potsdam, NY

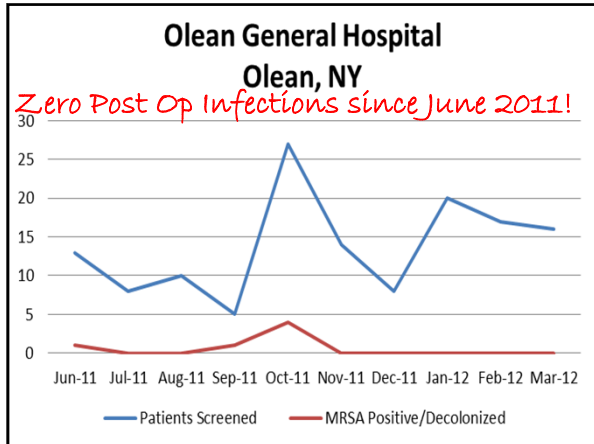
» **100% compliance achieved for 6 month time period (May – Dec 2011)**

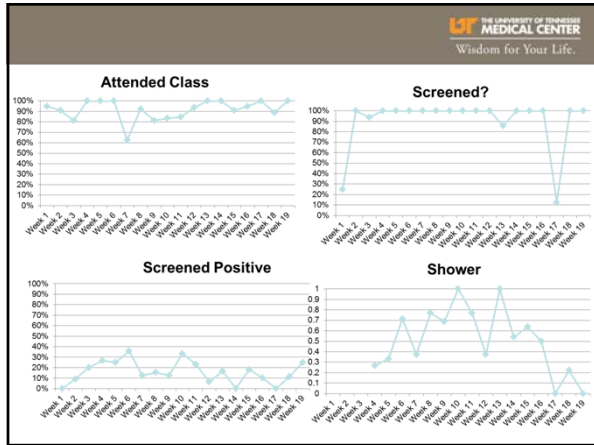
- Surgeons ordered joint protocol for all patients
- All patients consented to testing
- Pre-op nurses successfully collected nasal swabs, diligently checked results and provided patient education to MSSA and MRSA positive patients. All positive patients completed decolonization
- All patients were given correct antibiotic at the correct time on day of surgery
- All patients received the appropriate surgical skin prep
- Total of patients tested: 97
- MRSA/MSSA in our patient population captured with screening 19%



Have gone 1 year with ZERO total joint staph infections!!







How to sign up

Hospital Enrollment for Project JOINTS

Welcome to Project JOINTS (Joining Organizations In Tackling SSI)!

To officially register your hospital facility with the Project JOINTS initiative, please complete this form. Please note that only facilities in Arkansas, California, Colorado, Maryland, MD, Michigan, Minnesota, New York, Oregon, Tennessee, and Wisconsin are eligible for participation at this time.

*Required

Project JOINTS Information



Project JOINTS aims to prevent surgical site infections in patients undergoing hip and knee arthroplasty procedures by implementing the Enhanced Surgical Bundle. The aim of Project JOINTS is to support facilities on how to test, implement, and spread the Enhanced Surgical Bundle comprised of three new SSI prevention activities for hip and knee arthroplasty surgeries:

- Use of an alcohol containing antiseptic agent for preoperative skin preparation
- Preoperative bathing or showering with chlorhexidine gluconate (CHG) soap for at least 3 days before surgery
- Staph aureus (MRSA and MSSA) screening and use of 1% staph intranasal mupirocin and 2 days CHG bathing or showering to decolonize carriers

We are pleased to announce that we will be offering Continuing Education Units for our call series. More details to follow at the start of the Project JOINTS.

Hospital Information

Official Organization Name *


[Go to Project JOINTS Website. Enroll here: https://docs.google.com/spreadsheets/viewform?formkey=dE9EZUM2U29rdk9OdIFBS2hxd29xUHc6MQ](https://docs.google.com/spreadsheets/viewform?formkey=dE9EZUM2U29rdk9OdIFBS2hxd29xUHc6MQ)


Tools Provided

- *Project JOINTS call series*
- *Enhanced Surgical Site Infection Prevention Bundle How-to Guide*
- *Project JOINTS one-pager: summary of the evidence*
- *American Academy of Orthopaedic Surgeons (AAOS) letter of support*
- *Frequently Asked Questions – “living” document*



Tour of Resources

Welcome to Project JOINTS!



Project JOINTS (Joining Organizations in Tackling SSI) is an initiative funded by the federal government to spread the Enhanced SSI Prevention Bundle (also known as the Enhanced Surgical Bundle). The Enhanced Surgical Bundle is designed to prevent surgical site infections in patients undergoing hip and knee arthroplasty.

The Institute for Healthcare Improvement (IHI) will provide Project JOINTS participants with tools, resources, and special support to help implement the Enhanced Surgical Bundle.

If you are interested in joining Project JOINTS and your organization is located in Arkansas, California, Colorado, D.C., Maryland, Michigan, Mississippi, New York, Oregon, Tennessee or Wisconsin, please fill out the sign-up form or email ihio@ihi.org for additional information.



Press Release Template

- **Project JOINTS press template**
Customizable release to let your local media know you're participating in Project JOINTS

IHI Tools & Resources

- **Enhanced SSI Prevention Bundle How-to Guide** (updated 3/23/2012)
- **Enhanced Surgical Site Infection Prevention Bundle One-Pager for Surgeons**
Summary of the evidence behind the new elements of the bundle
- **A Brief for Hospital Administrators: The Business Case**
Financial implications for preventing hip or knee replacement SSIs
- **American Academy of Orthopaedic Surgeons Letter of Support**
- **Project JOINTS Annotated Bibliography**
- **Project JOINTS Data Tracking Tool**
An excel document designed to aid you in tracking your compliance with the Enhanced Surgical Site Infection Bundle. We advise you right click the link and save the document directly to your computer. Click [here](#) for a link to a WebEx tutorial.

Slide Presentations to Introduce the Bundle Elements in Your Organization:

- **Preoperative bathing or showering for at least three days**
- **Staph aureus screening and decolonization**
- **Use of alcohol-containing antiseptic for preoperative skin preparation**



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Questions & Discussion

