Surgical Discharge Kit: Reducing Surgical Site Infection in Patients after Total Knee Replacement
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**Problem:** Increase in post operative surgical site infection rate in the patient receiving knee replacement surgery who are 30 or more days post discharge. Infections occurring in the home environment. No inconsistencies identified in infection prevention pre-op routine. All patients received pre-op Hibiclens bath and Chloraprep pre-op surgical skin prep in OR prior to incision. No witnessed inconsistencies with OR set up, room cleaning, or room climate. All patients received similar discharge instructions: “may shower and clean incision with soap and water after you get home.”

**Evidence:** The common denominator identified for a source of wound contamination was use of the “family” bar of soap. Evidence supported the commonly held supposition that bar soap harbors bacterial flora and contamination on bar soap is transmitted from family member to family member. For the patient with a healing surgical incision, sharing bar soap increases the risk of bacterial infection via the transmission of organisms to the incision site.

**Strategy:**
- Discuss findings with surgeons and nursing staff.
- Seek approval from all stakeholders to assemble and distribute surgical discharge kit containing:
  - antibacterial liquid soap in a pump dispenser
  - revised discharge instructions
- Provide kit to knee replacement patients at discharge

**Practice Change:** Discharge education relative to discharge kits that insures patients with surgical incisions understand to use only the provided antibacterial soap dispensed from a pump container and not share with others in the family.

**Evaluation:** Following pilot program with knee and hip replacement and CABG patients, implemented for all patients being discharged with a surgical incision.

**Results:** 2 years post implementation indicates: significant decrease in patients presenting to ED with surgical site infections after discharge to home.

**Recommendations:** Continue distribution and education of surgical discharge kits; monitor and document to determine long-term success. Re-evaluate pre-operative and surgical prep for other opportunities to prevent surgical site infection.

**Lessons Learned:** Follow your clinical intuition and then follow up with evidence.
Bibliography:
