Eliminating CLABSIs: Piloting a Chlorhexidine Gluconate Bathing Protocol  
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**PROBLEM:** Healthcare-associated infections (HAIs) in acute care settings result in significant physiological, psychological, social and financial cost to patients, families, communities and healthcare agencies.

**EVIDENCE:** The average attributable per patient cost of HAIs related to central-line associated blood stream infections (CLABSIs) is estimated at $7,288-$29,156 (Scott, 2009). Among ICU patients, the colonization of multi-drug resistant organisms such as Methicillin-resistant Staphylococcus Aureus (MRSA) prolongs length of stays, increases cost of care, patient morbidity and mortality (Climo, et al., 2009). Daily 2% chlorhexidine gluconate bathing of medical icu patients has been shown to reduce the incidence of colonization of vancomycin-resistant Enterococcus (Vernon et al., 2006). A 52-week, 2-arm crossover clinical trial demonstrated that 2% chlorhexidine gluconate daily bathing was significantly more effective than traditional soap and water bathing in preventing primary blood stream infections (Bleadsoe, et al., 2009). In a 12-month, multicenter, before-after interventional study completed in 6 ICUs at 4 hospitals, a 32% decrease in MRSA acquisition and a 50% decrease in VRE acquisition occurred following the induction of daily CHG bathing (Climo et al., 2009).

**STRATEGY:** Assess the efficacy of daily 2% chlorhexidine gluconate (CHG) bathing of ICU patients in reducing the rate of CLABSIs due to MRSA. Sample Description/Population: All consecutive patients admitted or transferred into the ICU October 1, 2008- September 30, 2009 (pre-intervention phase) and October 1, 2009- September 30, 2010 (intervention phase). There were 6503 patient days in the pre-intervention phase. The intervention phase is currently underway. Setting: 24-bed comprehensive adult ICU of a 301 bed, tertiary, teaching hospital in the Milwaukee metropolitan area. Method/Design & Procedure: Quasi-experimental, after-only nonequivalent control group design. Active surveillance cultures for MRSA were obtained within 24 hours of patient admission or transfer to the ICU. For the duration of the study, prevalence surveillance cultures were obtained upon discharge or transfer out of the ICU. All surveillance cultures were obtained from the anterior nares and processed in the microbiology laboratory on site.

**PRACTICE:** During the pre-intervention phase, ICU patients received routine daily bathing with non-medicated soap and water or with Sage brand Comfort Bath disposable cleansing clothes. On October 1, 2009, the CHG bathing protocol was implemented in the ICU. Patients were bathed daily with Sage brand 2% CHG cloths.

**RESULTS and EVALUATION:** Data collection in progress: 4th quarter 2009 and 1st quarter 2010 results with statistical analysis will be presented.

**RECOMMENDATIONS:** Initial conclusions/implications will be presented based on findings of the first 6 months of the study.
LESSONS LEARNED: Pending

REFERENCES:


