with the types of process monitoring recommended. Information on packaging, loading the sterilizer and maintenance were provided. Links to corporate policies were included. Each activity included a post-test and evaluation. Materials were emailed to practice managers and clinical leads with a 30 day window to complete the activities.

Results: Following the initial assessments and SLA offering, subsequent visits have revealed improved understanding of decontamination and sterilization processes. Staff question appropriateness of processes and seek confirmation that they are in compliance. The SLAs were also favorably received by employees. The SLA evaluation included the question "I am satisfied with this self-directed learning activity". For the Decontamination SLA, 66% of respondents Strongly Agreed and 34% Agreed with the statements and for the Sterilization SLA 75% Strongly Agreed while 25% Agreed.

Lesson Learned: Many physician office staff members have significant knowledge deficits concerning reprocessing procedures. Educational materials appropriate to the office setting created an opportunity for improving processes and were well received by employees. Additionally, the SLAs have been converted to an online module available through a corporate intranet site to facilitate availability and tracking completion.

Presentation Number 14-201

Effectiveness of a Comprehensive Hand Hygiene Program for Reduction of Infection Rates in a Long-Term Care Facility: Lessons Learned

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Background/Objectives: Hand hygiene has been recognized as the most important intervention for preventing the transmission of pathogens in health care settings. Alcohol-based hand rubs (ABHRs) play a key role in reducing the transmission of pathogens and preventing infections in acute care settings, especially as part of a comprehensive hand hygiene program. ABHRs are associated with reduced hospital-associated infection (HAI) rates, including respiratory tract infections, and those caused by methicillin-resistant Staphylococcus aureus (MRSA). However, their use and impact in long-term care facilities (LTCFs), where the residents have increasingly higher acuity levels due to changing health care delivery systems, has been virtually unstudied.

Table 1
Summary of Infection Rate Results

Infection Type	Pre-intervention Rate*	Post-intervention Rate*	Statistical Analysis
LRTI (PA reportable)	0.97	0.53	$P = 0.01$
LRTI (McGeer)	0.97	0.53	$P = 0.03$
SSTI (PA reportable)	0.30	0.25	$P = 0.65$
SSTI (McGeer)	0.30	0.25	$P = 0.65$
MRSA	0.53	0.55	$P = 0.89$
VRE	0.07	0.05	$P = 0.80$
C difficile	0.08	0.04	$P = 0.36$
Gastrointestinal	0.10	0.09	$P = 0.87$

*Rate of infection per 1,000 resident-days

Table 2
Results of Analysis of Antibiotic Usage per Resident-Days

Analysis Type	Pre-intervention Rate	Post-intervention Rate	Statistical Analysis
Antibiotic usage units per 1,000 resident-days	12.9%	10.8%	$P = 0.03$

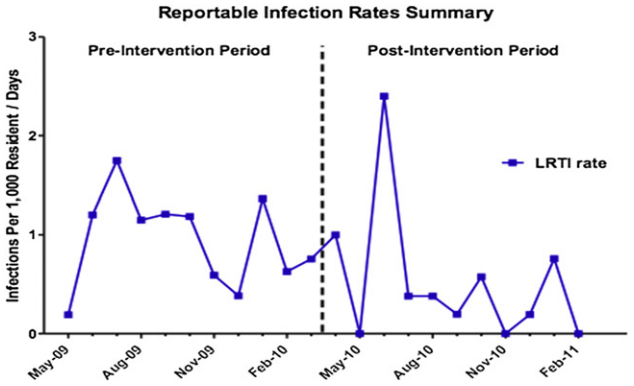

Fig 1. Reportable LRTI Rates.

Methods: Infection surveillance data, including those meeting McGeer et al. and the Pennsylvania Patient Safety Authority's reportable surveillance definitions, for lower respiratory tract infections (LRTIs) and skin and soft tissue infections (SSTIs), as well as hospitalization data were collected in a 174-bed skilled nursing LTCF for 22 months (May 2009 and February 2011). In March 2010, a comprehensive hand hygiene program including increased product availability (touch-free dispensers, alcohol based sanitizing wipes, 2 oz. personal carriage bottles), education for health care personnel (HCP) and residents, posters promoting hand hygiene, a resident hand hygiene program, a monthly hand hygiene champion, and an observation tool to monitor compliance, was implemented.

Results: Pennsylvania reportable infection rates for LRTIs were reduced from 0.97 to 0.53 infections per 1,000 resident-days ($P = 0.01$) following the intervention; a statistically significant decline. McGeer LRTI (non-pneumonia) also demonstrated a statistically significant reduction. Pennsylvania reportable infection rates for SSTIs were reduced from 0.30 to 0.25 infections per 1,000 resident-days ($P = 0.65$). There was a reduction with McGeer SSTIs that failed to attain statistical significance. A 54% hand hygiene compliance rate was observed among HCP. No statistically significant changes in hospitalization rates due to LRTI and SSTI were observed during the study period.

Conclusions: This study demonstrates that the use of ABHRs, as part of a comprehensive hand hygiene program for HCP and residents, can decrease infection rates in LTCFs.

Presentation Number 14-202

Keeping Our Eyes on TASS: Our Experience in the Ambulatory Care Setting

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Issue: Toxic Anterior Segment Syndrome (TASS) is an early post-operative complication of anterior chamber cataract surgery. TASS is an inflammatory process causing decreased vision. It is reported clusters range from a few cases to over 20 occurrences several times a year in the USA. Investigations have demonstrated several causes for TASS which include; abnormalities in the ph. or ionic composition of irrigation solutions, ophthalmic viscoelastic devices, intraocular medications, powdered gloves, or even the finish of an intraocular lens. TASS has also been cited by many sources as occurring from toxic residues on such as on improperly rinsed instrumentation or soaked in enzymatic detergents along with improper use of ultrasonic units.
Project: 1/7/2010 to 2/4/2010. 4 cases of TASS were reported from 2 physicians. A team was assembled to evaluate current practices. The team included; Infection Control, Nurse Executive, Operating Room Manager, and Sterile processing Manager. Review of sterilizers cleaning demonstrated no servicing for one week before trays sterilized, all loads met parameters for sterilization, and no closed container/short cycle loads were used for any instruments utilized in these cases. Our research on TASS lead to the following changes. 1. Modification of OR post procedural cleaning/rinsing practice. Incorporate two basins of sterile water on back table for intra-procedural rinsing and a second basin for post procedural rinsing with copious flushing. 2. Propose purchase of a separate ultrasonic unit for only ophthalmic instruments. 3. Utilize filtered needles for drawing medication. This practice decreases the possibility of microscopic shards from entering with ampule opening and changing to preservative free medications when available, i.e. epinephrine. 4. Evaluate all cleaning practices in sterile processing. 5/5/2010 and 11/17/2010. 2 more cases reported after above changes. Team reassembled: Sterile processing Manager introduced to team a rinsing system from a company. We contacted the company obtained a loaner which flushes cannulated instruments with an enzymatic cleaning solution as well as distilled water and air. After a trial of the Quick Rinse System, we purchased 3 units; one unit for use in the Operating Room for immediate use after manual rinsing post procedure. The Second and third units were placed in the sterile process department one in decontamination and the other in the sterile prep area. The Staff continues to follow the previous steps along with using the Quick Rinse Unit.
Results: 11/17/10 -2012 There have been no further incidences of TASS. The Quick Rinse system has been successful in cleaning ophthalmic instrumentations along with all the lumened instruments utilized in our Operating Room.
Lesson Learned: Review with the Operating & sterile processing staff the importance of following all steps of decontamination and sterilization. Meticulous removal of all viscoelastic, cleaning products and other potential toxins is imperative for successful patient outcomes.

Presentation Number 14-203

Strengthening Healthcare-Associated Infection Prevention Efforts in Rural, Small, and Critical Access Hospitals in California through Collaboration

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Issue: Healthcare-associated infections (HAIs) are a significant cause of preventable injury and death. California recognized HAIs as a significant public health issue and initiated assistance with HAI prevention strategies through the California Department of Public Health (CDPH) in the mid 1990's. One obstacle faced is the large number of rural, small, and critical access (RSCA) hospitals spread over an extensive geographical area (>163,000 square miles). Of California's 427 hospitals, approximately one-third have less than 100 beds, 72 are designated rural hospitals, and 28 are critical access hospitals (CAH). Due to many factors, including limited financial and staffing resources and limited collaboration opportunities due to geographic isolation, these hospitals may need assistance and training to aid in HAI prevention efforts within their facilities.
Project: Through a project conducted by the U.S. Department of Health and Human Services Office of the Regional Health Administrator for Region IX (as part of a Regional HAI Prevention program in the Office of Healthcare Quality) in collaboration with CDPH, current HAI prevention infrastructure was expanded to enable a targeted focus on assessing the needs of and providing additional support to RSCA hospitals. The project, which began in late 2010, initiated outreach (1-on-1 consultations) to RSCA hospitals. In March 2011, in association with the Hospital Council of Northern and Central California, six focus groups were convened via teleconference with RSCA hospitals in California to perform a needs assessment and determine interest in a statewide HAI Prevention Collaborative(s).
Results: 71 healthcare providers from 51 hospitals took part in the focus group discussions. The size of participating hospitals ranged from 10 to 153 beds plus one 600+ bed hospital from a predominantly rural county. Excluding the 600+ bed hospital, the median hospital size was 46 beds; 35 (69%) hospitals identified as rural, of which 15 (43%) identified as CAH. 22 (43%) hospitals described past experiences with HAI prevention interventions, with the most common infection or care process target being central line-associated bloodstream infections. 11 (50%) of those hospitals with past experience stated they were still working on one or more targets that required improvement. A majority of respondents favored participating in a RSCA-focused HAI prevention collaborative.
Lesson Learned: Less than half of participating hospitals reported recent experience with a HAI prevention initiative and 50% of those who have experience state further improvement is needed. Even without experience many hospitals expressed interest in further participation in a rural collaborative HAI prevention network. In 2011 CDPH began the California RSCA Hospital HAI Prevention Collaborative. Three projects were launched based on the results of the focus groups: Clostridium difficile prevention and antimicrobial stewardship, HAI prevention best practices for California's smallest hospitals, and catheter-associated urinary tract Infection prevention through the national “On the CUSP: Stop CAUTI” initiative.