decreased to 40% during the last quarter. The nurses' adherence to the daily checklist remained stable (>75%). **Conclusions:** This CAUTI prevention project was the first use of quality improvement methodology to implement change at NHTD. A trend decrease in CAUTI was observed, though a greater decrease occurred at the beginning of the intervention. Limited compliance of daily reminders is likely reflected in no statistically significant decrease in DUR. Possibly, this quality improvement project raised awareness among clinicians to improve general CAUTI prevention practices in the ICU without decreasing DUR. Given limited compliance with reminder and checklists, the intervention will be revised during the next PDSA cycle to improve adherence.

[1]Meddings J, Rogers MA, Krein SL, Fakih MG, Olmsted RN, Saint S. Reducing unnecessary urinary catheter use and other strategies to prevent catheter-associated urinary tract infection: an integrative review. *BMJ Qual Saf* 2014;23:277–289.

Presentation Type:
Poster Presentation
Pitfalls of a Staged Implementation of an Automated Hand Hygiene System: Lessons Learned
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Background: Hand hygiene is the first defense against healthcare-associated infections, yet studies show that adherence to hand hygiene still remains low. An academic medical center selected a beacon-based automated hand hygiene reminder system to improve hand hygiene adherence. Accountability is challenging to enforce without a reliable means to measure hand hygiene adherence. The hospital used secret shoppers to observe hand hygiene adherence. This method captures an estimated 0.5%–1.7% of opportunities and may be influenced by the Hawthorne effect. **Methods:** In November 2018, a phased trial of an electronic hand hygiene reminder system began in 4 intensive care units (ICUs). The system selected used a badge and beacon technology. The badge identifies each care provider and displays colored lights to show adherence status. Beacons are present on the patient's bed, soap, and hand sanitizer dispenser. These beacons establish a "patient zone" that captures opportunities for hand hygiene. The specialty beds in the ICUs were supposed to remain on the units. A patient transferring to a lower level of care would be placed on another bed or gurney when leaving the ICU. ICU staff were badged for the system. **Results:** The phased implementation strategy had challenges with beds, badges, and the system. Despite planning, education, and communication, the beds left the ICU area, so the beaconed beds were outside the ICU, and staff did not always wear their assigned badge. There were issues with the system router as well. Unit leadership and the infection control team worked on processes to get beds back into the units. The implementation team decided to provide badges to staff who regularly worked in the ICU to differentiate from consultation groups that came to the ICU (and were not badged). The system routers were plugged in at various places on the units and had become unplugged so information was not sent for reports. Despite these issues, over the year of implementation, the units did achieve an increase in hand hygiene adherence from 48% to 85%. Collectively, the units achieved a 53% reduction in central-line–associated blood stream infection (CLABSI), reducing infections from 13 to 7 and a 35% reduction in methicillin-resistant *Staphylococcus aureus*

(MRSA), reducing infections from 8 to 3 as defined by the NHSN. **Conclusions:** When implementing a beacon-based, automated hand hygiene system, staged implementation can be challenging. To avoid these challenges, facility-wide implementation is preferable.

Presentation Type:
Poster Presentation
Point-Prevalence Surveys of Antibiotic Use at Three Large Public Hospitals in Kenya
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Background: Antibiotics are the most prescribed medicines worldwide, accounting for 20%–30% of total drug expenditures in most settings. Antimicrobial stewardship activities can provide guidance for the most appropriate antibiotic use. **Objective:** In an effort to generate baseline data to guide antimicrobial stewardship recommendations, we conducted point-prevalence surveys at 3 hospitals in Kenya. **Methods:** Sites included referral hospitals located in Nairobi (2,000 beds), Eldoret (900 beds) and Mombasa (700 beds). [Results are presented in this order.] Hospital administrators, heads of infection prevention and control units, and laboratory department heads were interviewed about ongoing antimicrobial stewardship activities, existing infection prevention and control programs, and microbiology diagnostic capacities. Patient-level data were collected by a clinical or medical officer and a pharmacist. A subset of randomly selected, consenting hospital patients was enrolled, and data were abstracted from their medical records, treatment sheets, and nursing notes using a modified WHO point-prevalence survey form. **Results:** Overall, 1,071 consenting patients were surveyed from the 3 hospitals (n = 579, n = 263, and n = 229, respectively) of whom >60% were aged >18 years and 53% were female. Overall, 489 of 1,071 of patients (46%) received ≥1 antibiotic, of whom 254 of 489 (52%) received 1 antibiotic, 201 of 489 (41%) received 2 antibiotics, 31 of 489 (6%) received 3 antibiotics, and 3 of 489 (1%) received 4 antibiotics. Antibiotic use was higher among those aged <5 years: 150 of 244 (62%) compared with older individuals (337 of 822, 41%). Amoxicillin/clavulanate was the most commonly used antibiotic (66 of 387, 17%) at the largest hospital (in Nairobi) whereas ceftriaxone was the most common at the other 2 facilities: 57 of

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