it was inoculated onto brain-heart infusion. Next, it was plated on McConkey and Mannitol agar. MALDI-TOF was used for identification. Agar dilution was performed for *Staphylococcus* spp. We selected all *Staphylococcus* spp with MIC ≥ 8 and performed inhibition of efflux pump test. For isolates that showed a decrease of 2 dilutions, we searched the gene *qacA/B* by polymerase chain reaction.

**Results:** We obtained 262 samples from HCW hands yielding 428 isolates. The most frequent genera were *Staphylococcus* spp (58%), *Acinetobacter* spp (8%), *Enterobacter* spp (8%), *Stenotrophomonas* spp (5%), *Klebsiella* spp (4%), *Pseudomonas* spp (3%), and others (14%). *Staphylococcus* spp were less frequent in the intervention compared to control group (43% vs 61%; OR, 0.48; 95% CI, 0.29–0.69; P = .005). Among all *Staphylococcus* spp, the proportion of chlorhexidine resistance (RCHG; MIC ≥ 8) was 12%. All resistant isolates recovered susceptibility after inoculation with pump-efflux inhibitor. For pump-inhibited isolates, 53% had the gene *qacA/B* amplified by PCR. We did not investigate RCHG among gram-negative isolates. There was a nonsignificant increase in *Staphylococcus* spp RCHG in the intervention group (4% to 6%; P = .90).

Healthcare-acquired infection rates did not change significantly during the intervention. The consumption of CHG increased from 7.3 to 13.9 mL per patient day. **Conclusions:** We did not detect a significant difference in RCHG during the routine use of CHG for HH, although we observed increasing resistance. Further investigation is needed to clarify other reasons for increasing MIC to CHG.

**Funding:** None

**Disclosures:** None

**Doi:** 10.1017/ice.2020.1028

**Presentation Type:**

**STOP-BSI: Reducing Methicillin-Resistant *Staphylococcus aureus* Bloodstream Infections in Oncology Patients**

Myilinh Yun, Emory Healthcare; Jay Varkey; Renee Spinkie, Emory; Marie Ayers, Emory University Hospital; Christina Bell, Emory University Hospital Emily Bracewell, Emory University Hospital; Patricia Crabtree, Emory University Hospital; Carolyn Holder, Emory University Hospital; Roberta Kaplow, Emory University Hospital; Margaret Whiston, Emory Johns Creek Hospital

**Background:** Hospital-acquired methicillin-resistant *Staphylococcus aureus* bloodstream infections (MRSA BSIs) are associated with serious morbidity and mortality in immunocompromised patients. Of all MRSA BSIs at our academic medical center, 63% occurred in the oncology units. A multidisciplinary team was formed to address the improvement opportunity: the clinical nurse specialist, hospital epidemiologist, unit leaders, nurse champions and representatives from infection prevention, pharmacy and information technology. The goal was to decrease the incidence of hospital-onset MRSA BSI in the oncology wards by 10 infections in 2016 by implementing daily chlorhexidine (CHG) bathing and weekly nasal povidone-iodine antisepsis in July 2016.

**Methods:** The strategically targeting oncology with povidone-iodine nasal antisepsis and bathing with CHG *Staph* reduction initiative (STOP-BSI) was a quality improvement project consisting of daily CHG baths for all oncology patients and nasal povidone-iodine on admission and weekly thereafter. Nurses and patient care technicians were trained on how to administer CHG treatments. Education was also provided to patients on how to use CHG bath wipes to self-administer the nasal antisepsis. Education resources were created to help answer concerns of the staff, patient, or family, and an escalation process was developed for treatment refusal. CHG bath audits were performed to measure compliance and to identify barriers to the process. **Results:** By the end of 2016, the number of infections decreased by 5 on the oncology units. The number of infections continued to decrease each year. The bone marrow transplant (BMT) unit decreased from 8 infections in 2015 to 3 in 2018. The hematology oncology unit infections decreased from 5 infections in 2015 to 0 in 2018. The CLABSI rates per 1,000 line days trended downward after some time.

**Conclusions:** Implementing daily CHG baths and weekly povidone-iodine nasal antisepsis reduced the number of MRSA BSI infections in the oncology population. The CLABSI rates decreased after barriers to the process were removed.

**Funding:** None

**Disclosures:** None

**Doi:** 10.1017/ice.2020.1029

**Presentation Type:**

**Strategy for Increasing Alcohol Gel Consumption Based on Realistic Simulation, Opinion of Healthcare Workers, Structure Adequacy and Change in Alcohol Product**

Ligia Abraao, Americas Medical Services - United Health Group, Brazil; Sandra Nascimento dos Anjos, Paulistano Hospital; Chayenne Mika Matsumoto Pinto Tonheiro, Paulistano Hospital; Dália Souza Lima, Paulistano Hospital; Marianna Sarkis Braz, Paulistano Hospital; Sarita Pires, Americas Medical Services - United Health Group, Brazil; Daiane Cais, Americas Medical Services - United Health Group, Brazil; Bianca Miranda, Americas Medical Services - United Health Group, Brazil; Brunno César Batista Cocentino, Paulistano Hospital; Lauro Perdigão-Neto, Hospital das Clínicas, University of São Paulo, São Paulo, Brazil

**Background:** Healthcare-related infections (HAIs) imply higher morbidity and mortality, length of hospitalization, and costs to institutions and the health system. An important practice for HAI control is hand hygiene. Due to the need for greater adherence to the practice of hand hygiene, as well as understanding about behavior and motivations related to actions associated with infection control, we conducted this study based on inquiry and intervention. **Objectives:** To describe the increase in adherence to hand hygiene through a multimodal strategy based on realistic simulation, inquiry, change of alcohol and training on actions related to infection control. **Methods:** In May 2018, a survey was administered to healthcare workers (HCW) regarding structure, process, and behavior related to hand hygiene. Training was also performed, which simulated a bed marked with GloGerm (later revealed with the application of black light), performing tasks by professionals, and completing a test. In November 2018, the structure of hand hygiene and points at which the alcoholic product was offered were redefined, and the alcohol-based product and its dispensers were exchanged. In December 2018, an educational campaign on hand hygiene and change disclosure was held. In February 2019, a new survey was applied to employees. Alcohol consumption was measured per patient day in the periods and compared with the historical average. **Results:** In the first application of the survey, 263 HCW reported dissatisfaction with hand hygiene structure (46% preferred water and soap). Most reported that training and structure would improve adherence. The training took place for 540 HCWs from many different professional positions. Alcohol gel consumption had a sustained increase from an