implementation and provided various ASP resources to LTCFs (eg, antibiotic policy template, guidance documents and standard assessment and communication tools). Data collection included ASP Core Elements, antibiotic starts, days of therapy (DOT), and resident days (RD). The McNemar test, the Wilcoxon signed-rank test, generalized estimating equation model, and the classic repeated measures approach were used to compare the presence of all 7 core elements and antibiotic use during the baseline (2017) and intervention (2018) year. **Results:** In total, 9 trained consultant pharmacists assisted 32 LTCFs with ASP implementation. When evaluating 27 LTCFs that provided complete data, a significant increase in presence of all 7 Core Elements after the intervention was noted compared to baseline (67% vs 0; median Core Elements, 7 vs 2; range, 6–7 vs 1–6; $P < .001$). Median monthly antibiotic starts per 1,000 RD and DOT per 1,000 RD decreased in 2018 compared to 2017: 8.93 versus 9.91 ($P < .01$) and 106.47 versus 141.59 ($P < .001$), respectively. However, variations in antibiotic use were detected among facilities (Table 1). When comparing trends, antibiotic starts and DOT were already trending downward during 2017 (Fig. 1A and 1B). On average, antibiotic starts decreased by 0.27 per 1,000 RD ($P < .001$) and DOT by 1.92 per 1,000 RD ($P < .001$) each month during 2017. Although antibiotic starts remained mostly stable in 2018, DOT continued to decline further (average monthly decline, 2.60 per 1,000 RD; $P < .001$). When analyzing aggregated mean, antibiotic use across all sites per month by year, DOT were consistently lower throughout 2018 and antibiotic starts were lower for the first 9 months (Fig. 1C and 1D). **Conclusions:** Consultant pharmacists can play an important role in strengthening ASPs and in decreasing antibiotic use in LTCFs. Educational programs should be developed nationally to train long-term care consultant pharmacists in ASP implementation.

Presentation Type:
Poster Presentation
Large-Scale Analysis of Hand Hygiene Frequency Across Healthcare Facilities Varying in Key Hospital Characteristics
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Background: Hand hygiene by healthcare personnel is a critical infection prevention intervention. Direct observation, the most widely utilized method to observe hand hygiene practices, often provides an incomplete picture due to small sample size and altered behavior in the presence of observers. A growing number of healthcare facilities are employing electronic hand hygiene monitoring systems to capture overall compliance rates. These electronic systems can provide a wealth of data on hand hygiene practices within and across healthcare facilities. **Objective:** We used high-accuracy electronic monitoring data to perform a detailed analysis of hand hygiene practices across numerous facilities that varied in key hospital characteristics. **Methods:** In total, 11 tertiary-care facilities were equipped with an electronic hand hygiene monitoring system. Hospitals varied in size, region, area classification (urban vs rural), acuity level, and teaching status. The electronic monitoring system was composed of uniquely assigned employee badges and electronically monitored dispensers. Every recorded dispensing event was time stamped and associated with a specific healthcare worker, the location of the dispenser, and the specific product being dispensed (ie, alcohol-based hand rub [ABHR] or hand soap). The total number of dispensing events for each product type and the total number of hours worked were calculated for each healthcare worker and were used to determine hand hygiene frequency. Hospital attributes, such as size and area classification, were obtained from publicly available sources including but not limited to facility-owned websites and CMS data. **Results:** More than 15.7 million hand hygiene events, performed by nearly 11,000 healthcare workers, were captured by the electronic monitoring system and were included in the analysis. Overall, median hand hygiene frequency was 4.1 events per hour and ranged from 2.0 events per hour to 5.6 events per hour, depending on the facility. ABHR use (median, 3.6 events per hour) was more frequent than handwashing (median, 0.4 events per hour). Hospitals included in the analysis ranged from small (<20 beds) rural facilities to large (>600 beds) academic hospitals and provided a variety of services from general medical-surgical treatment to intensive care. Interfacility differences in observed hand hygiene frequency were analyzed. **Conclusions:** The current analysis reinforces and builds upon previous work that examined a smaller subset of 5 hospitals located in a single geographic region. Combined, these datasets represent >20 million hand hygiene events among ~15,000 healthcare workers from 16 unique healthcare facilities. This analysis provides detailed information about hand hygiene practices across a diverse set of healthcare facilities.

Presentation Type:
Poster Presentation
One Health: Farmworker Perceptions of Antibiotic Resistance and Personal Protective Practices on Wisconsin Dairy Farms
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Background: Antimicrobials are used on dairy farms for preventing disease and treating common infections such as mastitis. **Objective:** We aimed to understand farmworker practices that potentially contribute to transmission of antimicrobial resistance bacteria and their genes (ARG) among

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