Conclusions: The transition from mainly 2- and 4-person rooms to 100% single-patient rooms resulted in a significant decrease in environmental contamination, even though the number of patients colonized with HRMO slightly increased. No molecular typing to determine transfer from environment to patients and vice versa has yet been performed. Future sampling is needed to determine whether the low environmental contamination is a long-term effect of the transition to single rooms.

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Presentation Type:
Poster Presentation

A Clinical Decision Support Intervention to Improve Inpatient Pediatric Influenza Vaccination
Ioana Chirca, University Hospital; Alan Sun, Dwight D Eisenhower Army Medical Center; Adrienne Wright Albrecht, University Hospital; Sallie Jo Rivera, University Hospital; Kelly Henry, University Hospital; Connie Faircloth, University Hospital

Background: Clostridioides difficile is a leading cause of nosocomial infectious diarrhea in developed countries, and it has a significant economic impact throughout the world. Early detection of the pathogen and its toxins is critical because early treatment significantly reduces infection-related morbidity, mortality, and medical cost. Surveillance of healthcare-associated infections (HAIs) is conducted using the NHSN standardized infection ratio (SIR). This metric allows comparison of a facility’s observed infection rate to a national benchmark. The SIR can be elevated due to both a lack of institutional criteria for stool submission and the use of highly sensitive but poorly specific testing as a standalone test for diagnosis. The SIR can be artificially elevated by inclusion of C. difficile carriers rather than infected patients due to inappropriate testing and overly sensitive methods. We aimed to determine the impact of an institutional nursing-driven protocol for stool submission as well as 2-step testing on the SIR.

Methods: Starting from the fourth quarter of 2018, we instituted a nursing protocol for initiation of C. difficile testing. If the patient had ≥3 soft, loose, or liquid stools in 24 hours within the first 3 days of admission, they were placed on contact precautions and an unformed stool sample was submitted for C. difficile nucleic acid amplification testing (NAAT). A positive result prompted further evaluation with a stool enzyme immunoassay toxin test for confirmation of active infection. From hospital day 4 onward, stricter criteria were implemented for testing for C. difficile infection. Data were extrapolated for calculation of a quarterly SIR. This value was then compared to retrospective SIR data from the first quarter of 2016 to the third quarter of 2018.

Results: The quarterly total of hospital-onset C. difficile infections from the first quarter of 2016 to the third quarter of 2018 ranged from 24 to 39 incidents per quarter. After implementing the nursing-driven protocol and 2-step testing, the quarterly total of hospital onset C. difficile infections decreased to 5–6 per quarter. The SIR prior to initiation ranged from 0.66 to 1.37 and decreased to 0.306–0.386 after the nursing-driven protocol and 2-step testing were implemented.

Conclusions: Implementation of both an institutional nursing-driven protocol for stool submission and a 2-step testing protocol reduced the number of quarterly hospital-onset C. difficile events as well as our facility’s quarterly SIR to below the national standard.

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Presentation Type:
Poster Presentation

A Bundled Approach to Reduce Delayed Testing and Hospital-Acquired Cases of Clostridioides difficile Infection
Ioana Chirca, University Hospital; Alan Sun, Dwight D Eisenhower Army Medical Center; Adrienne Wright Albrecht, University Hospital; Sallie Jo Rivera, University Hospital; Kelly Henry, University Hospital; Connie Faircloth, University Hospital

Background: Clostridioides difficile is a leading cause of nosocomial infectious diarrhea in developed countries, and it has a significant economic impact throughout the world. Early detection of the pathogen and its toxins is critical because early treatment significantly reduces infection-related morbidity, mortality, and medical cost. Surveillance of healthcare-associated infections (HAIs) is conducted using the NHSN standardized infection ratio (SIR). This metric allows comparison of a facility’s observed infection rate to a national benchmark. The SIR can be elevated due to both a lack of institutional criteria for stool submission and the use of highly sensitive but poorly specific testing as a standalone test for diagnosis. The SIR can be artificially elevated by inclusion of C. difficile carriers rather than infected patients due to inappropriate testing and overly sensitive methods. We aimed to determine the impact of an institutional nursing-driven protocol for stool submission as well as 2-step testing on the SIR.

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Results: The quarterly total of hospital-onset C. difficile infections from the first quarter of 2016 to the third quarter of 2018 ranged from 24 to 39 incidents per quarter. After implementing the nursing-driven protocol and 2-step testing, the quarterly total of hospital onset C. difficile infections decreased to 5–6 per quarter. The SIR prior to initiation ranged from 0.66 to 1.37 and decreased to 0.306–0.386 after the nursing-driven protocol and 2-step testing were implemented.

Conclusions: Implementation of both an institutional nursing-driven protocol for stool submission and a 2-step testing protocol reduced the number of quarterly hospital-onset C. difficile events as well as our facility’s quarterly SIR to below the national standard.