

Background: The Infection Prevention and Control (IPC) department of a large, pediatric health system provides on-call support to employees twenty-four hours a day, seven days a week. Over the past two years, IPC has experienced an approximately 50% increase in on-call pages, leading to frequent interruptions in daily work of the infection preventionists (IP) and more response required during non-business hours. We aimed to develop a more efficient method for answering and triaging IPC questions.

Methods: IPC partnered with an existing 24/7 call center already in place at the health system. Employees call this IPC Communication Center directly with their questions. Agents answering calls were trained on topics including but not limited to isolation precautions, coronavirus disease 2019 (COVID-19), multi-drug resistant organisms and communicable diseases. Agents were provided resources to assist with immediate response to inquiries and they only escalated to the IP on-call as needed. IPC provided ongoing education to agents. Data were tracked and reviewed weekly including number of inquiries, inquiries agents resolved versus escalated to IPC and overall topic themes.

Results: Over seven weeks, agents handled 339 employee inquiries. During the first week post implementation, 17% were immediately answered by agents without IP escalation. By the end of week seven, 47% of callers received an immediate response to their inquiry without the need to escalate to IPC. Overall, 31% of inquiries required no IP escalation. Main inquiry topic themes were isolation precautions (32%) and COVID-19 (35%).

Conclusions: An IPC Communication Center provides direct support for employees while decreasing the number of inquiries reaching IPC. Partnering with other departments to implement a novel approach to IPC on-call assistance can lead to more efficient processes that provide better support to employees and IP within your health system.

Occupational Health and Wellness

OHW-20

Capitalizing on a Global Personal Protective Equipment (PPE) Shortage to Design a More Functional and Sustainable Isolation Gown

LUCY HE MLS(ASCP)CM, CIC, Inova Health System

Background: The COVID-19 pandemic caused a global PPE shortage. Across our health system, the type of disposable isolation gowns we were accustomed to using were not as readily available. As a result, we used new varieties of isolation gowns of inconsistent quality. With isolation gowns being the second most used type of PPE at our organization, we used and disposed of almost 3.1 million single-use isolation gowns, amounting to approximately 213 tons of waste in a year. An opportunity arose to design and implement a consistently high quality and reusable isolation gown that would both be protected from supply chain disruptions and reduce our health system's ecological footprint.

Methods: After trialing several varieties of disposable and reusable gowns, a substantial amount of feedback was gathered over several months from end-users, Infection Prevention, and Supply Chain. This feedback informed the design of a custom reusable isolation gown that resolves identified problems in functionality, particularly barrier effectiveness, comfort, fit, and ease of donning and doffing. The new design meets current healthcare protection clothing standards and specifications.

Results: The custom reusable isolation gowns are being implemented at all hospitals across our health system. There is adequate supply of the reusable gowns, as the product is not susceptible to PPE shortages. There is overwhelmingly positive feedback from end-users on functionality and effectiveness. The gowns are safely laundered according to healthcare standards, resulting in less waste when compared to single-use isolation gowns.

Conclusions: PPE shortages leave frontline healthcare workers ill-equipped to care for patients. Design and implementation of a more functional and sustainable product, that is not vulnerable to supply chain disruptions, helps ensure our healthcare workers have the resources needed to protect themselves and others from spreading infectious pathogens.

Quality Assurance and Performance Improvement

QAPI-21

Decreasing Peripheral Intravenous Catheter (PIV) Associated Methicillin-resistant Staphylococcus Aureus (MRSA) Bacteremia

Alicia D. Urbanovsky BSN, RN, CIC, Ascension Providence

Background: A 210-bed community hospital experienced 13 MRSA bacteremia events from July 2017 - June 2019. Among those infections, 46.2% were associated with the use of a PIV. Review of MRSA bacteremia infections identified a lack of standardized prevention measures in patients with PIVs.

Methods: A multidisciplinary team was assembled consisting of Infection Prevention (IP), nursing, anesthesia, and Emergency Medical Services (EMS) to create and implement a PIV bundle. The bundle included labeling, dating, and assessing intact, clean dressings. Following bundle development, education was conducted across the hospital via skills fair with hands-on training and roving in-services to ensure 90% of affected staff were reached. IP collected pre-intervention data and bundle audit data weekly to monitor improvement. During audits, the IP performed just-in time education and feedback on bundle non-compliance. PIV-bacteremia prevention education was incorporated into orientation for new nurses. Additional education was conducted with Anesthesia and EMS providers on PIV insertion technique and infection prevention processes.

Results: Baseline compliance with PIV-bundle components was 13.6% and increased to 69.0% in December of 2019 when the project ended. Dressing cleanliness increased from 66.0% in the baseline period to 88.7% Current data in December 2021 indicates an overall PIV bundle compliance rate of 80.6% demonstrating sustainability in the intervention. PIV-associated MRSA bacteremia decreased from 1.04 infections/10,000 patient days to 0 infections/10,000 patient days (p=0.008).

Conclusions: PIV-associated bacteremia can be a major contributor to overall MRSA bacteremia. A comprehensive PIV bundle with stakeholder engagement is an effective intervention to reduce MRSA-bacteremia. Improving PIV maintenance practices reduces MRSA bacteremia.

QAPI-22

Don't Jump to Conclusions, a Central Line-associated Bloodstream Infection Pseudo-Outbreak Investigation