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2017 CHAIN Award for Excellence Winning Nominations

Park Nicollet Methodist Hospital was recognized for its Park Nicollet Infection Prevention and Control Service.

Appropriate specimen testing is a key component of preventing healthcare-acquired *Clostridium difficile* infection (CDI) and supporting antibiotic stewardship, which includes promoting the appropriate use of antibiotics. Park Nicollet Methodist Hospital had a nurse-driven CDI testing protocol prompted by an electronic health record (EHR) software system alert, but this protocol sometimes resulted in avoidable testing, overdiagnosis of CDI and unnecessary antibiotic administration.

To enhance appropriate CDI testing and antibiotic prescribing, the hospital collaborated with nurses, providers, infection preventionists and lab staff members to replace the nurse-driven CDI testing protocol and instead require a provider order and completion of a brief clinical checklist before CDI testing occurred. Infection preventionists and lab staff members assessed all inpatient specimens submitted for CDI testing to ensure appropriate criteria were met and followed up with providers if tests were unnecessarily ordered. Additional alerts were developed in the EHR system to automatically prompt when CDI testing was not recommended or when a patient should be reassessed because a test order was over 48 hours old. The EHR was also enhanced so recent patient data populated when a provider entered an order for CDI testing.

As a result of these interventions, CDI test orders decreased from 152 per month to an average of 87 per month. The hospital also improved its accuracy of CDI diagnosis, realizing a 57 percent reduction in lab-identified healthcare-facility onset CDI events.

Regions Hospital was recognized for its Infection Prevention Isolation Precautions Utilization Improvement Team.

A goal of infection prevention programs is to interrupt transmission of organisms within health care settings. Regions Hospital had a protocol to initiate contact precautions for patients either colonized or infected with specific pathogens including Methicillin-resistant *Staphylococcus aureus* (MRSA). While this approach is generally supported by the CDC and infection prevention organizations, it can also lead to patient stress, decreased medical attention and more adverse events.

Regions began an initiative to reduce unnecessary use of contact precautions for MRSA in order to improve the patient experience while maintaining a safe patient care environment. Based on a review of existing literature regarding the use of isolation and an examination of approaches to MRSA screening, the hospital determined that its existing policies for isolation and screening were likely too stringent and that it lacked a standard process to routinely review admissions for proactive isolation discontinuation.

With the support of leaders, front-line colleagues and the hospital's Patient and Family Council, Regions Hospital discontinued routine patient screening for MRSA in its intensive care units and emphasized horizontal interventions, including bath treatment with chlorhexidine gluconate – a product that kills germs – for all inpatients with central lines and preoperatively for all surgical patients. Similarly, the hospital continues to monitor its robust hand hygiene program, bundled prevention practices and environmental cleaning to ensure high compliance.

Supported by a daily review of patients with a history of MRSA, Regions refined its utilization of vertical interventions. These include contact precautions for only those patients who met specific risk criteria for MRSA infection as well as targeted MRSA screening for high-risk populations. Together, these interventions resulted in no statistically significant change in infections, indicating that the focus on horizontal measures remained effective with no unintended consequences from practice changes. The hospital also saw a 16 percent decrease in isolation days for patients and a 54 percent decrease in MRSA screenings.