Quality and safety

Journal: Nurse-led antibiotic stewardship intervention reduces unnecessary urine cultures

Antibiotic stewardship programs (ASPs) improve patient outcomes and reduce antibiotic resistance. While recent guidance documents have outlined activities and approaches to integrate acute care nurses in antibiotic stewardship (AS) activities, few data have been published on effective ways nurses can contribute to AS efforts.

A new before-and-after study in the November issue of The Joint Commission Journal on Quality and Patient Safety, “A Pilot Study to Evaluate the Impact of a Nurse-Driven Urine Culture Diagnostic Stewardship Intervention on Urine Cultures in the Acute Care Setting,” details the impact of a nurse-driven urine culture (UrCx) stewardship intervention for adults with and without urinary catheters.

Overtreatment of asymptomatic bacteriuria (ASB) is a major driver of inappropriate antibiotic use in hospitals. Working with nurses to reduce unnecessary UrCxs may improve the diagnosis of urinary tract infections (UTIs) and, indirectly, antibiotic use.

The stewardship intervention was carried out in a 24-bed adult medicine unit staffed by rotating providers from a group of 27 hospitalists and 37 nurses at the Johns Hopkins Hospital, Baltimore. The intervention included:

- Education on the principles of diagnostic stewardship.
- Identification of a nurse champion to serve as liaison between nursing staff and the antibiotic stewardship program.
- Implementation of an algorithm to guide discussions with hospitalists about situations when UrCx may not be needed.

With the intervention, the mean UrCx rate per 100 patient-days decreased from 2.30 to 1.52, while without intervention it increased from 2.17 to 3.10. In addition, with the intervention, the rate of inappropriate UrCx decreased from 0.83 to 0.71. The findings support that nursing education and a clinical tool to enhance discussion on the necessity of UrCx among nurses and hospitalists are associated with a reduction in UrCx.

Also featured in the November issue:

- Use of Champions Identified by Social Network Analysis to Reduce Health Care Worker Patient-Assist Injuries (Oregon Health & Science University, Portland)
- Briefings: A Tool to Improve Safety Culture in a Pediatric Emergency Room (Hospital General Universitario Gregorio Marañón, Madrid, Spain)
- Using Electronic Health Record Data to Analyze Maternal and Neonatal Delivery Complications (Northwestern University Feinberg School of Medicine, Chicago)
- Pilot of Brief Health Coaching Intervention to Improve Adherence to Positive Airway Pressure Therapy (University of California, San Francisco)
- An Interprofessional Simulation-Based Orientation Program for Transitioning Novice Nurses to Critical Care Roles in the Emergency Department: Pilot Implementation and Evaluation (Yale New Haven Health and Yale School of Medicine, New Haven, Connecticut)
- Implementation of the Modified Minnesota Detoxification Scale (mMINDS) for Alcohol Withdrawal Syndrome in Critically Ill Patients (North Florida/South Georgia Veterans Health System, Gainesville, Florida)

Access the Journal.
Resources

Up in the blogosphere with The Joint Commission

- **Dateline @ TJC — Call to Exempt Physicians from Proposed Changes to U.S. Immigration Policy:** The members of Coalition for Physician Accountability – including The Joint Commission – are extremely concerned at the recent proposed rule by the U.S. Immigration and Customs Enforcement (ICE) and Department of Homeland Security to eliminate “duration status” as an authorized period of stay for physician non-immigrant visas, writes Mark Pelletier, MS, RN, Chief Operating Officer and Chief Nursing Officer.

- **Dateline @ TJC — Enhancing Understanding of the “Life Safety” Chapter:** Joint Commission Resources is published a brand-new book in October 2020, “Life Safety Made Easy: Your Key to Understanding Fire Safety in Health Care Facilities.” This easy-to-read — yet comprehensive — book is organized in order of the Life Safety standards and includes many downloadable tools to facilitate compliance, writes Carolyn Schierhorn, MA, Executive Editor, Global Publications, Joint Commission Resources.

- **Leading Hospital Improvement — Health Care Engineers Maintaining Building Safety & Saving Lives in a Pandemic:** Engineers and individuals working on the maintenance of a health care organization are often the unsung heroes of the industry. This happens to be the theme of the American Society of Health Care Engineers’ National Health Care Facilities and Engineering Week 2020 that took place from Oct. 25-31. Health care engineers literally keep our buildings running, writes Marisa Voelkel, BSN, MBA, CHSP, CHEP, Engineer.

- **Ambulatory Buzz — De-Escalating Violence in Ambulatory Care Settings:** There’s been a growing awareness of workplace violence potential in hospitals, but ambulatory providers are not immune. In fact, according to an executive brief issued by ECRI Patient Safety Organization (PSO) in 2019, workplace violence is one of the top four key risks in ambulatory care, writes Elizabeth Even, MSN, RN, Associate Director, Standards Interpretation.

- **Improvement Insights — Reflections on Maternal Morbidity Research:** The incidence of severe maternal morbidity (SMM) has been increasing nationally. U.S. pregnancy-related mortality rates remain higher than other high-income countries, with persistent racial and ethnic disparities, writes Joseph Feinglass, PhD.

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