New Studies on Effectiveness of Virtual Breakthrough Series and Outpatient Management of Neonatal Abstinence Syndrome

(OAK BROOK, Illinois, November 1, 2016) – The Joint Commission Journal on Quality and Patient Safety today released its November 2016 issue featuring two articles on the effectiveness of the Veterans Health Administration’s (VHA) use of the Virtual Breakthrough Series (VBTS) model to reduce infections and patient fall injuries, as well as an article on a project examining the outpatient management of neonatal abstinence syndrome (NAS).

In the article, “Virtual Breakthrough Series, Part 1: Preventing Catheter–Associated Urinary Tract Infections and Hospital-Acquired Pressure Ulcers in the VA," Lisa Zubkoff, PhD, White River Junction Department of Veterans Affairs (VA) Medical Center, White River Junction, Vermont, and National Center for Patient Safety (NCPS) affiliated co-authors, describe how they implemented a collaborative to help VHA facilities prevent catheter-associated urinary tract infections (CAUTIs) and hospital-acquired pressure ulcers (HAPUs). For the 18 participating teams focused on CAUTI prevention, the mean aggregated CAUTI rate decreased from 2.37 (prework phase) to 1.06 per 1,000 catheter-days (action phase); the rate did not change for nonparticipating sites. For the 31 participating teams focused on HAPU prevention, data were available for only 21 of those teams. Among those, the mean aggregated HAPU rate decreased from 1.80 to 0.99 from prework to continuous improvement.

In the second article, “Virtual Breakthrough Series, Part 2: Improving Fall Prevention Practices in the Veterans Health Administration," the authors implemented a VBTS collaborative to prevent patient falls and fall-related injuries. The project enabled 59 teams to expand program infrastructure, redesign improvement strategies and enhance program evaluation. The most frequently implemented changes were staff education, post-fall huddles, data tracking, falls classification, handoff communication, and intentional rounding. Of the 53 teams for which
data was available, the mean aggregated fall-related injury rate decreased from 6.8 to 4.8 per 100,000 bed-days of care, or five major injuries avoided per month. No statistically significant changes occurred for nonparticipants.

In an accompanying editorial, “Learning from the Virtual Breakthrough Series Collaboratives in the Veterans Health Administration,” Brook Watts, MD, MS, and Wynne E. Norton, PhD, state: “Like the VHA, all large health care systems are challenged to improve the quality and safety of care while being mindful of the efficiency and access constraints. These two articles suggest that a VBTS collaborative, if implemented appropriately, may be an important vehicle in these efforts.”

Also featured in the November 2016 issue:

**Performance Improvement**

**Outpatient Management of Neonatal Abstinence Syndrome:**

**A Quality Improvement Project**

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As the United States copes with an opioid epidemic, neonatal abstinence syndrome (NAS) is on the rise. A quality improvement project conducted in an academic medical center’s level IV neonatal intensive care unit included 22 infants with a NAS diagnosis and gestational age of 35 to 41 weeks, who were discharged for outpatient methadone management. A comprehensive, multidisciplinary outpatient NAS program entailed methadone monotherapy, a symptom-based management algorithm, and education of parents and providers.

From improvement period one to period three, there was no difference in total outpatient days on methadone (58, 53, 74 days, respectively) or cumulative methadone dose (2.7, 2.6, 3.1 mg/kg, respectively). A downward trend pattern in cumulative methadone exposure was noted in improvement period two. Pre- and post-implementation surveys revealed that after implementation, parents had better understanding of NAS before delivery (71 percent vs. 100 percent), while providers had increased comfort with outpatient management (24 percent vs. 67 percent) and educating parents (48 percent vs. 82 percent).

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