Quality Initiative Significantly Improves Outcomes for Children with Chronic Conditions
New Study in March 2017 Issue of The Joint Commission Journal on Quality and Patient Safety

(OAK BROOK, Illinois, February 16, 2017) – An estimated 20 percent of children in the United States suffer from a chronic condition or have a special health care need such as epilepsy, asthma or sickle cell disease, yet only half receive the care recommended for their conditions. By redesigning the way it cares for children with active chronic conditions, Cincinnati Children’s Hospital Medical Center successfully improved outcomes for 50 percent of more than 27,000 pediatric patients, according to a new study published in the March 2017 issue of The Joint Commission Journal on Quality and Patient Safety.

The study, “Applying the Chronic Care Model to Improve Care and Outcomes at a Pediatric Medical Center,” describes how the hospital implemented a Condition Outcomes Improvement Initiative to help specialized clinical teams apply quality improvement principles to improve outcomes for pediatric patients with chronic illness. The principles are part of the Chronic Care Model, an organizational approach developed in the 1990s to deliver patient-centered, evidence-based chronic care that improves individual and population-level outcomes.

Study author Jennifer Lail, MD, FAAP, assistant vice president of Chronic Care Systems and associate professor of Clinical Pediatrics, Cincinnati Children’s, and co-authors analyzed data involving more than 27,000 pediatric patients from 18 improvement teams that implemented care design changes based on the Chronic Care Model from 2012 to 2015.

Each improvement team focused on improving the care processes and outcomes for a specific chronic condition, such as juvenile arthritis, asthma, chronic kidney disease, food allergy, cardiomyopathy (heart muscle dysfunction) and sickle cell disease. Improvement processes included reviewing evidence to choose which outcomes to measure, developing condition-specific patient registries and data collection tools, classifying patients into defined risk
groups, planning and coordinating care before and after visits, and providing self-management and caregiver/parent support for patients and their families.

Following implementation of the care design changes, 50 percent of 27,221 active patients with chronic conditions had an improved outcome and 11 of the 18 chronic condition teams achieved the goal of 20 percent improvement in their chosen clinical outcome. Lail et al. believe their results suggest that by implementing quality improvement methods and with multidisciplinary support, clinical teams can manage diverse populations with chronic conditions and improve their outcomes.

In an accompanying editorial, John S. Adams, MD, clinical fellow of the Division of Adolescent/Young Adult Medicine, Boston Children’s Hospital, and Lauren E. Wisk, PhD, instructor of pediatrics, Harvard Medical School, Boston, and research associate of the Division of Adolescent/Young Adult Medicine, discuss how the Lail et al. study is unique in its implementation across multiple clinical divisions and array of chronic conditions within a single institution. The column states, “Such collaborative improvement networks allow for the lateral spread of innovation between quality improvement teams, accelerate knowledge acquisition through improved data infrastructure and standardization of care practices, and provide a platform to engage stakeholders.”

The March 2017 issue of *The Joint Commission Journal on Quality and Patient Safety* provides open access to all articles through March 31. Also featured in the issue:

- “A Prospective Emergency Department Quality Improvement Project to Improve the Treatment of Vaso-Occlusive Crisis in Sickle Cell Disease: Lessons Learned”
- “Timely Care for Sickle Cell”
- “Crossing the Communication Chasm: Challenges and Opportunities in Transitions of Care from the Hospital to the Primary Care Clinic”
- “Using an Electronic Perioperative Documentation Tool to Identify Returns to Operating Room (ROR) in a Tertiary Care Academic Medical Center”
- “Pediatric Postoperative Pulse Oximetry Monitoring During Transport to the Postanesthesia Care Unit Reduces Frequency of Hypoxemia”

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**Note for editors**
The article is “Applying the Chronic Care Model to Improve Care and Outcomes at a Pediatric Medical Center,” by Jennifer Lail, MD, FAAP; Pamela J. Schoettker, MS; Denise L. White, PhD, MBA; Bhavna Mehta, MBA (MIS); and Uma R. Kotagal, MBBS, MSc. It appears in *The Joint Commission Quality and Patient Safety*, volume 43, number 3 (March 2017), published by Elsevier.

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Joint Commission. Original case studies, program or project reports, reports of new methodologies or the new application of methodologies, research studies, and commentaries on issues and practices are regularly featured.