Reducing 30-Day Postoperative Emergency Department Visits Following Pediatric Urologic Surgery: A Quality Improvement Initiative

Kelly T. Harris[1,2], Darren Ha[2], Kyle O. Rove[1,2]

Coauthors addresses:

[1] Department of Pediatric Urology, Children's Hospital Colorado, Aurora, CO

[2] University of Colorado School of Medicine, Aurora, CO

Abstract

Introduction: Postoperative emergency department (ED) visits cause anxiety for patients and families. The median 30-day inappropriate postoperative ED return rate for the department of pediatric urology at our hospital from January to December 2022 was 4.3%. The aim of this quality improvement (QI) initiative was to decrease inappropriate 30-day postoperative ED visits after pediatric urologic surgery by 50% in six months.

Methods: Patients with postoperative uncontrolled pain, active emesis, active bleeding, or a problem after hours not addressable by phone were triaged to the ED. Otherwise, patients were triaged to an urgent clinic visit when possible. Clinic and recovery room nurses, surgeons, and trainees were provided training on how to communicate goals to families. Discharge instructions were updated to clarify these messages. All ED visits were classified as appropriate, inappropriate, or unrelated to surgery. The primary outcome was proportion of inappropriate 30-day postoperative ED visits.

Results: Six months after implementation, median inappropriate 30-day ED return rate was 2.2%, representing a 48.8% decrease from baseline. Barriers to implementation included varying levels of alignment across roles, differing uptake by practice setting, and concerns about communication and expectation for cross-covering urgent visits.

Conclusions: Our QI initiative led to a 48.8% decrease in inappropriate 30-day postoperative ED returns in the first six months of implementation. Our interventions led to a substantial reduction in inappropriate ED visits for children and families, saving time and money. Future iterations will continue to reinforce triage protocols while tracking the proportion of patients who successfully utilized urgent clinic visits for postoperative concerns.