

**UNDERSTANDING HOSPITALIZATIONS AFTER URETEROSCOPY IN A STATEWIDE QUALITY IMPROVEMENT COLLABORATIVE**

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**INTRODUCTION AND OBJECTIVES:** Hospitalizations after routine outpatient surgical procedures like ureteroscopy (URS) for stone disease are regarded as adverse (and sometime avoidable) events. As such, efforts are underway to reduce them. In this context, we examined hospitalization rates following URS in a statewide collaborative.

**METHODS:** The Michigan Urological Surgery Improvement Collaborative's Reducing Operative Complications from Kidney Stones (MUSIC ROCKS) is a quality initiative, involving 11 community and academic practices. Patients undergoing URS for stone treatment at a participating site are captured prospectively in an electronic registry. Trained abstractors record perioperative information, including patient demographics and comorbid illnesses, stone characteristics, surgical details, and unplanned healthcare encounters. For this study, we identified patients who were hospitalized within 30 days of URS, and we examined factors associated with hospitalization.

**RESULTS:** We analyzed data from 1,371 URS procedures that were performed between August 2016 and September 2017. The mean 30-day hospitalization rate following URS was 4.5%. Substantial variation in this rate existed between practices (0% to 11.4%). The majority of hospitalizations (62%) occurred within 5 days of surgery, and 76% of hospitalized patients underwent ureteral stenting at the time of URS. As shown in the figure, 57% were hospitalized for infectious reasons (red bars). Factors associated with hospitalization included public insurance status, higher levels of comorbidity, renal (vs. ureteral) stone location, residual fragments, intraoperative complications, and staged surgery.

**CONCLUSIONS:** Nearly one in 20 patients are hospitalized within 30 days of URS, often for infectious reasons. Further, there are identifiable and potentially modifiable patient factors associated with hospitalization that could be targeted by future quality improvement efforts. These findings have implications for urologists who care for patients with urinary stones given that payers are considering penalties for hospitalizations after outpatient surgery.

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