Podium Session

PD67-06 - Is outpatient classification justified for minimally-invasive renal surgery? Results from a statewide quality improvement collaborative

📅 Monday, May 6 🕒 10:20 AM - 10:30 AM 📍 Location: MCP: W181c

Abstract Presenter(s)

Kyle Johnson

Presentation Authors: Kyle Johnson*, Alon Weizer, Lindsey Herrel, Anna Johnson, Tae Kim, Ji Qi, Ann Arbor, MI, Craig Rogers, Detroit, MI, Richard Sarle, Troy, MI, Brian Lane, Grand Rapids, MI, for the Michigan Urological Surgery Improvement Collaborative, Ann Arbor, MI

Introduction: Increased utilization of minimally invasive (MI) approaches (laparoscopic/robotic partial nephrectomy [PN] and radical nephrectomy [RN]) for renal masses ≤7 cm (RM≤7cm) have been driven by literature reporting decreased morbidity and improved convalescence. As such, many insurers consider MIPN as an outpatient procedure despite added complexity compared with MIRN, which remains an inpatient procedure. We examined length of stay (LOS) and readmission for all PN and RN performed within the Michigan Urological Surgery Improvement Collaborative: Kidney mass: Identifying and Defining Necessary Evaluation and therapy (MUSIC-KIDNEY) initiative to identify factors associated with LOS.

Methods: Proposed and approved in 2015, MUSIC-KIDNEY commenced after beta testing with data collection in September 2017 at 8 diverse MUSIC practices. Data abstractors recorded clinical, radiographic, pathologic, surgical, and short-term follow-up data into the registry for patients with a newly-diagnosed RM≤7cm.

Results: During the initial 12 months of data entry, 291 patients underwent surgery at 8 practices. Median LOS for the entire cohort was 2 days (IQR 2-3 days). MI approaches resulted in decreased LOS compared to open approaches (p=0.02). Figure 1 demonstrates the distribution of LOS by surgical approach and procedure. Overall, 23% of patients had LOS ≤ 1 day with rates ranging from 0% to 44.7% across practices (Figure 1). There were no other significant predictors of LOS: demographic, clinical, tumor complexity. Readmission was uniformly low with only 6% of the cohort readmitted within 30 days of hospitalization. Increasing Charlson Comorbidity index (p < 0.01) and prolonged LOS (p=0.04) were associated with readmission.

Conclusions: Within a large state-wide collaborative, most patients treated with a localized RM≤7cm require at least a 2 day admission to the hospital. Only 26% of patients undergoing MIPN and 17% of MIRN patients required ≤ 1 day in the hospital, suggesting opportunities to work collaboratively with insurers to set appropriate hospital utilization expectations for this cohort. Establishment of pathways and understanding other variations in care might allow optimization of the in-hospital and post-hospital recovery in this real world cohort of patients.

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