ETIOLOGIES AND TRENDS OF 30-DAY READMISSION IN MAJOR UROLOGICAL PROCEDURES: A COMPARISON OF OPEN VS. MIS APPROACH

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INTRODUCTION AND OBJECTIVES: This study analyzes trends and etiologies in 30-day readmission rates for major urological procedures, specifically radical prostatectomy (RP), radical nephrectomy (RN), and partial nephrectomy (PN).

METHODS: We utilized the New York Statewide Planning and Research Cooperative System (SPARCS) database from 2006 to 2015 to identify all RP (ICD-9: 60.5), RN (ICD-9: 55.5), and all PN (ICD-9: 55.4). Minimally invasive surgery (MIS) was identified using the laparoscopic modifier (ICD-9: 54.21). Patient level data was collected for all patients who were readmitted during the first 30 days after discharge and trends were compared.

RESULTS: The 30-day readmission rate for open RP was 864 (4%) compared to 1013 (4%) for MIS RP (p < .001). The 30-day readmission rate for open RN was 2184 (12%) compared to 509 (9%) for MIS RN (p < .001). The 30-day readmission rate for open PN was 781 (8%) compared to 376 (6%) for MIS PN (p < .001). The major etiology of 30-day readmission was genitourinary in nature for PN and gastrointestinal in nature for both RN and RP (p < .001). The difference in 30-day readmission from the start of the study to the end decreased by 1.4% for RN (p = 0.075), and 2.2% for PN (p = 0.003). It increased by 0.1% for RP (p = 0.727). Significance was noted for a decrease in MIS readmission rates for PN of 3.6% (p < .001) and RP of 2.4% (p = 0.014). Significance was noted for an increase in readmission rates for open RP of 2.4% (p < .001).

CONCLUSIONS: The study suggests that MIS approach is associated with decreased length of stay, increased home discharge, and lower 30-day readmission rates. Trends suggest that 30-day readmission rates are decreasing over time, largely due to improvements in 30-day readmission by MIS approaches.

Source of Funding: None

PARTICIPATION OF ADVANCED PRACTICE PROVIDERS IN CARE OF PATIENTS IN UROLOGY PRACTICES

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WITHDRAWN

AN ASSESSMENT OF PATIENTS APPROPRIATE FOR INITIAL EVALUATION BY AN ADVANCED PRACTICE PROVIDER AT AN ACADEMIC MEDICAL CENTER

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INTRODUCTION AND OBJECTIVES: Advanced practice providers (i.e. Physician Assistant and Nurse Practitioners) play a valuable role in the evaluation of the urologic patient. We sought to evaluate volume of patients that would be appropriate for an advanced practice provider could see in our clinic practice.

METHODS: An IRB-approved retrospective review of consecutive patient visits was performed for the Kidney Stone Center at an Academic Medical Center. We defined the following as “appropriate for MD to evaluate”: any new patient who was scheduled for an operative procedure (SWL, ureteroscopy, or PCNL), any patient who had a same-day clinic procedure, any patient taking blood thinners, and any patient with a history of pyelonephritis. The remainder of the patient visits (i.e. review of 24-hour urine, imaging follow up, or any other that did not meet above criteria) were defined as appropriate for “Advanced Practice Provider to evaluate.”

RESULTS: Three hundred sixty-two (362) consecutive patient visits were evaluated. There were 110 new patient visits (30.3% of total), 30 same-day procedures (8.2%), and patient gender distribution was 55% male: 45% female. Of new patient visits, 32 out of 110 (29.1%) resulted in patients being scheduled an operative procedure (SWL, ureteroscopy, or PCNL), any patient who had a same-day clinic procedure, any patient taking blood thinners, and any patient with a history of pyelonephritis. The remainder of the patient visits (i.e. review of 24-hour urine, imaging follow up, or any other that did not meet above criteria) were defined as appropriate for “Advanced Practice Provider to evaluate.”
CONCLUSIONS: Based on criteria described above, > 80% of patients seen in the Kidney Stone Center/Academic Medical Center could be appropriately evaluated by an Advanced Practice Provider. These findings should be part of staffing plans and projects in order to optimize practice efficiency and perhaps to optimize the amount of time that surgeons are available to spend in the operating room or other clinical/academic endeavors.

Source of Funding: none

**PD16-08**

COST SAVINGS ANALYSIS OF INPATIENT ADVANCED PRACTICE PROVIDER

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INTRODUCTION AND OBJECTIVES: A recent survey of members of the American Urological Association found the majority of urologists (62.7%) work with an advanced practice provider (APP). Aim of our study was to evaluate direct cost savings of inpatient advanced practice provider by focusing on direct cost, length of stay, readmission rate and discharge planning.

METHODS: Data from a tertiary care referral center was collected between 2015Q1 to 2018Q2. Seven quarters prior to inpatient APP (2015Q1-2016Q3) were compared to 7 subsequent quarters after initiation of inpatient NP program (2016Q4-2018Q2). A total of 1190 major urological cases were performed during this time (178 cystectomies, 663 nephrectomies, 349 prostatectomies). Factors directly influenced by inpatient APP such as length of stay (LOS), discharge before 11 am and total direct cost were analyzed prior to APP and after APP. Mann Whitney U and Chi square tests were used for continuous and categorical data respectively.

RESULTS: Inclusion of APP as part of a health care delivery team showed an overall decreased LOS (p=0.042), with an increase in the number of discharges before 11 am (p < 0.001) (Table). While there was overall no significant change in the direct cost (p=0.89) combined for all three groups, total direct cost in the cystectomy group was significantly lower (p=0.048) (Figure). In additional, the median LOS for prostatectomy decreased significantly (p=0.015). Patients who underwent nephrectomy and cystectomy, after initiation of inpatient APP program, have continuously been able to improve on discharge time (p=0.039 and p=0.02) respectively.

CONCLUSIONS: Inclusion of advanced practice provider within inpatient setting has shown to consistently improve length of stay, and direct cost.

<table>
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<th>Group</th>
<th>APP (n=51)</th>
<th>No APP (n=168)</th>
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<tr>
<td>LOS - median (QTR)</td>
<td>11.90</td>
<td>11.51-12.69</td>
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<tr>
<td>Discharge before 11 am (%)</td>
<td>64.5%</td>
<td>57.3%</td>
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<tr>
<td>Total direct cost - median (QTR)</td>
<td>11,907.49</td>
<td>12,159.69-16,234.20</td>
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APP vs NP

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Source of Funding: none

**PD16-09**

ONLINE PATIENT RATINGS OF UROLOGISTS ARE CORRELATED WITH SHORT-TERM OUTCOMES FOLLOWING MAJOR UROLOGIC SURGERIES

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INTRODUCTION AND OBJECTIVES: Patients are using online physician rating websites like healthgrades.com to evaluate their providers. It is still debatable whether these ratings reflect a true quality of care. This study will examine the relationship between physician ratings from healthgrades.com and outcomes following four major urologic surgeries.

METHODS: Patients who underwent radical prostatectomy (RP), radical nephrectomy (RN), partial nephrectomy (PN) and radical cystectomy (RC) were identified from the Statewide Planning and Research Cooperative (SPARCS) database, a comprehensive all-payer reporting system containing patient level data and physician data from all hospital discharges in New York State. Ratings of these urologists were first obtained from Healthgrades.com and dichotomized into a highly rated (4-5 stars) group and a low rated (1-4 stars) group. Outcomes of interest included mortality/readmission within 30 days, prolonged (>75th percentile) length of stay (pLOS), postoperative complications and charges. Multivariable regression was used to assess the association between ratings and outcomes while adjusting for procedure, patient and other provider characteristics.

RESULTS: 118,569 patients and 2,482 urologists were identified. The highly rated group consisted of cases from 68,183 (58%) patients and 1,173 (47%) urologists. A highly rated surgeon was more likely to operate on a patient who was non-Hispanic, white, have severe comorbidities, have private insurance and have an income in the top quartile. Highly rated surgeons were also associated with employment at academic institutions, high-volume hospitals and having a high (>75th percentile) annual caseload. After controlling for patient, hospital and surgeon characteristics, highly rated urologists were also associated with lower rates of 30-day mortality, 30-day unplanned readmission, postoperative complications and pLOS.

CONCLUSIONS: Most urologists are rated positively, and these highly rated urologists receive the majority of patients. A highly rated (>4 stars) urologist was associated with improved short-term outcomes following major urologic surgeries even after controlling for surgeon characteristics.