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Podium #10

REIMBURSEMENT INCENTIVE ASSOCIATED WITH DECREASED INPATIENT OPIOID PRESCRIBING FOLLOWING ROBOTIC RADICAL PROSTATECTOMY

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Presented By: Mit Shah, MD, BS

Introduction: Various strategies have been explored to decrease the quantity of opioids prescribed for post-operative pain. The Michigan Opioid Prescribing Engagement Network, in partnership with BCBS-Michigan, has developed a pain optimization pathway for several surgical procedures, including prostatectomy. Urologists who follow the pain optimization pathway, which includes pre-operative patient education and limiting discharge opioids to 6 tablets of oxycodone 5 mg, can report a modifier for additional reimbursement. We explored the impact of this incentive on inpatient opioid prescribing practices following robotic assisted radical prostatectomy (RARP).

Methods: Patients undergoing RARP between January 2017 and August 2019 at a single institution were retrospectively reviewed. This interval included cases both before, and after, the reimbursement incentive was implemented on July 1, 2018. Outcomes included quantity of opioid administered during hospitalization, reported in morphine milligram equivalents (MME), and average inpatient pain scores, reported with numerical pain scale.

Results: A total of 300 patients underwent RARP, 209 prior to implementation of the reimbursement incentive, and 91 after. Mean MME administered during hospitalization decreased 18% after the incentive went into effect, from 73 to 54 MME ($p=0.04$). There was no difference in average pain scores or length of stay.

Conclusion: For patients undergoing RARP, a reimbursement-based incentive tied to limiting outpatient opioid prescriptions was associated with a decrease in opioids administered during hospitalization, with no impact on subjective pain scores or length of stay. This may reflect the effectiveness of pre-operative patient education on the dangers of opioid use and alternative pain management options.

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Podium #11

IS A PREOPERATIVE TYPE AND SCREEN REQUIRED IN PATIENTS UNDERGOING COMMON UROLOGICAL PROCEDURES? A COST-BENEFIT ANALYSIS

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Presented By: Joshua Ryan Volin

Introduction: Our objective was to evaluate the cost-effectiveness of obtaining preoperative type and screen (TS) for common urological procedures and to determine patient and hospital factors associated with receiving blood transfusions.

Methods: Retrospective database analysis of the 2006-2015 Nationwide Inpatient Sample (NIS) was performed to identify patients undergoing a variety of urological procedures. A total of 4,113,144 cases were identified. Transfusion rates were then determined from NIS data, and multivariate regression analyses was used to identify factors associated with transfusions. A cost-effectiveness analysis was performed to determine the incremental cost-effectiveness ratio (ICER) of obtaining preoperative TS to prevent an emergency-release transfusion (ERT), with a willingness-to-pay threshold of \$1,500.

Results: Transfusion rates of common urological procedure ranged from .91% to 33.14%. On multivariate modeling, all comorbidities with the exception of obesity were significantly associated with blood transfusion. Some examples included diabetes (OR, 1.26; 95% CI, 1.19-1.33), liver disease (OR, 1.20; 95% CI, 1.13-1.29), and metastatic cancer (OR, 2.69; 95% CI 2.54-2.85) ($p < 0.01$ for all). One-way sensitivity analysis demonstrated that the risk of transfusion should exceed 4.12% to justify preoperative TS. The ICER of preoperative TS for radical prostatectomy (transfusion rate = 3.88%) and penile implants (transfusion rate =