

## Health Services Research: Practice Patterns, Quality of Life and Shared Decision Making IV

### Podium 46

Sunday, September 12, 2021

9:30 AM-11:30 AM

#### PD46-01

##### FACTORS THAT INFLUENCE DECISION AID USE IN PROSTATE CANCER

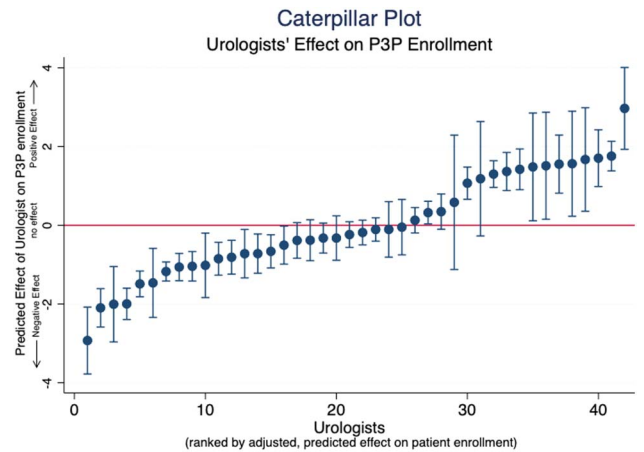
Giulia I. Lane\*, Ajith Dupati, Ji Qi, Stephanie Ferrante, Roshan Paudel, Daniela Wittmann, Lauren Wallner, Chad Ellimoottil, James Montie, J. Quentin Clemens, for the Michigan Urological Surgery Improvement Collaborative, Ann Arbor, MI

**INTRODUCTION AND OBJECTIVE:** Decision aids (DA) have been found to improve patients' knowledge of treatment and decrease decisional regrets. Despite their many benefits, there is not widespread use of DA for newly diagnosed prostate cancer. This study investigates how much influence patient and clinician factors have on a patient's use of a decision aid after being newly diagnosed with localized prostate cancer.

**METHODS:** We included patients with newly diagnosed, clinically localized prostate cancer, seen by urologists in the Michigan Urological Surgery Improvement Collaborate between 2018-20, who were using Personal Patient Profile for Prostate (P3P), a validated, web based decision aid. Our primary outcome was patient enrollment in P3P. We fit a multilevel logistic regression model with the following patient level factors: age, race, ethnicity, family history of prostate cancer, PSA, Gleason score, stage. We evaluated the effect of urologists on P3P enrollment, by using a model that accounted for clustering of patients among urologists via random intercepts. The intra-class correlation (ICC) was computed from the model. We estimated the predicted probability of P3P enrollment among patients of urologists who treated more than 10 patients, and this was visualized graphically in a caterpillar plot.

**RESULTS:** Out of our sample of 2099 patients, 988 (47%) patients enrolled into P3P. We found that 41% of the total variance (ICC) of whether or not patients enrolled into P3P was attributed to the urologist's influence. We found significant variation in predicted patient enrollment across the 42 urologists (Figure). In contrast, only 2% of the variance of whether patients enroll in P3P was explained by patient level factors: older patients (OR 0.98 [95% CI 0.97-0.99],  $p=0.015$ ) and those with higher PSA (OR 0.96 [95% CI 0.92-0.99],  $p=0.015$ ) had decreased odds of enrolling to use a DA.

**CONCLUSIONS:** Our findings suggest that urologists' influence far outweighs patient factors in patients' decision to enroll in P3P. Future work should focus on interventions that will encourage providers to increase decision aid adoption in their practices.



**Source of Funding:** NIDDK F32 DK126232; MUSIC is funded from Blue Cross Blue Shield of Michigan

#### PD46-02

##### LESS IS MORE: OPIOID PRESCRIPTIONS BEFORE AND AFTER IMPLEMENTING A NOVEL QUALITY INCENTIVE FOR OPIOID-FREE VASECTOMIES

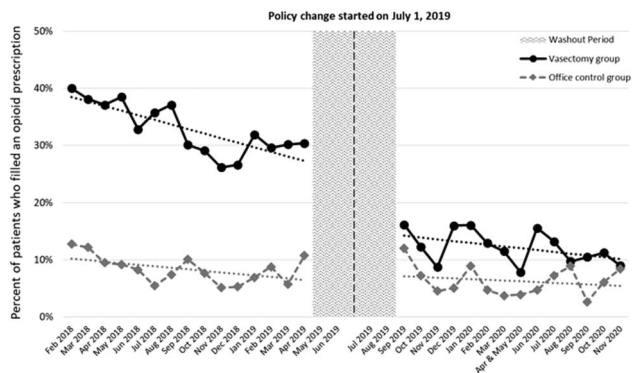
Catherine Nam\*, Yen-Ling Lai, Hsou Mei Hu, Arvin George, Susan Linsell, Stephanie Ferrante, Chad Brummett, Jennifer Waljee, James M Dupree, Ann Arbor, MI

**INTRODUCTION AND OBJECTIVE:** To examine the peri-operative opioid prescription fill rate pre- and post-implementation of a novel quality incentive for opioid-free vasectomy. The incentive used the modifier 22 mechanism to pay for additional resources required to shepherd patients through opioid-free vasectomies and was deployed statewide on 7/1/2019 by Blue Cross Blue Shield of Michigan (BCBSM).

**METHODS:** We assessed BCBSM administrative claims from 2/1/2018 to 11/16/2020. We included men age 20 to 64 years old with continuous enrollment from one year prior to three days after their procedure. Our intervention group included patients undergoing office-based vasectomies (CPT 55250). Our control group included patients undergoing other office-based urologic procedures including circumcision, cystoscopy, prostate biopsy, and transurethral destruction of prostate tissue. We excluded cases during a washout period 2 months before and after the policy implementation date of 7/1/19. Our primary outcome was the proportion of patients who filled an opioid prescription within 3 days of their procedure (aka, "opioid fill rate"). We performed an interrupted time series analysis to estimate changes in opioid fill rates before and after 7/1/19 in the vasectomy and control groups.

**RESULTS:** Our final cohort included 4,559 who had a vasectomy and 4,679 men who had a control procedure. Both groups had similar patient demographics before and after 7/1/2019. Implementation of the modifier 22 policy was associated with a significant decrease in the opioid fill rate in the vasectomy group (-12.8% change [95% CI: -17.0% to -8.5%]). Pre-intervention, 32.5% of men with a vasectomy filled an opioid prescription; post-intervention, 12.6% of men filled an opioid prescription. In the control group, the implementation of the modifier 22 policy was not associated with a change in the opioid fill rate (0.8% change [95% CI: -3.0% to 4.5%]).

**CONCLUSIONS:** Financial incentives that support opioid-free pathways are preventative strategies that can lead to a rapid decrease in the rate of opioid fills after vasectomy. These findings highlight the opportunity for a modifier 22 quality incentive to be applied in other states and to other surgical procedures to ensure safe opioid stewardship and judicious prescribing.



Source of Funding: None

**PD46-03**  
**EXAMINING MINORITY ENROLLMENT IN CLINICAL TRIALS IN UROLOGIC ONCOLOGY**

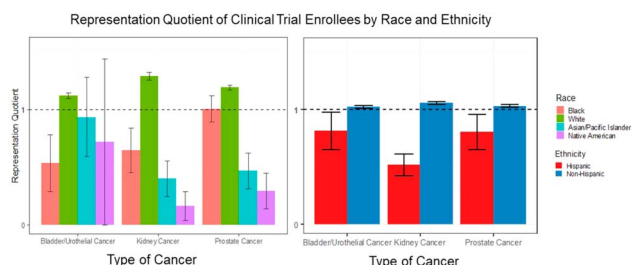
Jeunice Owens-Walton\*, Cheyenne Williams, Alexis Rompre-Brodeur, Peter Pinto, Mark W. Ball, Bethesda, MD

**INTRODUCTION AND OBJECTIVE:** Adequate representation in clinical trials is an important step towards addressing healthcare inequities. To explore the state of clinical trial representation within urologic cancers, we conducted a retrospective analysis comparing racial demographics in NIH-funded clinical trials with national cancer prevalence.

**METHODS:** The ClinicalTrials.gov results database was queried for completed and resulted phase II and III, interventional clinical trials in the US funded by the NIH in prostate, kidney and bladder cancer. The Surveillance, Epidemiology, and End Results (SEER) database was queried for the prevalence of prostate, kidney and bladder cancer cases between 2000 and 2017. Representation Quotients (RQ) were calculated to describe the relative proportion of each demographic enrolled in a clinical trial over the proportion of those groups among national cancer cases.

**RESULTS:** Seventy-five clinical trials met inclusion criteria with 59 of these reporting race and ethnicity. RQs were calculated for each race and ethnicity across each cancer type. Aggregates from 2000 to 2017 showed that White patients were overrepresented in trials for all cancer types (bladder cancer: RQ = 1.13 [1.11-1.15], kidney cancer: 1.28 [1.25-1.32], prostate cancer: 1.18 [1.16-1.20]). Black patients were adequately represented in prostate trials (0.95 [0.85-1.04]) but underrepresented in kidney and bladder (0.75 [0.55-0.95] and 0.45 [0.26-0.64]). Asian patients were underrepresented in kidney and prostate trials (0.37 [0.22-0.51] and 0.67 [0.91 - 0.43]). Hispanic patients were underrepresented in kidney and prostate trials (0.52 [0.42 - 0.61] and 0.81[0.65-0.96], respectively). When stratified by 4-year increments and the RQs remained stable for all races, across all years in the study period.

**CONCLUSIONS:** NIH funded clinical trials targeting prostate, kidney and bladder cancers continue to underrepresent minority patients. Based on the incidence of these cancers within minority populations there need to be improved and targeted efforts focused on creating racially and ethnically inclusive cancer research.



Source of Funding: NIH Intramural Research Funding, NIH Medical Research Scholars Program, Foundation for the NIH

**PD46-04**  
**TIME-RELATED CHANGES IN PATIENT-REPORTED BLADDER SYMPTOMS AND SATISFACTION AFTER SPINAL CORD INJURY**

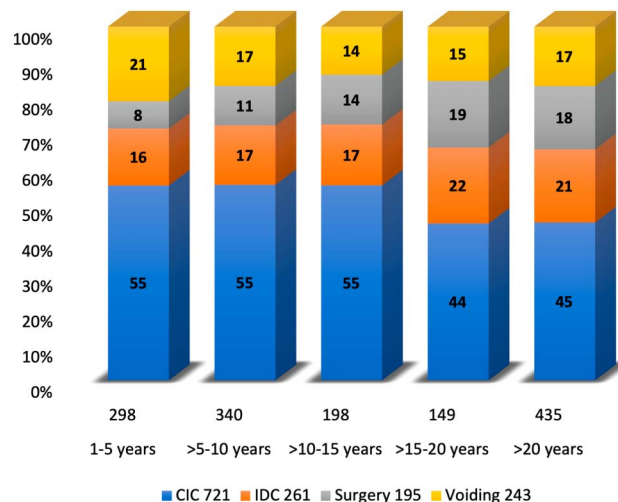
Odinachi Moghalu\*, Salt Lake City, UT; John Stoffel, Ann Arbor, MI; Sean Elliott, Minneapolis, MN; Blayne Welk, London, Canada; Sara Lenherr, Chong Zhang, Angela Presson, Jeremy Myers, Salt Lake City, UT

**INTRODUCTION AND OBJECTIVE:** Neurogenic lower urinary tract dysfunction is a significant source of concern and morbidity to individuals with spinal cord injury (SCI). Increased time from initial SCI is associated with improvements in bladder symptoms and satisfaction, despite a migration to bladder management strategies with higher morbidity such as indwelling catheters (IDC). We sought to better characterize the relationship between time from injury, bladder symptoms and satisfaction.

**METHODS:** This is a cross-sectional analysis of time-related changes in patient reported bladder symptoms and satisfaction using data from the Neurogenic Bladder Research Group Spinal Cord Injury Registry. Study outcomes included: *Neurogenic Bladder Symptom Score (NBSS-total)* and its overall quality of life (QoL) question (*NBSS-Satisfaction*). Multivariable regression was performed to assess associations between time from injury and outcomes, adjusting for: demographics, injury characteristics, bladder management, and psychosocial aspects of health related QoL. Time from injury was categorized as 1-5 (ref.), 6-10, 11-15, 16-20, and >20 yrs.

**RESULTS:** Of 1420 participants, median age at injury was 25.9 yrs. (IQR 19.7–38.8) and median time from injury was 11.6 yrs. (IQR 5.7–22.9). Primary bladder management changed with time from injury. There was a decline in use of clean intermittent catheterization (CIC) (55% 1-5 yrs. vs. 45% >20 yrs., p<0.001), and voiding (21% 1-5 yrs. vs. 17% >20 yrs., p<0.001) with increasing time from injury. Meanwhile, management with IDC (16% 1-5 yrs. vs. 21% >20 yrs.) and surgery (8% 1-5 yrs. vs 18% >20 yrs.) increased as time from injury increased (Figure 1). On multivariable analysis, increased time from injury was associated with less bladder symptoms (lower scores) at >20 yrs. from injury (NBSS-total -3.33, p<0.001) and better satisfaction in participants >10 yrs. from injury (NBSS-satisfaction 11-15 yrs. -0.36, 16-20 yrs. -0.59, >20 yrs. -0.86, p<0.001).

**CONCLUSIONS:** Even in a contemporary population of SCI patients, there is a migration away from CIC, and an increase in IDC usage with time from injury. Despite this, there is a significant decrease in urinary symptoms, and improved QoL, even after adjusting for demographics, injury characteristics, bladder management, and psychosocial aspects of health related QoL.



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