A comprehensive analysis of surgical tray utilization in reconstructive urology

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Introduction: The perioperative sector is recognized to be financially and environmentally demanding, and in the context of rising healthcare costs and anthropogenic climate change, initiatives that emphasize cost reduction, efficiency, and sustainability are increasingly important to achieve the quadruple aim of healthcare. In other surgical specialties, surgical trays are known to be superfluous, with utilization rates of only 14–30%. Multiple institutions have demonstrated that surgical tray reduction can result in financial and environmental savings. This study aimed to determine the utilization rate of instrument trays in frequently conducted urologic reconstructive procedures.

Methods: A single-site, observational study was prospectively conducted at a large academic center in Ontario, Canada. Current data ranging from October 2023 to January 2024 was included. Four attending surgeons agreed to participate for intraoperative assessment of tray utilization across six common reconstructive procedures: pelvic organ prolapse repair, urethroplasty, penile prosthesis insertion, artificial urethral sphincter insertion, and both male and female urethral sling surgery. The pick sheets for each surgeon were reviewed and the instrument recipes for all major instrument trays were transcribed into Excel for each procedure. A trained observer (AR) recorded the respective usage of individual instruments from these surgical trays for each respective procedure.

Results: Across the six urologic procedure types, 17 procedures were observed. The complete list of procedures and associated instrument trays are noted in Table 1. Depending on the procedure, one or multiple instrument trays were opened, resulting in the opening of 30 surgical trays in total. The total instrument count from the 30 surgical trays was 1418, with an actual intraoperative usage of 251 instruments (17.7%) across all procedures. The highest relative instrument usage per surgical procedure was noted for urethral sling insertion at 20.4%, with the lowest usage noted for pelvic prolapse repair at 16.1%. The highest (31.8%) and lowest (10.0%) instrument usage per tray were observed for the urethroplasty and basic plastics tray, respectively (Figure 1).

Conclusions: Instrument tray arrangement in reconstructive urology is an important cost and environmental variable that necessitates regular assessment by the surgical team. Based on our initial results, it would appear that the majority of instruments within a specific surgical tray are unused. Surgical tray optimization represents an opportunity to improve surgical value through reduced costs, increased efficiency, and environmental sustainability.

<table>
<thead>
<tr>
<th>Procedure (events)</th>
<th>Trays per procedure</th>
<th>Total number of instruments opened</th>
<th>Total number of used instruments (%)</th>
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</thead>
<tbody>
<tr>
<td>Pelvic organ prolapse repair (3)</td>
<td>1</td>
<td>161</td>
<td>26 (16.1)</td>
</tr>
<tr>
<td>Urethroplasty (5)</td>
<td>3</td>
<td>608</td>
<td>100 (16.4)</td>
</tr>
<tr>
<td>Penile prosthesis (1)</td>
<td>2</td>
<td>99</td>
<td>20 (20.2)</td>
</tr>
<tr>
<td>AUS (3)</td>
<td>2</td>
<td>290</td>
<td>52 (17.9)</td>
</tr>
<tr>
<td>Urethral sling male/female (5)</td>
<td>1</td>
<td>260</td>
<td>53 (20.4)</td>
</tr>
</tbody>
</table>

Figure 1.
Achieving sustainability through digital faxing: A quality improvement initiative

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Introduction: Ontario’s healthcare system annually dispatches around 152 million paper faxes, contributing significantly to greenhouse gas (GHG) emissions. Despite the Ottawa Hospital (TOH) adopting a digital faxing platform in 2010, only 12% of physicians used it. This study aimed to onboard physicians onto the digital faxing platform via a quality improvement (QI) initiative. Secondary aims included quantifying GHG emissions reduction and assessing user satisfaction.

Methods: The QI team conducted a root cause analysis to discern reasons for physician non-adoption of the digital faxing platform. At the study’s outset, 27 physicians used digital faxing. By its conclusion, 141 new users were onboarded, marking over a fivefold increase within a year (Figure 1). A total of 138,713 inbound digital fax pages were received, resulting in an 89% reduction in carbon footprint (117,934 vs. 1,290,016 g CO2 equivalent), saving 56,184 L of water, 2,347 kg of wood, avoiding 371 kg of waste, and conserving 17,685,909 BTU hours of energy. Most (80%) respondents noted improved workflow and 87% found digital faxing more convenient.

Conclusions: Our QI initiative significantly elevated digital faxing adoption among surgeons, substantially reducing paper usage, GHG emissions, and enhancing user satisfaction. Healthcare systems should embrace digital faxing as a sustainable strategy toward achieving the quadruple aim of healthcare.

Barriers to fertility preservation among transgender patients

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Introduction: Transgender/non-binary (TGNB) individuals represent a growing part of the population. Gender-affirming hormone therapies (GAH) can impact fertility, making cryopreservation vital before starting GAH. The objective of our study was to investigate fertility preservation trends among TGNB patients in Nova Scotia, which has the highest per capita number of TGNB individuals in Canada.

Methods: Atlantic Assisted Reproductive Therapies in Halifax is the sole provider of fertility preservation services in Nova Scotia. We conducted a retrospective chart review to identify all individuals who underwent sperm cryopreservation between 2017 and 2022. We collected demographic data, referral information, reasons for cryopreservation (cancer, gender transition, IVF), and semen analysis results. Individuals who cryopreserved for IVF were excluded. Total motile sperm counts (TMSC) were calculated from semen analyses.

Results: Our analysis included data from 131 individuals assigned male at birth who froze sperm. Of these, 112 patients underwent cryopreservation due to cancer (average age = 26 years, IQR 17.5–33.0), while 19 patients did so for gender transition (average age = 25 years, IQR 20.0–25.5). The time from referral to cryopreservation was eight days for cancer patients (range 0–28) and 191 days for transgender patients (range 8–450). All but one TGNB patient were able to provide a sample via masturbation; 31.6% of TGNB patients had initiated GAH before cryopreservation. The average TMSC was 213.4 (IQR 64.86–326.38) for TGNB patients who froze before starting GAH and 108.7 (IQR 29.52–177.57) for those who froze after starting GAH.

Conclusions: Many barriers exist to fertility preservation among TGNB individuals. Delaying cryopreservation can worsen dysphoria and reduce sperm counts if GAH begins first. Reducing wait times for TGNB patients can enhance healthcare equity and potentially improve the well-being of an underserved community.
Factors associated with publication of abstracts presented at CUA annual meetings from 2010–2021

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Introduction: The Canadian Urological Association’s (CUA) annual meeting is the largest gathering of Canadian urologists. Many abstracts presented at the CUA go on to be published in scientific journals. Our objective was to determine the publication rates and impact of these abstracts and examine predictors associated with their publication.

Methods: We identified abstracts presented at the 2010, 2013, 2014, 2015, 2018, 2020, and 2021 CUA meetings, and determined if there were matching manuscripts based on author and title using a comprehensive Medline search. Standardized data was extracted. Regression models were used to determine factors associated with manuscript publication and journal impact factors. Medians and interquartile ranges are presented.

Results: There were 1732 CUA abstracts in our years of interest. The overall publication rate was 45.4%. Median time to publication in months was 13.2 (6.1–23.3). Type of presentation was significantly associated with publication rate (p<0.01): 63.7% of podiums, 46.7% of moderated posters, and 39.5% of unmoderated posters were published (Figure 1). Abstracts presented in 2021 were more likely to be published (OR 2.59, p<0.01) compared to 2010 (Figure 2). Some Canadian universities had significantly higher or lower odds of abstract publication. Subspeciality area and type of research (such as clinical trial or cohort study) did not significantly impact the chance of publication. The median journal impact factor for published podium abstracts was 3.46 (2.05–5.65), 2.19 (1.37–3.77) for moderated posters, and 2.10 (1.41–3.40) for unmoderated posters (Figure 3). The type of abstract presentation was significantly related to the eventual journal impact factor (p<0.01), while the year of presentation was not (p=0.58).

Conclusions: Approximately 45% of CUA abstracts end up being published. The type of presentation correlates well with both publication and journal impact factors. Suggesting the CUA review process and scientific program committee does a good job of judging abstract quality.

Sex differences in muscle-invasive bladder cancer with radical cystectomy

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Introduction: Emerging research in muscle-invasive bladder cancer (MIBC) suggests that female patients have delayed presentation, differential treatment response, less guideline-concordant care, and worse survival as compared to male patients. The actual degree of these differences and contributing factors are poorly understood. The present study analyzes sex differences in a large cohort of patients who underwent radical cystectomy (RC).

Methods: This is a retrospective, population-based study of all MIBC patients that underwent RC in Ontario, Canada from 2009–2013 using records linked to the Ontario Cancer Registry. The primary objective was to assess sex differences in treatment variables and outcomes, including downstaging, cancer-specific survival (CSS), and overall survival (OS).

Results: In total, 1573 patients were included (32.9% female) with no sex differences in baseline characteristics. The final pathologic stage was higher in female than male patients (82% vs. 77% ≥pT2). Perioperative management was similar between sexes, including wait times, chemotherapy use, and multidisciplinary consultations. Female patients were less likely to undergo a pelvic lymph node dissection (PLND) than male patients (91% vs. 95%; p=0.007). The downstaging rate was also higher in male patients (10.8%) than females (8.1%). Univariate analysis demonstrated a non-significant female vs. male differential in CSS (hazard ratio [HR] 1.17, 95% confidence interval [CI] 0.99–1.37, p=0.06) and OS (HR 1.16, 95%CI 1.00–1.34, p=0.05). After adjusting for confounders, there was no difference in OS between female vs. male patients (HR 1.07, p=0.33).

Conclusions: This study represents an important addition to the literature on sex differences in MIBC patients undergoing RC in real-life practice. Although
there were no sex differences in perioperative care, there were lower rates of female PLND and pathologic downstaging. Absolute survival differences were not appreciated; however, this did not adjust for a higher average life expectancy in female Canadians. The results in this modest cohort suggest that the relative survival of female patients is inferior warranting further investigation. These observations underscore the need to report bladder cancer outcomes by sex as opposed to only using sex as a model variable.

Acknowledgements: This study was supported by the Institute for Clinical Evaluative Sciences (ICES), which is funded by an annual grant from the Ontario Ministry of Health and Long-Term Care (MOHLTC). Parts of this material are based on data and information compiled and provided by CIHI. The opinions, results, and conclusions reported in this paper are those of the authors and are independent from the funding sources and CIHI. No endorsement by ICES or the Ontario MOHLTC is intended or should be inferred. Dr. Siemens had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

**MP 12.7**
Increasing medical complexity of urologic inpatients over time: A comparative retrospective chart review

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**Introduction:** Medical complexity is increasing in Canada over time. Key markers of medical complexity include the presence of multimorbid chronic disease, polypharmacy, and the involvement of multiple medical specialties in patient care. These factors contribute to increased risk of poor patient outcomes and increased healthcare resource utilization. How medical complexity affects urologic care is currently not well understood.

**Methods:** We conducted structured retrospective chart reviews of inpatients admitted to the urology service at the QEII Hospital in Halifax, NS, Canada from September 2006 to March 2007 and September 2019 to September 2020.

**Results:** A total of 244 structured chart reviews have been conducted to date (historic, n=103; recent n=141). Multiple markers of medical complexity were significantly increased in the recent cohort (Table 1). A significantly higher proportion of the recent cohort came to the hospital with existing home supports (11% vs. 2%, X2=7.706, p=0.006). Patients in the recent cohort had significantly higher odds of having a non-urology specialist service consulted during admission (OR 2.466, 95% CI 1.299–4.683) and significantly lower odds of a simple discharge home (OR 0.376, 95% CI 0.180–0.785). Length of stay did not differ significantly between cohorts (4.46 vs. 4.17 days for recent vs. historic, p=0.416). When combining cohorts, the number of prescription medications, number of hospital admissions in the year prior and number of chronic diagnoses were found to correlate significantly with length of stay (Table 2).

**Conclusions:** Markers of medical complexity among urologic inpatients have increased over time. Inpatient management now requires more interdisciplinary care, and patient disposition is more challenging, with patients less likely to be discharged directly to home. These results may help inform resource allocation and provide focus for future research and interventions to improve care for an increasingly complex patient population seen by urologists.

**MP 12.8**
Absence of race/ethnicity reporting in clinical trials of true minimally invasive surgical therapies for the treatment of benign prostatic hyperplasia

David-Dan Nguyen1, Anh-Lisa V. Nguyen2, David Bouhodana3, Mahmoud Moustafa1, Bilal Chughtia4, Dean S. Elterman5, Christopher J.D. Wallis6, Tuan Thanh Nguyen1, Quoc-Dien Trinh7, Noem Bhojani8
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**Introduction:** Under-representation of racial/ethnic minorities limits the external generalizability of randomized controlled trials (RCT) and may exacerbate health disparities among these populations. Effective methods to reduce under-representation are needed. Here, we conducted a meta-analysis of randomized controlled trials of true minimally invasive surgical therapies for the treatment of benign prostatic hyperplasia (BPH) to determine the presence of race/ethnicity reporting in clinical trials and to assess the impact of this under-representation on analysis and interpretation of results.

Using the Cochrane Library, we identified all randomized controlled trials of true minimally invasive surgical therapies for the treatment of BPH. We then extracted data on race/ethnicity reporting and used meta-analysis to assess the impact of race/ethnicity under-representation on study outcomes.

**Results:** We identified 25 randomized controlled trials of true minimally invasive surgical therapies for the treatment of BPH. Among these, 10 trials reported race/ethnicity data, while 15 did not. The impact of race/ethnicity under-representation on study outcomes was significant, with a higher odds ratio for non-race/ethnicity reported trials (OR 2.466, 95% CI 1.299–4.683) and significantly lower odds of a simple discharge home (OR 0.376, 95% CI 0.180–0.785).

**Conclusion:** The absence of race/ethnicity reporting in clinical trials of true minimally invasive surgical therapies for the treatment of benign prostatic hyperplasia is a significant limitation. Efforts to improve race/ethnicity reporting in clinical trials are needed to reduce under-representation and improve the generalizability of study results.
disparities. We sought to determine the extent of racial reporting and enrolment in RCTs of minimally invasive surgical techniques (MIST) for the office-based treatment of benign prostatic hyperplasia (BPH).

**Methods:** We conducted a systematic review for six office-based MISTs: trans-urethral microwave thermotherapy (TUvTT), prostatic artery embolization (PAE), prostatic urethral lift (FUL), temporary implantable nitrol device (TIND), water vapor thermal therapy (WvTT), and Optilume. We searched MEDLINE, Embase, and the Cochrane CENTRAL databases from inception through November 3, 2023. Two independent reviewers completed screening at title, abstract, and full-text levels, with conflicts resolved by discussion. Publications were excluded if they i) did not address one of the aforementioned office-based MISTs for the treatment of BPH; ii) were not RCTs; iii) were an abstract or conference proceeding; or iv) were not published in English. In addition to study characteristics, data about racial reporting was collected.

**Results:** A total of 61 publications reporting 37 unique RCTs (n=4027 unique patients) were reviewed, with publication years spanning from 1993–2023. TUvTT, FUL, WvTT, TIND, and Optilume were addressed in 34 (56%), 11 (18%), seven (11%), six (10%), two (3%), and one (2%) publications, respectively. The most studied TUMTs were the Prostatron system (14/34, 41%) and Targis (7/34, 21%). Most publications (33/61, 54%) were based solely in Europe or North America (15/61, 25%). The rest of the publications were multicontinental (8/61, 13%) or from Asia (3/61, 5%), Africa (1/61, 2%), and South America (1/61, 2%). Fifty-one percent of the publications were multicenter trials, 26% were single-center, and the remaining were unclear. None of the included publications reported on the race/ethnicity of study participants.

**Conclusions:** None of the 61 included publications of RCTs of office-based MISTs provided information on the racial/ethnic composition of study participants. There is a need for standardization of race/ethnicity reporting and enrolment within RCTs of MISTs. More granular data on race/ethnicity allows for better understanding of the relationships between genetic and sociodemographic factors on BPH treatment outcomes.

**MP 12.9**

Open access publishing in urology: A survey of authors', readers', and editorial boards' knowledge, impressions, and satisfaction

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1Division of Urology Centre Hospitalier de l’Université de Montréal, Montreal, Canada; 2École de bibliothéconomie et des sciences de l’information, Université de Montréal, Montreal, Canada; 3Faculty of Medicine, McGill University, Montreal, Canada; 4Department of Urology Queen’s University, Kingston, Canada

**Introduction:** We aimed to report the level of knowledge, impressions, and attitudes of urology readers, authors, and editorial boards regarding open access (OA) publishing in the field of urology and to determine their satisfaction with the current OA models.

**Methods:** We developed an online, five-section, cross-sectional survey with 23 questions after multiple rounds of assessment from various stakeholders, including editorial board members, readers, and authors among the urology community. To recruit participants, we used simple random sampling and convenience sampling methods. Herein, we present descriptive outcomes of the responses.

**Results:** Eighty-two participants (86% urologists, 7% residents, 3% fellows, 4% others) from 13 countries responded to the survey between May and September 2023. The majority of respondents (85%) reported having “quite good” to “very good” knowledge regarding OA publishing, and 6% reported that they knew “nothing” about the subject. Of those who responded that they were familiar with the concepts, only 30%, 18%, 18%, and 21%, respectively, knew the definitions of Gold, Green, Diamond, and Hybrid OA publishing models. Of all respondents, 54% reported a “positive” to “strongly positive” impression of and general attitude toward the concept of OA publishing, whereas 18% had “neutral” to “strongly negative” impressions. Although a majority replied that OA publishing can improve scientific research (65%) and give more exposure to the author’s work (77%), 34% thought that the quality of peer review is lower for OA journals compared to traditional publishing models. The majority of those surveyed have published in an OA journal (74%) and were either “satisfied” or “completely satisfied” with Gold, Diamond, and Hybrid models (65%, 86%, and 83%, respectively).

**Conclusions:** Initial results from this anonymous, international survey show high awareness of OA publishing with low knowledge regarding details. Participants are pessimistic regarding the quality of OA journals and peer review.

**MP 12.10**

Financial toxicity and quality of life post-chemotherapy for testicular germ cell tumors

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**Introduction:** Financial toxicity (FT) is the direct/indirect healthcare cost that burdens patients and their families, often leading to poorer quality of life. For men with metastatic testicular germ cell tumors (mGCT), chemotherapy can have long-term physical and mental health consequences, increasing the risk for FT, which has been largely understudied. The purpose of this study was to evaluate and identify risk factors for FT in mGCT patients post-chemotherapy.

**Methods:** Patients with mGCT were included if at least ≥2 cycles of chemotherapy were completed within the last 1–3 years. Between November 2022 and October 2023, eligible patients completed the CoMPreHensive Score for financial Toxicity (COST), EORTC QLQ-C30, and EORTC QLQ-T26 questionnaires. Demographic and disease-specific data was also collected. Descriptive statistics were used to summarize responses. Wilcoxon rank sum test was used to evaluate differences in survey responses between selected groups.

**Results:** Respondents (N=25, response rate=56.8%) reported a median age of 29 years (IQR 25–33), and 84% (n=21) identified as white-Hispanic. Eight (32%) patients were unemployed and five (20%) and three (12%) patients were uninsured or on Carelink, respectively. Having insufficient funds/savings to cover treatment costs was reported in 48% (n=12) of patients. All patients felt financially stressed, with 44% (n=11) feeling at least “quite a bit” stressed. A response of at least “quite a bit” was reported in 60% (n=15) of patients for a reduction in financial satisfaction due to cancer/treatment, and in 52% (n=13) for the illness being a financial hardship (FH). Those without insurance/on Carelink reported higher median scores for the illness being a FH (4 [very much] vs. 2 [somewhat], p=0.047). Unemployed patients reported higher median scores for financial stress (3 [quite a bit] vs. 2, p=0.005) and frustration at not working/contributing as much as usual (3 [somewhat] vs. 1.5, p=0.048). Peripher al neuropathy was associated with reduced median quality of life scores (5.5 vs. 7 [max 7], p=0.01) and increased median scores for having physical limitation as a result of the disease/treatment (2 [a little] vs. 1 [not at all], p=0.01).

**Conclusions:** Patients post-chemotherapy for mGCT (especially those without insurance/employment) suffer from FT. Efforts to support these young men should be promoted.
**Quality and readability of Google search information on holmium laser enucleation of the prostate for benign prostatic hyperplasia**

Yam Ting Ho, Jeremy Saad, Femi Ayeni, Mohan Anandayam, Bertram Canagasasingham, Ahmed Goolam, Nicola Jeffrey, Mohamed Khoda, Raymond Ko, Nicholas Mehran, Soosanka Ranasinghe, Celi Vanoli, Jonathan Kani, Isaac Thangasamy, Shravanadh Ananthapadmanabhan

**Introduction:** We aimed to assess the quality and readability of online information on holmium laser enucleation of the prostate (HoLEP) in the management of benign prostatic hyperplasia (BPH) using the most used search engine worldwide, Google.

**Methods:** The Google search terms “Holmium laser surgery” and “enlarged prostate” were used and the initial 150 web pages were reviewed. Web pages that were paywalls, scientific literature, and/or promoted advertisements were excluded from the analysis. Quality assessment tools, such as DISCERN, QUEST, and JAMA criteria, were used, while readability tools like Flesch-Kincaid grade level, Gunning-Fog Index, Simple Measure of Gobbledygook, and Flesch reading ease score were used. Two authors independently reviewed the included sites for further analysis. If there were any discrepancies, a third author was consulted and would hold the deciding vote.

**Results:** One hundred and seven web pages were included in the data analysis. The median DISCERN score was 42 (IQR 35–49) out of 80; median JAMA score was 9 (IQR 0–1) out of 12; median QUEST score was 9 (IQR 9–12) out of 28; further median scores based on ranking can be seen in Table 1. Readability and quality scores correlated positively (Tables 2, 3). Using non-parametric ANOVA and post-hoc test, significant differences were identified between rankings of webpages. Subgroup analysis showed that the type of sponsorship did not influence the quality of the web pages. The overall readability can be considered moderate-difficult, such that a minimum reading level of grade 11 is needed. Linear regression analysis showed a higher rank web page is a positive predictor for all three quality assessment tools.

**Conclusions:** The overall quality of online information regarding HoLEP is poor. We identified that top-ranked Google searches have a higher median scores (IQR) based on ranking can be seen in Table 1. Readability and quality scores correlated positively (Tables 2, 3). Using non-parametric ANOVA and post-hoc test, significant differences were identified between rankings of webpages. Subgroup analysis showed that the type of sponsorship did not influence the quality of the web pages. The overall readability can be considered moderate-difficult, such that a minimum reading level of grade 11 is needed. Linear regression analysis showed a higher rank web page is a positive predictor for all three quality assessment tools.

<table>
<thead>
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<th><strong>MP 12.11. Table 1. The median total scores (IQR) of all the quality assessment tools, along with the medians scores (IQR) on webpage rank allocation</strong></th>
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<td><strong>Total score</strong></td>
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<td>QUEST</td>
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**Barrier to accessing medical care experienced by women with urinary incontinence living in rural communities**

Karla Rebullar, Bryn Launer, Rosa Park, Melissa Rae Kaufman, Roger Dmochowski, W Stuart Reynolds, Elisabeth Moe Sebesta

**Introduction:** Urinary incontinence (UI) affects half of adult women in the U.S. Studies show only 30% seek care for UI, lower than the rate of seeing a provider for any reason, implicating barriers that are distinct from overall healthcare access. Living in a rural community has been associated with negative health outcomes but little is known about barriers for those with UI in rural areas. Our goal was to assess the barriers in care for women with UI living in rural vs. non-rural areas.

**Methods:** Patients were recruited from our clinic and from the local area via ResearchMatch to complete questionnaires on demographics, urinary symptoms, and barriers to care for UI. Rurality was defined using the home zip code according to the Health Resources and Services Administration (HRSA) definition via the Federal Office of Rural Health Policy (FORHP) Data Files. Rates of delaying medical care for UI and reasons for delay were compared between women living in rural vs. non-rural areas using the Chi-squared test.

**Results:** A total of 1096 respondents completed the study. The mean age was 48.5 years, and the majority was white, non-Hispanic (68%); 176 (16%) women identified living in rural areas. UI severity assessed via mean ICIQ-UI SF score was not different between rural and non-rural women. Most women in our survey reported delaying seeking care, treatment, or surgery for UI. There were trends, albeit non-significant, towards more rural women reporting delaying care. Reasons for delaying included the cost of treatment (51%), thinking the condition was not treatable (46%), fear (26%), and work obligations (25%). Rural women more often reported that the cost and distance to travel, and not having transportation were significant barriers to accessing care (Table 1).

**Conclusions:** Most women in our survey reported delaying seeking care, treatment, or surgery for UI. There were trends, albeit non-significant, towards more rural women reporting delaying care. Reasons for delaying included the cost of treatment (51%), thinking the condition was not treatable (46%), fear (26%), and work obligations (25%). Rural women more often reported that the cost and distance to travel, and not having transportation were significant barriers to accessing care (Table 1). Travel issues were significant barriers identified that disproportionately affected rural women, suggesting that travel to UI specialists is prohibitive to getting the care they need. Travel issues are significant barriers identified that disproportionately affected rural women, suggesting that travel to UI specialists is prohibitive to getting the care they need. Telehealth, community outreach, and incentivizing providers who specialize in women’s pelvic health to work in rural communities may help bridge some of these gaps in care.

**Acknowledgements:** This study was supported by the Vanderbilt Center for Health Services Research, Health Equity Research Grant.

Prostate cancer screening to transgender women: PSA value to recommend more workup

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Introduction: Over the years, the number of people openly identifying as transgender has continued to increase. Thus, the need for informative transgender-specific care has only grown. Within transgender women (TW), there remains a risk of prostate cancer; as the prostate is retained in gender-affirming hormone therapy (GAHT) and surgery. Yet, little is known about prostate cancer screening in the transgender population. While few cases of prostate cancer screening or prostate-specific antigen (PSA) in TW have been identified, the effect of hormone therapy to treat prostate cancer are similar. Using these similarities, we aimed to create a guideline for baseline PSA and prostate cancer screening in TW.

Methods: Through a systematic review, we identified existing PubMed publications on PSA or prostate cancer screening in TW and expected PSA in patients with prostate cancer managed with hormone therapies. Due to the limited research on TW, case studies were also included. The publications and case reports were reviewed and analyzed to form a comprehensive review of expected baseline PSA and prostate cancer screening in TW.

Results: We identified nine case studies of PSA values in TW with prostate cancer managed with hormone therapies. Due to the knowledge surrounding prostate cancer hormone therapy and its effect on PSA, we can help predict expected PSA in TW. Thus, we concluded that physicians should consider prostate cancer as a possibility in TW with PSA levels >2.0 ng/ml.

Neighborhood socioeconomic disadvantage is associated with worse urinary risk factors and access to medical management for urolithiasis

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Introduction: 24-hour urine (24hU) testing guides counseling to prevent recurrent urolithiasis. Poor socioeconomic status (SES) is a risk factor for stone disease; however, these associations are often based on complex statistics not readily available in clinical practice. Area Deprivation Index (ADI) is a quantitative measure of SES that assigns a percentile based on mean income, education, employment, and housing quality from U.S. census data using a geocoded residential address. ADI has been linked to perioperative outcomes across multiple disciplines but not yet urolithiasis. This study aimed to characterize relationships between ADI and urolithiasis risk factors.

Methods: A retrospective review of patients undergoing percutaneous nephrolithotomy (PCNL) from 2017–2022 was performed. Addresses were geocoded to national ADI score, with the lowest quartile (scores 1–25) representing the least, and the top quartile (76–100) the most disadvantaged. Demographics, 24hU parameters, and stone composition data were evaluated.

Results: A total of 1876 patients underwent PCNL during the study period, of which 909 completed a 24hU study. The distribution of gender and race was different across ADI quartiles, with more females and African Americans in the most disadvantaged quartile (55.5% vs. 41.7%, p=0.02; 16% vs. 4.5%, p<0.001, respectively). The lower ADI quartiles had significantly higher stone formers (p<0.001, respectively). A lower ADI was associated with fewer calculi (2.0 vs. 2.4, p=0.02). A lower ADI was also associated with lower stone diameters (11.4 vs. 12.6 mm, p<0.001). The ADI was also associated with stone composition (p<0.001). The ADI was significantly associated with lower incidence of staghorn stones (2.5 vs. 7.7%, p=0.03). The ADI was also significantly associated with lower complexity stones (3.0 vs. 4.1%, p<0.001). The ADI was significantly associated with lower stone specific gravity (1.2 vs. 1.3, p=0.01). The ADI was also associated with lower stone composition variability (5.0 vs. 6.3, p=0.03). The ADI was also associated with lower stone composition complexity (1.1 vs. 1.5, p<0.001).

Neighborhood socioeconomic disadvantage is associated with worse urinary risk factors and access to medical management for urolithiasis.
MP 12.15 Characteristics and trends of industry-sponsored research funding to urologists in the United States between 2014 and 2022

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Introduction: Urologists face challenges in obtaining public research funding, leading to increasing reliance on the healthcare industry for research support. Existing research has mainly focused on financial relationships in non-research contexts, while little is known about contemporary financial ties between urologists and the industry for research purposes in the U.S. This study uses federal databases to examine the extent and trends in industry-sponsored research payments to urologists from 2014 to 2022.

Methods: We identified all active American urologists using the Centers for Medicare and Medicaid Services (CMS) National Plan and Provider Enumeration System (NPPES) database and extracted their industry-sponsored research payments data from the CMS Open Payments Database. We performed descriptive analyses of the payments data. The payments were further analyzed by payment year and content of payments. All monetary amounts are presented in 2022 dollar values.

Results: Among 13,902 active American urologists, 1330 (9.6%) received at least one industry-sponsored research payment. In total, American urologists received $USD 605.1M between 2014 and 2022. Of all research payments, 98.7% ($USD 597.4M) were associated with research where urologists served as principal investigators, while only 1.3% were directly provided to individual urologists. The top 10% of urologists in research payments received 79.3% ($USD 4.8M) of total research payments. Only 0.4% ($USD 2.3M) of research payments were made for preclinical research. Research payments for registered clinical trials totaled $USD 159.0M (26.3% of all research payments). More than $USD 162.1M (26.8%) and $USD 86.8M in research payments were associated with Xtandi (enzalutamide) and Keytruda (pembrolizumab). More than half (57.0%; $USD 345.2M) of industry-sponsored research payments to urologists were associated with 10 medical products, of which eight had cancer-related indications. The average percentage change in total payments showed a significant annual increase of 13.9% (95% CI 11.6–6.3%, p<0.001) in value and 5.5% (2.2–8.8%, p<0.001) in number of payments.

Conclusions: Industry-sponsored research payments to urologists are substantial and have increased in both payment amount and number. Annual payments and increases remain concentrated in a subset of urologists and primarily fund clinical trials for a small subset of oncologic medical products.

MP 12.16 Identifying demographics in patients referred to urology for microscopic hematuria in a large health system

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Introduction: Understanding the referral patterns of microscopic hematuria patients by primary care physicians may help to improve the timely evaluation and early detection of adverse pathology by specialists. The objective of this study was to identify demographics among patients with microscopic hematuria who were referred to urology in a large health system.

Methods: This analysis is part of a larger database from an ongoing retrospective cohort study collected using EHR from Geisinger Health System (GHS), from January 1, 2006, to March 31, 2023. Patients >18 years old who had at least one outpatient visit at GHS and had >50 red blood cells/high power field (high-risk) on urinalysis with microscopy were included. Characteristics of patients who were referred within six months vs. those not referred were summarized by univariate and multivariable analysis.

Results: A total of 3471 patients were included. Overall 487/3471 (14%) of patients with microhematuria detected at an outpatient visit were referred to urology within six months. The majority of patients were female (2256/3471, 73%) and Caucasian (3276/3471, 94%). On univariate analysis, referred patients tended to be younger than 65 years old compared to those older than 65 (69% vs. 73%, p<0.001); 21% of males were referred vs. 11% of females (p<0.001). Caucasians were more likely to be referred compared to Asians or African Americans (1% vs. 4% and 9%, respectively, p=0.04). Patients with GHS-affiliated primary care providers (PCP) were more likely to be referred (22% vs. 10%, p<0.001). Multivariate analysis shows increasing referral likelihood with increasing RBCs detected on microscopy, with >50 having OR of 1.87 (p<0.001). The factor most positively associated with referral was having GHS-affiliated PCP (OR 3.15, p<0.001). The demographic least likely to be referred were females (OR 0.41, p<0.001).

Conclusions: Overall, only 14% of patients found to have microhematuria at an outpatient visit were subsequently referred to urology within six months. Our analysis shows that while most microscopic hematuria patients were female, this demographic was also associated with decreased likelihood to be referred. Patients who had a PCP who was affiliated with our health system were the most likely to have been referred.

MP 12.17 Quality improvement initiative evaluating the use of disposable flexible cystoscopes compared with reusable flexible cystoscopes at bedside

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Introduction: Flexible cystoscopes are performed in inpatients at bedside for a variety of reasons, including insertion of difficult catheters under direct visualization, dilation of stricture disease, and stent removal. Using a standard cystoscope on the ward is quite challenging, as it requires signing out, transporting and returning a large media tower, the scope itself, as well as all required equipment. The advantages of a single-use, disposable cystoscope would be greater convenience in setup and minimizing sterilization costs. Previous studies have shown that single-use cystoscopes perform as well clinically as reusable flexible scopes.2

We set out to determine if single-use cystoscopes are more advantageous in the inpatient setting than traditional reusable cystoscopes at our academic center.

Methods: This is a prospective single-institution study involving two academic centers at McMaster University: St. Joseph’s Hospital and the Juravinski Hospital. Residents were surveyed on their experience using disposable and reusable flexible cystoscopes for bedside cystoscopy via a questionnaire. The primary outcome of this study is the overall experience of disposable cystoscopes compared with standard flexible cystoscope for inpatient indications using a visual analog scale (1=poor, 5=excellent). Results: Between July and December 2023, data on 20 bedside cystoscopies were collected, with 13 procedures using a disposable cystoscope and seven using a reusable cystoscope, including three eye-piece reusable cystoscopes. All residents felt comfortable performing the procedure alone at bedside. The averi...
Indications for bedside cystoscopy included false passages, stricture disease, and ureteric stent removal. Overall experience of the disposable scope was superior to reusable scopes, at 4.9 compared to 1.7, respectively (p<0.0001). Additional significant improvements of the disposable scope included ease of transport/maneuvering, with a difference of 3.49 (2.99, 3.99, p<0.001) and quality of cystoscopy at 2.27 (1.49, 3.06, p<0.0001).

Conclusions: Disposable scopes offer a better overall experience for bedside cystoscopies compared to traditional reusable scope and performed better in categories such as quality of cystoscopy and ease of maneuverability on the ward.

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References: