Poster Session 12: Health Equity/EDIA, Practice Management/QI
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MP 12.1
Unmet social needs are independently associated with kidney stone disease and worse quality of life

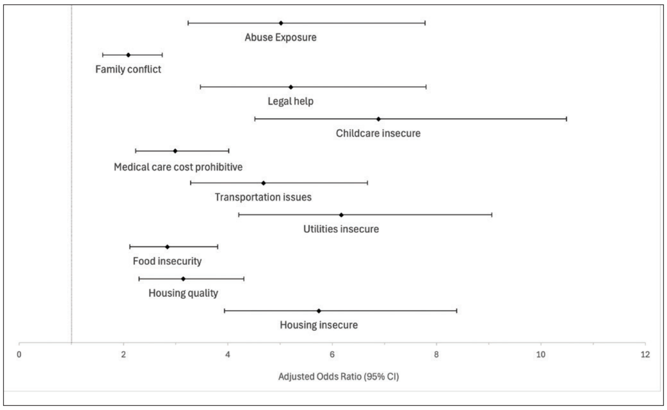
Michael Uy[1], Erik Sucher[1], Khurshid Ghani[1], Casey Dauw[1], Wilson Sui[1]
[1]Department of Urology, University of Michigan, Ann Arbor, United States

Introduction: Social determinants of health, including housing and food insecurity, barriers in transportation, and cost of medical care, shape disparities across chronic medical conditions. Among stone formers, these non-biologic factors may affect hydration habits, diet quality, access to specialty care, and adherence to preventative therapy, and are poorly described. We sought to evaluate associations between kidney stones and unmet social needs in a large, community-based sample.

Methods: Adults were recruited electronically to complete questionnaires on demographic and clinical characteristics, kidney stone history, and unmet social needs. Characteristics of those with and without stones were compared using two-sided t tests and χ^2 tests. Multivariable logistic regression assessed associations between kidney stones and individual social need domains, adjusting for demographic and clinical covariates. Among stone formers, the relationship between number of unmet needs and kidney stone disease-specific quality of life (Wisconsin Stone Quality of Life Questionnaire, WISQOL) was analyzed. Bonferroni correction was applied for multiple comparisons.

Results: A total of 1813 responses were included. Among respondents, 43% were kidney stone formers (n=778). Participants were predominantly female (71%), white (80%), and aged 25–64 years (74%). A history of kidney stones was associated with multiple unmet social needs on uni- and multivariable analyses (Figure 1), including housing and food insecurity, threatened loss of utilities, transportation barriers, cost-prohibitive medical care, childcare and legal needs, family conflict, and abuse exposure (all p<0.001). Among stone formers, each additional unmet social need corresponded to a 6.4-point decrease in WISQOL score (β=-6.36, 95% CI -6.79 to -5.92, p<0.001).

Conclusions: Multiple unmet social needs were independently linked to kidney stone disease and worse quality of life. Incorporating social risk assessment into stone care may improve outcomes, reduce disparities, and advance health equity. Future research should evaluate potential interventions to modify these non-biologic factors.



MP 12.1. Figure 1. Association between unmet social needs and kidney stones.

MP 12.2
Closing mental health gaps for GBTQ plus prostate cancer survivors through the PC-PEP phase 4 implementation trial

Robert Rutledge[1], Shingai Mutambirwa[2], Nathan K. Smith[3], Gabriela Ilie[3,4,5], Ricardo Rendon[4], Ross Mason[4], Andrea Kokorovic[4], Howard Evans[5], Kunal Jana[6], Jasmir Nayak[7], Christopher J.D. Wallis[8], Susan Ellard[9], John Thoms[10], Robert Thompson[1], Larry Pan[1], Ernest Chan[11], Stanley Flax[12], Nikhilesh Patil[1], David Bowes[1], Peter Dickens[1,13], Duvern Ramiah[14]
[1]Department of Radiation Oncology, Dalhousie University, Halifax, Canada; [2]Department of Urology, Sefako Makgatho Health Sciences University, Pretoria, South Africa; [3]Department of Community Health and Epidemiology, Dalhousie University, Halifax, Canada; [4]Department of Urology, Dalhousie University, Halifax, Canada; [5]Division of Urology, Department of Surgery, University of Alberta, Edmonton, Canada; [6]Division of Urology, Department of Surgery, University of Saskatchewan, Saskatoon, Canada; [7]Section of Urology, Faculty of Medicine, University of Manitoba, Winnipeg, Canada; [8]Division of Urology, Department of Surgery, University of Toronto, Toronto, Canada; [9]Division of Medical Oncology, University of British Columbia, Kelowna, Canada; [10]Department of Radiation Oncology, Memorial University of Newfoundland, St. John's, Canada; [11]Division of Urology, Lakeridge Health, Oshawa, Canada; [12]Gayle and Graham Wright Prostate Centre, North York General Hospital, Toronto, Canada; [13]Prostate Cancer Foundation of New Zealand, Auckland, New Zealand; [14]Division of Radiation Oncology, Department of Oncology, University of the Witwatersrand, Johannesburg, South Africa

Introduction: GBTQ+ prostate cancer (PC) survivors experience disproportionately high psychological distress and limited access to tailored survivorship support. Whether real-world, scalable digital programs can close, rather than perpetuate, these mental health gaps remains unclear. We examined equity in engagement and longitudinal mental health outcomes by sexual orientation within the phase 4 implementation trial of the Prostate Cancer-Patient Empowerment Program (PC-PEP).

Methods: This international, phase 4, single-arm, prospective interventional trial evaluated PC-PEP (October 2022 to ongoing), a six-month, home-based digital survivorship intervention integrating exercise, stress reduction, nutrition, pelvic floor training, and psychosocial support. Outcomes included psychological distress (Kessler's Psychological Distress, K10), mental and physical health-related quality of life (SF-12), program engagement, and perceived usefulness. Adjusted longitudinal generalized estimating equation models assessed change over time and time-by-GBTQ+ interactions.

Results: Among 688 participants at baseline, 32 (4.7%) identified as GBTQ+. At entry, GBTQ+ participants reported significantly worse mental health (median K10 17.5 vs. 15.0, p=0.016; median SF-12 MCS 49 vs. 55, p=0.005) (Table 1). Six-month followup completion was higher among GBTQ+ participants (92.9% vs. 80.3%). Mental health improved in both groups, with greater improvement among GBTQ+ participants in K10 at 12 months (β -2.6, 95% CI -5.0 to -0.21), and SF-12 MCS at six months (β 4.8, 95% CI 0.8–8.7) (Table 2). No differences were observed for physical health. Program satisfaction and perceived usefulness exceeded 85% across groups.

Conclusions: GBTQ+ PC survivors entered PC-PEP with marked mental health disadvantage yet experienced equal or greater mental health gains. These findings demonstrate that scalable digital survivorship care can actively reduce mental health inequities in PC.

Funding: This work was supported by Movember Canada (Health Equity Grant, 2025): Transforming Prostate Cancer Care through Communities of Empowerment. Principal Investigator: Gabriela Ilie; Clinical Co–Principal Investigator: Robert Rutledge. The Pan-Canadian study team included Ricardo Rendon, Ross Mason, Andrea Kokorovic (QEII Hospital and Dalhousie University, Nova Scotia); Larry Pan (Queen Elizabeth Hospital, Prince Edward Island); Rob Thompson (Saint John Regional Hospital, New Brunswick);

Jon Thoms (Health Sciences Centre, Newfoundland and Labrador); Kunal Jana (Saskatchewan Health Authority, Saskatchewan); Howard Evans (Dianne and Irving Kipnes Urology Centre, Alberta Health Services, Edmonton); Chris Wallis (Mount Sinai Hospital, Toronto); and Susan Ellard (BC Cancer Agency, Kelowna). The authors gratefully acknowledge the support of Mr. and Mrs. Frank and Debbi Sobey, whose generosity supports the endowed academic position that enabled the broader development of this research through the Soillse Research Endowment Fund. This study was conducted with the support of Dalhousie University and its Faculty of Medicine and Advancement Office, which provided the academic and research environment for this work. The authors also thank the New Glasgow Prostate Cancer Support Group (Pictou County) and Tolmar Pharmaceuticals for their support with the French translation of the program. Additional funding support was provided by the Tracey Foundation. The authors also acknowledge the invaluable contributions of patient and community leads, including John Demmings (2SLGBTQ+ communities), Duane Winter (Black men), Bernie Petolas (rural and Francophone communities), Ross Macdonald and Kevin Barnett (rural communities), Tony Orchard (Greater Nanaimo Support Group), Sandra Burling (Indigenous communities), and Nadia Denny (Eskasoni Health Centre). Finally, the authors thank all clinicians and participating sites across Canada for their support with patient enrollment and implementation. FOR MORE INFORMATION PLEASE EMAIL: PEP@NSHEALTH.CA or VISIT: PCPEP.ORG ClinicalTrials.gov ID NCT04895839.

MP 12.2. Table 1. Baseline characteristics of PC-PEP Phase 4 participants by sexual orientation

Characteristic	Heterosexual (n=656)	GBTQ+ (n=32)	p*
Age, years	67 (62, 72)	64 (57, 71)	0.064
Country, n (%)			0.20
Canada	578 (92)	26 (84)	
Other (New Zealand, U.S., Australia, South Africa, Austria, United Kingdom)	52 (8.3)	5 (16)	
Rural residence, n (%)	195 (30)	5 (16)	0.10
Ethnicity, n (%)			0.059
White/Caucasian	599 (91)	26 (81)	
Non-white	56 (29)	6 (19)	
Days from diagnosis to baseline survey	164 (75, 626)	171 (93, 808)	0.40
Psychological distress (K10 score)	15.0 (12.0, 18.0)	17.5 (13.0, 22.0)	0.016
K10 category, n (%)			0.068
Likely well	518 (79)	21 (66)	
Likely mental disorder	136 (21)	11 (34)	
SF-12 Mental Component Score (MCS)	55 (46, 59)	49 (33, 57)	0.005
SF-12 Physical Component Score (PCS)	49 (44, 51)	50 (45, 54)	0.20
IPSS urinary symptom score	11 (6, 16)	9 (4, 16)	0.30
EPIC sexual function	42 (27, 67)	54 (24, 78)	0.40
EPIC urinary bother	82 (68, 93)	82 (71, 93)	0.70
EPIC urinary incontinence	92 (71, 100)	94 (71, 100)	0.70
EPIC urinary irritative/obstructive	89 (79, 96)	89 (80, 93)	0.60

Values are median (Q1, Q3) or n (%), as indicated. *P-values derived from Wilcoxon rank-sum test (continuous variables) and Fisher's exact or Pearson χ^2 tests (categorical variables), as appropriate. Percentages calculated excluding missing data; missingness was ≤5% for all variables. Seven participants with missing sexual orientation data were excluded.

MP 12.2. Table 2. Longitudinal generalized estimating equation models for psychological distress and mental health-related quality of life by sexual orientation in the PC-PEP phase 4 implementation trial

Panel A. Psychological distress (Kessler 10)

Predictor	β (95% CI)	p
Age (years)	-0.14 (-0.21, -0.07)	<0.001
Charlson comorbidity index	0.38 (0.03, 0.72)	0.033
Prescribed medication for anxiety/depression	3.40 (2.40, 4.40)	<0.001
Currently in a relationship	-0.17 (-1.20, 0.90)	0.80
Days from diagnosis to baseline survey	0.00 (0.00, 0.00)	0.009
Treatment category		
Surgery ± hormone therapy	Reference	–
Active surveillance	-0.30 (-0.90, 0.30)	0.30
Radiation ± hormone therapy	0.84 (0.13, 1.60)	0.020
Hormone therapy only	1.20 (0.18, 2.20)	0.021
Time (months)		
Baseline (0)	Reference	–
6	-0.63 (-1.10, -0.17)	0.008
12	-0.68 (-1.20, -0.16)	0.010
GBTQ+ (vs heterosexual)	1.60 (-0.73, 3.80)	0.20
Time × GBTQ+ interaction		
6 months × GBTQ+	-1.80 (-3.60, 0.01)	0.051
12 months × GBTQ+	-2.60 (-5.00, -0.21)	0.033

Panel B. Mental health–related quality of life (SF-12 MCS)

Predictor	β (95% CI)	p
Age (years)	0.20 (0.07, 0.33)	0.002
Charlson comorbidity index	-0.29 (-0.95, 0.37)	0.40
Prescribed medication for anxiety/depression	-6.10 (-8.20, -4.00)	<0.001
Currently in a relationship	2.10 (-0.41, 4.60)	0.10
Days from diagnosis to baseline survey	0.00 (0.00, 0.00)	0.006
Treatment category		
Surgery ± hormone therapy	Reference	–
Active surveillance	0.35 (-0.97, 1.70)	0.60
Radiation ± hormone therapy	-1.10 (-2.60, 0.38)	0.14
Hormone therapy only	-1.70 (-3.80, 0.48)	0.13

Models estimated using Gaussian GEE with an exchangeable correlation structure, clustered by participant. All models adjusted for age, comorbidity burden, prescribed mental health medication, relationship status, time from diagnosis to baseline survey, and treatment category. Positive β values indicate higher distress (K10) or better mental health-related quality of life (MCS).

MP 12.2. Table 2. Longitudinal generalized estimating equation models for psychological distress and mental health-related quality of life by sexual orientation in the PC-PEP phase 4 implementation trial

Panel B (cont'd). Mental health–related quality of life (SF-12 MCS)		
Time (months)		
Baseline (0)	Reference	–
6	1.20 (0.10, 2.30)	0.032
12	0.97 (-0.25, 2.20)	0.12
GBTQ+ (vs heterosexual)	-4.30 (-8.90, 0.22)	0.062
Time × GBTQ+ interaction		
6 months × GBTQ+	4.80 (0.80, 8.70)	0.019
12 months × GBTQ+	3.90 (-2.60, 10.00)	0.20

Models estimated using Gaussian GEE with an exchangeable correlation structure, clustered by participant. All models adjusted for age, comorbidity burden, prescribed mental health medication, relationship status, time from diagnosis to baseline survey, and treatment category. Positive β values indicate higher distress (K10) or better mental health-related quality of life (MCS).

MP 12.3

Equitable engagement and functional recovery among Black patients enrolled in a digital prostate cancer survivorship program: Preliminary race subgroup findings from a phase 4 implementation trial

Maren Brodovsky[1], Nathan Smith[2], Gabriela Ilie[1,2,3], Ricardo A. Rendon[1], Ross Mason[1], Andrea Kokorovic[1], Howard Evans[4], Kunal Jana[5], Jasmir Nayak[6], Christopher Wallis[7], Susan Ellard[8], John Thoms[9], Robert Thompson[3], Larry Pan[3], Ernest Chan[10], Stanley Flax[11], Nikhilesh Patil[3], David Bowes[3], Peter Dickens[12], Duvern Ramiah[13], Shingai Mutambirwa[14], Robert Rutledge[3]

[1]Department of Urology, Dalhousie University, Halifax, Nova Scotia, Canada; [2]Department of Community Health and Epidemiology, Dalhousie University, Halifax, Nova Scotia, Canada; [3]Department of Radiation Oncology, Dalhousie University, Halifax, Nova Scotia, Canada; [4]Division of Urology, Department of Surgery, University of Alberta, Edmonton, Alberta, Canada; [5]Division of Urology, Department of Surgery, University of Saskatchewan, Saskatoon, Saskatchewan, Canada; [6]Department of Urology, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada; [7]Division of Urology, Department of Surgery, University of Toronto, Toronto, Ontario, Canada; [8]Division of Medical Oncology, University of British Columbia, Kelowna, British Columbia, Canada; [9]Department of Radiation Oncology, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, Canada; [10]Division of Urology, Lakeridge Health, Oshawa, Ontario, Canada; [11]Gayle and Graham Wright Prostate Centre, North York General Hospital, Toronto, Ontario, Canada; [12]Prostate Cancer Foundation of New Zealand, Aukland, New Zealand; [13]Division of Radiation Oncology, Department of Oncology, University of the Witwatersrand, Johannesburg, South Africa; [14]Department of Urology, Sefako Makgatho Health Sciences University, Pretoria, South Africa

Introduction: Black patients with prostate cancer experience disproportionate disease burden yet remain underrepresented in survivorship programs. We evaluated race-based differences in engagement, acceptability, and outcomes in the Prostate Cancer-Patient Empowerment Program (PC-PEP).

Methods: This international, phase 4, single-arm, prospective trial evaluated PC-PEP, a six-month, daily, home-based digital survivorship program. Participants completed assessments at zero, six, 12, and 24 months. We compared 1) eligibility-adjusted followup by race; 2) six-month program ratings; and 3) changes in psychological distress (Kessler Psychological Distress Scale), health-related quality of life (SF-12 Mental and Physical Component Scores), and urinary incontinence (EPIC). Outcomes were examined using Gaussian generalized estimating equation models, adjusting for demographic, clinical, treatment, time, race, and time × race interactions.

Results: Eligibility-adjusted followup was comparable between Black and non-Black participants at six months (81.2% vs. 80.5%) and 12 months (66.7% vs. 68.9%), with lower Black followup at 24 months (44.4% vs. 59.7%). Acceptability at six months was uniformly high: median likelihood of recommending PC-PEP was 10 (IQR 8–10) in both groups, with 92% giving positive recommendations (≥6/10). Baseline psychological distress and mental health-related quality of life did not differ by race (K10 median 13 vs. 15, p=0.20; MCS median 55 vs. 55, p>0.90). Psychological distress decreased over time (Table 1), with no differential trajectories by race (all time × race interactions p≥0.80). Black participants experienced greater improvements in urinary continence at six and 12 months (Table 2) relative to non-Black participants.

Conclusions: Black participants demonstrated high engagement and acceptability, comparable mental health outcomes, and greater early gains in urinary continence, supporting PC-PEP as a scalable approach for equitable functional recovery.

Funding/Acknowledgements: This work was supported by Movember Canada (Health Equity Grant, 2025): Transforming Prostate Cancer Care through Communities of Empowerment. Principal Investigator: Gabriela Ilie; Clinical Co–Principal Investigator: Robert Rutledge. The Pan-Canadian study team included Ricardo Rendon, Ross Mason, Andrea Kokorovic (QEII Hospital and Dalhousie University, Nova Scotia); Larry Pan (Queen Elizabeth Hospital, Prince Edward Island); Rob Thompson (Saint John Regional Hospital, New Brunswick); Jon Thoms (Health Sciences Centre, Newfoundland and Labrador); Kunal Jana (Saskatchewan Health Authority, Saskatchewan); Howard Evans (Dianne and Irving Kipnes Urology Centre, Alberta Health Services, Edmonton); Chris Wallis (Mount Sinai Hospital, Toronto); and Susan Ellard (BC Cancer Agency, Kelowna). The authors gratefully acknowledge the support of Mr. and Mrs. Frank and Debbi Sobey, whose generosity supports the endowed academic position that enabled the broader development of this research through the Soillse Research Endowment Fund. This study was conducted with the support of Dalhousie University and its Faculty of Medicine and Advancement Office. The authors also thank the New Glasgow Prostate Cancer Support Group (Pictou County) and Tolmar Pharmaceuticals for their support with the French translation of the program. Additional funding support was provided by the Tracey Foundation. The authors acknowledge the invaluable contributions of patient and community leads, including John Demmings (2SLGBTQ+ communities), Duane Winter (Black men), Bernie Petolas (rural and Francophone communities), Ross Macdonald and Kevin Barnett (rural communities), Tony Orchard (Greater Nanaimo Support Group), Sandra Burling (Indigenous communities), and Nadia Denny (Eskasoni Health Centre). Finally, the authors thank all clinicians and participating sites across Canada for their support with patient enrollment and implementation. ClinicalTrials.gov ID: NCT04895839. More information: PEP@nshealth.ca | https://pcpep.org

MP 12.3. Table 1. Participant retention and eligibility-adjusted follow-up by race in the PC-PEP phase 4 implementation trial

Timepoint (months)	Non-Black, n	Black, n	Non-Black followup, %*	Black followup, %*
Baseline (0)	676	17	–	–
6	482	14	80.5	81.2
12	332	9	68.9	66.7
24	190	4	59.7	44.4

*Eligibility-adjusted denominators.

MP 12.3. Table 2. Adjusted longitudinal outcomes by race in the PC-PEP phase 4 implementation trial (surgery reference)

Outcome	Predictor	β (95% CI)	p
K10 psychological distress	Time (6 months)	-0.75 (-1.20, -0.30)	0.001
	Time (12 months)	-0.86 (-1.40, -0.33)	0.001
	Black race (vs non-Black)	-1.80 (-3.80, 0.21)	0.079
	Time × Black (6 months)	-0.26 (-2.30, 1.80)	0.80
	Time × Black (12 months)	-0.20 (-2.40, 2.00)	0.90
SF-12 Mental Component Score	Time (6 months)	1.50 (0.38, 2.60)	0.008
	Black race (vs non-Black)	0.09 (-4.70, 4.90)	>0.90
	Time × Black (12 months)	4.00 (-0.52, 8.50)	0.083
EPIC urinary incontinence	Time (6 months)	2.90 (0.25, 5.60)	0.032
	Time (12 months)	7.20 (4.10, 10.0)	<0.001
	Time × Black (6 months)	13.0 (0.88, 25.0)	0.036
	Time × Black (12 months)	9.40 (0.07, 19.0)	0.048

Models adjusted for age, Charlson comorbidity index, prescribed anxiety/depression medication, relationship status, days from diagnosis to baseline survey, treatment category, and clustered by participant.

MP 12.4

Equitable implementation of PC-PEP for prostate cancer survivorship: Reach, followup, perceived usefulness, and longitudinal mental health outcomes in an international, phase 4, implementation trial

Wyatt MacNevin[1], Nathan K. Smith[1], Ricardo A. Rendon[1], Ross J. Mason[1], Andrea Kokorovic[1], Howard Evans[2], Kunal Jana[3], Jasmir Nayak[4], Christopher J.D. Wallis[5], Susan Ellard[6], John Thoms[7], Robert Thompson[8], Larry Pan[8], Ernest Chan[9], Stanley Flax[10], Nikhilesh Patil[8], David Bowes[8], Peter Dickens[11], Duvern Ramiah[12], Shingai Mutambirwa[13], Robert Rutledge[8], Gabriela Ilie[1,8,14]

[1]Department of Urology, Dalhousie University, Halifax, Canada; [2]Department of Urology. Department of Surgery, University of Alberta, Edmonton, Canada; [3]Department of Urology, Department of Surgery, University of Saskatchewan, Saskatoon, Canada; [4]Section of Urology, University of Manitoba, Winnipeg, Canada; [5]Division of Urology, Department of Surgery, University of Toronto, Toronto, Canada; [6]Division of Medical Oncology, University of British Columbia, Kelowna, Canada; [7]Department of Radiation Oncology, Memorial University of Newfoundland, St. John's, Canada; [8]Department of Radiation Oncology, Dalhousie University, Halifax, Canada; [9]Division of Urology, Lakeridge Health, Oshawa, Canada; [10]Gayle and Graham Wright Prostate Centre, North York General Hospital, Toronto, Canada; [11]Prostate Cancer Foundation of New Zealand, Auckland, New Zealand; [12]Division of Radiation Oncology, Department of Oncology, University of the Witwatersrand, Johannesburg, South Africa; [13]Department of Urology, Sefako Makgatho Health Sciences University, Pretoria, South Africa; [14]Department of Community Health and Epidemiology, Dalhousie University, Halifax, Canada

Introduction: Many prostate cancer survivors lack access to structured survivorship care, particularly in rural settings.[1] PC-PEP is a daily, six-month, digital program integrating exercise, stress reduction, pelvic-floor training, nutrition, and behavioral self-monitoring. Building on phase 3 efficacy evidence,[2] we evaluated rural vs. urban implementation outcomes and longitudinal mental health in a phase 4, international cohort.

Methods: This international phase 4, single-arm, prospective interventional trial evaluated PC-PEP (October 2022 to ongoing), a daily, six-month, home-based digital survivorship program integrating physical fitness, pelvic-floor muscle training, stress reduction, nutrition, and psychological support, and its efficacy based on participant rurality. Rural vs. urban participant program evaluation metrics were compared and analyzed at six, 12, and 24 months. Changes in psychological distress (K10) and SF-12 mental health-related quality of life over time were compared.

Results: Among 689 respondents (urban, n=483; rural, n=206), followup completion was similar at six months (82.1% vs. 77.5%), 12 months (68.5% vs. 69.8%), and 24 months (61.5% vs. 55.3%). Acceptability was high, with likelihood of recommending PC-PEP being 10/10 (8–10) in urban and 10/10 (9–10) in rural participants (p=0.20) (Table 1). Positive recommendation was 93% (urban) vs. 92% (rural) (p=0.60), and overall usefulness was rated as 9/10 (7–10) in both groups (p=0.037). Rural participants rated pelvic-floor training more useful (p=0.036) and more often rated dietary guidance positively (86% vs. 77%, p=0.026). K10 psychological distress decreased at six, 12, and 24 months, and mental health improved over time, with no evidence of differential trajectories by rurality.

Conclusions: PC-PEP demonstrated equitable reach and high perceived usefulness across rural and urban contexts, alongside improved mental health over time. These findings support scalable, equity-oriented delivery of survivorship care for prostate cancer.

Funding/Acknowledgements: This work was supported by Movember Canada (Health Equity Grant, 2025): Transforming Prostate Cancer Care through Communities of Empowerment. Principal Investigator: Gabriela Ilie; Clinical Co–Principal Investigator: Robert Rutledge. The Pan-Canadian study team included Ricardo Rendon, Ross Mason, Andrea Kokorovic (QEII Hospital and Dalhousie University, Nova Scotia); Larry Pan (Queen Elizabeth Hospital, Prince Edward Island); Rob Thompson (Saint John Regional Hospital, New Brunswick); Jon Thoms (Health Sciences Centre, Newfoundland and Labrador); Kunal Jana (Saskatchewan Health Authority, Saskatchewan); Howard Evans (Dianne and Irving Kipnes Urology Centre, Alberta Health Services, Edmonton); Chris Wallis (Mount Sinai Hospital, Toronto); and Susan Ellard (BC Cancer Agency, Kelowna). The authors gratefully acknowledge the support of Mr. and Mrs. Frank and Debbi Sobey, whose generosity supports the endowed academic position that enabled the broader development of this research through the Soillse Research Endowment Fund. This study was conducted with the support of Dalhousie University and its Faculty of Medicine and Advancement Office. The authors also thank the New Glasgow Prostate Cancer Support Group (Pictou County) and Tolmar Pharmaceuticals for their support with the French translation of the program. Additional funding support was provided by the Tracey Foundation. The authors acknowledge the invaluable contributions of patient and community leads, including John Demmings (2SLGBTQ+ communities), Duane Winter (Black men), Bernie Petolas (rural and Francophone communities), Ross Macdonald and Kevin Barnett (rural communities), Tony Orchard (Greater Nanaimo Support Group), Sandra Burling (Indigenous communities), and Nadia Denny (Eskasoni Health Centre). Finally, the authors thank all clinicians and participating sites across Canada for their support with patient enrollment and implementation.

References:

1. Ilie G, Murphy S, MacDonald C, et al. Digital delivery of a six-month, home-based empowerment program improves mental health in rural adults with chronic conditions: A single-arm, prospective, interventional trial. *Digital Health* 2026:12:20552076251413351. https://doi.org/10.1177/20552076251413351
2. Ilie G, Rendon R, Mason R, et al. A comprehensive 6-mo Prostate Cancer-Patient Empowerment Program decreases psychological distress among men undergoing curative prostate cancer treatment: A randomized clinical trial. *Eur Urol* 2023;83:561-70. https://doi.org/10.1016/j.eururo.2023.02.009

MP 12.4. Table 1. Baseline characteristics of participants by rurality

Characteristic	Urban (n=483)	Rural (n=206)	p*
Age, years	67 (62–72)	65 (62–70)	0.013
Country of residence			0.14
Canada	421 (90%)	184 (96%)	
New Zealand	36 (7.7%)	6 (3.1%)	
United States	5 (1.1%)	1 (0.5%)	
Australia	1 (0.2%)	0 (0%)	
South Africa	5 (1.1%)	0 (0%)	
Other	3 (0.6%)	0 (0%)	
Ethnicity			0.30
White/Caucasian	405 (89%)	192 (96%)	
Black/African	15 (3.3%)	2 (1.0%)	
First Nations/Indigenous	4 (0.9%)	1 (0.5%)	
Asian	12 (2.6%)	3 (1.5%)	
Middle Eastern/Arab/Indian	3 (0.7%)	1 (0.5%)	
Latino/Hispanic	3 (0.7%)	0 (0%)	
Other	13 (2.9%)	2 (1.0%)	
Sexual orientation			0.059
Heterosexual	459 (95%)	195 (96%)	
Gay	18 (3.7%)	4 (2.0%)	
Bisexual/other	4 (0.8%)	0 (0%)	
Prefer not to answer	1 (0.2%)	4 (2.0%)	
Days between diagnosis and baseline survey	169 (71–766)	151 (88–345)	0.30
Psychological distress (K10 total score)	15 (12–18)	15 (12–19)	0.50
K10 category			0.20
Likely well	384 (80%)	156 (76%)	
Likely psychological distress	97 (20%)	50 (24%)	
SF-12 Mental Component Score	55 (47–58)	54 (45–58)	0.60
IPSS total score	10 (5–16)	11 (6–15)	0.70
EPIC-26 Sexual function	42 (27–67)	48 (27–70)	0.30
EPIC-26 Urinary bother	82 (68–93)	82 (71–93)	0.30
EPIC-26 Urinary incontinence	92 (73–100)	94 (68–100)	0.70
EPIC-26 Urinary irritative/obstructive	89 (79–96)	89 (79–96)	>0.90

Values are median (Q1, Q3) or n (%). *p-values derived from Wilcoxon rank-sum tests for continuous variables and Pearson's χ^2 or Fisher's exact tests for categorical variables, as appropriate. Percentages are calculated among participants with available data. Missing values were low across variables (≤3%) and are not shown for readability. Six participants with missing rurality status were excluded.

MP 12.5

Mind the gap: Gender, academic rank, and research productivity in Canadian academic urology

Kennedy L. Dirk[1], Andrew Maher[1], Naji Touma[1]
[1]Department of Urology, Queen's University, Kingston, Canada

Introduction: Research productivity is a key determinant of academic promotion and career advancement. Prior studies have demonstrated that men in urology have higher Hirsch-indices (h-indices) than women, paralleling differences in academic rank. These studies reflect an American data, or a somewhat dated Canadian cohort. This study aimed to examine contemporary gender-based differences in research productivity within Canadian academic urology.

Methods: Demographics, academic rank, and subspecialties were collected from university and provincial college websites. Research productivity metrics, including h-index (based on number of papers and citations), i10index (number of publications receiving >10 citations), and year of first publication, were obtained from Scopus and Google Scholar. All data were collected as of December 2025. Analyses included Chi-squared and Fisher's exact tests, Mann-Whitney U and Kruskal-Wallis tests, Spearman correlation, and exploratory multivariable linear regression models.

Results: A total of 263 Canadian academic urologists from 14 institutions were identified, consisting of 41 (15.6%) women, and 222 men (84.4%). Two women held the rank of full professor (4.9% of women) in comparison to 55 full professor men (24.8% of men). The highest proportion of women were at the assistant professor rank, with 26 (63.4% of women) as compared to 88 men (24.8% of men) (Fisher's exact test for rank by sex, p=0.003). Median (IQR) years since graduation, first publication, and start of independent practice were significantly shorter for women than men: 14.5 (11, 20.5) vs. 23 (15.75, 31), 13 (10, 20) vs. 22 (15, 28) and 7.5 (5, 13) vs. 16 (8, 23.25), respectively (Mann-Whitney U for all p<0.001). Median (IQR) Google Scholar h-index, Scopus h-index, and i10-index were also lower among women compared with men: 12.5 (7.5, 16) vs. 21 (13, 40), 9 (6, 14.5) vs. 16.5 (9, 33), and 16 (4, 54) vs. 47 (17.25, 130), respectively (Mann-Whitney U p=0.005, p<0.001, and p= 0.042). Years since graduation was the strongest predictor of productivity across all metrics. Each additional year since graduation was associated with increases of 1.2 Google Scholar points (p<0.001), 0.4 Scopus points (p=0.002), and 4.6 i10-index points (p<0.001).

Conclusions: Despite increasing numbers, women remain under-represented in Canadian academic urology, particularly at senior academic ranks. This largely explains an apparent research gap. The lack of female representation at the senior levels raises concerns regarding mentorship, which may impact academic advancement.

MP 12.6

Sex-based differences in early outcomes after bladder-preserving therapy for muscle-invasive bladder cancer

Zoe K. Friedman[1], Rachel Mckay[1], Akasham Rajagopaul[1], D. Robert Siemens[1,2]
[1]School of Medicine, Queen's University, Kingston, Canada; [2]Department of Urology, Queen's University, Kingston, Canada

Introduction: Bladder cancer is among the 10 most common malignancies worldwide. Although incidence is higher in men, women more often present with advanced disease and experience worse outcomes. Evidence on sex-based differences has largely focused on radical cystectomy; however, bladder-preserving therapy (BPT) using radiation or chemoradiation is increasingly offered due to surgical morbidity and aging populations. Early outcomes, such as acute toxicity, hospitalization, and short-term mortality, influence treatment completion and patient safety but remain poorly described. This scoping review characterizes sex- and gender-based differences in short-term outcomes following BPT for muscle-invasive bladder cancer (MIBC).

Methods: This scoping review followed established guidelines and was registered on the Open Science Framework. MEDLINE, Embase, and Web of Science were searched, yielding 3584 records. Two reviewers independently screened for studies reporting outcomes within 12 months by sex or gender among adults with MIBC treated with BPT. They extracted data and assessed adherence to sex- and gender-reporting guidelines.

Results: Most research focused on long-term survival rather than early outcomes after BPT. Of those reporting short-term outcomes, findings were heterogeneous. Several studies described higher rates of acute toxicity or worse early mortality among women, whereas others showed no sex-based differences. Few studies analyzed short-term outcomes by sex, and none distinguished biological sex from gender. Hospitalization and quality-of-life outcomes were rarely reported. **Conclusions:** Evidence regarding sex-based differences in early outcomes after BPT for MIBC is limited and inconsistent, with emphasis on long-term survival. Deficiencies in sex- and gender-specific reporting represent a major gap in the literature. Clarifying early safety and tolerability is needed to support patient-centered treatment planning and equity in care.

MP 12.7

Quantifying continuous bladder irrigation quality using an automated monitoring system

Nikhile Mookerji[1,2,3], *Salma Abdelfattah*[4], *Jonguk Lee*[5], *Toufik Safi*[6], *Kyra White*[6], *Fatima Saleem*[3], *Amir Hamzeh*[3], *Kai-Ho Fok*[1,2,3], *Karim Habib*[1,3], *Brian Carrillo*[7], *Monica Farcas*[1,2,3]

[1]Division of Urology, Department of Surgery, University of Toronto, Toronto, Canada; [2]Division of Urology, Department of Surgery, St. Michael's Hospital, Toronto, Canada; [3]Temerty Faculty of Medicine, University of Toronto, Toronto, Canada; [4]University of Waterloo, Waterloo, Canada; [5]Department of Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Canada; [6]Faculty of Medicine, Royal College of Surgeons in Ireland, Dublin, Ireland; [7]Well Spring Research, Toronto, Canada; [8]Institute of Medical Sciences, University of Toronto, Toronto, Canada

Introduction: Continuous bladder irrigation (CBI) is a common intervention for gross hematuria. It is labor-intensive, requiring continuous monitoring, frequent bag changes, and precise titration to prevent clot formation. Because CBI is manually controlled and lacks standardised protocols, assessment of CBI quality remains limited. In this study, we used an automated device capable of real-time CBI monitoring (Creative Medical Solutions) to quantify CBI irrigation quality and identify areas for improvement.

Methods: This prospective, observational pilot study was conducted on the urology ward at St. Michael's Hospital, Toronto, Canada. Nine patients receiving CBI after transurethral resection of the prostate were enrolled. An automated monitoring system (Creative Medical Solutions, Toronto, ON) was integrated into the standard setup without altering workflow. The device used load cells to track irrigation and effluent bag weights and an optical sensor on the effluent tubing to measure effluent blood concentration (EBC) every five seconds. Data on irrigation and effluent volumes, interruption frequency and duration, and the time above a predefined EBC threshold were collected for approximately 12 hours per patient.

Results: A total of 120 hours of CBI data were analyzed, with a mean observation duration of 13.3±2.3 hours per patient. Nurses adjusted settings an average of 7±3 times, replaced 9±4 saline bags (29±14 L total), and emptied 9±3 effluent bags per patient during the observed CBI duration. Unintentional interruptions lasted for 2±2 hours per patient (approximately 15% of monitored time), mainly from depleted irrigation bags (3±1 instances) or failure to unclamp new bags (1±1). EBC exceeded the desired threshold for an average of 2.2±2.3 hours per patient.

Conclusions: CBI was unintentionally interrupted for nearly one-sixth of the monitored duration, highlighting measurable limitations in irrigation quality. Automated CBI monitoring provides objective, real-time assessment and exposes inefficiencies not previously measurable by manual observation. Continued data collection linked to clinical outcomes will clarify the impact of interruptions and guide standardized protocol development.

MP 12.8

Two-year outcomes of a pop-up prostate cancer screening event: The PSA Detect and Protect Initiative

David-Dan Nguyen[1,2], *Tiiu Sildva*[3], *Kristina Meriel*[3], *Sunakshi Chowdhary*[3], *Ken Noel*[4], *Anthony Henry*[4], *Neil E. Fleshner*[2,3], *Jessica G. Cockburn*[3]

[1]Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto, Toronto, Canada; [2]Division of Urology, Department of Surgery, University of Toronto, Toronto, Canada; [3]Division of Surgical Oncology, Princess Margaret Cancer Centre, University Health Network, Toronto, Canada; [4]Walnut Foundation, Toronto, Canada

Introduction: The absence of routine prostate-specific antigen (PSA) screening recommendations contributes to inequities in early detection, particularly among underserved populations. To address this gap, the University Health Network and The Walnut Foundation launched the PSA Detect & Protect Initiative in 2023, delivering culturally responsive PSA testing through pop-up screening events in high-risk communities across Ontario. We report two-year outcomes.

Methods: Screening events were held in trusted community settings, including places of worship, health fairs, and community centers. Eligible participants were men aged 40 years or older with no prior prostate cancer diagnosis, no active prostate-related treatment, and no PSA testing within the preceding 12 months. Blood samples were collected on site and analyzed for total and free PSA. Results were reviewed and triaged by a urologist, with expedited referral for individuals with borderline or abnormal findings. Participant demographics and operational metrics were summarized descriptively.

Results: Between September 2023 and September 2025, 874 participants were screened across 14 events. The median age was 56.9 years (SD 11.0), and 44.2% identified as Black or Afro-Caribbean. Overall, 27.9% of participants did not have a family physician. Among 863 participants with available PSA results, 8.1% had PSA levels of 4.0 ng/mL or higher, 7.2% had borderline levels between 2.5 and 3.9 ng/mL, and 84.7% had levels below 2.5 ng/mL. The mean and median total PSA values were 1.8 ng/mL (SD 4.4) and 0.9 ng/mL (IQR 0.6–33.1; maximum 96.5), respectively. Community feedback was positive, with repeat requests from existing partners and interest from new communities.

Conclusions: Findings from the first two years of the PSA Detect & Protect Initiative demonstrate the feasibility of a pop-up, equity-oriented prostate cancer screening model codesigned with community partners. The initiative successfully engaged higher-risk populations who often lack access to primary care and shared decision-making around screening. Ongoing evaluation will assess clinical outcomes, patient-reported outcomes, and sustainability.

MP 12.9

Implementation of a pre-procedural screening questionnaire for risk factor stratification and augmented antibiotic prophylaxis in patients undergoing transrectal US-guided prostate biopsy: Impact on urosepsis rates

Marley Blommers[1], *Ben Thompson*[2], *Michael Rivers-Bowerman*[1,1,3], *Andreu Costa*[1,3], *Trevor McGrath*[1,3]

[1]Faculty of Medicine, Dalhousie University, Halifax, Canada; [2]Faculty of Science, Dalhousie University, Halifax, Canada; [3]Department of Diagnostic Radiology, QEII Health Sciences Centre, Halifax, Canada

Introduction: The current standard of care for prostate cancer diagnosis in Nova Scotia, Canada is a transrectal ultrasound (TRUS)-guided core needle biopsy of the prostate gland. The rate of urosepsis following TRUS-guided prostate biopsy ranges from 0.3–3.1% in the literature and is associated with significant patient morbidity and healthcare resource utilization. The objective of this study was to evaluate the rate of urosepsis at our institution before and after implementing a pre-procedural screening questionnaire to identify patients at high risk of urosepsis.

Methods: With institutional approval as a quality improvement initiative, we retrospectively evaluated a consecutive series of 992 patients who underwent TRUS-guided systematic and/or targeted prostate biopsy between 2022 and 2025. Prior to the procedure, a nurse contacted each patient and screened for the following risk factors: diabetes, immunosuppression, recent hospital admission or antibiotic use, history of antibiotic resistance, prior prostate biopsy-related urosepsis, and healthcare worker. The checklist was adopted in October 2023. Patients who screened positive received 2 mg/kg tobramycin IM (to a maximum of 200 mg) one hour prior to the procedure, in addition to routine oral antibiotic prophylaxis. Electronic medical records, including imaging studies and discharge reports, were reviewed to identify patients with urosepsis. Urosepsis rates were compared across patient groups (Fisher's exact test).

Results: A total of 992 patients (mean age, 67±7 years, range 40–88) were included, of which 23 (2.3%) developed urosepsis. Univariate analysis is shown in Table 1. Rates of urosepsis were lower with the screening questionnaire (3.2 vs. 1.3%, p=0.05), administration of tobramycin (2.6 vs. 1.4%, p=0.44), and fewer (<12) biopsies (2.8 vs. 1.1%, p=0.10); however, these were not significantly different.

Conclusions: The rate of urosepsis at our institution decreased from 3.2–1.3% with implementation of a screening questionnaire. Although this decrease was not statistically significant, we consider it clinically significant. The overall low rate of urosepsis makes it a challenge to evaluate for changes from the screening intervention; our goal is to continue screening patients and expand our dataset to strengthen the study further.

Acknowledgements: The authors thank Barry Debaie and Dale Whynot for assistance with retrieval of MRI and prostate biopsy lists, Liz Humphrey (RN) for performing screening phone calls, and Mike MacDonnell for help in tracking urosepsis admissions.

MP 12.9. Table 1. Difference in rates of urosepsis among patient subgroups post TRUS-guided prostate biopsy (n=992)

Variable		Urosepsis	%	p
Checklist completed	Yes	6/457	1.3	0.05
	No	17/535	3.2	
Received tobramycin	Yes	3/215	1.4	0.44
	No	20/777	2.57	
Fewer than 12 core biopsies	Yes	3/283	1.06	0.10
	No	20/709	2.82	
Age ≥ 75 years	Yes	5/170	2.94	0.57
	No	18/822	2.19	

MP 12.10

Urology resident educational needs in transgender health and development of targeted urology training modules

Megan Richer[1,2], *Stéphane Bolduc*[1,2]

[1]Département de chirurgie, Faculté de Médecine, Université Laval, Québec, Canada; [2]Centre de recherche, CHU de Québec, Québec, Canada

Introduction: Trans and gender-diverse (TGD) individuals frequently encounter barriers when accessing urologic care, including limited provider knowledge and discomfort with gender-affirming practices. Urologists are increasingly involved in areas such as hormone-related care, lower urinary tract symptoms, sexual health, fertility preservation, and gender-affirming surgeries, yet formal training in transgender health remains limited in urology residency programs. This study aimed to identify urology-specific educational gaps through engagement with both urology residents and transgender patients and to develop targeted training modules addressing these needs.

Methods: We conducted a mixed-methods needs assessment using questionnaires and focus groups with urology residents. Data collection explored baseline knowledge, clinical confidence, perceived barriers, and priority topics related to transgender health within urologic practice. Qualitative data from focus groups were analyzed using thematic analysis. Results from this needs assessment directly informed the development of urology-focused educational modules created in collaboration with clinical experts.

Results: Residents reported limited confidence in providing gender-affirming urologic care, particularly regarding inclusive communication, hormone-related urologic considerations, fertility preservation, sexual and urinary function, and perioperative considerations for gender-affirming surgeries. Participants identified a lack of practical, urology-specific guidance and limited exposure to transgender-related clinical scenarios during training. Key themes included the need for clear delineation of the urologist's role, case-based learning grounded in urologic practice, and concise, clinically applicable resources. These findings guided the development of structured training modules tailored to urology residency education.

Conclusions: This study identified significant urology-specific gaps in transgender health education among urology residents. Targeted training modules were developed to address these gaps and to better prepare residents for the provision of competent, affirming urologic care. Integrating such modules into urology residency curricula may improve resident preparedness and support high-quality care in an evolving area of urologic practice.

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MP 12.11

Chlorhexidine anaphylaxis in kidney transplantation and urologic surgeries: A quality-improvement initiative at a Canadian perioperative anaphylaxis clinic

Hyunwoong Harry Chae[1], *Lucas Rempel*[1], *Julena Foglia*[2], *Juan Ruiz*[3], *Jacqueline Trudeau*[2], *David Harriman*[4], *Christopher Nguan*[4]

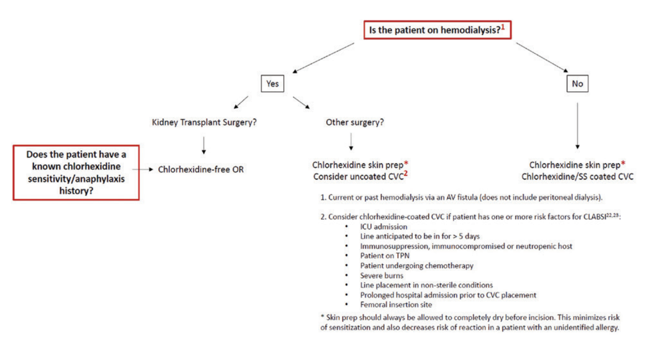
[1]Faculty of Medicine, University of British Columbia, Vancouver, Canada; [2]Department of Anesthesiology, Pharmacology and Therapeutics, University of British Columbia, Vancouver, Canada; [3]Division of Allergy and Immunology, University of British Columbia, Vancouver, Canada; [4]Department of Urologic Sciences, University of British Columbia, Vancouver, Canada

Introduction: Chlorhexidine (CHX) is a widely used antiseptic across clinical settings. Anaphylaxis from CHX is an under-recognized but potentially life-threatening condition. Patients undergoing kidney transplantation (KT) may be at higher risk due to increased exposure from chronic hemodialysis, repeated urinary catheterizations, and other common procedures in these chronic care patients. In this quality improvement initiative (QI), we determined the incidence rate of CHX anaphylaxis in the perioperative setting at our center, summarized characteristics of cases occurring in KT/urologic procedures, and proposed prevention strategies.

Methods: We reviewed all perioperative CHX anaphylaxis cases referred to the Vancouver Coastal Health perioperative anaphylaxis clinic during the QI period and extracted case characteristics to inform development of mitigation protocols.

Results: From 2017–2023, there were 12 cases from 10 patients. Mean age at reaction was 62.1 years, and 4/10 (40%) patients were female. The approximate incidence rate was 1/12 500. Six cases (6/12, 50%) were KTs or urologic surgeries, as there were four KTs, one retroperitoneal lymph node dissection (RPLND) with left hemi-scrotectomy, and one nephroureterectomy (Table 1). Nine (9/12, 75%) cases involved CHX-coated central venous catheters (CVC). Four (4/10, 40%) patients were on hemodialysis. Five (5/10, 50%) patients had previous evidence of CHX sensitization. From this QI initiative, a shared decision-making algorithm for CHX use in operating rooms was developed and implemented (Figure 1).

Conclusions: CHX anaphylaxis was higher than previously reported in the literature. Kidney transplant and urologic patients may be at increased risk. Perioperative clinicians should be aware of this adverse event and vigilant with CHX use around patients with risk factors (KT/urology, hemodialysis, CVC). Institutions must consider implementing standardized error response and reporting protocols and CHX-free operating rooms.



1. Current or past hemodialysis via an AV fistula (does not include peritoneal dialysis).
2. Consider chlorhexidine-coated CVC if patient has one or more risk factors for CLABSI[22,23]:
   - ICU admission
   - Line anticipated to be in for > 5 days
   - Immunosuppression, immunocompromised or neutropenic host
   - Patient on TPN
   - Patient undergoing chemotherapy
   - Severe burns
   - Line placement in non-sterile conditions
   - Prolonged hospital admission prior to CVC placement
   - Femoral insertion site

* Skin prep should always be allowed to completely dry before incision. This minimizes risk of sensitization and also decreases risk of reaction in a patient with an unidentified allergy.

MP 12.11. Figure 1. Proposed shared decision-making algorithm for chlorhexidine use in operating rooms.

MP 12.11. Table 1. Case summaries of chlorhexidine-induced anaphylaxis cases that occurred during kidney transplants and urologic surgeries

Year	Age	Sex	Medical history	Procedure	Pre-existing known sensitivity to CHX?	CHX products used			Details of reaction	Outcome	Subsequent allergy testing and results	*Anaphylaxis grade	On dialysis?	Chlorhexidine allergy?
						Wash	Prep	CVC						
1a May 2017	51	M	ESRD (from DN), T2DM, HTN, DLD, CAD, Pancreatitis, MI, Multiple CVA, PE, DIC, HBV, TB, Cataracts, PFO	Renal transplant	Yes. Pruritus/hives. Multiple previous reactions to CHX in dialysis prior to coming to OR for 2nd attempt at transplant. Tryptase positive during dialysis in December 2018.	N/A	No	Yes	STEMI	Surgery aborted.	Tryptase 52 µg/L during reaction in dialysis, December 2018.	3	HD since 2015 via AV fistula	Yes
1b April 2019	53			Renal transplant		N/A	No	Yes	PEA Arrest	Surgery aborted, successfully transplanted in August 2019 with non-CHX coated CVC.	Tryptase 86.9 µg/L during reaction. Repeat 10 hours post-event 31 µg/L after PEA arrest, Apr 2019.	4		
2 July 2020	59	M	Metastatic rhabdomyosarcoma originating in left testicle,	Retroperitoneal lymph node dissection (RPLND) and left hemi-scrotectomy	No	Yes	Yes	Yes	↓ BP, PEA arrest	Surgery aborted half-way but completed next day.				
3 July 2021	70	M	ESRD (from HTN), HTN, DLD, splenic rupture, gout, septic arthritis, scabies	Renal Transplant	Red itchy rash at fistula site during dialysis. CHX sensitivity reported.	No	No	Yes	↓ BP, transient desaturations.	Surgery aborted. Successfully transplanted in December 2021 with non-CHX coated CVC.				
4 February 2021	60	F	ESRD (from DN), T2DM, HTN, hyperparathyroidism	Renal Transplant	No	N/A	No	Yes	↓ BP, bronchospasm, swollen lips & tongue.	Surgery completed				
5 April 2023	67	M	ESRD (from bilateral nephrectomies (2017, 2023), HTN, CAD, MI, Rathke's cyst, BPH, urothelial carcinoma	Laparoscopic nephroureterectomy	No	Yes	Yes	Yes	PEA arrest, airway swelling.	Surgery aborted. Stayed overnight in PACU with intubation and epinephrine support.				

MP 12.12

Evaluating the accuracy and readability of large language model-generated patient-friendly summaries of urodynamics reports

Oluwatobi Ayodeji Fasola[1], Jethro Kwong[1], Tiange Li[1], Omer A. Choudhary[1], Rano Matta[1,2], Sarah Neu[1,2]

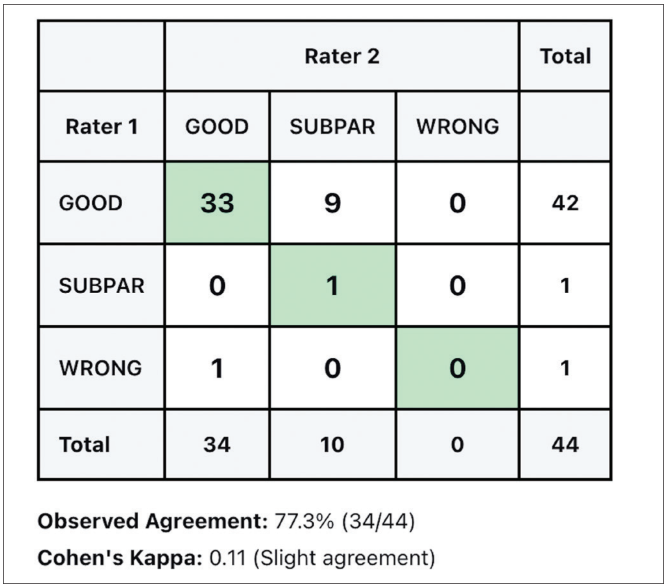
[1]Department of Surgery, University of Toronto, Toronto, Canada; [2]Division of Urology, Sunnybrook Health Sciences Center, Toronto, Canada

Introduction: Urodynamics (UDS) reports are highly technical and often difficult for patients to interpret. Large language models (LLMs) show promise in medical text summarization, but their accuracy in generating patient-friendly clinical summaries remains underexplored. This study evaluates the accuracy of LLM-generated patient-friendly UDS report summaries through expert review.

Methods: Forty-four de-identified physician-generated UDS reports created between 2000–2019 were collected from a tertiary care urology division. An LLM (GPT-4.1, OpenAI, accessed via a PHI-compliant endpoint) generated patient-friendly summaries for each report. Two expert urologists independently evaluated each summary using the QUEST framework with a four-point Likert scale: wrong (clinically inaccurate), subpar (omitted information), good (but over-inclusive), perfect. Good and perfect ratings were combined as "Acceptable" (acceptable quality) for analysis. Inter-rater reliability was assessed using Cohen's kappa. Readability was assessed using automated tools, including Flesch-Kincaid grade level.

Results: Rater 1 assigned one wrong (2.3%), one subpar (2.3%), and 42 acceptable (95.5%) ratings. Rater 2 assigned no wrong (0%), 10 subpar (22.7%), and 34 acceptable (77.3%) ratings. Observed agreement was 77.3% (34/44). Cohen's kappa was 0.11 (slight agreement) (Figure 1). The low kappa despite high observed agreement is explained by both raters predominantly rating summaries as acceptable, resulting in substantial expected agreement by chance alone. Readability analysis of 44 summaries showed mean Flesch-Kincaid grade 9.1, corresponding to 9th-grade (high school) reading level appropriate for patient comprehension.

Conclusions: LLMs generated patient-friendly UDS summaries that both expert raters predominantly rated as acceptable (95.5% and 77.3% rated acceptable). Summaries demonstrated appropriate readability for patient comprehension. These findings suggest LLM-generated summaries can be safely used with physician oversight to enhance patient education and improve understanding of UDS results; however, slight inter-rater reliability (kappa=0.11) indicates a need for standardized evaluation criteria before widespread deployment. Further validation with patients and providers is warranted.



	Rater 2			Total
Rater 1	GOOD	SUBPAR	WRONG	
GOOD	33	9	0	42
SUBPAR	0	1	0	1
WRONG	1	0	0	1
Total	34	10	0	44

Observed Agreement: 77.3% (34/44)

Cohen's Kappa: 0.11 (Slight agreement)

MP 12.12. Figure 1. Rater agreement. Observed agreement: 77.3% (34/44), Cohen's Kappa: 0.11 (slight agreement).

MP 12.13

Authorship trends in urology literature: A bibliometric analysis by gender

Maya Morcos[1], Amir-Ali Golrokhian-Sani[1], Cerine Benomar[2], Marc Morcos[3], Kiera Liblik[4], D. Robert Siemens[4]

[1]Faculty of Medicine, University of Ottawa, Ottawa, Canada; [2]Faculty of Health Sciences, University of Ottawa, Ottawa, Canada; [3]Faculty of Applied Science and Engineering, University of Toronto, Toronto, Canada; [4]Department of Urology and the Centre for Applied Urological Research, Queen's University, Kingston, Canada

Introduction: Previous studies have documented gender gaps in authorship within urologic research; however, their findings were limited by narrow temporal windows, insufficient sample sizes, and selective journal representation. As such, this study analyzed gender representation in urologic literature over time, by study design, in predatory journals, and geographic regions.

Methods: Authorship position, affiliation country, and journal name were extracted from all abstracts in the PubMed database under "Urology" [MeSH] or "Urology" (2002–2024). Inferential and descriptive statistics were used to assess gender-based differences in publication characteristics through validated name-to-gender tools.

Results: A total of 130 621 publications comprising 885 343 author names were included (21.7% women). In 2024, the proportion of women authors increased significantly from 11.4% in 2002 to 26.3% (p<0.001). Overall, compared to first-authorship positions (21.6%), women in senior authorship positions (14.8%) remain low. Africa had the lowest representation of overall women authors (15.3%), whereas Europe had the highest (27.3%). Across all study designs, women published less than men, particularly in interventional research (18.5%) and case reports (17.2%). First and senior women authors had higher odds of publishing in predatory journals than non-predatory journals (aOR 1.18, 95% CI 1.12–1.24; aOR 1.21, 95% CI 1.14– 1.28, respectively).

Conclusions: Although we note progress over time, there remain substantial gender gaps in academic urology authorship. This underscores a necessity to better characterize barriers women face in urologic academic spheres.

MP 12.14

Prostate cancer diagnostic pathways and outcomes among immigrant men in Ontario

Mithun Kailavasan[1], Edem A. Afenu[1], Lorraine Scanlon[1], Blayne Welk[1], Andrew McClure[2], Eric Winquist[1,3], Jonathan Izawa[1]

[1]Division of Urology, Department of Surgery, Western University, London, Canada; [2]London Health Sciences Centre Research Institute, London Health Sciences Centre, London, Canada; [3]Department of Oncology, Western University, London, Canada

Introduction: Immigrant men may experience barriers to timely cancer detection and access to specialist care. We examined prostate cancer diagnostic pathways and clinical characteristics among immigrant compared with non-immigrant men in a large, population-based cohort in Ontario, Canada.

Methods: We conducted a retrospective population-based cohort study of men aged 40 years and older undergoing prostate biopsy or transurethral resection of the prostate between 2013 and 2022 in Ontario. Immigration status was identified using linked national immigration records. Outcomes within five years included prostate cancer diagnosis, prostate-specific antigen testing, pelvic magnetic resonance imaging, repeat biopsy, and transurethral resection of the prostate. Baseline characteristics and crude outcome rates were compared using standardized differences and logistic regression. Planned time-to-event analyses with time-varying effects will be used to address non-proportional hazards.

Results: The cohort included 167 553 men, of whom 20 740 were immigrants. Immigrant men were younger and more likely to reside in socioeconomically marginalized and more racialized neighborhoods. Prostate cancer was diagnosed in 3.4% of men overall, with no significant difference by immigration status (OR 0.95; 95% CI 0.87–1.02). Immigrant men were more likely to undergo prostate-specific antigen testing (81.9% vs. 76.3%; OR 1.40; 95% CI 1.35–1.46) and pelvic magnetic resonance imaging (8.1% vs. 7.6%; OR 1.08; 95% CI 1.02–1.14), but less likely to undergo repeat biopsy (14.5% vs. 18.8%; OR 0.85; 95% CI 0.79–0.91) or transurethral resection of the prostate (9.1% vs. 12.4%; OR 0.85; 95% CI 0.80–0.91). Among 5779 men diagnosed with prostate cancer, stage group distributions differed by immigration status (p=0.014), and small but statistically significant differences in Gleason score were observed (median 7 in both groups, p=0.035).

Conclusions: Immigrant men in Ontario undergo more prostate-specific antigen testing and pelvic magnetic resonance imaging but fewer downstream diagnostic procedures following referral for suspected prostate cancer. Despite these differences in diagnostic pathways, prostate cancer detection rates appear similar. Ongoing time-varying analyses will determine whether these procedural differences are associated with delayed diagnosis or adverse clinical outcomes.

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MP 12.15

Assessing the impact of socioeconomic marginalization on non-muscle-invasive bladder cancer outcomes in Canada

Keiran J.C. Pace[1], Jethro C.C. Kwong[2], Maximiliano Ringa[3], Wassim Kassouf[4], Kellie Kim[2], Marian S. Wettstein[5], Rodney H. Breau[6], Michele Lodde[7], Adrian Fairey[8], Jean-Baptiste Lattouf[9], Claudio Jeldres[10], Ricardo A. Rendon[11], Nimira Alimohamed[12], Peter Chung[13], Andrew Feifer[3], Peter C. Black[14], Girish S. Kulkarni[2,5], Alexandre R. Zlotta[15]

[1]Temerty Faculty of Medicine, University of Toronto, Toronto, Canada; [2]Division of Urology, Department of Surgery, University of Toronto, Toronto, Canada; [3]Division of Urology, Department of Surgery, Trillium Health Partners, Mississauga, Canada; [4]Division of Urology, McGill University Health Centre, Montreal, Canada; [5]Divisions of Urology and Surgical Oncology, Department of Surgery, University Health Network, Toronto, Canada; [6]Division of Urology, Department of Surgery, The Ottawa Hospital Research Institute, Ottawa, Canada; [7]Division of Urology, Department of Surgery, CHU de Quebec-Universite Laval, Quebec City, Canada; [8]Division of Urology, Department of Surgery, University of Alberta, Edmonton,

Canada; [9]Division of Urology, Department of Surgery, Centre Hospitalier de l'Universite de Montreal, Montreal, Canada; [10]Division of Urology, Department of Surgery, Universite de Sherbrooke, Sherbrooke, Canada; [11]Department of Urology, Dalhousie University, Halifax, Canada; [12]Department of Oncology, Cumming School of Medicine, University of Calgary, Calgary, Canada; [13]Radiation Medicine Program, Princess Margaret Cancer Centre, University Health Network, University of Toronto, Toronto, Canada; [14]Department of Urologic Sciences, University of British Columbia, Vancouver, Canada; [15]Division of Urology, Department of Surgery, Mount Sinai Hospital, Sinai Health System, Toronto, Canada

Introduction: Socioeconomic disparities contribute to inequities in cancer outcomes, but their impact on non-muscle-invasive bladder cancer (NMIBC) is poorly defined. Although lower income has been associated with worse survival, the influence of socioeconomic marginalization within Canada's publicly funded healthcare system remains unclear. This study evaluated the association between socioeconomic marginalization and NMIBC outcomes in a national cohort.

Methods: Patients with NMIBC diagnosed between 2005 and 2023 were identified from the Canadian Bladder Cancer information system. Socioeconomic marginalization was measured using the Canadian Marginalization Index across four domains: age and labor force, household and dwellings, racialized and newcomer populations, and material resources. Cumulative incidences of recurrence, progression, and cancer-specific mortality were estimated using the Aalen-Johansen method with non-cancer-specific mortality as a competing risk. Multivariable logistic regression assessed associations between age, sex, marginalization, and receipt of repeat transurethral resection of the bladder tumor (TURBT) for T1 disease and adequate bacillus Calmette-Guérin (BCG).

Results: Among 7032 patients, 6915 had complete marginalization data. The cohort included 55% Ta, 38% T1, and 7% carcinoma in situ only, with 67% high-grade disease. Over a median followup of 3.2 years, 3657 recurred, 981 progressed, and 517 died of bladder cancer. After adjustment for multiple comparisons, no clinically meaningful associations were observed between marginalization domains and recurrence, progression, or cancer-specific mortality (all $p>0.05$). Increasing age was associated with lower odds of repeat TURBT and adequate BCG, while marginalization was not.

Conclusions: In this large, Canada-wide cohort, socioeconomic marginalization was not associated with adverse NMIBC outcomes. These findings may reflect the benefits of a universal healthcare system.