Telehealth and Clinical Outcomes Among New Patients With Urological Cancers

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BACKGROUND

The Problem: Global incidence genitourinary (GU) cancers is projected to continue to increase by 2050 amid growing shortage of urologic surgeons.

Potential Solution – Telemedicine:

- An effective solution for mitigating physician shortages and improving specialty care access.
- GU cancer patients reports high satisfaction with telemedicine, significantly reduced travel costs and increased convenience for multidisciplinary care.

Objective: Determine whether telemedicine reduce wait times for new patients with genitourinary cancer.

METHODS

Cohort: Existing cohort of new genitourinary cancer patients at Fred Hutchinson Cancer Center (2019-2022)

Primary outcome: Time from referral to new patient visit (wait time)

Secondary outcome: Time to definitive treatment, extended post-op hospital stay and 90-day post-op readmission rate

Statistical Analysis: Multivariable linear and logistics regression.

RESULTS

New GU Cancer Patients Seen Via Telemedicine:

- Had **4.9 days faster access** to urologic oncologist (18.1 vs 23.0 days, p = 0.046)
- Were **2.3 times more likely** to be seen within 14-day urgent referral threshold
- Benefit consistent across age groups, geographic locations, and urban/rural settings

Compared to those see in-person, both groups had similar:

- Time to treatment: 50 vs 55 days (p=0.66)
- Post-op 90-day hospital readmission rates (p = 0.81)
- Post-op length of hospital stay (p = 0.81)

	In-Person (n = 115) n (%)	Telemedicine (n = 356) n (%)	Total (n = 471)
Age, mean (SD)	72.1 (11)	69.6 (11)	471
Sex			
Male	98 (79)	293 (82)	391
Female	17 (21)	63 (18)	80
Ethnicity			
White/Non-Hispanic	67 (58)	205 (58)	272
Other	3 (3)	13 (4)	16
Primary Cancer			
Prostate	68 (59)	194 (55)	262
Bladder	26 (23)	67 (19)	93
Kidney	16 (14)	72 (20)	88
Insurance			
Medicare	77 (67)	192 (54)	269
Medicaid	3 (3)	25 (7)	28
Private	33 (29)	131 (37)	164
Rural	78 (68)	89 (25)	167
Urban	37 (32)	267 (75)	304

CONCLUSIONS & POLICY IMPLICATIONS

Conclusion:

- This is the first evidence demonstrating telemedicine reduces wait times for new GU cancer patients.
- Telemedicine provides faster access to specialized urological cancer care without compromising clinical outcomes.

Opportunities in Urology Advocacy:

- Our data demonstrates the need to **restore and make permanent Medicare coverage** for telemedicine in cancer care.
- Expand telehealth licensure across state lines.