

National Adoption and Availability of Telehealth Services for Urological Care at Cancer Hospitals in the United States



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Introduction

The COVID 19 pandemic accelerated existing efforts to provide remote clinical care via telehealth. Telehealth is expected to remain an important component of the healthcare landscape, with the potential to improve convenience, access, and reduce costs. However the availability of telehealth services for urologic care is largely unknown, especially as facilities do not keep track of patients that are turned away prior to even a first consultation. Identifying the incidence of these refusals can help uncover barriers to implementation.

This study aims to characterize availability of telehealth services for urological cancer care. across cancer designated hospitals in the United States in the context of COVID 19.

Methodology

- April 1 to July 9, 2020 → contacted 293 randomly selected CoC-accredited hospitals to assess the availability of telehealth services for urological care for both new patient encounters and follow up visits.
- Hospital level, demographic, and regional characteristics gathered from the 2016 American Hospital Association (AHA) survey, publicly available Center for Medicare and Medicaid Service (CMS) data, and the American College of Surgeons CoC directory.
- Hospitals that did not accept new patients and those that were not in the CMS or AHA databases were excluded (n=12).

Primary outcomes:

- Availability of telehealth for urological cancer care
- Hospital characteristics associated with telehealth access

Statistical Methods:

- Statistical analysis was performed using JMP
- Chi squared analysis and univariable and multivariable logistic regression were used to compare facility characteristics for telehealth access

Results

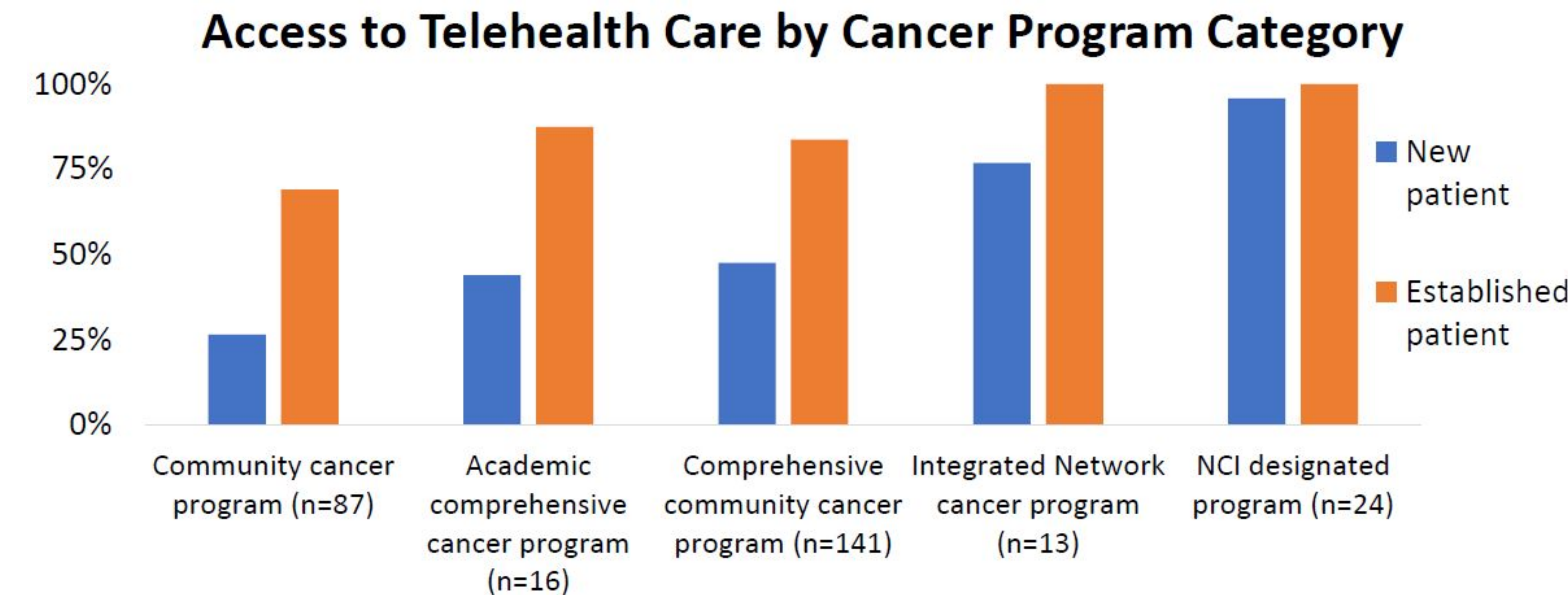
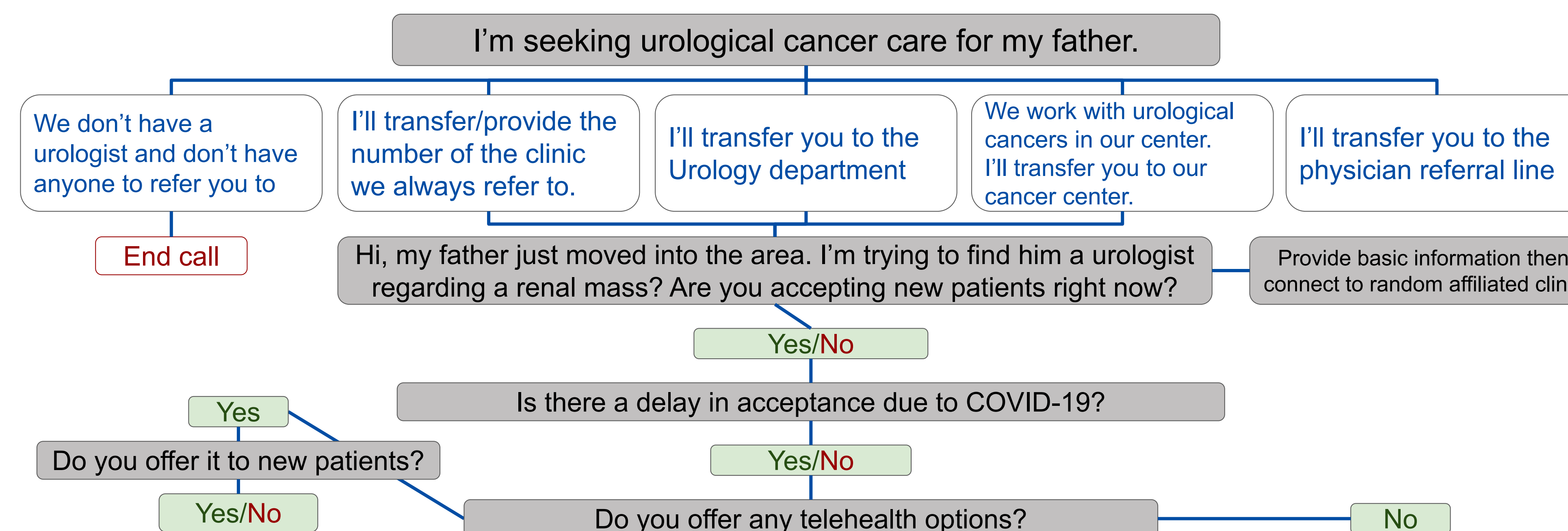


Fig 1. Availability of telehealth for new and established patients by cancer program category

Cancer Program Category	Accepts Telehealth for New Patients	Odds Ratio (95% CI)	p-value
Comprehensive Community Cancer Program (n=143)	67 (46.9%)	-	-
NCI Designated Program (n=24)	23 (95.8%)	64.75 (5.15, 813.36)	0.001
Integrated Network Cancer Program (n=13)	10 (76.9%)	8.97 (1.64, 49.12)	0.011
Academic Comprehensive Cancer Program (n=16)	7 (43.8%)	1.74 (0.36, 8.38)	0.489
Community Cancer Program (n=87)	23 (26.4%)	0.72 (0.35, 1.51)	0.384

Table 1. Significant variables resulting from multivariable logistic regression of hospital characteristics on new patient telehealth availability. Model was adjusted for factors that approached significance (p<0.1) on univariable analysis: cancer program category, bed count, medical school affiliation, accreditation by Joint Commission, teaching hospital status, ACO status, overall hospital rating, efficacy of care metrics, timeliness of care metrics, income of the surrounding zip code, and facility volume.

Secret Shopper Method



Telehealth Offered, Accessibility Varies

- Among 281 hospitals in the final sample, 130 (46.3%) offered new patient telehealth visits with a urologist and 229 (81.3%) offered telehealth visits for follow up appointments for established patients (p<0.001).
- Community Program hospitals had the lowest availability of telehealth visits for new patients (26.4%), whereas National Cancer Institute (NCI) designated cancer hospitals had the highest (95.8%) (p<0.001; Figure 1).
- On multivariable logistic regression, NCI designated (OR 65.75; p=0.001) and Integrated Network cancer programs (OR 8.97; p=0.011) were substantially more likely to offer telehealth for new patients (Table 1).

Conclusions

- Although telehealth for urological cancer care was largely accessible for established patients during the COVID 19 pandemic, we identified gaps in access for new patients.
- NCI designated programs and Integrated Network Cancer programs were more likely to offer telehealth appointments for new patients, likely due to increased resources and infrastructure compared to other facility types.
- Facility volume, income of the surrounding zip code, and hospital performance metrics were not associated with availability of telehealth for new patients.
- Future investigation should seek to clarify and address barriers to telehealth implementation for cancer care.

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