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BRIEF COMMUNICATION

Gynecology

The effect of COVID-19 on telehealth: Next steps in a post-pandemic life

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Previous research has shown increased access to care for underserved cancer patients with telehealth.[1] However, few studies have reported on disparities in gynecologic oncology as its utilization has increased since the coronavirus disease 2019 (COVID-19) pandemic.[2] To that end, we examined patterns of care in our large regional health system.

All patients with at least one gynecologic oncology visit from January 2019 to August 2021 at Sutter Health in northern California were included after Institutional Review Board approval. χ^2 test and multivariable analyses were used, and all data analyses were performed using SAS Version 9.3 (SAS institute).

A total of 30469 unique visits (27228 office, 3241 telehealth) were identified from 7431 gynecologic cancer patients. The majority of patients (5129; 69%) were over 50 years old. Most patients were white (4103; 55%), 1305 (18%) were Asian, 677 (9%) were Hispanic, 218 (3%) were black, and 1128 (15%) identified as other. A total of 374 (5%) required interpreter services for their cancer care. Before March 2020, all visits (12870/12870, 100%) were conducted in person. At its peak in May 2020 during California's shelter-in-place policy, telehealth visits comprised 35% of all visits (193/599). After statewide COVID-19 vaccinations in May 2021, telehealth visits decreased to 15% of all visits (634/3527). We next identified those who were most and least likely to use telehealth since March 2020 (Figure 1). Those under 50 years old used telehealth for 21% of all visits (947/4622 visits), compared with 17% of those aged 76 years or older (420/2522 visits, $P < 0.01$). White patients were most likely to use telehealth for their visits (20%, 1865/9458) compared with Hispanic (19%, 265/1376), Asian (18%, 594/3263), and black (17%, 77/448) patients ($P < 0.01$). Those whose first language was not English and required an interpreter used telehealth for only 11% of visits (88/802), compared with 20% for those who for whom English was their first language (3151/16119, $P < 0.01$). Each trend persisted after statewide COVID-19 vaccination.

Telehealth allows easier access to care for patients with gynecologic malignancies and should be equitably available for all patients. However, in our study, older patients and those who required an interpreter were least likely to use this resource. Unfortunately, these disparities continued after statewide COVID-19 vaccinations and may continue going forward. Previous studies have demonstrated that patients of older age and minority ethnicities desire to use telehealth but may be constrained by access issues.[3,4] Future research should investigate access to care disparities between different non-English-language speakers, one limitation of our study. These findings exemplify the need for targeted attention to these at-risk groups, and additional steps must be taken to ensure adequate access to this resource, not constrained by race, age, or language.

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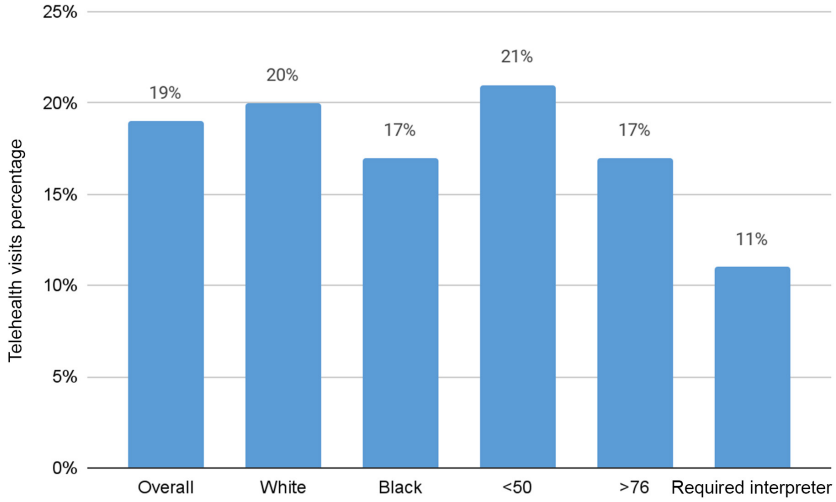

FIGURE 1 Telehealth utilization rates.

AUTHOR CONTRIBUTIONS

The study was conceptualized by SL, TC, NC, DK, MB, AK, and JKC; formal analysis and methodology were by SL, TC, NC, MB, AK, and JKC; visualization was by SL, MR, and DW; investigation was performed by SL, MR, DW, TC, NC, DK, MB, AK, and JKC; funding was acquired by SL and JKC; the original draft was written by MR, DW, DK, and JKC; and was reviewed and edited by SL, MR, DW, TC, NC, DK, MB, AK, and JKC.

CONFLICT OF INTEREST

JKC reports personal fees from Acerta, Aravive, AstraZeneca, Biodesix, Clovis, Eisai, Janssen/J and J, Oxigene/Mateon, Roche/Genentech, and GlaxoSmithKline/Tesaro. His research is also in part sponsored by the Denise Cobb Hale, Fisher Family Fund, and Angela Wang Johnson Fund. Funding for this project was also partially supported by funds provided by The Regents of the University of California, Research Grants Program Office, California Breast Cancer Research Program, Grant Number R00RG2968 and R01RG3731. All other authors report no conflict of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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REFERENCES

1. Mojdehbakhsh RP, Rose S, Peterson M, Rice L, Spencer R. A quality improvement pathway to rapidly increase telemedicine services in a gynecologic oncology clinic during the COVID-19 pandemic with patient satisfaction scores and environmental impact. *Gynecol Oncol Rep*. 2021;36:100708.
2. Nakayama J, El-Nashar SA, Waggoner S, Traughber B, Kesterson J. Adjusting to the new reality: evaluation of early practice pattern adaptations to the COVID-19 pandemic. *Gynecol Oncol*. 2020;158(2):256-261.
3. McAlarnen LA, Tsaih SW, Aliani R, Simske NM, Hopp EE. Virtual visits among gynecologic oncology patients during the COVID-19 pandemic are accessible across the social vulnerability spectrum. *Gynecol Oncol*. 2021;162(1):4-11.
4. Dholakia J, Kim J, Liang MI, et al. Gynecologic oncology patients are ready for telemedicine in routine care: results from a pre-COVID survey. *Gynecol Oncol Rep*. 2021;38:100871.

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