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Racial and Socioeconomic Disparities in Access to Telehealth

Veronica Rivera, MD^a, Melissa D. Aldridge, PhD^a, Katherine Ornstein, PhD^a, Kate A. Moody^a, Audrey Chun, MD^a

^aIcahn School of Medicine at Mount Sinai

Keywords

telehealth; disparities; COVID-19

INTRODUCTION

Rapid implementation of telehealth became a hallmark of our healthcare system's response to the COVID-19 pandemic. Telehealth has demonstrated feasibility and efficacy in the care of older adults including vulnerable homebound populations.^{1,2}

Implementation of telehealth was facilitated by both relaxation of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) allowing the use of non-HIPAA compliant platforms for video visits, as well as a temporary increase in reimbursement rates for telehealth for Medicare and Medicaid patients.^{3,4} Emerging evidence suggests, however, that minority populations face substantial barriers to telehealth including lack of familiarity with technology, lower health and digital literacy, sensory impairments, lack of broadband access, and lack of assistance.^{5–10} Given the widespread implementation of telehealth as a tool to provide ongoing care to older adults during a pandemic, it is crucial to understand whether access to and use of telehealth services differed for disadvantaged groups, including racial/ethnic minorities.

METHODS

We conducted a cross-sectional analysis of the electronic medical records of a large, urban, geriatric outpatient practice during the COVID-19 surge in New York City (NYC). The outpatient practice provides primary and consultative care to high-risk, high-need, vulnerable, complex older adults, many with advanced illness. Our sample consisted of all active patients, defined as those who had a visit within the 19 months prior to March 1, 2020. For our analyses of patient visit data, we included all video and telephone visits completed during the peak of COVID-19 cases in NYC (March 18, 2020 - May 15, 2020).

Corresponding author: Melissa D. Aldridge, PhD, Brookdale Dept of Geriatrics and Palliative Medicine, Icahn School of Medicine at Mount Sinai, One Gustave L. Levy Place, Box 1070, New York, NY 10029, Melissa.Aldridge@mssm.edu, @ProfAldridge.

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To examine access to telehealth services, we measured whether or not a patient or proxy had activated the patient online portal (“MyChart”) within the electronic medical record required for telehealth use as of the start of the study period. Activation requires access to a mobile device or computer with internet access and may occur either onsite with healthcare providers or at home. We estimated a multivariable logistic regression model to examine associations between patient characteristics and activation status. For the subset of patients who had activated the patient online portal prior to the study period and who had a visit during the study period, we estimated a multivariable logistic regression model to examine associations between patient characteristics and having a video versus telephone telehealth visit. This study was approved by the Mount Sinai IRB.

RESULTS

Of 4571 total patients, one-third (35.1%) were younger than 80 years old and 21.0% were age 90 or older. More than 70% were female (73.8%), 55.7% were white, and 18.8% were eligible for Medicaid. A total of 2438 (53.3%) had activated their online portal and thus had the potential to have a telehealth video visit. 1651 (36.1%) had not activated the portal and 482 (19.8%) had declined activating the portal. Patients who had activated the portal were more likely to be younger, White, male, English speaking, married or partnered, and did not have dementia (Table 1).

In adjusted analyses, patients were less likely to have activated their portal if they were older (AOR= 0.68, 95%CI 0.59–0.78 for 80–89 versus <80 years old and AOR= 0.50 (95%CI 0.42–0.60 for 90+ years versus <80 years old), African-American compared with White (AOR=0.51, 95%CI 0.42–0.62), or eligible for Medicaid (AOR= 0.74, 95%CI 0.62–0.90). Patients who were married/partnered had higher likelihood of activation than those without a spouse/partner (AOR= 1.60, 95%CI 1.38–1.86). Among patients who activated their portal (N=2438) and sought care during the study period (N=651), there were no statistically significant differences in likelihood of having a telehealth video versus telephone visit in both unadjusted and adjusted models.

DISCUSSION

We found substantial differences by race and socioeconomic status in access to telehealth video services during the COVID-19 surge in NYC. African-American patients and those of other races were significantly less likely than White patients to have activated the online portal and more likely to have declined activation outright. Independent of race, those eligible for Medicaid were also less likely to have activated the portal. Once activation of the online portal was considered, however, there were no differences by demographic or socioeconomic characteristics in the likelihood of receiving a telehealth video visit relative to a telephone visit during the COVID-19 surge in NYC, underscoring the key role of *access* to telehealth technology.

A patient’s ability to access telehealth should be assessed and facilitated as part of their intake appointment. As telehealth becomes embedded in clinical practice for both

emergency and standard clinical care, it is critical to ensure that its use does not exacerbate healthcare disparities among vulnerable older adults.

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Table 1.

Characteristics of Geriatric Patient Population by Telehealth Patient Online Portal Activation

	Total N=4571 N(%)	Activated N=2438 %	Not Activated N=1651 %	Declined N=482 %	Adjusted OR (95%CI)
Age					*
<80 years old	1606 (35.1)	61.2	30.2	8.7	reference
80–89 years old	2006 (43.9)	51.8	37.3	10.8	0.68 (0.59–0.78) *
90+ years old	959 (21.0)	43.4	43.5	13.1	0.50 (0.42–0.60) *
Sex					*
Female	3371 (73.8)	51.8	37.7	10.6	reference
Male	1200 (26.3)	57.8	31.8	10.5	1.00 (0.86–1.16)
Race					
White	2547 (55.7)	60.7	30.6	8.7	* reference
African-American	563 (12.3)	40.1	46.4	13.5	0.51 (0.42–0.62) *
Asian	128 (2.8)	68.0	22.7	9.4	1.35 (0.90–2.02)
Other	1100 (24.1)	44.6	41.9	13.5	0.61 (0.52–0.73) *
Unknown	233 (5.1)	37.8	51.5	10.7	0.43 (0.32–0.58) *
English language					*
Yes	4145 (91.4)	54.5	35.5	10.0	reference
No	388 (8.6)	40.5	43.0	16.5	0.79 (0.61–1.01)
Medicaid coverage					*
Yes	860 (18.8)	40.8	44.8	14.4	0.74 (0.62–0.90) *
No	3711 (81.2)	56.2	34.1	9.7	reference
Marital status					*
Married/life partner	1433 (31.3)	65.2	26.6	8.2	1.60 (1.38–1.86) *
Widowed/divorced/ single	3138 (68.6)	48.5	39.8	11.7	reference
Dementia					*
Yes	728 (15.9)	46.3	42.6	11.1	0.90 (0.76–1.08)
No	3843 (84.1)	54.7	34.9	10.4	reference

Note:

* P value <.001;

Race category “Other” includes American Indian/Alaskan Native (0.09%) and Native Hawaiian/Pacific Islander (0.07%); Abbreviations: OR, odds ratio; CI, confidence interval; Adjusted OR compares activated to not activated/declined