

The Transition to Telehealth during the First Months of the COVID-19 Pandemic: Evidence from a National Sample of Patients



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As the COVID-19 pandemic disrupted in-person medical care, emergency regulatory changes were implemented to promote use of telehealth,¹ moving this previously peripheral practice to the center of health care delivery in the USA. One study of private health care claims found that telemedicine claims were 4000% higher in March 2020 than in March 2019.² Information on use of telehealth by patients can inform post-pandemic policy.

METHODS

The American Life Panel (ALP) is based on a probability-based representative sample of the US adult population age 20 and over who are provided with internet-connected devices and paid for survey participation. Data in this study come from the ALP Survey on Impacts of COVID-19, which was fielded between May 1 and 6, 2020. Two thousand fifty-two of the 2622 sampled panel members completed the survey (78% participation rate).³

Respondents were asked if they were receiving treatment for a chronic physical or behavioral health condition when the pandemic began or if they considered seeking care for a new or recurring condition during the pandemic. For each condition type, respondents were asked about phone or video telehealth use due to the pandemic. Analyses used sampling weights to account for non-response and match sample demographics to the US population.⁴ Study procedures were approved by the RAND IRB.

RESULTS

The sample of 2052 was, after weighting, 51.9% female, almost equally divided by age group (20–39, 40–59, and 60 and older), and 63.9% white, with 94.2% insured. When the

pandemic began, 39.3% were being treated for a chronic physical health condition, 15.0% for a behavioral health condition; since the pandemic started, 16% had considered seeking care for a new or recurrent condition. Almost half (48%) of these patients used telehealth: from 43.2% (95% CI 37.9–48.5%) for physical conditions to 53.6% (95% CI 43.2–64.0%) for behavioral conditions (Fig. 1). Use of video was less common for physical health care (13.7%, 95% CI 10.5–16.8%) than for behavioral health care (30.4%, 95% CI 20.0–40.7%). The vast majority of patients using telehealth saw their own doctor.

Use of telehealth for behavioral health conditions was lower in females relative to males, those 60 and over relative to younger ages, non-Hispanic Whites relative to non-Hispanic Blacks, and those with less than a high school education relative to those with a college degree (Table 1). Lack of insurance was associated with lower telehealth use for new conditions (OR = 0.2, 95% CI 0.0–0.7). Use of telehealth was more common in the Northeast than other regions.

DISCUSSION

Despite evidence of its effectiveness,⁵ telehealth has remained at periphery of US healthcare. Between mid-March and early May 2020, telehealth was used by over 40% of patients with a chronic physical health condition (including almost 14% having done so by video) and over 50% of those with a behavioral health condition (30% by video) or seeking care for a new health condition (21% by video). A 2019 ALP study found that less than 4% of Americans had a video telehealth visit in the past year.⁶

This shift to telehealth, particularly video, was enabled by time-limited, regulatory changes related to reimbursement, privacy standards for telehealth technology, and licensure. Lessons from utilization during this period can inform policy for the post-COVID-19 era. Three results from this national survey of patients have notable policy implications.

First, the dramatic increase in telehealth use was driven by patients seeing their own doctors. The ability to see one's own doctor may be a particularly challenging feature to preserve once in-person care resumes. Second, telehealth was more likely to be used for behavioral than for physical conditions; prospects for an expanded role for telehealth may be better for behavioral health care. Third, measures will be needed to

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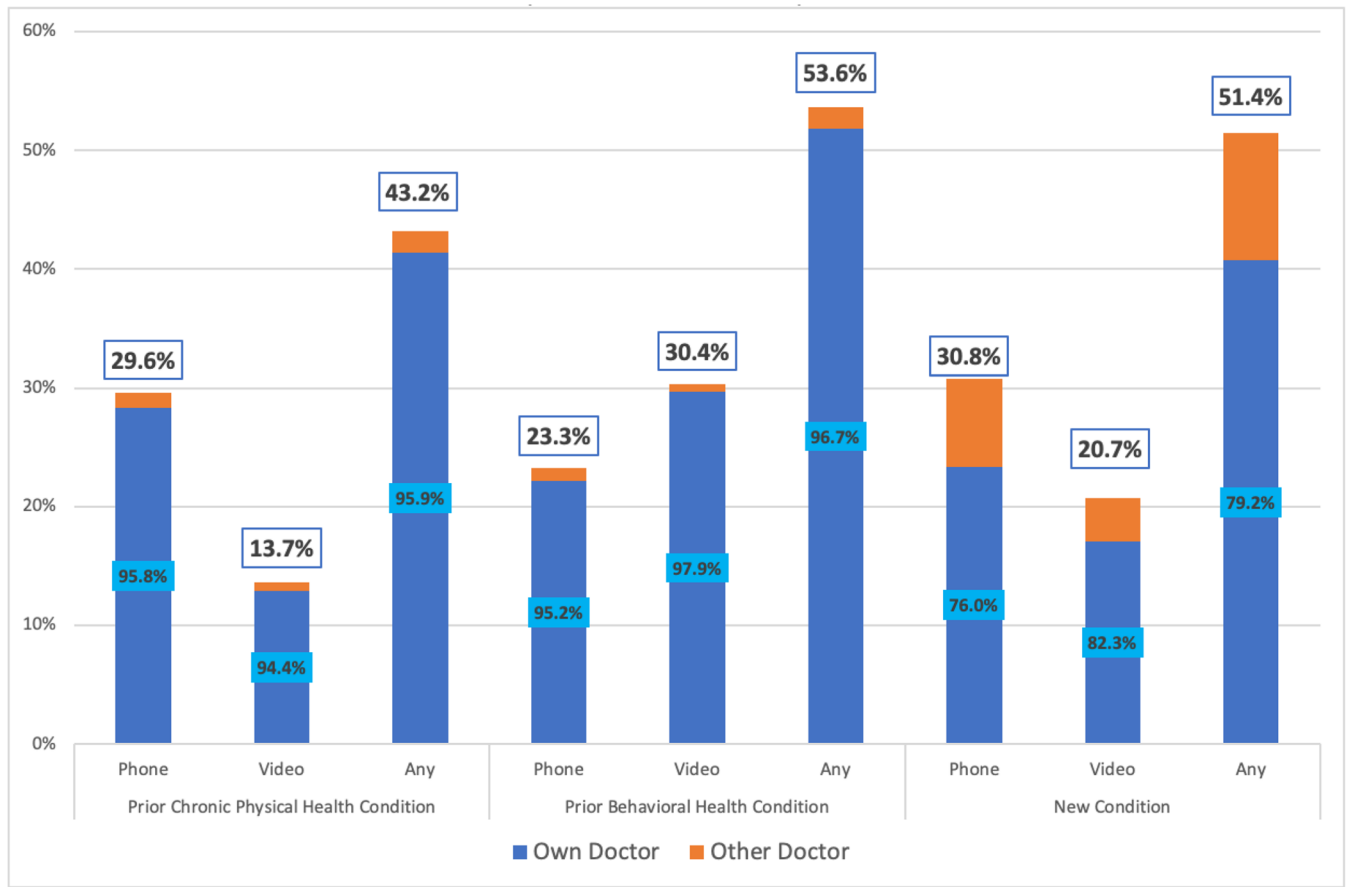


Fig. 1 Prevalence of telehealth use by condition, modality, and own doctor. Data are from the American Life Panel Survey on Impacts of COVID-19.³ Proportions of patients who used telehealth are shown above bars. Proportions of telehealth users who saw their own doctor are shown within bars.

Table 1 Predictors of Telehealth Use by Condition

| Respondent characteristics | Conditions being treated when the pandemic began | | | | | | New or recurrent condition | | Any condition | |
|--------------------------------|--------------------------------------------------|------------------|-----------------------------|-------------------|----------------------------|------------------|----------------------------|------------------|---------------|------------------|
| | Chronic physical condition | | Behavioral health condition | | Any pre-COVID-19 treatment | | Odds ratio | 95% CI | Odds ratio | 95% CI |
| | Odds ratio | 95% CI | Odds ratio | 95% CI | Odds ratio | 95% CI | | | | |
| Sex (vs. male) | | | | | | | | | | |
| Female | 1.1 | (0.7–1.6) | <i>0.4</i> | <i>(0.2–0.9)</i> | 0.9 | (0.6–1.4) | 0.8 | (0.3–1.8) | 1.0 | (0.6–1.4) |
| Age (vs. 60 and over) | | | | | | | | | | |
| Ages 20–39 | 0.7 | (0.3–2.0) | 3.3 | <i>(1.4–8.1)</i> | 1.2 | (0.6–2.4) | 1.2 | (0.5–3.2) | 1.4 | (0.7–2.6) |
| Ages 40–59 | 1.2 | (0.8–1.8) | 3.7 | <i>(1.7–7.9)</i> | 1.3 | (0.9–2.0) | 1.1 | (0.6–2.6) | 1.5 | <i>(1.0–2.2)</i> |
| Race/ethnicity (vs. NH-White) | | | | | | | | | | |
| Hispanic | 1.2 | (0.6–2.6) | 0.5 | (0.2–1.8) | 1.0 | (0.5–2.0) | 0.8 | (0.3–2.3) | 0.9 | (0.5–1.6) |
| NH-Black | 1.5 | (0.8–2.8) | 3.7 | <i>(1.1–13.1)</i> | 1.4 | (0.8–2.6) | 1.6 | (0.4–6.3) | 1.3 | (0.7–2.3) |
| NH-Other | 1.3 | (0.5–3.4) | 2.0 | (0.5–9.0) | 1.5 | (0.7–3.5) | 0.7 | (0.2–2.8) | 1.2 | (0.6–2.6) |
| Region (vs. Northeast) | | | | | | | | | | |
| Midwest | <i>0.5</i> | <i>(0.3–0.9)</i> | 0.4 | (0.1–1.0) | <i>0.4</i> | <i>(0.2–0.7)</i> | 0.5 | (0.1–1.7) | <i>0.4</i> | <i>(0.2–0.7)</i> |
| South | <i>0.5</i> | <i>(0.3–0.9)</i> | 0.6 | (0.2–1.4) | <i>0.5</i> | <i>(0.3–0.8)</i> | 0.8 | (0.3–2.7) | <i>0.6</i> | <i>(0.3–0.9)</i> |
| West | <i>0.4</i> | <i>(0.3–0.8)</i> | 0.3 | (0.1–1.0) | <i>0.3</i> | <i>(0.2–0.6)</i> | 0.6 | (0.2–2.0) | <i>0.4</i> | <i>(0.2–0.6)</i> |
| Education (vs. college degree) | | | | | | | | | | |
| Less than HS | 0.7 | (0.3–1.9) | 0.1 | <i>(0.0–0.6)</i> | 0.5 | (0.2–1.2) | 0.5 | (0.1–3.4) | 0.5 | (0.2–1.2) |
| HS to Assoc | 1.0 | (0.7–1.5) | 0.6 | (0.3–1.2) | 0.8 | (0.5–1.1) | 1.1 | (0.5–2.2) | 0.9 | (0.6–1.3) |
| Health insurance (vs. insured) | | | | | | | | | | |
| Uninsured | 1.1 | (0.3–3.8) | 0.4 | (0.1–2.0) | 0.8 | (0.3–2.1) | <i>0.2</i> | <i>(0.0–0.7)</i> | 0.5 | (0.2–1.3) |

Italicized entries indicate statistically significant associations at p = 0.05; NH, non-Hispanic; HS, high school; Assoc, associate's degree. Telehealth defined as a visit with a health care provider by phone or video connection.

ensure equity of access, particularly for behavioral health care where education, age, and gender were all associated with use. Lack of health insurance may affect telehealth use.

It is important to note that changes since early May would not be reflected in these results. Analyses by specific medical conditions would add policy-relevant detail.

Post-COVID-19 policies will determine whether telehealth remains central to US health care or returns to the periphery. Decisions should be informed by information about how patients used telehealth during the crisis.

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Shira H. Fischer, MD, PhD¹
 Lori Uscher-Pines, PhD¹
 Elizabeth Roth, MA¹
 Joshua Breslau, PhD, ScD, MS¹

¹RAND Corporation,
 Santa Monica, CA, USA

Corresponding Author: Shira H. Fischer, MD, PhD; RAND Corporation, Santa Monica, CA, USA (e-mail: sfischer@rand.org).

Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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