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## Research and Applications

# Racial and ethnic differences in self-reported telehealth use during the COVID-19 pandemic: a secondary analysis of a US survey of internet users from late March

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### ABSTRACT

**Objective:** Widespread technological changes, like the rapid uptake of telehealth in the US during the COVID-19 pandemic, risk creating or widening racial/ethnic disparities. We conducted a secondary analysis of a cross-sectional, nationally representative survey of internet users to evaluate whether there were racial/ethnic disparities in self-reported telehealth use early in the pandemic.

**Materials and Methods:** The Pew Research Center fielded the survey March 19–24, 2020. Telehealth use because of the pandemic was measured by asking whether respondents (N = 10 624) “used the internet or e-mail to connect with doctors or other medical professionals as a result of the coronavirus outbreak.” We conducted survey-weighted logistic regressions, adjusting for respondents’ socioeconomic characteristics and perceived threat of the pandemic to their own health (eg, no threat, minor, major).

**Results:** Approximately 17% of respondents reported using telehealth because of the pandemic, with significantly higher unadjusted odds among Blacks, Latinos, and those identified with other race compared to White respondents. The multivariable logistic regressions and sensitivity analyses show Black respondents were more likely than Whites to report using telehealth because of the pandemic, particularly when perceiving the pandemic as a minor threat to their own health.

**Discussion:** Black respondents are most likely to report using telehealth because of the COVID-19 pandemic, particularly when they perceive the pandemic as a minor health threat.

**Conclusion:** The systemic racism creating health and health care disparities has likely raised the need for telehealth among Black patients during the pandemic. Findings suggest opportunities to leverage a broadly defined set of telehealth tools to reduce health care disparities postpandemic.

**Key words:** telehealth, COVID-19, structural racism, racial and ethnic disparities, digital divide, digital inequality

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### INTRODUCTION

With the novel coronavirus (COVID-19) pandemic, health systems and providers faced an urgent need to limit in-person ambulatory visits to reduce the risk of infection and expand their capacity to care for and monitor patients.<sup>1,2</sup> Several policy changes facilitated

increased use of telehealth,<sup>3</sup> defined by the US Health Resources and Services Administration (HRSA) as the use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, and public health and health administration.<sup>4</sup> In practice,

telehealth has encompassed a range of technologies, including synchronous modes, like telephone and live video, and asynchronous modes, like e-mail and text messaging.<sup>5</sup> In response to the COVID-19 pandemic, virtually all federal, state, and private insurers made changes to telehealth coverage, leading to a further expansion of telehealth used in practice. Expansion included several changes to facilitate patient access to clinical care outside of in-person, face-to-face visits, such as increasing the set of eligible:<sup>6</sup> 1) types of services covered, 2) acceptable modes (eg, audio-only/telephone, audio-video, text-chat, e-mail, portals); 3) providers; and 4) locations in which patients and providers must be situated.

Despite the rapid growth in telehealth visits during the pandemic,<sup>7-9</sup> there are concerns about inequities in access, particularly with respect to patients' race and ethnicity. Innovations in health care policies and technologies risk reproducing and even exacerbating existing inequalities due to systemic racism, making it less likely that members of racial and ethnic minority groups can benefit.<sup>10-12</sup> Before the pandemic, several studies showed Black and Latino patients were less likely to use telehealth than White patients or that disparities disappeared only after estimates accounted for structural inequalities through adjusting for other sociodemographic variables.<sup>13-18</sup> Other studies indicated that racial and ethnic minorities are just as likely to utilize telehealth tools like patient portals once accessible,<sup>19,20</sup> suggesting that expanding access to these technologies may be an important step toward ameliorating disparities. For example, a recent national survey of self-reported patient portal access found racial and ethnic disparities within respondents' reports of being offered access to a portal, but among those who reported being offered access, no racial and ethnic disparities in self-reported access were found.<sup>14</sup>

Systematic racism is likewise disproportionately placing racial and ethnic minorities at greater risk of contracting COVID-19 and experiencing severe complications.<sup>21</sup> During the pandemic, racial and ethnic minorities are potentially in greater need of using telehealth because of the threats to their health. First, their precarious position in society raises the likelihood that they suffer from chronic conditions requiring follow-up care,<sup>22-25</sup> creating a need for telehealth to avoid in-person visits without disrupting treatment plans. Second, several reports show racial and ethnic minorities, particularly Blacks, are among the groups most vulnerable to contracting and dying from a COVID-19 infection.<sup>26,27</sup> The heightened risks they face are endemic to their economic vulnerability during the pandemic, such as overrepresentation among essential workers.<sup>28</sup> In turn, their exposure to the virus potentially prompts them to search for channels like telehealth to receive medical advice about symptoms consistent with an infection.

Early evidence is mixed regarding whether the widespread transition to telehealth during the pandemic is creating additional fractures in society by disproportionately harming racial and ethnic minority patients. A study from four San Francisco primary care practices, including a safety net practice, found that racial and ethnic minority patients were less likely to have a visit after the transition from mostly in-person visits to mostly telehealth (video or telephone) visits.<sup>29</sup> In a study analyzing visits in a cardiology clinic in Philadelphia, the researchers found no significant racial and ethnic differences between patients who canceled a visit and completed a telehealth (video or telephone) encounter.<sup>30</sup> Among those who completed a telehealth encounter, Black patients were more likely to have a telephone than a video-based visit, but this difference disappeared after adjusting for sociodemographic characteristics, suggesting differences were attributable to structural inequalities like

differences in income and internet access. Complicating the emerging profile of evidence is a study of primary care visits in a large hospital system in Northern California, which found Black patients were more likely than White patients to opt for a telehealth (video or telephone) visit over an office visit.<sup>31</sup>

While these studies are critical steps toward assessing racial and ethnic disparities in telehealth use during the pandemic, key gaps remain. First, studies thus far examined only small regions of the US, which makes it difficult to generalize patterns to other regions experiencing differences in the severity of the COVID-19 outbreak. There are also likely differences between health care providers and whether the visits were for primary or specialty care. Second, previous studies may be underreporting the rate of telehealth use by focusing on only telephone or audio-video visits via provider telehealth platforms, thereby missing other modes of telehealth, including asynchronous communications or those using Internet-based commercial videoconferencing platforms like Zoom and Cisco Webex. Because the swift policy changes across all types of payers that facilitated access to telehealth will likely influence the ongoing use of telehealth postpandemic,<sup>32</sup> it is important to characterize the state of racial and ethnic disparities in accessing multiple modes of telehealth during the pandemic. Such evidence can inform how to design and deliver equitable telehealth care postpandemic in the US.

To address these gaps, the current study is a secondary analysis of nationally representative survey data of US adults with internet access from the Pew Research Center,<sup>33</sup> fielded late March 2020, to estimate self-reported telehealth use as a result of the pandemic using a different measure of telehealth than used in recent studies. We present an analysis of racial and ethnic differences in telehealth use and adjust estimates based on covariates measuring respondents' socioeconomic characteristics. We also evaluate whether the estimated racial and ethnic differences in using telehealth varied across different levels of perceived threat of the pandemic to a respondent's health.

## METHODS

### Data source

This is a secondary analysis of cross-sectional survey data from the Pew Research Center's American Trends Panel, which is a national, probability-based online panel of adults (18 or older) living in US households. Panelists from households without Internet-enabled devices were offered 1 at no cost. The panelists for the current analysis were invited to participate March 19-20, 2020 and provided responses from March 19 to March 24, 2020. Out of 15 433 invited panelists, 11 537 responded to the survey (74.8% response rate) and completed it in either English or Spanish. Out of these respondents, only 164 (1.4%) were among those who received an Internet-enabled device, situating the survey as a representative profile of US adults living in households who used the Internet during the pandemic. This aligns with samples from other surveys of self-reported telehealth use that ask about use only among Internet users, including the widely used Health Information National Trends Survey from the National Cancer Institute.<sup>18,34</sup>

### Key measures

Telehealth use because of the pandemic is a dichotomous outcome based on responses to an item asking whether respondents used "the internet or e-mail to connect with doctors or other medical professionals as a result of the coronavirus outbreak." The survey item fits

with the HRSA definition of telehealth,<sup>4</sup> which covers both synchronous and asynchronous forms, but differs from some earlier studies of racial and ethnic differences in telehealth use during the pandemic that focus exclusively on synchronous audio-video or audio-only (ie, telephone) visits.<sup>29–31</sup> Race and ethnicity is their self-identification with 1 of 4 categories (ie, White, Black, Latino, other). Perceived threat of the pandemic for their own health was based on responses to the item asking, “How much of a threat, if any, is the coronavirus outbreak for your personal health?” (a major threat, a minor threat, not at all).

### Covariates

Covariates were respondent’s sex, age, annual income, highest level of education completed, and Internet activities, which is a count (range: 0–4) of the reported number of other Internet uses because of the pandemic (searched online for information about COVID-19, used social media to share or post information about COVID-19, used e-mail or messaging services to communicate with others, used video calling or online conferencing services to attend a work meeting). Household characteristics include Census division, metropolitan area, and whether someone was laid off or received a pay cut because of the pandemic.

### Statistical analysis

After describing the sample with complete responses to our key measures and covariates ( $N=10\,657$ , which is 92.4% of those responding to the survey), the main analysis begins by examining the weighted percentage of respondents reporting telehealth use because of the pandemic by their race and ethnicity. We then use a survey-weighted logistic regression to compare the unadjusted odds of reporting telehealth use by respondents’ race and ethnicity. We adjust these odds by reestimating with all covariates in the model. We also stratify by respondents’ perceived threat of the pandemic to their own health to compare racial and ethnic differences in telehealth use across the 3 perceived levels of threat.

Two sensitivity analyses examined whether findings from the main analysis were robust to different modeling strategies accounting for missing information. The first analyzed a multiply multiple imputed dataset (10 imputations) that filled in missing values for income. Most measures had less than 1% missing values, except for income, which was missing 3%. Accounting for missing values in household income is important because other studies of telehealth use during the pandemic show patients’ household income and out-of-pocket costs are associated with use.<sup>30,31</sup> We used ordinal logistic regression with respondents’ race and ethnicity, perceived health threat, and all covariates as predictors.

The second leverages the Internet activities items to account for unobservable individual differences that affect who is likely to report using telehealth and performing other Internet activities, such as digital literacy and experiencing COVID-19 symptoms. We reanalyzed the data using a mixed-effects item response model<sup>35</sup> in which responses to telehealth and the other 4 Internet activities items are a repeated measure of Internet use for each respondent, resulting in  $N=53\,242$  observations (up to 5 total uses  $\times$  10 657 respondents). Responding yes to any item is modeled as conditional on both fixed effects and random effects. The model leverages information gleaned from respondents’ responses to all 5 Internet activities items to approximate key unobserved variables and factor them into the predicted probability of reporting telehealth use. Additional

**Table 1.** Characteristics of Sample Respondents ( $N = 10\,657$ )

Measure	Unweighted n (weighted %)
Race/ethnicity	
White	7075 (65.1)
Black	791 (10.3)
Latino	2201 (15.9)
Other	590 (8.8)
Outbreak threat to own health	
Not at all	988 (11.5)
Minor	5753 (53.5)
Major	3916 (35.0)
Female	5824 (51.3)
Age	
18–29	1232 (20.6)
30–49	3636 (35.6)
50–64	3172 (24.7)
65+	2617 (19.1)
Education	
High school or less	1457 (34.5)
Some college	3192 (32.3)
College graduate	6008 (33.2)
Annual family income	
<\$30 000	1956 (28.1)
\$30 000–74 999	3672 (36.8)
\$75 000+	5029 (35.1)
Number of internet activities	
0	526 (8.3)
1	1488 (17.5)
2	3172 (30.7)
3	3883 (33.0)
4	1588 (10.5)
In metropolitan area	9571 (87.3)
Census division	
Pacific	1516 (14.9)
Middle Atlantic	1180 (12.7)
East North Central	1480 (14.6)
West North Central	699 (6.5)
South Atlantic	3009 (21.2)
East South Central	463 (4.9)
West South Central	1012 (10.9)
Mountain	825 (9.2)
New England	473 (5.1)
Household member laid off	1867 (19.7)
Household member with pay cut	2824 (27.5)
Internet use intensity, weighted mean (SD)	2.20 (1.12)

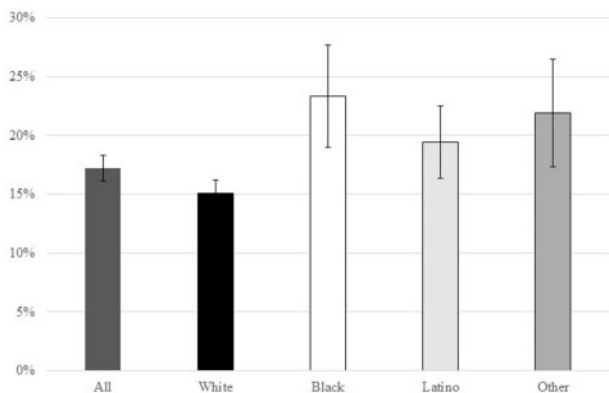
*Note:* Sample is drawn from the Pew Research Center’s American Trends Panel, with responses fielded March 19–24, 2020.

details about how we specify the model are in the [Supplementary Appendix](#).

## RESULTS

### Sample characteristics

**Table 1** summarizes the weighted characteristics (and unweighted frequencies) of the analytic sample. Approximately 65% of the sample identified as White, 10% as Black, 16% as Latino, and 9% as other race. The majority (89%) perceived some level of threat to their own health.



**Figure 1.** Survey-weighted percentage with 95% confidence intervals of US adults reporting telehealth use due to the COVID-19 pandemic by race and ethnicity.

**Table 2.** Unadjusted association between respondent race/ethnicity and reported use of telehealth due to COVID-19 pandemic

Racial/ethnic group	Odds ratio (95% CI)
White (reference)	
Black	1.71 (1.32–2.21)**
Latino	1.36 (1.09–1.69)**
Other	1.58 (1.19–2.09)**

*Abbreviations:* CI, confidence interval.

*Note:* Sample is drawn from the Pew Research Center's American Trends Panel, with responses fielded March 19–24, 2020.

\*\* $P < .01$ ; \*\*\* $P < .001$ .

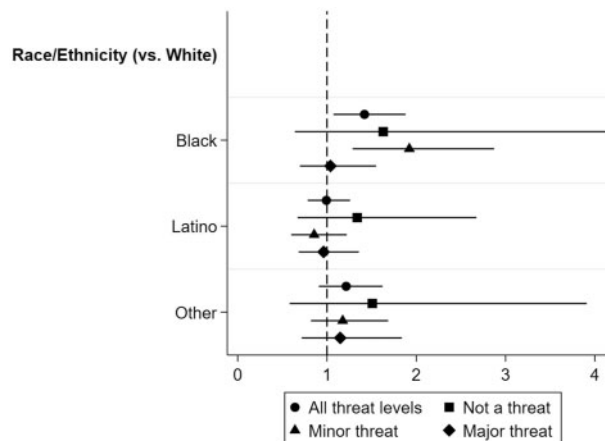
### Unadjusted estimates of telehealth use

Figure 1 shows the weighted percentages of respondents reporting telehealth use, overall and by race and ethnicity, and with 95% confidence intervals around the estimates. Approximately 17% (95% CI, 16.2–18.3%) of all respondents reported using telehealth because of the pandemic. The weighted percentage is higher than this for all 3 of the racial and ethnic minority groups. At 23% (95% CI, 19.2–27.9%), Black respondents have the highest weighted percentage reporting telehealth use.

Table 2 shows the unadjusted association of respondents' race and the odds of reporting telehealth use because of the pandemic. The weighted logistic regression shows Blacks (odds ratio [OR], 1.71; 95% CI, 1.32–2.21), Latinos (OR, 1.36; 95% CI 1.09–1.69), and those identifying as other race (OR, 1.58; 95% CI, 1.19–2.09) had significantly higher odds than White respondents of reporting telehealth use.

### Adjusted estimates of telehealth use

The next step in the analysis performed a weighted multivariable logistic regression estimating racial and ethnic differences in reporting telehealth use, which adjusts the odds ratios for all covariates. The analysis was also stratified by perceived threat of the pandemic to the respondent's own health. Full estimation results are available in Table S1 of the Supplementary Appendix. Figure 2 summarizes the ORs across all threat levels and shows Black respondents have significantly higher odds than Whites of reporting they used telehealth as a result of the COVID-19 pandemic (OR, 1.42; 95% CI, 1.07–1.88). Latinos and respondents identifying as other race no longer



**Figure 2.** Adjusted odds ratios with 95% confidence intervals for reported telehealth use due to COVID-19 pandemic by perceived threat level.

have significantly higher odds than Whites of reporting telehealth use because of the pandemic.

Figure 2 also shows how respondents' perceived threat of the pandemic to their own health modifies the racial and ethnic differences in the odds of using telehealth. Among respondents perceiving no threat or a major threat to their own health, race, and ethnicity are not significantly associated with reports of using telehealth as a result of the pandemic. Among those perceiving a minor threat, Black respondents have significantly higher odds than Whites of reporting telehealth use (OR, 1.92; CI, 1.29–2.87).

### Sensitivity analyses

We conducted 2 sensitivity analyses. The first is an analysis of a multiply imputed dataset to fill-in missing values for income. The results appear in Table S2 in the Supplementary Appendix and show Black respondents continue to be more likely than Whites to report using telehealth, particularly among respondents perceiving the pandemic as a minor threat to their health.

The second sensitivity test was the mixed-effects logistic regressions shown in Table S3 of the Supplementary Appendix. Based on estimates from these regressions, we then calculated the marginal change in the probability a respondent reports using the Internet for telehealth that is attributable respondents' racial and ethnic category (Figure S1, S2, S3, and S4 in the Supplementary Appendix). We find that Black respondents are significantly more likely than Whites to report using telehealth (Model 1 in Supplementary Table S3 and Figure S1). For Black respondents, their stronger tendency to report using telehealth is most pronounced among those perceiving the pandemic as a minor threat to their health (Model 2 in Supplementary Table S3 and Figure S3). The estimated racial and ethnic differences in reported telehealth use are not conditional on the other 2 threat levels (Model 2 in Supplementary Table S3 and Figure S2, S4). According to our main analysis as well as the 2 sensitivity analyses, Black respondents consistently are more likely than Whites to report using telehealth, particularly among those perceiving the pandemic as a minor health threat.

## DISCUSSION

The COVID-19 pandemic created an unprecedented need for a range of telehealth modes to manage the demand for health care

while also limiting in-person medical visits whenever possible to mitigate the spread of infection. Providers and others expressed widespread concern that rapid expansion of telehealth might exacerbate racial and ethnic disparities.<sup>29,36</sup> The analysis presented here of a sample representative of adult Internet users in the US shows that during late March 2020, Black respondents were more likely than White respondents to report using telehealth, which was measured with a survey item encapsulating both synchronous and asynchronous modes. The differences in the odds of reported use of telehealth were pronounced among those perceiving the pandemic as a minor threat to their own health.

The history of implementing health care innovations is fraught with examples where racial and ethnic minorities are disadvantaged by new treatments and technologies because of systemic racism.<sup>10-12</sup> Our findings show Blacks are more likely than Whites to report using telehealth during the first weeks of the COVID-19 pandemic, when there was rapid expansion of telehealth for outpatient visits. There are several reasons this finding may be less surprising than expected. First, the pandemic hit US regions with varying levels of intensity and at different times. Some regions with the highest number of cases are those with high percentages of minorities, particularly African Americans.<sup>26,27</sup> Second, states took actions, such as social distancing and other restrictions, at different times, which had significant implications for telehealth demand. During the 5-day period of the survey, 9 states instituted a stay-at-home order,<sup>37</sup> including states with metropolitan areas consisting of large numbers of racial and ethnic minorities like California, Illinois, Louisiana, Michigan, and New York. We adjust estimates for Census division and living in a metropolitan area to partly account for these geographical differences, yet racial differences were still significant, suggesting other factors are operating. These may include the precarious economic position of racial and ethnic minorities, particularly Blacks, rendering them more vulnerable to contracting the virus,<sup>21-26</sup> suggesting they may be using telehealth to report their symptoms. Further, racial and ethnic minorities are also more likely than Whites to suffer from health conditions requiring ongoing medical care,<sup>22-25</sup> which may lead them to telehealth to maintain a previously scheduled visit.

Another reason why these findings may be less surprising is because the measure of telehealth use encompassed a wider range of modes than other early studies evaluating racial and ethnic disparities in use during the pandemic.<sup>29-31</sup> The focus on Internet users in the current sample may explain why our findings contrast with some of the early evidence suggesting the switch to telehealth during the pandemic may have disadvantaged racial and ethnic minorities. However, there are additional key distinctions between the current study and these previous ones that can further explain the different findings. Certain modes of telehealth demand greater Internet resources and digital literacy and, thus, may be more likely to disadvantage racial and ethnic minorities. The telehealth measure used in the current study encompasses a broad range of telehealth, from secure messaging to video consultations and, accordingly, also represents a broad range of requisite Internet skills and resources. Conversely, the early evidence from previous studies focuses on a narrower range of telehealth modes of engagement, specifically telephone-only and audio-video.<sup>29-31</sup> Variation in findings of disparities in use of telehealth across studies may be related to measuring different modes that demand different levels or types of resources to access and use. This suggests that to ensure greater equity in telehealth postpandemic, providers and policy makers should identify how to spur uptake of multiple telehealth modes, including

those requiring lesser resources. In addition, regardless of mode, providers should ensure that digital health tools are understandable by users with different literacy levels by both following best practices for website and tool design and engaging patients and their families and communities in meaningful ways.<sup>38,39</sup>

The perceived threat of the pandemic to respondents' health modified the findings, with Black respondents reporting greater telehealth use than Whites only among those who perceive a minor rather than no threat or a major health threat. Patients who deem the pandemic as a minor health threat may be the group where telehealth marginally makes the most sense because they face some need for health care. Conversely, those who perceive no health threat can avoid or postpone a visit, while those who perceive a major threat may require an in-person visit and believe it is worth the risk of potential COVID-19 exposure. The heightened tendency of Black respondents to report using telehealth among those perceiving a minor threat may be attributable to differences in perceived susceptibility to COVID-19.<sup>40</sup> Despite reporting the same level of threat (minor) as Whites, the greater risk of infection in the Black community may incline the respondent or their provider to exercise an abundance of caution and substitute an in-person visit with a telehealth visit. This may also explain why another study found that Black patients are more likely than Whites to use video or telephone over a clinic visit.<sup>31</sup>

Key health policy changes were important for expanding telehealth access and coverage during the COVID-19 pandemic: CDC recommendations for conducting telehealth visits to triage possible COVID-19 patients<sup>41</sup> as well as for non-coronavirus-related non-urgent health care; insurance coverage changes by Medicare, Medicaid, and private insurers to create parity in payments for telehealth visits;<sup>42</sup> relaxation of penalties for noncompliance with requirements under the HIPAA Rules for providers' good faith provision of telehealth during the pandemic;<sup>43</sup> and specific assistance for Rural Health Centers and Federally Qualified Health Centers to provide telehealth services.<sup>44</sup> These actions, long advocated by health care providers,<sup>45,46</sup> enabled expanding access to and payment for multiple modes of telehealth across providers and payers. Importantly, the current study suggests that further expansion of telehealth across a range of modes may benefit Black patients. After the pandemic is under control, some policy changes, such as the HIPAA rules, should be reevaluated and updated to ensure that access is maintained while also safeguarding important protections, including privacy, that patients value.<sup>32</sup>

While our sample represents Internet users in the US, this should not distract from the importance of Internet resources and digital literacy for ensuring that patients can use telehealth and equity in access.<sup>47</sup> Alongside the rapid changes in telehealth coverage during the pandemic was also greater accessibility of broadband, with some companies offering free or low-cost access.<sup>48</sup> While racial and ethnic disparities in Internet and broadband access within the US narrowed during the years preceding the COVID-19 pandemic<sup>49,50</sup> the lack of Internet access continued to limit the ability of racial and ethnic minorities to access telehealth.<sup>11,19</sup> Further, among samples with Internet access, low digital literacy contributed to racial and ethnic disparities in previous studies of telehealth.<sup>13</sup> Because panelists in the survey analyzed here represent Internet users who regularly complete web-based surveys, it is possible these barriers are mitigated. For populations who still face these barriers, sustained implementation of telehealth postpandemic requires ensuring availability of broadband access, access to telehealth via multiple modes, and increased assistance with using telehealth. While the significant exter-

nal shock of the pandemic may produce lasting changes in technology use, insurance coverage, and health care delivery overall, to ensure equitable use of telehealth, policies and resource availability will likely need to evolve to ensure access via multiple modes, including synchronous audio-only and video consultations from any location, as well as asynchronous modes.

This study is not without limitations. While the telehealth use measure references the pandemic as the cause of use, the study cannot evaluate telehealth use before and during the pandemic. Several studies document a surge in telehealth use during the pandemic,<sup>9,31</sup> but we cannot identify how racial and ethnic differences in use may have changed. The telehealth measure is self-reported, making it susceptible to recall bias. Yet this risk is minimal given the short period between the survey administration and the use of telehealth. In addition, the measure asks about visits only via the Internet or e-mail, not telephone. Our estimated rate of telehealth use is therefore only a conservative estimate. Overall rates are likely much higher later in the pandemic as well.<sup>9</sup> Further, because Black patients may be more likely than White patients to opt for a telephone than a video visit,<sup>30</sup> we are likely also conservatively estimating the size of the Black-White difference in telehealth use. The measure also does not allow distinguishing between whether a respondent used telehealth because they were concerned about symptoms related to COVID-19 or other health concerns. The analysis cannot show how type of health insurance coverage is associated with racial and ethnic differences in reported telehealth use. Finally, because respondents all had Internet access (with some having it provided by the Pew Research Center), the results may not generalize to populations without Internet access, including lower income patients and those who live in rural areas.

## CONCLUSION

During widespread crises, like a pandemic or a natural disaster, telehealth can provide uninterrupted health care access, but technological changes risk contributing to disparities because systemic racism creates fractures between who is likely to benefit. A key takeaway of this study of telehealth use during the COVID-19 pandemic is that it is possible for racial minorities in the US to *not* fall behind in adopting telehealth. The importance of telehealth for managing shortages and the uneven distribution of health care professionals will remain once crises like the COVID-19 pandemic subside. The confluence of rapid changes in telehealth coverage and the availability of broadband may be effective ways to mitigate barriers commonly cited as contributors to racial and ethnic disparities in access, such as inequalities in who has Internet access. Policy changes that ensure parity in payment for telehealth visits, as well as other policies that expand access to telehealth across all types of providers and simplify certain rules for patients and providers, may ensure that telehealth is accessible to all and not only during a national emergency.

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## AUTHOR CONTRIBUTIONS

CC designed the analysis, interpreted data, and drafted the work. DA designed the analysis, interpreted data, and critically revised the work for intellectual content.

## SUPPLEMENTARY MATERIAL

Supplementary material is available at *Journal of the American Medical Informatics Association* online

## CONFLICT OF INTEREST STATEMENT

None declared.

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