Summary report:

Experiences of racially and ethnically minoritized and marginalized physicians in the U.S. during the COVID-19 pandemic

The COVID-19 pandemic has taken a heavy toll on health care workers. At the onset of the pandemic, there was a limited understanding of the unique experiences of minoritized and marginalized physicians* during this national health crisis. This was concerning because of the anecdotal and media reports documenting that Black, Indigenous and other physicians of color, LGBTQ+ physicians, and physicians with disabilities experienced unique negative experiences and undue burden during this public health crisis. Early in the epidemic it became clear that Black, American Indian and Indigenous, Latino/Latina/Latinx† and Hispanic and Pacific Islander communities, as well as historically marginalized and medically vulnerable populations, were disproportionately affected by COVID-19. Minoritized and marginalized physicians are more likely to serve other marginalized patients, practice primary care, and serve in medically marginalized areas.[1,2] They therefore often bear a larger portion of the toll of this pandemic, compared to their counterparts.

This study aims to center the unique experiences of these physicians and to explore the specific ways that the epidemic impacted them more negatively than their non-minoritized non-marginalized counterparts. Understanding these unique experiences is essential to making the field of medicine more inclusive and aware of the unique tolls these physicians face.

Various factors have historically contributed to the increased burden and negative experiences of minoritized and marginalized physicians. This study focused specifically on discrimination and burnout, as these factors have emerged as areas of necessary attention over the course of the pandemic, specifically as they relate to direct experiences of discrimination, mental health and well-being, physician practice sustainability, and availability of and access to telehealth services. Themes that emerged from the survey responses demonstrate that the COVID-19 pandemic has exacerbated existing health inequities in the U.S.; Black physicians were negatively impacted by the epidemic in various ways; physician burnout remains a primary concern for all physicians regardless of race; and the increase in telehealth use, although accompanied by challenges, has been a positive development of the pandemic. These and other compelling findings are described in further detail in this report.

* Physicians who are from demographic groups that have been historically underrepresented in and/or excluded from the field of medicine are referred to as marginalized physicians, whereas minoritized refers to the process of historically minoritizing others based on a dominant category intended to oppress groups based on a given social standing (e.g., race/ethnicity).

† We will use Latinx and Hispanic to refer to the Latino/Latina/Latinx or Hispanic community as an inclusive umbrella term.

Racism as evidenced through discrimination in the workplace

Concerted efforts toward increasing physician workforce diversity require an understanding of the workplace conditions that racially minoritized physicians face. The concept of racism—at the structural, societal, institutional and interpersonal levels—corresponds to a set of attitudes, behaviors, and practices that maintain an imbalance in the distribution of power and enact violence and harm across racial and ethnic groups with a focus on upholding white supremacy.[3,4] Racism is closely tied to emotional well-being and health outcomes.[3,5] However, little research exists documenting the experiences of minoritized and marginalized physicians and how their experiences of racism may drive burnout, reduce well-being and impact the practice of medicine.

Racially minoritized physicians, specifically Black physicians, are more likely to experience discrimination in the workplace or racism perpetrated by patients and colleagues and bolstered by the broader institutional structure.[6] Such discrimination has been linked to physician job turnover, career dissatisfaction and contemplation of career change,[7] as well as burnout and poor mental well-being. While burnout and poor mental health remain a challenge for the physician workforce, there is minimal research on how these outcomes differ by race and ethnicity, although some studies suggest that there might be variation.[8,9] For instance, racially minoritized physicians report lower rates of burnout compared to their non-Hispanic white counterparts.[10] Further studies that focus on the unique experiences of minoritized physicians, as they relate to discrimination and its impact, are needed. The importance of understanding these experiences is heightened particularly in times of public health crises, when physicians and health systems are uniquely stressed, and the workplace social cohesion may be challenged.

Burnout

Studies demonstrate that physicians remain at heightened risk for burnout as compared with professionals in other fields. Prior to the COVID-19 pandemic, however, there was a modest downward trend in physician burnout, with rates decreasing from 43.9% reported at least one symptom of burnout in 2017 compared with 54.4% in 2014 and 45.5% in 2011.[11] As a result of this unprecedented pandemic, physicians are facing heightened psychological, financial and physical stress, which may result in increased burnout. This increase is detrimental, not only to physicians, but also to the patients they treat, as burnout is associated with increased risk for patient safety incidents, poorer quality of care,[12] and lower patient satisfaction scores.[13,14]

One of many sources of physician stress during the pandemic stems from the shifts in approaches to patient care many physicians have had to make. Due to social distancing requirements, physicians have had to adopt telemedicine as a means to connect with their patients. For many, this has been a major disruption, given the relatively low levels of familiarity with telemedicine. For example, Sermo conducted a sentiment survey among physicians using telemedicine for consultation during the COVID-19 outbreak and found that nearly half (48%) are using it for the first time.[15] Furthermore, many physicians, particularly those in relatively under-resourced settings, have not had the existing infrastructure, capacity or technological support necessary for the smooth transition to telemedicine.

Furthermore, physicians face intensified challenges as they work to address the complex needs of patients during the pandemic. Physicians recognize the challenges faced by patients who do not have COVID-19 and are seeking care.[15] Additionally, physicians are increasingly attuned to the complex relationship between social determinants of health and health care outcomes. Studies

have found that the inability to address social determinants of health contributes to physician burnout.[16,17,18] Given the immediate concern surrounding the rising need for housing, food and employment security among those most vulnerable to COVID-19,[18,19,20,21,22] we anticipate this may greatly impact physician burnout for those working in areas with high concentrations of poverty. Manifestations of burnout such as emotional exhaustion, depression, depersonalization, and low efficacy are also associated with decreased quality of care and may exacerbate health inequities by disproportionately impacting clinicians working in lower-resourced settings.[23,24,25,26]

Methods

A sample of 43,351 physicians in the Medscape Physician Survey Panel were invited to participate in a web-based survey in June and July of 2020. Of the 13,912 physicians who opened the invitation email, 1,048 began the survey. A total of 954 physicians completed the survey*; however, for this survey we excluded the augmented samples aimed at increasing the number of physicians with disabilities and from LGBTQ+ identities. Therefore, the final sample used for this analysis was 747 for this report. For this study, an intentional quota of 150 physicians per racial and ethnic group was set to ensure a balanced sample of physicians of Asian, Black or African American, American Indian or Indigenous, Latinx or Hispanic, Native Hawaiian and Pacific Islander, and White racial and ethnic backgrounds. Given the overall small population of Indigenous and Native Hawaiian and Pacific Islander physicians we adjusted the targeted sample size to 70 physicians. For American Indian and Indigenous and Native Hawaiian and Pacific Islander physicians, we extended the recruitment phase to be able to generate meaningful estimates for relatively small groups. Given this sampling strategy, the final sample is not racially or ethnically representative of the general U.S. physician population.

The 12-question survey comprised of questions from commonly administered, validated burnout assessment instruments and perceived discrimination scales, as well as instruments assessing sources of support and well-being. The survey also included items aimed at understanding emerging needs surrounding COVID-19, telehealth and private practice sustainability. All questions were optional.

Sample demographics

The majority of participants identified as male (56.1%). Nearly 93% identified as heterosexual, and more than 95% reported not having a disability. Five percent of participants identified as LGBTQ and 5% reported having a disability. (Table 1) The largest portion of participants practiced in a hospital (31.6%) or single-specialty group practice (28.6%). More than half worked in a private practice setting (57.4%). (Table 2)

The majority of Latinx or Hispanic participants identified as Mexican/Chicano or Puerto Rican (28.1%). The "other ethnic" category was extensive and a considerable proportion of Latinx physicians did not identify with prepopulated ethnic categories categories (Argentinian, Colombian, Cuban, Dominican, Mexican or Puerto Rican). The majority of Asian American participants identified as Indian (35.2%) and Chinese (29.7%). The majority (57.9%) of Native Hawaiian or other Pacific Islander participants identified as "other" when asked about their specific ethnic identities while Native Hawaiian self-identification comprised just 37% of this racial/ethnic category.

* Insights from the augmented samples of physicians with disabilities and LGBTQ+ physicians will be published separately and have been analyzed separately.

Table 1. Demographic characteristics of the respondents

Gender and Gender Identity (Total N=747)	**N/% of Total**
Female	314 (42.0%)
Male	419 (56.1%)
Other (non-binary/third gender/gender queer)	9 (1.2%)
Prefer not to answer	5 (0.7%)
Identify as transgender (% yes)	2 (0.3%)
Sexual Orientation (Total N=747)	
Heterosexual	693 (92.8%)
Lesbian or gay	20 (2.7%)
Bisexual	13 (1.7%)
Queer	4 (0.5%)
Preferred not to answer	16 (2.14%)
Disability (Total N=747)	
Have a disability	36 (4.8%)
Do not have a disability	702 (93.98%)
Preferred not answer	9 (1.2%)
Race (Total N=747)	
American Indian or Alaska Native only (Non-Hispanic)	33 (4.4%)
Asian only (Non-Hispanic)	145 (19.4%)
Black or African-American only (Non-Hispanic)	135 (18.1%)
Latinx or Hispanic	153 (20.5%)
Native Hawaiian or Pacific Islander (PI) only (Non-Hispanic)	19 (2.5%)
White only (Non-Hispanic)	151 (20.2%)
Two or more races (2+ races, non-Hispanic)	111 (14.9%)

Table 2. Practice characteristics

Practice Characteristics	**Total (N=747)**
Practicing physician	683 (91.4%)
Resident or fellow	64 (8.6%)
All appointments are conducted via telehealth	36 (4.8%)
Spend more than 20 hours physically in practice	552 (73.9%)
Spend between 1 and 20 hours physically in practice	159 (21.3%)
Practice Type	
Solo practice	90 (12%)
Single specialty group practice	214 (28.6%)
Multi-specialty group practice	133 (17.8%)
Hospital	236 (31.6%)
Ambulatory surgical center	2 (0.3%)
Urgent care facility	15 (2.0%)
Federally Qualified Health Center (FQHC)	40 (5.4%)
HMO/Managed care organization	17 (2.3%)
Private Practice	
Private practice full or part owner	226 (30.2%)
Works in private practice (does not own)	203 (27.2%)
Does not work in a private practice	318 (42.6%)

Patient population served by physician race/ethnicity

Physicians were asked to estimate the percentage of their patient population that belong to different racial/ethnic groups. The mean percentage of the populations identified are listed in the table below. It is important to note that this is representative of the physician's perception of their patients, not an actual report of their patient population based on patient-identified race/ethnicity. Overall, we observed that physicians of Asian, Black or African American, Latinx or Hispanic, and white race or ethnicity reported seeing significantly higher proportions of patients of the shared race or ethnicity as compared to other physicians. (Table 3)

Table 3. Patient population served by physician race/ethnicity

Mean % of Patient Population Served	Overall	Asian	American Indian/ Alaskan Native[a]	Black or African-American	Latinx or Hispanic	Two or more races	Native Hawaiian/ other PI[a]	White
Asian patients	7.9%	10.3%[1]	8.4%	5.39%[1]	7.3%[1]	9.8%	5.2%	7.5%
American Indian/Alaska Native patients	2.1%	1.7%	6.3%	0.70%	1.3%	3.8%	2.4%	2.3%
Black or African American patients	14.5%	11.5%[2]	10.6%	29.2%[2]	12.3%[2]	10.2%[2]	12%	10.7%[2]
Latinx or Hispanic patients	20.9%	22.3%[3]	15.7%	17.9%[3]	30.5%[3]	16.6%[3]	18.5%	17.9%[3]
Native Hawaiian/other PI patients	1.8%	2.1%	2.03%	0.7%	1.6%	2.4%	5.9%	1.5%
White patients	43.4%	43.4%[4]	46.67%	35.2%[4]	36.9%[4]	48.6%	45.8%	52.2%[4]
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

a. Native Hawaiian and other Pacific Islander and American Indian/Alaskan Native physicians were excluded from the between group significance testing due to small sample sizes; proportions included for these two groups for informative purposes.

1. P-value < 0.05, The mean percent of patients' population served by the defined characteristic was significantly different across physician's race/ethnicity when compared to Asian physicians

2. P-value < 0.05, The mean percent of patient's population served by the defined characteristic was significantly different across physician's race/ethnicity when compared to Black physicians

3. P-value < 0.05, The mean percent of patients' population served by the defined characteristic was significantly different across physicians' race/ethnicity when compared to Latinx physicians

4. P-value < 0.05, The mean percent of patients' population served by the defined characteristic was significantly different across physicians' race/ethnicity when compared to white physicians

Other characteristics of patient population

Physicians were also asked about the percentage of their patient population that are insured by Medicaid or do not have insurance, as well as the proportion that speak languages other than English. This is helpful in observing the diversity of the patient populations physicians of different races serve. (Table 4) Findings illustrate that white and Native Hawaiian and other Pacific Islanders physicians serve a lower proportion of Medicaid patients. White physicians serve a proportionately lower percentage of uninsured patients compared to other physicians. Regarding language, Latinx

or Hispanic physicians and Native Hawaiian or other Pacific Islanders physicians serve a greater proportion of patients who speak Spanish compared with white and/or American Indian/Alaskan Native physicians.

Table 4. Other characteristics of patient population

Mean % of Patient Population Served	Overall	Asian	American Indian/ Alaskan Native[a]	Black or African-American	Latinx or Hispanic	Two or more races	Native Hawaiian/ other PI[a]	White
Medicaid	30.5%	31.5%	28.5%	36.2%*	31.4%	31.4%	22.1%	24.4%*
Uninsured	12.2%	11.5%	13.5%	13.8%*	12.7%*	12.7%	17%	9.5%*
% patients who speak other languages	90.8%	91%	81.8%	88.9%*	95.4%*	93.7%	94.7%	86.8%*
% whose patients speak Spanish	86.3%	86.2%*	72.7%	85.9%*	93.5%*	84.7%*	94.7%	82.8%*
% whose patients speak Chinese	30.4%	35.2%*	24.2%	28.9%	30.1%	36.9%*	31.6%	23.8%*
% whose patients speak Arabic	21.6%	17.9%	18.2%	23.7%	21.6%	24.8%	26.3%	19.9%

** P-value < 0.05, the mean percent of patients' population served by the defined characteristic was significantly different across physicians' race/ethnicity.*

a. Native Hawaiian and other Pacific Islanders and American Indian/Alaskan Native physicians were excluded from the between groups significance testing due to small sample sizes; proportions are included for these groups for informative purposes.

Patient and practice experience during COVID-19

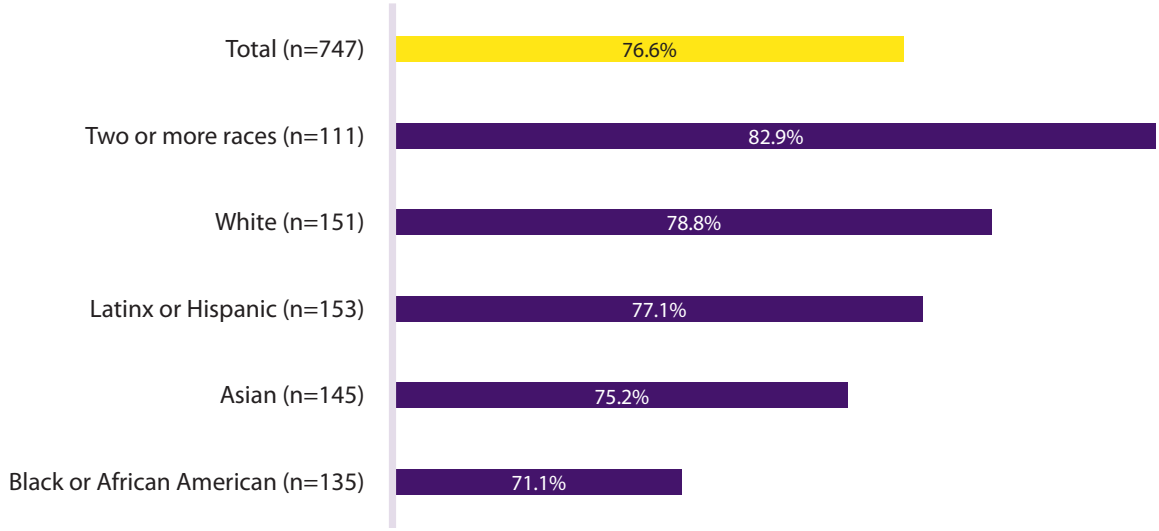
The COVID-19 pandemic affected physician practices of all kinds in a variety of ways. Physicians of different racial backgrounds were presented with different challenges and experiences in their practices. Black and Latinx physicians are among the most likely to have treated a patient with a confirmed case of COVID-19 (78.5%; 74.5%). This finding aligns with other evidence showing Black and Latinx populations were disproportionately affected by the COVID-19 pandemic. Members of these groups were infected and hospitalized at higher rates than other populations,[27] with Black and Latinx people under the age of 65 dying in greater numbers than white people in this age group.[28]

At the time of the survey, most physicians reported their medical practice had enough COVID-19 tests for health care workers (75.2%). Asian and Latinx physicians are more likely to work in these practice settings than are Black or white physicians. To a lesser degree, most physicians (62.5%) indicated their practice had enough COVID-19 tests for all essential non-frontline support staff. Black physicians were the least likely to work in a practice with enough tests for non-frontline support staff (54.8%).

Nearly 70% of physicians work in practice settings with enough COVID-19 tests for patients. While this is encouraging, it means that more than one-quarter of physicians work in practices where there are not enough COVID-19 tests for the patients that need them. Black physicians are least likely to work in a practice that has enough COVID-19 tests for patients.

In the early stages of the pandemic, lack of access to personal protective equipment (PPE) for frontline health care workers was a major concern. At the time of this survey, the majority of physicians reported having enough PPE for frontline health care workers (76.6%); however, fewer Black and Asian physicians worked in practices with enough PPE (71.1%; 75.2%). In addition, two-thirds of physicians reported there was enough PPE for essential non-frontline support staff (67.7%). (Figure 1)

Figure 1. Access to PPE for frontline health care workers



Q2.d: Please identify whether the following statements are true or false, based on the current conditions within your practice setting: In my practice, there are/is enough personal protective equipment for all frontline health care workers.

- *Native Hawaiian or Pacific Islander (n=19): 13 true*
- *American Indian or Pacific Islander (n=33): 25 true*

Concerns about health care worker shortages are front and center as the COVID-19 pandemic increased the demand for health care workers, especially in geographical areas that have been impacted by large numbers of cases in short periods of time. At the time of this survey, more than 80% of physicians reported that in their practice there were enough health care providers to care for patients with COVID-19. Black physicians were least likely to work where there were enough health care providers to care for patients with COVID-19.

Although COVID-19 placed a large demand on hospitals and many medical practices, there was not a large concern among participants about having enough health care providers to care for non-COVID-19 patients. Nearly nine in 10 (88.2%) physicians report that their practice had enough health care providers to care for patients who *did not* have COVID-19. This was least likely, however, among Black physicians (84.4%).

Similarly, there was initial concern among hospitals that the demand for ICU space and ventilators would outpace the available supply. At the time of this survey, however, nearly nine out of 10 physicians reported their hospital had enough ventilators for all patients (86.9%), and 80% reported having enough ICU space (80.5%).

"The administration are far removed from the reality of what is actually happening on floors. Decisions are made without important stakeholders involvement. Lack of essential resources like staff, medication and PPE has been an issue even before Covid."

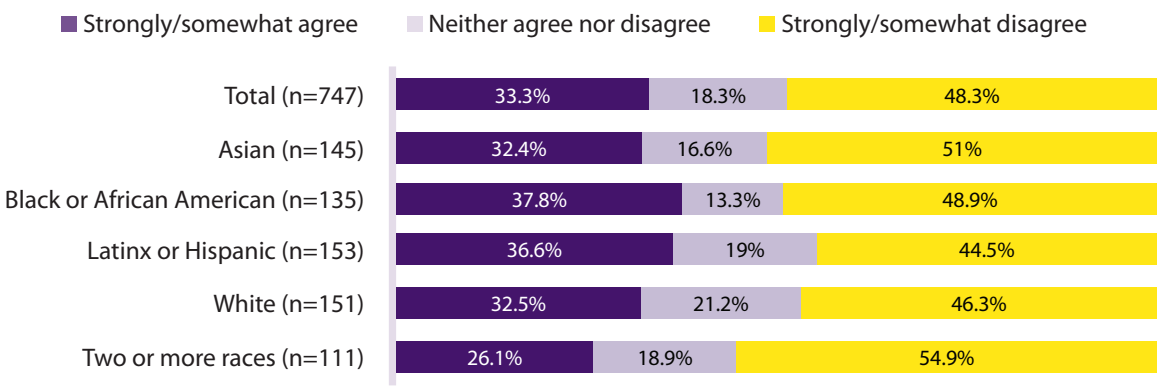
– Native Hawaiian and Pacific Islander, hospital-based resident physician (internal medicine)

Organizations of all types, from hospitals and health systems to small and independent medical practices, had to rapidly implement new processes and procedures for many aspects of patient care and practice. New guidelines to test and treat COVID-19 patients as well as to prevent further spread of the virus were provided, and although the majority of physicians, regardless of race or ethnicity, knew how and where to find this information, nearly one-third of physicians did not feel the guidelines were clear or that they knew how to implement them. Over half of the participants, regardless of race or ethnicity, reported that the guidelines were clear and they knew how to implement them.

Patient care during COVID-19 pandemic

Twenty percent of physicians report that their patients' lack of financial resources hampers their ability to properly test for and treat COVID-19. This is least likely for white physicians. Lack of resources *within* the practice is more often reported to hamper physicians' ability to test for and treat COVID-19 than lack of patient financial resources. (Figure 2) This was most likely among Black and Latinx physicians (37.8%; 36.6%) and least likely among physicians who identify as two or more races (26.1%).

Figure 2. Lack of resources in practice inhibit testing for and treating COVID-19



Question as displayed in survey: Please rate your level of agreement with the following statements: My ability to test for and treat COVID-19 is hampered by a lack of resources within my practice.

- *Native Hawaiian or Pacific Islander (n=19): 5 Strongly disagree, 3 Somewhat disagree, 5 Neither agree nor disagree, 4 Somewhat agree, 2 Strongly agree*
- *American Indian or Alaska Native (n=33): 8 Strongly disagree, 6 Somewhat disagree, 8 Neither agree nor disagree, 7 Somewhat agree, 4 Strongly agree*

When patients face social and economic hardships such as low literacy, unemployment, and poor housing quality and availability, resources to support social needs (such as access to community programs and dedicated staff) are important in providing complete patient care. Only one in 10 physicians say that most or all patients who contend with the ability to get other social needs met during the COVID-19 pandemic. Over half of physicians (57.7%) report their practice has the resources to address patients' social needs. Physicians who identify as two or more races and Asian physicians are most likely to experience this in their practice, (68.4%; 58.6%) and white physicians were the least likely (53.7%).

Relatively few physicians (6.4%) reported that most or all of their patient population contend with the inability to pay for health care services and medications. However, Black (9.6%) and Asian (9.7%) physicians, as well as physicians who identify as two or more races (8.1%), are more likely to report most or all of their patients struggle with paying for health care services and medications.

Similarly, few physicians report that most or all of their patients struggle with getting medications (4%). More Black physicians (5.2%) and physicians who identify as two or more races (5.4%) report that most or all of their patients struggle with getting medications for other conditions than do white (1.3%), Asian (4.1%), and Latinx (3.3%) physicians.

A major concern for public health during the pandemic is that patients would not be able to get, or would delay, timely care for conditions other than COVID-19. One in 10 (10%) participants reported that most or all of their patients have limited ability to seek timely care for their other conditions, but more than half report that only a few or none of their patients have this challenge (54.2%).

"It has greatly impacted the Native population and they experience more barriers to access than normal due to distance and decreased time availability at clinics."

– Native American, multi-specialty group practice physician (internal medicine)

Accessing relevant materials and information about their health care is important for all patients, regardless of race or nationality. For some non-English speaking patients, a lack of information about COVID-19 in their native language can be a barrier to obtaining appropriate health care. Asian physicians are most likely to report that most or all of their patients struggle with the ability to access materials or information in their native language (7.6%).

Physician experience during COVID-19

The COVID-19 pandemic impacted many aspects of daily life and the practice of medicine for physicians and health care workers. Nearly 93% of physicians expressed concern about personal exposure to COVID-19, and more than 95% expressed concern about exposing their family, loved ones or household to COVID-19. Particularly, the pandemic's toll on the mental health of frontline health care workers was significant and remains a top concern for patients and physicians alike. One-third of physicians (34%) report that access to personalized mental health resources for physicians would improve their ability to sustain their well-being.

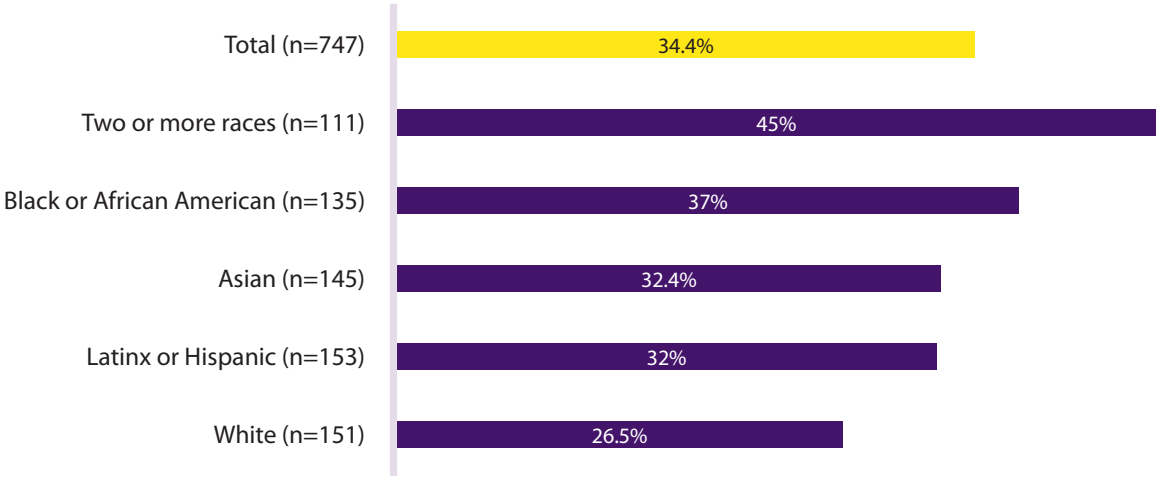
"Fear of infecting family members led some colleagues to move into motels. I chose to stay at home because I have a 2 year old. Fear of infecting family members was hard on me in March but as I got used to my decontamination regimen, I felt a bit better."

– Two or more races, hospital-based physician (internal medicine)

The COVID-19 pandemic added multiple stressors for U.S. health care workers, who were already experiencing high levels of burnout, stress, anxiety and depression.[11] More than half of physicians (51.3%) reported they were stressed and one-quarter indicated they were beginning to experience burnout (25.7%). At the time of this study, 8.5% reported being very or completely burned out. There were not notable differences across the racial groups. Latinx, Asian, and Black physicians are more likely than physicians who identify of two or more races and white physicians to have known a physician who passed away from COVID-19 infection.

In addition to stress and burnout, physicians report experiencing an onset or increase in anxiety due to the COVID-19 pandemic. Physicians who identify as two or more races and Black physicians report the highest rates of burnout onset or increase due to COVID-19 (45%; 37%). (Figure 3) Two-thirds of physicians (65.3%) report an increase in anxiety due to COVID-19 impacts. One in five physicians report an onset or increase in depression due to the impact of COVID-19. Physicians who identify as two or more races, and white physicians, are the most likely to experience this onset or increase (31.5%; 20.5%). In addition to burnout, anxiety and depression, a small but significant percentage of physicians (1.7%) have experienced thoughts of taking their own life due to the impacts of COVID-19.

Figure 3. Onset or increase in burnout



Q9.d: Due to the impact of COVID-19, I have experienced an onset or increase in the following - Burnout.

- *Native Hawaiian or Pacific Islander (n=19): 10 true*
- *American Indian or Alaska Native (n=33): 11 true*

"We not only have the financial stress related to this pandemic but also the stress of exposure. Physicians strongly need support groups especially pertaining to mental health issues in this time of stress."

– Asian, single-specialty clinic-based physician (radiology)

Two in five physicians report an onset or increase in work overload due to the impact of COVID-19. The increased demand on health care workers during the COVID-19 pandemic strained many workers' schedules, leaving many to worry about how to care for their own families. Three in 10 (29%) physicians reporting having concerns about childcare due to the impacts of COVID-19. Physicians who identify as two or more races and Asian physicians were more likely to experience an onset of these concerns (33.3%; 33.1%).

Encouragingly, more than two-thirds of physicians indicate that their professional values, particularly concerning the response to the COVID-19 pandemic, are aligned with those of their practice's administrative leaders. There were no significant differences between racial groups.

Access to resources and information about health equity can help improve patient care and help physicians implement improvements in their practices. Black, Asian, and Latinx physicians are more likely than white physicians to report that access to health equity tools that they can in fact implement would improve their practice (50.4%; 47.6%; 39.9% vs. 30.5%).

Sustaining well-being

Study participants were asked whether a series of items would improve their ability to sustain well-being. Just over half of all physicians report that access to financial resources for private practices and/or health centers would improve their ability to sustain their well-being. There were no significant differences across race/ethnicity.

"We need a lot more than we're getting in terms of support to mitigate burnout."

– Native American, hospital-based physician resident (internal medicine)

Black physicians are the most likely to report that access to support and fellowship opportunities with physicians who are like them demographically would improve their ability to sustain well-being. This is also a common belief among Asian physicians, particularly compared to their Latinx and white counterparts. Two in five physicians think that access to community and local resources for patients impacted by COVID-19 crisis would improve their ability to sustain their well-being.

Black physicians (55.6%) are the most likely to report that access to advocacy opportunities to confront health inequities related to the COVID-19 crisis would improve their ability to sustain their well-being. A greater proportion of Asian physicians (44.8%) and physicians who identify as two or more races (40.5%) hold this belief when compared to white physicians (29.1%).

Experiences of racially and ethnic minoritized and marginalized physicians

"This pandemic is exacerbating deeply seated inequities rampant throughout our health care system and bearing witness to such, day in and day out, inflicts moral injury on healthcare workers every day."

– Asian, Federally Qualified Health Center-based physician (family medicine)

The intent of this study is to gain a better understanding of the barriers, supports, and personal experiences of racially and ethnic marginalized and minoritized physicians during the COVID-19 pandemic. The majority of physicians surveyed (82.3%) agreed that in the U.S. the COVID-19 pandemic has highlighted deep-seated inequities in the health care system. Black and Asian physicians are the most likely to agree with this sentiment (93.3%; 87.6%).

Discrimination is sometimes a part of the experiences minoritized and marginalized physicians have in their workplace. Although the majority (85.3%) of physicians report they are never or rarely treated with less dignity and respect by *colleagues* due to their race/ethnicity, Black physicians are the most likely to report that they are sometimes treated with less dignity and respect due to their race/ethnicity (20%). The survey showed no notable differences among racial/ethnic groups in reports of frequent disrespectful treatment by colleagues.

One in five (20.5%) reported they are sometimes or more frequently treated with less dignity and respect by their *patients* because of their race/ethnicity. Black physicians are among the most likely to report this experience (28.2%). More than one in 10 physicians of racial/ethnic minoritized/marginalized backgrounds indicated that racial/ethnic jokes or harassment are directed to

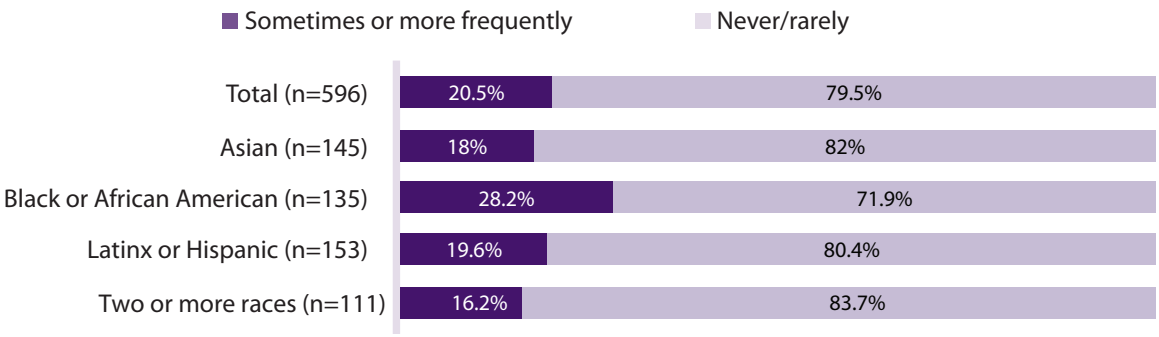
them at work sometimes or more frequently (12.4%). Nearly one in 10 (9.1%) of all physicians of minoritized/marginalized racial/ethnic identities indicated that they are sometimes or more frequently called insulting names related to their race, ethnicity or skin color at work.

Black physicians are the most likely to indicate that, sometimes or more frequently, their opinions are not considered because of their race or ethnicity (23%) compared to Asians (12.5%), Latinx or Hispanic (14.4%), or physicians who identify as two or more races (14.4%).

Changes in experiences with interpersonal racism since the onset of COVID-19

Since the onset of COVID-19, some physicians have experienced an increase in being treated with less dignity and respect *by their colleagues* because of their race/ethnicity. Black physicians are the most likely to report an increase in this experience (22.9%). Nearly one in five physicians of racially/ethnically minoritized/marginalized backgrounds report an increase in experiences of being treated with less dignity and respect *by their patients* due to their race since the onset of COVID-19 (18.1%). (Figure 4)

Figure 4. Treatment with less dignity or respect by patients



Q13.b: How often do you experience the following: I'm treated with less dignity and respect by my patients because of my race or ethnicity.

- *Native Hawaiian or Pacific Islander (n=19): 5 Never, 8 Rarely, 5 Sometimes, 1 Fairly often, 0 Very often*
- *American Indian or Alaska Native (n=33): 15 Never, 14 Rarely, 3 Sometimes, 1 Fairly often, 0 Very often*

More than one in 10 (11%) racially/ethnically minoritized/marginalized physicians reported an increase in racial/ethnic jokes or harassment directed toward them at work since the onset of COVID-19. There were no notable variations by race/ethnicity.

Since the onset of COVID-19, Black physicians are the most likely to experience an increase in their opinions not being considered because of their race or ethnicity (22.2% vs. 12.4% Asian; 11.2% Latinx/Hispanic; 12.6% Two or more races). In addition, nearly one in 10 (9.7%) physicians of racially/ethnically minoritized/marginalized backgrounds report an increase in being called insulting names related to their race, ethnicity or skin color at work.

Practice sustainability

Three in five physicians (59.6%) have lost confidence in the financial sustainability of their practice since the start of the COVID-19 pandemic. However, Latinx physicians are less likely than most others to report a drop in confidence (49.7% vs. 65.8% Two or more races; 65.6% white; 55.6% Black; 59.3% Asian).

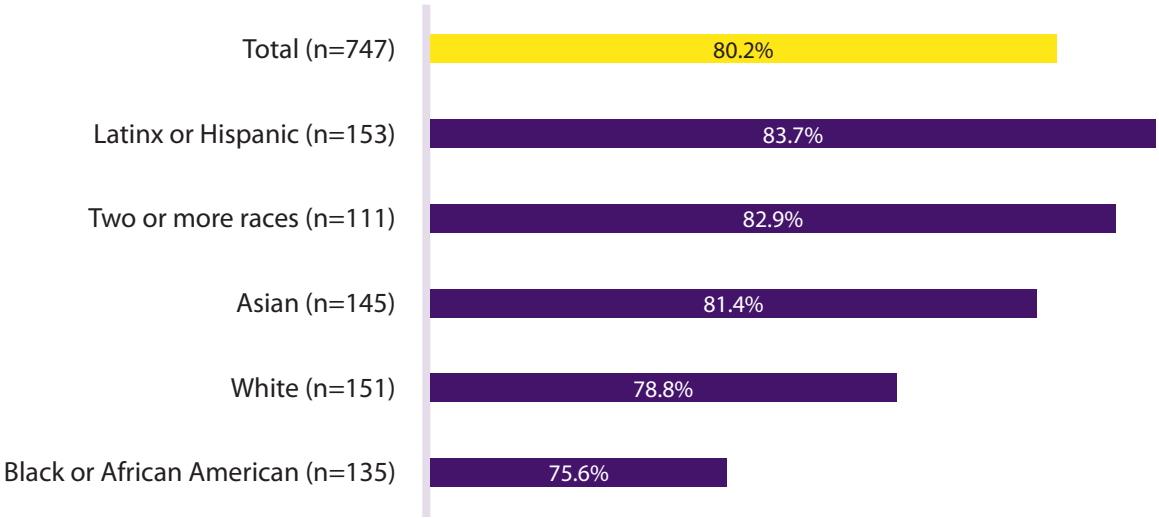
During the COVID-19 pandemic there were numerous federal, state and local programs established to offer financial assistance to businesses, including health care practices. At the time of the survey, the majority of the physicians surveyed had applied for emergency federal, state or local funds (72.6%).

Among private practice physicians who sought federal funding, the SBA Paycheck Protection Program was the program with the highest application rate (85.9%). The vast majority of those who applied to this program were successful. Nearly 50% of physicians who sought federal funding applied for assistance from the CARES Act Provider Relief Fund (49.4%) and almost one-third applied for the Medicare Accelerated and Advanced Payment Program (31.1%) and the Emergency Economic Injury Disaster Loan Emergency Advance program (27.5%).

Telehealth during the COVID-19 pandemic

The onset of the COVID-19 pandemic drastically increased the demand for telehealth services. In the first quarter of 2020 the number of telehealth visits increased by 50% over the first quarter of 2019.[29] Four out of five (80.2%) of the physicians in this study reported using telehealth to conduct patient care. (Figure 5)

Figure 5. Use of telehealth to conduct patient care



Although sentiments about telehealth varied among participants, most found the expanded use of telehealth to be beneficial to their patients and practice.

"Expanding telemedicine has provided a significant benefit to my patients."

– Hispanic or Latinx, HMO or managed care organization physician (family medicine)

"[There is] increased burnout due to the lack of support staff and increased burden on the physician doing telemedicine during this time."

– Asian, hospital-based physician (neurology)

"Telehealth services must be improved and defined for greater use in general not just a pandemic."

– Black or African American, single-specialty group practice physician (pediatrics)

"It has proven to be invaluable during this time, but also shown it will be useful in the future."

– Hispanic or Latinx, multi-specialty group practice physician (pediatrics)

"Telemedicine has been a positive addition to patient care. I hope it is here to stay with reimbursement that will allow practices to last."

– Black or African American, solo practice physician (gastroenterology)

Challenges using telehealth

Telehealth implementation presented challenges for some practices. Physicians were asked to identify a variety of challenges including communication, privacy, regulatory policies, pay parity and connectivity. More than one in 10 physicians who use telehealth experience challenges using real-time audio and telephone communications (13.2%). HIPAA-compliant telehealth platforms are important to providing secure remote patient care, but more than one in 10 physicians who use telehealth report a lack of access to HIPAA-compliant telehealth platform providers (12.4%).

Since telehealth was new to many physicians at the onset of COVID-19, navigating state regulations and telehealth policies was challenging for many. One-third (32.1%) of physicians who use telehealth experienced a lack of clarity in state policies and regulations regarding topics such as physical location of the provider, type of health encounter, billing/coding, and the Federal Tort Claims Act (FTCA) regulations.

During telehealth visits, connectivity issues using real-time audio-video communications was experienced by three in five physicians. Problems with connectivity issues was least common among Black (58.8%) and Latinx (58.6%) physicians (vs. 66.3% Two or more races; 63.9% white; 60.2% Asian). In addition, more than one-third of physicians who use telehealth report experiencing lack of technical support to troubleshoot problems (33.7%). This issue is more common among white physicians (41.2%), compared to Latinx (28.9%) and Black physicians (28.4%).

More than one in five physicians who use telehealth experience a lack of workflows and policies to implement telehealth in their private practice (23%). This issue is least common among Latinx physicians (11.7%). Nearly 40% of physicians who use telehealth reported experiencing lack of parity in payments for telehealth options that work for their patient population.

"Wish we had clearer guidelines … on workflow, distancing, legality, best practices, etc. We've had to create our own policies and rules somewhat blindly."

– Asian, solo practice-based physician (family medicine)

"One of the hardest things to deal with has been the CONSTANT change—in terms of clinic policies, telehealth, telehealth billing/coding, new medical knowledge regarding COVID-19, hospital rules/policies, changes with state policies regarding Covid."

– Asian, Federally Qualified Health Center-based physician (family medicine)

"Trying to provide comprehensive care during the pandemic has been challenging. Implementing telehealth was a trial and error process."

– Black or African American, hospital-based resident physician (obstetrics and gynecology)

More than one-third of physicians who use telehealth experience linguistic barriers with patients who speak a primary language other than English (34.4%). This issue is least common among Latinx physicians (23.4%).

More than two-thirds of physicians (67.9%) who use telehealth report patients' lack of ability, knowledge or resources to receive care via telehealth as a barrier. This issue is particularly common among physicians who identify as two or more races (73.9%) and Black physicians (73.5%).

"[COVID-19] has been an eye-opening experience, exposing breaks in the system and a lack of technology available to patients [creating unequal] telehealth capabilities."

– Black or African American, single-specialty group practice-based physician (nephrology)

Conclusion

"This has been a very stressful time, for many reasons. It has been difficult to balance the need to provide care for our patients and the need to care for ourselves, and the safety of our loved ones. With isolation, most of our usual support mechanisms have been lost. The focus has been completely shifted to our work and our patients, which has also been difficult with an illness that is not completely understood yet."

– Asian, hospital-based physician (pediatrics)

Findings from the survey illuminate the scope and particularities of racially and ethnic minoritized and marginalized physicians at the start of the COVID-19 pandemic. Over a year into the pandemic, the landscape of the crisis has changed in notable ways—vaccines are now available, some gaps in public health infrastructure have been addressed, infection rates are lower, and medical settings are no longer as overwhelmed as they initially were. It is important, however, to heed the valuable lessons of the not-so-distant past. The survey findings, if understood as a snapshot of the early days of the pandemic, highlight the several ways in which physician experiences are impacted during times of public health crises, and how these changes oftentimes disproportionally affect minoritized and marginalized physicians. The following themes emerged as characteristic of these shifts in physician experiences:

- The pandemic has exacerbated existing health inequities, particularly observed by Black and Asian physicians.
- For Black physicians the COVID-19 pandemic drove an increase in discriminatory treatment from colleagues or patients.
- Physician burnout remains a primary concern for all physicians, and there is an observed increase in the onset of anxiety, depression and increased work burden due to COVID-19.
- The threat of COVID-19 exposure or exposing one's family or household to COVID-19 was an ongoing concern for most physicians in the beginning of the pandemic.
- Many physicians lost confidence in the financial sustainability of their practices, despite many having received financial support from the government and the increased use of telehealth solutions for delivering patient care.
- The exponential growth of telehealth has been a positive development of the pandemic, but it came with many challenges that physician practices had to navigate along with uncertainty in policy and procedural changes.

Strengths and limitations of this study

- This study is one of the few to focus on the experiences of minoritized physicians of color amidst COVID-19.
- This study did not include a representative sampling approach and included physicians that had already agreed to participate in the Medscape Physician Panel Survey.

- Experiences amidst COVID-19 varied throughout the cycles of the pandemic. These insights reflect early experiences when COVID-19 was emerging in the U.S. and provide only a snapshot, rather than represent the ongoing experiences of physicians during this time.
- Experiences of burnout, racism and discrimination, and support are subjective and susceptible to varying interpretations.

The COVID-19 pandemic laid bare the instability and unpreparedness of our health care and public health infrastructure, and, in turn, the unique toll this took on physicians and other health care workers. Success of our late- and post-pandemic rebuilding, as well as our preparation for future public health crises, will depend largely on our ability to harness the lessons learned from the past year. Through COVID-19 and beyond, physicians and other health care workers will continue to need strong support from organized medicine. And among many other areas, this support will need to account for the many ways such crises manifest in the day-to-day realities of physicians—from racial discrimination and burnout to concerns about practice sustainability and navigating new technology.

As the pandemic continues, and into its aftermath, the American Medical Association will continue to be a trusted advocate and source of research, education and resources in support of all physicians. Given the differential experiences of minoritized and marginalized physicians, an intentional and targeted centering of equity in all efforts is crucial if we are to ensure that the health care system emerges stronger and more prepared than before the pandemic.

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