

ONE HUNDRED SEVENTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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March 24, 2022

Dr. Megan L. Ranney
Academic Dean, School of Public Health
Brown University
121 South Main Street
Providence, RI 02903

Dear Dr. Ranney:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Wednesday, March 2, 2022, at the hearing entitled “Lessons from the Frontline: COVID-19’s Impact on American Health Care.” I appreciate the time and effort you gave as a witness before the Committee on Energy and Commerce.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from certain members of the Committee. In preparing your answers to these questions, please address your response to the member who has submitted the questions in the space provided.

To facilitate the printing of the hearing record, please submit your responses to these questions no later than the close of business on Thursday, April 7, 2022. As previously noted, this transmittal letter and your responses, as well as the responses from the other witnesses appearing at the hearing, will all be included in the hearing record. Your written responses should be transmitted by e-mail in the Word document provided to Austin Flack, Junior Professional Staff, at austin.flack@mail.house.gov. To help in maintaining the proper format for hearing records, please use the document provided to complete your responses.

Dr. Megan L. Ranney
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Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Austin Flack with the Committee staff at (202) 225-2927.

Sincerely,

A handwritten signature in blue ink that reads "Frank Pallone, Jr." in a cursive style.

Frank Pallone, Jr.
Chairman

Attachment

cc: The Honorable Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

The Honorable Diana DeGette
Chair
Subcommittee on Oversight and Investigations

The Honorable H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and Investigations

Attachment—Additional Questions for the Record

**Subcommittee on Oversight and Investigations
Hearing on
“Lessons from the Frontline: COVID-19’s Impact on American Health Care”
March 2, 2022**

Dr. Megan L. Ranney, Academic Dean, School of Public Health, Brown University

The Honorable Diana DeGette (D-CO)

- 1. How have chronic and acute workforce shortages impacted the ability of our nation’s health system to respond to the current pandemic and what are the implications of these shortages as the health system seek to remedy the effects of deferred care during the pandemic?**

Subcommittee-member DeGette, both chronic and acute workforce shortages affect our ability to respond to not only the Covid-19 pandemic, but also other healthcare needs. As described in my original testimony and elaborated below, some shortages existed prior to the pandemic - but our workforce has been universally, negatively impacted by the pandemic.

Over the last two years, burnout in my own specialty of emergency medicine has increased from 43 to 60 percent; rates of moral injury have risen; 75 percent of healthcare workers reported symptoms of depression in winter 2020-2021; and both objective and subjective reports of workplace violence increased in conjunction with Covid-19 cases.^{1 2 3 4} In response, 18 percent of healthcare workers have quit; depending on the source, between 1/3 and 2/3 of nurses report that they’re planning to leave bedside care.^{5 6 7} These staffing shortages not only impact hospital systems, but also every other part of the healthcare system - home healthcare aides, nursing home staff, and more.

Despite the current lull in cases, the number of healthcare workers is not recovering fast enough. A recent Kaiser Family Foundation analysis shows that, as of February 27th, 2022, 29

¹ https://www.medscape.com/slideshow/2022-lifestyle-burnout-6014664?uac=85323SN&faf=1&sso=true&impID=3962382&src=wml_physrep_220122_Burnout2022

² <https://www.cnn.com/2020/11/18/opinions/health-care-workers-covid-19-burnout-ranney-gold/index.html>

³ <https://link.springer.com/article/10.1007/s11606-021-07252-z>

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8457914/>

⁵ <https://morningconsult.com/2021/10/04/health-care-workers-series-part-2-workforce/>

⁶ <https://www.aha.org/fact-sheets/2021-11-01-data-brief-health-care-workforce-challenges-threaten-hospitals-ability-care>

⁷ <https://www.beckershospitalreview.com/workforce/66-of-nurses-say-pandemic-has-made-them-consider-leaving-profession.html>

percent of nursing facilities reported having staff shortages.⁸ This is slightly improved from the 32 percent reported in January 2022, but still dramatically higher than the 19 percent vacancy rates reported in February and March of 2021 (Note: Nursing facilities only began reporting this data in May 2020).⁹ In Pennsylvania, Allegheny Health Network has had three times as many nurse openings this March compared to the same time last year.¹⁰ Nurses who had been with the system left to become travel nurses for higher pay, leaving the healthcare system with a myriad of open spots that it, in turn, has to fill with travel nurses itself. This, in itself, is nothing more than a stopgap measure, as travel nurse rates place considerable strain on health systems' finances, which in turn may cause other strains in the system and further exacerbate staffing shortages down the line.

These chronic and acute issues have culminated in a healthcare system that does not serve patients' needs. We've had to increase wait times, stop non-emergent surgeries, and delay preventive care - all of which have significant direct impacts on patients. The average emergency department wait time in the United States increased three-fold during the pandemic, from roughly 22.4 minutes pre-pandemic to 62 minutes in 2021.¹¹ Due to staffing shortages, many hospitals across the country have had to make the difficult decision to prioritize emergency care over non-emergent operations.^{12 13 14} Many patients have been unable to much-needed undergo procedures such as colonoscopies, heart surgeries, and brain surgeries. In a February 2022 CVS Health-Harris Poll National Health project, researchers found that a quarter of adults had treatments or surgeries delayed, and that a fifth of adults had doctors who stopped practicing entirely.¹⁵ The lack of adequate home healthcare services restricts nursing homes' ability to discharge patients home, which in turn causes a lack of nursing home space, which then worsens

⁸ <https://www.kff.org/coronavirus-covid-19/issue-brief/nursing-facility-staffing-shortages-during-the-covid-19-pandemic/>

⁹ <https://www.kff.org/coronavirus-covid-19/issue-brief/nursing-facility-staffing-shortages-during-the-covid-19-pandemic/>

¹⁰ <https://www.wsj.com/articles/covid-19-hospitalizations-are-down-but-nurse-shortages-stretch-hospitals-11646217000>

¹¹ <https://health.usnews.com/health-care/patient-advice/articles/2018-10-26/why-do-i-have-to-wait-so-long-to-be-seen-in-the-emergency-rooml>

¹² <https://www.nbc15.com/2022/01/06/madison-health-systems-postpone-non-emergent-surgeries-amid-peak-capacity/>

¹³ <https://www.wglt.org/local-news/2021-12-30/pritzker-urges-hospitals-to-delay-non-emergency-surgeries-as-mclean-county-sets-new-covid-records>

¹⁴ <https://www.fiercehealthcare.com/hospitals/hospitals-postpone-elective-surgeries-amid-omicron-surge>

¹⁵ <https://www.axios.com/the-health-worker-shortage-is-starting-to-get-real-for-americans-6b5775fa-49c6-45c6-a557-ebc03c442c2b.html>

hospital overcrowding.¹⁶ We've also seen dramatic increases in boarding for mental health emergencies, and decreases in availability of outpatient behavioral health care.^{17 18}

¹⁶ <https://www.forbes.com/sites/howardgleckman/2022/02/17/how-nursing-home-staff-shortages-are-hurting-hospital-care/?sh=615121e237eb>

¹⁷ <https://www.usnews.com/news/health-news/articles/2022-01-07/emergency-departments-a-frayed-safety-net-for-behavioral-mental-health>

¹⁸

<https://www.thenationalcouncil.org/news/demand-for-mental-health-and-addiction-services-increasing-as-covid-19-pandemic-continues-to-threaten-availability-of-treatment-options/>

The Honorable H. Morgan Griffith (R-VA)

1. Do you believe that health systems benefit from the use of digital health technologies, like remote patient physiologic monitoring (RPM), to help clinicians care for patients and relieve stress on nursing staff?

Subcommittee-member Griffith, during the pandemic, we saw a quick pivot to the use of telehealth and digital health, because we simply had no other choice. Utilization of digital health technologies skyrocketed as healthcare systems quickly adapted to social distancing, self-quarantine, and lockdown policies.

A December 2021 HHS study found that Medicare Fee-For-Service telehealth visits increased 63-fold during the pandemic; from 840,000 in 2019 to 52.7 million in 2020.¹⁹ Expanding the scope beyond just Medicare-related telehealth services, we saw that, in general, telehealth usage was 38 times higher than pre-pandemic rates - with a 78-fold peak in April 2020.²⁰ Since April 2020, telehealth has comprised roughly 17 percent of all outpatient/office visits, with variations in uptake by specialty.²¹ From April 2020 to July 2021 for example, telehealth utilization in psychiatry comprised 50 percent of all psychiatric sessions while telehealth utilization for ophthalmology comprised only two percent of all ophthalmology sessions.²² Growth of remote patient monitoring - a part of digital health that allows tracking of vital signs and other physiologic measures at home - has grown by a third (from 29.1 million U.S. users in 2020 to 39.3 million users in 2021) over the course of the pandemic, and is expected to increase to 53.1 million users by 2023.²³ Use of other forms of digital health has grown, as well.

Preliminary data suggests that telehealth and digital health innovations successfully de-stressed hospitals and improved care of patients at home during the worst of the pandemic. For example, Northwell Health used Conversa's automated chat system to provide Covid test results and to provide "quarantine chats" for recently diagnosed patients; Northwell estimated that this system reduced hospital labor needs by 20 to 30 percent.²⁴ ²⁵ Similarly, a 2021 study on Penn Medicine's *COVID Watch* system - an automated text messaging system that helped monitor patients' Covid-19 symptoms at home - found that this system reduced mortality rates,

¹⁹ <https://aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf>

²⁰ <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

²¹ <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

²² <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

²³ <https://www.insiderintelligence.com/insights/remote-patient-monitoring-industry-explained/>

²⁴ <https://coronavirushealthchats.com/>

²⁵ <https://www.youtube.com/watch?v=3cCacIpAQSU>

improved equity in healthcare delivery, and was experienced positively by hospital nurses and support staff.^{26 27}

This increase in use of digital and telehealth was facilitated, of course, by changes in policies and payment rules. The March 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act enabled Medicare providers to be paid at the same rates for telehealth sessions as in-person visits.²⁸ The CARES Act also removed Medicare policies that had restricted telehealth utilization to only rural providers, thereby enabling providers in more urban areas to offer digital health services as well.²⁹

Preliminary data suggests that patients and providers want telehealth and digital health to stay. They report that it breaks down the social, economic, and geographic barriers to healthcare - especially for patients who have difficulty with transportation, stigma, or limited work flexibility.³⁰ Patients report being satisfied with telehealth services, with 40 percent of surveyed consumers in a July 2021 McKinsey study reporting that they wanted to continue to use telehealth (a drastic increase from the 11 percent pre-pandemic).³¹ In the same McKinsey study, 58 percent of physicians responded that they viewed telehealth more favorably than they did before the pandemic.³²

However, it is critically important to maintain the factors that have allowed these innovations to thrive. Flexibilities in insurance cost-sharing and billing for telehealth services enabled telehealth visits to be billed the same as in-person visits.³³ In addition, telehealth implementation was expanded from solely rural healthcare providers to more urban providers while also enabling remote care to be practiced across state lines - allowing telehealth coverage to encompass larger swaths of the population than ever before.³⁴ These regulatory changes were essential to the successes of telehealth and digital health in adapting to Covid-19, and we must continue to maintain such a flexibility to better bolster our healthcare system for years to come.

²⁶ <https://www.pennmedicine.org/news/news-releases/2021/november/automated-texting-system-saved-lives-weekly-during-first-covid-surge>

²⁷ <https://www.acpjournals.org/doi/10.7326/M21-2019>

²⁸ https://www.aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf?_ga=2.263152908.1288477598.1638811694-1417522139.1637192937

²⁹ https://www.aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf?_ga=2.263152908.1288477598.1638811694-1417522139.1637192937

³⁰ [https://www.npjjournal.org/article/S1555-4155\(20\)30515-8/fulltext](https://www.npjjournal.org/article/S1555-4155(20)30515-8/fulltext)

³¹ <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

³² <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

³³ <https://aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf>

³⁴ <https://www.hhs.gov/coronavirus/telehealth/index.html>

2. Do you think that the appropriate use of medical technology to safely and reliably monitor patients can help reduce burnout in our healthcare workforce?

Subcommittee-member Griffith, medical technology has a huge potential impact on safety, reliability, and equity of healthcare access - with two caveats.

First, it has to be designed and implemented in a way that's not only safe and private for patients, but also safe and usable for the provider. There are safety and health risks to poorly designed digital health. For example, one study reports that as many as $\frac{3}{4}$ of commercially available applications share patient data with 3rd parties without consent.³⁵ Another study reports that only 34% of commercially available digital health applications provide accurate symptom diagnosis.³⁶ The FDA's creation of their Digital Health Center of Excellence is an important step towards improving patients' and providers' trust in digital health and telehealth, but more is needed. Similarly, provider experience needs to be considered. EHRs' poor design are reported to have enhanced risk of physician burnout; adding new digital technologies to existing cognitive and time overload would potentially worsen providers' burnout.^{37 38}

Second, medical technology needs to be designed in ways and for conditions that reduce rather than worsen disparities in patient health outcomes. While about 77 percent of Americans in 2021 have broadband connections at home, access heavily varies across demographics.³⁹ For instance, in 2021, about 80 percent of white households had access to broadband compared to only 65 percent of Hispanic households.⁴⁰ Similarly, 92 percent of households with an annual household income of \$75,000 or greater reported having access to broadband, compared to only 57 percent in households with annual household incomes less than or equal to \$30,000.⁴¹ In comparison, there are few disparities in cellphone access: as of April 2021, 97 percent of all Americans (regardless of income, age, race, ethnicity, or urbanicity) report having a cell phone, and 85 percent have smartphones (again, regardless of income, age, race, ethnicity, or urbanicity).⁴² Not surprisingly, systems designed for cellphones, social media, or text-messaging (particularly if available in multiple languages or for low-literacy populations) can help lessen disproportionate health outcomes. In fact, this was precisely what had been done in the pandemic. The March 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act allowed audio-only telehealth services through FFS Medicare during the pandemic, which

³⁵ <https://www.hcinovationgroup.com/population-health-management/patient-engagement/article/21158201/health-data-privacy-and-thirdparty-apps-reframing-the-conversation>

³⁶ <https://www.bmj.com/content/351/bmj.h3480>

³⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5559244/>

³⁸ <https://pubmed.ncbi.nlm.nih.gov/35062195/>

³⁹ <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>

⁴⁰ <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>

⁴¹ <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>

⁴² <https://www.pewresearch.org/internet/fact-sheet/mobile/>

resulted in a 100-fold uptake from 2019 to 2020.⁴³ Similarly, text-message-only vaccination sign-up systems increased vaccination rates by 30%.⁴⁴

In sum: yes, if digital health and telehealth technologies are not designed well; evaluated well; and incorporated into existing workflows, they can have a tremendous positive impact for patients and clinicians alike.

⁴³ <https://aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf>

⁴⁴ <https://www.nature.com/articles/d41586-021-02043-2>