

**HOST:** The COVID-19 pandemic took a major toll on the U.S. health care system. In a new [report](#) released on September 28, data from the National Ambulatory Medical Care Survey were used to examine how COVID-19 impacted physician practices around the country.

Joining us to discuss that new study is Zach Peters, a health statistician with the NCHS Division of Health Care Statistics.

**HOST:** What did you hope to achieve with this study?

**ZACK PETERS:** This study was intended to produce nationally representative estimates of experiences at physician offices. So it's a physician level study and we really wanted to highlight some of the important experiences physicians had due to the pandemic, such as shortages of personal protective equipment. And it highlights whether testing was common in physician, whether physicians were testing positive or people in their office were testing positive for COVID-19 given that they were on the front lines of helping to treat patients. So we really wanted to touch on a broad set of experiences faced by physicians. This certainly isn't the first study to assess experiences and challenges faced by health care providers during the pandemic but often times those other studies are limited to specific facilities or locations or cohorts and can't be generalized more broadly. So a big benefit of a lot of the NCHS surveys is that we can produce nationally representative estimates and this study is an example of that.

**HOST:** And what kind of impact has the pandemic had on physicians and their practices?

**ZACH PETERS:** In having done quite a bit of literature review for this project it became pretty clear - and I think just listening to the news you sort of understood a lot of the impact. A lot of research has shown that that health care providers experienced a lot of burnout or fatigue. There was a lot of exposure and what not to COVID-19. Long hours... So there's a lot out there in the literature that sort of cites some of the challenges. What we really, what this study highlighted was it was the level of shortages of personal protective equipment that were faced. About one in three physicians said that they had they had experienced personal protective equipment shortages due specifically to the pandemic. The study highlighted that a large portion of physicians had to turn away patients who were either COVID confirmed or suspected COVID-19 patients. And I think the last thing this really helped to show was the shift in the use of telemedicine due to the pandemic. So prior to March of 2020 there were less than half of physicians at physician offices who were using telemedicine for patient care and that number, that percentage jumped to nearly 90% of office based physicians using telemedicine after March of 2020. So this is sort of adding to the broader literature with some nationally representative estimates of experiences that providers had due to and during the pandemic.

**HOST:** So what sort of personal protective equipment was most affected during this study?

**ZACH PETERS:** It's a good question. The way in which we asked the questions about shortages of "PPE" - I'll call it I guess - don't allow us from really untangling that question. We asked about face mask shortages, N-95 respirator shortages specifically, but then the second question we asked sort of grouped isolation gowns, gloves, and eye protection into one question. So physicians didn't really have the chance to check off specifically what they had shortages of other than face masks. So it's somewhat hard to untangle that but these results show that about one in five physicians faced N-95 respirator, face mask shortages due to the pandemic and a slightly higher - though we didn't test significance in this

in this report - a slightly higher percentage, about 25% of physicians, had shortages of isolation gowns, gloves, or eye protection or some combination of those three.

**HOST:** And you say that nearly four in 10 physicians had to turn away COVID patients. Now, was this due to a high volume of patients or a lack of staff?

**ZACH PETERS:** Again that's another great question. I think unfortunately we weren't able to ask a lot of these really interesting follow-ups to some of these experiences. We didn't get to pry physicians on some of the reasons why they had these experiences, including why they had to turn away patients. So unfortunately we're not able to answer some of the "why" questions that we would like with these data.

**HOST:** And do you have any data on where these patients were referred to, the ones that were turned away? Do you have any information on that?

**ZACH PETERS:** Again unfortunately this specific question wasn't something that we asked in the set of new COVID questions introduced in the 2020 NAMCS we did ask a question about whether physicians who had to turn away patients had a location where they could refer COVID-19 patients. So there are a few reasons - we haven't assessed that measure in this work so far, but it's certainly an area we can dig into more especially as we have additional data from the 2021 NAMCS and can try to combine over time.

**HOST:** Does it look like the shift to telemedicine visits is here to stay?

**ZACH PETERS:** The broader literature sort of highlights that these changes are broad and likely indicate that physician offices and different health care settings have built up the infrastructure to allow for telemedicine use in the future. And so it'll be interesting to see if, as waves of COVID or other infections ebb and flow, if we see that the use of telemedicine kind of ebbs and flows along with that. But I think the option for telemedicine is something that health care settings won't get rid of now that they have them.

**HOST:** Sticking with the topic of telemedicine – did physicians list any benefits to telemedicine visits other than limiting exposure to COVID-19?

**ZACH PETERS:** The set of questions that we asked physicians were limited in scope and we didn't really have that level of follow-up. There are some additional questions about telemedicine use that we asked and hope to be able to dig into further. We asked physicians what percentage of their visits they had used telemedicine and some other questions about just kind of the scope of use, but not necessarily the benefits that they felt they received due to using telemedicine.

**HOST:** Is it possible that you might be getting some data on these questions in the future?

**ZACH PETERS:** These questions were introduced part way through the 2020 survey year, so we were only able to ask half of our physician sample about these experiences in the 2020 survey. But we kept the exact same set of COVID related questions in the 2021 NAMCS survey year and so we're working to finalize the 2021 data and hope to be able to look into some of the more nuanced aspects of this that we might be interested in, such as trends over time if we combine years. So we might be able to assess differences in experiences based on the characteristics of physicians. So yeah, we asked these specific questions in the 2021 survey year so hope to have some additional information to put out for folks.

**HOST:** You were talking a little bit about the fact that you made changes to the National Ambulatory Medical Care Survey, which this study is based on, which allowed you to collect more complete data during this period. Could you again sort of go over what sort of changes you made?

**ZACH PETERS:** Yes the NAMCS team with the Division of Health Care Statistics, we made changes to a few of our surveys partway through the 2020 survey year. Partly out of necessity and partly out of just interest in an unfolding public health crisis. So for NAMCS two big changes were made. The first was that we had to cancel visit record abstraction at physician offices. So historically we have collected a sample of visit records or encounter records from physicians to be able to publish estimates on health care utilization at physician offices due to sort of wanting to keep our participants safe, our data collectors safe, and patients safe. We cancelled abstraction partly into the 2020 survey year so that was an important change in that we won't be able to produce visit estimates from the survey year. But the other change that we made - I think I alluded to it earlier - was that partway through the survey year we introduced a series of COVID-19 related questions, which is what this report summarizes. And the reason it came partway through the survey year is simply due to the fact that adding a series of new questions to a national survey takes a lot of planning and a lot of levels of review and approval. So this is partly why we were only able to ask these questions of half of our survey sample.

**HOST:** Are there any other changes forthcoming in the NAMCS or for that matter any of your other health care surveys?

**ZACH PETERS:** Historically there have been a few different types of providers that have been excluded from our sample frame. We didn't include anesthesiologists working in office-based settings, radiologists working in office-based settings. So we had a few different types of promoting specialties that we couldn't speak to in terms of their office characteristics and their care that they provided. In future years we are hoping to expand to include other provider types that we haven't in the past so I think that's the big change going forward for the traditional NAMCS. We also have a kind of a second half of NAMCS that looks at health centers in the U.S., and the big change for that survey in the 2021 survey years that we are in is instead of abstracting a sample of visit records, are we are starting to collect electronic health record data from health centers. So that's another a different portion of NAMCS but those are a couple of the big changes at high level that are implementing in NAMCS.

**HOST:** What would you say is the main take-home message you'd like people to know about this study?

**ZACH PETERS:** I think the main strength of using data from NCHS in general is that many of our surveys allow for nationally representative estimates and NAMCS is the same in that regard. We sampled physicians in a way that allows us to produce nationally representative estimates. And so I think this study highlights how we're able to leverage our surveys in a way that other studies that you might see in the literature can't in that they're more cohort-based. So I think another important aspect of this is just that it highlights an example of some of the adaptations that DHCS end and NCHS more broadly, some of the adaptations that we made during the pandemic to better collect data and disseminate data. And so outside of the topic being hopefully important to understand how physicians nationally experienced various things related to the pandemic, this highlights some of the ways in which NCHS was able to remain nimble during a public health crisis.

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**HOST:** On September 1, NCHS released a new [report](#) looking at emergency department visits for chronic conditions associated with severe COVID illness. The data, collected through the National Hospital Ambulatory Medical Care Survey, were collected during the pre-pandemic period of 2017-2019 and serve as a useful baseline, since it is well established that chronic conditions increase the risk of hospitalization among COVID patients. The [report](#) showed that during this pre-pandemic period, hypertension was present in one-third of all emergency department visits by adults, and diabetes and hypertension were also present together in one-third of these visits.

On the 7<sup>th</sup> of September, NCHS released a [study](#) focusing on mental health treatment among adults during both the pre-pandemic and pandemic period, 2019 to 2021. It has been documented by the Household Pulse Survey and other studies that anxiety and depression increased during 2020 and the beginning of 2021, and this new study focuses on the use of counseling or therapy, and/or the use of medication for mental health during this period. The study found there was a small increase in the use of mental health treatment among adults from 2019 to 2021, with slightly larger increases among non-Hispanic white and Asian people.

Also this month, NCHS updated two of its interactive web dashboards, featuring data from the revamped National Hospital Care Survey. On September 12, the [dashboard](#) on COVID-19 data from selected hospitals in the United States was updated, and two days later the dashboard featuring data on hospital encounters associated with drug use was updated.

On the same day, September 14, NCHS released the latest [monthly estimates](#) of deaths from drug overdoses in the country, through April of this year, showing 108,174 people died from overdoses in the one-year period ending in April. This death total was a 7% increase from the year before. Over two-thirds of these overdose deaths were from fentanyl or other synthetic opioids.

On September 29, the latest [infant mortality data](#) for the U.S. was released, based on the 2020 linked birth and infant death file, which is based on birth and death certificates registered in all 50 states and DC.

Finally, September is Suicide Prevention Month, and on the final day of the month, NCHS released its [first full-year 2021 data](#) on suicides in the country. For the first time in three years, suicide in the United States increased. A total of 47,646 suicides took place in 2021, according to the provisional data used in the report. The rate of suicide was 14 suicides per 100,000 people.

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