Past Event: 2023 APRN Roundtable - Evaluating the Impact of Executive Orders Lifting Restrictions on Advanced Practice Registered Nurses during the COVID-19 Pandemic Video Transcript

Event
2023 APRN Roundtable

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Presenter
Brendan Martin, PhD, Director, Research NCSBN

Hello. My name is Brendan Martin, and I'm the director of NCSBN's research department. I'm here today to discuss the results of a recently completed study assessing the impact of executive orders that waived certain practice restrictions on APRNs during the COVID-19 pandemic and their subsequent effects on direct patient care.

You'll likely know my two co-investigators as well. Michelle Buck is our senior APRN policy advisor, and Elizabeth Zhong is our senior research scientist in the research department. For today's presentation, we are going to cover a few major points. To start, I'll provide a bit of background on the study to give you all the necessary context for why we wanted to pursue this study in the first place and what we hope to achieve.

I'll then share a brief overview of the study methodology so that you are clear on how we selected our sample, went about collecting the data, and how we analyzed the responses. Then we'll get into the meat of the presentation in which I will cover the results in detail before wrapping things up with a few key takeaways. As always, I'll attempt to leave ample time at the end for any follow-up questions or necessary clarification. So please feel free to submit your questions to the Q&A box as I go through the material.

Following the onset of the COVID-19 pandemic, many states that restricted APRN practice in some form prior to 2020 chose to temporarily suspend their collaborative practice agreement requirements, either in part or in full, the executive order or legislative or regulatory action.

Like the state-based supervisory arrangements, the lived reality of these waivers across impacted states largely remains unclear and likely inconsistent from one jurisdiction to another. For instance, limited evidence has emerged about how such waivers ultimately expanded patient access or affected financial

requirements, how provisions influence the extent and frequency of interprofessional collaboration, and how telehealth usage changed, if at all.

In addition, how these resulting changes impact APRN discipline rates is unknown. To augment the literature on these important topics, NCSBN designed a cross-sectional study to identify APRN practice trends across the United States during the COVID-19 pandemic. The primary research question driving this study was, what is the impact of the executive orders lifting restrictions on Advanced Practice Registered Nurses' direct patient care during the COVID-19 pandemic?

Two primary objectives provided the framework for this inquiry. First, we wanted to assess summary discipline trends comparing overall APRN discipline rate and breakouts by jurisdiction from 2019 through 2021. The analysis includes a baseline snapshot prior to the pandemic, as well as two full years after the pandemic onset, to determine the safety profile of APRNs adjusting their practice in light of the issuance of temporary waivers in many jurisdictions.

With that discipline context established, we then wanted to determine the patient care implications of the executive orders lifting restrictions on APRNs. Regarding the methodology, as I mentioned, this was a cross-sectional observational study. The proposed study utilized a two-phased approach. The first was the survey of APRNs practicing across the U.S.

This confidential survey was designed to assess the extent to which temporary practice waivers during COVID-19 affected APRN practice and the resulting implications for patient access. The second phase of the study linked these response trends with discipline data to examine issues pertaining more directly to patient safety.

Given our dual interest in practice and safety, we leveraged NCSBN's Nursys database for the study. For those of you who are not familiar, Nursys is a national database for verification of licensure, discipline, and practice privileges for all nurses licensed in participating boards of nursing. We focused on APRNs in participating Nursys jurisdictions to ensure access to both the most up-to-date contact and licensure information, but also to establish a baseline understanding of disciplinary trends.

As of 2020, there were a total of 27 states that shared their APRN data through the Nursys database. These states are colored dark gray on the map you see on this slide. As you will note, while not a complete picture of the U.S., the Nursys database gave us good coverage across the country and strong geographic diversity. While these 27 states constituted the overall sample for our survey, we also drilled down further to highlight observed discipline trends for a four-state subset to better examine the safety of APRN care.

These jurisdictions were Maine, West Virginia, Kentucky, and Louisiana. These four states were chosen based on the results of our active monitoring of executive orders or legislative or regulatory actions across the U.S., which indicated these four locales had waived significant practice restrictions due to the pandemic. Thus, both the overall discipline trends and detailed breakouts by these four states are provided in this presentation.

For the analysis, summary pre- and post-pandemic disciplinary trends comparing the overall APRN discipline rate and breakouts by jurisdiction are presented from 2019 through 2021. Findings associated with the four-state subset are presented graphically. The survey component of the study was administered using Qualtrics. A descriptive summary of the 27-state APRN sample is included for context.

Univariable and multivariable binary logistic regression model results are then used to illustrate the significance of observed trends. The primary dependent variable for the models employed in this study was dichotomized as a general yes/no outcome where one indicated an impact of the executive order waiving certain practice restrictions and zero indicated no impact.

A stepwise approach was used to identify issues of multicollinearity between potential predictors in the multivariable model. The final composition of the multivariable model was determined to achieve the most parsimonious and informative combination of available characteristics across all domains. To facilitate the Nursys discipline case review, NCSBN researchers closely examined all discipline records reported across the 27 jurisdictions to both quantify the volume and determine the nature of any documented APRN disciplinary action.

We found APRN discipline rates remain largely unchanged during the analysis period. Overall, APRN discipline rates nationally have historically been and remained low before and after the onset of the COVID-19 pandemic at approximately 0.1%. As mentioned prior though, NCSBN actively monitored executive orders and legislative or regulatory actions across the United States during the early stages of the pandemic.

Through this review, NCSBN identified 4 of the 27 states included included in the survey sample as particularly compelling cases or examples of the safety of APRN practice during the period. The figure you see before you depicts APRN discipline rates from 2019 to 2021 for 4 jurisdictions: Kentucky, Louisiana, Maine, and West Virginia.

In each instance, an executive, legislative, and/or regulatory action waiving significant practice restrictions prior to the pandemic provided the lens through which the impact of pseudo-full practice authority could be investigated in these locales. As you can see, discipline rates in Kentucky, Louisiana, Maine, and West Virginia remain largely unchanged during the three-year period.

Overall, the total number of APRN discipline cases reported to Nursys decreased from 66 in 2019 to 55 in 2021 across these 4 states, despite the total number of APRN licenses increasing 20% during the same period. APRN discipline rates remained around 0.2% in this 4-state subset throughout the analysis window.

Even more importantly, this trend held for disciplinary cases involving more serious infractions as well. For instance, the incidence of error in prescribing, dispensing, or administering medicine or sedation fell from 28 in 2019 to 16 in 2021. Similarly, the incidence of unauthorized prescription of medication fell from 22 in 2019 to 15 in 2021, and practice beyond the scope of practice remain constant at 3 during the 3-year period.

So, right off the bat, this sets a good baseline understanding of comparable year-to-year patient safety. The survey component of this study was initially fielded on December 8th, 2020. We scheduled weekly reminders to nonresponders running through January 11th, 2021. This confidential online survey included 42 items and was administered using Qualtrics.

Questions were divided into three domains: demographic and professional information, practice, and telehealth. Prior to final dissemination, the instrument was reviewed for face validity through coordination with experienced nurse regulators and approved by the Western Institutional Review Board. Let's now turn our attention to the survey results themselves.

The overall survey response rate was approximately 14%, with a total of 16,699 APRNs located across 27 states responding. Assuming that nonresponse is random at the 95% confidence level, the maximum margin of error for the findings from these respondents is about 0.8%. So, obviously, we were able to achieve a high level of precision with our reported results.

On average, respondents were 50 years old and predominantly female, white, and non-Hispanic. Approximately 88% indicated they were actively engaged in direct patient care, and just over 2/3 resided in a state that explicitly restricted some level of APRN practice prior to the onset of the pandemic in the United States.

Around 40% of those not providing direct patient care reported being furloughed or losing their job or retiring early or otherwise leaving their place of employment specifically due to COVID-19. About 80% of the sample identified as nurse practitioners, followed by 13% CRNA, 4% CNS, and 3% CNMs.

A plurality of respondents were certified in family across the lifespan care. Primary care was the most common clinical practice area at about 20% of the sample, and over 50% of respondents reported working in some manner of hospital setting. Of that cohort, equal proportions reported working inpatient, outpatient, or both. And finally, a plurality of respondents reported practicing in an urban area, with one-sixth of APRNs working in a setting designated as a health provider shortage area.

Two-thirds of all respondents reported having at least one collaborative practice agreement in the year prior to COVID-19, while most respondents reported having a median of one agreement with one supervising physician. At the extreme, responses range up to 82 agreements and 100 supervisors. Respondents identified the signature or co-signature requirement as well as prescribing restrictions and mandated chart reviews as the most pronounced restrictions associated with their collaborative practice agreement.

A majority of APRNs worked in the same office or facility, but if not in the same location, respondents reported only working a median of 15 miles from their supervising provider. As a result, minimum distance requirements did not emerge as a significant obstacle for most APRNs in this study. The median fee to establish a collaborative practice agreement was $150.

However, over 60 respondents reported paying in excess of $10,000 to establish their collaborative practice agreement. Similarly, the median annual fee to maintain a collaborative practice agreement was $175, but shockingly or perhaps not so shockingly, depending on your experience with such arrangements, over 100 respondents reported paying in excess of $10,000 a year to maintain their collaborative practice agreement.

Less surprising, most respondents indicated the COVID-19 pandemic affected their direct patient care. Approximately one-third of respondents were reassigned to or changed positions or volunteered in a new practice setting, clinical practice specialty area, or to treat COVID-19 patients specifically. Roughly 20% of respondents witnessed a significant decrease in their patient volume initially following the onset of the pandemic.

One in five participants also reported they expanded the geographic boundaries of their direct patient care, with the most dramatic increase coming in the form of increased outreach to patients in rural areas. Before the pandemic, 27% of APRN care was reported in rural areas, but after, the rate climbed to 36%.

Prior to the pandemic, only 53% of respondents indicated their supervising provider conducted regular chart reviews, and 9% indicated their supervising provider never conducted chart reviews. So as the chart before you illustrates, coordination between APRNs and their supervising providers was not always regular, even before COVID-19.

As further context, prior to the onset of the pandemic, 92% of respondents indicated their clinical practice area and that of their supervising physician were in alignment. So, perhaps due to those overlapping skillsets, the proportion of respondents indicating they referred patients to their supervising physician dropped 13% year-to-year.

Nonetheless, the results suggest several key takeaways. One, the levels of pre-pandemic interprofessional communication underscore that even with collaborative practice agreements in place, there was no guarantee of regular coordination. Second, the lines of communication that predated the pandemic were generally maintained and utilized as necessary despite the waivers.

And third, vital interprofessional collaboration is not only possible but likely outside the strict confines of collaborative practice agreement. In total, 39% of respondents indicated the COVID-19 waiver reduced restrictions on their direct patient care during the pandemic. The most common reported outcomes were an ability to expand the geographic boundaries of their care, followed closely by the ability to see more new and current patients.

In line with other reported outcomes, a sizable proportion of APRNs also noted a reduction in the frequency of their communication with their supervising physician and fewer chart reviews as ancillary administrative benefits. For nearly two-thirds of respondents who indicated the waiver did not have an impact on their direct patient care, the most common reported reason by far was that their employer requirements did not change.

This was the principal reason articulated by approximately four in five APRN respondents who reported no waiver impact. To a much less significant extent, APRNs also noted state board of nursing guidance and their own reservations regarding the legal implications of not abiding by their pre-specified collaborative practice agreement requirements.

And finally, a proportion indicated they were temporarily furloughed due to the pandemic and, thus, were unable to benefit from the specifics of the waiver. Switching topics a bit, just under two-thirds of all respondents reported they actively practiced telehealth at the point of survey administration. Of this subset, 22% utilized telehealth practice across state borders.

Of those who indicated they had a collaborative practice agreement prior to the onset of COVID-19, about one in four indicated at least some restrictions on their telehealth practice. Fortunately, three in four reported their state's COVID-19 waiver temporarily waived these restrictions as well.

Over half of this cohort reported that this allowed them to see more current patients, while plurality were also able to add new patients, and to generally expand the geographic boundaries of their direct patient care. Not surprising, the rates of telehealth usage among responding APRNs also experienced a significant uptick with the onset of the COVID-19 pandemic.

Prior to the start of the pandemic, APRNs reported nearly no significant telehealth usage. This changed dramatically during the pandemic, however, with APRNs reporting a median increase of 50% telehealth usage. As you can see, the 75th percentile during the pandemic increased even further to 80%. Across

the board, respondents also underscored the durability of this trend, projecting a quarter of their care would continue to be delivered using telehealth after the pandemic subsides.

Those positive telehealth trends, notwithstanding, respondents reported significant barriers to telehealth delivery. For a clear majority, these concerns were patient-focused rather than provider side. A majority of APRNs indicated that their patients often lacked access to needed technology or had significant technology support problems.

And just over one-third also reported patient apprehension with adopting and utilizing new technologies. On univariable analysis, APRN ethnicity, license type, practice area, practice environment and setting, the geographic location of the practice, and their use of telehealth correlated with a positive waiver impact.

Further, as you can see from the table in front of you, most of the positive effects of the state-based waivers were sustained on multivariable analysis after further adjustments for other important covariants. So, what are the key takeaways? COVID-19 significantly reshaped APRN practice. Approximately 81% of APRNs reported an impact on their direct patient care.

Initially, most witnessed a significant decrease in their patient volume or found themselves reassigned to new practice settings or clinical practice areas. Many pivoted to work directly with COVID-19 patients during the pandemic. Second, unfortunately, pandemic waivers did not have a widespread impact, but when they did, it was positive.

One in four participants reported they expanded the geographic boundaries of their direct patient care, particularly, in rural areas and health provider shortage areas. Respondents also indicated they were often able to see more patients, including new ones, more often as a direct result of the waivers. Regardless, it is clear from the results that continued employer restrictions likely blunted the impact of these emergency orders.

Third, telehealth emerged and is here to stay. Telehealth usage increased nearly 50% overnight due to the onset of COVID-19. This was both due to adherence to local restrictions but also to ensure continuity of care. While APRNs believe telehealth will continue to account for a significant proportion of their healthcare delivery moving forward, they highlighted several patient-centered barriers to such services, which require thoughtful consideration.

And finally, APRN discipline rates remained consistently low from 2019 to 2021, confirming the overall safety profile of APRN-coordinated care. Overall, based on these findings and long-standing evidence on the topic, we believe full practice authority for APRNs clearly benefits patients by promoting expanded access and increasing the resiliency of our healthcare system without compromising patient safety.

With that, I will open the floor to discussion and any questions you might have.