COVID-19 effects on practice: Perspectives of Tennessee APRNs

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Abstract

Background: In response to the COVID-19 pandemic, Tennessee’s Governor issued executive orders temporarily suspending certain practice restrictions on advanced practice registered nurses (APRN), which expired after 2 months as the pandemic worsened.

Purpose: This purpose of this qualitative study was to analyze APRN interview data to evaluate how prepandemic APRN practice barriers, executive orders, and the pandemic affected APRN practice in Tennessee.

Methods: Fifteen Tennessee APRNs who completed the National APRN Practice and Pandemic study also completed follow-up interviews via a HIPAA-compliant Zoom platform. Given the unprecedented circumstances associated with the COVID-19 pandemic, we conducted a qualitative descriptive study seeking descriptions and unique perspectives of Tennessee APRNs. Consistent with qualitative study design, we conducted an atheoretical study that featured interviews, purposeful sampling with maximum variation sampling, and content analysis.

Results: The major themes were practice changes, impact of executive orders, and ongoing care barriers. The data revealed that patients, APRNs, and other health care providers were strained in new and profound ways during the pandemic. An underlying theme was Tennessee APRNs' frustration with continued regulatory and other practice barriers despite their state’s health and health care disparities and under resourced health care system.

Conclusion: These findings indicate the need to improve care access and health outcomes, advocate for full practice authority for APRNs, support telehealth expansion, address transportation deficiencies, and respond to the pandemic-precipitated mental health crisis.

Keywords
advanced practice nursing, COVID-19, delivery of health care, health policy, mental health, policy
On March 19, 2020, Tennessee's Governor Lee issued Executive Order No. 15 to provide an effective and timely response to the COVID-19 pandemic (hereafter referred to as the pandemic).1 The order temporarily relieved nurse practitioners (NPs) of the requirement to file notice of their collaborating physician and formulary with the Board of Nursing, and suspended collaborating physician chart reviews and monthly site visits. Tennessee executive order No. 28, issued on April 17, 2020, amended the initial order to temporarily remove the requirement that advanced practice registered nurses (APRNs) with prescriptive authority have collaborating physicians.2 Order 28's provisions related to the expiration of state APRN practice restrictions on May 18, 2020.3,4 This expiration immediately reinstated previous APRN practice restrictions as the pandemic worsened.

Governors in some states with reduced or restricted APRN practice also issued executive orders. Five states temporarily suspended all practice restrictions (KY, LA, NJ, NY, and WI); 16 eased some restrictions (AL, AR, CA, IN, KA, MA, MI, MS, NC, OK, PA, SC, TN, TX, VA, and WV); and seven took no action (DE, FL, GA, IL, MS, OH, and UT).5

1 | BACKGROUND

APRNs—including NPs, certified nurse-midwives (CNMs), certified registered nurse anesthetists, and clinical nurse specialists—are credentialed by national organizations and licensed by individual states. State practice authority laws can be classified into three categories: full practice authority (FPA), reduced practice authority, and restricted practice authority. These categories regulate APRNs' ability to function independently in the four APRN practice domains: evaluation, diagnosis, diagnostic test ordering and interpretation, and treatment initiation and management.6 In FPA, APRN practice is not subject to physician supervision or collaboration. Reduced and restricted practice authority denotes varying degrees of physician collaboration or supervision in at least one practice domain.6 In early 2020, 22 states had FPA, 16 had reduced practice authority, and 12 (including Tennessee) had restricted practice authority.6,7

Physician organizations' strong opposition to FPA continued during the pandemic.8-10 The American Medical Association urged the Centers for Medicare and Medicaid Services (CMS) to resume practice restrictions rather than extending temporary waivers.5,11 Meanwhile, state medical associations encouraged governors to resume practice restrictions once executive orders expired.12 No exception to this trend, the Tennessee Medical Association (TMA) expressed disapproval of practice restriction suspension and pressured the Governor not to renew it.12 TMA's lobbying efforts ensured that Tennessee APRNs experienced the executive orders' benefits for less than 2 months.

2 | PURPOSE

When Tennessee's governor issued the executive orders removing APRN practice revisions, the TNA approached nurse researchers at three universities and asked them to conduct this study. Consequently, this study had the following aims: Evaluate the impact of APRN practice barriers before the pandemic and document how the pandemic and Governor Lee's executive orders affected APRN practice.14 National APRN leaders and various state and national organizations also expressed interest in the study, prompting the researchers to administer the survey nationally. Ultimately, the study data were collected from two sources: a nationally distributed survey and subsequent interviews with Tennessee APRNs. This article describes the findings from the Tennessee APRN interviews.

3 | METHODS

Fifteen Tennessee APRNs who completed the National APRN Practice and Pandemic study also completed follow-up interviews via a HIPAA-compliant Zoom platform.

Given the unprecedented circumstances associated with the COVID-19 pandemic, we conducted a qualitative descriptive study15—seeking descriptions and unique perspectives of Tennessee APRNs. Consistent with qualitative study design, we conducted an atheoretical study that featured interviews, purposeful sampling with maximum variation sampling, and content analysis.16 No member of the study team reports any conflicts of interest.

4 | SAMPLE

The National APRN Practice and Pandemic Study14 received expedited review from Vanderbilt University. A web-based survey (open June 1 to September 23, 2020) assessed practice barriers to and the pandemic impact on APRN practice. Kleinpell et al. has described the survey sampling method.14 The Tennessee APRNs who took the survey could volunteer to be interviewed by clicking on a link to send a secure email. Potential participants then were emailed a secure link to schedule a 60-min Zoom interview.

5 | DATA COLLECTION

Three study team members completed the Collaborative Institutional Training Initiative program and signed a confidentiality pledge before conducting interviews using a HIPAA-compliant Zoom platform. One of three study members conducted each of the interviews. Before the interview, each of the 15 participants recorded a verbal consent to participate in the study and be recorded. Semi-structured interview questions were based on preliminary survey results. Interviews were closed for several reasons, including: we met our goal of conducting at least 12 interviews, consistent with an oft-cited recommendation17; the study was about specific topics in a relatively homogeneous population where semi-structured interview questions and subsequently codes aligned with study aims18; we conducted interviews for almost 4 months; the primary survey which as a pre-requisite for the interviews closed; and we ceased to be contacted by...
any additional interview volunteers. All volunteers who conducted us and followed-through with an interview appointment were interviewed. When interviews were complete, the interviewers dictated their field notes on the Zoom recording. The Zoom m4a (audio) files then were uploaded into a HIPPA-compliant secure folder and transcribed.

6 | DATA ANALYSIS

The research team used conventional (inductive) content analysis\(^\text{19}\) that began with multiple transcript read-throughs to allow them to get a holistic sense of each interview. Three researchers created preliminary codes (nodes) in NVivo and sorted quotes into these codes. The researchers met to discuss first-pass coding and establish a new three-layer coding structure, as the initial coding was deemed too interpretive, inconsistent with the descriptive methodology employed. Next, the researchers re-coded the transcripts based on the new coding structure. When the second coding round was complete, the researchers merged their NVivo files and met to identify overarching themes. Each researcher reviewed and refined one theme, with theme definitions and exemplary quotes discussed at a later meeting. Since analysis was descriptive rather than interpretive and the new codes aligned with the study aims and interview questions, the researchers readily reached agreement on the final themes and the data they encompassed. Member checking was not employed, consistent with,\(^\text{20}\) who has noted that since the researchers of a study are trained in data analysis, they, not the participants, are responsible for the findings.

7 | RESULTS

Table 1 contains participant demographic information. The semi-structured interview protocol included questions from three topics: pandemic impact on practice, practice barriers, and executive order impact on practice.

8 | PANDEMIC IMPACT ON APRN PRACTICE

The participants indicated that the pandemic precipitated major changes in APRN practice in care delivery, patient volume and mix, patient circumstances and needs, and resource availability.

8.1 | Care delivery

The pandemic required APRNs to continue their existing tasks while responding to the new pandemic related demands: administering COVID-19 tests while adopting new protocols for personal protective equipment (PPE), increased patient flow, and higher patient volumes.

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**Table 1** Participant characteristics

|                  | Number (percentage) |
|------------------|---------------------|
| **N = 15 APRNs** |                     |
| **Gender**       |                     |
| Female           | 13 (87%)            |
| Certification    |                     |
| FNP              | 6 (40%)             |
| PMHNP            | 4 (27%)             |
| ACNP             | 2 (13%)             |
| ANP or AGNP      | 2 (13%)             |
| CNM              | 1 (7%)              |
| **Years in practice** |                   |
| <2 years         | 3 (20%)             |
| ≥2 but <10      | 7 (47%)             |
| ≥10 years        | 5 (33%)             |
| **Education**    |                     |
| Doctor of Nursing Practice (DNP)\(^a\) | 6 (40%) |
| Master of Science in Nursing (MSN)\(^b\) | 9 (60%) |
| **Employment**   |                     |
| Outpatient/community | 13 (87%) |
| Hospital         | 4 (27%)             |
| Nursing education | 2 (13%)             |
| **Location/population** |                   |
| Health professional shortage area (HPSA) | 11 (73%) |
| Medically underserved populations | 8 (53%) |
| Medically underserved area | 7 (47%) |

Abbreviations: ACNP, acute care nurse practitioner; AGNP, adult gerontology nurse practitioner; ANP, adult nurse practitioner; CNM, certified nurse midwife; FNP, family nurse practitioner; PMHNP, psychiatric mental health nurse practitioner.

\(^a\)One DNP APRN also had a PhD.

\(^b\)Two MSN APRNs were DNP students.

\(^c\)Four APRNs worked in more than one setting.

\(^d\)These statuses were not verified, as practice names and specific locations were not obtained to protect participant anonymity.

One significant practice change was the telehealth expansion facilitated by CMS regulatory changes\(^\text{21}\) and emergency executive orders.\(^\text{1,2,22}\) Telehealth became a viable care delivery option when personal telephones were permitted for telehealth visits during the pandemic.

Telehealth helped mitigate concerns about COVID-19 exposure and spread while addressing some longstanding care delivery issues. An FNP/CNM said, “[Patients] love telephone visits... [and] not having to show up somewhere... Our show rates are pretty equivalent and sometimes better than in-office visits.” Additionally, a psychiatric-mental health NP (PMHNP) reported, “My numbers have
been really good through the pandemic once we started using telehealth because it made it easier for patients to be seen.” Despite its advantages, this NP also offered an important caveat: the lack of affordable broadband service in rural areas.

Telehealth also helped alleviate some transportation issues. One PMHNP shared, the biggest thing in a rural community is a lot of my patients and families do not have transportation… [and] are very economically disadvantaged… many of them do not have a working vehicle, or, if they do, they have very limited money [for] gas… There's [a] rural transportation service in Tennessee, but it's a very broken system... [You] have to call at least two weeks in advance to make an appointment. If it's an acute issue or my patients are having problems, you can forget that.

Transportation problems also placed unnecessary burdens on some patients. For example, the same PMHNP stated,

If a child… has an appointment at 12 o'clock, [the rural transportation service will] drop him off at 8 o'clock in the morning and [he] will have to… wait on me... [When] we call [the service] to... get [him], they'll come back later that evening. So [he] spends a whole day for a 30- or 45-minute appointment. They either have to pack a lunch or a snack, and... they're grumpy... [and] stressed. Furthermore, if the child needs lab services, this necessitates a separate call for transportation and another two-week wait and long day.

A FNP working in a pediatric practice in an economically distressed, underserved rural community described an unexpected telehealth benefit: well-care and check-ups, a pediatric practice mainstay, were maintained via telehealth in contrast to the decline in preventive and routine care seen among other populations. This FNP said, “At first it was really hard. Parents wanted to cancel. They didn't want to keep well visits.” However, because TennCare (Tennessee’s Medicaid waiver program) requires regular well-child care to maintain coverage, parents seemed to accept and adjust to telehealth visits.

Despite the advantages, some participants shared concerns about telehealth visits. One PMHNP was uneasy providing mental health care over the phone, noting,

[Telephone visits have] been a bit odd for us, not being able to gauge body movement with a lot of anti-psychotics we prescribe. We have to become acoustically in-tune with how [the] pitch of their voice has changed, whether it indicates a depression, an anxiety, or mania.

Similarly, another PMHNP stated, “We do need to be able to see our patients every so often... for me to feel... I’m giving them the service they need and so I can do a good assessment and figure out... our next step.”

8.2 Patient volume and mix

Many participants reported a decline in patient volume during the first 6 months of the pandemic. An adult gerontology NP (AGNP) relayed, “They shut down our clinic completely to any appointments whatsoever.” An FNP said, “Our volume... dropped by about 50%.” In contrast, some practices saw increased patient volume for pandemic related services, including testing. An AGNP from a rural county health department mentioned that when the National Guard members deployed to help administer 200-300 COVID-19 tests per day were redeployed, the existing staff had to cover the testing in addition to usual clinical services.

8.3 Patient circumstances and needs

Patient needs increased during the pandemic, due in part to other pandemic effects (job loss) and longstanding issues (transportation). One participant, a dually certified FNP and PMHNP, said “I’m now seeing... just how much this is overwhelming people that have lost their jobs.” An FNP reported, “A lot of our really older patients... [came into the practice] in tears because they were so thankful we were open because somebody touched them.” An AGNP working on a COVID unit shared,

You can look through this glass [hospital room] door and see them and they can see you... but you can’t talk through the glass and the mask... I just... sense that they feel isolated and alone, more so than normally.

One unexpected finding was that 14 of 15 participants reported mental health issues among their patients, despite the lack of direct questions about this topic.

8.4 Resource availability

The lack of PPE was a major concern among some participants. One FNP revealed, We have a significant... PPE shortage as a private practice... We've been on backorder for N95 masks. We literally have three N95 masks right now... and have been having to reuse them. We do not have an autoclave... [and] can’t autoclave them.

Securing needed cleaning supplies also was challenging, particularly in community settings. One FNP reported, “there for a while we were going to Walmart every day... just trying to get supplies, Clorox wipes and such.” An AGNP working in a public health clinic
shared a different perspective, noting that her workplace stockpiled PPE and supplies beginning in January and ran low on them only after several months. A PMH-NP shared,

There were little things that were harder to come by... the simplest matters of clinic cleanliness... it was a struggle. We made it work, but we really had to go the extra step. It wasn’t as simple as calling the company and ordering. It was scouring... for medical supplies... through medical companies being on backlog.

Guidelines and information also were in short supply. An FNP said, “It has been] a little challenging... trying to find the right information on how to reuse masks.” Furthermore, one AGNP relayed,

I feel like the information was... on overload... once the faucet opened. There was a while where everybody just said, ‘We don't know,’ but then everybody... came forward with all these silly recommendations based on... no evidence. A guideline would be helpful, but... that's also not realistic [with] a novel disease.

9 | PRACTICE BARRIERS

Interview data revealed three themes related to regulatory barriers: restrictive practice regulations, increased time and money expenditures, and decreased care access.

9.1 | Restrictive practice regulations

Many of the APRNs reported that restrictive state practice barriers do nothing to improve patient outcomes, especially given the limited time supervising physicians spend performing oversight duties. One FNP stated,

I had to have him sign off on my charts even though he's calling me to walk through how he's handling patients. It's rather infuriating. There is no way in the timeframe that they're there... that they actually read my charts... their whole line that... it's to protect patients and make sure we're not doing anything crazy is absolutely untrue in my experience, and I've worked at four different practices.

Another FNP echoed this sentiment, “They come and... visit with you a few minutes, and you ask, 'Is there anything we could be doing better, more effectively?'... Nine times out of 10, they say, ‘Oh no, we're learning from you. You're doing great.'”

Other participants described how excessive delays reaching physicians meant supervisory advice had little effect on the care delivered. For instance, one PMHNP noted that a phone call to the supervising physician was not returned for 2 weeks,

I do know that it is sometimes hard to communicate in a timely manner when I have a particular individual in my office that maybe I need to have an answer on before I turn them loose, but I can't hold them for... hours waiting on a [supervising physician] to call back and maybe give me some guidance.

Some APRNs mentioned that physician-APRN teamwork can be a positive aspect of their practice as long as communication is clear and respectful. A PMHNP stated, “I work with... an excellent physician... he is so thorough, so knowledgeable. I've been with him for... several years.” In contrast, one FNP noted that while the arrangement “doesn't have to be so demeaning,” she will always go the extra mile to get answers for her patients if she encounters a problem that is not in her “wheelhouse” and feels that all APRNs should embrace this responsibility.

9.2 | Increased time and money expenditures

Several participants noted that the supervisory requirements result in excessive time and money expenditures. One FNP reported, “I could probably see one more patient every day if I didn't have to keep up with all that mess... We have to pay our supervising physician, which is another... waste of money.” She went on to mention that “every time I write a prescription, I'll print the chart... it takes a lot of time [and] printer paper, keeping a running list of the patients that I've seen. It's definitely a waste of time.”

The supervision expenses also kept APRNs from investing in other practice areas, including additional service lines. One FNP expressed,

[the supervising physician] costs about $24,000 a year... we've been looking at adding some new services, but you've got all that money tied up... and that's per NP... that's a lot of money you could use to better benefit your patient.

Similarly, one AGNP noted, “We have to pay a supervising physician a certain fee every month, and just being a fairly new practice... it's definitely been a strain cost-wise, especially... pay[ing] this person too during COVID times when funds are really tight.”

9.3 | Decreased care access

Participants reported that paperwork requirements led to referral delays that reduced patients’ care access. One PMHNP who worked with school-aged children said,
I then have to put that paperwork in an envelope, send it to... my oversight physician, who I hope gets it... signs it and sends it back to me before it can go back to the school. That can take months, if we ever get it done.

The same participant added,

Another big thing [is] when I want to refer for certain circumstances... occupational therapy, physical therapy, things like that... I usually have to send my kids back to their primary care provider, where there's physician oversight there to get them to order that, because I'm not allowed to order many of those things. And even [for] things that I can order, different practices just don't understand that, and they'll say, 'No, it has to be a physician signature.'

This PMHNP then added, "I can't do everything I need to do [for my patients], and... that... is just a huge issue."

One FNP/CNM described how FPA would benefit patients, particularly in rural areas, I think obviously increasing access to care is the biggest [issue]... especially in... rural areas, having full scope and FPA would be huge... It needs to be in effect... now, but definitely if there's another outbreak or... pandemic situation. Those providers need to be able to function at the top of their education.

10 | EXECUTIVE ORDERS

The Tennessee executive orders were relatively short-lived and not uniformly implemented. Perspectives on the orders' value were mixed. Some participants viewed the order easing physician supervision requirements positively. For example, an AGNP said, "I didn't have to waste time sending my supervising physician any charts. That was a big help not having to worry about that... Just having [the] freedom to practice to the full extent of our education without... restrictions." According to one PMHNP,

[the benefit] was massive... just knowing that I was practicing in my scope of practice legally. I wasn't doing anything that could jeopardize my patient care, my career, my company... and it just reinforces the whole thing of struggling sometimes, especially during all this, to collaborate with a physician that might be out of pocket in a time of need. So that autonomy was huge.

Physicians also benefitted from changes in APRN practice regulations. According to an FNP, eliminating chart review was "a huge help for [the physician] because she didn't have to... spend a day a week just reviewing our charts." However, several APRNs did not experience a change in physician supervision despite the executive orders for several reasons: the orders' transient nature; not understanding the orders; the burdens associated with implementing system, policy, and procedure changes; and the APRNs' relationship with their supervising physician. A PMHNP explained,

The organization... has asked us to continue business as usual for prescribing, so... when I get ready to sign off on a record, if it has a controlled substance on it, I route it to my supervising collaborating physician. We've continued to do that.

The same NP added, "I asked... my organization why are we still doing this if we have this executive order and the response was... because it's a time-limited executive order, [and] things will go back the other way."

An FNP from a pediatric clinic also experienced minimal change, but for different reasons. She explained,

It doesn't really pertain to me because my physician is there pretty much all the time... so... she has still been doing chart reviews and... nothing has really changed because it was not clear... whether it [pertained] to COVID patients only or... general practice. I felt like [the] order was not stated very clearly.

While APRNs generally pay their supervising physician, there was no precedent for how payment would be handled when supervision requirements were suspended. Participants reported a variety of approaches. An adult gerontology NP said, "We skipped one month... due to the fact that we truly just couldn't pay her. If we could, then I'm sure we would have still paid her even though we had FPA and just didn't send her our charts." Another FNP reported that "[Paying our supervising physician] has put another strain on our bottom line... because we are not back to full... patient load."

Participants questioned why it was acceptable to eliminate physician supervision requirements for a short time early in the pandemic, but not extend this practice during its acute phase. Other participants also noted the incongruency of considering APRNs qualified, essential health care professionals capable of practicing without physician supervision during the pandemic and then reverting to previous practice restrictions. One FNP said,

It was very frustrating that it was okay in the time of a pandemic for [APRNs] to not have as many restrictions and then all of a sudden... [have the increased autonomy] taken away... I had some questions... Why is it okay [to have autonomy] during chaos [at a time [when]]... it's hard to think critically under pressure... but it's not okay [to have it in] day-to-day circumstances when you have time to think about things?"
10.1  | Mental health problems

Although only four participants were PMHNP s and we did not ask direct questions about the pandemic’s mental health effects, widespread concern for patient and provider mental health was evident in the data. Fourteen of 15 APRNs described mental health challenges experienced by their patients, and 13 referenced provider mental health. APRNs were particularly concerned about the effects of social isolation, new and worsening psychiatric complaints, and a feeling burned out at work. With no hospital visitors allowed and health care professionals minimizing patient contact, an acute care NP expressed concern over the isolation that COVID inpatients experienced. He said, “... while iPads with FaceTime to family members and to nurses through the door is a way to build connection, I don’t think it’s as authentic and genuine as actual human interaction with someone two feet away from you.” One FNP reported seeing more patients with suicidal ideation—both adults and children—during the first few months of the pandemic than in her entire 10 years of practice.

Health care professionals’ mental health also suffered during the pandemic. A PMHNP with 24 years of experience reported seeing an influx of physicians and nurses seeking mental health services because of the amount of death they were seeing as they cared for COVID patients. Another PMHNP said she and others in her practice were “overwhelmed” from longer hours and larger caseloads. Her days seemed to be full of patients in crisis situations, making her feel like she was providing “back-to-back trauma care.”

11  | DISCUSSION

Interviews with 15 Tennessee APRNs conducted July through September 2020 painted a portrait of patients, APRNs, other health care professionals, and a health care system strained in new and profound ways. While executive orders to mobilize health care professionals were appropriate for the severity of the crisis, they were not in effect long enough to prompt widespread or consistent adoption, and expired before the surge in pandemic case numbers, hospitalizations, and deaths experienced in late 2020 and early 2021.

Unfortunately, the executive orders may not have been renewed for political reasons, as the TMA formally opposed lifting any APRN practice restrictions. Furthermore, the TMA has dismissed overwhelming evidence of the patient benefits seen in states that have removed APRN practice restrictions.

One underlying theme was participants’ frustration with regulatory and other practice barriers. An APRN practice barrier is defined as anything that impedes, blocks, or prevents APRNs from delivering care to the fullest extent of their education and training. Some barriers are functional: the fragmented health care system, workforce recruitment challenges, and high turnover rates. Our study identified additional functional barriers to APRN practice in Tennessee: low reimbursement rates; multiple documents requiring physician signatures; businesses selling medications and supplies only to physicians; inefficient electronic health record systems; and vulnerable patient groups’ lack of access to transportation and newer communication methods. The executive orders did not address these barriers.

Other barriers are regulatory, or the result of policies preventing APRNs from practicing in accordance with their education and preparation. Because these barriers interfere with access to and the quality of APRN-delivered care, they can be detrimental to the populations APRNs serve. Tennessee law restricts APRN prescribing practice through a career-long requirement for physician supervision and professional oversight by the state board of nursing and board of medical examiners. These study findings highlighted how these regulatory barriers affect APRNs and their patients.

Participants’ reactions to the temporary suspension of key practice regulations varied. The emergency orders’ short duration was particularly troubling given the extraordinary pandemic circumstances and demands, which worsened after the orders expired. APRN participants reported that organized medicine seemed to have more influence on the Governor than did the needs of Tennesseans or evidence about the quality of APRN care in FPA states.

Similar to pandemic-created needs, Tennessee’s longstanding unmet health care needs and persistent disparities also require a crisis-level resource mobilization. In the most recent America’s Health Rankings, Tennessee scored in the bottom quintile in three of the four drivers of health and health outcomes: 44th on clinical care, 40th on social and economic factors, 42nd on behaviors, and 44th on health outcomes. Three negative core measures contribute to these poor rankings: multiple chronic conditions, premature death, and smoking. Moreover, while Tennessee has an adequate number of primary care physicians, their availability is uneven, with many rural counties plagued by a dearth of such providers. Moreover, the pandemic only added to the existing public health crises in the state. Most of Tennessee land is classified as rural. In 70% of the state’s 95 counties. At least 50% of the residents live in a rural area. The rurality of Tennessee is significant for numerous reasons, including the health disparities associated with rural health and health care, the dearth of primary care and mental health providers which is worse in rural areas, and Tennessee being one of the most restrictive states in regards to APRNs practice authority.

Granting APRNs FPA could help improve primary care access and health outcomes. Several organizations support FPA for APRNs, including the IOM, the National Governors Association, and the Federal Trade Commission. In contrast to Tennessee, Massachusetts became the 23rd FPA state when Governor Baker signed a bill into law extending pandemic related executive orders easing NP practice provisions. Before the pandemic, Massachusetts NPs advocated for FPA for more than 10 years. Many participants hoped for a similar outcome in Tennessee.

While the Governor’s executive orders were one mechanism used to expand health care access during the pandemic—if just for a short time—the rapid increase in telehealth also extended access. The CMS and the state of Tennessee’s modification of telehealth regulations was instrumental in addressing pandemic-imposed health care access and delivery challenges. Increased telehealth use also
helped addressed longstanding health care barriers related to transportation, geography, poverty, and other challenges. However, universal broadband access is essential for sustained and comprehensive telehealth use. In fact, broadband is considered a super-determinant of health due to its effect on other determinants (e.g., employment and education).35

12 | IMPLICATIONS

The five areas of practice and policy implications derived from these study findings are described below.

12.1 | Improving care access and health outcomes

A key strategy for addressing health and health care deficits in Tennessee is allowing APRNs to practice without physician supervision, which hinders care access, increases health care costs, and does not improve patient outcomes. Conversely, removing APRN practice barriers could help increase health care access in underserved areas across the state, thereby improving health outcomes. In addition, FPA has economic benefits as a major health driver supporting the vitality of rural and disadvantaged communities.23

12.2 | Advocating for FPA

APRs and other nurses should organize to efficiently and effectively advocate for FPA. To be successful, it is imperative that APRNs solicit support outside the profession, avoid turf battles with physicians, and engage relevant stakeholders and communities in grassroots efforts. The case for FPA should emphasize how its economic benefits also confer health benefits and promote health equity.

12.3 | Supporting telehealth

To maximize health care access, the telehealth expansion begun during the pandemic should continue. Adequate reimbursement, mental health services reimbursement parity, and an ongoing favorable regulatory environment are essential for robust telehealth use. A Tennessee law passed in a special session in 2020 extended state telehealth permissions and reimbursement parity.36 These permissions should be maintained and extended to currently excluded APRNs. Even before the pandemic, the American Association of Nurse Practitioners officially stated that telehealth services “are not a separate specialty or the practice of any one profession,” and “health care provided via technology should be recognized, regulated, and reimbursed on parity with the same services delivered in person.”37 Still, APRNs must receive suitable training, such as immersive simulation, to effectively provide telehealth services.38

Broadband access is another key issue in telehealth promotion. Because approximately 492,000 Tennesseans, primarily in rural areas, lack access to affordable broadband services,39 efforts to develop broadband infrastructure in underserved areas should be prioritized.

12.4 | Addressing transportation deficiencies

An assessment of patient-centered options to improve scheduling flexibility and transportation availability in rural areas is needed, including services offered by Tennessee human resources agencies. Same-day and other scheduling options and accommodations for multiple stops should be offered. Providing comprehensive same-day services for various specialists and needed labs and diagnostic tests could increase efficiency and decrease transportation burdens. Opportunities to support public, private, and public-private partnerships to provide needed transportation for rural residents also are needed.

12.5 | Responding to the pandemic-precipitated mental health crisis

Policymakers and stakeholders must come together to assess and understand the mental health needs of patients and health care professionals, especially during crises. From this understanding, new policies should address mental health challenges proactively and incentivize the expansion of mental health services to address the paucity of providers. Such strategies can enhance patient and provider general welfare and promote adaptability during public health emergencies and other times of upheaval.

13 | CONCLUSION

The results of this qualitative analysis of interview data from Tennessee APRNs indicated that the pandemic decreased care access at a time of increased need. While an executive order removed some APRN practice restrictions, its 2-month duration was insufficient to implement or evaluate any meaningful changes. It is incongruent that APRNs in Tennessee were considered important assets in the initial pandemic response, but within a short period and before the pandemic began to wane, the less restrictive practice regulations were abandoned. Surprisingly, the resistance to easing APRN practice barriers increased in Tennessee during the pandemic. Despite this resistance, now is the time for nurses to claim their role in expanding Tennesseans’ access to high quality, holistic, and patient-centered health care.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.
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