Enhancing Psychiatric Mental Health Nurse Practitioner Practice: Impact of State Scope of Practice Regulations

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Introduction: Shortages of behavioral health providers, particularly prescribing clinicians, are widespread nationally. Although rapidly increasing numbers of psychiatric mental health nurse practitioners (PMHNPs) could increase access to behavioral health services, state limitations on scope of practice may restrict their ability to do so. Aim: The purpose of this comparative case study was to assess how state scope of practice regulations impact PMHNP practice in five states with different levels of nurse practitioner autonomy (full, reduced, and restricted), as categorized by the American Association of Nurse Practitioners. Methods: Site visits and interviews were conducted with 94 key informants, including state board of nursing staff, PMHNP practitioners and educators, behavioral health agency directors, and psychiatrists. State scope of practice regulations were reviewed. Thematic analysis was used to analyze qualitative data. Results: Findings indicated that scope of practice regulations affected settings and arrangements in which PMHNPs practiced. In states where physician supervision is required, PMHNPs and agency leaders reported costs and administrative burdens related to obtaining and documenting supervision. PMHNP practice was sometimes constrained by institutional restrictions not required by law. Conclusion: Mandated physician supervision of PMHNPs adds cost and diminishes accessibility to both psychiatrists and PMHNPs. Full nurse practitioner practice authority allows for more efficient utilization of PMHNPs and may increase access to services.

Keywords: Behavioral health, nurse practitioner regulations, scope of practice

ental health and substance use disorders (SUDs) are a major public health issue in the United States. The Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Behavioral Health Statistics and Quality (2018) estimated that in 2017, 11.2 million adults (18 years of age and older) in the United States had a serious mental illness and 46.6 million had any mental illness in the past year. Additionally, 3.2 million youth (12 to 17 years of age) had experienced a major depressive episode in the prior 12 months. An estimated 19.7 million Americans (12 years of age and older) had a SUD in that year. SAMHSA projects that by 2020, behavioral health disorders will surpass all physical health disorders as a major cause of disability worldwide (SAMHSA, 2018).

Factors related to healthcare reform, including increased access to health insurance and parity in mental health benefits, as well as societal issues such as the opioid epidemic, have led to a dramatic increase in the demand for mental health services. Prior to implementation of the Affordable Care Act, it was estimated that 25% of uninsured adults had a mental health and/ or substance abuse condition (Garfield, Lave, & Donohue, 2010). While the expansion of insurance coverage for behavioral health reduced financial barriers and led to an increase of 5.3% in treatment among young adults with possible mental health disorders

(Saloner & Lê Cook, 2014), an increase in the behavioral health workforce is needed to accommodate the numbers of newly covered individuals seeking services (Saloner & Lê Cook, 2014).

These recent changes are superimposed on a long-term lack of access to psychiatric services that has resulted in significant delays for those seeking treatment, reduced quality of care, and low patient satisfaction (National Council Medical Director Institute [NCMDI], 2017). The NCMDI (2017) also notes that the increase in screening for psychiatric and addictive disorders in primary care will continue to increase demand for access to psychiatric services.

There is a well-documented shortage of behavioral health providers, particularly for underserved areas and populations. The U.S. Department of Health and Human Services (DHHS) Bureau of Health Workforce (BHW) identified 4,700 Mental Health Care Health Professional Shortage Areas with a total population of more than 100 million people (US DHHS BHW, 2017). Approximately 62% of these areas are in rural or partially rural areas (US DHHS BHW, 2017). The NCMDI (2017) notes the psychiatrist workforce is aging and the number of psychiatrists working with public sector and insured populations declined by 10% over a 10-year period. The growing demand for behavioral health services will exacerbate these shortages, particularly for the underserved. Psychiatric mental health advanced practice registered nurses (PMH-APRNs) are behavioral health providers with prescriptive authority who add to the number of professionals and help address this shortage. First licensed and certified as clinical nurse specialists (PMH-CNSs) and more recently as psychiatric mental health nurse practitioners (PMHNPs), PMH-APRNs have been practicing for more than 50 years (Delaney, 2017). A literature review of 14 papers on psychiatric nurses in advanced practice found their services yielded positive outcomes, especially in the detection of mental health needs in non-mental health settings (Fung, Chan, & Chien, 2014). The PMH-APRN workforce is growing and expected to surpass 17,000 by 2025 (Delaney, 2017).

PMH-CNSs have independent or dependent prescriptive authority in 38 states and the District of Columbia (National Association of Clinical Nurse Specialists, 2015), and all states allow PMHNPs to prescribe, though 10 states restrict prescribing (Delaney, 2017). Because regulation of nurse practitioner (NP) practice is more similar across states than CNS practice, and because PMH-APRN programs have moved exclusively to NP education, we focused on scope of practice for PMHNPs, which is governed by the same state regulatory framework as other NP roles.

Because PMHNPs can potentially play a significant role in improving access to behavioral health services (NCMDI, 2017), this study assessed the impact of state scope of practice regulation on the ability of PMHNPs to contribute these services to the full extent of their education and experience. Although our primary focus was PMHNPs, we included PMH-CNSs with prescriptive authority because they are a substantial portion of the PMH-APRN workforce in some states. We examined regulatory and other practice barriers that limit the potential contribution of PMHNPs, and in some cases PMH-CNSs, and make recommendations for enhancing the practice environment for PMH-APRNs. Research questions included the following:

- How does PMHNP practice vary in states by scope of practice?
- What recommendations for policy and regulatory changes can enhance the ability of PMHNPs to practice consistent with their education and experience?

Background

There are substantial state variations in how independently NPs can practice, which in turn affects their ability to increase access to health services. Studies indicate the general NP workforce expands in states that grant NPs independent practice authority (Xue, Ye, Brewer, & Spetz, 2016; Hooker & Muchow, 2015). Because NPs are more likely than physicians to practice in rural areas, a study by Neff et al. (2018) demonstrated there was greater access to primary care in states with autonomous NP practice after assessing the distance patients had to drive to receive care.

Another study of utilization and NP practice authority found NPs in states with full practice authority provided more

mental health services than physicians in community health centers when compared with states without autonomous practice (Yang et al., 2017).

Scope of practice regulations may impact economics as well as access to care. In one of the few economic analyses focused on NP scope of practice, researchers found if a state moved to less restrictive regulation of advanced practice nurses, the state benefited from increased economic output and tax revenues (Conover & Richards, 2015). A similar study (Hooker & Muchow, 2015) predicted lower costs due to salary savings and reduced emergency department visits in states with full scope of practice for NPs.

Additional research in California, a restricted practice state, found that issues related to state scope of practice for PMHNPs included barriers to practice and full utilization of these professionals (Phoenix, Hurd, & Chapman, 2016). Reported barriers included widespread difficulty understanding regulations related to NP practice, challenges in arranging physician supervision, physician concerns about the burden of providing supervision, cost of supervision, and practice limitations such as the ability to sign certain patient care documents (Phoenix, Hurd, & Chapman, 2016). Despite these obstacles, psychiatrists, behavioral health directors, and other professional colleagues interviewed in the California study all valued the contributions of PMHNPs and thought they made unique contributions to patient care and outcomes. In addition, the economic analysis showed PMHNPs made a positive net financial contribution to the agencies where they were employed (Chapman, Phoenix, Hahn, & Strod, 2018).

In summary, previous studies on the impact of granting full practice authority to NPs are sparse, but findings from a few studies indicate both expansion of the NP workforce and greater access to care. However, few studies have focused specifically on behavioral health care and the role of PMHNPs in providing that care.

Methods

We used a qualitative comparative case study approach to assess and compare models and conditions of PMHNP practice in five states with varied scope of practice regulations for NPs. CNSs were included in states where PMH-CNSs have prescriptive authority. Case study involves the study of an issue across multiple research sites (Creswell, 2007, p. 73). We used the categorization of state practice environments for NPs as defined by the American Association of Nurse Practitioners (AANP; 2018) to select states for the study. This categorization of state practice regulation has three levels: full practice, reduced practice, and restricted practice. We received human subjects approval from the University of California, San Francisco.

Setting

We selected five states that represent different geographical regions of the United States and degrees of urbanization, as well as different levels of NP autonomy. Selected states were Oregon, Colorado, Illinois, Massachusetts, and North Carolina.

Sampling and Recruitment

We began recruitment by reaching out to our state PMHNP program faculty contacts and known PMHNPs practicing in the selected states. We developed a spreadsheet of potential interviewees and sites including email and phone numbers provided by our contacts. We then reached out to selected sites and individual informants by email and/or telephone with letters of invitation and a project description.

We used snowball sampling to identify additional potential informants and visit sites within the states. Our goal was to find a mixture of practice sites by size, urban and rural setting, population size served, and behavioral health service delivery models. Thus, practice sites included community mental health clinics, county mental health services, integrated primary care clinics, psychiatric inpatient units, academic medical centers, substance abuse treatment settings, and private and group practices. We also sought to recruit informants with a variety of perspectives on PMHNP practice, including PMHNPs, agency directors, and colleagues from other behavioral health disciplines. We made a concentrated effort to recruit psychiatrists who could speak to the physician experience in required collaborative relationships.

Data Collection and Analysis

Interviews were conducted with individuals or small groups by our three-member research team using interview guides to increase consistency across interviews. Most interviews were conducted in person during our week-long visits to each state, but we also conducted some interviews by phone in cases where the informant was not available to meet during our visit.

All three members of the study team took detailed notes by hand or on a laptop computer. The research team included a senior analyst, a faculty member from a nonclinical department, and a faculty member from the PMHNP program. Interviews were not recorded because many of the interviews were conducted in settings not conducive to obtaining quality audio recordings.

Interview notes were summarized and reviewed by each team member. Documents reviewed included regulations posted on each state's public board of nursing (BON) website describing the states' scope of practice. We also compiled data provided by the American Nurses Credentialing Center (M. Horahan, personal communication, January 21, 2018) on the number of certified PMH-APRNs in each state and compared state ratios for practitioners to population to compare the current size of the PMHNP workforce in the selected states. Information about nursing workforce and regulation in each state was used to provide context and triangulate with information provided in the informant interviews.

A thematic analytic approach was used to code and analyze the key informant interview information. In this approach, data are grouped into key themes and each interview is examined to

TABLE 1

Psychiatric Mental Health Nurse Practitioner (PMHNP) and Clinical Nurse Specialist (PMH-CNS) Certifications by State

State	PMHNPs	PMH-CNS	Total	Total PMH-APRNs per 100,000
Colorado	253	96	349	6.2
Illinois	240	117	357	2.8
Massachusetts	523	685	1208	17.6
North Carolina	363	116	479	4.7
Oregon	333	70	403	9.7

Note. PMH-APRN = psychiatric mental health advanced practice registered nurse.

Sources: American Nurses Credentialing Center, M. Horahan, personal communication, January 21, 2018. Annual Estimates of the Resident Population: April 1, 2010, to July 1, 2017 Source: U.S. Census Bureau, Population Division.

ensure that each manifestation of the theme has been accounted for and compared across interviews (Pope & Mays, 2006). Issues of potential bias were discussed as the research team conferred and reached consensus on key themes and findings. Original categories in the data arose from topics covered by our interview guide (e.g., role functions, perspectives on scope of practice), and additional data categories were added as issues were described by informants. When our study was complete, we conducted webinars for our informants in each state discussing our findings as a form of respondent validation of the study's validity (Noble & Smith, 2015).

Results

We visited 40 sites with 6–10 sites/organizations and 14–28 interviews per state for a total of 94 interviews. Interviewees included state BON staff, state advanced practice nursing organization staff, directors of PMHNP education programs, program faculty, PMH-APRNs in various practice settings, agency/system directors, psychiatrists, and other health professionals who worked on teams with PMH-APRNs. Several interviewees had roles as both faculty and practitioner. About 15–20% of the interviewees worked in a solo or group private practice. There were three to four group interviews of PMHNPs in each state conducted during the early morning or lunch time breaks so as to not interfere with scheduled clinical appointments.

Sizes of APRN-PMH Workforces in Each State

Data on the number of certified PMHNPs and PMH-CNSs in the five states we visited were provided by the American Nurse Credentialing Center (M. Horahan, personal communication, January 21, 2018) (Table 1). Data on the number of PMH-APRNs per 100,000 population showed a wide variation, with Massachusetts having the highest at 17.6 and Illinois having the lowest at 2.8 per 100,000 population. In most of the states visited, the PMH-APRNs were predominantly NPs, except for Massachusetts, which has a long history of PMH-CNS preparation and many active practitioners with prescriptive authority. In all other states except North Carolina, there were fewer PMH-CNS practitioners, but they have a pathway to obtaining prescriptive authority.

Scope of Practice Variation Among States

None of the states visited have a distinct scope of practice for PMH-APRNs. Massachusetts has a scope of practice for PMH-CNSs that differs from other CNSs in the state. In Colorado, regulations from the Department of Behavioral Health affect certain functions of PMH-APRN practice, such as ability to release legal mental health holds.

Oregon uses APRN as the title for advanced practitioners as recommended by the APRN Consensus Model. APRNs have had independent practice since the 1970s, prescriptive authority since 1979, and authority to prescribe Schedule 2 drugs since 1995 (Oregon State Board of Nursing, personal communication, February 13, 2017). In addition, Oregon passed a payment parity law in 2013 sponsored in part by the Oregon Nurses Association. NPs must be paid 100% of what physicians are paid for providing the same services in primary care and mental health. This applies to Medicare, Medicaid, and all commercial insurers.

In Colorado, NPs gained full practice authority in 2015 (Colorado Board of Nursing, personal communication, June 9, 2017). Prior to that, a collaboration agreement with a physician was required. Prescriptive authority for NPs requires obtaining 1,000 hours of documented mentorship with either a physician or APRN who has full prescriptive authority and experience in prescribing medications. Colorado also requires NPs to develop an "Articulated Plan for Safe Prescribing" that includes a quality assurance plan and mechanism for ongoing consultation with a physician or NP mentor. The signed plan must be kept on file and can be audited. There is no required format for the articulation agreement, but the BON has templates available.

Massachusetts is a restricted practice state for APRNs according to the AANP (2018). In 2014, the Massachusetts (BON) clarified in the regulations that restricted practice is for prescriptive authority only. The PMH-CNS scope of practice is essentially the same as for PMHNPs except that PMH-CNSs must be supervised by psychiatrists while NPs can be supervised by any physician practicing in the same field. PMH-APRNs are supervised for the prescribing of controlled substances.

North Carolina is another state with a restricted scope of practice for APRNs and a requirement of collaborative practice with a physician (AANP, 2018). NPs are jointly regulated by the state BON and the medical board. Certified PMH-CNSs practice in the state, though they have never had prescriptive authority in North Carolina. Attempts to update the Nursing Practice Act in North Carolina to reduce restrictions on APRN practice in 2017 were not successful.

Illinois is currently designated by the AANP (2018) as a reduced practice state requiring supervision. However, in January 2018, new legislation was passed to allow full practice authority for NPs after they obtain 4,000 hours of supervised clinical experience. The law continues the requirement for supervision in prescribing specific controlled substances. Regulations to implement this new law are still in development.

Impact of Regulations on Practice Setting

In the states with full practice authority for NPs, Oregon and Colorado, informants reported that independence in practice was a key factor in their choice of practice setting, and in some instances is what prompted them to move to the state to practice. For this study, we were not able to assess whether there was any growth in the number of PMHNPs in states with full practice authority; however, interviewees often reported this was a factor in their staying in the state or moving to another state to practice. A PMHNP who completed her graduate education in California stated she "wanted a less restrictive practice environment, so Washington and Oregon were the top two options." In contrast, an agency leader in North Carolina noted, "PMHNPs I try to recruit are now saying, 'I don't want to work in a state without autonomous practice."

Key informants in full practice authority states reported it was relatively easy to set up private or group NP practices. In contrast, informants in the restricted states of North Carolina, Massachusetts, and Illinois cited the supervision requirement as a challenge to establishing and maintaining a private practice, citing both difficulty in finding and keeping a physician supervisor and the expense of paying for supervision.

We found more innovation in practice settings in full practice states. A PMHNP-led group practice in Oregon included six NPs practicing full- or part-time as employees working on a commission basis. The practice secured a number of contracts for behavioral health services in schools, juvenile facilities, and Medicaid-funded services, allowing for a variety of practice sites and models, which was a source of job satisfaction cited by our interviewees: "As a group we have infrastructure support, and I like the collaboration and variety of practice."

Structure and Impact of Supervision and Collaboration

In states requiring supervision, which may be called collaboration in some state regulations (Illinois, Massachusetts, and North Carolina), the specific requirements for supervisor qualifications, frequency, mode, and documentation were quite different between states. Table 2 includes a summary description of the supervision requirements in each of the five states in the study.

Oregon has full practice authority with no supervision requirements. Interviewees noted they often developed voluntary peer collaborations to consult with each other about treatment challenges, share best practices, and continue their education in

TABLE 2

Scope of Practice (SOP) and Supervision/Collaboration Requirements in Each State

Detail Oregon		Colorado	Illinois ¹	Massachusetts ²	North Carolina ³
SOP Categorization ^a	Full SOP	Full SOP	Reduced SOP	Restricted SOP	Restricted SOP
Year Granted Full Practice Authority	1979	2015	2018 (at time of study, Illinois was classified as having reduced scope of practice)	N/A	N/A
Supervision/ Collaboration Language	N/A	Mentor ^b	Collaborating physician	Supervising physician	Supervising physician
Supervisor Credentials	N/A	N/A	Physician licensed to practice medicine in all branches, or licensed podiatrist in active clini- cal practice.	Physician with training in specialty area appro- priately related to APRN's area of practice. PMH-CNS supervisor must have training in psychiatry.	Physician with population focus, certification, and competence that mirrors or exceeds that of NP's population focus.
Supervision/ Collaboration Frequency	N/A	N/A	Not specified. Consultation between NP and physician can occur in person or by other electronic means.	Schedule II drugs must be reviewed within 96 hours.	Once a month for first 6 months; every 6 months thereafter.
Supervision/ Collaboration Requirements	N/A	1,000 hours of practice with prescribing mentor for full prescriptive authority. Articulated plan for safe prescribing kept on file, reviewed annually, and updated as necessary.	Written collaborative agreement describes re- lationship of APRN with collaborating physician. Describes categories of care, treatment, or pro- cedures to be provided by APRN. Copy of signed, written collaborative agree- ment must be available to the department upon request.	Supervision required for prescriptive authori- ty only. Guidelines required are written instructions and procedures describing methods that NP or CNS with prescriptive authority follow when managing medications. Guidelines specify in- stances in which referral to or consultation with physician required for appropriate medication management. Guidelines available to any person upon request.	Collaborative practice agreement identifies drugs, devices, medical treatments, tests, and procedures prescribed, ordered, and performed in NP practice sites. On-site physical presence not required; available to each other for direct com- munication or telecommunication. Supervisor must have DEA registration equal to or greater than that of NP. Written agreement signed by both primary supervis- ing physician and NP, maintained in each prac- tice site; reviewed at least yearly; available for in- spection by members or agents of either board.

Note. APRN = advanced practice registered nurse; CNS = clinical nurse specialist; DEA = Drug Enforcement Administration; NP = nurse practitioner; PMH-CNS = psychiatric mental health clinical nurse specialist.

^a SOP categorization based on 2018 American Association of Nurse Practitioners classification.

^b For prescriptive authority only during provisional prescriptive authority. Mentor is physician or advanced practice nurse with full prescriptive authority. *Sources:*

¹ http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=1312&ChapterID=24

² Mass.gov. (n.d.). Learn more about prescriptive authority requirements and practice guidelines. Retrieved from https://www.mass.gov/service-details/learnmore-about-prescriptive-authority-requirements-and-practice-guidelines

³ NC Board of Nursing. (2018, August 16). Frequently asked questions. Retrieved from https://www.ncbon.com/practice-nurse-practitioner-frequently-askedquestions#faq2 the practice. Peer consultation groups included either PMHNPs only or a mixture of PMHNPs, psychiatrists, or psychologists. Peer collaborations usually involved practitioners working in the same practice setting.

In Colorado, the "articulated plan" is supposed to facilitate consultation and professional development, but interviewees reported the documents were mostly "just to have in the file" and did not lead to real collaboration in practice. Collaboration was reported to occur much as it did in Oregon with peers with a similar type of practice or in the same practice setting.

In Massachusetts, supervision is for prescriptive authority only. The initial prescription for Schedule II drugs must be reviewed within 96 hours. Supervising physicians for NPs must be board certified in the specialty area or have hospital privileges related to the area of the NP's practice. Supervisors of PMH-CNSs need to be board certified in psychiatry (244 CMR 4.00, 2014).

In North Carolina, "the supervising physician must be licensed with the North Carolina Medical Board with a population focus, certification and maintained competence that mirrors or exceed that of the Nurse Practitioner's population focus to avoid limiting the Nurse Practitioners scope of practice," (North Carolina Board of Nursing, 2018). NPs must meet with the collaborating physician once per month for the first 6 months, and every 6 months thereafter. When there is a change in physician collaborator, NPs must again meet monthly for the first 6 months. The collaborative practice agreement must specify the practices/ procedures performed and the medications that can be prescribed. Progress and outcome measures need to be included and documented. The collaboration agreement needs to be signed by both parties and reviewed annually (Quality Assurance Standards, 2009).

In Illinois, regulations regarding supervision and the written agreement, prior to the new legislation, specified the collaborator as a physician or podiatrist with the meeting frequency of once per month. The practice area of the collaborating physician was described as "services the collaborating physician or podiatrist generally provides to his or her patients in the normal course of clinical medical practice" (Nurse Practice Act, n.d.).

Perspectives on Supervision/Collaboration

As noted earlier, in the states with full practice authority, PMH-APRN supervision is not a legal requirement. Consultation and collaboration were voluntary and designed by the individual practitioners to meet the goals of professional development and consultation on an as-needed basis.

In the states with specific supervision/collaboration requirements, perspectives on these requirements varied, primarily based on the level of experience of the PMHNP. Some newer PMHNPs felt the requirement for physician supervision meant they were guaranteed access to consultation when needed. An informant in Massachusetts said, "When I first graduated I was happy to have a collaborating doctor." PMH-APRN interviewees with more experience were more likely to report that supervision was an administration burden, costly for the individual or organization, and did not add value to their clinical practice.

Many PMHNP interviewees in states requiring supervision noted the supervision did not typically occur as specified in the regulations. Especially with experienced PMH-APRNs, there was often a mutual unwritten understanding between the parties that the collaborating physician would be available by phone if needed, but regular meetings were not necessary. PMHNPs in a group practice in Massachusetts noted their supervision was "mostly on paper" and the physician was not routinely involved. Many interviewees described the administration of collaborative practice agreements as "busy work," particularly in clinical sites with multiple NPs. Turnover of psychiatrists and the need to continually locate and arrange new supervisors was often reported to be a challenge, and in some cases departure of a collaborating psychiatrist from an agency meant PMHNPs had to stop seeing patients until another collaborator was found.

The significant cost of supervision, difficulty in finding a supervising/collaborating physician, and finding a new physician in the case of relocation, new job, or physician retirement were all commonly reported as challenges by PMH-APRN interviewees. One interviewee commented she knew colleagues who had to pay retainers for supervision, regardless of whether supervision occurred. PMHNP interviewees in private practice reported the average cost of supervision was as high as \$1,500-\$3,000 per month. Numerous informants commented on the potential for salary inequality inherent in supervision requirements. An informant in Massachusetts, whose opinion was echoed by other informants, was very vocal that scope of practice regulation was "a control issue to make sure that NPs don't get compensated as much as the doctors. Once you get rid of supervision, you'll have more clout with the insurance companies and get reimbursed at a higher rate." Another PMH-APRN in Massachusetts noted psychiatrists in her agency are paid \$150/hour while PMH-APRNs are paid \$65/hour, though job duties are the same. Several North Carolina informants shared information (no longer posted) from a website in North Carolina targeting psychiatrists: "Because North Carolina's supervision rules are modest, money earned from supervising good, experienced nurses or [physician assistants] PAs is almost passive income for the doctor. Psychiatrists earn from \$10,000.00 to \$15,000.00 per nurse, so a doctor supervising four full-time nurses would earn up to \$60,000.00 per year in extra income." (Carolina Partners, 2017).

Many interviewees reported that difficulty in finding a willing supervisor was a barrier to their practice in taking a new position or relocating to another part of the state, particularly rural areas where psychiatrists are in short supply. "On Cape Cod, the wait to see a psychiatrist can be 6 months. I don't prescribe here in my practice because I could never find a supervising physician."

Psychiatrists interviewed about supervision reported a lack of understanding of the requirements in their state and some concerns about their legal liability for the PMH-APRN's practice. A psychiatrist informant in North Carolina indicated that supervising PMHNPs increases his malpractice insurance premiums because he is put in a higher risk group. Several psychiatrists described mandated collaborations as an opportunity for collegial exchange where the physician was able to learn from PMH-APRNs' expertise as well as provide consultation.

Organizational/Facility-Based Practice Limitations

In addition to scope of practice limitations due to state regulations, interviewees also reported practice limitations that were organizational or facility based and not required by law. Examples included requirements that a physician cosign or review visit notes, more frequent supervision sessions than required by state regulations, and failure to allow PMHNPs hospital privileges. This meant inpatient assessments conducted by the PMHNP were billed under the physician's name, not capturing the PMHNP's contribution. Interviewees reported these types of restrictions were almost as difficult to address as scope of practice limitations.

Discussion

Our study has implications for addressing the workforce shortage in mental health and SUDs and increasing access to services in the United States. We found some PMH-APRNs considered practice authority in determining where to live and practice. While our study methods did not allow quantification of PMHNP access to care across states, interviewees reported difficulty or perceived difficulty in finding a supervising/collaborating physician as a barrier to practice, especially in rural or underserved areas. Previous research found PMH-APRNs are more likely than psychiatrists to live in rural areas (Hanrahan & Hartley, 2008). Demand for PMHNPs was reported by faculty and nurse interviewees in all five states. Most nurse interviewees stated they had 2 to 3 job offers before they completed their program. PMHNP program faculty reported they were asked to increase enrollment in their programs.

Previous research also suggests that changing scope of practice regulations toward full practice authority impacts growth in the number of APRNs in a state. A study by Reagan and Salsberry (2013) comparing growth in the number of NPs in states with differing scopes of practice found significant differences in NP growth rates, with the highest growth in states with no restrictions. While these results are not specific to PMH-APRNs, they suggest restricted practice may be a barrier to addressing the current workforce shortage in behavioral health.

Even if laws are changed to implement full practice authority, growing the number of PMH-APRNs to address workforce shortages could take several years. In New York, the scope of practice was changed in 2015 to remove the written practice agreement for NPs with more than 3,600 hours of practice. However, qualitative data collected nearly 2 years later found that there was a lack of physician knowledge about the changes in the law and that institutional restrictions in practice persisted (Poghosyan, Norful, & Laugesen, 2018).

Supervision has costs, both economic and administrative, to individuals and to organizations and may be financially motivated, as described in North Carolina. Furthermore, if the goal of scope of practice laws is to provide consultation for new practitioners, there should be less need for supervision as PMHNPs gain experience. Our study found that the actual supervision provided was often inconsistent with state requirements and did not change as PMHNPs became more experienced. This finding is consistent with prior research. Rudner and Kung (2017) found that 12% of NPs in Florida received no physician supervision, which was unrelated to the NP's level of experience. Some NPs with little or no experience had no physician oversight, whereas some NPs with more than 20 years of experience had extensive oversight. A recent study found higher costs for supervision in rural areas (Martin & Alexander, 2019).

There is a need for further research on the economic costs and administrative burden of required supervision and the impacts on PHMNP practice and access to care for patients. Losses in productivity due to time spent on supervision that is unnecessary for improving patient care, as well as time spent arranging and documenting supervision, could be quantified in future research.

Further research is also needed on how to best meet the needs of new PMHNP practitioners for consultation and provide experienced practitioners the opportunity to confer with peers about challenging patient issues. If the goal of supervision/collaborative practice regulation is to ensure consultation, particularly for new practitioners, our study found that goal is not reliably met. In states with supervision requirements, supervision was often an on-call arrangement and face-to-face meetings were rare. The most valued consultation occurred in true collaborative sharing of practice challenges between PMHNP peers or between nurses and physicians working alongside each other in similar practices.

Limitations

One of the potential limitations of this analysis is that the selected study states and practice sites may not be representative of all national practice issues for PMH-APRNs. We selected states that represented variation in NP scope of practice but recognize each state has unique nuances within its scope.

Another limitation is the use of snowball sampling, which may miss some perspectives within each state. It is our experience when conducting a study of this nature, where practitioners are busy in practice and have very limited time available for interviews, it is important to use a snowball approach and utilize key contacts already in the state. However, because most of our initial contacts were PMHNP educators or were active in psychiatric nursing organizations, it is possible our sample was biased toward persons interested in expanding nursing's professional autonomy. Likewise, because interviewed psychiatrists were often the physician collaborators of our PMHNP informants, their perspectives on supervising PMHNPs may not be representative of all psychiatrists. Our findings should be considered suggestive rather than conclusive.

Conclusion

PMHNPs are a growing and important component of the workforce needed to meet increased demand for behavioral health services and address well-documented shortages in the workforce. Our study found that differing scope of practice regulations across states impacted PMHNPs in choice of practice settings, perceived flexibility in job mobility, costs, and multiple concerns about supervisory requirements. Supervision requirements in restricted scope of practice states were viewed as costly and burdensome. Further research on the contribution of PMHNPs could address the specific impacts of removing scope of practice burdens on the availability of practitioners and patient access to care.

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