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Revisiting Scope of Practice Facilitators and Barriers for Primary Care Nurse Practitioners: A Qualitative Investigation

Lusine Poghosyan, PhD, MPH, RN[1], Angela Nannini, PhD FNP-C, FAANP[2], Arlene Smaldone, DNSc, CPNP, CDE[1], Sean Clarke, PhD, RN, FAAN[3], Nancy C. O'Rourke, MSN, ACNP, ANP, RNC, FAANP[4], Barbara G. Rosato, MSN, RN/NP, ANP-BC, CDE[5], and Bobbie Berkowitz, PhD, RN, FAAN[1]

Abstract

Revisiting scope of practice (SOP) policies for nurse practitioners (NPs) is necessary in the evolving primary care environment with goals to provide timely access, improve quality, and contain cost. This study utilized qualitative descriptive design to investigate NP roles and responsibilities as primary care providers (PCPs) in Massachusetts and their perceptions about barriers and facilitators to their SOP. Through purposive sampling, 23 NPs were recruited and they participated in group and individual interviews in spring 2011.The interviews were audio recorded and transcribed. Data were analyzed using Atlas.ti 6.0 software, and content analysis was applied. In addition to NP roles and responsibilities, three themes affecting NP SOP were: regulatory environment; comprehension of NP role; and work environment. NPs take on similar responsibilities as physicians to deliver primary care services; however, the regulatory environment and billing practices, lack of comprehension of the NP role, and challenging work environments limit successful NP practice.

Keywords

advanced nursing practice, nursing/health-care workforce issues, regulation of nursing practice

In October, 2010, *The Future of Nursing: Leading Change, Advancing Health*, a landmark report, was released by the Institute of Medicine (IOM, 2010). The report identified nursing as a key element in transforming the U.S. health-care system by increasing timely access to high-quality, patient-centered care. Given nurse practitioners' (NPs) abilities to provide comprehensive primary care and the overlapping scope of practice (SOP) for NPs and primary care physicians (American College of Physicians, 2009), the IOM acknowledged the expansion of the NP workforce in primary care settings as a means of accommodating increased demand for care.

NPs comprise approximately 20% of the primary care workforce (Agency for Healthcare Research and Quality, January, 2012), and this workforce is growing rapidly. Nationwide, 130% increase is anticipated from 2008 to 2025 *in their overall numbers* (Auerbach, 2012), and in general, more than 60% of NPs practice in primary care (Health Resources and Services Administration, 2008). The high quality and the cost-effectiveness of NP care have been documented in multiple investigations (Horrocks, Anderson, & Salisbury, 2002; Newhouse et al., 2011). If NPs and physician assistants were permitted to practice primary care to the fullest extent of their training, the health care would experience cost savings ranging from US$4.2 to US$8.4 billion between 2010 and 2020 (RAND Health, 2009).

Despite the benefits of NP care, the IOM report indicated that a number of policy challenges continue to pose barriers to the implementation of NP roles and to the NP workforce making optimal contributions to primary care. Regulations related to NP SOP are governed by different entities including boards of nursing, boards of medicine, and vary from state to state (Pearson, 2012). In some states, regulations may present barriers to NPs in terms of utilizing their skills and training to the fullest extent, potentially hindering the

[1]Columbia University, New York, NY, USA
[2]UMass Lowell, MA, USA
[3]McGill University, Montreal, QC, Canada
[4]University of Massachusetts Medical Center, Hollis, NH, USA
[5]Beth Israel Deaconess Medical Center, Boston, MA, USA

Corresponding Author:
Lusine Poghosyan, PhD, MPH, RN, Columbia University, 617 W. 168th Street, GB 306, New York, NY 10032, USA.
Email: lp2475@columbia.edu

delivery of high-quality patient care (Hansen-Turton, Ritter, & Torgan, 2008; Pohl, Hanson, Newland, & Cronenwett, 2010). Some of the barriers include required supervision or collaboration with physicians for prescribing certain medications or certifying specific services (Pearson, 2012), and the inability to sign some forms for their patients such as workers' compensation forms or handicap parking permits (Barton Associates, 2012). In an effort to alleviate barriers that limit the provision of and anticipated demand for primary care, the IOM report has called for policy changes to allow NPs to practice to the full extent of their training and licensure.

Revisiting the SOP policies for primary care NPs is necessary given the major redesign primary care is undergoing to provide timely access and contain cost (Bodenheimer & Pham, 2010; Friedberg, Hussey, & Schneider, 2010). In addition, this is particularly important given the passage of the Patient Protection and Affordable Care Act (PPACA, March 23, 2010), which has the potential to drive an additional 32 million patients into the market, stretching the current workforce to its limit. *Meeting this projected demand for primary care will require optimal utilization of the skills, knowledge, and training of NPs as they represent a substantial supply of primary care providers* (PCPs; Poghosyan, Lucero, Rauch, & Berkowitz, 2012).

Perhaps the best case study of health reform implementation and the impact it had on NPs is found in Massachusetts (MA). In 2006, MA enacted a health reform law that expanded access to health care and ultimately drove approximately 450,000 previously uninsured persons into the health-care market (Commonwealth of Massachusetts, April 12, 2006). This sudden increase in the demand for services burdened the primary care system that was already experiencing a significant shortage of primary care physicians (Massachusetts Medical Society, 2008). In an effort to meet this service demand, legislation was passed requiring third party insurers to recognize NPs as PCPs in 2008 (Commonwealth of Massachusetts, 2008; Craven & Ober, 2009). MA Nurse Practice Act, that includes Advanced Practice Nurses (M.G.L. C. 112 s. 80B), is overseen by the MA Board of Registration in Nursing (244 CMR 4, March 1994). *However, advanced practice nursing regulation governing the ordering of tests, therapeutics, and prescribing of medications is promulgated by the MA Board of Registration in Nursing in conjunction with the Board of Registration in Medicine* (Pearson, 2012). Despite the expanded role of NPs in MA, their SOP continued to require physician supervision and, in some cases, physician sign off of NP charts for being qualified for reimbursement (Barton Associates, 2012). Consequently, while NPs in MA experienced an expanded SOP in-line with their clinical skills and training, they continued to operate under regulations that limited their autonomous practice.

The MA case study offers some insight into how NPs might function in the face of national health reform. Modern primary care models, such as Patient Centered Medical Homes (PCMHs; National Committee for Quality Assurance, 2011) and Accountable Care Organizations (ACOs; Fisher, Staiger, Bynum, & Gottlieb, 2007) will rely on the contributions of all health-care providers, including NPs, to deliver primary care and to address the shortcomings of the current system. To date, little is known regarding how mandated insurer recognition of NPs affected their utilization as PCPs in the context of health reform. However, in anticipation of forthcoming health reform measures and the expected increase in demand for primary care, research on the factors that promote or restrict NP practice is critically needed. Policymakers, administrators, NPs, and researchers need to better understand NP practice in the primary care settings so that barriers and facilitators of optimal SOP can be identified to favor the provision of cost-effective care, to better utilize the NP workforce, and to retain NPs in clinical practice. This qualitative investigation focused on describing NP roles and responsibilities in primary care settings in MA and exploring NPs' perceptions about the barriers and facilitators of their SOP as PCPs.

Method

This study is a part of a larger qualitative investigation of NP practice and organizational climates in primary care settings in MA (Poghosyan, Nannini, Stone, & Smaldone, in press). Using qualitative descriptive design, data were collected through group and individual interviews with NPs: those who participated in the group discussion were not eligible to participate in the individual interviews. Participants in the group discussion were offered US$20 to offset transportation expenses and participants of the individual interviews received US$15 gift card. The study was approved by the Institutional Review Board of Northeastern University.

Sample and Recruitment

Using purposive sampling, NPs were recruited from the membership list of Massachusetts Coalition of Nurse Practitioners (MCNP), the statewide NP organization. Information about the study and an invitation to participate was emailed to all members by MCNP staff. A second, follow-up email was sent 2 weeks later. To recruit additional members, flyers were distributed to NPs who attended the 2011 Northeast Regional Nurse Practitioner Conference, sponsored by MCNP. NP eligibility criteria for participation included the following: *current practice in a primary care setting in MA*; employment at current setting for 6 months or more; adult- or family-health patient population; and primary language of English. Interested NPs contacted the researcher to participate either in group or in individual interviews

Table 1. Interview Guide Questions.

Questions
1. Describe your usual day's work. *Probe*. What are your major responsibilities? What do you do all day? What are the major parts of your job? Probe: Administration/patient care/follow-up/teaching? Probe—types of visits, patients, age group?
2. Tell me about the practice you work in. What types of services are provided by your practice? *Probe*., number of providers and types, funding, staffing, for profit or nonprofit, part of a bigger organization, etc.
3. Describe your role as a primary care provider? How is this defined in your organization?
4. How would you distinguish your primary care provider role from any MDs that work in the practice? *Probe*—do you follow patients exclusively or do you share patient care?
5. How do you see your role as NP within the practice? Describe the opportunities for NPs in your practice site. Discuss challenges for NPs practice in your workplace.
6. How clear are nurse practitioner roles and responsibilities in your organization? Probe: give example.
7. How valued is NP care by your organization? What are the rewards for contributions to patient care?
8. What are the overt and implicit expectations for nurse practitioners and other members of your team?
9. What are some of the obstacles within the practice that hinder you from doing your job?
10. The recently released IOM report said that nurses including nurse practitioners should operate at the fullest level of their training . . . what are the necessary structures for this "effective" NP practice.

Note. The guide contained several probes that are not included in this table.

Procedures for Group and Individual Interviews

Group Interview. The research team developed an interview guide by reviewing existing evidence, consulting NPs, and pretesting the questions with two primary care NPs who did not participate in the study. Some questions from the guide are presented in Table 1. The group interview was conducted before the individual interviews to gather collective testimonies of NPs and add additional content to the guide. Seven NPs participated in the group interview held in March 2011, which took place in a separate room on a university campus. Two researchers, the research assistant, and the participants were present during the interview. One researcher moderated the interview with the assistance from the comoderator researcher. Informed consent of the participants was obtained. The researcher introduced herself, the comoderator, and the research assistant who took notes throughout the interview. The interview lasted 98 min and was audio recorded. During the interview, the researcher avoided all criticism, opinion, or evaluation and focused only on the phenomenon being described (Speziale & Carpenter, 2003).

Individual Interviews. One researcher conducted all individual interviews. She met the participants at an arranged location convenient for them. At the start of each interview, informed consent was obtained. An interview guide was used to direct the interview process and collect data. Among the topics explored were NPs roles as PCPs, the expectations from NPs, and the obstacles toward NP practice. Interviews lasted from 30 min to 70 min and were audio recorded. Sixteen in-depth interviews were conducted from March through May, 2011, until data saturation was achieved. All participants also completed a demographic form.

Data Analysis

The recordings of the interviews were transcribed by a professional transcriptionist. The researcher checked the accuracy of transcriptions against the audiotapes, and each transcript was entered into Atlas.ti 6.2 qualitative software (ATLAS.ti, 2011) for analysis. Content analysis was used (Sandelowski, 2000; Zhang & Wildemuth, 2009). All transcripts were reviewed and coded independently by three researchers. Then, the data were sorted by codes to identify categories or patterns. After this step, the researchers looked for repetitions, metaphors, analogies, and transitions to identify themes. During the reading process, new categories and themes emerged, and were added or removed as the researchers continued the data analysis. Another senior researcher reviewed all themes and an exhaustive description of the phenomenon was developed (Speziale & Carpenter, 2003).

Findings

Demographic Characteristics

Overall, 23 primary care NPs participated in the study: 16 in individual in-depth interviews and 7 in the group interview. The mean age of the participants was 49; 95.7% of them were female; and 52.2% worked over 40 hr per week. The NP participants provided primary care services in community health centers (CHCs), private physician practices, in ambulatory care networks, and hospital-affiliated outpatient clinics. The majority of them shared a patient panel with

Table 2. Characteristics of Nurse Practitioners Participants.

	Participants ($n = 23$)
Demographics	
Age (years)	
Mean (*SD*)	49.3(8.9)
Range	28.0-62.0
Sex (Freq, %)	
Male	1(4.3)
Female	22(95.7)
Race	
White	22(95.7)
Non-White	1(4.3)
Highest nursing education degree	
Master	23.0(100.0)
Work characteristics (Freq, %)	
Years in the current position	
6 months-1 year	2(8.7)
1-4 years	10(43.4)
5-8 years	9(21.7)
> 8 years	6(26.1)
Average number of work hours per week	
11-20	1(4.3)
21-30	4(17.4)
31-40	6(26.1)
More than 40	12(52.2)
Number of nurse practitioners in their practice	
None	5 (21.7)
1-3	9(39.1)
4-5	2(8.7)
More than 5	7(30.4)
Nurse practitioner practice	
Own patient panel	8(34.8)
Episodic visits	1(4.3)
Share patients with doctors	14(60.9)

physicians in their practices. Table 2 outlines the characteristics of the participants.

Themes

In addition to the NP roles and responsibilities theme, three additional themes were extracted. The themes, elements that could either support or restrict NP SOP in primary care, were: (a) regulatory environment; (b) comprehension of NP role; and (c) work environment.

NP Responsibilities and Roles. Most NP participants reported that they were responsible for providing comprehensive primary care to their patient population. They described activities related to preventative, episodic, and chronic care, and assuming responsibilities comparable to primary care physicians in their practice sites. One NP from a hospital-affiliated family practice said: "Here our scope of practice is pretty much the exact same as any of the physicians . . . There really is very little difference between what an NP does and what an MD does."

However, NPs spoke about differences from physicians in their approach to providing patient care and addressing patient care issues. NPs felt they had a more holistic approach, made their care personal for each patient and spent more time listening, explaining, and teaching patients about their conditions. One NP who worked with four physicians said:

> I don't really feel like a lot of the physicians look at it that way. They're like okay you're coming in with high blood pressure, we're gonna do A, B, C, where[as] I'm like . . . Well . . . let's talk about diet, let's talk about exercise, let's talk about weight loss.

Another NP, with 11 years of experience, made a similar comment:

> I don't just look at the diagnosis. I look at your family dynamics. I look at your diet. I look at your support system . . . I know that all of those things have to do with how that patient's gonna do physically. They are all factors in wellness! And I think that that's the difference between the focus of medicine and the focus of nursing.

NPs spoke about the importance of patient teaching and assessing patients' understanding of their conditions and care instructions. One NP shared a story about patients stopping their cholesterol medication after receiving updates on their lipid levels from their physicians:

> I've have patients stop their medications for cholesterol . . . because they got a letter from the doctor stating that their cholesterol [was] fine, so they thought that the pill they were on did the job and they [didn't] need to take it anymore . . . I try to teach the doctors you have to think like your patients. You have to tell them: "Your cholesterol is good. Keep on the same cholesterol medication and the same dose and continue watching your diet."

The ability to develop relationships with patients and participate in their care can be hindered by organizational processes related to patient scheduling. While most NPs reported following a group of patients on a regular basis, others provided only same-day visits or served as overflow when a patient's regular physician was unavailable. One NP said: "I also can get anybody that calls up and if I have an opening they book . . . I don't know what I see until the day that I see them and my schedule can change several times in that same day." NPs who only saw same-day visits reported that providing only the same-day care is challenging since they have never met the patients and do not have any information about them. One NP who has been in her practice for more than three years said: "It's a new patient every single time, which is very challenging." Working with patients on a shifting or ad hoc basis can further mask the contribution of NPs. An NP who worked in a large hospital-based practice with many physicians and a few NPs said: "We don't have our own patient panel; none of us [NPs] are considered PCP's and mostly we do the physicals, chronic care management, and the Urgent Care as needed." The same NP continued by saying: "I do not see new patients . . . because we're a hospital

based practice, a lot of my billing goes under the Facility[‘s] fee, so really the Nurse Practitioner Services are not transparent.”

Sometimes NPs see patients with specific conditions related to particular areas of expertise or training for the NP or when patients express a preference for the NP’s approach. Some patients also prefer to see female providers (most of the NPs interviewed were women). When NPs have specialized to some extent, for instance, geriatrics or cardiology, they will be scheduled to see patients with those issues. Several NPs spoke of working with physicians who did not “do women’s health.” For example, one NP from an internal medicine practice said:

> I probably see more of the women’s health component in my office. Because he’s a male physician and he just doesn’t have as much expertise or . . . clinical interest in women’s health, whereas I have that interest. So, I probably do a little bit more of that.

Regulatory Environment. While, practically speaking, NPs exercise considerable independence in providing primary care; current MA regulations require that NPs be supervised by physicians when exercising their prescriptive authority. The state requires NPs to have written agreements in place with specific physicians that define a structure for this oversight. While all of the interviewed NPs felt that regular reviews of a specified number of patient charts by a collaborating physician satisfied the state requirements, they did not feel that it ensured or improved the quality of the care they delivered. Further, chart reviews were unevenly practiced across clinical sites: NPs said that the supervising physician reviewed their charts and discussed some of their cases every 2 to 3 months and sometimes not at all. One NP from a family practice said: “I have a supervising physician, supposedly, but . . . she doesn’t read my charts. She used to when I first started—she did for about three months and then she was like okay—you’re fine.” Another NP reported that the chart review is a technicality; having a supervising physician does not change the care NPs provide: “A supervising physician is really only in regards to prescriptive authority; it’s not in regards to what I’m doing in the room.”

NPs reported that physician supervision leads to challenges in their clinics both for physicians and NPs, and NPs felt that it was an obsolete requirement that should be revisited. One NP said:

> I think many moons ago when they implemented prescriptive authority . . . they had to concede [sic] with the Board of Medicine and the Board of Nursing . . . We’re talking 20 years later in which you have programs that are training Nurse Practitioners that Pharmacology is part of the education, that there’s requirements for Continuing Education . . . I feel it’s an administrative burden . . . I just feel like it’s something to get all dressed up for JCAHO [The Joint Commission] and CMS [Centers for Medicare & Medicaid Services].

Another similar comment:

> I have Practice Guidelines on paper [so] that in case if anybody ever wants to see them I can show them . . . With Schedule 2’s—they’re supposed to be reviewed within seventy-two hours . . . Not only have I not done it at all in my current practice (in the past three years), I didn’t do it in the Community Health Center where I worked for probably 5 or 6 years before that . . . The last two docs I worked [with] couldn’t find the time to meet with me.

Some NPs reported that even though they make all patient care decisions, they have to wait for the physicians to sign off on some procedures, prescriptions, and medical clearance forms. One NP with 23 years of experience said, “Some other things that need to be signed by the physician and so . . . that’s problematic . . . What if they’re off that week? . . . You have to hold the chart out until it’s convenient for them.” Another NP furthered this same sentiment:

> I’ll do a physical for a . . . school bus driver but I can’t sign it . . . I do physicals for everything but, for that particular one, a doctor has to co-sign it and it’s kind of silly . . . Why do they have to sign it when I’ve done the physical?

NPs also described how restrictive governmental and other policies force organizations to complete forms in a manner that maximizes reimbursement rather than tracks who delivers care. An NP with 11 years of experience who joined her practice about a year ago said:

> The care’s not changing. My setting is not changing but physically what you’re doing is you’re essentially manipulating the billing by saying, OK . . . a physician collaborated on this.’ Did he look in the room? Absolutely not . . . That’s why he has me—so he doesn’t have to do that. He doesn’t want to.

Informants described reimbursement policies and billing practices as the main policy challenge that limits NPs’ abilities to practice within their SOP in most of the primary care sites. Clinics follow Medicare guidelines for “incident to” billing, which translates into larger financial revenues for them, because a practice can bill at *100% of the physician fee if the NP sees the patient but the physician is recorded as the provider of the visit* (Chapman, Wides, & Spetz, 2010). NPs are reimbursed at 85% of the physician fee by Medicare. Other insurers follow Medicare’s lead. As a result, despite the MA 2008 law requiring insurers to recognize NPs as PCPs, primary care practices have negative financial incentives to do so and tend not to designate them as PCPs or assign them their own patient panel. One NP with 20 years of experience said: “The system does not recognize me as a primary care provider although that’s exactly what I do . . . [my organization] at this point, is not willing to have Nurse Practitioners do that . . . I think it’s because of the reimbursements.” Another NP said:

> It's a private practice. It's his [physician's] practice so these are his patients, and in fact, for the insurers he is the PCP even though the laws have changed so that I could be . . . From a financial standpoint it doesn't make much sense. You know, 100% is way better than 85% . . . particularly for some with private insurers . . . We don't get audited on whether he [physician] sees the patients on not.

Almost no NPs reported being listed as PCPs by their employing practice; consequently, patients were unable to choose them as PCPs. One NP said: "I think they've taken away rights from the patients to choose who they want to see." Some NPs reported that they have patients that they have followed for years, but in the patient's chart the physician is recorded as the PCP. One NP from a family practice affiliated with a medical center said:

> [A] lot of times we see the patients so much more than their PCP[s] . . . There is one patient, to give you an example, yesterday . . . who I was seeing and then I decided . . . to run the case by her PCP and just, like, say you know I just saw your patient . . . She [the PCP] hadn't seen this patient since 2004.

The same NP continued by saying: "If the patient isn't seeing their PCP and they're just seeing different Nurse Practitioners here and there . . . I don't think that's good care."

Such billing practices tend to render an NP's contributions to care invisible—especially in data. One NP said:

> A lot of [decisions] are based on claims data, so it's [all about] who's doing the billing . . . At least where I am, everything goes under the physician so, many of my physicians look wonderful on paper because I am hidden in the closet, for all the work that I do.

NPs who worked in CHCs reported that the reimbursement is not a major issue in their settings because they do not have many patients with commercial insurance and the reimbursement is at a flat CHC rate by public insurers regardless of who sees the patient. One CHC NP who has been there for 23 years said: "As far as the Health Center is concerned . . . if it were up to them we probably wouldn't have supervising physicians and medication reviews."

Most NPs said that for them to practice within their SOP, state laws should be reinforced at the practice level *such as allowing NPs to be PCPs*. NPs ventured that if reimbursement policies changed, so would clinic staffing. One NP said: "Institutional policy would change and they'd hire more NPs."

Colleagues'/Coworkers' Comprehension of NP Role. Organizations differ in how they developed the NP role and involved NPs in care delivery. In some clinics, NP roles were not clearly defined, leading to variation in their responsibilities. One NP, from a hospital-affiliated clinic, said: "Nurse Practitioners in primary care just drop in there and you've gotta figure it out from there and I don't think that's safe." Most NPs reported that administrators, physicians, staff, and patients did not have a clear understanding of NP roles and competencies, which was a barrier for NP practice. Some NPs were the first NPs hired by their clinics, which required educating their coworkers about their SOP. *Rather than having a system about how to utilize NPs in care delivery and the type of the patients NPs will see, in such organizations NPs operated in an unclear manner.* As one NP related:

> When I first joined the practice, since there was no NP representation, they sort of didn't know what to do with me in a way and what happened was I started seeing any kind of patient that showed up—people with a [trial] fib[rillation], CHF—really complex problems.

Some NPs reported that they were viewed as registered nurses and often did not receive assistance from practice site medical assistants or nurses because "nurses helping nurses" did not make sense to the administrators. In this instance, NPs reported carrying out duties traditionally assigned to nurses or medical assistants such as recording patient vital signs, weight, and height. One NP who worked with two physicians in a hospital-based clinic said: "The medical assistants only bring in the doctors' patients; they don't bring in [mine]. They don't [take] vital [signs on] my patients. They don't weigh my patients; I basically do it all myself." Another NP from a large primary care practice said: "It hasn't changed from nursing to an NP; it's the same thing. It's the same battles that we fight, [around] equality." An NP with 2 years of working experience made a similar comment: "I think it's somewhat new to have the number of NPs that they have and so they didn't quite know where to put us . . . they put as kind of staff . . . we're basically looked at like nursing staff, medical assistants."

NPs spoke about similar impacts of lack of clarity of NP role on the support NPs receive and the relationship between NPs and other staff members:

> There's a lot of boundary role mish-moshing and . . . mixing that occurs because things are now not clearly defined for the staff . . . like my setting where I'll have the MA [medical assistant] say to me, "Why don't you go put this fax through."—which they would never say to the doc . . . It's a cultural thing.

Organizations made few efforts to define and promote NP role either within or outside of their settings. One NP gave an example:

> I had my picture taken eight years ago for the computer so people can see who works in the practice. They've never used it . . . I'm not on the site so no one ever knows that an NP even works in the group. They're [patients] very surprised when they come in for the first time and I'm usually the first person that's seeing them, 'cause they can't get in with the new PCP for a long time . . . We recently had a new doctor join our group, a female, and . . . they sent around this pamphlet that they send out to people with all the new docs and under that her picture . . . neither one of us [NPs] is on there.

NPs viewed not having their own patient panel as limiting their visibility in the community. One NP, who was the first NP to work in a physician practice and has been there for 8 years, said: "Patients are always saying, 'Oh, when are you going to be a doctor?' I say I'm not gonna be a doctor . . . I like what I do then I explain them why I like it."

Several NPs offered hope that achieving a critical mass of NPs and having NPs involved in the administration of practice or organizations could have positive long-term impacts on scope. One NP commented: "Having good NP representation in Administration where we can set those nice boundaries . . . that's why we need more nurse representation and leadership in the physician organizations . . . It should be a given that NPs have their administrative representation." A similar comment was made by another NP: "I think the more NPs are out there and at the table and in leadership roles, it [the role]'s gonna be more clearly defined."

Work Environment

General observations/stressors. NPs reported that their work environments affected their ability to practice within their SOP, specifically, work environments that lacked appropriate patient-care supports, infrastructure to promote NP practice and had poor relations with practice administration and some physicians. One NP spoke about stresses in their practice environment:

> It really is stressful. There's so much pressure on you from every possible direction. You've got . . . your patient base who's calling you . . . then there's all this new technology . . . Patient access through e-mail . . . Then there's management pressure to see people quickly . . . It seems like things are unreasonable in some way . . . We have our visits set up for the day and nobody seems to care about we need that down time, that breathing time, that time to take in.

Access to medical assistant and other practice supports. Some of the NPs reported that physicians have better access than NPs to organizational resources such as exam rooms, staff support, and so on. It was their perception that physicians' needs and patients are prioritized over NP needs and patients by practice site administration and staff. One NP said she does not like to have the physicians in the office because their presence diverts resources that ultimately introduce delays in her patient schedule. It was the contention of NPs that if they provided the same care as physicians, they should enjoy access to the same resources and privileges. One NP from the group interview said that a supportive work environment for her means being treated the way physicians are treated by the staff:

> There are two or three Medical Assistants that work with us. [The physician and I] are the two providers in the practice. What I've noticed is I'll run out of stock and gowns in my room—if I mention it to them . . . they fill him up, they come to me last or they just skip me . . . I don't understand this . . . there's something in the culture that the Medical Assistants and even the Practice Manager just would not treat me equally.

Another NP in the group interview added: "That happens to me too . . . I think they're [medical assistants] just not in the mind that they should assist . . . It's always been the doctor's patients [who come first]."

Involvement in organizational decisions. Most NPs reported little or no representation for NPs at the administrative level of their organizations. NPs are not involved in administrative decision-making processes and there is no one to advocate for creating organizational structures to promote NP SOP. One NP said: "They have an Executive level meeting of Managers . . . There won't be any representation for NPs . . . in that meeting to have a voice for whatever might matter to the NP role. It doesn't seem fair or just to me." Another NP who worked in a family practice setting with three part-time physicians and with two other NPs said:

> [When] the new doctor that was hired it was like, "What do you want in your office? What do you want to make your position better?" . . . It was basically, "What can we do to get you to come here?" . . . As Nurse Practitioners we're never asked what we want . . . We might say what we want . . . and then we still don't get it.

However, some NPs said that most physicians are very supportive. One NP said: "I think there's a big lacking in the administrative supportiveness but the doctors are making up for it. If it wasn't for the doctors, I would have left a long time ago."

NPs spoke about having favorable practice environments that enhance their ability to provide patient care, such as having good relationships with physicians and administration and enough support and time for patient care activities. Most NPs spoke about respect as an important factor in their work environment. On this topic, one experienced NP said: "There's got to be the respect for you and your status in the organization . . . It means that you need to have a seat at the table and you need to have a voice that is listened to."

Discussion and Implications

This qualitative descriptive study investigated NPs' roles as PCPs and identified several factors that may affect NP optimal practice within their scope. In primary care settings, NPs take on similar responsibilities as primary care physicians to deliver care to their patient population. NPs spoke about factors related to the regulatory environment, understanding of the NP role by coworkers including physicians, and work environment features that affect their ability to practice within their SOP. This study was conducted in MA, where health reform initiatives have been enacted in a similar fashion as to what is expected with the implementation

of the PPACA in 2014 (Patient Protection and Affordable Care Act, March 23, 2010). The health reform in MA led to an increase in the demand for primary care, which prompted the creation of a law recognizing NPs as PCPs to meet the new care demand. Nationwide, a similar trend might be observed as the rest of the country is beginning to implement various aspects of *PPACA and the MA case study offers a lens into how this projected demand in primary care services might be handled.* Drawing on the MA experience of NPs and their employers adapting to health-care reform might suggest new directions for utilizing this workforce in primary care.

With respect to the regulatory environment, the main emphasis in the observations offered was on the physician collaboration requirement and the existing reimbursement rules and system. While MA regulations require NPs to be supervised, NPs view this as an unevenly practiced technicality that adds no value to patient care and creates unnecessary challenges toward practice for NPs and physicians such as limiting NPs abilities to practice within their SOP and increasing work burden for their physician colleagues.

Current insurance reimbursement policies do not incentivize organizations to expand NP practice to the fullest extent of their SOP and further the critical role NPs play as PCPs. For instance, organizations that implement Medicare's "incident to" billing (42 C.F.R. § 410.26(b)), instead of independent NP billing, are financially rewarded for this practice. This may have significant implications for organizations hiring and retaining NPs as independent care providers given that they will be negatively impacted. These billing practices also mask the collection of data about NP care and inhibit researchers' ability to generate statistics and quality indicators related to NP care and patient outcomes. As primary care organizations move toward becoming ACOs, it will become necessary to understand the care and the quality of care each provider delivers. Consequently, further review of outdated reimbursement policies is warranted toward new policies that track the actual care delivery (Newhouse et al., 2012).

Many of the issues discussed by respondents in this study have been raised throughout the more than 40-year history of the NP movement (Sullivan, Dachelet, Carrol, Sultz, & Henry, 1979; Sullivan-Marx, McGivern, Fairman, & Greenberg, 2010). These include issues related to legislated SOP/resistance to expanded NP SOP by organized medicine, challenges in articulating the model of practice, problems created by reimbursement, and the idiosyncratic politics of prescriptive authority in various states. Earlier literature and much practical experience has borne out that variations across settings exist even when the actors operate within jurisdictions with the same regulations in force, as was seen here in this study of NPs from a single state. This suggests that despite the seeming maturity of NP education and widespread recognition of the NP role, NPs are still confronting fundamental challenges in their work settings. The way physicians and organizations incorporate NPs into their practices fell into a number of fairly consistent patterns suggesting that deeper analysis of the relationship between official policy and actual incentives and disincentives for certain practices is worthwhile.

A number of practical suggestions can be offered to NPs and their advocates. Lack of the awareness of the NP's role both within and outside the organization is an important factor. If policy restrictions are lifted to allow NPs to be recognized as PCPs within their organization, this will promote a continuous contact with patients and increase their patient's awareness about NPs. Increasing the public's awareness about NPs' SOP and their abilities to deliver care is necessary to promote a stronger professional identity. Within the organization, clear orientation programs should be in place for NPs and they should be introduced to their organizations in the same fashion as other providers, for example, through organizational websites, emails, or other means.

There seems to be widespread, if not universal, acceptance that NPs are particularly well suited to handling patient lifestyle issues and chronicity and indeed a good deal of literature has described this role (Horrocks et al., 2002; Litaker et al., 2003; Watts et al., 2009). In designing primary care delivery models, the NP approach to patient care should be taken into account to both utilize their expertise and to achieve the best patient care outcomes.

A number of specific elements of a positive work environment appear necessary for productive NP practice. Support for NPs to provide patient care and collegial relationships with physicians seem to be major attributes of work environment for NPs. Practice administrators should make efforts to include NPs in the governance of the organizations. If NPs have similar responsibilities as other PCPs, then they need to have similar rights, privileges, and access to organizational resources including information to provide high-quality care. NPs also need to advocate for organizational policy changes that will promote their visibility, participation in governance, and mechanisms to monitor the quality and cost of NP care.

This study utilized a convenience sample of respondents who were members of NP advocacy organization, which may be a limitation as the experiences of those participating NPs might differ from others. While the theme of local differences in interpretation and implementation of roles is likely a consistent one given the history of NPs internationally, the regulatory environment where an NP practices varies greatly. NPs practicing outside of MA operate under different statutes and regulations and might experience other realities.

Conclusion

The expansion of the NP workforce in primary care is a cost-effective way to increase access to high-quality care. This study investigated NP roles and responsibilities in primary care settings in MA and concluded that the role of NPs in primary care settings is very similar to that of primary care physicians. However, the study found that the

regulatory environment, comprehension of the NP role, and work environment attributes greatly affect NPs' abilities to practice within their SOP in primary care settings in MA. More research is needed to better understand NP workforce in primary care settings and find ways to promote their practice.

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Author Biographies

Lusine Poghosyan, PhD, MPH, RN is an assistant professor at the Columbia University School of Nursing. Her research focuses on investigating the primary care nurse practitioner workforce.

Angela Nannini, PhD FNP-C, FAANP is an associate professor in the Department of Nursing at the University of Massachusetts Lowell. Her research focuses on health policy related to health disparities and health care workforce issues.

Arlene Smaldone, DNSc, CPNP, CDE, is an associate professor of clinical nursing at the Columbia University School of Nursing. She is also is the codirector of the PhD Program. Her research focuses on chronic health conditions in childhood and use of technology in diabetes care and education.

Sean Clarke, PhD, RN, FAAN, is a professor and Susan E. French chair in Nursing Research; director, McGill Nursing Collaborative for Education and Innovation in Patient-Centered Care at McGill University. His research focuses on investigating nursing workforce and patient safety.

Nancy C. O'Rourke, MSN, ACNP, ANP, RNC, FAANP, is the director of Critical Care Affiliate Practitioner Program at the University of Massachusetts Medical Center. She is a former President of Massachusetts Coalition of Nurse Practitioners.

Barbara G. Rosato, MSN, RN/NP, ANP-BC, CDE, is an Adult Nurse Practitioner, Healthcare Associates~Atrium Suite, Beth Israel Deaconess Medical Center

Bobbie Berkowitz, PhD, RN, FAAN, is Dean of the Columbia University School of Nursing. Her areas of expertise and research include public health systems and health equity, and nursing education and practice.