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Knowing Your Limits: A Qualitative Study of Physician and Nurse Practitioner Perspectives on NP Independence in Primary Care

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BACKGROUND: The shortage of primary care providers and the provisions of the Affordable Care Act (ACA) have spurred discussion about expanding the number, scope of practice (SOP), and independence of primary care nurse practitioners (NPs). Such discussions in the media and among professional organizations may insinuate that changes to the laws governing NP practice will engender acrimony between practicing physicians and NPs. However, we lack empirical, descriptive data on how practicing professionals view NP independence in primary care.
OBJECTIVE: The aim of the present study was to explore and describe the attitudes about NP independence among physicians and NPs working in primary care.
DESIGN: A qualitative study based on the principles of grounded theory.
PARTICIPANTS: Thirty primary care professionals in Missouri, USA, including 15 primary care physicians and 15 primary care NPs.
APPROACH: Semi-structured, in-depth interviews, with data analysis guided by grounded theory.
KEY RESULTS: Participants had perspectives that were not well represented by professional organizations or the media. Physicians were supportive of a wide variety of NP roles and comfortable with high levels of NP independence and autonomy. Physicians and NPs described prerequisites to NP independence that were complementary. Physicians generally believed that NPs needed some association with physicians for patient safety, and NPs preferred having a physician readily accessible as needed. The theme "knowing your limits" was important to both NPs and physicians regarding NP independence, and has not been described previously in the literature.
CONCLUSIONS: NP and physician views about NP practice in primary care are not as divergent as their representative professional organizations and the news media would suggest. The significant agreement among NPs and physicians, and some of the nuances of their perspectives, supports recommendations that may reduce the perceived acrimony surrounding discussions of NP independent practice in primary care.

KEY WORDS: qualitative research; advanced practice nursing; primary care; professional responsibilities; interprofessional.

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INTRODUCTION

Primary care is the principle form of care fundamental to effective and affordable health care, provided by clinicians who are able to address a large majority of health needs, develop a sustained partnership with patients, and practice in the context of family and community [1]. Increased access to primary care is associated with lower mortality rates and lower costs due to better preventive care, lower hospitalization rates, and the reduction of unnecessary specialty care [2, 3]. Nevertheless, data indicate a growing shortage of primary care providers [4], which has provided the impetus for the current debate about expanding the number, scope of practice (SOP), and independence of primary care nurse practitioners (NPs).

While physician interest in primary care has plummeted, NP numbers have risen, from 30,000 in 1990 to 140,000 in 2010 [5, 6]. The majority (89 %) of NPs have a primary care focus, specializing in family (49.2 %), adult (17.9 %), and pediatric care (9.4 %), women's health (9.1 %), and gerontology (3 %) [6]. The NP workforce can be expanded with less training time than that for physicians [7, 8].

Some data indicate that NPs can provide about 90 % of primary care services commonly provided by physicians, with at least comparable outcomes and at lower cost [9]. NPs have similar types of malpractice claims to those of physicians, but lower malpractice rates, and no data suggest that increased use of NPs increases physician liability [10]. Research also indicates that NPs score consistently higher in patient satisfaction, patient compliance, health promotion, and disease prevention [11, 12]. Many physicians agree that NPs are a great addition to a clinic, because they "can pay for themselves" [13] and reduce physician workload [14].

Accordingly, the 2010 Institute of Medicine (IOM) report on "The Future of Nursing" supported greater roles for NPs in primary care and equal reimbursement for the same services provided by physicians [15], and the Affordable Care Act (ACA) designated significant funds for NP training and education, NP-managed health clinics, and loan programs for nurses to pursue advanced nursing degrees [16].

Nevertheless, policies aimed at increasing the number, SOP, and independence of NPs have been met with significant debate [17–19]. Several national medical organizations explicitly oppose many of the changes that NPs have worked toward and the recommendations of the IOM report. These include the American Medical Association (AMA) [19], the American Association of Family Practitioners (AAFP) [17], The Physicians Foundation [20], The Council of Medical Specialty Societies (CMSS) [21], and the American Academy of Pediatrics (AAP) [22]. Their arguments focus on the lower number of years of education and training that NPs have compared with physicians, which they argue may put patients at risk and create a two-tiered system of medical care.

Surprisingly few studies have examined the perspectives of primary care physicians and NPs toward each other [23]. Descriptive interview data are sparse, and what has been published is outdated or international in nature [24–27]. Most research on perceptions among these professionals is the result of surveys and questionnaires, which may yield responses that are difficult to contextualize and interpret [28–32]. The few studies that have been conducted have produced ambiguous results, with a majority of physicians identifying advantages to working with NPs [40] and a majority of physicians and NPs reporting good relationships [29, 31], while pluralities express deep concerns about NP SOP, independence, or relationships. However, none of these studies provided data on the deeper reasons for these views or explained their ambiguous findings. This exploratory study sought to provide a rich descriptive understanding of how doctors and NPs feel about NP practice in primary care, particularly their independent practice, and why.

METHODS

Qualitative methods were used to gather and analyze data. In-depth interviews followed the general guidelines provided by Corbin and Strauss for descriptive exploratory studies [33]. Literature review informed the development of the interview guide, while sampling and data analysis where guided by the principles of grounded theory [33]. The interview guide was meant to support a hybrid approach to data gathering and analysis, combining conventional content analysis, which is largely open-ended and inductive, and directed content analysis, which is largely deductive and driven by literature reviews and pre-existing theory [34]. This qualitative approach was appropriate given that the aim was to explore the experiences of NPs and physicians working with each other. The study was conducted toward completion of the first author's MD/PhD program, with the second author, a PhD researcher in ethics and social science, serving as mentor. The first author conducted all interviews; the two authors collaborated in the development of the interview guide, codebook, and data analysis. The authors used a third-party transcription service.

Recruitment

We recruited 15 physicians and 15 NPs working in academic and private primary care practices. Purposive sampling was used to select participants on the basis of their credentials and specific experiences as medical professionals [35]. Individuals and primary care offices were called and emailed to invite participation from selected professionals, and others were gained by snowballing. Participation was incentivized with a $25 gift card to a local bakery. A sample size of 15 was tentatively established as adequate to achieve data saturation. Research has indicated that saturation in qualitative interview studies often occurs within the first 12 interviews [36].

Setting

Data were gathered in person in St. Louis County, Missouri, at locations convenient for participants. The location is relevant to interpreting the experiences of participants, as Missouri state laws governing NP practice are among the most restrictive in the US [37]. The study protocol was approved by the university's institutional review board (#20794). The study posed minimal risk to participants, and all participants provided informed consent.

Data Collection

Data were collected through semi-structured, in-depth interviews performed by the primary researcher and through a questionnaire on participant demographics. Interviews were audio recorded and transcribed by a third-party transcription service. Reflexivity in data collection and analysis was practiced, while still working to maintain some degree of detachment and objectivity. Observational notes were written immediately following each interview [33]. This process was formalized by the use of journals in which interviewers recorded their responses to nine post-interview questions that examined their feelings, dynamics, and interactions with the participant, mood, and notable characteristics of the practice and work environment. Fifteen interview questions were developed, following significant review of the literature, to ensure relevance and to build on prior data. The interview began with a broad, open-ended question to enable identification of spontaneously generated theme, followed by questions about more specific issues in primary care, including NP roles, SOP, NP impact on care quality and the larger primary care system, and NP relationships with physicians (see Online Appendix A). Follow-up questions were used to define terms and to clarify for understanding.

Data Analysis

Data analysis was ongoing; interviews were transcribed, read, and analyzed as they were being conducted. The Text Analysis Markup System (TAMS) was used to search, code, and organize transcript data. Analysis was driven by the search for concepts that could be coded, compared, and related to each

other [33]. Constant comparison was used to develop more valid and specific codes and to develop themes and interpretations that explained the perceptions expressed. Attention was paid to significant statements that supported theme development. Spontaneous themes, that is, themes that surfaced in response to the opening question or without clear association with the more specific questions, were noted and developed into their own set of themes. To improve the reliability of the codes, the second author reviewed the developing code sheet at multiple points in the analysis process and read several entire transcripts to evaluate and challenge the developing coding strategy.

RESULTS

The data in this paper were gathered within interviews addressing an array of topics too broad to present in one paper. Here we focus on responses to questions 1–8 of our interview guide, which center on the quality of care provided by NPs, NP independence, and NP SOP (see Online Appendix A). The data presented were selected because of their significant addition to the literature on these issues; individual quotes were selected that best represented themes.

Participants

Participants represented a variety of ages, specialties, and backgrounds. The majority of physicians were women (66.7 %), were white (93.3 %), and practiced in academic group practices (66.7 %) in an urban environment (93.3 %). All but two collaborated with NPs regularly, and 12 were currently in a collaborative practice agreement (CPA) with an NP. All NPs interviewed were women, 93.3 % were white, and 66.7 % practiced in an urban environment. Practice settings varied among NP participants, with four in federally qualified health centers (FQHC), four in private group practices, five in academic practices, and two in retail health care clinics. Physicians spanned a wide age range, with four between 20 and 39, six between 40 and 49, and five between 50 and 69. NP interviewees similarly represented all ages, with eight between 50 and 69, and seven between the ages of 20 and 49. Most NPs in higher age ranges had been RNs for a significantly longer period before continuing their nursing education. The youngest participants had less than 5 years of experience as RNs before receiving NP training. Two interviewees had PhDs, two had DNPs, and two others were enrolled in DNP programs; all others held a master's degree or a graduate-level certificate.

All interviewed NPs had active collaborative practice agreements with one or more physicians, according to Missouri law. Participants came from a broad range of professional experiences, including all identified primary care specialties (internal medicine, family medicine, women's health, pediatrics, and geriatrics). Physician interviews averaged 47 min, and NP interview length averaged 56 min.

Overarching Themes

Overall, NPs and physicians had surprisingly similar and complementary views on many of the issues considered during interviews. In contrast to the public discourse on issues relating to NPs practicing in primary care, participant responses were essentially absent of any tone of defensiveness or conflict. NPs never cited physicians as impediments to their professional goals or to treating patients, and physicians had significant respect for NPs and evaluated them and their skills with patients favorably. Neither physicians nor NPs cited significant empirical data to support their views, even studies or specific data on the comparative effectiveness of physicians and NPs. Above all, participants cited their own experiences with coworkers as support for their perspectives, illustrating the power of personal experience in shaping these professionals' views of one another.

NPs Provide Quality Care

From the initial open-ended question and throughout the interview, physicians consistently indicated that NPs were great for primary care. Specific qualities that were highlighted included NP adaptability, their ability to provide routine primary care with ease, and the benefits of their unique nursing approach to patient care.

> "I think they're very—especially in primary care, for the majority of the population without special needs, I think nurse practitioners are perfect for that." (P3Q2)
> "So to maintain a daily service and basically to keep the lights on in our practice, it's very useful to have nurse practitioners to see patients with us…it's great." (P7Q1)

NPs, consistent with the views of their representative organizations, felt their skills were an excellent fit for primary care, including improving patient access to primary care, their attention to social issues and education, and the benefits of their nursing background.

> "I think that patients are overall really satisfied with our care and what we provide to them, and I think it improves access for a lot of people, because there's a lack of providers in primary care." (NP3Q1)
> "I think nurse practitioners do an awesome job of providing primary care to all those patient groups, adult, family, women, because I believe that nurse practitioners speak at the level of the patient." (NP12Q1)

NP Independence

In contrast to what one may take away from the more public debate on NP independence, physician participants were

supportive and comfortable with high levels of NP independence and autonomy.

> "[T]he nurse practitioners we have currently, I feel, are very sharp and well trained, and so if the average nurse practitioner is like them, I would feel very comfortable knowing that they were practicing independently…I think for primary care I could see them being given independent privileges." (P12Q2)

In turn, NP participants described a clear sense of independence they felt in practice, while highly valuing having physicians close by to consult as needed.

> "At least in primary care, I think we pretty much have an ideal situation. I think all of our physicians, I can't think of any of them really that I don't like to work with. They give us our independence, which is good. So I think ideally, you know, we see the patient, we pretty much are allowed to treat as we feel we should… They come when we need them and they leave us alone when we don't need them, but they're always there for consult, but they're not hovering. They show an interest in the patients, but they're not constantly worried that you're going to be doing something wrong. So just to have the independence and not have them hovering over you is probably a big thing." (NP1Q10)
>
> "I can be and am already the sole provider for patients, again, with the caveat that there is attending physicians available if the care gets beyond my scope of practice." (NP9Q2)

For both groups of professionals, NP independent practice carried with it certain prerequisites. For physicians, these caveats included knowing your limits, experience, and training.

> "I prefer to work with people who are very independent but know when to ask questions." (P13Q2)
>
> "It's definitely appropriate that they can see patients on their own, with somebody that is trained, that has clinical experience." (P3Q2)

For NPs, necessary skills included experience, and a physician connection. Most expressed a preference for having a physician quickly accessible, as needed, for questions and referrals.

> "I think it depends on the comfort level of the nurse practitioners and her level of expertise and experience. I think as nurse practitioners practice longer, they end up being more independent…you also learn what your level of comfort is and when it's time to refer out or to get consult…so I think it's something that should be weighed individually by the level of expertise." (NP13Q2)
>
> "I think having the collaborative practice agreement with a physician and the group is very important…I think it's important because we didn't have the schooling of a doctor…but I am capable to be your provider and to provide that treatment and the diagnosis and the care and all of those things that come with it. But I do think that a level of supervision is important." (NP9Q2)

Similar to the profession's public commentary, most physician participants insisted on some degree of supervision by an accessible physician to ensure patient safety, given perceived gaps in NP training.

> "I think there should be some oversight so that the quality is maintained. I think there needs to be some, as we have now, a scope of practice of what nurse practitioners are trained to do and the scope of their practice. And also that that can be modified over time as new information comes out or new aspects of the care that they're qualified to do. I think with that overall supervision for quality, making sure people are working within their scope of care, it's a very good arrangement." (P11Q2)

Importantly, the way participants defined supervision was far less invasive than the way it is depicted publicly. Both groups of professionals rejected the idea that the physician must be a hovering presence to ensure good care quality. When one physician was asked to clarify her meaning of "direct supervision," she replied that it simply meant that the two professionals were "in the same office." (P6Q2). Physicians routinely used the idea of supervision and collaboration interchangeably to describe this preferred arrangement of the different providers working in the same practice. Collaboration was a means of supervision.

Physicians also indicated that the specific practice environment had an effect on the appropriate degree of independence. In their minds, the needs of the community could necessitate an NP working independently, but they should still have an available physician to consult with in case they needed it, albeit less directly.

> "I think it sort of depends, and I think there's also needs, you have to balance the needs of the community." (P8Q2)
>
> "For some people, that availability may be by phone, depending on the time and things like that, which I think is fine too. I just think having that availability… we have nurse practitioners who have their own clinic and they just can call their collaborating physician as needed." (P9Q2)

NPs similarly indicated that the environment in which they practiced had an effect on the level of independence

appropriate for ensuring patient safety and quality care, while still providing access.

> "I think that they should be able to be independent, like in a rural setting where there aren't any physicians." (NP14Q2)
> "I'm very big on access, because there's a lot of people who don't have access to health care services, and I think allowing certain practitioners to practice independently is good in terms of getting patients access. (NP6Q3)

Knowing Your Limits

The theme of "knowing your limits" has not been previously described in the literature on these professionals' perspectives, yet came up repeatedly from all participants throughout interviews. It was a key theme in responses to questions 1, 2, 4, 5, and 10. Both groups of professionals mentioned this theme during their discussions of independent practice.

Physicians saw it as a required skill in NPs crucial to their ability to provide quality care.

> "They have to know their own boundaries. Okay, if they're really good at what they do, they know when they've come across something that they shouldn't be dealing with and they should refer. The really good ones know that." (P4Q1)

Knowing your limits was described as practically a moral imperative for NPs, as it represented a concern for the good of patients as well as one's professional credibility. They also considered it a foundational element of quality care and essential for maintaining physicians' trust in the collaboration. NPs insisted that they knew their limits, and would always stay within them to ensure safe and quality patient care.

> "I'm very attuned to what my limits are, and I do not ever encroach on them, because that is the basis of nurse practitioner and physician collaboration is that my physicians know that I'm gonna do what I'm comfortable with, and I will get them when I know I've reached that limit." (NP12Q1)

Physicians agreed that NPs knew their limits and asked questions appropriately within an otherwise independent environment.

> "They are—at least in my experience, all the nurse practitioners that I've worked with have been really good about asking for help when they need it, when they're not sure or things like that, so I think that works great." (P8Q1)

Both professionals agreed that the situation was no different from that with primary care physicians, who need to decide when to refer a patient to a specialist.

> "I was no different when I was in private practice. I handled things, and then when I had questions that were beyond my expertise or knowledge, I called specialists, so I would see nurse practitioners act in that same way." (P5Q2)

Notably, an absence of this trait was generally attributed to personality rather than degrees held, level of training, or experience.

> "I think the only concern is if there's someone who thinks they know more than they do, and they won't go for help or consult with a physician. The nurse practitioners I have worked with, I've never really seen that to be a problem." (NP1Q1)
> "And also the person. I'm sure there are also physicians out there who are very cavalier about what they think they know. So certainly there can be nurse practitioners who are the same way, who think they know more than they know or are overconfident. That's not unique to … any one profession." (P8Q4)

Barriers to Independence

NP participants cited arbitrary or burdensome laws as barriers to their independence, and not physicians. They had many examples of practice restrictions based on laws that did not seem reasonable and did not optimize their ability to provide the care they saw as part of their SOP.

> "And then the prescriptive authority. So I can kill somebody with insulin, but I can't write for them to have Adderall so they can study better in school? It makes no sense… my patients sit in the waiting room and they wait for my doc to get done seeing those patients to where they can bring their script to them and have them sign it. It's crazy, absolutely crazy." (NP11Q3)

Their focus on NP independence was very patient-oriented, and not self-promoting or defiant. They were concerned about getting quality care to patients. Physicians similarly referenced arbitrary laws and practice restrictions that seemed unreasonable for safe and efficient care, albeit less frequently than NPs. They voiced support for their NP colleagues in such positions when a relationship of trust was established.

DISCUSSION

This study elicited findings that aid in a deeper understanding of how these professionals think about NP independent

practice in primary care, offering highly descriptive qualitative data unique in this realm. While our study does not have direct implications for policy development, which can be politically highly charged, we believe that the findings can inform the way that dialogue about policy is structured.

Improving the NP–Physician Discussion

In the public sphere, terms such as "equal," "substitute," "independence," and "direct supervision" are used to frame debates in ways that can polarize [[20], [40–38]]. Such language was rarely present in participant responses, and when it was, the meaning was never polarizing. When physicians were asked to clarify words like "direct supervision," for example, it was clear that their concept agreed significantly with NPs' understanding, and its meaning was conducive to productive discussion. Physician and NP representative organizations might do well to describe their positions carefully using specific and patient-centered terms.

NP Independent Practice

Instead of framing the debate surrounding NP independent practice in terms of what they are and are not trained to do, or how the two measure up in comparisons, the conversation could be improved by focusing on whether these professionals will limit their practice appropriately based on their training. Based on the results of this study, both physicians and NPs believe this is a valuable skill, believe that NPs generally have this skill, and indicate that a lack of this skill depends more on one's personality than on experience or training. Just as all primary care physicians are trusted to know when to refer to a specialist, both physicians and NPs believed that NPs could be trusted to know when to seek consultation from, or refer to, a physician colleague. The operative notion of physician oversight was not that of an attending with a new intern, but availability and consultation as needed, and it was welcomed by both groups of professionals.

Limitations

Small-sample, qualitative studies are useful for developing theory, describing the relationship between complex variables, and identifying questions that deserve further investigation, but they are limited in their generalizability. The generalizability of this study was further limited by its focus on primary care, the strong representation of individuals working in academic settings, and the fact that all interviews were conducted in one state, while state laws pertaining to NP independence and SOP vary widely across states.

Future Research

It would be informative to conduct a generalizable, nationwide survey of primary care physicians and NPs on the issues addressed in our study, to inform the efforts of professional organizations, educational programs, and legislatures on matters such as SOP and independence. We believe that this qualitative study might inform the way that survey items should be phrased, and what kinds of questions should be asked.

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Compliance with Ethical Standards:

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