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How nurse-led practices perceive implementation of the patient-centered medical home☆,☆☆

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ABSTRACT

Purpose: The Affordable Care Act (ACA) promotes the Patient-Centered Medical Home (PCMH) model as a way to improve healthcare quality, the patient experience, and has identified nurse-led primary care as a mechanism meeting the increasing demand for quality primary care. The purpose of this study was to investigate the implementation of a PCMH model in nurse-led primary care practices and to identify facilitators and barriers to the implementation of this model.
Methods: Data were collected through in-depth interviews with providers and staff in nurse-led practices.
Results: These data suggest two categories of processes that facilitate the integration of PCMH in the nurse-led practice setting: patient-oriented facilitators and organizational facilitators. In addition, a number of barriers were identified to implementing the PCMH model. Overall, these practices creatively engaged in the transformation process by structuring themselves as a complex adaptive system and building upon the core principles of nurse-led care.
Conclusion: Since the core principles of nurse-led care map onto many of the same principles of the PCMH model, this study discusses the possibility that nurse-led practices may experience fewer barriers when transitioning into PCMHs.

1. Introduction

The demand for, and provision of, primary care in the US is shifting. Increasing incidence of chronic disease, rising medical costs, and the predicted increase in demand related to improved access associated with the Patient Protection and Affordable Care Act (ACA) (Patient Protection and Affordable Care Act, 2010) have led healthcare systems to consider alternative models of care delivery. The ACA specifically included support for Patient-Centered Medical Homes (PCMH) in health centers. The PCMH model supports team-based coordination of care and patient self-management capacity in an effort to improve quality of care and associated health outcomes. PCMH has been widely adopted in primary care settings, including in nurse-led practices. Nurse-led practices (also referred to as nurse-managed healthcare) have shown promise in alleviating the US demand for primary care (Esperat, Hanson-Turton, Richardson, Tyree Debisette, & Rupinta, 2012) and

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have been identified as practice models for improving quality of care (Hansen-Turton, Bailey, Torres, & Ritter, 2010; Martinez-Gonzalez et al., 2014).

Current models of nurse-led care were developed in the 1980's in response to the demand for clinical training sites for nursing students and to serve the communities located near nursing schools (Hansen-Turton, 2005). Funding for these practices initially came from the Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration and individual schools of nursing (Hansen-Turton, 2005). As a result of their early successes, there are now over 250 nurse-led US health centers (Holt, Zabler, & Baisch, 2014).

While there is no formal model for nurse-led practices, the National Nursing Centers Consortium outlines the following nurse-led practice priorities (NLPP) and characteristics:

> "***Wellness*** *- We treat, educate, and heal from a holistic perspective that integrates preventive care and wellness maintenance into primary care.****Patients*** *- We know our patients and our patients know and trust us. We take the time to listen and to learn about the whole person, and consequently make the connections between a person's life and the state of his or her health.****Families*** *- We treat the whole family, not as separate individuals but as a family whose members share an environment of health risks and health opportunities.****Non-traditional and community-based services*** *- We expand our definition of healthcare to deal with some of the most serious problems facing American society today, including family, adolescent and neighborhood violence; drug, nicotine and alcohol addictions; grief, stress, and anxiety; and the environmental aspects of diseases such as asthma and birth defects.*" (National Nursing Centers Consortium, 2011)

Nurse-led centers emphasize the holistic model of care and integrate an understanding of the social determinants of health. Additionally, nurse-led centers often utilize the patient-provider team approach to care, which promotes patient autonomy and supports shared decision making – all key constructs in the PCMH model (Hansen-Turton, 2005; Moser, Houtepen, & Widdershoven, 2007).

In part because of this alignment, attention in the US has been refocused recently on nurse-led centers. The passing of the ACA in 2010 codified the definition of nurse-led health centers, and created a specific funding mechanism to aid existing nurse-led clinics under Title V-Sec.5208 (*Patient Protection and Affordable Care Act*, 2010). Additionally, the National Committee for Quality Assurance (NCQA) recognized nurse-led practices for PCMH certification in 2010 after a long history of only recognizing physician-led practices (National Committee for Quality Assurance, 2010). NCQA recognition created an opportunity for nurse-led practices to receive financial incentives to support PCMH transformation (National Committee for Quality Assurance, 2010).

As originally envisioned by the American Academy of Pediatrics (AAP), the purpose of the PCMH is to provide centralized and consistent care. The PCMH model facilitates a team-based approach to care, wherein providers coordinate care across all elements of the larger healthcare system. This includes efforts to partner with specialists, hospital systems, home healthcare networks, and agencies providing support in the community. Well aligned with the professional values of the nurse-led paradigm of care, the model emphasizes a holistic, relationship-based approach to primary care, where the whole person is the center of treatment and the team works with families and support networks respecting patient's needs, preferences, culture and values (National Committee for Quality Assurance, 2011). However, given that PCMH models are relatively new and most work has focused on adoption of the model in the physician-led setting, it is especially important to examine integration in the nurse-led practices setting. This study examined the adoption of the PCMH model in four Pennsylvania nurse-led practices. The specific aim of this study was to assess the barriers and facilitators to integrating the PCMH model in the nurse-led practice setting.

2. Methods

2.1. Sample

Data for this study are nested within a parent project funded by the Agency for Healthcare Research & Quality (AHRQ R18HW019150) and the Aetna Foundation. It was designed as a mixed-methods investigation of PCMH implementation and transformation in 25 primary care practices (19 physician-led practices and six nurse-led practices) in Southeastern PA. Surveys, site visits, focus groups, and individual interviews were conducted at participating sites. The sub-investigation described here focuses only on interview data collected at four of the participating nurse-led practices.

2.2. Data collection

Key informant interviews were conducted between September 2010 and September 2011 ($n = 32$) with nurse practitioners, nurses, social workers, certified nurse assistants, medical assistants, support staff, and practice administrators at four sites. Interviews lasted approximately 60–90 min and were audio-recorded with the consent of each participant. Audio recordings were transcribed verbatim and de-identified. To ensure the validity of the data, standard guidelines were implemented including: 1) rigorous training of interviewers; 2) use of a standardized interview guide; and 3) conducting interviews in private locations. The interview guide addressed the following areas: Understanding of the PCMH model, motivation for involvement, practice commitment, barriers to implementation, practice culture, and communication (see Appendix A for full interview guide).

2.3. Data analysis

De-identified transcripts were imported into a qualitative software program [QSR NVivo (9.2)] used to facilitate analyses. The research team developed a codebook and coded all the transcripts. Coding accuracy was evaluated by the senior researcher on the team and coding discrepancies were reviewed and resolved by consensus. The codes were organized into two thematic categories: facilitators and barriers. Quotes from the transcripts were then chosen to illustrate the findings and to ensure that emerging themes were firmly grounded in the data.

3. Results

Thirty-two key informants from four nurse-led practices participated in this study. Their roles in the practice varied and included nurse practitioners, nurses, social workers, certified nurse assistants, medical assistants, support staff, and practice administrators. Practice characteristics are described in Table 1. The analysis yielded a set of themes that were organized into two broad thematic categories: ***facilitators*** and ***barriers*** to the integration of the PCMH model in the nurse-led practice setting. The themes identified as facilitators were the patient's role in their care, including one-to-one encouragement, using outcome reports, facilitating care, and the formal structure of PCMH, including frequent meetings and use of reports, physical environments that facilitate communication, and horizontal responsibility. Themes categorized as barriers included changing electronic medical record (EMR), time,

Table 1
Practice characteristics.

Practice Study ID	Practice Type	Service Area	Number of interviews
1	FQHC	Urban	9
11	FQHC	Urban	4
14	FQHC	Urban	10
23	FQHC	Suburban	5