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Implications of the Patient Centered Medical Home for Nursing Practice

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Abstract

OBJECTIVE—The experiences of registered nurses (RNs) and licensed practical nurses (LPNs) implementing a patient centered medical home (PCMH) in Department of Veterans Affairs (VA) primary care clinics were examined to understand model implications for nursing practice and professional identity.

BACKGROUND—National implementation of the PCMH model, called Patient Aligned Care Teams (PACTs) in VA, emphasizes areas of nursing expertise, yet little is known about the effect of medical homes on the day-to-day work of nurses.

METHODS—As part of a formative evaluation to identify barriers and facilitators to PACT implementation, we interviewed 18 nurses implementing PACT.

RESULTS—Challenges to nurse's organizational and professional roles were experienced differently by RNs and LPNs in the following areas: 1) diversified modes of care and expanded clinical duties; 2) division of labor among PACT nurses; and 3) interprofessional status in the team.

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CONCLUSIONS—Healthcare managers implementing PCMH should consider its inherent cultural and practice transformations.

There is international interest in the Patient Centered Medical Home (PCMH) model and its potential to capitalize on the care coordination, population management, and other expertise that nurses bring to patient care (1). Nurse training and experience in patient education, care coordination, and culturally competent care delivery is well-suited to the primary care setting (2,3). The Veterans Health Administration's (VA) specific application of PCMH, called Patient Aligned Care Teams (PACT), aims to leverage nursing expertise to its fullest potential by: distributing care responsibilities throughout a clinical team; encouraging the delegation of certain chronic disease management, health promotion, and disease prevention activities from primary care providers to nurses; and emphasizing the importance of panel management and continuity with a clinical team. PACT's emphasis on patient-centeredness, care coordination, chronic disease management, and patient education is consistent with nursing's approach to patient care (3–5).

State licensure differentiating nurse roles has been in place since the early 1920's (6). While there has been research examining registered nurse (RN) and licensed practical nurse (LPN) staff mix and role definition between physicians and nurses in ambulatory care, to our knowledge there is scant research exploring differences in between RN and LPN practice in ambulatory care settings adopting PCMH or PACT (7–9). Thus, there remains ongoing ambiguity regarding role clarity and the differentiation of clinical work according to nurse licensure. Prior to PACT, RNs and LPNs typically worked as nursing staff for all the providers within a primary care clinic. LPNs coordinated work among themselves and RNs coordinated work among other RNs, with some degree of overlap between the clinical work performed by each role. According to the PACT model, RNs and LPNs are assigned to a discrete unit that also includes an administrative associate and 1 primary care provider. Working as an interdisciplinary unit has the potential to enhance delegation in the team due to the shared professional culture of nurses, as well as to empower LPNs by recognizing their skills to be maximized in the clinical team.

Evidence illustrating the positive outcomes associated with aspects of PCMH such as nurse-managed protocols for chronic conditions is emerging, however little attention has been paid to the potential effects of the initial transformation to PCMH on nursing practice (10). Our primary objective was thus to capture nurses' perceptions of PACT's effect on their nursing practice and role identity as they transitioned to a team-based model of care.

Methods

Institutional review board approval was obtained by the Iowa City VA health care system and the VA research and development committee. This descriptive, qualitative study comes out of a mixed methods formative evaluation that: examined barriers to team formation and function and supported regional implementation through formative evaluation. Detailed description of the larger evaluation and interview guide development are reported elsewhere (11). Briefly, interview questions were informed by: a review of medical home implementation literature; data collected at PACT training sessions; and the evidence gap

pertaining to team function, inter- and intra-professional role clarity and delegation, and cultures of practice. Nurses were asked to discuss their job satisfaction; team function and development; role negotiation, and perceived barriers to PACT implementation (11,12). In this manuscript we report our analysis of qualitative interview data collected from PACT RNs and LPNs as part of the larger study of barriers to PACT implementation.

Sample

The study population included all primary care staff implementing PACT in the upper Midwestern U.S. For the current analysis we included interviews with nurses from 22 teams. Eligible nurses (n=132) were e-mailed invitations to be interviewed, and 26 RNs and LPNs agreed to participate.

Data Collection and Analysis

A semi-structured interview format was used to optimize comparability across interviews and provide respondents with an opportunity to raise topics they identified as important (13). Interviews were conducted by a medical anthropologist, audio-recorded and lasted 30–60 minutes. Interviews were transcribed by trained transcriptionists, audited for accuracy, and imported into the data analysis software platform MAXQDA (14).

Interview transcripts were coded using a codebook developed for the larger study that employed inductive and deductive techniques (15). Two trained analysts coded all interview data using an 80% agreement benchmark (16). Coding disagreements were discussed and adjudicated by the lead anthropologist (SS). For the current analysis 2 anthropologists (KS, SS) independently reviewed data coded for professional role (e.g., RN or LPN) with a focus on the relationship between professional role and related coded data on scope of practice, practice redesign, task delegation, implementation processes, and workload. Key themes were independently reviewed and summarized and then final themes were those independently identified by both anthropologists and present in multiple interviews. Nurses' telling of their experiences during the early adoption phase of PACT provides insight into the ways in which health care delivery models may impact collegial relationships and identities.

Results

Of the 26 nurses who agreed to be interviewed, 12 RNs and 6 LPNs completed interviews and 8 withdrew from the study due to difficulties in scheduling the interviews. Figure 1 summarizes participant characteristics. A majority worked at hospital-based primary care clinics.

Nurses associated a change in their responsibilities with reorganization from traditional staffing models to PACT, which is interdisciplinary team-based care delivery (Figure 2). In particular, nurses discussed how PACT implementation challenged their prior roles in the following areas: expanded clinical duties and within-team division of labor among nurses.

Expanded Clinical Duties

To meet PACT goals of greater access to care, panel management, and patient-centered care, nurses reported taking on new, diverse tasks such as: providing clinical care by telephone; calling patients prior to their appointment to complete clinical reminders; or using techniques such as motivational interviewing as part of patient education and chronic disease management. LPNs and RNs reported that patient care was central to their idea of being a nurse; however, RNs and LPNs described their experience of these changes differently. Generally, RNs emphasized negative effects of their expanded duties, whereas LPNs emphasized positive effects.

RNs in particular noted that the new forms of delivering care created some distance between themselves and their patients. RNs in particular reported they were spending much more time delivering care to patients over the phone relative to in-person. Some RNs described this change in positive terms, noting that telephone care provided patients convenient and direct access to RNs while potentially opening appointment slots for other patients whose care required face-to-face visits. Other RNs said that they missed being involved in direct patient care, such as face-to-face visits.

“Frankly, I really miss checking people in for their routine appointments just because, I knew my patients. I worked with the same 2 doctors for a lot of years and I knew their patients. And now it’s like, we have all these patients and I don’t know who they are! I hear a name and it doesn’t bring up a picture in my head” (RN # 7).

In response to diversification and expansion of clinical duties some RNs expressed concerns that they were being pulled in too many directions to “do a good job” and that it was difficult to prioritize work within a broad range of duties.

“[Increased telephone care] doesn’t sit very well with me. I like to have the direct patient contact. I like to do the interview process. I like to do what I can do—I get to know the veteran. I still do that as much as I can” (RN # 1).

“It almost seems like we can’t do anything really good because we’re so diversified in what our duties are that some of [the RNs] I know have trouble setting the priorities. Like with our clinic, I get calls all day long so I mainly have to just deal with the calls. I can’t really be proactive with a lot of the clinical reminders. They want us to try to get the hemoglobin A1Cs down and the LDLs and stuff. We don’t have a whole lot of time to work proactively because of our patient load” (RN # 2).

In contrast, some LPNs described similar changes in more positive terms such as ‘variety’ or not ‘getting bored’ and linked these changes positively with job satisfaction. LPNs reported spending more time on the phone and engaging in patient education. In some cases, LPNs reported being given more responsibility for clinical tasks that they were less familiar with. These tasks were variably met by LPNs with a desire for refresher training or as providing opportunity for professional growth.

“LPNs get to do a great deal more and the freedom to innovate and do continuous improvement is fantastic. The impact that it’s going to have in health outcomes for the patients is significant, and as a nurse that’s all I really care about” (LPN # 3).

“And with the PACT program I do a lot more in depth into the patients and to me it’s more satisfying. ... [Before PACT], if you had a slow day you’d kind of be, “Okay, what am I doing today?” And now I [have] people to call. I have to find out if I can’t set them up for different things and I have teaching to do. I do a lot more teaching now. Before, it was always the RNs teaching them how to use the [glucometers]” (LPN # 2).

“I’m very comfortable with what my provider does, but when we switched over to taking on all of our nursing clinic responsibilities like allergy shots, B-12s, stitch removal, things that I hadn’t done for years. ... I need some time to work with the person who’s in the nursing clinic now and refresh those skills until I feel that they aren’t rusty at all. That set [our PACT] back awhile, [my] taking over the nursing clinic. But hey, that’s what I asked for and felt that was needed and every one of my LPNs appreciated it!” (LPN # 4).

Within-Team Division of Nursing Labor

According to the PACT model, tasks are delegated according to scope of practice, ideally with everyone working to the full extent of their licenses and delegating other tasks. However, all nurses noted that strict division of labor according to the model was impractical, particularly in smaller, community-based outpatient clinics where interdependence and task sharing was considered part of team culture. Despite training in task delegation, RNs and LPNs reported routinely performing less clinically complex tasks. All nurses identified their involvement in a variety of tasks such as rooming patients, staffing nursing clinics, administering shots, taking histories, calling patients, refilling medications, etc.

Small subsets of tasks were reported to be exclusively performed by RNs. Such activities included triage, case management, and clinical assessment and their assignment to RNs was attributed to RN clinical licensure. However, nurses described within-PACT division of labor on many other tasks as varying according to PCP knowledge of nursing roles. Some PCPs were believed to delegate tasks according to scope of practice whereas others were viewed by nurses as unable or unwilling to differentiate between different nurse licensures. For RNs, this included tasks such as rooming patients or satisfying clinical reminders. For LPNs, this involved administrative tasks such as sending faxes or telephoning patients to remind them of their upcoming appointments.

“Because I don’t think our providers care [which nurse is which]. They’ll give a nurse a message and you’re supposed to take care of it. Whether I can take care of it or not, it is my responsibility to pass it on to whoever *can* take care of it” (LPN # 4).

“Providers are starting to let go of some follow up stuff, but there needs to be a working trust between the provider and the RN. These are new employees so the

trust is still developing. Once these relationships are established these providers will pass more along to the RNs. The RNs will let things trickle down to the LPNs. It's a big change because for so long the LPNs weren't allowed to do certain things and now they are. Each facility has a different philosophy. So now we have to build up a comfort level for the LPNs so that they can do more" (RN 6).

Discussion

Nursing literature has highlighted the critical role of nurses in patient health care, but there is little evidence demonstrating the impact of the medical home model on the day-to-day work of nurses. Specifically, there is little research exploring the differences between RNs' and LPNs' roles and professional identities in the context of multidisciplinary medical home teams. Our qualitative study of nurses' experience implementing the medical home model in VA PACTs, while limited to the experiences of nurses early in the implementation process, demonstrates both the potential of the approach to better utilize nurse skills and implementation challenges.

PCMH emphasis on care coordination, patient-centeredness, and chronic disease management depends on multidisciplinary expertise and teamwork. Interview data presented here demonstrate that implementation of medical homes involves a cultural shift for nursing practice. Moving from traditional nurse staffing models to team-structured approaches changes nurses' responsibilities and in some cases how nurses think about their professional roles. With reorganization into teams, RNs and LPNs are engaged in more diversified clinical work but report differing experiences. RNs experienced a challenge to their professional role, some of which may derive from their perceived lack of skills to complete the new tasks (17). As others have shown, RN experience of task diversification may also be a result of the shift away from more direct hands-on nursing tasks (18). Providing nursing care over the telephone can involve reshaping nurse ideals for patient interaction. RNs in particular seem to find the transition from face-to-face care to telephone appointments challenging. This perception may derive from their traditional whole person orientation to clinical care which accounts for patients' contextual circumstances (18). In contrast, LPNs described the increased diversity of tasks more positively, typically connecting increased responsibility with increasing professionalism of their role, due to the PACT model's recognition of their licensure as a particular set of skills that they bring to the team (19).

Separation from their fellow RNs and LPNs into distinct PACTs requires nurses to realign not only their work priorities, but also their professional relationships (20). In addition to learning different modes of care (e.g., telephone, secure messaging, etc.), nurses must also reformulate their professional identity as an RN or LPN in relationship to the roles of the PCP and administrative associate. The experiences of RNs and LPNs reported here highlight the need to consider how different healthcare models, such as interdisciplinary PACT teams, require cultural and practical transformations. Similar to findings reported by Tuepker and colleagues, LPNs in the current study recognized how their shared disciplinary priorities can inform PACT adoption of patient-centered practices and result in greater job satisfaction (21).

In some cases, rather than enhancing a collaborative ethos, PACT's approach to task delegation based on licensure inadvertently ranked team members. A majority of the role changes reported by RNs and LPNs are achieved through either vertical substitution--the delegation of work across disciplines with varying degrees of training, power, and expertise--or diversification, the creation of new tasks (22). Both mechanisms for role change have potential for enhancing professionalism, but inter- and intra-professional knowledge barriers within teams appear to prioritize PCP leadership and delegation over that of other PACT members. PCPs were reportedly less able to differentiate between RNs and LPNs to delegate work, resulting in RNs feeling split between care management and less clinically complex work and LPNs feeling underutilized as nurses, a dynamic also reported by MacDonald, et al (23). Because PCPs drove delegation of tasks downwardly through a licensure hierarchy in the team, nurse implementation was constrained by PCPs' level of adoption (24). As other research in VA has demonstrated, status differences may be inadvertently reinforced by informal policies which prioritized training for PCPs and RNs over that for LPNs and administrative associates (25).

VA is implementing PCMH on the largest scale to date using both RN and LPN trained nurses. The enhanced role of LPNs in VA presents a model for addressing the global shortage of RNs by reducing their workload and enabling RNs to focus on areas requiring their specific expertise. The qualitative data collected from nurses implementing the model, while limited in sample size and collected early in the team development process, demonstrates the acceptability of PCMH to nurses and the opportunities for increased professionalization of RNs and LPNs. These findings are consistent with recent studies of delegation, teamwork, and satisfaction issues between RNs and other lower licensed nurses, (23,26,27) which suggest that intraprofessional knowledge between nurses is more salient than 1 specific level of licensure (23).

Conclusions and Implications for Practice

PCMH has the potential to improve job satisfaction among nurses working in ambulatory care settings while delivering coordinated, patient-centered care. Primary care clinics wishing to implement PCMH should be aware of the need for ongoing interprofessional education to support within-team task delegation as they transform nursing practice into an interdisciplinary model of care.

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Role	Respondent Gender		Practice Site Type	
	Female	Male	VAMC*	VA CBOC ⁺
RN	12	0	5	7
LPN	4	2	3	3
Total	16	2	8	10

* VA Medical Center

+ VA Community Based Outpatient Clinic

Figure 1. Participant Characteristics

Primary Care Provider

- responsible for providing same day access and continuity of care with assigned panel of patients
- increased use of telehealth and telephone care
- providing team leadership, identifying of team goals
- PCP delegates clinical task to dedicated RN or LPN

RN Care Manager

- assigned to work with single PCP
- providing chronic disease management to high need subpopulations
- increased use of telehealth and telephone care
- participating in team meetings, identification of team goals

LPN

- assigned to work with single PCP
- providing patients with self-management support and education
- participating in team meetings, identification of team goals
- improve in-clinic wait times through pre-appointment telephone care
- actively support care coordination

Administrative Associates

- assigned to work with single PCP
 - participating in team meetings, identification of team goals
 - actively support care coordination
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Figure 2.

Overview of Role Duties Associated with PACT Model