# Medical Homes Require More Than an EMR and Aligned Incentives

Samantha L. Solimeo, PhD, MPH; Michael Hein, MD, MS; Monica Paez, BA; Sarah Ono, PhD; Michelle Lampman, MA; and Greg L. Stewart, PhD

**Background:** The Veterans Health Administration (VHA) is changing its primary care delivery by implementing the patient-centered medical home (PCMH).

**Objectives:** To evaluate PCMH implementation among 22 newly formed teams working in the VHA.

**Study Design:** Longitudinal formative evaluation of team members' role transformation during the first 18 months of implementation.

**Methods:** We used 3 sequential, semistructured focus groups to gather data from 4 different groups representing the principal team member roles: primary care providers, registered nurse care managers, licensed practical nurses, and clerical associates.

**Results:** Team members identified within-team role and interpersonal conflict, as well as discordant administrative leadership styles, as key implementation challenges.

**Conclusions:** Our results suggest that, in addition to technological and fiscal infrastructure, healthcare leaders implementing the PCMH model must take into account interprofessional issues associated with changes in leadership and the adoption of team-based structures.

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**For author information and disclosures, see end of text.**

The US healthcare system is facing systemic change driven by urgent needs to rein in unsustainable costs and deliver higher-quality care. Successful transformation will require a robust primary care infrastructure that provides first-contact, comprehensive, coordinated, and continuous care.[1] Toward that end, the patient-centered medical home (PCMH) has been proposed as a model not only for reforming healthcare delivery but also for rejuvenating primary care as a field.[2-5]

Building on long-standing investments in organizational, technological, and fiscal infrastructure to support integrated, team-based care,[6] the Veterans Health Administration (VHA) has emerged as a champion of the PCMH model— branded the Patient Aligned Care Team (PACT). Formal adoption of the PCMH model began in 2009, when Secretary of Veterans Affairs Eric K. Shinseki initiated several large-scale transformational initiatives to position the VHA as a patient-centered, team-based, continuously improving, and data-driven organization.[7,8] Foremost among these initiatives was fully implementing PACT. This included increased primary care clinic staffing, technical and interpersonal skill development, and development of highly functional interdisciplinary care teams. In-person learning collaboratives were implemented using the model of the Institute for Healthcare Improvement (IHI) Breakthrough Collaborative Series methodology,[9] including training seminars, virtual communities of practice, and virtual lectures. The extensive nationwide change effort involves all 21 Veterans Integrated Service Networks (VISNs) and every VHA healthcare facility.

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The VHA's recent implementation efforts and long-standing infrastructural investments in key PCMH components such as electronic medical records are intrinsic advantages for PCMH implementation. Moreover, the VHA's focus on providing patients with healthcare for life in the context of a limited global budget creates organizational incentives for investing in health promotion, disease prevention, and chronic disease management.[10] Yet these structural advantages that on the face appear to make the VHA example unique are counterbalanced by the recognition that the VHA is implementing PCMH across the entirety of its primary care network, composed of approximately 5000 full-time-equivalent primary care providers (PCPs) who have a wide range of clinical experience and understanding of the PACT model. Accordingly, the VHA experience

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can inform the broader adoption of PCMH. In this study we present the results of a formative evaluation of PACT implementation in the VHA among 22 teams working to transform their interpersonal and clinical practices in the first wave of implementation. We then draw on these early findings to present a set of lessons learned.

**Take-Away Points**

Primary care reform has recently focused on financial incentives and electronic medical records, but the social side of medical home and team implementation demands investment and attention. Team development is facilitated when the following occur:

- Extensive effort is made early in the team formation process to develop positive interpersonal and interprofessional relationships.
- Administrative leadership champions new ideas and supports teams by providing key resources.
- Team members work cooperatively and democratically to determine member roles.

## RESEARCH DESIGN

A qualitative observational design was used to gather experience-near data in order to understand implementation barriers and facilitators from the perspective of the teams involved in putting PACT into practice. These observations focus on the experiences of 22 primary care teams distributed across the VA Midwest Healthcare Network (VISN 23), which includes 8 hospitals and 56 outpatient clinics located throughout 6 upper Midwest states, providing care to approximately 300,000 veterans. The teams in this study were selected because they all participated in the first wave of PACT training provided in VISN 23. Individual team members were selected by administrative leadership based on perceived high performance and their expressed interest in PACT. Each team was composed of 4 distinct roles, as prescribed by the VHA model based on previous medical home transformations: a PCP, a registered nurse care manager, a licensed practical nurse, and a clerical associate. A clerical associate is similar to an administrative assistant and is typically responsible for greeting patients, telephone work, scheduling, and data entry and retrieval. These core teams were supported by closely aligned staff referred to as "neighbors" such as pharmacists, social workers, and mental health specialists.

VISN 23 leadership selected the IHI Breakthrough Series Collaborative methodology to facilitate the development of PACT teams in VISN 23 because it is designed to assist health systems with large-scale quality improvement efforts and to establish a framework for the creation of systemwide learning communities.[9] The IHI framework presents a process whereby leaders and outside experts come together to develop and deliver training content that is tailored to the needs of the specific organization. To help organizations learn and deploy this methodology, IHI provides a Breakthrough Series College.[11] The training delivery process guides participants to acquire knowledge, experiences, and skills via a series of didactic in-person 3-day learning sessions. Experience-based action periods occur between learning sessions, with teams engaging in implementation of self-selected rapid cycle small tests of change using "plan-do-study-act."[12] Responding to expressed needs, demonstrated knowledge gaps, and goals of the change effort, the content of the learning session and action period activities are created iteratively by faculty content experts and Collaborative leadership. In the present context, the VHA Office of Quality Safety and Value also developed and supported the VHA-wide PACT Collaborative.

Prior to the transformation reported in this study, VISN 23 leadership had used the Collaborative methodology to implement a systemwide chronic disease management program.[13] Under the guidance of an expert consultant and building on the skills and knowledge from the prior Collaborative and the national PACT implementation work, VISN 23 Collaborative leadership partnered with expert faculty brought together from the 8 healthcare systems in VISN 23. Together they created the initial scope and aims, as well as the learning session content and structure. As the Collaborative progressed, content was modified, added, or deleted in response to emerging themes, identified knowledge gaps, and shared learning. The content of the training was thus tailored specifically to the VISN 23 context and is presented in **Table 1**.

Learning collaboratives are labor intensive and require sustained organizational commitment of resources. The VISN 23 PACT Collaborative required weekly 60-minute planning sessions; monthly team action reporting, review, and feedback for all submitted materials (eg, monthly team reports); and substantial time dedicated to logistical planning and content development for the learning sessions. The VISN 23 PACT Collaborative lasted 18 months and required 4 months of preplanning and preparation.

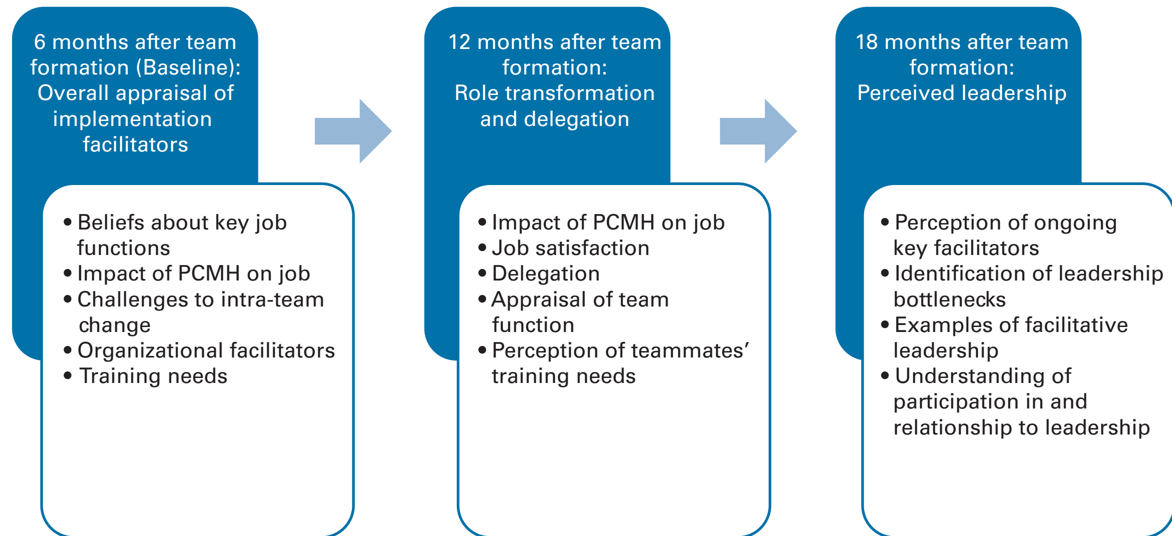
It was during the learning sessions that data for this study were collected via PACT teams participating in role-based focus groups that occurred approximately 6, 12, and 18 months after the VHA initiative began. These time points provided longitudinal data on the changes and challenges members encountered. Data were analyzed after each focus group to inform discussion prompts for subsequent sessions. The focus group discussions were loosely framed around the given topic, but participants were otherwise naïve to the data collection purpose. The **Figure** describes the specific domains addressed in the focus groups.

**Table 1.** Summary of VISN 23 PACT Learning Collaborative Training Components[a]

| Learning Session | Didactic Presentation Topics | Skill Development and Application | Team Development and Application |
|---|---|---|---|
| **Session I (prior to data collection)** | Overview of IHI model and learning collaborative goals<br>PACT "pillars"[b]<br>PACT staffing model<br>Overview of the PCMH and accountable care<br>Primary care transformation<br>PCMH case studies/pilots<br>Qualities of high-performing teams<br>"Advice" from PACT team "neighbors"[c]<br>Team-based care<br>Patient-centered care<br>Access<br>Practice redesign | Data resources for monitoring team performance (eg, panel size, capacity, staffing ratio, patient satisfaction, ED utilization, same-day access, care coordination, and clinical indicators)<br>Aim development, implementation, and analysis | Team development<br>Communication skills exercise<br>Development of team communication plan<br>Development of team meeting framework<br>Introduction of team action plan<br>Next steps and bridge to session II |
| **Session II (baseline, 6 months)** | Adaptive reserve<br>National Demonstration Project<br>Feedback on the team's progress<br>Role of the RN care manager in the PACT team<br>Role of the RN chronic disease case manager/ neighbor to the PACT team<br>Telephone clinics<br>Motivational interviewing<br>The role of the patient in PACT<br>Care transitions<br>Team development processes | Use of a self-management support tool with chronically ill patients<br>Incorporating patient agenda setting into clinic practice<br>Population planning worksheet and activity<br>Care transitions data acquisition and analysis<br>Exercise to identify potential use of telephone clinics | Developing an elevator speech for dissemination<br>Brainstorming session to identify intra-team relationship challenges<br>Team exercise to evaluate state of team goals and progress toward those goals<br>Team roles worksheet to facilitate practice redesign |
| **Session III (12 months)** | Feedback on team's progress<br>Overview of change theory<br>Team-based CDM<br>CDM track for diabetes, congestive heart failure, and chronic obstructive pulmonary disease<br>Shared decision making | Team presentation on best practices<br>Live demonstration of CDM registry<br>Peer group problem-solving sessions<br>Care coordination exercise<br>Optional pre-sessions offered:<br>—PACT 101 for new team members<br>—PACT measurement 101 | Within-team role clarity presentation and Q&A<br>Team development measure discussion<br>Team skill development exercise<br>Change exercise |
| **Session IV (18 months)** | Feedback on the team's progress<br>Shared medical appointments<br>Strategies for improving clinic access<br>Telephone care<br>Role of the clerical and clinical associates<br>Effective meetings and huddles<br>Role of healthcare system health promotion disease preventionist and health behavior coordination for PACT teams<br>Veteran expert panel | Team presentation on best practices<br>Shared medical appointments exercise<br>Telephone care exercise<br>Access exercise<br>Peer group problem-solving sessions<br>Breakout sessions on:<br>—Effective meetings<br>—Coaching PACT teams<br>—Dual users<br>Optional pre-sessions offered:<br>—PACT 101 for new team members<br>—PACT measurement 101<br>—PACT team coaches orientation | Effective meetings<br>Huddles<br>Exercise on role clarity for clerical and clinical associates<br>Postbreakout teach-back session |

CDM indicates chronic disease management; ED, emergency department; IHI, Institute for Healthcare Improvement; PACT, Patient Aligned Care Team; PCMH, patient-centered medical home; RN, registered nurse.
[a]The topics listed in each cell are intended to provide a summary of the content provided during the face-to-face learning events sponsored by the Veterans Integrated Service Network 23 (Midwest Healthcare Network) PACT Learning Collaborative. The categorization into didactic presentations, skills, and team development was done for presentation in this study and was not a framework adopted by the VISN Collaborative leadership. Due to the nature of education, items necessarily overlap. Didactic presentations certainly inform skill and team development, but for clarity we have artificially divided topics clearly intended for each domain.
[b]Veterans Health Administration PACT pillars are to provide patient-driven, team-based, efficient, comprehensive, continuous, coordinated, and communicated care.
[c]Neighbors are the specialty care providers integrated with PACT teams to provide expertise and coordination with services such as social work, pharmacy, mental health, and chronic disease management.

■ **Figure.** Data Collection Domains




PCMH indicates patient-centered medical home.

Focus groups were facilitated by 5 social scientists who took handwritten notes that were elaborated into longer typewritten field notes for content analysis. To maximize participants' comfort with speaking freely, discussions were not audio-recorded and no identifiable data were collected. Focus group field notes were reviewed by 2 members of our research team, who identified role-specific and cross-cutting themes. These themes were then validated by group discussion using an iterative, constant comparative approach[14] within the study team and through feedback mechanisms such as telephone conferences with VISN leadership and in-person presentations at learning sessions. Reports summarizing the discussion findings were distributed electronically to all Collaborative participants, and in-person presentations were conducted at subsequent learning sessions to foster dissemination and interprofessional understanding. These techniques not only strengthened rapport between the study team and the PACT team members, but also provided a mechanism for assessing the face validity of the findings. Barriers to and facilitators of PCMH implementation among the 22 pilot PACT teams were derived from these themes and are reported in a temporal fashion. This study was approved by the Iowa City VA Healthcare System Institutional Review Board and Research and Development Committee.

## RESULTS

Participation in the focus groups was voluntary, but a majority of learning session participants attended (Table 2). As expected, focus group participants' concerns changed over time. Analysis of focus group field notes produced 3 overarching trends, moving from (1) an emphasis on establishing teams and negotiating tasks to (2) the importance of clarifying identity and sharing responsibility to (3) an increased understanding of both internal and external supportive leadership roles (Table 3). Discussion of these 3 phases follows.

### Phase 1: Establish Teams and Negotiate Tasks

During the first 6 months of implementation, teams reported widely varying degrees of cohesion and success. The variation was traced to differences in team composition. Some teams were fully staffed, whereas others, primarily rural clinics, were not. Some teams consisted of colleagues who had long-standing relationships; others consisted of new employees. Primary care providers (physician, nurse practitioner, physician assistant), the de facto team leaders, also had widely varying degrees of experience in the VHA. Teams with stable membership, particularly members with experience working together, were able to develop and advance more quickly than those teams with new employees.

Early-phase development challenges focused on the equitable and practical within-team distribution of tasks. Teams experienced a lack of role clarity regarding scope of practice and performance expectations. Team members viewed their roles as sets of tasks and invested substantial effort in determining who on the team should do what. This process of role negotiation was especially difficult for nursing staff. They were subject to multiple lines of guidance concerning scope of practice, facility policies, and PCP preferences for the specific responsibilities nurses should assume.

**Table 2.** Discussion Group Participants[a]

| Participants | No. (%) | | |
|---|---|---|---|
| | Baseline: 6 Months After Team Formation | 12 Months After Team Formation | 18 Months After Team Formation |
| Primary care providers (MD, DO, PA, NP, APRN) | 22 (100) | 19 (79.2) | 22 (91.7) |
| RN | 26 (96.3) | 28 (87.5) | 17 (94.4) |
| LPN | 16 (80.0) | 14 (66.7) | 19 (100) |
| Clerical associate | 20 (95.2) | 15 (88.2) | 13 (86.7) |

APRN indicates advanced practice registered nurse; DO, doctor of osteopathic medicine; LPN, licensed practical nurse; MD, doctor of medicine; NP, nurse practitioner; PA, physician assistant; RN, registered nurse.
[a]Teams local to the session event were able to send additional staff for training and so were invited to participate in discussion groups.

**Table 3.** Phases of Team Development in Year 1 of Implementation

| | |
|---|---|
| **Phase 1** | Team establishment with emphasis on task negotiation within the team and coordination of responsibilities for the team and for supervisors in the larger organization |
| **Phase 2** | Development of team identity to facilitate proactive thinking about providing care to a patient population rather than individual patients in face-to-face appointments |
| **Phase 3** | Increased attention to relationships affecting the team's ability to achieve desired clinical outcomes, particularly with regard to administrative leadership, scope of practice, and team "neighbors" |

Every team member perceived an increase in workload associated with pressure to achieve same-day access for patients and improve care coordination. For teams with a preexisting perception of being overworked, the increased expectations with PACT were at the crux of early-adoption challenges.

In addition to internal task allocating, teams experienced tension between accountability to their specific team and to the overall clinic. This tension was heightened by a phased deployment of PACT teams within clinics and the disruption of well-established interdependencies (eg, cross-coverage). This made it difficult for management to balance the needs of the PACT teams with the needs of the clinic overall. In some instances, the disparity between PACT team needs and broader clinic interests amplified leadership resistance to change. For example, in some clinics, where they had work assignments that included both PACT duties and other responsibilities, supervisors would sometimes not release clerical associates to attend team meetings and other activities designed to improve team function and cohesion.

Leaders worked through these challenges when they clearly perceived potential benefits of implementing the PACT model. Effective leaders supported teams by providing protected time for team meetings, encouraging learning session attendance, and facilitating access to team-level performance data. VISN 23 leadership supported these local efforts by providing PACT teams with team effectiveness and systems redesign coaches, who assisted with interprofessional communication by deciphering performance data, testing changes, and providing feedback on team reports. Team effectiveness coaches were volunteers from across VISN 23 who received 2 days of on-site training on facilitating and developing high-performing teams. This training was developed in-house, drawing upon TeamSTEPPS, use of the Team Development Measure, and the skills of other local resources and consultants.[15,16] System redesign coaches were experienced at facilitating performance improvement teams in VISN 23 and had received previous training and certification in Vision-Analysis-Team-Aim-Map-Measure-Change-Sustain (VA-TAMMCS), the model of system redesign used in the VA.[17]

In many instances leadership actions (eg, active involvement with multiple teams) were particularly difficult, yet critical. Leaders faced numerous concerns, including the implementation of several other major transformational initiatives while attempting to direct the efforts of other clinics that had not yet begun transitioning to the medical home model. The leaders themselves were also new to the medical home model and were simultaneously learning. Keeping a focus on the medical home transition in such a demanding and dynamic environment required skilled leadership.

### Phase 2: Clarify Identity and Share Responsibility

At 12 months, the focus shifted away from task assignment to professional identity. Team members struggled to determine how their new identities fit daily clinic operations and their long-standing beliefs about their professional identity as a

healthcare worker. One adjustment was from individualism to a focus on the needs of the collective team. To meet the demands of the new model of delivery, some identified the need for increased professionalism and self-initiative from some coworkers and increased delegation and trust from others. At times this created intra-team tension as coworker expectations sometimes conflicted with self-identified roles and responsibilities. Teams also experienced an emerging call for organizational clarity regarding how their new identity as a PACT team fit in the broader organizational context.

Over time, the teams came to focus more on factors affecting overall team function and less on specific task assignments, yet participants made it clear that PACT implementation was highly disruptive to traditional hierarchies. The team-based model focused on redistributing responsibility for patients from the PCP to the collective group. This challenge was specifically expressed as a need for colleagues with less medical expertise to become more independent and self-motivated, and a need for those colleagues with more medical expertise to let go of some patient care tasks and allow others on the team to participate in patient care to the "top of their licensure."

Within the most successful teams, clerical associates were praised for taking initiative and performing information retrieval and organization-related tasks that support efficient patient care. Licensed practical nurses were lauded for being self-motivating and not funneling all activities through the registered nurse or PCP. Registered nurses supported others by providing backup when workload became overwhelming. Primary care physicians facilitated their team when they gave up sole ownership of patient care and allowed others in the team to maximize their capabilities.

As they developed a clearer collective identity, teams continued to acknowledge the critical importance of facilitative leadership behaviors. Effective leaders spent time with the team, provided information, allocated improved resources such as newly configured workspaces, and attended team meetings.

### Phase 3: Gain Ground With Supportive Leadership

At 18 months, PACT teams continued to work against traditional organizational models by increasing their within-team delegation and moving more tasks toward the top of individual team members' skill sets. Role negotiation and intra-team delegation were constrained by teams' perceived increased workloads associated with PACT implementation and VHA trends toward increasing panel size during this time. During this period, the process of delegation and role negotiation became more clearly connected to larger issues of leadership, both within the team and between the team and organizational culture. Primary care physicians remained the default team leaders, yet registered nurses were taking an active role in identifying team aims and performing the interpersonal and administrative work that served to forge team relationships. Some PCPs reported difficulty enacting a leadership role, and others felt as if they lacked authority to lead. Licensed practical nurses and clerical associates were least likely to report participation as intra-team leaders.

There remained a sense that successful PACT implementation could only be accomplished in settings where administrative leadership enhanced strong intra-team and within-clinic communication. This required a more engaged leadership style than some were comfortable with or able to provide. In some situations, even with a clear and strong message from executive leadership, local administration perceived PACT as a "flavor of the month" project that was highly disruptive of the status quo. This dynamic created some difficulties in implementation at the local level.

For example, a common challenge experienced by many teams was a developing conflict between the innate leadership emerging from well-functioning teams and the demands of administrative departmental heads such as nursing or clerical supervisors. For example, the intra-clinic matrix structure created by a phased implementation of PACT (organized PACT team leader supervised by an administrative leader) made whole-clinic administration (eg, scheduling, task allocation) difficult. As PACTs strengthened, teams wanted to assume the tasks that were historically managed centrally, like scheduling.

## DISCUSSION

Introduction of the PCMH model into the largest national integrated healthcare system has been neither fast nor easy. Our findings underscore the conclusion of the American Academy of Family Physicians–sponsored National Demonstration Project.[2,18] The transition to team-based primary care is exceedingly difficult, and a clear understanding of the complexity of implementation issues requires a comprehensive research methodology that incorporates multiple perspectives.[19]

Similarly to the published examples of PCMH implementation in the private sector, the sample of teams we followed were selected for training because they were identified as either high performing or supporters of the PCMH model. Yet after 18 months of substantial investment in training, staffing, and coaching, it was clear that successful PCMH implementation requires more than an electronic medical record, intrinsic fiscal incentives to promote care coordination, and simply reorganizing staff into teams. Our findings suggest a number of lessons for helping teams succeed as part of PCMH implementation. These include the importance of (1) sustained facilitation of team development, (2) transformational leaders,

(3) capitalizing on the skills of individual team members, (4) effectively straddling an empowerment paradox of balancing autonomy and coordination,[20-22] and (5) attention to the interpersonal dynamics within PCMH teams.

### Lesson 1: Facilitate Team Development

Team development is fundamental for effective teams and transcends financial and technological investments. Consistent with existing literature,[23] the most effective teams expended a great deal of time and effort in planning for and coordinating activities, in addition to task work. At the 1-year mark, most teams had progressed into cohesive units, but this progression required sustained facilitation and supportive leadership. The most effective teams took time to develop a shared understanding of team objectives. They also learned to discuss difficult issues in a nonthreatening way that prevented personal attacks. Effective teams invested significant time and effort in developing relationships and managing communication in ways that initially felt inefficient, but over time became a critical foundation for success.

Given the general lack of experience and training in team development in healthcare, many teams were unable to develop effectively without the help of an outside coach. The allocation of adequate time and resources was highly dependent on leadership support. The most effective leaders actively engaged in helping groups of individuals transform into true teams.

### Lesson 2: Enact Transformational Leadership

Transformational leadership behavior is critical for effective PCMH implementation. The most successful PACT teams were led by those who demonstrated behaviors most consistent with transformational leadership.[20] Traditional control-oriented actions were anathema to PCMH.[21] Effective administrative leaders facilitated change,[24] provided time and space resources, and protected teams from outside duties that prevented them from building interprofessional relationships and working cooperatively. Teams are most likely to succeed when administrative leaders are committed to change and acknowledge that the change is more than a routine training initiative. These leaders shield teams from distractions and provide fledgling teams with the necessary support, such as adequate staffing and the freedom to innovate.

In addition, the difficult social transformation to PCMH heightens the critical role of leadership, which must recognize the challenges in establishing effective PCMH teams and the required depth and duration of facilitative development. Moreover, behaviors consistent with effective PCMH teams in some cases may be in conflict with current healthcare leadership behaviors and organizational cultures. Effective leaders need to develop a vision of change and continuously communicate that vision to all members of the organization.[25] This is likely even more important in settings that are potentially less ready for change than the participants in our study, who were chosen at least somewhat because of their high past performance and expressed interest in carrying out the transformation. In these settings, readiness for change can be facilitated by sharing inspirational examples of how care can be improved as well as clinic-specific data about current weaknesses.[26]

It was anticipated that transformational leadership behaviors and change management would be important topics for VISN 23 PACT teams. The initial Collaborative curriculum included content and speakers to address these issues. However, early in the curriculum, faculty and leaders deemphasized most of the leadership content because they underestimated the importance of transformational leadership actions. As the Collaborative unfolded and it became apparent how important these leadership behaviors were to the success of PACT teams, content on change management was reintroduced and leadership was reemphasized, but formal training in transformational leadership was not offered. Given its critical nature, an optimum approach would fully integrate leadership training, particularly an emphasis on transformational leadership, throughout the PCMH transformation.

### Lesson 3: Capitalize on Team Members' Skills

Team members, rather than central policy, should define and assign key PCMH tasks. Patient-centered medical home implementation requires an identity change for many participants. Much of the change cannot be driven from above and expected to trickle down to the team level. Just as PCMH requires that teams assess the needs of their individual patient panels and tailor their aims and processes to those needs, administrative leadership must allow teams to organize work among themselves in a way that makes sense to the team. The most effective teams negotiated their individual roles within their team in order to establish a group-specific dynamic. This is consistent with a model of team role development that suggests coordination is best when it takes advantage of the unique talents and abilities of team members, meaning that the configuration of roles and accompanying task assignments are optimized differently for each team.[27] The allocation of tasks within a team that includes a licensed practical nurse who has many years of experience and extended training should be different than the allocation of tasks in a team where the person in that same role has less training and experience. Licensure and scope of practice guidelines limit how some tasks can be allocated, but PCMHs are most effective when team members

themselves, rather than remote administrators, work together to determine who does which specific tasks.

### Lesson 4: Balance Innovation and Standardization

Teams implementing PACT experience an empowerment paradox. The transformation to PCMH creates tension between localized innovation and cross-facility standardization. To optimally meet the needs of unique patients, each team needs to innovate and adapt to specific conditions. At the same time there needs to be effective inter-team coordination within the organization. This balance between innovation and standardization often manifests in an empowerment paradox.[28] Most team members see themselves as not having enough empowerment from the people in the roles above them in a hierarchy. At the same time, most individuals also see those below them in the hierarchy as incapable of additional empowerment. Effective teams overcome this paradox by building trust in the abilities of their teammates. This process takes time,[29] meaning that PCMHs can be best facilitated by a strong and sustained commitment from administrative leadership for keeping groups intact. Teams must also develop open lines of communication to better understand the roles and talents of each member. In some cases team members need to pursue additional training and skill development, such as data acquisition and analysis skills provided through the collaborative.

### Lesson 5: Pay Attention to Social Issues

Leaders in organizations adopting PCMH must not ignore the social issues. Investments in information technology infrastructure and financial incentives are often emphasized in discussions about PCMH implementation and in PCMH recognition processes. Although these issues are substantial, our work within the VHA led us to a conclusion similar to that of other researchers,[30] illustrating the difficulty of transformation even with these elements in place. The largest obstacles are social in nature and require ongoing guidance and direction as team members adopt new roles and identities. Teams must also reorient themselves in regard to clinical data so that they attain a sense of ownership and relationship to patient outcomes rather than viewing performance measures as punitive systems.[18,31] Such changes in professional roles create an ongoing need for professional facilitation and coaching.

Because the extent of change is vast, team members often perceive "change fatigue" and believe that PCMH is another passing fad in clinical care.[18,31] Successful PCMH implementation requires clinical staff to change the way they view their professional identity, the specific tasks that they perform, and their ownership of both population and patient-level outcomes. This is a difficult process that challenges the fundamental assumptions about who should be responsible for what, offers an increased sense of professionalism as healthcare workers practice closer to the top of their skill set, and demands change that may contribute to a sense of overwork if these individuals fail to meet increasing expectations in a changing organizational culture. Such changes are not unique to the PCMH model, but have been discussed in other approaches to transforming clinical teams, such as the clinical microsystem concept,[32] and have relevance outside of primary care settings.

## CONCLUSIONS

The best transformation efforts are iterative. The lessons presented herein can inform others regarding the effective facilitation of teams during implementation of the PCMH model. Widespread and systemic transition to team-based primary care requires change in practice, policy, expectations, and attitudes. These changes must happen at the clinic level as well as at the local and regional levels of leadership and must be facilitated by a constructive exchange among all involved parties. Redesigning primary care is not a painless process, but it is timely and has the potential for great impact. Therefore, it deserves our collective concentration. Inattention to the social adaptations necessary for structuring work around teams rather than individuals may place the success of this important approach to healthcare reform at risk.

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***Author Affiliations:*** From VISN 23 Patient Aligned Care Team Demonstration Laboratory (SLS, MP, SO, ML, GLS), Iowa City VA Health Care System, Iowa City, IA; The Center for Comprehensive Access and Delivery Research and Evaluation (SLS, MP, SO, ML), Iowa City VA Health Care System, Iowa City, IA; VA Midwest Health Care Network, Primary Care and Specialty Medicine Service Line (MH), Minneapolis, MN (Dr Hein is now with Saint Francis Medical Center, Catholic Health Initiatives, Grand Island, NE); Tippie College of Business (GLS), University of Iowa, Iowa City, IA.

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***Address correspondence to:*** Samantha L. Solimeo, CADRE, Iowa City VA Health Care System, 601 Hwy 6 W, Mailstop 152, Iowa City, IA 52246. E-mail: Samantha.Solimeo@va.gov.

## REFERENCES

1. Stange KC, Nutting PA, Miller WL, et al. Defining and measuring the patient-centered medical home. *J Gen Intern Med.* 2010;25(6):601-612.

2. Crabtree BF, Nutting PA, Miller WL, Strange KC, Stewart EE, Jaén CR. Summary of the National Demonstration Project and recommendations for the patient-centered medical home. *Ann Fam Med.* 2010; 8(suppl 1):S80-S90.

3. Margolius D, Bodenheimer T. Transforming primary care: from past practice to the practice of the future. *Health Aff (Millwood).* 2010;29(5): 779-784.

4. Achieving Person-Centered Primary Care: The Patient-Centered Medical Home. Senate Special Committee on Aging; Hearing on "Person-Centered Care: Reforming Services and Bringing Older Citizens Back to the Heart of Society." July 23, 2008.

5. Friedberg M, Lai DJ, Hussey PS, Schneider EC. A guide to the medical home as a practice-level intervention. *Am J Manag Care.* 2009; 15(10)(suppl):S291-S299.

6. Grundy P, Hagan KR, Hansen JC, Grumbach K. The multi-stakeholder movement for primary care renewal and reform. *Health Aff (Millwood).* 2010;29(5):791-798.

7. Office of Healthcare Transformation. *VHA T21 Implementation Guidance.* Washington, DC: Department of Veterans Affairs; 2011.

8. Patient-Centered Primary Care Collaborative. Joint Principles of the Patient Centered Medical Home. http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home. Updated 2007. Accessed July 18, 2011.

9. Institute for Healthcare Improvement. *The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement.* IHI Innovation Series white paper. Boston, MA: Institute for Healthcare Improvement. http://www.ihi.org. Published 2003. Accessed September 21, 2011.

10. Atkins D, Kupersmith J, Eisen S. The Veterans Affairs experience: comparative effectiveness research in a large health system. *Health Aff (Millwood).* 2010;29(10):1906-1912.

11. Institute for Healthcare Improvement. IHI Breakthrough Series College. http://www.ihi.org/offerings/Training/BreakthroughSeriesCollege/Pages/default.aspx. Published 2012. Accessed August 18, 2012.

12. Reid R. Productivity and quality improvement: an implementation framework. *Int J Prod Qual Manage.* 2006;1(1):26-26.

13. Rector T, Bloomfield H, Hein M, Murphy J. Effect of a VA chronic disease management initiative on hospitalizations for ambulatory care sensitive conditions. *Fed Pract.* 2012;29(1):23-26.

14. Glaser BG. The constant comparative method of qualitative analysis. *Soc Prob.* 1965;12(4)436-445.

15. Agency for Healthcare Research and Quality. About TeamSTEPPS. http://teamstepps.ahrq.gov/. Published 2012. Accessed December 10, 2012.

16. PeaceHealth. The Team Measure. http://www.peacehealth.org/about-peacehealth/medical-professionals/eugene-springfield-cottage-grove/team-measure/Pages/default.aspx. Published 2012. Accessed December 10, 2012.

17. Veterans Health Administration. Systems Improvement Framework. Version 1.0. VHA Office of Systems Redesign (10NSR). http://www.paloalto.va.gov/docs/ImprovementGuide.pdf. Published January 2010. Accessed December 17, 2012.

18. Nutting PA, Crabtree BF, Miller WL, Stange KC, Stewart E, Jaén C. Transforming physician practices to patient-centered medical homes: lessons from the national demonstration project. *Health Aff (Millwood).* 2011;30(3):439-445.

19. Peikes D, Zutshi A, Genevro JL, Parchman ML, Meyers DS. Early evaluations of the medical home: building on a promising start. *Am J Manag Care.* 2012;18(2):105-116.

20. Bass B, Avolio B. *Improving Organizational Effectiveness Through Transformational Leadership.* Thousand Oaks, CA: Sage Publications; 1993.

21. Schwartz RW, Tumblin TF. The power of servant leadership to transform health care organizations for the 21st-century economy. *Arch Surg.* 2002;137(12):1419-1427.

22. Katzenbach J, Smith D. The discipline of teams. *Harvard Business Rev.* 2005;83(7/8):162-171.

23. Mathieu JE, Rapp TL. Laying the foundation for successful team performance trajectories: the roles of team charters and performance strategies. *J Appl Psychol.* 2009;94(1):90-103.

24. Kotter J. Why transformation efforts fail. *Harvard Business Rev.* 1995;73(2):59-67.

25. Kotter JP. Leading change. *Harvard Business Rev.*2007;85(1):96-103.

26. Courtright SH, Stewart GL, Ward MM. Applying research to save lives: learning from team training approaches in aviation and health care. *Organ Dyn.* 2012;41(4):291-301.

27. Manz CC, Shipper F, Stewart GL. Shared influence at W.L. Gore & Associates. *Organ Dyn.* 2009;38:239-244.

28. Manz CC, Stewart GL. Attaining flexible stability by integrating total quality management and socio-technical systems theory. *Organ Sci.* 1997;8:59-70.

29. Luxford K, Safran DG, Delbanco T. Promoting patient-centered care: a qualitative study of facilitators and barriers in healthcare organizations with a reputation for improving the patient experience. *Int J Qual Health Care*. 2011;23(5):510-515.

30. Landon BE, Gill JM, Antonelli RC, Rich EC. Prospects for rebuilding primary care using the patient-centered medical home. *Health Aff (Millwood).* 2010;29(5):827-834.

31. Meyer H. Report from the field. Group Health's move to the medical home: for doctors, it's often a hard journey. *Health Aff (Millwood).* 2010; 29(5):844-851.

32. Batalden PB, Nelson EC, Edwards WH, Godfrey MM, Mohr JJ. Microsystems in health care: part 9: developing small clinical units to attain peak performance. *Jt Comm J Qual Saf.* 2003;29(11):575-585. ■