

Open Access in the Patient-Centered Medical Home: Lessons from the Veterans Health Administration

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BACKGROUND: The Veterans Health Administration (VHA) has undertaken a 5-year initiative to transform to a patient-centered medical home model. An early focus of implementation was on creating open access, defined as continuity and capacity in primary care.

OBJECTIVE: We describe the impact of *readiness for implementation* on efforts of pilot teams to make changes to improve access and identify successful strategies used by early adopters to overcome barriers to change.

DESIGN: A qualitative, formative evaluation of the first 18 months of implementation in one Veterans Integrated Service Network (VISN) spread across six states.

PARTICIPANTS: Members of local implementation teams including administrators, primary care providers, and staff from primary care clinics located at 10 medical centers and 45 outpatient clinics.

APPROACH: We conducted site visits during the first 6 months of implementation, observations at Learning Collaboratives, semi-structured interviews, and review of internal organizational documents. All data collection took place between April 2010 and December 2011.

KEY RESULTS: Early adopters employed various strategies to enhance access, with a focus on decreasing demand for face-to-face care, increasing supply of different types of primary care encounters, and improving clinic efficiencies. Our interviews with key contacts revealed three important areas where readiness for implementation (or lack thereof) had an impact on interventions to improve access: leadership engagement, staffing resources, and access to information and knowledge.

CONCLUSIONS: Key factors related to readiness for implementation had an impact on which interventions pilot teams could put into place, as well as the viability and sustainability of access gains. Wide variations in interventions to improve access occurring across sites situated within one organization have important implications for efforts to measure the impact of enhanced

access on patient outcomes, costs, and other systems-level indicators of the Medical Home.

KEY WORDS: patient-centered access; primary care; continuity of care; veterans health; qualitative evaluation.

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BACKGROUND

In the face of growing concerns over quality and viability of the current system of primary care, the Patient-Centered Medical Home (PCMH) has emerged as a promising alternative care-delivery model.^{1,2} In a PCMH, team-based primary care is employed to assess and address the patient's medical and psychosocial needs, bringing in outside resources and specialists as needed.³ There are more than 100 demonstration projects across the US piloting core principles of the PCMH.^{4,5} In April 2010, the Veterans Health Administration (VHA) launched one of the largest PCMH initiatives to date, with the ambitious goal of transforming primary care clinics across more than 850 hospital-based Medical Centers and Community Based Outpatient Clinics (CBOCs) by the end of 2014 to what was dubbed the Patient-Aligned Care Team (PACT) model.⁶

VHA is the United States' largest integrated health-care system, providing and paying for comprehensive care to over 5 million veterans each year. Recognized as a leader of innovation in the development and use of electronic medical records, as well as improvements in quality and cost control,⁷ VHA has embraced the PACT model as a means to provide continuous, comprehensive care to a diverse population of patients, many of whom have complex comorbidities.

The focus of early PACT implementation was on training pilot teams from each facility, funding additional staff, leveraging existing space and technology resources, and re-designing existing processes with an emphasis on developing new ways to coordinate and deliver care.⁸ Pilot teams were charged with making changes along the full spectrum of PCMH activities; however, particular emphasis was

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placed on moving toward “open access,” a strategy for improving quality of care and patient satisfaction that has been widely adopted across outpatient settings in the US.^{9–13} Open access is defined in terms of improved *continuity* in the patient-provider/care team relationship and increased *capacity* in the team’s schedule to accommodate patients’ desire for same-day and future scheduled appointments.^{12,13}

Concurrent with implementation, VHA funded evaluation efforts, including the Center for Evaluation of Patient-Aligned Care Teams (CEPACT). CEPACT’s mission is to evaluate PACT implementation processes and outcomes across one Veterans Integrated Service Network (VISN 4), comprised of 10 VA Medical Centers and 45 Community-Based Outpatient Clinics across six states. As part of an ongoing qualitative formative evaluation, we tracked implementation activities and experiences of pilot teams during the first 18 months of PACT implementation.

Our evaluation is informed by the Consolidated Framework for Implementation Research (CFIR), which provides a unifying theory for examining the impact of multiple constructs on uptake of new interventions across a variety of organizational settings.¹⁴ Our objective in this article is to describe the impact of *readiness for implementation*, defined as “tangible and immediate indicators of organizational commitment to an intervention,”¹⁴ (p 9) on pilot teams’ efforts to improve open access. We also elucidate strategies used by pilot teams to overcome barriers to implementation in order to inform other health-care organizations interested in providing open access care.

METHODS

We used multiple qualitative data collection methods including site visits, observations at PACT Learning Collaboratives, semi-structured interviews, and review of internal organizational documents. All data collection took place between April 2010 and December 2011. Our approach to data collection and analysis is summarized below; a detailed description of methods is provided in an [Online Appendix](#).

Data Collection

We conducted site visits to each of the ten VA Medical Centers in VISN 4 during the initial 6 months of PACT implementation to better understand the variety of settings in which PACT was being introduced. We conducted semi-structured interviews in either one-on-one or group settings with administrators, primary care clinical leads, and members of pilot teams involved in local implementation. Interviews focused on the history and organization of primary care, local decision-making processes around PACT implementation, initial plans for implementing

changes in primary care, attitudes toward and knowledge about the national PACT initiative, and perceived barriers and facilitators to change. Between 8 and 16 individuals were interviewed at each site visit. Interviews lasted 30 to 90 min and were audio-recorded and transcribed.

We conducted field observations at six VHA-sponsored Learning Collaboratives over an 18-month period. These 3-day conferences were designed to provide centralized training and support to local implementation teams. Members of our qualitative research team shadowed pilot teams and took extensive field notes to capture details about evolving implementation efforts at each facility, as well as barriers and facilitators to change encountered by pilot teams over time.

Interviews with key contacts were conducted in April 2011, August 2011, and December 2011 in order to track progress of PACT implementation across the VISN. Key contacts were selected based on their knowledge about the overall strategy for PACT implementation at their facility and their level of day-to-day involvement in PACT implementation, as assessed from site visits and field observations. These interviews were designed to elicit details about local activities undertaken to improve processes of care, as well as barriers and facilitators encountered along the way. In addition, we asked about the perceived level of support from administrative and clinical leadership and the capacity to access and use patient- and facility-level data to help guide implementation.

The number of key contact interviews increased over time as PACT activities spread to additional pilot teams and primary care clinics; the number of interviews therefore ranged from 10 for the first round to 33 for the final round. Most key contact interviews were conducted over the phone, except where the respondent preferred to be interviewed in person at a Learning Collaborative. Key contact interviews averaged 30–45 min in length. About half the interviews were audio-recorded and transcribed. Due to a VHA regulation regarding phone interviews the remaining interviews were not recorded; instead the interviewer typed summary responses into a templated form.

Data collection activities were led and supervised by at least one of four CEPACT qualitative investigators (GT, JS, ML, or AB), with assistance by trained members of the qualitative research team.

Data Analysis

Qualitative data were formatted and imported into ATLAS.ti software to facilitate data management, coding, and analysis.¹⁵ We developed a common coding scheme to conduct thematic analysis across all qualitative data. An initial set of deductive codes was developed based on our evaluation objectives (e.g., tracking views of staff in

different roles regarding PACT implementation). Open coding of eight transcripts by four members of the qualitative research team led to identification of emergent themes. Independent line-by-line coding of site visit transcripts and a subset of other qualitative data (e.g., fieldnotes, follow-up interviews), followed by constant comparison of coding by two of the authors (AB and GT), resulted in a codebook consisting of definitions, inclusion and exclusion criteria, and examples for each theme. Four members of the research team completed coding of qualitative data with training and supervision from the lead author. Members of the qualitative team met regularly to review coded texts, resolve any coding discrepancies through consensus, and discuss emerging barriers and facilitators to achieving open access PACT during early implementation. (Additional details provided in the [Online Appendix](#).)

FINDINGS

Thirty-two Patient Aligned Care Teams (PACTs) piloted interventions to enhance access during this period. Below we delineate three key characteristics of readiness for implementation and describe how each facilitated or impeded the ability to implement interventions related to open access. We also describe successful strategies undertaken by early adopters to overcome barriers to open access. Barriers and strategies described here were common across facilities and pilot teams; however, not all barriers were encountered by every team or facility.

Leadership Engagement

The CFIR model identifies *leadership engagement* as an important indicator of organizational commitment to change. A common theme emerged around how attitudes and actions of local administrators (e.g., facility directors and primary care clinic managers) operated as a barrier or facilitator to making changes toward open access. At one site, a PACT lead described administration at her medical center as buying into the PACT initiative early on:

“We have been very fortunate. We have very supportive leadership who gave us the money and said, ‘Do what you have to do to get this model up and running.’ So we are renovating all of the primary care spaces. They’ve also supported us making changes to [the role of] the clerks so we can staff our pilot teams.” Associate Chief of Staff, Site 4

A key step in this site’s progress toward open access involved a complete restructuring of the PCP’s and RN Care Manager’s clinic schedules to accommodate time for same-day/walk-in patients, telephone clinics, and shared

medical appointments. In preparation for this new schedule, each team spent 2 weeks reviewing their patient panel to identify patients who could go with longer intervals between visits, be seen by a team member other than the PCP, or receive telephone care. During this period, the team did not see patients other than those with the most pressing needs. Even though this had the potential to reduce access and other measures in the short-term, leadership was described as supportive:

“Our administration here, they went along with it, and they absolutely appreciated that the teams needed more time.” Primary Care Nurse Manager, Site 4

A number of key contacts emphasized the importance of allowing each PACT to exercise a degree of control over its own schedule, something that was only possible with support from leadership. One strategy used by pilot teams at several facilities was to review the schedule for the prior 2 weeks to identify peak demand for walk-in appointments and then to restructure schedules to offer open access slots during those times.

In contrast, early adopters at sites that had difficulty making changes toward open access perceived administration as unsupportive of PACT, as evidenced by administrators’ comments that PACT was just “the flavor of the month,” and by their refusal to approve new hires for PACTs or renovations to primary care spaces. One key contact observed that local leaders were unfamiliar with PACT concepts and goals, leading to problems with engagement:

“They [leadership] really don’t understand the concepts, and they’re not getting any of the training that we are...we’re expected to go back and ‘teach up’ but we’re in no position to do that. They [VHA] really need to get medical center leadership to come together for some training about PACT if they want [leadership] to support what we’re doing.” PCP, Site 9

When local administrators with authority over primary care scheduling did not understand or support the concept of open access, it became very difficult for early adopters to create or maintain open slots in their clinic schedules. As one PACT provider observed during the early implementation phase:

“From what I understand, the Chief of Staff is not into having open time. They [call center schedulers] are filling up open slots with other [providers’] panel patients and not giving it a chance to work the way it’s supposed to. It gets to be very depressing.” PCP, Site 6

The experience of early adopters at one facility illustrates how lack of leadership engagement posed a barrier to open access and how strategies undertaken to engage administrators led to successful interventions to enhance access. At this facility, pilot teams requested permission to leave “open slots” in the schedule to accommodate requests for same-day appointments. In response, they were allowed to create a mid-morning “carve out.” However, this slot often went unfilled because patients requesting same-day appointments called too late in the day to make that appointment time. A key contact described how her colleague presented leadership with data demonstrating that their facility was falling behind on access goals relative to other facilities in the VISN and made the case for allowing each PACT to have a number of open slots throughout the day based on patient needs. This effort was credited with fostering greater buy-in and garnering support for PACT. Pilot teams were then able to implement a highly successful approach to creating open access slots each day that involved reviewing appointments ahead of time and calling patients to cancel unnecessary appointments or move some appointments to telephone care (also referred to as “schedule scrubbing”).

Engendering leadership support was not always a viable option; a key contact at one facility reported:

“Our executive leadership is involved in decision-making, but [they] won’t sign off on hiring RN Care Managers [for pilot teams] because they think [PACT] funds are going to dry up after next year.”
RN Care Manager, Site 1

Despite lack of support from leadership, pilot teams at this site implemented a number of smaller-scale interventions to improve access, such as extending intervals between visits from 6 to 9 months for patients who did not need to be seen as often. However, given their inability to implement larger change processes, teams at the facility continued to struggle with improving access.

Staffing Resources

The level of available resources, and in particular personnel to staff PACT teams, was a near-universal barrier for pilot teams seeking to implement change processes related to open access. The VA Central Office suggested a PACT should consist of one full time equivalent (FTE) PCP supported by three FTE staff, including an RN Care Manager, a Clinical Associate (e.g., LPN), and a Clerical Associate. At sites where leadership made funds available to hire new staff, early adopters indicated that having a fully staffed PACT enabled them to implement open access interventions by assigning specific tasks to the appropriate team member. LPNs started making pre-appointment calls to patients to ensure they were getting the type of

appointment they needed (i.e., face-to-face or telephone) and that they came to appointments prepared. This freed up RN Care Managers to contact patients who had visited the ED to determine whether or not they required a follow-up visit to the PCP. One Nurse Practitioner on a pilot PACT talked about how RN Care Managers in her clinic had taken over responsibility for making return calls to patients. She said:

“There are many in this neck of the woods who don’t have answering machines. And it’s a pain in the neck when you try and call them and you can’t get anybody. So for [the RNs] to make the calls and be persistent enough, they can make the calls probably sooner than I can...it’s really nice to see them managing the stuff that I had to do in the past.” PCP, Site 7

More commonly, pilot teams faced barriers to panel management and open access that stemmed from being understaffed. For example, a PCP who led a pilot team that had an assigned RN Care Manager but no LPN or clerk said she struggled with fitting in a backlog of patients, which had a negative affect on her team’s access:

“Unfortunately, things still slip through the cracks and we try the best that we can to gather it up, and I think most of our patients are being managed quite well, but I just worry that it’s all going to fall apart.”
PCP, Site 8

In the absence of additional staff, efforts to enhance patient access were contingent upon local implementers’ ability to develop alternate strategies based on the local resources they did have. Some facilities responded by forming different team configurations based on available staff, resulting in variable team composition within the same primary care clinic. Other sites focused on creation of what they called “hybrid PACTs” in which two PCPs shared one assigned RN Care Manager and other support staff and took turns holding “walk-in access clinics” where they saw each other’s patients. In addition to developing alternate team configurations, sites adapted to staffing constraints by harnessing other local resources. One common strategy was to make greater use of extended team members such as social workers and clinical pharmacists, which allowed some aspects of patient care to be shifted away from the PCP. A key contact talked about the problem of not having enough RN Care Managers to staff every pilot team and went on to describe how PACT implementers had decided to deal with this resource constraint, saying:

“We’ve been looking around at what we do have... and creating access by providing more services through pharmacy, nutrition, social work...and doing more via telehealth.” PACT Lead, Site 2

Thus, while staffing resources challenged early adopters' ability to implement the full spectrum of activities related to open access, many facilities and pilot teams succeeded in leveraging existing resources in order to make some changes toward improving access.

Access to Information and Knowledge

Ability to access information and knowledge (including experts, other experienced staff, and computerized information systems)¹⁴ was essential to pilot teams, both in order to implement targeted activities to achieve open access and to measure progress toward open access goals. Patient-level data useful for tracking progress toward open access was available through VHA's comprehensive electronic medical record (EMR); however, many teams were unable to access information in the EMR in a timely or easily digestible manner. As a PACT lead who was familiar with the system pointed out:

"The electronic medical record is a wonderful thing, but it does not make getting information out of it very easy. The structure of the medical record does not lend itself to collecting information. It's tough to get what you're looking for in a nice, neat package."
PACT Lead, Site 9

Accuracy and reliability of information in the EMR also came up as an issue. An essential first step to facilitating continuity—one of the metrics for access—rested on ensuring that every patient was assigned to a PCP and every PCP had a defined panel of patients (referred to as "empanelment"). Many facilities experienced a delay in accurate and complete empanelment. This hampered efforts to implement access changes on a number of levels. For example, an early strategy used successfully by pilot teams seeking to enhance access was referred to as "panel scrubbing," whereby team members identified "co-practice" patients with outside providers who primarily came to the VA to refill medications; they would then move these patients to once-yearly in-person visits, thus opening up access for higher need patients. Pilot teams from facilities that had problems with empanelment were unable to implement this intervention.

Having someone on the implementation team who knew how to pull information from the EMR was a major facilitator of changes to increase open access. A number of facilities had success with using centralized data to generate daily reports of patients seen at any VHA Emergency Department, which were then forwarded to each PACT. At an early site visit, an RN Care Manager explained the role this process played in enhancing capacity for her team:

"Every morning we pull up the ER list. I review the chart, why they came in [to the ER]. Every ER note

says 'follow up with your PCP.' So I go over them; if they're on an antibiotic and they're being told to come see their PCP in 2 or 3 days, and they're on an antibiotic for 7 to 10 days, they're not going to be feeling better yet. So I call them to see how they're doing, and then I say I'll call them back in 3 days or so to see how they're doing, and then that may even alleviate [the need for] a doctor's appointment." RN Care Manager, Site 5

Conversely, lacking involvement from someone with expertise in using data to inform process improvement and planning emerged as a barrier to implementing access interventions. A PACT lead described the problem this way:

"Our access is not good. We know that already, you don't have to tell us that again. What we need is someone who can tell us what we can do. What are the tactics? What is the systems redesign that we need to do? What's the process?" PACT Lead, Site 10

Pilot teams at this site implemented a short-term solution aimed at improving access by creating four carve-out slots each day, which resulted in their access scores worsening. PACT leads then sought and received funding from local leadership to bring an expert in systems redesign from another VA Medical Center for on-site consultation. By the end of the early implementation period, two out of three of the pilot teams at this facility were able to offer same-day access to their patients.

CONCLUSIONS

Readiness for implementation has been identified as a key element in making the transformation to a PCMH from a primary care model that is fragmented, episodic, and reactive to demand for clinical visits.^{16,17} Our interviews with key contacts revealed three important areas where readiness for implementation (or lack thereof) had an impact on interventions to improve access: leadership engagement, staffing resources, and access to information and knowledge.

When local administrators with responsibility for disbursing funds to hire staff and approving changes to clinic schedules either were not exposed to medical home principles or lacked confidence in VHA's commitment to the PACT initiative, their actions created barriers for teams trying to enhance access. An important aspect of leadership engagement is *managerial patience*—"taking a long-term view...to allow time for the often inevitable reduction in productivity" as pilot teams endeavor to test and implement new interventions¹⁴ (p 9). Organizations seeking to improve access in the medical home should have strategies in place to engage administrators and engender managerial patience

before introducing a new intervention in order to provide a solid base of support for early adopters. When leadership remains unsupportive of change efforts, pilot teams may be able to implement minor interventions with creative work-arounds, but true and sustainable change is less likely to occur.

Another key factor affecting implementation was the ability of pilot teams to leverage available health information technologies to improve access. A recent Commonwealth Fund report noted that “*empanelment plays a key role in facilitating continuity of care and enabling teams to monitor patients and identify those requiring higher level of attention and services.*”¹⁸ Barriers to complete and accurate empanelment impeded pilot teams’ efforts to improve access. This was further compounded by the absence or lack of involvement of someone with the skills needed to access and make use of data to support improvement efforts. Having someone with appropriate expertise in health information technology, or at the very least providing regular training and support to staff who must deal with such technology, is essential to any systems change initiative.^{19,20}

We acknowledge several limitations to our study. Because CEPACT is tasked with evaluating PACT implementation across the VISN, it was unfeasible to track pilot teams’ activities more closely, and our face-to-face interactions with early adopters were limited to initial site visits and observations at Learning Collaboratives. Our follow-up interviews were typically conducted with just one person, who was often a champion of PACT implementation. The extent to which this person knew the consistency with which changes were implemented may have been limited. In addition, though we emphasized the neutrality of the interviews and the fact that the interviews were confidential, some interviewees may have tended to overstate the positives.

Despite these limitations, our findings suggest many broader lessons with relevance to non-VHA health systems attempting large-scale systems change. Organizational attention to key elements of readiness for implementation—leadership engagement, available resources, and access to information and knowledge—is essential to building the foundation on which early adopters can test change processes and find what works best locally.

Pilot teams used a number of effective strategies for improving access, including extending time between appointments for some patients, reorganizing clinic schedules in order to provide a mix of face-to-face, telephone, and same-day appointments, and contacting patients after an ED visit to determine whether they needed in-person or phone follow-up care. However, our data also revealed factors impacting which interventions could be put into place by which teams; these factors may also lead to erosion of access gains in the long-term. Such variations within one organization have important implications for efforts to

measure the impact of enhanced access on patient outcomes, costs, and other systems-level indicators of the Medical Home.

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