Title

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Journal

Journal of General Internal Medicine, 35(12)

ISSN

0884-8734

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Publication Date

2020-12-01

DOI

10.1007/s11606-020-06052-1

Peer reviewed

Nationwide Qualitative Study of Practice Leader Perspectives on What It Takes to Transform into a Patient-Centered Medical Home

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BACKGROUND: Despite widespread adoption of patient-centered medical home (PCMH), little is known about why practices pursue PCMH and what is needed to undergo transformation.

OBJECTIVE: Examine reasons practices obtained and maintained PCMH recognition and what resources were needed.

DESIGN: Qualitative study of practice leader perspectives on PCMH transformation, based on a random sample of primary care practices engaged in PCMH transformation, stratified by US region, practice size, PCMH recognition history, and practice use of Consumer Assessment of Healthcare Providers and Systems (CAHPS®) PCMH survey.

PARTICIPANTS: 105 practice leaders from 294 sampled practices (36% response rate).

APPROACH: Content analysis of interviews with practice leaders to identify themes.

RESULTS: Most practice leaders had local control of PCMH transformation decisions, even if practices adopted quality initiatives under the direction of an organization or network. Financial incentives, being in a statewide effort, and the intrinsic desire to improve care or experiences were the most common reasons practice leaders decided to obtain PCMH recognition and pursue associated care delivery changes. Leadership support and direction were highlighted as essential throughout PCMH transformation. Practice leaders reported needing specialized staff knowledge and significant resources to meet PCMH requirements, including staff knowledgeable about how to implement PCMH changes, track and monitor improvements, and navigate implementation of simultaneous changes, and staff with specific quality improvement (QI) expertise related to evaluating changes and scaling-up programs.

CONCLUSION: PCMH efforts necessitated support and assistance to frontline, on-site practice leaders leading care delivery changes. Such change efforts should include financial incentives (e.g., direct payment or additional reimbursement), leadership direction and support, and internal or external staff with experience with the PCMH application process, implementation changes, and QI expertise in monitoring process and outcome data. Policies that recognize and meet the needs of on-site practice leaders will better promote primary care practice transformation and move practices further toward their PCMH transformation goals.

KEY WORDS: practice transformation; quality improvement; leadership; primary care.

J Gen Intern Med
DOI: 10.1007/s11606-020-06052-1

INTRODUCTION

The US healthcare system faces challenges in access, coordination of care, and quality of care. Quality gaps have spurred the need for fundamental redesign of healthcare delivery.[1, 2] The patient-centered medical home (PCMH) aims to improve[3] access and coordination of care, chronic disease management, and responsiveness by implementing team-based care focused on the patient.[4–17] Comprehensive PCMH transformation seeks to improve patients' clinical care quality and care experiences[18] while allowing site-level flexibility in implementation and evaluation of outcomes.

The National Committee for Quality Assurance (NCQA) recommends primary care practices administer the Clinician & Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS®) survey[19, 20] and the 14-item CAHPS PCMH supplemental item set (CAHPS PCMH survey).[12, 21–24] Through 2019, practices that administered the CAHPS PCMH survey and had their vendor submit patient-level data to NCQA annually received NCQA Distinction in Patient Experience Reporting,[25] acknowledging measurement and monitoring of access, communication, coordination of care, and provider-patient interaction. Over 13,000 practices (15–18% of primary care practices) are currently recognized as a PCMH by NCQA.[26, 27] Since its April 2012 inception, 1230 practices have held this 1-year Distinction in Patient Experience Reporting.

PMCH implementation includes multiple specified requirements which can involve considerable time and resources. How practice leadership approaches PCMH transformation has been studied primarily through individual case studies[28–30] or statewide efforts.[31–33] General studies on healthcare

Prior Presentations *None*

Electronic supplementary material *The online version of this article (https://doi.org/10.1007/s11606-020-06052-1) contains supplementary material, which is available to authorized users.*

Received January 27, 2020
Accepted July 13, 2020

change have identified leadership as a critical facilitator for implementing and sustaining changes within practice.[34–36] However, few studies have systematically gained insights about why practice leaders obtain or remain committed to PCMH recognition,[37] what resources are needed,[38–40] and their rationale for PCMH transformation.[41, 42]

This paper examines the PCMH transformation experiences of a nationwide sample of 105 primary care practice leaders. We investigate what motivated PCMH transformation and what facilitated or impeded changes.

MATERIALS AND METHODS

Design and Sample

We created a stratified random sample of practices that had applied for NCQA PCMH recognition by US census region,[43] physician count, PCMH recognition level (level 1 or 2, indicating a practice is progressing toward PCMH; level 3, indicating a practice is a PCMH) and years as a PCMH level 3 (i.e., PCMH level 3 for less than 3 years, for 3 to 5 years, or for 5+ years), and whether they are current users (CU), previous users (PU), or never-used (NU) of the CAHPS PCMH survey. The study included 105 of 294 sampled practices, a 36% response rate (see Appendix A for details).

We collected information on practice characteristics in hour-long phone interviews with practice leader(s) knowledgeable about the practice's PCMH history and patient experience data. We discussed PCMH transformation decisions and change efforts. Participants were asked about the practice's PCMH history, motivations for obtaining and maintaining PCMH recognition, and the resources used for PCMH transformation. We inquired how they selected their patient experience survey, how they used patient experience data, and their history with NCQA's Distinction in Patient Experience Reporting (see Appendix Table A.1 for full list of interview topics). We recorded and transcribed the interviews and provided a $75 honorarium.

Analytic Approach

We entered transcripts into Dedoose,[44] a web application for managing, analyzing, and presenting qualitative data. We established codes mapped to key research questions.[45] We developed a code structure and codebook using systematic, inductive procedures,[45, 46] and used content analysis to identify emerging themes.[47–50] We coded transcripts independently, noting topics related to key research questions.

Our four-person coding team used meetings to reach consensus on topics, identify discrepancies, refine concepts, and define codes.[51] Coders suggested new codes and discussed codebook changes, resolving discrepancies by consensus. We employed interrater reliability exercises to refine codes and descriptions. After code training, we compared coding differences across coders and obtained a pooled kappa coefficient of 0.93, indicating "very good" agreement.[52, 53] We employed ongoing training on emerging sub-codes using the Dedoose training module.

Study protocols were approved by RAND's Human Subjects Protection Committee, IRB (IRB_Assurance_No: FWA00003425; IRB Number: IRB00000051), and approved by the Office of Management and Budget (OMB) (OMB_No: 0935-0236).

RESULTS

Practice Characteristics

Most practices were small (< 10 physicians on staff) (80%) and treated both adults and children (see Table 1). Half were hospital affiliated and most were part of a medical group or network. More than one-third were Federally Qualified Health Centers (FQHCs), and about one-third were privately owned. CUs were most likely to have level 3 recognition. Practices were evenly divided across statewide PCMH-initiative state (Vermont and New York) (25%), another Northeastern state (25%), and the South (25%), with the remainder in the Midwest (16%) and West (11%). The majority of practices were in urban settings (42%), followed by suburban settings (35%) and rural settings (22%). NUs were most likely to be suburban and CUs were most likely to be urban.

Practice Leader Characteristics

Most (78%) practice leaders reported working at their practice the whole time it pursued PCMH (see Table 2). Approximately 60% of practice leaders were involved with the initial PCMH application, while 25% were involved in subsequent PCMH renewal applications. Most individuals were practice leadership or administrators (60%). About a third had job roles related specifically to PCMH, and less than 10% were primarily healthcare providers.

Reasons Practices Desired PCMH Recognition

Practice leaders most often mentioned financial motivation for obtaining or maintaining PCMH recognition (53%), followed by a desire to improve care and patient care experiences (48%).

Of those mentioning financial motivations, 17% reported significant state or health insurance payer pressure. Practices in Maine,[54] New York,[55] and Vermont[56] were part of initiatives that offered supplemental payments or additional resources for PCMH application, changes, and survey administration of the CG-CAHPS or CAHPS PCMH survey to all primary care practices. Practices in Alaska,[57] Pennsylvania,[58] and Massachusetts[59] reported state grants and smaller funding initiatives to pursue PCMH. Practices in North Carolina[60] and Connecticut[61] received Medicaid incentives for PCMH recognition. Practice leaders reported health insurance payers also pushed for PCMH recognition, often providing financial

Table 1 Practice Characteristics

Variable	CAHPS PCMH survey administration			
	Never ($N=41$) % (N)	Current ($N=33$) % (N)	Past ($N=31$) % (N)	Total ($N=105$) % (N)
Location				
Initiative states (NY/VT)	12 (5)	33 (11)	26 (8)	23 (24)
Other Northeast	24 (10)	27 (9)	26 (8)	26 (27)
Midwest	22 (9)	12 (4)	13 (4)	16 (17)
South	22 (9)	24 (8)	26 (8)	24 (25)
West	20 (8)	3 (1)	10 (3)	11 (12)
Urban/rural status				
Urban	41 (17)	48 (16)	39 (12)	43 (45)
Suburban	44 (18)	24 (8)	35 (11)	35 (37)
Rural	15 (6)	27 (9)	26 (8)	22 (23)
PCMH history				
Level 1 or 2	32 (13)	18 (6)	29 (9)	27 (28)
Level 3: < 3 years	22 (9)	33 (11)	23 (7)	26 (27)
Level 3: 3–5 years	24 (10)	18 (6)	16 (5)	20 (21)
Level 3: 5+ years	22 (9)	30 (10)	32 (10)	28 (29)
Provider types				
Primary care only	73 (30)	82 (27)	84 (26)	79 (83)
Primary care and specialists	27 (11)	18 (6)	16 (5)	21 (22)
Practice size/number of physicians				
Small/less than 10 physicians	73 (30)	79 (26)	90 (28)	80 (84)
Medium/10–24 physicians	20 (8)	21 (7)	9 (3)	17 (18)
Large/more than 24 physicians	7 (3)	0 (0)	0 (0)	3 (3)
Patient population				
Adult only	22 (9)	21 (7)	19 (6)	21 (22)
Adult and children	78 (32)	79 (26)	81 (25)	79 (83)
Hospital affiliation				
Hospital affiliated	51 (21)	60 (20)	35 (11)	50 (52)
Not hospital affiliated	49 (20)	40 (13)	65 (20)	50 (53)
Group or network status				
Part of group or network	80 (33)	82 (27)	84 (26)	82 (86)
Not part of group or network	20 (8)	18 (6)	16 (5)	18 (19)
Ownership				
Privately-owned	32 (13)	30 (10)	26 (8)	30 (31)
Hospital-owned	22 (9)	24 (8)	14 (4)	20 (21)
Federal Qualified Health Center	29 (12)	45 (15)	30 (9)	35 (36)
Other ownership structure (incl. health system-affiliated, medical/academic health center, or HMO)	17 (7)	0 (0)	30 (10)	15 (17)
Access to in-house pharmacy	22 (9)	15 (5)	10 (3)	16 (17)
Access to clinical pharmacist	29 (12)	22 (7)	33 (10)	28 (29)
Offer extended hours	54 (22)	79 (26)	77 (24)	69 (72)
Presence of urgent care	20 (8)	18 (6)	3 (1)	14 (15)

Table 2 Practice Leader Characteristics

Variable	CAHPS PCMH survey administration			
	Never ($N=41$) % (N)	Current ($N=33$) % (N)	Past ($N=31$) % (N)	Total ($N=105$) % (N)
Job function*				
PCMH-focused role	34 (14)	30 (10)	29 (9)	31 (33)
Leadership/administrator	56 (23)	61 (20)	65 (20)	60 (63)
Healthcare provider (ex. MD, NP, MA)	10 (4)	9 (3)	6 (2)	9 (9)
Practice leader location*				
On-site	51 (21)	52 (17)	58 (18)	53 (56)
Primarily off-site	41 (17)	18 (16)	32 (10)	41 (43)
Time at practice				
Present *entire time* practice was pursuing PCMH	73 (30)	88 (29)	74 (23)	78 (82)
Present only *part of the time* practice was pursuing PCMH	27 (11)	12 (4)	26 (8)	22 (23)
PCMH Role†				
Submitted original application	49 (20)	76 (25)	55 (17)	59 (62)
Submitted subsequent applications	27 (11)	24 (8)	26 (8)	26 (27)
PCMH change team	73 (30)	58 (19)	48 (15)	61 (64)
PCMH data reviewer	54 (22)	45 (15)	55 (17)	51 (54)
PCMH coordinator	56 (23)	82 (27)	68 (21)	68 (71)

**A few individuals did not respond to the question, resulting in missing data*
†Practice leaders reported all relevant roles (categories are not mutually exclusive)

incentives or other resources. Other practices mentioned collaborative arrangements; two examples include Care Transformation Collaborative (CTC) in Rhode Island[62] for administering the CAHPS PCMH survey and a large group of Kansas FQHCs supporting practices pursuing PCMH transformation. Those (29%) reporting financial motivations indicated other payer mechanisms such as additional per-member per-month payment for patients as PCMH incentives.

A few practice leaders (7%) said they were motivated to pursue PCMH transformation by a national payer program, such as an Accountable Care Organization (ACO) program in which groups of doctors, hospitals, and other healthcare providers work together to coordinate high-quality care for Medicare patients[63]; a Medicare-Advantage contract offered by private companies[64]; a Comprehensive Primary Care Plus (CPC+) program through the Centers for Medicare and Medicaid Services (CMS) to strengthen primary care via regionally based multi-payer payment reform,[65] or the Meaningful Use Program to increase use of certified electronic health records.[66] Practice leaders indicated these national programs overlapped with PCMH goals and included many aspects of PCMH transformation. One leader said:

> [PCMH-transformation] really fits in with…the current shift to a value-based approach…within MACRA [Medicare Access and CHIP Reauthorization Act][67] and MIPS [Merit-based Incentive Payment System] and…with[in] where healthcare is today and [is] headed.—site A (NU-Other Northeast, level 3, 5+ years)CUs differed from PUs in how they talked about financial incentives from national programs. CUs commonly reported a federal program being their additional motivation for PCMH. PUs reported they wanted to prepare for future new payment models or supplement current work of becoming an ACO. A CU leader stated:

> We had a pretty proactive management team…We can see a future in PCMH…and so for now we are a CPC+ participant as well. We have always tried to stay ahead of the curve as best we could.—site T (CU-Midwest, level 3, 3–5 years)A PU leader indicated:

> We were aware of upcoming value-based payments. Some of the insurers were offering higher rates of reimbursement or preferential incentive programs [for NCQA recognition]. We wanted it on our website for quality and frankly, I also was interested in doing it to…shift towards the new PCMH models.—site J (PU-South, level 1 or 2)PUs did not typically report specific financial incentives to pursue PCMH but mentioned becoming a PCMH to provide more cost-effective care, better use resources, and improve quality of care. Practice leaders at a CU explained:

> We had all the pieces of PCMH and so we wanted to make sure we were getting the recognition…we wanted to be providing exceptional service and care to patients, being cost-appropriate.—site H (CU-Midwest, level 3, < 3 years)The second-most common motivation was improving general care and patient care experiences. Overall, 44% of practices wanted to demonstrate their commitment to quality care and 22% to improving patient care experience. Improving patient care experience was the most common motivation among FQHCs. Practices reported improving care and patient care experiences as organizational or network priorities. A CU practice leader at a FQHC cited financial reasons as their main motivation:

> PCMH recognition bolstered the view communities have, of what a FQHC is, and…that we do provide high-quality care…it fits with our mission as a FQHC for an underserved population and they deserve the best quality of care…whether they can or cannot pay.—site E (CU-West, level 3, 3–5 years)When asked to explain how becoming a PCMH helped improve care delivery, most practice leaders said it provided a structure for pursuing targeted improvement efforts. Some mentioned how PCMH helped solve problems in delivering care. Practice leaders indicated PCMH and its emphasis on regular follow-up and care management helped close the specialist-referral loop for patients. Some practices noted the PMCH standards related to empanelment and population health techniques helped them keep patients "in house" whenever possible and to better manage their care. A CU practice leader said:

> We are very happy as a PCMH because it has made our practice more disciplined…We now create reports, follow high-risk patients, … make policies about so many different things. To improve patient access, we implemented same-day appointments and after-hours coverage…—site S (CU-Other Northeast, level 3, < 3 years)Some practices (15%) mentioned wanting PCMH recognition to signal their commitment to high-quality care. Others (12%) indicated it was considered a requirement to compete in their market, explaining higher-level leadership wanted all practices to claim they were "fully NCQA-PCMH-recognized." A practice leader mentioned:

> One motivation for PCMH is we wanted to be a little more groundbreaking in… outpatient care [and]

outreach…We needed help closing the loop…in terms of following up and actually getting results-based medicine…We really wanted to do all-around care and PCMH made us a little bit more marketable…we wanted to advertise as a PCMH.—site I (CU-West, level 3, 3–5 years)One in three practices reported significant "top-down" leadership pressures to pursue PCMH. This pressure did not necessarily mean these practices received additional support to pursue PCMH. Smaller, non-network practices reported leadership pressure as a mandate but no additional direction or resources, while most practices that were part of larger organizations reported leadership support and additional resources for PCMH. One practice leader noted:

We're part of a larger healthcare system…and one of their principles is for all clinics to be NCQA-PCMH-certified. So not only is it financial, it's also an organizational imperative.—site R (CU-Other Northeast, level 3, < 3 years)Practices that did not report "top-down" pressure mentioned motivations such as standardization of practice and policy (18%) or wanting to be a PCMH early adopter (14%) which allowed more time to implement PCMH before being held accountable. One said:

PCMH would help us achieve, for the most part, those items that Medicare was going to ask us to do, and also Blue Cross Blue Shield. And even since we've started this PCMH process, our Blue Cross Blue Shield has almost completely aligned their requirements of us with PCMH requirements. And as you look at what Medicare is doing, it's very much PCMH-aligned as well.—site U (CU-Midwest, level 3, < 3 years)

Implementation of PCMH

Almost all practices noted that leadership did not control what PCMH changes or specific implementation decisions they would undertake. Even in larger organizations, practice leaders were free to implement the changes as they saw best. One corporate representative stated:

We [the practice] made their own decisions about what quality initiatives to work on; our preventive goals; chronic care goals, and about turnaround callback. [The organization has] a guide for callback, for triage, and they had to be within a certain time-period based on our own protocol, but [the individual practices] could shorten it if they wanted to. [The practices] made decisions about their PCMH team make-up and how their workflow would be, and [the corporate leadership] acted more as a consultant.—site C (PU-South, level 3, 3–5 years)Twenty percent of NUs mentioned they had strong relationships with their hospitals, which supported and influenced their PCMH efforts. CUs and PUs did not mention this.

All practices mentioned leadership support as key to PCMH implementation. Leadership was demonstrated in three ways. First, practice leaders reported receiving general directives from their leadership at the network and practice level. Second, practice leaders mentioned receiving specific direction and guidance regarding how to meet PCMH requirements that was unique to their practice. Third, practice leaders were provided with additional support staff or services for PCMH recognition and transformation. Such staff assisted with specific PCMH implementation decisions, the application and submission processes, coordination, changes at the practice, and reviewing data to inform changes. Practice leaders provided the following examples of such relationships:

Our primary care PCMH-group…made the decisions [and] we followed it. We went through, we did the reporting, we pulled out the areas we felt were best-suited for us.—site E (CU-South, level 1 or 2)

[Decisions for PCMH-implementation] were made more at the executive-level…I was charged with implementing the decisions.—site W (PU-Midwest, level 3, 5+ years)

[W]e are very fortunate…being part of a larger organization, to have a PCMH-team…that works behind the scenes to help us with what we need to achieve…but basically they communicated to the administrator what resources and things they needed, and then we populated that information.—site L (NU-South, level 3, < 3 years)The mention of such resource staff varied by CAHPS PCMH survey administration. CUs and PUs reported having the most support and resources for PCMH implementation. NUs had roughly equal access to a PCMH coordinator, but rarely had access to a PCMH data reviewer or someone aiding the practice's PCMH change team.

Thirty-nine percent of practices reported significant leadership support for PCMH implementation, while 24% said their PCMH change team members had received training from their network or larger organization. This training consisted of learning the specific PCMH elements and PCMH standards for recognition, how to document what was needed for the PCMH application, and linking QI to specific PCMH changes.

Practice leaders also spoke about the importance of staff buy-in. They described differential staff buy-in by element. Practices varied in the implementation of key PCMH features, with some elements being universally implemented (e.g., coordinating referrals to specialists), and others varying greatly in implementation (e.g., team huddles). While most practices bought into huddles, others did not see their value and pointed to their practice layout as limiting their implementation.

NCQA Distinction in Patient Experience Reporting

Our study included 33 practices with a current NCQA Distinction in Patient Experience Reporting and 31 that had previously earned this Distinction. Among these 64 practices, about one-third were unaware or could not speak to its requirements. Of those aware of the Distinction, 75% said they would pursue it again. Some mentioned advertising this Distinction among primary care staff to increase morale or to demonstrate their practice delivered high-quality care. One practice leader noted:

> I think the Patient Experience Distinction has been good for staff morale…it's made it easier for us to pull together in the direction of patient-centered care.—site C (CU-Other Northeast, level 3, 5+ years)CUs and PUs commonly mentioned they received help from outside their practice—from their parent organization, the larger health system which owned them, or a state organization—to complete these Distinction requirements. As a result, these practice leaders did not see any downsides to the Distinction.

Other practices noted downsides, as they did not see added value in gathering the 18 CAHPS PCMH items in addition to the 34-item core CAHPS survey items. As one leader said, "I think the biggest drawback to the [Distinction] is that it made our patient experience survey very long."—site Z (PU-Other Northeast, level 1 or 2). PUs mentioned this most often, but a few CUs did also.

Most practices reported not specifically marketing the Distinction, though they did market PCMH recognition. Practice leaders who said they would not again apply for the Distinction typically claimed it did not provide any additional value or they were no longer administering the CAHPS PCMH survey. Few practices noted any substantial benefits or downsides to receiving the Patient Experience Distinction in Reporting.

DISCUSSION

Since 2008, roughly 15,000 primary care practices—nearly one in five across the USA—have pursued PCMH recognition. This demonstrates the commitment of many policymakers, health insurance payers, healthcare practitioners, physician leaders, and healthcare organizations to transforming primary care and being patient-centered. This work extended previous research by interviewing a large, nationwide sample of practices pursuing PCMH about what motivates them to seek, obtain, and remain committed to PCMH transformation including NCQA's optional Patient Experience Distinction, as well as, what helps or hinders attaining these goals.

Pursuit and Implementation of PCMH

Across all practices, we identified two main reasons practices pursue PCMH recognition. First are financial motivators, such as participation in statewide PCMH initiatives or incentives from payers to PCMH recognized practices. Second, practice leaders genuinely wanted to improve care and patient care experiences.

Practice leaders however needed significant resources. Most often these included the following: (1) sustained leadership buy-in and support; (2) financial support; and (3) staff versed in PCMH changes, including an understanding of QI monitoring, data collection, and documentation. Practices hired experts in PCMH practice transformation who could facilitate PCMH changes internally or externally. This was true for leaders lacking on-site expertise or staff time for PCMH application, documentation, or subsequent changes. Leaders who were involved with PCMH implementation served as change team members, data reviewers, and/or coordinators, and were involved in multiple aspects of implementation. PCMH transformation takes commitment and is resource-intensive, requiring training to prepare and submit the applications, collect data, and identify, implement, and monitor several simultaneous changes. Both small and large practices reported mandates or financial forces to pursue PCMH transformation from their networks or larger organization, but large practices reported greater leadership commitment and resources to pursue and maintain PCMH recognition. Other studies have also found that passionate and persistent frontline leaders used multidimensional, tailored strategies to support the adoption of new practices.[35, 36, 68]

Practices that are part of a network or larger organization generally received direction on the PCMH change process (e.g., priority areas and sequencing of changes), consistent with PCMH literature.[31] While implementation happened at the practice level, corporate or network leaders identified areas of improvement, gave practices guidelines for implementing changes, and monitored activities for measuring effectiveness in addition to submitting data to NCQA. Efficient audit and feedback mechanisms allowed leaders to see immediate and beneficial effects of PCMH practice change on patient care and experiences.

Practices commonly desired to improve clinical care quality and patient care experience through PCMH efforts. They sought to simultaneously reward value, improve quality of

care and patient experiences, and better integrate and coordinate care. Our findings support recent literature that leaders recognize the importance delivering high-quality outcomes and focusing on the provision of high-quality care and patient experiences.[69] Policies or programs that support, measure, and publicly report improvement in clinical quality and patient experience naturally align with PCMH goals and motivated practice leaders in continued PCMH improvements and transformation. The main facilitators were leadership, patient-centered culture, and staff with time and knowledge to conduct QI, implement patient-centered changes, and monitor patient experience data. These findings were not differentially seen in CU, PU, and NU practices.

Patient Experience Distinction

Of CU and PU practices, we found that the NCQA Distinction in Patient Experience Reporting was not well understood and did not motivate practices to track changes in patient experiences. Even among those aware of this Distinction, few mentioned any benefit other than improving staff morale. The benefits of the CAHPS PCMH survey and its associated Distinction appeared insufficient to offset the vendor costs of fielding the additional items. As of 2019, NCQA has stopped awarding this distinction to practices, but may consider the impact of such distinctions for future programs.[18] Recent work has examined practice leader perspectives on the impact of PCMH transformation on patient care experience[70] and forthcoming is a study on how the CAHPS PCMH survey was used by practices during PCMH transformation.

Our study has limitations. While we studied a large, varied national set of practices, the sample is not nationally representative and we report unweighted estimates. We also typically interviewed one individual. Even though we recruited/identified the leader(s) most knowledgeable and responsible for PCMH changes in the practice, there may be additional perspectives within practice leadership we did not capture and may have included leaders with more positive feelings toward PCMH. Ultimately, we did explore/analyze a wide range of perspectives from practice leaders about PCMH nationwide. Finally, we did not include practices that sought or gained PCMH certification under different recognition programs.

The primary care PCMH model has been endorsed by the American Academy of Family Physicians, American Academy of Pediatrics, and the American College of Physicians as a multidimensional approach to improve quality of care and decrease costs. The benefits rely on an integrated approach across healthcare organizations. Despite the mixed results on PCMH's impact on such outcomes,[31, 71] practice leaders support PCMH because of its underlying aim to improve and provide high-quality, patient-centered clinical care. Primary care practice organizations and their frontline on-site practice leaders need financial support or incentives, leadership support, and resources to change how primary care is delivered. Most practice leaders reported they do have local control of the specific implementation decisions for PCMH transformation, so with the necessary resources they could achieve transformation. Policies that support on-site practice leaders in measuring, improving, and publicly reporting quality and patient experience measures therefore should facilitate PCMH transformation.

Research is needed on the intertwining nature of PCMH sustainability and spread and on identifying any sequencing of effective PCMH implementation strategies. Evidence indicates significant investment of resources in the PCMH transformation process (e.g., release time for project leads, champions, managers, steering committees; education time and training); however, we do not know the impact of PCMH transformation on cost or what affects the costs of scaling PCMH across practices. This is a key research priority given the focus on the value and quality of providing primary care for all. Finally, it would be useful to explore or test how other QI theories, such as normalization process theory, which explores how complex interventions are routinely embedded in healthcare practice, can potentially complement the QI efforts embedded within PCMH transformation.[72–74]

CONCLUSION

Practices require support to implement changes in care delivery that are patient-centered and recognized as PCMH transformation. Financial incentives appear to entice practice leaders to pursue PCMH changes and pay for the continued investment necessary to transform practice processes to be coordinated, integrated, continuous, and patient-centered. Resources, including support on aspects of PCMH that require significant expertise and direct labor to plan for and make changes, support practices once they have decided to obtain PCMH recognition. Leadership support is critical in deciding which PCMH changes to make or which PCMH standards to engage as part of the overall mission of an organization. Practices without outside resources, such as support completing PCMH applications or recertification, monitoring change, or conducting QI efforts from their larger health system or network, will likely continue to struggle in PCMH implementation and stall in the transformation process.

Systematic efforts should be directed at providing support and assistance to frontline on-site practice leaders who oversee PCMH changes. Efforts could include providing financial incentives, leadership direction and support, training and support for on-site QI expertise, and staff knowledgeable about PCMH application and implementation. Policies that recognize and try to meet the needs of on-site practice leaders will promote patient-centered primary care practice transformation.

Acknowledgments: *We acknowledge the time and support of the interview participants in this study.*

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Funding Information *This work was supported by a cooperative agreement from the Agency for Healthcare and Research Quality (AHRQ) (Contract Number U18 HS016980).*

Compliance with Ethical Standards:

Study protocols were approved by RAND's Human Subjects Protection Committee, IRB (IRB_Assurance_No: FWA00003425; IRB Number: IRB00000051), and approved by the Office of Management and Budget (OMB) (OMB_No: 0935-0236).

Conflict of Interest: *The authors declare that they do not have a conflict of interest.*

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