

Culture: The Unexpected Key to Exemplary Primary Care

Erin E. Sullivan
Harvard Medical School

Sophia D. Arabadjis
Harvard Medical School
University of California, Santa Barbara

Jessica L. Alpert
Harvard Medical School

Andrew L. Ellner
Harvard Medical School

Health care organizations achieve better outcomes at lower cost where known advances in primary care have been implemented. With few exceptions, primary care in the US has been unsuccessful in implementing these advances. We conducted eight case studies of exemplar primary care organizations to theorize best systems design in adverse conditions; we offer a cross-case analysis. Every study site had culture characterized by 1) trusting, long-term relationships; and 2) power, responsibility, and authority redistribution. Organizational culture may drive exemplary primary care; building cultures with identified traits may improve primary care outcomes and is actionable.

INTRODUCTION

In recent decades, academics and practitioners have made important advances in defining a successful role for primary care within a health system. Key frameworks define the essential functions of primary care (Starfield et al., 2005). Others use the “patient-centered medical home” (PCMH) construct to provide a roadmap for improving primary care practice (Bodenheimer, et al., 2014; Wagner et al., 2012a). Convincing evidence suggests that health care systems that apply these frameworks manifest better health outcomes and equity at lower cost (Friedberg et al., 2010; Starfield et al., 2005).

Yet these advances have not translated well into general practice. During these same decades, a crisis in primary care practice has worsened (Ellner & Phillips, 2017). A much-championed push to transform practices to align with the PCMH model has produced mixed results and at best incremental improvements (Sinaiko et al., 2017). Fee-for-service payments continue to under reward primary care activities. Poor design of electronic health records and practical difficulties in implementing and operationalizing their use have further stressed many health systems. Perhaps relatedly, more than 50% of primary care providers report symptoms of burnout (Peckham, 2015) and the American Academy of Medical Colleges has estimated a shortage of up to 49,300 primary care physicians by 2030 (Dall et al., 2018).

Amid this overall grim picture, however, a few individual primary care organizations *do* appear to have achieved the promise of primary care frameworks. These exemplary organizations give rise to our research question: How do some organizations succeed in implementing primary care frameworks and achieving their benefits, despite adverse conditions, when most do not? Using qualitative methods, we systematically studied a set of exemplary primary care organizations in an effort to develop and refine theory to explain the causes and design of exceptional primary care, and to generate hypotheses that can be tested in future research (Edmondson & McManus, 2007; Eisenhardt, 1989).

BACKGROUND

A number of primary care frameworks identify the features of high quality, high performing, patient-centered primary care (Barrett, 2017; Bodenheimer et al., 2014; Wagner et al., 2012b). These frameworks have overlapping elements, including team-based care, leadership and several of the primary care functions identified by Starfield (Starfield et al., 2005). The ultimate goal of these frameworks is to identify methods that will improve care delivery and assist primary care practices as they transform their practices towards a patient-centered, value-driven entity.

To that end, organizational culture has been the focus of some primary care frameworks in roundabout ways. Bohmer and Lee (Bohmer & Lee, 2009), drew on management research to emphasize the importance of high-functioning teams and leadership as primary care moves towards outcomes-oriented, value-based models. Others have consistently demonstrated that teamwork and strong relationships between physicians, nurse practitioners and physicians, and clinicians and non-clinicians promote higher quality care (Finley et al., 2013; Lanham et al., 2009; Poghosyan & Liu, 2016). Williams suggests that primary care practice should address team culture as well as team structure in order to mitigate provider burnout (Williams et al., 2007). Similarly, organizational culture has been the focus of a pervasive subset of health care research. The 2001 Institute of Medicine report, *Crossing the Quality Chasm*, recommended developing and maintaining organizational cultures that support patient safety, which kicked off a number of studies on the relationship between culture and patient safety (Corrigan, 2005). At this point, many links have been established between culture and outcomes: organizational culture and safety climate in a hospital environment has tangible effects on patient safety (Singer et al., 2009), and a quality-oriented culture highlights the relationship between stress, dissatisfaction and burnout among clinicians with the perception of quality of care (Williams et al., 2007). Though these studies suggest the importance of organizational culture in health care generally, none are primary care focused. As far as we have been able to determine, there is no research on organizational culture that focuses specifically on primary care.

METHODS

We employed a mixed methods approach, anchored in case study methodology, to understand context, complexity and variation within primary care systems (Bonoma, 1985; Creswell & Clark, 2007; Creswell et al., 2004; Yin, 1994). Borrowing from grounded theory approaches (Glaser, 1978; Strauss & Corbin, 1990), we sought to inductively develop generalizable propositions that would create new theory or refine or extend existing theories related to effective primary care delivery.

To identify a set of exemplary primary care organizations for study, we developed a list of characteristics of organizations (rural/urban, size measures, etc.) that we thought our sample of cases needed to span to be of general relevance. We relied on published evaluations and rankings, including several major multi-site primary care studies (Bodenheimer, 2007; Case Studies, 2016; America's Most Valuable, 2015; Ladden et al., 2013; Sinsky et al., 2013) to define exemplary performance. The research team then conducted a purposive case selection process, reviewing over 120 U.S. based primary care systems and 20 international health systems, to populate a matrix with exemplary cases that reasonably spanned identified case characteristics (i.e., we used theoretical sampling to choose cases (Eisenhardt, 1989); see **Table 1**). The team also consulted primary care experts in order to leverage multiple points of view from different geographies, which aided in case selection.

**TABLE 1
CASE SITE ORGANIZATION DESCRIPTIVE TABLE**

Case Site	A	B	C	D	E	F	G	H
Rural/Urban Catchment	Urban/Rural multisite	Rural Single-site	Urban Multi-site	Urban Single-site	Urban Multi-site	Urban Multi-site	Urban Multi-site	Rural Single-site
Size: Employees	1,750	18	32	70	3,973	68,595	65	62
Size: Patients	60,000	3,400	7,300	75-80 per period	343,000	4,232,000	47,000	4,000
Patient Population Description	General Practice, IHS Provider	Rural elderly with multiple chronic conditions	General practice, rising rates of chronic disease	Adjunct to general practice for complex patients	Urban aging population, rising rates of comorbidity, chronic disease	Multi-site general practice, large Latino/a population	General practice, mixed payers: Medicaid and large employer groups	Rural, low socio-economic status, high Medicaid/Medicare volume
Socioeconomic status/relevant indicators	Higher rates of chronic disease, behavioral health issues and domestic abuse than the other populations	Shortage of physicians, rural service area, 1/5 of patients have Medicare	All residents have federal health insurance	40% of population live below the Federal Poverty Line, high uninsurance, Medicaid mix ~ 45% of patient volume.	Decentralized health structure, public insurance, aging population	Closed Health system (insurance + care), the majority of patients are between ages 40-64	High chronic disease, high rates of poverty among Medicaid patients	High prevalence of substance abuse, limited access to secondary/tertiary care, aging population
Payment structure	Global Budget + Fee-for Service	Fee-for-Service	Fee-for-Service + Pay for Performance + Episodic Payment	Global Budget + Episodic Payment	Pay-for-Performance + Global Budget	Capitated	Per Member Per Month	Fee-for-Service

DATA COLLECTION AND ANALYSIS

Before visiting a case site, researchers accessed secondary public data sources to generate a preliminary understanding of each organization's activities. Key informants for semi-structured interviews were selected in partnership with an on-site study coordinator at each organization. We used a theoretical sampling approach (Corbin & Strauss, 2008) to choose informants who varied by management level and role in order to explore a range of experience across the organization. For each site, informants included leadership team members (CEO, COO, CFO, CMOs), frontline staff (clinicians, social workers, medical assistants etc.), operations, financial, quality improvement and information technology support staff, patient advocates (where available), as well as local/regional health leaders when appropriate.

Interviews were based upon a semi-structured interview template with optional prompts or follow-up questions (see **Table 2**).

TABLE 2
DOMAINS OF INQUIRY FROM SEMI-STRUCTURED INTERVIEW GUIDE

Topic of Inquiry	Sample Interview Questions
Interviewee background and role	Could you please share your name and title, and describe your role at this organization?
Primary care delivery	How do patients become a patient at your clinic? What does this process look like?
Integration	How, if at all, do staff interact with other agencies to deliver care? (e.g., public health, social services)
Teams	What, if any, are the barriers to teamwork? How do you address them?
Leadership	How would you describe your approach to leadership and how does it fit with your care delivery model?
Data and QI	How do you use data in your primary care system?
Health IT	How has HIT impacted, if at all, the patient experience?
Finance	What payment model is used for reimbursement of services?
Organizational Culture	Could you describe what it is like to work here?
Patients	How do you build long term relationships with patients?
Providers	What are some barriers providers face in delivering care, if any?
Governance/Policy	There are sometimes political tensions around how to manage, oversee, and pay for health care for a population. How would you describe the political landscape here?
Change/Challenges	Could you describe some of the challenges this primary care system faces and what strategies have been developed to address them?

The initial interview guide was developed by the team to correspond with topics identified in the literature; it was pilot tested, and eventually adapted to incorporate the specific contexts of each site. Approximately 110 individuals participated across eight case sites, with some follow-up interviews; we completed, transcribed and coded 122 total interviews. Two people conducted and recorded all interviews

(PI + researcher). Interviews were transcribed verbatim in English. Researchers also logged field notes and in-situ memos, which included casual and structured observations about the interviews; descriptions of settings, people, and activities; and pending questions and preliminary conclusions. In addition to interviews, the research team collected and analyzed documents, artifacts (including organization charts, presentations, core values etc.) and operational, financial, and health outcome data from each organization.

Transcripts were entered into NVivo10 qualitative data analysis software and data were thematically indexed and coded. The research team used the literature review and an initial set of case study interviews as a starting point to identify recurring themes within the interviews in order to create a codebook that was applied across all sites (open coding). Teams of two researchers (combinations of research assistants, research manager and PI) coded interviews based on the coding scheme the team created through review and discussion of the data, to find relationships between recurrent themes and concepts (selective coding). We analyzed data when fieldwork was completed at each case site, to allow observations and insights to emerge inductively from the literature and data set (axial coding) (Miles et al., 2014; Saldaña, 2015). The codebook was periodically reviewed and revised to capture additional emergent themes and findings. Codebook revisions were consensus-based and tracked, and checked against past coding to verify consistency.

This study was approved and deemed not human subjects research by the Institutional Review Board (IRB) at our university. Our IRB agreement did not encompass patient interviews.

RESULTS

We identified 15 major themes associated with exemplary primary care within our dataset, including leadership, health information technology, operations, quality improvement, and community. Much of this was consistent with the previous primary care literature (Bodenheimer, 2007; Bodenheimer et al., 2014; Starfield et al., 2005; Wagner et al., 2012b). On completing the thematic coding, our most dominant code was organizational culture and we therefore chose to focus on the role of organizational culture in primary care and report the results of that analysis here.

The data within the organizational culture code was reviewed by two researchers (ES + SA) and sub-themes were identified, summarized, and subsequently confirmed with the rest of the research team. The emerging themes clustered around two distinct, if overlapping approaches: the cultivation of functional, trusting, long-term relationships, and the purposeful redistribution of power, responsibility and authority. We summarize these findings below by surfacing the cultural beliefs within our cohort and explaining the operational tactics that organizations employed to reinforce them.

Cultivating Functional, Trusting, Long-term Relationships

Our cohort prioritized building long-term, trusting relationships with patients, but more notable and surprising, they prioritized relationship-building among their *employees* (see **Table 3**).

TABLE 3
DESCRIPTIVE QUOTES ON CULTIVATING FUNCTIONAL, TRUSTING, LONG-TERM RELATIONSHIPS

Case Site	Illustrative Quote
A	I heard you say transparency transparency....we have truly been transparent not just with each other, but we have been transparent with our board of directors. We asked what happens when we fail. We fail and we put it right out there in front of the board. We put our successes and our failures there. ¹
B	And part of it [prescription audit process] is -- the real important thing is that people realize is that it's for developing relationships, and it's not a gotcha... So that's part of the training. And so it's not just hand them a sheet of paper with the format on it and say "Do 30 of these." We spend time talking about why. And if you don't want to develop a relationship, then it's not the right tools. So work on it -- you'll want to use something else. So, but we do want them to know how to do that, and we suspect that most people who are working here want some sort of relationship with the people they're working with. So that's a key one, and it does take time...
C	They must not be within the primary health care center but there must be cooperation and relationships with the primary health care service. So also relationships with welfare, with housing, with the municipalities. And that's one, when our scope widens, what it says here, the pharmacists and dieticians are added to the group... So we start to focus on neighborhood focused care
D	Well we have a whole ladder of people coming up through the organization... The core of servant leadership, or one of the ideas, is to build the capacity of your staff, of your patients, and of your partners so that you get smaller and less necessary. A very core block, soul-thoughtful thing, so if you are a boss what are you doing to build the capacity of your staff so that they can actually replace you and fulfill the work that you do. There's always more work for you to move up in the organization and do. Are you training, mentoring, and cultivating staff? ²
E	You need to have an aptitude, and you need to have the knowledge about the system, and the disease or whatever. You need to have an aptitude- I mean you need to be polite, you need to be open-minded, you need to share things between people, you need to easily facilitate that all the patients can relate among each other. And then the third thing is that you need to have some kind of relationship, some kind of good relationship like empathy, nonverbal communication- things like that, compassion, yeah.
F	So you see the patient is in the middle of all that we do. But it goes beyond to being high-performing, because high performance means you're providing high quality. It means that you are doing that in a way that is sustainable for the, not only our members, but for the business. And that the culture is one that's collaborative and collegial, in which we're good and kind and supportive to each other, because that's the environment I want to work in, that's the environment that trickles down to how our members are cared for. How our staff feels they are treated is how our staff will treat our patients.
G	We have a sort of ethos that we're pushing very, very hard which is that we promote leadership at every level. And what we mean by that is not leadership in the sense of, "I'm gonna run something. I'm gonna direct something." But leadership in the sense of make what needs to happen, happen... And we need to give them the tools and the space and the authority to make decisions and learn. And so there has to be this sort of laboratory environment so that people feel like it is safe to try things. It's safe to stick your neck out a little bit and not feel like you're gonna get clobbered if it does not pan out. ¹
H	It [high utilization of behavioral health services] is a sign that things are working, and that the team has devoted years to building authentic, trusting relationships with this community.

¹ = Trust You to Fail; ² = Hire, Train, Protect, Grow

Informants discussed how they used daily check-ins, team huddles, and larger meetings as opportunities to connect with others on their team or within their organization. Organizations shared vocabularies across professions, and established multiple communication pathways. Two organizations had specific relationship-building communication trainings, which many employees mentioned “using at home,” as well as at work. The basis of these relationships, informants suggested, was trust. A number of case sites reified trust as part of their organization’s core values; for example, “we trust each other. We take time to build trusting relationships. We trust people’s intentions and we give each other the benefit of the doubt.” Other case sites were less explicit, but trust still appeared as a pillar of employee and patient interaction. As one executive described:

...the back-office staff are the ones that are doing most of this work; they see the checklist, they stage all of the orders, they're communicating with the patient. They're the ones that really need a lot of the information that traditionally, it wasn't felt that they needed to know, they were there to act on orders. Well now we want them to be educated, because they need to be able to have that conversation with the patient also, patients trust them.

Hire, Train, Protect, Grow

Analysis revealed beliefs that cultivating trusting long-term relationships generally started with hiring, and every organization described a structured, extensive hiring process followed by organization-specific training and onboarding routines. Within the hiring process, informants specifically searched for candidates who would be interested in building relationships with others in the organization and open to working on their own relationship-building skills for the good of the organization (see **Table 3**). In particular, one site explained their eight-week onboarding process for new administrative assistant hires, “We take admin supports [and] they go through new hire orientation... the first three weeks are [classroom-based]... and focus on relationship and technical skills. Relational skills are all about relationship with self and others...we spend time on teaching communication and conflict resolution.”

Several organizations dedicated considerable attention and resources to employee growth and retention. One site drew heavily from Robert Greenleaf’s servant leadership approach, encouraging managers to focus on the achievements of their direct reports as metrics of their own success. Other sites held more seniority-based pathways to advancement, but with important milestones such as member voting rights, protected research time, or protected hospital positions. As our sites varied in age (some were nascent, others long established), the routes of advancement and employee growth were not always clear, but promoting from within was always a priority. For well-established sites, growth pathways were well-documented, articulated and practiced. More nascent sites actively discussed formalizing such pathways, usually through employee forums.

Trust You to Fail

As sites strived to be innovative, all employees (C-suite to frontline) accepted that constructive innovation necessitated failure in order to learn and improve. To that end, sites employed a variety of strategies aimed at nurturing environments where it was “safe” to fail. One of our case sites strived to create a “laboratory environment” to encourage their employees to regularly try new approaches to whatever employees identified as needing improvement; some of the experiments at this site aimed to increase patient access, manage inventory, and better coordinate care between primary care and urgent care. Another drew on classic business practice and recommended that all health care institutions create funding for “R&D” (Research and Development) to facilitate resources and protected time for frontline providers.

Thoughtfully Redistributing Power, Authority, Responsibility and Action

Structures of power and authority often dictate workflow parameters and heavily influence culture. To varying degrees, all case sites were purposeful in their approach to redistributing power, authority,

responsibility and action away from physicians to other members of the care team, patients, and families. They accomplished this through a variety of strategies and operational tactics (see **Table 4**).

TABLE 4
DESCRIPTIVE QUOTES ON THOUGHTFULLY REDISTRIBUTING POWER, AUTHORITY, RESPONSIBILITY AND ACTION

Case Site	Illustrative Quote
A	Most people who need a high level of control are not successful in a team-based environment, because they are unlikely to empower and allow a team to operate. To survive, this is a team sport. You can't be everything simultaneously. [If you] watch a really mature team, they will be almost clairvoyant. . . A mature team knows what needs to be done and isn't waiting for the provider.
B	[Our clinical decision making tool gave] you the top [possibilities] for any given diagnosis, and then displayed them in a top to bottom fashion, in terms of [likelihood]... You really can't start to solve a problem until you've asked all of the questions, and have a complete picture of what's going on. [It also] standardized the advice, because an awful lot of the time, if you're a doctor, and someone brings you a couple of pieces of information, you'll shoot from the hip and try to take care of it as quickly as you can, and you might find out that the same information given to another doctor, the workup is completely different. ¹
C	Patients have to become aware of that for some medical problem, you don't really have to see, always, your primary care doctor. Sometimes also a nurse or someone else can solve this.
D	And really the goal for us is not even change, it's to get you [the patient] from where you are to where you want to be, and that's the new philosophy that we're starting to embody is our goals to get you from where you are to where you want to be. And that might not be where we think you should be, it's very much this idea that it's not an outcome that we're driving towards. Our goal is not to reduce utilization, it's a byproduct of the relationship, so that's kind of how we frame it. ²
E	And we need to fight also for this kind of sense that physicians traditionally had, that you are a professional, are the one who has the knowledge, the abilities, the competencies, the training. And sometimes as- the thing that we need to remember now as a physician is that the communication with patients is very important. And we are trained very much in the tissue, and the anatomy- but not in the communication. And we need to remember this. At the same time, there is a feeling that physicians are... afraid to lose power.
F	There is a lot that has to be condensed into that 20 minutes. The only way they [back office staff] can do it is to follow these work flows, follow the instructions we're passing on to them in the checklist, use the support tools we've built for them to stage orders, otherwise things don't get done... Because if you didn't you are working harder and not smarter. ¹
G	The "leaders at every level" concept re-envisioned what leadership meant for the organization. Leadership did not imply that one should simply run or direct a team or initiative, but rather it depicted leadership as making what needs to happen, happen. [Employees are] challenged to take the lead and do everything they are capable of within their own scope, and where possible, to expand their scope. [Staff need to have the] with the tools, space, and authority to make decisions and to learn from those decisions... ³
H	As we've seen physicians come and go, we reach a place with them where they start to understand what we're trying to do and then they leave. It's an extreme challenge and what I'm trying to do is take the focus away from the provider and put it on the team. Because the team is consistent. I almost wanted to create a plug-and-play so that it doesn't matter what physician comes in because the team knows enough to educate the physician about the patients and about our integration.

¹ = Create Routines, Codify Knowledge, Standardize What You Can; ² = Prioritize Patient Insight; ³ = Leverage Hierarchy

Leverage Hierarchy

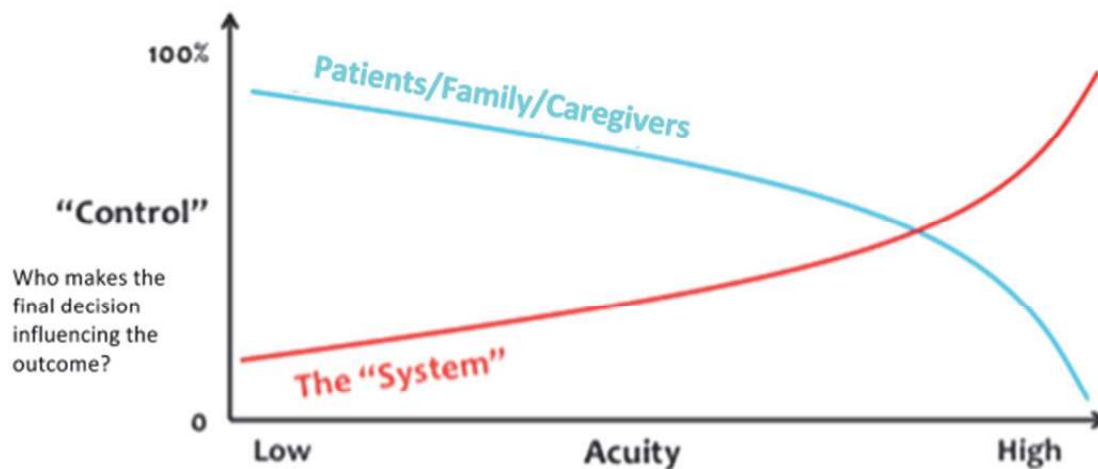
The majority of our cohort used or enforced hierarchical structures selectively, as opposed to exclusively. As one executive leader described, “hierarchy solves a specific problem: consistency. If you need something done the same way every time you have to have hierarchy... but you want some parts [of the organization] to be fuzzy... the parts that are new and exploratory.” All of our organizations leveraged their hierarchical structures from time to time, but not exclusively, and many also fostered “fuzziness” to encourage flatter structures, decentralized decision making, or safe spaces for contribution.

Most sites were deliberate in moving away from a physician-centric hierarchy, which manifested in different ways. At all but one case site, staff called physicians by their first names unless they were in the presence of a patient. One site espoused a “leaders at every level” philosophy, which changed the hierarchy and meaning of leadership. At that site, leadership did not imply management or directorship of a team or initiative, but rather taking the initiative to solve problems and accomplish important objectives. Furthermore, management encouraged employees to “take the lead” and “do what they were capable of within their own scope,” and the CEO consistently reaffirmed the importance of providing staff with the tools, space, and authority to make decisions.

Prioritize Patient Insight

All of our case sites were highly patient-centered, emphasizing individual patient preferences and ensuring patient values guided clinical decisions. Most sites maintained a laser-like focus on patient satisfaction by constantly soliciting and responding to patient input, employing a variety of methods to regularly capture feedback and make improvements. Sites also articulated sincere deference to the patient and his/her articulated needs, especially in some low complexity cases (see **Figure 1**).

FIGURE 1
CONTROL AND DECISION MAKING IN THE HEALTH CARE SETTING
“Control” versus “Complexity” in Patient-Provider Decision-Making



Note: The graph above, from one of our case organizations, demonstrates different decision-making scenarios in the health care setting. The “System” line shows that in situations with a high degree of complexity (e.g. emergencies), clinicians need a high degree of control to perform specific interventions. The “Patient/Family” line demonstrates that in situations with a low degree of complexity (which is characteristic of many primary care issues), it is feasible for the patient/family to assert a high degree of control and make decisions. This philosophy promotes patient-centered care.

In some sites, this deference meant that patients defined their own goals, often in personal, or social terms as opposed disease-centric terminology. For example, at one site, a patient managing diabetes compounded by obesity worked to “see my grandkids.” These goals were often iterative and formed through motivational interviewing tactics and home-grown visual patient prioritization tools. At other sites, patient needs were determined by examining aggregate patient utilization metrics. For example, one site recognized that a majority of a particular patient demographic was not accessing care through their primary providers, so restructured to allow certain primary care tasks, particularly those related to prevention, to be addressed by secondary or tertiary specialists. In all cases, sites viewed patients as drivers of health and used various tools (self-advocacy assessments, health education for employees and patients, data and metrics) to align organizational process with patient needs and goals to ensure more continuous, comprehensive care.

Create Routines, Codify Knowledge, Standardize What You Can

Within the cohort, the process of standardizing was typically supported by health information and technology (HIT) tools and quality improvement (QI) teams. Most of our case sites implemented QI teams to study clinical processes and work flows, and then worked to improve them, test them, and roll them out across the organization. Standardizing routine tasks, triage for non-complicated illnesses, and clinician-administrative workflows enabled physicians to focus on relationships, complex diagnoses, and associated management tasks. In addition to increasing patient safety and quality of care, standardization created stable routines within the organizations; as one particularly large organization explained: “it is our way of making sure things are getting done the right way, the same way, all the time, by everybody.”

Our cohort of case sites also balanced the tension between standardizing work and allowing clinicians to maintain autonomy in clinical practice. While most clinician informants stated that they did not want their own practice to turn into executing checklist after checklist, the majority also understood that a number of factors, including the fast pace at which medical information changes and the increasing complexity of their patient populations, meant that standardizing made sense for parts of everyday practice. As one physician elucidated, “an awful lot of the time, if you’re a doctor, and someone brings you a couple of pieces of information, you’ll shoot from the hip and try to take care of it... and you might find out that the same information given to another doctor, the workup is completely different.” While our cohort valued the autonomy of their physicians, they also recognized the role of standardization in consistent, quality outcomes.

DISCUSSION

Our study extends the understanding of the role and nature of organizational culture and relationships in the primary care setting and provides some concrete examples of tactics that exemplary primary care organizations have used to cultivate and reinforce a constructive culture. These tactics include creating work environments where employees can both trust and fail in safety through communication training and deliberate hiring, intentional flattening of traditional hierarchical structures, and standardization of non-critical routine practice.

More broadly, our findings suggest that the relationship discourse in primary care ought to not only consider the utility of physician-patient and provider-team relationships, but also consider the importance of positive, trusting relationships between *employees and organizations*. These findings align with the employee-organization relationship theory in management literature, which centers on the investment both employees and organizations make in each other and considers employees’ views and beliefs about the organization (Coyle-Shapiro & Shore, 2007). We found that employee-organization relationships that redistribute power and authority and empower employees may provide the organizational culture needed to support exemplary primary care.

Our findings suggest that leaders seeking to implement exceptional primary care systems should prioritize culture. In other fields such as organizational behavior and management, it is well documented that culture creates and perpetuates shared values, processes, and routines (Schein, 2010), facilitates trust,

failure and innovation, and empowers professionals to work at the top of their license with autonomy, independence (Zak, 2017) and fidelity. As our results corroborate, the research in the health care field is no different (Best et al., 2016; Corrigan, 2005; Edmondson, 1999; Williams et al., 2007). However, it requires both time and constant maintenance by organizational leadership (Schein, 2010).

To date, efforts to transform primary care have largely focused on teamwork, leadership and payment reform, not explicitly naming organizational culture. In the cohort we studied, organizational culture served as the foundation on which exemplary primary care was built. Our results demonstrate that to operationalize primary care delivery, organizations must go beyond the technical implementation of specific standards, building blocks or elements. We hypothesize that culture is what helped translate the high-performing frameworks into practice in our case sites, and look forward to mining our extensive data set to evaluate this as part of our future work.

There are several limitations to our study. Without a universally-accepted metric for identifying exemplary primary care organizations, we employed a purposive sampling strategy that relied on a mix of outside assessments as well as expert recommendations, and hence our sample was subject to bias. In light of the difficulties of effectively sampling lauded high performing primary care sites, we have not yet identified a systematic approach to sample less well known struggling sites, and so our analysis is limited in its ability to test our hypotheses. However, we are confident that the breadth of characteristics and locations with which covered in our selection make for a rich contrast and more generalizable base. Finally, while we were not able to measure and compare organizational culture in this study, attempts to do so and link culture to improvement in outcomes are a promising area for future research.

Additionally, there are several strengths of this study. Our qualitative approach generated rich descriptions of care processes within a specific local context (that of the case site), and preserved both the chronology of organizational change as well as its implications (Miles & Huberman, 1994). Analyses of these in-depth data revealed several common practices, which we have presented here, as a general hypothesis to explain some of what makes these primary care sites exemplary in their care delivery. Qualitative data is ideal for hypothesis generation (Edmondson & McManus, 2007; Miles & Huberman, 1994), and our future work will continue to test and refine this hypothesis to see if and how it might differentiate care delivery across sites.

CONCLUSION

Our findings suggest that two aspects of organizational culture are key commonalities for exemplary primary care performance: cultivation of trusting, long-term relationships within and between employees and patients and redistribution of power across all members of the care team. The high concordance of our results with lessons from other research both within and outside health care fields suggests that health systems leaders could safely apply our findings as they seek to improve primary care. In particular, such leaders may find that efforts focused on recruiting, hiring, training and managing a primary care workforce capable of building strong relationships and empowering team members, patients, and families will pay enormous dividends as they seek to better serve patients, health care purchasers, and other key stakeholders.

ACKNOWLEDGEMENTS

The authors wish to acknowledge Professor Robert D. Austin for reading and providing feedback on draft manuscripts as well as Dr. Russell S. Phillips for his review of prior drafts.

CONFLICTS OF INTEREST

This work was funded by the Center for Primary Care at Harvard Medical School. Dr. Andrew L. Ellner is the Cofounder and CEO of Firefly Health, a for-profit, primary care service and technology company. EE Sullivan, SD Arabadjis, and JL Alpert do not have conflicts of interests to declare.

ENDNOTES

1. Specific awards and/or recognized excellence was also a criteria of our sampling matrix, but is not included in this table in order to protect the anonymity of our case sites. Awards included but were not limited to: Patient-Centered Medical Home recognition, Malcolm Baldrige recipients, MacArthur Fellow recipients, multiple foundation grant recipients (ex. Robert Wood Johnson Foundation), Leapfrog reviews, JD Power rankings, and workplace and patient satisfaction surveys.

REFERENCES

- America's Most Valuable Care: Primary Care Snapshots. (2015). Retrieved from <https://petersonhealthcare.org/identification-uncovering-americas-most-valuable-care/primary-care-snapshots>
- Barrett, T. (2017). NCQA PCMH Recognition: 2017 Standards Preview. Retrieved from <http://www.ncqa.org>
- Best, A., Berland, A., Herbert, C., Bitz, J., van Dijk, M. W., Krause, C., . . . McKeown, S. (2016). Using systems thinking to support clinical system transformation. *Journal of health organization and management*, 30(3), 302-323.
- Bodenheimer, T. (2007). Building Teams in Primary Care: Lessons from 15 Case Studies. Oakland, Calif: California Healthcare Foundation.
- Bodenheimer, T., Ghorob, A., Willard-Grace, R., & Grumbach, K. (2014). The 10 building blocks of high-performing primary care. *The Annals of Family Medicine*, 12(2), 166-171.
- Bohmer, R. M., & Lee, T. H. (2009). The shifting mission of health care delivery organizations. *New England Journal of Medicine*, 361(6), 551-553.
- Bonoma, T. V. (1985). Case research in marketing: opportunities, problems, and a process. *Journal of marketing research*, 199-208.
- Case Studies (2016). Retrieved from <http://www.commonwealthfund.org/publications/case-studies#/sort=%40fdate63677%20descending>
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. *Thousand Oaks*.
- Corrigan, J. M. (2005). Crossing the quality chasm. *Building a better delivery system*.
- Coyle-Shapiro, J. A., & Shore, L. M. (2007). The employee–organization relationship: Where do we go from here? *Human resource management review*, 17(2), 166-179.
- Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research.
- Creswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing A Mixed Methods Study In Primary Care. *Annals of Family Medicine*, 2(1), 7-12. doi:10.1370/afm.104
- Dall, T., West, T., Chakrabarti, R., Reynolds, R., & Iacobucci, W. (2018). *The Complexities of Physician Supply and Demand: Projections from 2016 to 2030*. Retrieved from Washington, DC: https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4ef0-97fb-ecc129836829/aamc_2018_workforce_projections_update_april_11_2018.pdf
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, 44(2), 350-383.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of management review*, 32(4), 1246-1264.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Ellner, A. L., & Phillips, R. S. (2017). The coming primary care revolution. *Journal of General Internal Medicine*, 32(4), 380-386.

- Finley, E. P., Pugh, J. A., Lanham, H. J., Leykum, L. K., Cornell, J., Veerapaneni, P., & Parchman, M. L. (2013). Relationship quality and patient-assessed quality of care in VA primary care clinics: development and validation of the work relationships scale. *The Annals of Family Medicine*, 11(6), 543-549.
- Friedberg, M. W., Hussey, P. S., & Schneider, E. C. (2010). Primary care: a critical review of the evidence on quality and costs of health care. *Health Affairs*, 29(5), 766-772.
- Glaser, B. G. (1978). *Advances in the methodology of grounded theory: Theoretical sensitivity*: Mill Valley, CA: Sociology Press.
- Ladden, M. D., Bodenheimer, T., Fishman, N. W., Flinter, M., Hsu, C., Parchman, M., & Wagner, E. H. (2013). The emerging primary care workforce: preliminary observations from the primary care team: learning from effective ambulatory practices project. *Academic Medicine*, 88(12), 1830-1834.
- Lanham, H. J., McDaniel, R. R., Crabtree, B. F., Miller, W. L., Stange, K. C., Tallia, A. F., & Nutting, P. A. (2009). How improving practice relationships among clinicians and nonclinicians can improve quality in primary care. *Joint Commission Journal on Quality and Patient Safety*, 35(9), 457-466.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*: sage.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Peckham, C. (2015). Physician Burnout: It Just Keeps Getting Worse. *Medscape*.
- Poghosyan, L., & Liu, J. (2016). Nurse practitioner autonomy and relationships with leadership affect teamwork in primary care practices: a cross-sectional survey. *Journal of General Internal Medicine*, 31(7), 771-777.
- Saldaña, J. (2015). *The coding manual for qualitative researchers*: Sage.
- Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2): John Wiley & Sons.
- Sinaiko, A. D., Landrum, M. B., Meyers, D. J., Alidina, S., Maeng, D. D., Friedberg, M. W., . . . Houck, P. R. (2017). Synthesis of research on patient-centered medical homes brings systematic differences into relief. *Health Affairs*, 36(3), 500-508.
- Singer, S. J., Falwell, A., Gaba, D. M., Meterko, M., Rosen, A., Hartmann, C. W., & Baker, L. (2009). Identifying organizational cultures that promote patient safety. *Health care management review*, 34(4), 300-311.
- Sinsky, C. A., Willard-Grace, R., Schutzbank, A. M., Sinsky, T. A., Margolius, D., & Bodenheimer, T. (2013). In search of joy in practice: a report of 23 high-functioning primary care practices. *The Annals of Family Medicine*, 11(3), 272-278.
- Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The milbank quarterly*, 83(3), 457-502.
- Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*: Sage Publications, Inc.
- Wagner, E. H., Coleman, K., Reid, R. J., Phillips, K., Abrams, M. K., & Sugarman, J. R. (2012a). The changes involved in patient-centered medical home transformation. *Primary Care: Clinics in Office Practice*, 39(2), 241-259.
- Wagner, E. H., Coleman, K., Reid, R. J., Phillips, K., & Sugarman, J. R. (2012b). Guiding transformation: How medical practices can become patient-centered medical homes. *The Commonwealth Fund: New York*.
- Williams, E. S., Manwell, L. B., Konrad, T. R., & Linzer, M. (2007). The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. *Health care management review*, 32(3), 203-212.
- Yin, R. (1994). *Case study research: Design and methods*. Beverly Hills, CA: SAGE Publications
- Zak, P. J. (2017). The neuroscience of trust. *Harvard business review*, 95(1), 84-90