Primary Care Transformation

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KEYWORDS

• Primary care transformation • PCMH • Patient-centered • Team-based care

KEY POINTS

- In the United States, our hospital- and specialty-driven health system fueled by a fee-for-service model has created an expensive disease response system, but does not proactively promote health and wellness.
- Patient-centered care should be the guiding principle of transformation.
- Transformed primary care will have a laser-like focus on the patient experience of care and organize services to empower and engage patients to improve their health.
- Transformed care will get patients the right amount of care when and where it's needed.
- Patients need a system they trust to get the help they need in a timely manner. Transformed care will meet these needs and allow care to be escalated and deescalated seamlessly.

Primary care transformation, done right, will require a radical shift in the way we deliver health care in the United States. At more than $10,000 per capita, we spend the most on health care (over twice as much as an average wealthy nation),[1] and our performance is among the worst.[2] Many factors contribute to this dismal reality. At the foundation, the United States has built health care as a business, while public health is the domain of government.[3] The business has been built on a fee-for-service model that rewards clinicians when they do more (visits, tests, procedures) to patients, but does not actively promote health; it creates perverse disincentives, promotes waste, and discourages proactive prevention and population health management. In the crisis of our dysfunction that is fueling shifts to value-based care, we cannot afford not to increase investments in primary care. The value of excellent primary care is undeniable, and will play a central role in rescuing the failing US health care system.[4–8]

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Primary care transformation needs to be driven by the guiding principles of patient centeredness and engagement. The challenge is to create a system that reliably and equitably provides the right amount of high quality care when and where it is needed. Meeting this challenge requires the building of authentic healing relationships, not just between patient and physician, but also between the patient and his or her health care team nested in a system that is robustly supported with sophisticated technology (**Box 1**).

To illustrate the radical patient centeredness required for primary care transformation, we have written 2 clinical vignettes (**Boxes 2** and **3**) to illustrate how transformed primary care will *feel* for our patients. Look for how these practices engage and empower patients and how connections and relationships are purposefully designed with health care team members and the technology to support it. Notice where the roles and systems reach for health beyond what we typically consider the purview of health care.

TEAM-BASED CARE

Most primary care offices practice in teams at some level; however, transformed primary care requires a new level of team performance. Practices will need to develop new roles and be integrated with other services and specialties including social services that will challenge our systems to reach for health beyond health care.[15] Teams will be oriented around a clear, shared vision of care that focuses on patient experience and engagement. The deep traditional hierarchies of medical care delivery will be challenged in high-functioning teams as broader arrays of staff are empowered to connect with patients.

Much has been written about various team configurations and roles in primary care, and those will certainly continue to evolve.[20] Specific needs of our patients (which will differ by community) should be the primary driver in the creation of new roles and services. Team member roles and duties should all be oriented around the concept of getting the right amount of care when and where it is needed, and distributing work such that all team members are spending most of their time working at the top of their skills and license capabilities.

One of the most promising developing roles in primary care is health coaching. Bellin Health has developed coaching within its care team coordinators (CTC) role. Bellin, and several other systems, have evolved these roles often by up-skilling medical assistants who are then deployed in a 2:1 ratio to providers.[9] CTCs do the typical medical assistant work of rooming and taking vitals, but also have expanded duties with agenda setting, addressing health maintenance, medication reconciliation, and support for health behavior change. When the clinician arrives, the CTC remains in the room, serves as scribe, and actively participates

Box 1
Key concepts for "transformed" primary care

1. Authentic healing relationships build trust.
2. Patients are confident their health care team will take excellent care of them.
3. The "system" delivers the right amount of care when and where it is needed.
   a. Patient-oriented technology (virtual visits and coaching)
   b. Escalation and deescalation as needed
   c. Broader roles and team members

Box 2
Chronic disease management

Mr. Rios: A 58 year-old man with diabetes, chronic obstructive pulmonary disease, hypertension, attempting smoking cessation.

Interviewer: Tell me about your last visit with your doctor.

Rios: I saw Dr. Klein 2 weeks ago, but Marina called me yesterday to see if I threw away all my ashtrays.

Interviewer: Who's Marina, and what's with the ashtrays?

Rios: She takes care of me. Dr. Klein calls her a care partner.[9] I call her my health coach![10,11]

A few years ago Dr. Klein's office started developing new roles. Marina was a medical assistant, but does a lot more now.

Interviewer: What changed?

Rios: One day she asked if it was okay if she stayed in the room to help with my appointment after she took my vitals. Marina helped me build a list of what I wanted to talk about, scheduled my colonoscopy, updated my medicines, and started talking about my smoking.

Interviewer: How was it with Marina in the visit?

Rios: I wasn't sure at first, but quickly realized it's a great thing. Dr. Klein listened better and wasn't so buried in the computer because Marina was taking the notes. When Dr. Klein was done, Marina had written everything down for me that I needed to remember and explained it all to me before I left—and then made me "teach back" to make sure I got it.[12] When Dr. Klein used to give me instructions at the end, she always seemed in a rush by the end of the visit. I know she's super busy, and I didn't want to slow her down, and also felt embarrassed if I didn't understand something.

Interviewer: What's the deal with the ashtray question?

Rios: I've been smoking for a long time and I know I need to quit, I really want to quit, but I wasn't sure if I'd be able to since I've been smoking so long. After my visit with Dr. Klein that day, Marina spent another 20 minutes with me developing a really detailed quit plan. How I'd take my medication, setting a quit date, making a big deal of it, telling my friends and family, and yes, throwing away my lighters and ashtrays to make a "nonsmoking house."[13] She told me she'd call me at 6 PM on my quit date, so I had an accountability piece built in to support me. She also got me set up with a smoking cessation group I'm meeting with weekly at the clinic. It's so great to go through this tough work with others wrestling with the same issue.[14] I've gone 46 days without a cigarette. I think I can do it for real this time!

Interviewer: How is your relationship with your primary care team now different than previous relationships you've had with a doctor?

Rios: I trust it. That's new for me. When I need something, I know I can call or send a message and Marina or whomever is covering for her will get back to me that day. They also lean into the hard stuff. Last year, they started using more questionnaires when I checked in. This one asked if I was having any trouble affording enough food, or medication or having trouble with my housing. I was too embarrassed to bring it up, but I was having trouble, and they introduced me to their Patient Resource Coordinator who got me set up with Meals on Wheels and sent a referral to the local food pantry.[15] They're not just pill pushers!

Interviewer: How do you contact them usually?

Rios: Marina helped me download an app to my phone. It was intimidating at first, but she showed me how to send questions, book appointments or refills. It's WAY more convenient than their old annoying phone tree.

Interviewer: But you still call them too.

Rios: Yeah, and their phone tree has gone away, so now when I call an actual person answers and tries to take care of everything I need on that same call so we're not playing an endless game of phone tag.

Interviewer: Are there others in the clinic you have relationships with?

Rios: Yes, Dr. Alex, she's a pharmacist who works with Dr. Klein. She taught me how to give myself insulin shots, which was scary at first. Since I have so much going on with my health, Alex has really focused on my diabetes and helped me get that much better under control.[16]

Interviewer: How was it different working with the pharmacist on your diabetes versus Dr. Klein?

Rios: We were focused on my diabetes. I always have 100 questions for Dr. Klein which quickly fills up my 20 minutes. My first visit with Dr. Alex was an hour and follow-up visits have been 30 minutes, I understand SO much more about my diabetes now.

Interviewer: It sounds like you really trust your primary care team. That's not always the case—how did they win your trust?

Rios: Same way we earn trust in any relationship, with time and reliability. I usually have trusted my doctor, but never their office staff.

Interviewer: What do you mean?

Rios: I've had some really good doctors, but like the annoying phone tree stuff, getting access to the doctor was a thrash and I didn't trust other folks in the office that they knew anything about me or my medical care. Now I'm okay talking with the person who answers the phone and telling her exactly what I need because she I know she'll make it happen, like make an appointment, get a refill, referral, whatever I need.

Interviewer: How does that feel having all these different folks take care of you?

Rios: I love it. Initially, I was suspicious of anyone besides Dr. Klein, but now I know I have a whole team that can take care of me and get me the right amount of care when and where I need it which is WAY more convenient than waiting for an appointment with my doctor for every little thing.

in the patient visit. Finally, when the provider finishes, the CTC reviews instructions, and arranges any follow-up or hand-offs. CTCs develop continuous relationships with the patients and serve as health coaches. Coaches provide self-management support, system navigation, emotional support, and help to bridge the gap between patient and clinician.[21] In a more traditional model, patients usually leave offices understanding only 50% of recommendations and instructions.[22] Coaching gives time and space for techniques like teach-back (ie, closed-loop communication) to increase patient understanding and empowerment.[12,23] These models increase provider and patient satisfaction, and improve performance metrics. Off-loaded tasks allow physicians on average to see one more patient per session, and the added revenue more than covers the cost of higher staffing ratios.[9,24]

As we develop a deeper focus on patient experience and engagement, we also need to think carefully about recruitment of our staff and leveraging their life experiences to build patient connection. Traditionally, we have focused on the doctor–patient relationship, which remains critical. Yet, as we think about partnering more comprehensively with patients, we must rely more on our team members. Community health worker models are some of the most advanced in this arena of purposeful recruiting, training, and ongoing support. They underscore that the best individuals to connect with patients in the community are folks from the community who have a shared life experience. Shifting the focus to hiring for the *who* and training and

Box 3
Expanding concepts of access and visits: the right amount of care when and where it's needed

Ms. Corbett: A 32-year-old mother of 3- and 6-year-old children who are also patients in the practice.

Interviewer. Tell me about your last interaction with your primary care doctor.

Corbett: Last week, I sent a message to the office on MyChart because I noticed burning when I urinated and I was going more than usual.

Interviewer. What is MyChart?

Corbett: It's a website and app I can use to send messages to the office and see a lot of info about my health care.

Interviewer: What happened after you sent the message?

Corbett: Christine, the nurse on my team, called me with a few more questions about my symptoms. She thought I had a urinary tract infection and sent in a prescription for an antibiotic.

Interviewer: Did you talk to Dr. Early?

Corbett: No, only Christine.

Interviewer: How do you feel about not talking to your doctor directly when you're not feeling well?

Corbett: Great. I know Christine. She did my first prenatal visits and has worked there for a long time. She answers my MyChart messages for me and my kids and I know she works very closely with Dr. Early, who could be hard to reach, so I get what I need more quickly instead of waiting for a day or two for Dr. Early to get back to me. It takes a lot of time, effort, and money to get into the clinic with 2 young kids or to get a babysitter, so when I can get care I trust without coming in, that's great!

Interviewer: Are there times when you've sent a message and the team asked you to come in?

Corbett: Yes, after my second baby I got depressed. I sent a message to Dr. Early saying I was feeling sad and having trouble caring for my son. Christine got the message and called me right away. She asked me a bunch of questions to make sure I was safe and then scheduled an appointment the next morning with Dr. Early.

Interviewer: Wow, you were able to get care very quickly.

Corbett: Yes, I was surprised by how quickly Christine called and was able to get an appointment. She said it was urgent, and keeps a few appointments open for these types of things.[16] Also, if I didn't have this depth of relationship with my health care team, I don't think I would have felt comfortable telling them how bad I was feeling, but I knew they cared and would want to know.

Interviewer: So you have meaningful relationships with more team members than just your primary care doctor? Tell me more about that.

Corbett: Besides Christine, I know the medical assistant, Toni, who works with Dr. Early. I see her every time the kids or I have appointments. She gets us settled, makes sure we're updated on our vaccines and check-ups. She sent a message last week reminding me to schedule my daughter's physical, and asked how I was doing after I took the antibiotics for the urinary tract infection.

Interviewer: How is your relationship with this team different from previous relationships you've had with a doctor or health system?

Corbett: My doctor works with a team of people who seem to really know me and my family. I usually see or speak with the same few people; they know my story, or at least have easy access to my record, and seem to know me, so I don't have to start from scratch with every conversation. They're seamless, I get answers when I call or send a message and don't feel lost like I did with other health systems. I'm a lot less frantic about getting care. In the past I didn't

have confidence that my doctor and the health system would proactively take care of me, so I had to be a really staunch self-advocate. Which sometimes made me get more care than I actually needed. In the past, I was always ending up in the emergency room with my oldest who has asthma. That doesn't happen anymore. She has a care plan we all understand. I trust my team. If something can be handled without a visit, that's better for all of us, and if I need more help, I know I'll get that too.

Interviewer: It sounds like you really trust your primary care team, that's not always the case. How did they win your trust?

Corbett: I felt like the team really cared when I sent the message that I was feeling sad after my son was born. Christine called me to check in and get me an appointment right away. Dr. Early knew why I was coming in and asked a psychologist, Dr. Zona, to come and speak with me while I was there.[17] I was really nervous about seeing a psychologist. But having Dr. Early introduce her and being able to see her at my regular clinic made it a lot easier. I saw Dr. Zona for a couple months and felt a lot better. I haven't felt taken care of like that by anyone in health care before.

Interviewer: What happens when you need care that is, beyond what Dr. Early can provide?

Corbett: Dr. Early or the team can order the usual referrals, like seeing the psychologist, but she's also been able to get help without seeing a specialist. When I was depressed, we tried a couple different medications but I had a lot of side effects from them and was nervous about trying new medications because I was breastfeeding. It was a really long wait to see a psychiatrist to help figure out medication. So Dr. Early made an e-consult with a psychiatrist who recommended a medication change after reviewing my chart.[18,19] I didn't have to wait months and it saved me a visit and co-pay.

Interviewer: Are there other instances where you've been able to get specialty help like that?

Corbett: Yes, a few months ago my daughter had a rash on her arm that wouldn't go away. We were traveling and I wasn't able to bring her in, so I sent a photo through MyChart to Dr. Early to see if she could tell us what to do. She sent it to the dermatologist to review and sent me back recommendations. It was so easy and we were able to enjoy our trip.

Interviewer: Sounds like you love MyChart. Is this the main way you communicate with the office?

Corbett: Yes, the patient portal system is super easy to use, so I prefer that over the phone. I can log in on my computer or use the app on my phone and send messages after hours, as long as they're not emergencies. Then I don't have to worry about going back and forth leaving messages or only being able to ask a question before 5 PM The messages seem to get to the right person reliably. I can also look at notes from our visits or the kids' vaccination records.

supporting for the *what* of the work bolsters the roles to create higher functioning teams.[25] This is also a crucial strategy to increase health equity and decrease disparities.

AUTHENTIC HEALING RELATIONSHIPS

Authentic healing relationships are characterized by the core elements of security, genuineness, and continuity.[17] They work by "(1) valuing/creating a nonjudgmental emotional bond; (2) appreciating power/consciously managing clinician power in ways that would most benefit the patient; and (3) abiding/displaying a commitment to caring for patients over time."[16] Traditionally, we have thought about these relationships as existing only between a healer and patient, but with new team-based models, these relationships will also need to develop between the team and patient. Patients may have greater rapport with their health coach than they do with their clinician. This relationship shift may feel like a loss to physicians in transformed primary care. The

traditional physician-centric model where doctors are the virtuoso violin player must evolve so they are effective team leaders working instead as orchestra conductors. With an estimated shortage of primary care physicians reaching 44,000 by 2035, models must leverage other roles to build the meaningful relationships patients need.[26]

TECHNOLOGY

Transformed primary care will harness the power of technology to nurture relationships. As illustrated in the vignette in **Box 2**, technology can allow systems to improve access, right-size care, and share information among teams and patients. Patient-facing technology includes patient portals, information-gathering devices, and personalized coaching and advice. Patient portals enable asynchronous visits with care teams that can improve patient satisfaction and increase the efficiency and quality of face-to-face visits.[27] Data sharing, including patient input of blood pressure, blood sugar, weight, and other information can improve self-management of chronic disease.[28] As patient portals become more sophisticated, abnormal values can trigger urgent responses from team members as well as access to curated health education. Similarly, as smart devices, such as phones, activity trackers, and watches evolve, greater automation of data collection and sharing will enable teams to provide customized care. Bidirectional data sharing through shared record keeping such as

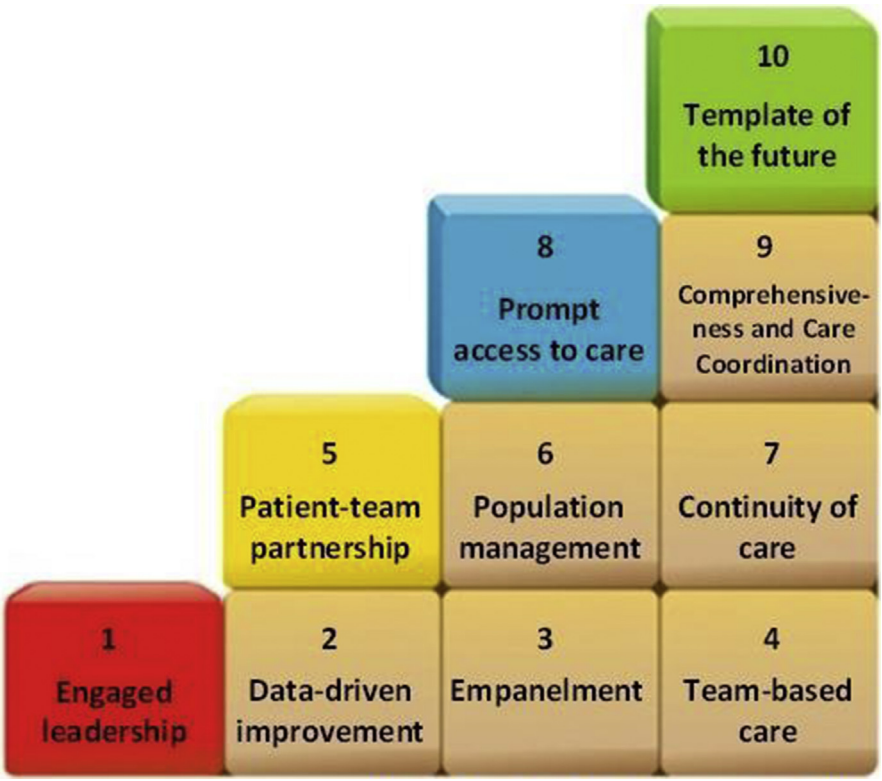

Fig. 1. The 10 building blocks of high-performing primary care. ©2012 UCSF Center for Excellence in Primary Care.

open notes provides transparency for patients to review their visits, keep goals aligned, and empower patients to help direct their own care.[29]

Electronic medical records (EMRs) support population health management by generating registries for chronic diseases and preventive care. As EMRs advance, actionable reports will allow team members to proactively address population health as they communicate with each other around outreach, and progress toward goals, which can increase engagement and improve outcomes in chronic disease management.[29] On a broader level, metadata from EMRs can help to identify disease trends and resource needs to direct health care and public health systems to better serve patients and communities.[30]

TRANSFORMATION MODELS

Each practice, health system and community will have unique characteristics that must be considered as they transform their care models. Thankfully, primary care transformation has been well studied, and there are excellent models that can provide a road map and tools to help practices evolve. Two leading models are *The 10 Building Blocks of High-Performing Primary Care* from the University of California–San Francisco Center for Excellence in Primary Care[31] and the Qualis Health's *Safety Net Medical Home Initiative*,[32] which similarly organizes steps of transformation into *Change Concepts* that are sequenced in a particular order to increase chances of success.

There are many commonalities between the 2 models, including the need for engaged leadership, adoption of a shared model for data-driven improvement,

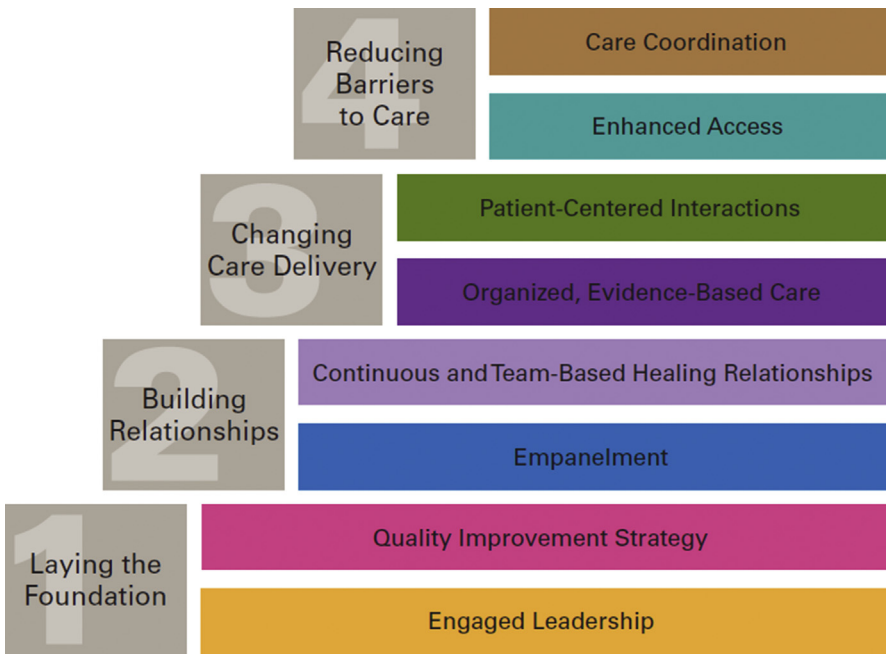

Fig. 2. Safety net medical home initiative: change concepts. (*From* Sugarman JR, Phillips KE, Wagner EH, et al. The Safety Net Medical Home Initiative: transforming care for vulnerable populations. Med Care. 2014;52:S3; with permission.)

empanelment, team-based care, panel management, and advanced access. Each of these models has a collection of interactive tools and materials that can provide structure and support for practices ready to engage in an active transformation efforts (**Figs. 1** and **2**).[33,34]

Practice transformation must be seen as a long journey; many "transformed practices" unfold over a 3- to 5-year period. Indeed, a culture of continual improvement will keep practices evolving to better meet patient needs.[35] Most health care professionals have not received training in improvement science, which is a critical skill needed to support transformation. Whether health care professionals adopt the models mentioned, or Lean or Six Sigma,[36] or another model entirely, the "secret sauce" that makes any model work includes 3 key ingredients: (1) the discipline of building a shared language and improvement practices, (2) being data driven, and (3) empowering everyone on the team to pose the orienting question of the Institute for Healthcare Improvement's Model for Improvement[37]: "What are we trying to accomplish?" Similarly, team members should all make contributions unique to each person's perspective.[37] Practice transformation collaboratives can be effective strategies to grow improvement capacity and to provide technical assistance and coaching for clinics to evolve.[38,39]

SUMMARY

Primary care transformation should be driven by the guiding principle that all people deserve an authentic healing relationship with a primary care team they trust will take excellent care of them. The primary care team is the patient's first point of contact with the health system supported by relationships that are long term and provide continuity, and a proactive person (not disease) focus of care.[40] These concepts are not new in primary care, but also have not been supported to grow to fruition as the underfunded "step-child" of a fee-for-service health system.

Our practices need to lean in to intentionally build relationships so our patients feel known, understood, and trust that we will take care of them. Getting the right amount of care when and where it is needed empowers patients to navigate their needs. Tools can help; robust patient portals, convenient apps that promote engagement, activity trackers, and smart devices that push information into our EMRs and nudge them to make healthier decisions all have promise. Behind the scenes, health systems must be able to accurately assess patient needs, linking them efficiently to appropriate services, whether gentle reassurance for a cold, an e-consult with a specialist, a visit with their primary care provider, advice for an emergency room visit, or a referral to a local food pantry. In our current catastrophic care model, many of these simple concerns wind up in wasteful emergency room visits. As illustrated in the vignettes, relationships are changing to leverage other caregivers beyond the primary care physician, and technology will also play a key role in facilitating those interactions. If we ask, patients will guide our way and should be aggressively recruited to participate in our planning and design with attention to the concept of co-production of health.[41–43]

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