INNOVATION AND IMPROVEMENT:
Improvement Happens

Improvement Happens: Doctors Talk About the Medical Home

An Interview with Charles Mayer, MD, MPH and Eric Seaver, MD

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Group Health, a nonprofit health-care and coverage system in Washington and Idaho, has been a pioneer since 2006 in implementing and evaluating the patient-centered medical home (PCMH) model of primary care. Improved quality of care and patient experience, increased provider job satisfaction, and reduced downstream health-care utilization and costs at one clinic in 2008 led to PCMH implementation at all 25 Group Health primary care locations. Ongoing evaluation focuses on patient relationships, staff and provider satisfaction, quality of care, clinic efficiencies, improved patient experience, cost, and utilization.

But how does it actually feel to be a primary care physician participating in such a large transformation? In this installment of Improvement Happens, JGIM interviewed two practicing Group Health physicians. Both share their experiences and patient stories as they tell other providers what to expect as the PCMH movement spreads and evolves.

***Charles Mayer (CM), MD,MPH**, practiced for 12 years at a community health center before joining Group Health in 2007. The community health center underwent "re-engineering" in 1997, which led to changes in how teams function and how care was coordinated. Dr. Mayer joined the Group Health downtown Seattle clinic in time to accept hundreds of patients from other physicians as they reduced the size of their patient rosters. He continues a robust family medicine practice serving the downtown community.*

***Eric Seaver (ES), MD**, is a family physician with additional training in internal medicine who worked in a hospital-supported practice for 3 years in Sonoma County, CA. This practice failed financially because of a high prevalence of HMO capitated plans. He joined Group Health in 2006 at the pilot site for the medical home redesign. His practice consists of primarily adolescent and adult patients, with 20% Medicare and a significant percentage of patients for whom English is a second language.*

The initial interviews for this article were conducted by Eric Larson, MD, MPH, and Robert Reid, MD, PhD, both of the Group Health Research Institute. Additional questions were posed and editing provided by Richard L. Kravitz MD, MSPH, JGIM Co-Editor in Chief.

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JGIM: The "medical home" has just about as many definitions as there are practices.[1] What are the most important components of the medical home affecting your work?

CM: One of the most important elements is our use of "virtual medicine," which entails decreasing the number of face-to-face patient visits and increasing the number of phone and secure electronic messages (patient e-mails). In a 4-h half-day clinic block, I have seven face-to-face visits and two to three scheduled phone visits, and I generate or respond to approximately 10–20 secure messages. Also, my medical assistant's (MA's) work has changed. She spends more time reviewing our patient's health-care maintenance and quality measures as well as "fishing" the schedule for patients who have face-to-face appointments but might be better served by virtual medicine visits.

ES: Frankly, I did not look forward to starting at Group Health because it was my third practice in 7 years. However, I found the medical home provided me the opportunity to practice medicine the way I envisioned I would while in medical school and residency. In addition to the changes mentioned by CM, we have developed other systems to support the patient-physician relationship, including a 25% reduction in panel size of patients; a system-wide electronic medical record; a proactive, team approach with expanded roles for support staff (such as medical assistants reviewing patients charts prior to care to visits to identify care needs and a 1:1 physician-medical assistant ratio); a phone triage assuring that 85% of our patients' calls are answered within 30 s (some even by the physicians!); and, using our systemwide electronic health record, better coordinated care with specialists to expedite workups, ensure timely care, and avoid unnecessary referrals.

JGIM: That sounds great, but how do you pay for the increased staff support?

CM: Group Health is largely a capitated system, so it has the ability to invest in primary care staffing with the

expectation that these costs will be covered by downstream savings in emergency and hospital care.[2, 3] This flexibility is one of the benefits in working at an organization like this.

But of course, it's more than just increasing the amount of staff support, it's also about expanding and redesigning roles to deliver better care with less physician time. The morning huddles with the whole team, and other huddles between MDs and their MAs to plan patient flow, are contributing to role expansion. MAs can manage health maintenance, and the front desk can play a more active role in coordinating patient care. More time can be allotted for teams to meet and actively manage the panel, and social workers and other staff can be included in clinic meetings to enhance care and communication.

JGIM: How have other specialists (non-primary care physicians) reacted to the system? In particular, do they see the shift of resources to primary care as potentially threatening?

CM: Not particularly. At the pilot site, savings were realized from lower facility costs (fewer hospital admissions and emergency room visits), not from fewer visits to Group Health's specialists. Specialists still get their share of the pie.

I believe that the medical home has also improved the quality of referrals and coordination of care with specialists. The medical home has created the opportunity for Group Health primary care physicians to improve their referrals by making sure that questions to specialists are clearly articulated. Group Health already has weekly CMEs for primary care providers that often cover the common health complaints that specialists see.

ES: Specialists at Group Health have been working to support the medical home through the use of "virtual consults" that allow primary care physicians to consult with specialists using the electronic medical record during a primary care visit. Not only do specialists often respond to these requests while the patient is still in the room, but it also helps specialists by reducing unnecessary referrals and, when visits are required, completing as much of the workup prior to the specialty visit as possible.

JGIM: Much of the success of the system would seem to hinge on getting patients the right care at the right time. How does the phone triage system actually work?

ES: When patients call into the primary care clinic, they choose from a menu of departments (e,g., pharmacy, billing, or the health-care team).

CM: When they pick "health-care team" from the option menu, the phone will be answered by the RN, LPN, MA, or me. The LPN or RN answers most calls, but once a day or so I will answer if I am available. Group Health's goal is to answer and complete calls during the patient's first attempt to contact us. This is one of the principles of our "Lean" call management system. Group Health clinic leaders continually request staff to turn "on" the call management button in order to be more available. In reality, I am often busy seeing patients, answering secure messages and on scheduled phone visits, so it is often difficult to answer the phone more than once a shift.

JGIM: Are you thinking differently about how you deliver care to patients?

CM: Although I had past experience with transformation of a clinic at a community health center, "virtual" medicine created new opportunities for patient-centered care. The ease of scheduling a phone visit or communicating via secure message increases the number of patient contacts or "touches" without burdening patients or our staff with the time and costs associated with a face-to-face appointment. For example, I diagnosed a patient with breast cancer, and she is now followed by specialists for her care. But we still have phone visits and secure message communication, which maintains continuity. Both of us agree that it is wonderful to stay in contact without her having to be seen in clinic. When in-person visits are needed, they are also less rushed and more focused. She has repeated many times that she values the way we communicate, and it has built greater trust in how her overall care is delivered.

ES: I find that I am able to dig a little deeper with my patients. I am not just treating a symptom but will more often find the underlying cause. These discussions encourage patients to think more about how their diet, lack of exercise, stress, or alcohol or tobacco use might be contributing to their problems. I can then ascertain the patient's goals and negotiate a collaborative plan to reach these goals. Families of my more debilitated, elderly patients also become more engaged in their loved one's care through direct virtual communication with me and increased attendance at appointments.

We all know the point in a visit when the discussion is headed to the loaded question, "What else is going on in your life?" But how many times are we really able to ask that question, knowing there is a line of patients waiting to be seen? I can ask those questions now. While seeing an elderly patient for memory loss, it became clear to me that she was suffering from symptoms of depression. As I pursued this, I learned that her dog, a faithful companion for over 10 years, had died a month ago. Her dog got her out of the house every day and gave meaning to her life. I "prescribed" a visit to the animal shelter to adopt another dog. At her follow-up visit 1 month later, she was transformed. She had adopted a dog and her life felt whole again. Now, every time I see her, I also ask her how her dog is doing.

JGIM: Traditional primary care has been characterized as "hamster medicine." Do you feel like you have stepped off the treadmill?

CM: Overall, I feel I'm working more efficiently and have stronger relationships with my patients. Phone visits in the past were done between seeing patients, after the workday, on weekends, or not at all. Because Group Health

took the big step of scheduling phone visits, my job satisfaction definitely increased. In addition, my passion for providing quality care to low-income earners has partly been addressed by offering these alternative appointments at no co-pay.

The secure messages are not usually overwhelming. I have been clear with my patients that secure messages are not for long ongoing conversations but for brief communication. "Brief" means a few sentences describing one or two health concerns. Sometimes patients write whole paragraphs or describe a myriad of symptoms with accompanying physical findings. At that point, I will ask that the patient make a phone visit or a face-to-face visit with me (or ask my medical assistant to do the same). Patients usually understand. Luckily, phone visits, like secure e-mail messages, do not carry a co-pay so they don't induce a financial burden.

The inbox (incoming secure messages, phone messages, staff messages, and inbox coverage for my practice partner when she is not in clinic) can be a source of stress. But to be honest, I have been blessed with a practice partner who covers her inbox when she is not at work (and I try to do the same). The additional 30 to 60 min of checking my inbox when I am not in clinic or during my days off has not been a great burden. There have been times when I spent many hours at home working on my inbox, but this has become more the exception than the rule.

ES: I am working a similar number of hours, but the work that I am doing is less exhausting and more rewarding. In my last practice, I definitely felt I was on a treadmill. Everyday I leaped on at full speed juggling with both arms until the day ended. One slip and I would fall flat on my face. In the medical home, the treadmill initially ran at a slower, steadier pace, and I rarely had to juggle anything. Recently, my practice has grown to the point where I feel like the treadmill has an extra incline, and I am wearing a heavy backpack.

My typical day starts at 8:00 a.m. with 30 min of inbox work and making phone calls, and another 30 min preparing for clinic with staff huddles and chart reviews. I typically see six patients in the morning and seven in the afternoon. I have a working "lunch" for charting and inbox work; otherwise, I am unable keep up with incoming messages. I spend another hour at the end of the day completing charts and working on my inbox. I will generally leave around 6:00 p.m. and might spend another 30–60 min that night clearing out my inbox to prepare for the next day.

JGIM: How does this system play with the new generation of physicians? They are said to value work-life balance. How does a system that implicitly requires working 7 days a week jibe with the sensibilities of Generation X and Millennials?

ES: I think that recent residency graduates look to Group Health as a great place to work. There are a large number of applicants for each opening, and residents from other local residencies are choosing to work at Group Health. Work-life balance will always be a challenge in medicine, and this is still true in the medical home. Work on the weekends and days off is generally limited to 1–2 h to clear out the inbox for the next work day. The use of the EMR with access from home also creates a lot of flexibility so that you can make it to your child's late afternoon game or performance by doing some of the work later at home.

JGIM: What do patients value the most about the medical home?

CM: One of my favorite recent moments came when a new Group Health patient said after our visit, "This is even better than the ads!" He was referring to the time I took to listen to his concerns, review in detail the risks and benefits of health-care maintenance screening options, and remind him that he had multiple options for follow-up. He particularly liked the online options and services. Patients can make their appointments online, access a wealth of evidence-based information through the Group Health website, and can send me their health concerns—all online.

ES: Patients love the medical home—they see it as a more personalized form of medical care. Two tenets of our medical home are building continuous, healing relationships with patients to engage them in their care and providing access to care based on the patient's needs. The longer face-to-face appointments and more frequent virtual communication are the key to building this personal relationship. Over 75% of my patients have signed up on our website, and most of my patient "touches" are by secure message or phone.

JGIM: What about patients who have not signed up for secure messaging? Has anyone looked to see how they differ in terms of demographics, health status, or computer literacy?

CM: About 65% of Group Health clinic patients have signed up to use secure messaging, and I am told that the highest use is among patients in their 50s and those managing ongoing health conditions like depression and diabetes. Some patients and their family members either cannot use secure messaging or prefer not to. Of course, we continue to encourage them to make in-person or telephone visits at a time that works for them. In-person visits, while less frequent, are more satisfying for patients and doctors, including those who don't use secure messaging. Persons who don't use secure messaging are more likely to be older, healthier, African-American, Asian, or Hispanic, and have lower education. Research at Group Health tells us that encouragement from a primary care physician to use secure messaging is a strong predictor of who uses it.

JGIM: How has your staff been affected by medical home? What have you learned about the best ways to work with the rest of the health-care team within this environment?

CM: Staff are asked to engage in "panel management." This means reviewing health maintenance and chronic

disease care before we see patients, with reports automatically generated using data from the EMR. If the patient has heart failure, diabetes, hypertension, coronary artery disease, asthma, COPD, or depression, or regularly takes opioids, the medical assistant will check if one of these concerns has been recently addressed and, if needed, ask the provider to make a care plan. Sometimes these activities are embraced by staff and other times resisted. If it is not placed in the context of improving patient care or not enough time is allotted, staff enthusiasm can wane. Since Group Health began offering scheduled phone visits, additional time has been freed for staff to work on panel management. Although EMR reports make panel management relatively seamless, busy days and too many requests can lead to staff fatigue.

ES: The "proactive" approach in the medical home is the key to providing patients a better form of care. But this takes a team. Our RNs and LPNs contact our patients after an urgent care visit or hospitalization to check on their progress and to ensure they have appropriate follow-up. Our MAs prepare for each visit ahead of time to ensure we are meeting each patient's health-care maintenance and chronic disease needs. Pharmacists and RN's work closely with patients to improve care of diabetes, heart disease, and hypertension. Daily morning huddles between providers and support staff provide time to review daily scheduling issues, new clinical recommendations, and the progress of our many improvement initiatives. Daily "dyad" huddles between each provider and his or her dedicated MA anticipate the needs of each patient on the schedule.

JGIM: What kind of training do RNs, LPNs, and MAs receive in order to deliver this kind of care?

ES: RNs, LPNs, and MAs receive orientation and training to the standard work of the medical home as it relates to each of their roles. An overview of the medical home is part of nursing orientation, along with their role in the care team, and use of the EMR. On-the-job training occurs as part of orientation under the supervision of the clinic manager. There are also centralized training and skill building classes that staff can attend.

JGIM: What is left to be done?

CM: Providers and staff need to be engaged. At Group Health, transformation occurred initially at one primary care site and then was applied to the other clinics, including mine. Initially, we had to accept what others thought best without having direct input. Transformation was accompanied by a lot of medical home jargon that at times felt unconnected to our daily work. To Group Health's credit, 2011 has been dedicated to engaging providers and staff at the local clinic level before committing to any further medical home changes.

ES: Making the medical home a long-term sustainable practice relies heavily on controlling the panel size and improving teamwork in the clinic. At the start of the pilot, my panel was created by accepting patients in transfer from two other providers. The goal was to decrease panel sizes across Group Health to approximately 25% below the pre-medical home size. Over the last several years, panel sizes have crept 10% above this target. Providers agree that this has been the difference between sustainability and burden. Our support staff also feels this crunch, and our ability to effectively work as a team is affected by competing demands.

Though the balance seems tipped in the wrong direction now, I still feel that at the end of the day I have made a connection with my patients while providing very good care. Fortunately, the organization has expressed a commitment to anticipatory hiring of new providers to stay ahead of the growth—and they have no shortage of applicants who are interested in practicing here. The challenge is to keep pace in economic hard times.

JGIM: How specifically can an organization demonstrate the kind of commitment needed to further the transformation?

ES: Now that the basic changes for the medical home have been implemented, I think the organization should allow each clinic to mold the model to fit the specific needs, skills, and resources of that clinic. In our clinic, we are having trouble keeping up with the sheer volume of work due to our being down two physicians for the past 4 months. Hiring of new primary care physicians needs to stay ahead of the growth. If physician hiring lags behind organizational growth, physician burnout will occur no matter how good the care model.

CM: As an organization, Group Health made a large financial and emotional commitment to the initial transformation process. And I think we nailed it. The entire pilot clinic staff was engaged, the financial resources were made available to make the changes, and an exceptional research team was ready to evaluate the process. It is difficult to overcome what I call the "Kibbutz phenomenon," where the original change agents are more successful than the next generation because they bring that initial passion and creativity of doing something idealistic and innovative.

I believe any clinic could successfully transform itself by setting up a team made up of a front desk person, MA, nurse, provider, and administrator committed to transformation and empowered to change things that don't work locally. You need patients to be involved, too. At Group Health, there was a large commitment to implement the transformation at clinics but not necessarily at the level of the local teams. The result is that buy-in has been slow.

Recently, "Front Line Improvement" teams made up of two providers, a nurse, a complex case manager, a medical assistant, and a pharmacist have been working to address common procedural problems in the clinic. They have been given the power to work with the entire clinic to make changes to improve processes. Indeed, processes have changed in the last few months, and I have noticed greater

staff buy-in. In my mind, this is part of the transformation process and empowers individuals.

JGIM: Any concluding remarks?

CM: A front desk team member told me that "reengineering changed her life." Her sincerity was striking. She knew, as did I, that her contribution helped make our transformation successful. Group Health patients are overall very satisfied. But there has been some frustration and a sense that there are never-ending requests of teams to make changes. With the new Front Line Improvement approach and the focus on changes that are front-of-mind to local teams, I think continued health improvements, cost savings, and staff engagement will occur.

ES: The first 3 years of the medical home were very inspiring to all of us at the pilot clinic. We all felt that health care was being reborn. We were able to mold a medical home from a few basic tenets, and the resulting product was well received by patients, support staff, and the medical staff. The energy and enthusiasm in the clinic were palpable—this was the way we were taught to practice medicine. I think that as the medical home and related initiatives were rolled out to all the clinics, the work now feels more onerous and less rewarding. Growing pains in the organization have pushed panel sizes too high. Once again, providers are feeling more stress and less reward in their daily work. Group Health maintains its commitment to the medical home, and I believe future success will depend upon individual clinics regaining more control over how the medical home works best for them. This means having the ability to shape some of the standard elements to meet the local needs of our patients and ideas of our staff. All in all, despite the current challenges, I feel the medical home is the future of primary care and I cannot imagine practicing in any other setting.

EPILOGUE

This interview has focused on the experiences of two veteran primary care physicians in a system that has devoted considerable resources to develop the PCMH[2, 3]—lengthening the visit template, reducing panel sizes and adding staff to support clinical teams. How applicable to other health-care systems is this experience? One lesson of the Group Health experience is that for primary care to achieve its potential, local teams need empowerment and investment. Simply expressing principles and proposing a model will not achieve the results without adequate resourcing to accommodate the new work. A major take-home lesson from the 2004 SGIM Task Force on General Internal Medicine[4] was that simply endorsing primary care principles without a workable plan inevitably falls short.

Just asking primary care physicians and teams to work smarter and harder will not succeed if the work is designed around short visits based on fee for service payment. The PCMH needs adequate resources to allow time for patients to connect with their care teams and to extend that connectivity across the continuum of care. The evaluation of the medical home pilot at Group Health was valuable not just for showing reductions in cost and improvements in quality and satisfaction, but also to establish a basis for needed investments.[2] However, what is feasible in one setting may not be in another. While available resources will vary considerably, simply relying on existing resources and the same payment systems will not produce change. Reorganization of work and financing is essential.

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