The Road to Excellence for Primary Care Resident Teaching Clinics

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Abstract

Primary care residency programs and their associated primary care clinics face challenges in their goal to simultaneously provide a good education for tomorrow's doctors and excellent care for today's patients. A team from the Center for Excellence in Primary Care at the University of California, San Francisco, conducted site visits to 23 family medicine, internal medicine, and pediatric residency teaching clinics. The authors found that a number of programs have transformed themselves with respect to engaged leadership, resident scheduling, continuity of care for patients and residents, team-based care, and resident engagement in practice improvement. In this Commentary, the authors highlight the features of transforming programs that are melding inspiring resident education with excellent patient care. The authors propose a model, the 10 + 3 Building Blocks of Primary Care Teaching Clinics, to illustrate the themes that characterize transforming primary care residency programs.

In this era of primary care turmoil, we are assaulted by woe-filled tales published in leading journals of dysfunctional teaching clinics with frustrated patients and unhappy residents.[1,2] In primary care residency settings, teaching practices face daunting obstacles as faculty and trainees navigate daily challenges.

Yet all is not bleak. Shining examples of outstanding teaching practices are beginning to illuminate the landscape. This Commentary offers a glimpse into the features of primary care teaching clinics undergoing this transformation.

It is well known that faculty physicians and resident learners often spend only one to two half-days per week in traditional teaching clinics, undermining continuity of care for patients and learners. Creating stable teams is difficult as physicians are mostly away from the clinic. Access to care is difficult for patients, who may not be able to reach anyone who knows them and who is able to address their issues. Medical students rotating through primary care teaching clinics may experience daily dysfunction, causing many to abandon thoughts of a primary care career. Moreover, a "training gap" exists between the inpatient focus of traditional residency programs and the reality that most health care occurs in the outpatient setting.[3]

We heard from a faculty preceptor during a recent site visit:

> When I started in the clinic, there was chaos. There were too many patients and we couldn't take good care of them. The culture of leadership was, "Clinic it is what it is and there's nothing we can do about it"…. [The residents] always had someone sicker in hospital they needed to go back to.… Clinic was leftovers—the action was in the hospital.

To understand the journey toward transformation in residency programs, our research team at the Center for Excellence in Primary Care at the University of California, San Francisco conducted site visits between March 2013 and May 2015 to 23 family medicine, internal medicine, and pediatrics primary care teaching clinics and their associated residency programs across the United States. We found a number of residency programs demonstrating that *good education for tomorrow's doctors requires excellent care for today's patients.*

The framework for analyzing the information collected during the site visits is based on the 10 Building Blocks of High-Performing Primary Care.[4] We used a detailed site visit guide including interviews with residency and clinic leaders and observations of clinic staff and clinicians, including residents. Site visit reports were analyzed to identify themes, leading us to add 3 additional resident-related Building Blocks and to propose a 10 + 3 Building Blocks of Primary Care Teaching Clinics model (Figure 1).

In this Commentary we focus on the five Building Blocks that most clearly illuminate the difference between traditional and transforming programs.

Engaged Leadership

Some residency programs visited were found to have a top-down leadership culture with little engagement of frontline clinicians, residents, or staff. Mission statements are written, but residents and staff do not see or discuss them. Residency program leadership and clinic leadership work in silos, often creating tension between resident training and patient care.

Transforming programs have engaged leadership with the residency director and clinic medical director working as inseparable partners, meeting and jointly agreeing on concrete goals—for example, "80% of patient visits to residents will be with that resident's patient rather than another resident's patient." One clinic created a leadership body with the clinic management

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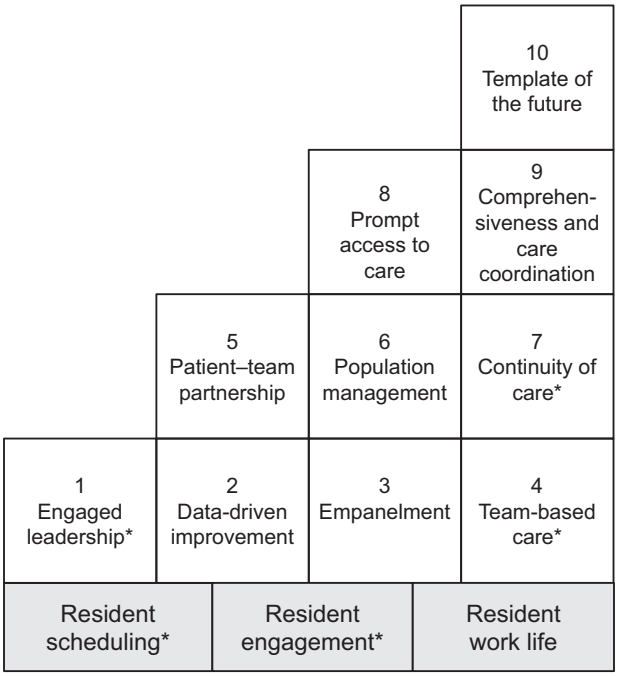

Figure 1 10 + 3 Building Blocks of Primary Care Teaching Clinics. Expanding on the 10 Building Blocks of High-Performing Primary Care,[4] the authors propose 3 additional Building Blocks (shaded boxes) gleaned from site visits conducted by the University of California, San Francisco Center for Excellence in Primary Care at 23 family medicine, internal medicine, and pediatrics primary care teaching clinics and their associated residency programs across the United States, March 2013 to May 2015. Asterisks indicate the 5 Building Blocks that are the focus of this Commentary.

team and residency leadership team meeting together weekly to iron out the inevitable tensions between the education and patient care missions. For example, "Should residents ever be scheduled to work in both the hospital and the clinic on the same day?"

Several transforming clinics provided leadership training to the entire clinic. One clinic implemented weekly meetings of a practice improvement team, which included one management team representative, two residents, two frontline clinicians, a nurse (RN), a medical assistant (MA), a receptionist, and two patient representatives nominated by clinic staff. The improvement team rotated the meeting chairperson every two months so that every member could be mentored in leadership skills. Improvement team members brought to the agenda issues from their frontline colleagues and went back to tell their colleagues what took place in the meetings.

Resident Scheduling

How residents' time is scheduled may be the most important factor determining how well a teaching clinic performs. For some clinics visited, inpatient rotations trump clinic time in the scheduling process. Residents run from morning inpatient work to afternoon clinic, which creates stress and prevents them from focusing fully on either responsibility. One residency director said, "For most residents, forming continuous healing relationships in this setting is a fantasy."

Transforming clinics offer a variety of scheduling solutions. Some increase resident clinic time to 30% of total residency time. These clinics are moving from "hospital first, clinic second" toward "clinic first," prioritizing ambulatory teaching and patient care.

One clinic implemented the two-week mini-block, with monthlong blocks divided into two weeks of inpatient time and two weeks of clinic time. During inpatient weeks, residents did not attend clinic, and during ambulatory weeks they were not in the hospital. Resident stress created by running from hospital to clinic was eliminated, and patient continuity had increased by 35% because residents were not away from clinic for more than two weeks.

Another clinic pioneered the "long block," with residents spending 12 consecutive months exclusively on ambulatory rotations, including three primary care clinic sessions per week plus daily responsibility for their patient panels via phone and electronic medical record inbox messages.[5] Residents experienced an authentic 12-month immersion into primary care. One faculty physician said, "For the first time the clinic was the most important place for the residents."

At one clinic, second- and third-year residents spent 46% and 63% of total time in clinic, respectively. Scheduling had been elevated to a science, with a "scheduling bible" detailing the rules that schedulers follow. Each year an agreement was made among hospital, primary care, and specialty services on an overall yearlong schedule for each resident and faculty member. The residency operations manager and clinic practice manager then worked out the details, meeting almost every day, prioritizing patient and learner continuity.

Continuity of Care

Continuity of care is associated with improved preventive and chronic care, higher patient and clinician satisfaction, and lower costs.[6] It is a strong component of the patient–clinician relationship and is key to the educational value of teaching clinics.

Some clinics we visited attempt to schedule patients with their very part-time resident or faculty physician, but during the frequent times when that physician is not available, patients are scheduled with any clinician on that physician's team. Because teams may include 10 to 15 clinicians, continuity with the team has little meaning for patients. In clinics without functioning teams, patients report that they see different clinicians and staff almost every time they come to clinic. Often, continuity is not measured and the problem remains hidden. Transforming teaching clinics set goals of 80% for continuity of care from both the patient and resident perspective. These practices achieve high continuity rates by increasing the amount of time residents spend in clinic, minimizing the intervals between resident clinic sessions, and forming smaller teams so that patients are able to see 1 of 2 or 3 clinicians for

nearly all their visits. One transforming clinic had stable teams, each containing 6 clinicians—faculty, residents, and a midlevel provider. If the front desk was not able to schedule patients with their resident or faculty physician, patients were scheduled with the full-time nurse practitioner or physician assistant on the team. Patients saw 1 of 2 providers on their team—their personal physician or the team midlevel—78% of the time. Residents in the "long-block" clinic nearly always saw their own patients during the 12 ambulatory months. Previously, patients saw an average of 7 different clinic providers per year. After this model was implemented, 70% to 80% of residents' patient visits were with their own resident physician. Moreover, each team had an RN who was a continuity figure; team RNs knew and were trusted by many patients on their team's panel.

In another transforming clinic, residents—who were in clinic 30% of their residency time—alternated one week on inpatient rotations with one clinic week such that they were not absent from clinic more than seven days at a time. Patients were scheduled with their resident physician or a resident practice partner on the same team. Continuity for first-year residents was approximately 80%, and for second- and third-year residents it was 60% to 80%.

Team-Based Care

Some clinics we visited create teams, but the teams are large and invisible to patients. Residents and staff are often moved to another team for staffing reasons, with team stability a low priority. MAs, working with different clinicians on different days, are underused and frustrated. Nurses spend their days phone-triaging patients or plowing through unending inbox messages. Residents and faculty feel a lack of team support in caring for their complex patients.

The transforming clinics we visited view team-based care as necessary to improve access and quality while reducing clinician stress. These goals are addressed through the mantra "share the care"—training nonclinicians to provide care independently, within their scope of practice, and creating expanded team roles to provide support for clinicians.

Transforming clinics create stable teams. Residents consistently work with their team MA or nurse, allowing them to learn the details of implementing "share the care." In one transforming clinic, residents stayed on their team during their entire residency, turning a large impersonal clinic into a small comfortable home with two faculty, three residents, one nurse, and two MAs. Faculty and residents worked with the same MA 75% to 80% of the time. One MA added, "We try to keep continuity for the MA and the provider, but also for the patient."

Crucial to the implementation of stable teams is the creation of a small core faculty with a faculty member leading each team. One clinic formerly had 40 faculty preceptors in clinic one half-day per week; at the time of our site visit, the program had a small core of 14 clinical faculty, each having three to five patient care sessions plus one to two precepting sessions per week. The clinic had become the center of professional life for these faculty, who—in contrast with very part-time faculty—were engaged in making the clinic work well for residents and patients.

In several transforming clinics, teams are colocated in an open space ("pod") with, for example, three physicians sitting next to their three MA "teamlet" partners and the team nurse instantly available to support the three MA teamlets. Transforming clinics create standing orders empowering nurses and MAs to independently assume responsibility for appropriate clinical functions. Residents coordinate care for their patient panel with empowered team members.

Resident Engagement

In some residency programs we visited, education about how to work in high-performing primary care is didactic and theoretical rather than experiential. Residents are expected to choose quality improvement projects, but these are not integrated within the framework of clinic priorities. Thus, a large number of quality improvement projects are frequently short-lived pilots, not lasting beyond the resident's tenure in the clinic.

Transforming clinics focus on training residents to become drivers of primary care transformation. These clinics have implemented many of the Building Blocks (Figure 1), and residents learn to become primary care leaders in three ways: by participating in excellent primary care during their own clinic sessions, through educational curricula on practice transformation, and through active engagement as leaders of clinic improvement.

In one transforming clinic, residents were taught the foundations of practice transformation during a three-year curriculum. First-year residents attended three intensive teaching months including an introduction to the patient-centered medical home. Second-year residents have five to six clinic sessions per week and relate their clinic experience with the academic practice improvement curriculum. Resident quality improvement projects last through their third year, and third-year residents are immersed in a medical home leadership month. By graduation, residents are expected to have strong skills in quality improvement tools, population management, team-based care, the use of registries, coordination of care, and change management.

In another clinic, leadership training was provided through hands-on experience —the clinic is the curriculum. All residents co-led a practice improvement project with their multidisciplinary clinic team, the same team members they worked with side by side every day. Moreover, residents were empowered as change agents at the health system and state levels. Third-year residents were required to serve on a board of directors for the clinic or hospital and were involved in clinic leadership meetings. Residents learned legal patient advocacy skills, wrote resolutions for the state medical association, testified before the state legislature, and wrote several bills that became state law. One resident echoed that the program "teaches us that being a physician is not just about providing patient care, but also about being a leader and advocate."

Conclusion

Residency programs have traditionally been oriented toward inpatient teaching, with residents learning clinical skills by caring for patients at times of serious acute illness

or chronic illness exacerbation. As little as 10 years ago, the value of ambulatory preventive care and longitudinal management of chronic conditions had not been fully acknowledged in medical education. Thus, it is not surprising that many family medicine, internal medicine, and pediatric residency programs continue their traditional orientation and are only beginning to concretely implement their desire to meld resident teaching and excellent primary care. In 2010, Americans made 600 million primary care visits compared with 35 million hospital admissions.[7] Yet in traditional primary care residency programs, the hospital is still first, the clinic second.

A powerful movement—reflected in the 10 + 3 Building Blocks (Figure 1)—is under way to transform residency teaching programs and their associated clinics. Inspired by leadership, these programs have created high-functioning teams, consistent resident schedules to prioritize continuity of care, and resident engagement in practice transformation. In addition, learners are increasingly enjoying their clinic days and becoming enthusiastic about primary care careers.

Of the transforming teaching practices we visited, many are based in the community rather than within academic medical centers. Federal Teaching Health Center and alternative graduate medical education funding sources liberated several of these programs from reliance on resident inpatient obligations, suggesting that graduate medical education payment reform can help to spread primary care teaching clinic transformation.[2] Though the challenges facing teaching practices are formidable, our site visits demonstrate that some programs are successfully merging excellent patient care with inspiring resident education. To attract medical students and residents to primary care careers will require that many more training programs undertake this transformational journey.

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