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Continuity of Care in Residency Teaching Practices: Lessons from "Bright Spots"

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ABSTRACT

Continuity of care is a challenge in primary care residency teaching clinics. Resident physicians have competing inpatient and outpatient responsibilities and often spend only 1 to 2 half-days per week in the clinic. Their clinic schedules are often pieced together after the needs of inpatient and specialty rotations are met. Similarly, faculty clinicians often balance limited clinic time with teaching, research, or administrative responsibilities. Seeking approaches to improve continuity of care, we visited 23 internal medicine, family medicine, and pediatric residency clinics across the US. This article highlights strategies to optimize continuity of care pioneered by 3 "bright spot" residency teaching clinics with high-continuity performance. The strategies include adopting a strong continuity culture and patient scheduling algorithms that prioritize continuity, appointing a team continuity anchor, and/or reorganizing resident and faculty schedules to maximize continuity. We hope that these perspectives can assist residency teaching practices to improve continuity of care for their patients.

INTRODUCTION: THE CHALLENGE

Continuity of care is a fundamental pillar of primary care.[1] Continuity of care is particularly important in primary care residency teaching clinics, which provide a substantial proportion of care for underserved communities[2] and shape the priorities of the next generation of primary care physicians (PCPs).

To learn how to optimize continuity of care throughout their careers, primary care residents ideally experience excellent continuity of care as learners. Yet teaching clinics are precisely the institutions most challenged to provide continuity. The two missions of teaching clinics—excellent resident education and patient-centered care—are often in conflict. To become PCPs, residents must rotate through inpatient, ambulatory, and specialty services; they spend relatively little time in their primary care clinic. Patients, in contrast, want and deserve to have their PCPs available much of the time. This perspective features examples of primary care residency clinics that have made progress in overcoming this dilemma.

Continuity of care from the patient perspective is defined as the percentage of a patient's primary care visits that are with the patient's personal PCP. Although alternative visit types such as patient portal encounters would ideally be included in continuity measurement, this is not generally done. Continuity is associated with improved chronic illness management and preventive care, increased patient and clinician satisfaction, fewer Emergency Department visits and hospitalizations, and reduced costs.[3-5] For Medicare beneficiaries with chronic conditions, a small increase in continuity is associated with sizeable reductions in complications and costs.[6]

Another lens on continuity of care comes from the PCP (faculty or resident) perspective: The percentage of a PCP's visits that are visits with patients on the PCP's panel.[7] Continuity from the resident perspective—optimizing the ability of residents to see their own patients—can improve the quality of the resident experience by increasing care efficiency and building meaningful connections with patients.[7-9] Residents report that lack of continuity with their patients is associated with increased rates of medical errors.[10]

In many primary care residency programs, resident clinic schedules are subordinate to the needs of inpatient and specialty rotations.[11] Furthermore, in many residency programs, faculty spend little time in clinic, prioritizing research responsibilities and other academic obligations, further compromising faculty-patient continuity.[12] In the words of several medical educators, "Continuity of care between a patient and a physician is a core aspiration. However, we rarely achieve it in residency training."[13]

This article describes how three "bright spot" primary care teaching clinics have achieved excellent performance on continuity of care from the patient perspective. A "bright spot" clinic is a clinic with good performance on clinical, operational, and patient experience measures as well as implementation of a number of requirements of the patient-centered medical home.

METHODS

In 2013, the University of California, San Francisco (UCSF) Center for Excellence in Primary Care created a project team to observe existing internal medicine, family medicine, and pediatric residency programs and their associated clinics, looking for characteristics associated with high-quality patient care and resident

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experience. Between May 2013 and May 2015, team members performed 23 site visits to residency teaching clinics. The 1- to 2-day site visits involved interviews with clinic leadership, residents, faculty, and clinic staff and shadowing frontline clinicians and staff. Details of the site visits and how the 23 clinics were chosen are provided in a 2016 report.[12] From all 23 programs, we requested performance data, including continuity of care metrics. Some follow-up interviews were conducted in 2016 to 2017. The project was reviewed by the UCSF Committee on Human Research and deemed exempt.

Nine of the 23 clinics measured continuity of care from the patient perspective, which ranged from 21% to 81% with a median of 53%. From the 9 clinics with continuity data, we picked the 3 "bright spot" clinics with the highest performance on continuity of care from the patient perspective, to describe the strategies that these clinics use to achieve their results.

RESULTS: OVERCOMING THE CHALLENGE

Three sites achieved continuity of care rates from the patient perspective of 70% or greater at the time of the site visits. These sites were the primary care teaching sites of the University of Cincinnati Internal Medicine Residency in Cincinnati, OH (81%); University of North Carolina Family Medicine Residency in Chapel Hill, NC (71%); and University of Massachusetts Medical School-Baystate Internal Medicine Residency in Springfield, MA (74% continuity with 1 of 2 clinicians).

At the time of our site visits, these practices used three strategies to improve continuity of care: 1) adopting a strong continuity culture and patient scheduling algorithms that prioritize continuity, 2) appointing a team continuity anchor, and/or 3) reorganizing resident and faculty schedules.

Adopting Strong Continuity Culture and Scheduling Algorithms

University of North Carolina Family Medicine Residency has achieved an average continuity rate from the patient perspective of 71% at its Family Medicine Center. The program uses a traditional scheduling model with 4-week rotations, scheduling residents and faculty to be in clinic almost every week. The clinic has adopted a strong culture of continuity, with continuity of care metrics tracked and displayed monthly for each clinician, and high continuity rates are expected of all faculty and residents.

To prioritize both access and continuity, each physician (faculty and residents) has approximately one-fourth of appointment slots that are opened only a few days early. These slots are available only to patients of that physician. Staff members who answer the phones cannot give those slots to another physician's patients unless the slots are still available on the day of the appointment. This practice promotes continuity from both the patient and the PCP perspective.

Appointing a Team Continuity Anchor

At Baystate's internal medicine teaching clinic in Springfield, MA, continuity from the patient perspective with 1 of 2 clinicians has exceeded 70% for several years. The clinic uses a continuity team anchor model to promote continuity of care. The front desk is trained to make appointments either with a patient's PCP or with the full-time advanced practice clinician (nurse practitioner or physician assistant) on the PCP's team. The advanced practice clinicians act as team continuity anchors. They have only small patient panels of their own because their main role is to see patients of unavailable residents on their team, ie, to comanage the panels of their team's resident physicians. This approach increases the continuity experience for patients, who are seen by 1 of 2 team clinicians who are in frequent contact with one another. Residents and the advanced practice clinician on their team are in close face-to-face communication (because their workspaces are located right next to each other), and they share electronic medical record notes. The patients know both clinicians (resident and advanced practice clinician), and both clinicians know the patients.

Reorganizing Resident and Faculty Schedules

Two of the sites use unique scheduling models, with the goal of improving continuity. Baystate uses a 2 + 2 (2-week miniblock) schedule.[14] Monthlong blocks are divided into 2-week inpatient and 2-week ambulatory care miniblocks. During inpatient weeks, residents do not attend clinic, and during ambulatory weeks they are not in the hospital. Residents are not away from the clinic for more than 2 weeks at a time and have sufficient appointments during their 2-week ambulatory block to meet the appointment needs of their patient panel. Patients needing urgent appointments when their resident PCP is on the 2-week inpatient rotation are scheduled with the advanced practice clinician on the resident's team as noted earlier.

In 2006, the University of Cincinnati Internal Medicine Residency instituted the "ambulatory long-block" model. Residents provide purely ambulatory care with no inpatient rotations for months 17 to 29 of residency.[15] Continuity from the patient perspective rose as high as 81%, and continuity from the PCP perspective increased to 71%. During long block, residents have 3 primary care clinic sessions each week, spending other times in ambulatory specialty rotations. Every day the residents must answer patient and staff messages, communicate with team registered nurses, and follow-up on their patients' care coordination issues. The 3 continuity (primary care clinic) sessions are spread across the week, consistent every week, and have sufficient appointments to match patient demand. To enhance continuity beyond the residents' 1-year long block, patients stay on the same care team for years; the team registered nurse functions as a longitudinal continuity anchor when the resident PCP leaves.

DISCUSSION: LESSONS FROM "BRIGHT SPOT" CLINICS

Residency teaching practices with high continuity of care metrics employed the three strategies described here, strategies also instructive for nonteaching practices. A key take-home message from these three "bright spot" examples is the need for primary care practices to regularly measure, track, and discuss continuity of care metrics and to adopt a clinic culture embracing the importance of continuity. Prioritizing continuity into scheduling algorithms for patient appointments improves continuity while maintaining access.

A powerful strategy to enhance continuity from the patient perspective is to build teams with a full-time continuity anchor, as Baystate has done. In that clinic, staff members answering phones are trained to schedule patients to see either their resident PCP or the advanced practice clinician on their team. In Baystate's experience, continuity with one of two people (PCP or team advanced practice clinician) who are in close contact with each other is meaningful for patients.

In recent years, some residency programs have promoted "x + y" block scheduling models that separate inpatient and outpatient duties, with x connoting inpatient weeks and y standing for ambulatory weeks.[16] The 2 block models we described here—2 + 2 miniblock and long block—promote continuity of care because residents are away from clinic only for short intervals, allowing residents to see their patients in a timely fashion. Their clinic presence is also consistent and predictable, as opposed to having certain months with many clinic sessions and other months with few sessions. Moreover, clinicians with more monthly half-day clinic sessions have higher continuity rates.[7]

Our findings have several limitations. Continuity of care varies from patient to patient, from clinician to clinician, and from month to month; our data are a time-limited snapshot. Effective strategies to optimize continuity must be sustainable, and we did not follow our sites longitudinally. Additionally, our three sites were not selected in a representative manner, and other teaching clinics with good continuity of care metrics likely have other useful strategies.

CONCLUSION

Primary care practices are challenged by the growing phenomenon of part-time physicians, with residency teaching practices the most extreme examples. Practices can make strides in achieving high continuity of care rates by implementing one or more of the strategies described here. Teaching practices can overcome the dilemma created by the often divergent needs of resident education and patient care. ❖

Disclosure Statement

The author(s) have no conflicts of interest to disclose.

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Sensible

Men are men before they are lawyers, or physicians … and if you make them capable and sensible men, they will make themselves sensible lawyers or physicians.

— John Stuart Mill, 1806-1873, British philosopher, political economist, and civil servant