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Models of Faculty Involvement in Primary Care Residency Teaching Clinics

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Abstract

Through site visits to 42 teaching clinics in family and internal medicine residency programs during 2013–2018, the authors observed a spectrum of faculty involvement. In this Perspective, they describe and share examples of the 3 faculty models they identified. Some programs have a small, focused faculty whose members spend at least 5 half-day sessions/week seeing patients or precepting residents in the clinic. Others have a large, dispersed faculty with many faculty physicians who spend 1 or 2 half-day sessions/week in the clinic. Some use a hybrid model with a small focused faculty group plus other faculty with little clinic time. The dispersed model was observed only in university-based residencies and the focused faculty model was commonly seen in community-based residencies. While faculty in both settings must juggle multiple responsibilities, several studies have confirmed the value of having faculty committed to ambulatory care and teaching. In site-visit interviews, clinic leaders indicated focused faculty play an important role in teaching clinics by championing clinic improvement, improving continuity of care, and enhancing the resident experience. Faculty physicians who spend substantial time in the clinic know the residents' patients, provide greater continuity of care, anchor clinic teams, and coordinate coverage for residents when they are on other rotations. Clinic and residency program leaders generally favored a shift toward a focused or hybrid model. The authors view the hybrid model as a practical way to balance the challenges of having a focused faculty with the multiple responsibilities facing university- and community-based faculty.

Residency programs have two equally important missions: educating tomorrow's doctors and caring for today's patients.[1] These missions appear harmonious, yet they often conflict in primary care teaching clinics. While patients want their doctors to be available all the time, residents' responsibilities at other sites limit their time in the clinic. Faculty physicians also have multiple commitments that pull them away from ambulatory care and teaching, including inpatient responsibilities, preparation of presentations for students and residents, administrative duties, and research. As a result, many teaching clinics must juggle complex schedules of residents and faculty, and they struggle to improve care continuity and access for patients. Between 2013 and 2018, our team from the University of California, San Francisco (UCSF) Center for Excellence in Primary Care conducted site visits to 42 teaching clinics associated with internal medicine and family medicine residency programs in the United States. As described in our 2016 report published by the Association of American Medical Colleges,[1] the 2-day site visits involved interviews with clinic leaders (medical directors and residency program directors), residents, faculty, and clinic staff as well as observations of front-line clinicians and staff performing their daily work. Integral to the site visits were discussions with clinic faculty and collection of data about the number of faculty physicians at each clinic and the number of half-day sessions they worked in the clinic. In this Perspective, we describe the 3 different models of faculty involvement in primary care teaching clinics that we observed, and we comment on the benefits of, and barriers to, moving toward more full-time faculty presence in the clinic.

Three Faculty Models

Reviewing site-visit reports for the 42 clinics, we found a spectrum of faculty involvement. At one end is the focused faculty model, with a small number of faculty physicians who work in the clinic at least half time, and sometimes close to full time, caring for patients and precepting residents. At the other end is the dispersed model, with a large number of faculty physicians who work 1 or 2 half-day clinic sessions per week. Between these is a hybrid model, with a small focused faculty group plus other faculty who spend little time in the clinic. We also explored the extent to which these 3 models are associated with residency programs within university-based medical centers (academic medical centers) or community-based health systems.[2] Our intent during the site visits was to identify and describe patterns of clinic functioning; we did not conduct quantitative research. Therefore, we did not assess how these faculty models were associated with clinic performance.

To illustrate the 3 models of faculty involvement we identified, we share examples from our site-visit reports (Chart 1).

Focused faculty model

The focused faculty model was seen in 17 (40%) of the 42 sites we visited. It was more commonly found in community-based residencies–that is, those not housed within university-based medical centers.

Program A is a community-based family medicine program with 11 faculty physicians, each spending 6–8 half-day sessions per week in clinic seeing their panel of patients or attending. One faculty physician explained, "We are here all the time; if residents need anything, we are around. Clinic is our home—we are committed to how the clinic runs. We are a core group that love

working together." This clinic reported high performance on resident satisfaction and clinical metrics.

Program B moved from a dispersed model to a focused faculty model. Under the dispersed model at this community-based internal medicine residency, many attendings had 1 patient care session and 1 or 2 precepting sessions in the teaching clinic per week. One faculty physician recalled that faculty and residents worked with different staff members on different days, residents often saw other residents' patients, and waits for appointments could approach 6 months. To address this situation, the residency's leadership invited faculty to commit to teaching and practicing in either ambulatory or inpatient care. Some faculty became hospitalists while others chose to be ambulatory physician-educators. New faculty, with a flair and love for ambulatory care and teaching, were recruited. The clinic leaders reported that under the focused faculty model, in which 12 faculty physicians have up to 6 patient care and 2 precepting sessions per week, the resident experience and continuity of care have improved.

Program C, a family medicine residency within a university-based medical center, trains residents at 4 small community-based sites rather than 1 large clinic. Each site has 5-8 faculty physicians who, on average, see patients 4-5 half-day sessions per week and precept 2 sessions per week. Full-time faculty start at 8 half-day clinic sessions, but over time they may reduce their clinic time to take on more academic responsibilities. Clinic medical directors reported trying to resist the academic pressure pushing faculty to reduce their clinic time. Because each site has a faculty with significant patient care time and few residents, most patient visits are with faculty physicians rather than residents, which allows higher continuity of care.

Dispersed model

Nine (21%) of the 42 sites we visited used the dispersed model of faculty involvement, in which a large number of faculty physicians spend a small amount of time in the teaching clinic. We observed this model only in university-based programs, as in the examples below; none of the community-based programs exhibited the dispersed model.

Program D, an internal medicine residency within a university-based medical center, has 100 residents and over 50 faculty physicians. Faculty spend little time in the teaching clinic (1–3 sessions per week). Teams are large, and clinic staff are often moved from one team to another. There are no team meetings to discuss performance metrics because faculty and resident schedules make attendance inconsistent. Continuity of care is poor, and patients may wait months to see their primary care physician.

At Program E, a family medicine residency at a large university-based medical center, about 30 faculty physicians see patients and precept at the teaching clinic. For most faculty, clinic is a minor part of their departmental responsibilities (2–3 sessions per week). Twenty-four residents rotate through the clinic, often spending only 1 or 2 half-day sessions there per week. The large number of physicians makes it difficult to optimize continuity of care and build stable teams. To address these problems, the residency leadership reported they are moving the clinic in the focused faculty direction by requiring faculty to see patients at least 2 half-days per week in addition to precepting. Faculty are expected to address their in-box messages every day, and junior faculty are encouraged to contribute more clinic sessions.

In a variant of the dispersed model, Program F's faculty physicians see their patients at a different site from the clinic where they precept residents. In this university-based internal medicine residency, about one-third of faculty members spend up to 7 sessions per week in

ambulatory care and teaching. Most of these sessions are for patient care at the non-teaching faculty practice; 1 to 2 sessions are spent precepting in the teaching clinic . From the perspective of the teaching clinic, this is a dispersed model.

Hybrid model

Teaching clinics with some focused faculty physicians and other faculty physicians who are in the clinic only 1-2 sessions per week have adopted the hybrid model of faculty involvement. Sixteen (38%) of the 42 sites we visited utilized this model.

At Program G, an internal medicine residency within a university-based medical center, most faculty precept residents and see patients in the teaching clinic on a limited basis (1-3 sessions per week). However, 2 of the faculty physicians see patients or precept 5 or more half-day sessions per week, providing some stable faculty presence in the clinic. The clinic is faced with strong academic pressure for faculty to "buy their way out of clinic" by securing research grants or other academic roles. The clinic leaders expressed concern that this pressure could push the program back toward a dispersed model.

Residents at Program H, a university-based family medicine residency, train at one of 4 small sites. Each clinic has a few focused faculty physicians who see patients 4 half-days and precept residents 1-3 half-days per week. Each clinic also has some community preceptors who teach residents 1 session per week.

Faculty Involvement in Setting Clinic Schedules

We observed another element of faculty involvement in teaching clinics: the degree to which faculty physicians have autonomy in scheduling their clinic time. In some residency programs, faculty create their own schedules, which may result in clinics having 2 faculty physicians one

day and 8 the next. Other programs enforce firm rules around faculty schedules so that clinics can count on a certain number of physicians being present.

One such approach is "level loading," or requiring that the same number of physicians (faculty plus residents) be in clinic each half-day session. Faculty are asked to identify a range of half-days when they are available for clinic time, which allows clinic leaders the flexibility to schedule the same number of physicians each session. Another approach is the access-centered rule adopted by Program D to determine whether faculty or residents are allowed to cancel a clinic session for a late-scheduled meeting or speaking engagement. Previously, faculty could cancel without asking for approval. Now, a faculty physician's request to cancel is approved only if the clinic has adequate capacity that day. In these two ways, a balance is struck between faculty autonomy in scheduling their time and the scheduling needs of the clinic.

Focused Faculty: Benefits and Barriers

During our site visits, clinic medical directors voiced benefits of having a focused faculty presence in the clinic, including the following:

- A focused faculty anchors and allows for stable clinic teams, so residents and staff are not shuffled from one team to another
- A focused faculty knows and can provide continuity of care for residents' patients as well as coordinate coverage for residents when they are on other rotations.
- Focused faculty physicians serve as role models for residents, demonstrating careers in ambulatory care and teaching.
- Focused faculty physicians know the clinic's resources and referral options, making them more effective preceptors.

- When faculty physicians are present in clinic for much of their professional lives, they do not tolerate clinic dysfunction. Rather, they become anchors of their care teams and champions of quality improvement, population health management, continuity of care, and engagement with residents.

These benefits are supported by the findings of a study of 4 primary care residency clinics: Continuity of care was significantly greater for residents and faculty when faculty spent more time in clinic, and greater continuity was associated with improved diabetes and hypertension control and higher rates of cancer screenings.[3] Resident satisfaction is greater in teaching clinics with a dedicated outpatient faculty committed to ambulatory education.[4] Major predictors of faculty satisfaction include a well-functioning workplace and ability to provide high-quality patient care[5]—attributes we generally found in our visits to teaching clinics with focused faculty. Nevertheless, entrenched barriers inhibit the development of focused faculty models. University-based clinics are often staffed by faculty physicians who have multiple administrative and academic responsibilities. In university-based residency programs, faculty with heavy clinical demands face pressures to obtain research grants and publish articles.[6,7] In a survey of family medicine residency faculty in Pennsylvania, 80% of respondents reported providing inpatient and outpatient care and teaching, illustrating the competing demands facing both university- and community-based faculty.[8] In another survey, 68% of responding internal medicine faculty reported that patient care is the aspect of work they find most meaningful,[9] but academia tends to reward research and teaching above patient care and inpatient over ambulatory services. In addition, clinician-educators are promoted less often than research faculty.[10] These barriers help explain the association between university-based residencies and dispersed faculty for whom ambulatory care and teaching occupy little time. University-based medical centers need faculty

who can contribute in many realms.

Most family medicine and internal medicine residency programs are community-based rather than university-based, with faculty physicians heavily involved in patient care and teaching.[11,12] Yet even in community-based programs, teaching clinics need to compete with inpatient services for faculty time. Achieving a focused faculty model remains a challenge for teaching clinics in all settings.

Conclusion

Residency directors and clinic medical directors whom we interviewed generally felt that a shift toward a focused or hybrid faculty model would be a positive development. They cited the advantages of a small focused faculty or hybrid model over the dispersed model. Teaching clinics with some faculty physicians whose professional lives are centered on ambulatory care and teaching can provide more satisfying experiences for residents and patients. We view the hybrid model as a practical way to balance the challenges of having a focused faculty with the multiple responsibilities facing both university- and community-based faculty physicians.

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Chart 1
Examples of the 3 Faculty Models in Primary Care Teaching Clinics

Program	Program setting	Faculty model[a]	No. of faculty physicians	Sessions per week (seeing patients or precepting)[b]
A	Community	Focused	11	6–8
B	Community	Focused	12	Up to 8
C	University—with 4 community sites	Focused	5–8 per site	6–8
D	University	Dispersed	Over 50	1–3
E	University	Dispersed	About 30	2–3
F	University	Dispersed	24	1–2 (precepting only)
G	University	Hybrid	22 total (2 focused)	Focused faculty: 5 or more
				Other faculty: 1-3
H	University—with 4 community sites	Hybrid	5–6 focused per site plus community preceptors	Focused faculty: 5–7
				Community preceptors: 1

[a]In the *focused faculty model*, faculty physicians work in the clinic at least half time, and sometimes close to full time, caring for patients and precepting residents. In the *dispersed model*, a large number of faculty physicians work 1 or 2 half-day clinic sessions per week. In the *hybrid model*, there is a small focused faculty group; other faculty spend little time in the clinic.
[b]All sessions are half-day sessions.