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OBSERVATIONS

The Community Preceptor Crisis: Recruiting and Retaining Community-Based Faculty to Teach Medical Students—A Shared Perspective From the Alliance for **Clinical Education**

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ABSTRACT

Issue: Community-based instruction is invaluable to medical students, as it provides "real-world" opportunities for observing and following patients over time while refining history taking, physical examination, differential diagnosis, and patient management skills. Community-based ambulatory settings can be more conducive to practicing these skills than highly specialized, academically based practice sites. The Association of American Medical Colleges and other national medical education organizations have expressed concern about recruitment and retention of preceptors to provide high-quality educational experiences in community-based practice sites. These concerns stem from constraints imposed by documentation in electronic health records; perceptions that student mentoring is burdensome resulting in decreased clinical productivity; and competition between allopathic, osteopathic, and international medical schools for finite resources for medical student experiences. Evidence: In this Alliance for Clinical Education position statement, we provide a consensus summary of representatives from national medical education organizations in 8 specialties that offer clinical clerkships. We describe the current challenges in providing medical students with adequate community-based instruction and propose potential solutions. Implications: Our recommendations are designed to assist clerkship directors and medical school leaders overcome current challenges and ensure high-quality, community-based clinical learning opportunities for all students. They include suggesting ways to orient community clinic sites for students, explaining how students can add value to the preceptor's practice, focusing on educator skills development, recognizing preceptors who excel in their role as educators, and suggesting forms of compensation.

KEYWORDS

community preceptors; medical education; clinical clerkships

Background

Medical education in community-based ambulatory settings offers many advantages.¹ Such experiences help ensure that medical students receive patient care experiences to align with medical school content and evolving health care delivery practices.2 Community-based preceptors provide students with more one-on-one mentoring and opportunities for continuity with patients.³ Adequate numbers of patients, work space, and readily available supervision are crucial to prepare learners to work in an increasingly ambulatory health care system.

To that end, community-based preceptors must demonstrate (a) high-quality clinical care; (b) excellence in teaching; and (c) understanding of, and willingness to follow, a medical school's program objectives and assessment requirements. Increasing numbers of students and increasing demands on community-based offices for implementation of electronic medical records, demonstrating quality measures, and meeting insurance requirements for payment have stretched these resources. Therefore, identifying and recruiting preceptors in private practices to serve as teaching sites has become

increasingly challenging in recent years. Without their participation, some medical schools will not have sufficient numbers of preceptors and clinical sites to teach students. More important, the absence of such training opportunities will limit students' preparedness to work effectively with patients who are receiving much of their care in community-based practices. They are a more effective environment to demonstrate the importance of a medical home, the long-term coordination of multispecialty care in individuals with chronic diseases, and the business of medicine.

Medical schools and other clinical disciplines often struggle to identify adequate numbers of community teaching sites, even without applying recommended selection criteria. More than 10 years ago, Irby⁴ cited difficulties in recruiting community-based faculty because the changing medical environment required preceptors to see more patients while complying with increased documentation requirements. A 2013 national survey of all deans of allopathic and osteopathic schools, nurse practitioner programs, and physician assistant programs illustrates the magnitude of this issue. More than 80% of respondents in each discipline were concerned with the quality and quantity of clinical training sites. More than 70% of respondents felt that developing new sites was more difficult in 2013 than it had been 2 years before. Training and orientation of faculty were identified as key barriers⁵ along with real costs associated with lost revenue due to teaching obligations.

In light of the importance of community-based teaching sites and recognizing the crisis in recruiting and retaining community-based faculty, the Alliance for Clinical Education (ACE), representing eight national organizations of core clinical clerkship directors, offers this position statement to (a) define the scope and causes of the crisis and (b) offer practical, evidence-supported recommendations and ideas for recruiting and retaining high-quality community-based faculty and teaching sites. The strategies are designed to assist deans, clerkship directors, teaching faculty, and medical education professional organizations that address the community-based education needs of our students.

Statement of the crisis

For decades, community-based faculty have played a crucial role in educating health professions students. However, expanded class sizes and increasing numbers of other health professions clinical students (e.g., allopathic, osteopathic, and allied health) have increased competition for limited community-based teaching sites.⁶ Preceptors are also becoming increasingly aware of the costs for participating in community-based

clerkship education, including seeing fewer patients and working longer days,⁷⁻⁹ and asking for payment to host students, which is currently done by some osteopathic, international, and allopathic medical schools.^{5,7,8} The prestige and benefits of academic medical center affiliation have become less compelling incentives.9 Additional factors that may contribute to the difficulty of recruiting and retaining preceptors include practice environment changes and changing expectations for preceptors. 10,11

The practice environment issue is evidenced by increased preceptor clinical productivity expectations in an environment with lower operating margins, exacerbating the constraints on teaching time. 12,13 Although self-employed or physician-owned group practices are declining, hospital employed preceptors are becoming more numerous.14 The new office- and hospital-based practice environment commonly features the electronic health record (EHR). EHR implementation has led to additional documentation requirements by agencies such as the Centers for Medicare and Medicaid Services (CMS) and the National Center for Quality Assurance. CMS guidelines limit what students are allowed to document in the EHR, resulting in compliance offices restricting students from assisting in the documentation of clinical encounters, traditionally a perceived benefit of student involvement because of increased clinic efficiency. 15,16 In one recent study, almost half of the clinical faculty felt that using an EHR was burdensome and decreased their enthusiasm for teaching. A majority felt that the EHR did not offer instructional advantages and resulted in decreased teaching time.¹⁷ Consequently, the need for immediate e-documentation to conduct patient care and bill encounters alters the dynamic between clinical practice and teaching. 18-21

A 2011 survey of community-based providers from multiple disciplines reported that physician preceptors most often reported a negative impact of medical student interactions on patient flow, work hours, and income. Further, expectations for preceptors have increased with implementation of Liaison Committee for Medical Education accreditation requirements. These accreditation standards require documentation of educational activities, assignment of students to patients with certain diagnoses, meaningful feedback, and direct observations of patient interactions.²² Preceptors need greater familiarity with educational terminology (e.g., formative and summative evaluation, "competency-based assessment," and "milestones").^{23,24} Such requirements may discourage some faculty uncomfortable and unfamiliar with structured educational and assessment approaches. Nevertheless, more than 90% of physicians reported satisfaction with precepting and 88% planned to continue precepting.9

Strategies to address the crisis

An observational approach was utilized to define the scope of the predicament and offer potential solutions based on evidence in the literature as well as expert consensus. A systematic search of the PubMed database from January 1990 through June 2015 and relevant articles included by the coauthors formed the foundation for our recommendations. One of the authors (BDS) met with small groups of medical educators from Liaison Committee for Medical Education-accredited medical schools during 2014-15 and used a structured interview process to develop a list of examples of how students can add value to practices. In addition, the author met with members of ACE, attendees at the Association of American Medical Colleges Southern Group on Educational Affairs meeting, the board of the Society of Teachers of Family Medicine, the Medical Student Education Committee of the Society of Teachers of Family Medicine, and the Council of Academic Family Medicine. These groups were selected for their national perspective and their experience working with community-based preceptors. After each meeting, an iterative process was used to refine the list of activities.

The following options provide educators in multiple clinical settings a spectrum of methods to integrate students into busy clinical practices, which benefit both the student and the practitioner (summarized in Table 1). These items are in no specific order of priority. The list is intended to be comprehensive and not applicable to all situations. Certain suggestions may be most appropriate for a specific level of learner or a specific curriculum.

Orienting the practice for students

The medical school should ensure that community-based faculty and staff are oriented sufficiently, providing written expectations for the student and community-based faculty and other team members. Ideally this orientation should occur in person at the practice site. Although a web interface may achieve the orientation goals, an inperson visit by the medical school's education team sends a positive message to the practice and enables the team to address issues that arise during the meeting. Updates and ongoing training may be delivered through a web-interface or via e-mail.

To ensure accreditation standards are achieved, advising preceptors and staff to schedule student orientation, as well as midrotation and end-of-rotation feedback, facilitates a smooth and successful experience and may minimize disruption in patient care activities. As part of this orientation, clerkship objectives and medical conditions required for the students should be reviewed. This

Table 1. Strategies and proposed actions.

Strategy to Support Teaching Practice	Proposed Action	Strategy to Implement
Preceptor and Staff Orientation	Practice preparation	Explain program expectations
		Logistics (scheduling), EHR training and access
		Clinic and student profiles
Added Value of Student Involvement	Readiness training	Annual orientation (transition course)
		Segment transitions (clerkship orientation)
	Practice support	Patient registration and screening
		Quality improvement
	EHR interactions	Update problem lists
		Pend orders
	Care coordination	Pre-visit services
		Direct patient care
		After-visit services
	Patient engagement	Patient education
		Thanking patients
Preceptor Incentives	Professional development	Offer/pay for CMEOn site/convenient educator skills development
	Prestige	Including preceptors in school ceremonials (e.g., white coat ceremony,
		graduation)Articles in local newspaperTeaching site plaque for office
	Compensation	If schools can afford some form of compensation it should be
		investigated
Practice Maintenance	Streamlined assessment tools	Mini-CEX
	Practice preparation and ongoing support	Orientations/transition courses to decrease "start up" time once
		student reaches practice
	Maintaining certification	Assisting with quality improvement projects (e.g., data analysis)
		Supporting preparation activities
	Practice marketing	Publicize list of practices that are among the school's teaching
		sitesThanks in local media
Dedicated Time	Longitudinal clerkships	Assign students to clinical sites for longer periods or develop a
	•	longitudinal clerkship track

will help the faculty member optimize the student experience.

Orientation to the clinic is valuable and facilitates students becoming more efficient in the practice regardless of rotation length.²⁵ It is also good practice for the faculty to elicit a student's own goals for the experience when reviewing the clerkship goals. Preceptors and staff should be made aware of scheduling templates that increase efficiency by allowing concurrent visits for the student and preceptor so that the preceptor completes one or more visits while the student conducts basic components of another visit.²⁶

Another important discussion during this orientation session is advanced planning for getting students access to the EHR and other secured areas in the local hospital.¹⁵ Sometimes acquiring identification and password for the EHR takes time. It would be highly beneficial to discuss this process while orienting the clinic to know training requirements and deadlines so the medical school can facilitate the process in advance. This will help the student be prepared on the 1st day in the clinic.

The medical school could request a bio-sketch of preceptors that includes personal information such as hobbies or favorite local restaurants. This will add a personal touch when the preceptor orients the student to the practice. The medical school should be clear about the skills and training that the student has to contribute to care in the practice. Such "job descriptions" can help students quickly become a valuable member of the team. The medical school could also provide the clinic with a biosketch of the student as well. If students are present for 1 month or longer, the medical school could provide business cards for the student or a plaque in the waiting area with the student's name so patients identify the student as a valuable team member.

Preparing students for practice

Communicating expectations. One of the challenges is the successful integration of students into practice settings so that students learn and are assessed while contributing to practice success. Commensurate with situated learning theory wherein students learn best by applying their knowledge, clinical learning and assessment activities should fulfill institutional and clerkship goals and objectives. Preceptors who are familiar with the performance expectations can assess students as they participate in practice activities.²⁷ The more students contribute, are assessed, and receive feedback, the more the preceptor-patient-student team should benefit and integration process should become easier.²⁸

Transition courses. Transition courses before clinical rotations begin are increasingly common. These courses prepare students for clinical rotations by reinforcing communication skills, patient safety and continuous quality improvement, clinical skills, and EHR training. A combination of didactic and applied learning has been used successfully so that students are prepared to contribute to patient care.²⁹

Clerkship orientation. Clerkship-specific orientation promotes student readiness to practice. Student orientation conducted in person and via the web has been reported to be comparably effective, allowing clerkship directors with students at remote sites to connect via online modalities, thus lessening the burden on local community-based faculty.³⁰ Orientation provides a mechanism for introducing clerkship-relevant information and procedures that may not be systematically taught in ambulatory settings and may enhance student satisfaction. For example, skills training in obstetrics and gynecology procedures resulted in improved student perception of, and satisfaction with, the clerkship overall.³¹ Orientation to laparoscopy, increasingly an outpatient procedure, has similarly been reported to improve satisfaction with the surgery clerkship.³² Demonstrating strategies for evaluating children of various ages and developmental stages has been helpful to students starting their pediatrics clerkship.33

Student contribution to clinical practice

Patient check-in. Students can directly contribute to the care of patients in community-based practices and patients generally appreciate students' involvement. 34,35 Students can check in and register patients, giving students a perspective of systems of health care. For example, in pediatric clinics, students can help families complete developmental screening questionnaires or update immunization records or school physical forms. They can counsel patients about smoking cessation, losing weight, and eating healthier, thereby providing some of the anticipatory guidance usually given by the primary care provider.

Patient care. Students can take an active role in all aspects of patient care, preclinic to postvisit.³⁶ Students can also help with EHR documentation¹⁵ components congruent with CMS rules. 37,38 Students can update problem lists, reconcile medication lists, ³⁹ and complete some note elements, including the review of systems, past medical history, family history, and social history. Students can also pend orders and prescriptions and

complete and review after-visit summaries. This serves to facilitate the students' focus on salient issues during the patient interview while ensuring completeness.⁴⁰

Traditionally, students will see patients prior to the preceptor. This allows the student the opportunity to take a history and be able to begin formulating a problem list to diagnose the problem. This is where preceptors state that time is consumed in the clinics, but preceptors can send a student into a room and then go see a patient on their own. By the time the student is done, the preceptor will typically be done and can then staff the patient. This allows for maximum use of time. This is a technique reported by several community pediatricians in Nebraska to one of the authors (GLBD). In-room precepting can also increase efficiency. The student presents to the preceptor in the patient's room, allowing the patient to add any additional information. Patients feel more included in the care and the preceptor does not need to ask as many follow up questions.

After-visit patient follow-up. After the visit, the student can follow up on patient issues and communicate normal test results to patients⁴¹ and can coordinate specialty visits, social work assessments, or other referrals. Students can call patients to assess adherence to the treatment plan, thus reinforcing the relationship between treatment plans and maintenance.³⁵ For example, the student may find that a prescribed medication is not covered by the patient's health insurance and the patient needs help in navigating that system, or the patient may need assistance connecting with a specialist. In certain settings, students may have the opportunity to accompany patients to the specialty care appointment or to the hospital for tests and procedures, therein allowing for longitudinal interaction. This represents added value for patient, preceptor, and student.⁴² The patient garners special attention, and the preceptor and student receive immediate feedback on referral outcomes.

Preceptor benefits

Practice rewards. We recommend that medical schools develop ways to meaningfully reward community-based faculty, particularly in light of enhanced expectations and accountability. Although direct monetary compensation is not always feasible, innovative ideas, should be considered. The State of Georgia has implemented a tax credit system for community practitioners who teach health professions students. 43 This approach could be modeled in other states.

Practice marketing. Affiliation with a medical school may also assist the practice with marketing. A community-based practice that has an educational affiliation with a medical school may be attractive to patients who perceive the affiliation as a sign of quality and to potential practice partners who are interested in sustaining academic ties and teaching. For example, the University of Nebraska Rural Health Opportunities Network sends press releases to local newspapers promoting clinics that have a student rotating at their site.

Quality improvement. Additional benefits that may also be important to preceptors include assistance with maintenance of certification, quality improvement projects, and developing patient education materials. Maintenance of Certification has become a more daunting issue for preceptors. Students can further collaborate with the preceptor to meet quality improvement needs of the practice and prepare them for future practice expectations. This can be as simple as looking up topics pertinent to patient issues to identifying areas of needed practice quality improvement in which the students can participate. 44 Technically proficient students may be able to help the preceptor identify high-quality medical applications and enhance preceptor interaction with the EHR. 45,46

Ongoing faculty development. Offering novel continuing medical education (CME) provides preceptors and clinic staff professional development opportunities. Medical students are often required to attend simulated activities to assess their competence in certain tasks. Similarly, participation in simulated CME activities could be offered to the practice to help fulfill CME credit requirements. For example, a simulated procedural activity could be conducted with the student participating as part of a staff in-service that would meet both physician and nursing CME needs. This would have the added benefit of enhancing the operation of the clinical practice. Other CME offerings may center on emergency preparedness, new coding, or HIPPA regulations. This would provide a positive interprofessional team experience for the student and could result in functional practice benefit.

Convening community-based faculty for faculty development is critical but logistically difficult. Well-prepared preceptors enhance the training environment and make teaching more efficient and enjoyable for preceptors and students. Online tool kits are available to help community preceptors get started and/or groom their teaching skills (e.g., http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC146667/). The Society of Teacher of Family Medicine has created another comprehensive online resource for community preceptors (http://www.teach ingphysician.org/). Although online resources and group meetings that allow preceptors to interact with each



other are time efficient, individual outreach may be logistically easier for the community-based faculty and reinforces their value to the academic institution.

Community-based faculty development should include a variety of efficient and effective teaching skills such as information for orienting students to the practice. Basic teaching topics such as how to give feedback in order to prepare preceptors for required feedback sessions at mid-rotation (formative feedback) and end of rotation (summative feedback), teaching with patients present, and how to handle a difficult student and when to call the clerkship director are all critical.

Feedback. After each rotation, provide student feedback to the practice focusing on positive comments demonstrating how the practice helped the student while also providing suggestions for improvement. Informing preceptors about outcomes such as examination scores, specialty choice, and residency site can help reinforce the value of their investment. Community-based faculty may also appreciate being invited to events such as AOA induction, Match Day celebrations, and graduation.

Additional opportunities

Interprofessional education

In medical education, there is an increasing emphasis on interprofessional teams. Some community practices have found it helpful to include various trainees in their clinical and educational efforts. The entire office staff should be made aware of the importance of interprofessional education for health sciences students. Brainstorming ideas with the practice for integrating students into the team may be beneficial to identify examples that have worked well in the clinic or other settings. Pharmacy students, physical therapy students, and advance practice nurses can all contribute differently to patient care and to one another's education in a team-based, peer-mentoring environment.

Duration of time with preceptors

Benefits of longitudinal, as opposed to block, clerkships include longer relationships with preceptors and patients that can result in more accurate assessments and feedback, more meaningful patient contact, and more opportunities for helpful involvement in ongoing practice activities. Optimizing the length of time students spend with preceptors by adjusting the curriculum may mutually benefit the needs of students and preceptors. 47 Longitudinal integrated clerkship models offer evidence of this. It has been reported that longitudinal integrated clerkship patient-centered students have better

communication skills, identify psychosocial contributions to medicine, and demonstrate higher order clinical and cognitive skills compared to students in traditional block rotations.48

Conclusions

There is an ongoing crisis in recruitment and retention of community-based teaching sites in all medical specialties. Many of the strategies in this document were identified by ACE representatives based on their experience dealing with these issues in their respective institutions as well as an extensive literature review and expert opinion. This position statement has been endorsed by the leadership of each of ACE's member organizations.

Medical school leadership must provide both meaningful incentives and faculty development to community-based faculty in order to retain these valuable teaching sites. The issue of community-based faculty recognition, including compensation, must be promptly addressed. Without urgent attention and action by all parties involved, we risk losing a rich educational venue at the center of today's medical care environment. Addressing these issues holds promise to provide benefits for our students, their preceptors, and patients.

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