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for ACADEMIC INTERNAL MEDICINE

AAIM Perspectives

AAIM is the largest academically focused specialty organization representing departments of internal medicine at medical schools and teaching hospitals in the United States and Canada. As a consortium of five organizations, AAIM represents department chairs and chiefs; clerkship, residency, and fellowship program directors; division chiefs; and academic and business administrators as well as other faculty and staff in departments of internal medicine and their divisions.

Tackling the Problem of Ambulatory Faculty Recruitment in Undergraduate Medical Education: An AAIM Position Paper

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KEYWORDS: Ambulatory education; Faculty; Medical education; Undergraduate medical education

INTRODUCTION

Historically, training within internal medicine has offered a comprehensive and deep understanding of adult medical issues, with a particular emphasis on critical thinking as well as diagnosis and management of complex medical disease. However, as hospital admissions decline and length of stay shortens, it is not possible to learn the breadth of internal medicine on the basis of inpatient service alone. The management of diseases in the inpatient setting and in the outpatient setting is significantly different. For example, management of diabetes mellitus, heart failure, and chronic obstructive pulmonary disease are very distinctive in inpatient versus outpatient settings. Some conditions, such as asthma and human immunodeficiency virus, are no longer seen frequently enough in the inpatient setting to guarantee learning opportunities. The ability to see the course of illness over time as well as appreciate the relational aspects of care and prevention of complications requires ambulatory training. The Liason Committee on Medical Education and the Accreditation Council for Graduate Medical Education endorse ambulatory training for these reasons.[1,2] Despite the need for robust ambulatory education, internal medicine educators face well-documented difficulties in recruiting ambulatory training sites for both students and residents.[3,4]

Barriers include increasing physician workload, inadequate financial support, and competition from other learners. In response to this growing concern, a task force was convened by the Alliance of Academic Internal Medicine and Society of General Internal Medicine in 2016. The group proposed a model that included consideration of compensation and incentives, career and faculty development, attention to mentorship, and innovative clinical learning models.[5] Unfortunately, there is a disconnect between proposed solutions and the reality that implementation is complex and trade-offs are necessary. As such, the majority of academic health centers have yet to make much progress in this area, particularly in undergraduate medical education (UME).

SURVEY

In light of these challenges, in 2017 the Alliance of Academic Internal Medicine convened a group of department chairs and clerkship directors to propose solutions. The group held monthly conference calls and presented a joint workshop at Academic Internal Medicine Week 2018. To better inform this discussion,

Funding: None.
Conflict of Interest: None.
Authorship: All authors meet the criteria for authorship.

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0002-9343/$ -see front matter © 2019 Published by Elsevier Inc.
https://doi.org/10.1016/j.amjmed.2019.06.035

department chairs were surveyed in advance of the meeting; these responses were compared with clerkship director responses to similar questions from the 2016 Clerkship Directors in Internal Medicine Survey (Amy Shaheen, MD MSc, personal communication, January 11, 2018). The Clerkship Directors in Internal Medicine survey had a response rate of 74.2% (95/128) and consisted of 9 items on ambulatory education, including structure, barriers, and possible solutions.

In Spring 2018, the work group sent a modified version of this survey to the Association for Professors in Medicine (APM) membership over a 3-week period, administered via SurveyMonkey (San Mateo, Calif) using Secure Sockets Layer encryption. Two e-mail reminders were sent. The survey yielded 37/140 responses from US institutions, for an overall response rate of 26%. The University of California Irvine Institutional Review Board granted the survey protocol exempt status.

PERSPECTIVES VIEWPOINTS

- Difficulty in recruiting ambulatory clinician educators for undergraduate medical education is a significant problem.
- A joint initiative between the Association for Professors in Medicine and Clerkship Directors in Internal Medicine is described, highlighting the need for a collaborative approach.
- A proposal is made for co-ownership of recruitment and review of resource allocation from medical school, as well as departmental sources, meaningful integration of students, and use of faculty incentives, in addition to resident and fellow educators in the ambulatory setting.

RESULTS

Survey responses are summarized in Table 1; 87% of clerkship directors reported difficulty with faculty recruitment, whereas only 54% of department chairs thought it was difficult to recruit ambulatory teachers for medical students in their department. Both clerkship directors and chairs reported inadequate financial support, loss of productivity, and time limitations to be significant barriers to recruitment, but nearly 50% of chairs thought that faculty disinterest in teaching was a barrier compared with approximately 12% of clerkship directors.

In terms of solutions, 62% of clerkship directors suggested that an educational relative value unit system be employed, compared with 35% of department chairs, while 62% of chairs felt additional teaching awards would be useful, compared with 18% of clerkship directors. Of the 37 respondents, 12 employed an educational relative value unit system at their own institution, and 13 allowed fewer patients per session to be scheduled. Approximately 43% of chairs met with their clerkship directors monthly, 21.6% met with them quarterly, 8.1% biannually, and 2.7% annually; 21.6% did not meet with clerkship directors personally, delegating this responsibility to another individual in the department. When asked "What best describes your role in ensuring adequate numbers of high quality ambulatory teaching faculty for medical students?," 70.3% of chairs reported that they work on and discuss this issue with their clerkship director on a regular basis, 18.9% believed it was the responsibility of the clerkship director, 5.4% did not consider it their responsibility, and 5.4% had not previously considered it their responsibility but now recognized it as a problem.

Approximately 50 chairs and clerkship directors attended the workshop session in March at Academic Internal Medicine Week 2018. After survey results were shared, participants were divided into 4 smaller discussion groups, focusing on solutions to recruitment that both chairs and clerkship directors could agree were possible to implement. Each group then shared their proposed solutions with the larger group. Shared suggestions included regular communication about the state of recruitment and retention between clerkship directors and chairs; teaching awards and other forms of recognition such as faculty appointments and promotion opportunities; routine discussions between chairs and deans about reallocation of funds to more accurately reflect current teaching needs instead of historical assumptions; redistribution of current financial incentives to reward teaching; leveraging chair's existing relationships with alumnae; more focus on quality

Table 1 Main Differences Between Clerkship Directors and Chairs in Perceptions Surrounding Recruitment of Ambulatory Preceptors

	Clerkship Directors (% Agreeing with or Choosing this Option)	Chairs of Medicine (% Agreeing with or Choosing this Option)
It is difficult to recruit ambulatory preceptors	87%	54%
A main barrier to teaching is faculty disinterest	50%	12%
Proposed solutions: use of educational RVU	62%	35%
Proposed solutions: use of teaching awards	18%	62%

RVU = relative value unit.

than quantity of care to better incentivize preceptors; and regular reflection on meaningful mentoring relationships with students to attenuate burnout. (see Table 2).

DISCUSSION

The difficulty in recruiting ambulatory teachers across educational levels has been well described, but in the UME setting is particularly challenging, in contrast to graduate medical education (GME), where there is long-established infrastructure dictated by accreditation. UME has more learners who must compete with GME learners for already scare resources. The Liason Committee on Medical Education calls for each medical school to determine the "mix of inpatient and ambulatory settings used for required clinical clerkships,"[1] but leaves it up to the institution to define the adequacy of this exposure in each discipline. Increasingly, exposure to the undifferentiated adult patient and the practice of primary care medicine is occurring in other disciplines. Internal medicine has always prided itself on providing comprehensive and deep education. In describing the career opportunities in internal medicine to students, the American College of Physicians states: "The general and subspecialty nature of training equips internists to develop expertise in diagnosing the wide variety of diseases that commonly affect adults and in managing complex medical situations where multiple conditions may affect a single individual. Internists are well prepared to provide primary care to adults through their outpatient

Table 2 Recommended Changes and Measures of Success for Chairs of Medicine in Recruiting Ambulatory Preceptors

	Recommended Change	Possible Measure
Resources and time	Regularly scheduled communication with ambulatory internal medicine course directors	Ambulatory course director satisfaction with chair support for the ambulatory educational mission
	Financial and time support for ambulatory faculty teaching	Faculty satisfaction with support for ambulatory teaching
		Transparent policy on time and funding models for ambulatory teachers
	Ambulatory teaching awards	Ratio of ambulatory teaching awards/inpatient teaching awards
	Appropriate allocation of school of medicine departmental educational dollars to support ambulatory UME learners	Transparent policy for educational funds distribution
Advocacy	Advocacy for student time in ambulatory internal medicine	Percent of ambulatory curricular time spent in IM primary care and subspecialty care
	Advocacy for the role of the student in ambulatory teaching sites as value added for preventing provider burn-out, improving quality of care, and patient satisfaction	Adequacy of sites as judged by ambulatory course director and Dean of the School of Medicine
	Advocacy to the greater health system for recruitment and retention of high quality teaching sites	
Teacher/site shortages	Improve quality and quantity of internal medicine ambulatory learning sites, including community practices	Student satisfaction with ambulatory internal medicine learning as judged by the AAMC graduation questionnaire or school of medicine surveys
		Number of students choosing internal medicine residency training
	Support career pathways for ambulatory clinician educators	Transparent promotion track for ambulatory clinical educators
Faculty development	Support faculty development efforts for ambulatory faculty	Ambulatory faculty development activities that respect time and geographic barriers for ambulatory faculty (ie, Web-based, dedicated time for CME)
	Support scholarly activities for faculty in ambulatory settings	Publications, presentations of learner-centered activities based in ambulatory setting
	Support curricular innovations in the ambulatory setting that benefit students, teachers, patients, practice, and health systems	

AAMC = Association of American Medical Colleges; CME = Continuing Medical Education; IM = internal medicine.

continuity experience during training, particularly for medically complicated patients."[6]

The absence of a robust contingent of ambulatory preceptors places academic internal medicine, in particular, at risk for losing influence on the academic stage, as well as losing relevance to future generations of trainees. At present, our colleagues in family medicine are responsible for an increasing amount of ambulatory student teaching of adult medical conditions (Amber Pincavage MD, personal communication, November 16, 2018). Not only do they do this well, but their educators speak with one voice when there are unmet needs.[7] Divisions of internal medicine are split into factions with dissipated power. Even within general internal medicine, hospitalists and "ambulists" further divide our ranks. In particular, the pipeline for general internists is slowly being eroded. According to National Resident Matching Program data, 18% of US seniors matched into categorical internal medicine in 2018, compared with 19.3% in 2014. However, only 1.3% matched into primary care internal medicine residency programs, compared with 1.2% in 2014.[8] With the majority of internal medicine graduates entering practice as specialists or subspecialists, fewer are going into general internal medicine, thus it is predicted that the majority of US generalists in the future will be family practitioners.[9] The time honored "holistic" internist may be a thing of the past.

While the role of departments of family medicine in educating students is undisputed, there is value added when other disciplines also embrace the ambulatory setting in patient care and educational design. For internal medicine, it is often accomplished by a merging of outpatient subspecialty experiences with primary care internal medicine, which is critically important. Students learn the diagnosis and treatment of disease presentations in patients who would never be seen in a hospital, as well as how to effectively coordinate the care of complex patients who often transition in and out of the inpatient setting. In addition, ambulatory education provides them with the rare opportunity to have one-on-one time with a seasoned member of the faculty to hone clinical skills as well as to be exposed to passionate role models who may help guide them toward a career path in internal medicine. At present, however, the desperation among clerkship directors to find preceptors to work with students frequently results in linking students with dissatisfied clinicians. Given the nature of the faculty exposure provided, we should not be surprised that students are choosing other disciplines.

It is critical for academic internists to refocus educational efforts for purposes of both pedagogy and sustainability of the discipline. The APM survey data highlight the fact that there is a dichotomy in both perception and understanding between clerkship directors and department chairs. Both groups would benefit from a mutual understanding of the benefits as well as the barriers to addressing the complexities around ambulatory faculty recruitment. Education, however, is not enough. The only way that progress can be made is with a collaborative approach. An increase in ambulatory-focused student education cannot be at the expense of hospital-based teaching or be at odds with the GME needs of the institution. Outpatient and inpatient learning need to be viewed as equally important for sustainability of internal medicine and recruitment to our field. A companion paper addressing ambulatory recruitment in GME is forthcoming.

Our data are limited by the low response rate to the APM survey, thus limiting generalizability across institutions. However, the ensuing workshop discussion highlighted the same themes and further underscored the importance of a unified approach if a solution is to be found. The barriers to ambulatory student teaching have been well described in the educational literature; the need for time, space, and money are not easy to overcome. Some solutions will be financial in nature, but not all need to be. To meet new educational competencies, strategies used for GME learners could be operationalized to include UME learners as well. These might include population and disease management, systems-based practice, and interprofessionalism. We must also find meaningful ways to integrate students into practice that will lead to improved patient satisfaction. Christner et al[10] describe some of the benefits that students can provide in the clinical setting, including provision of counseling and immunizations, managing electronic health record documentation enabled by the recent changes in US Centers for Medicare & Medicaid Services requirements, and provision of after-visit follow-up, as well as contributing to quality-improvement efforts that are necessary for purposes of maintenance of certification. Such efforts may also serve to improve patient satisfaction ratings as well.

Over time, if more learners are in longitudinal ambulatory environments with the advent of longitudinal integrated clerkship or hybrid models, the pressure to recruit inpatient-based student teachers may be alleviated. Nonfinancial rewards can be better utilized in faculty recruitment. Providing Continuing Medical Education credit, choice of preferred clinical days, and increased recognition with ambulatory teaching awards would serve as effective means of incentivizing the faculty that would be cost-neutral to the department. As the leader of the academic enterprise, the chair has a unique opportunity to bridge the gap between the school of medicine and the health enterprise, and can help set the direction by sharing in the accountability for ambulatory site recruitment. It is important that recruitment be conducted jointly by the chair and the clerkship director, not only to highlight the important teaching role for the department, but also to create a competitive process through which only the best

teachers and role models would be vying for these roles. In addition, we should entrust our best resident and fellow educators to join us in this process—just as we have always done in the inpatient setting—there is no reason why our students cannot learn from near-peer learners in outpatient clinics. It would enhance students' enjoyment and lessen the demands on faculty.

Meaningful change cannot occur without solutions that will impact the departmental budget. In 2000, the Association of American Medical Colleges described a process of creating educational value units (EVUs),[11] and their use has become increasingly common.[5] Denton et al[4] described a successful 3-pronged model for recruitment of primary care physicians for student clinical instruction, including protected teaching time, allocation of tuition money to reimburse physicians for teaching via educational value unit tracking, and a faculty development program.

Alternatively, some departments may pay a salary with an incentive structure and provide protected teaching time, with faculty members being held accountable to mutually agreed-upon expectations. An evaluation of incentive models might be undertaken in a department to find one that most effectively balances renumeration for patient care with faculty willingness to teach. We propose, as a first step, a broad overview of appropriate allocation of resources to support ambulatory learners, which should include a review of the compensation provided by schools of medicine as well as departmental allocation of teaching dollars, with an eye on providing transparency and potentially shifting resources to augment the ability to teach effectively in the ambulatory setting. This review will allow some of the necessary structural changes to occur—such as reduced number of patients per session and shorter duration of student clinical sessions—to make this teaching feasible.

As pedagogical and structural needs in education have evolved, interdepartmental, interdisciplinary, and community engagement efforts have emerged to meet current demand, leaving less of this teaching conducted in ambulatory clinics in academic health centers (Amy Shaheen, MD MSc, personal communication, January 11, 2018). We see this change as a real loss, both in terms of exposure to high-quality faculty and teachers, and the increasingly limited exposure medical students have to academic internists as role models and mentors as they plan their own career trajectories.

It is a casualty to internal medicine faculty as well, because the very reason many chose an academic career was a love of teaching. Faculty burnout and decreased levels of professional satisfaction are on the rise;[5] it is time we rewarded this passion rather than perpetuating a system of institutionalized disincentives for ambulatory teaching activities. Students bring a sense of enthusiasm and a thirst for learning, and sometimes even push the limits of what we know, which can be an inspiring and rewarding experience for our clinician educators. Students need high-quality ambulatory experiences; in the current environment, it is no longer possible to learn the breadth and depth of internal medicine on an inpatient service alone. Bringing departmental chairs and student educators together to develop strategies to recruit and retain talented ambulatory educators is critical. It is time for academic internal medicine to make a commitment to change.

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