Faculty Development: Academic Opportunities for Emergency Medicine Faculty on Education Career Tracks

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Abstract

Medical school faculty members who specialize in the scholarship of teaching have unique requirements for academic advancement in universities with clinician-educator series. While excellence in teaching is the cornerstone of achievement, attention to traditional academic pursuits improves the likelihood of a favorable review by the institution's promotion and tenure committee. The teaching portfolio is an effective means to document performance. Ongoing faculty development and sound mentoring relationships facilitate the academic advancement of clinician-educators. **Key words:** medical education; faculty development; mentor; emergency medicine. ACADEMIC EMERGENCY MEDICINE 2003; 10:1113–1117.

The art and science of medicine began as Greek philosophers and physicians such as Hippocrates and Socrates engendered clinical excellence through teaching. The role of today's clinician-educator is recognized in universities where promotion tracks are being developed for medical educators. As curriculum committees seek new methods to provide high-intensity clinical experiences, emergency physicians are valuable resources. U.S. emergency departments (EDs) had more than 103 million visits in 1999, up 14% from 90 million visits in 1992.[1]

This article introduces the concept of academic development for clinician-educators in emergency medicine (EM), highlights the importance of the teacher's portfolio, and provides examples of opportunities for faculty development.[2]

THE CLINICIAN–EDUCATOR IN EM

Boyer's concept of ''expanded scholarship,'' in which educators are responsible for dissemination of newly discovered original research, has facilitated incorporation of clinician-educator tracks that recognize excellence in clinical teaching as a means for academic advancement in some universities.[3] Careful planning by the proposed faculty member with the chair of the department determines if his or her skill set matches the academic reality of the institution. A thorough understanding of published institutional requirements for promotion and tenure and an appreciation of any unwritten local value systems is necessary when considering an appointment. Numbers and types of publications that are needed for advancement, quality of teaching, and evaluation methods should be discussed. Short- and long-range goals, ample release time for junior faculty to pursue academic interests and achieve scholarly requirements for promotion, and a method for accumulating supporting documentation are necessary. Learning the success rate and analyzing the academic productivity of the university's senior clinician–educators provides insight into the viability of this track. It is possible that the actual requirements for promotion are no different than for faculty in other series. For those who choose a position in a university without a specialized track for clinician–educators, traditional promotion standards apply. This possibility should be explored before one accepts a position or if a future job change is contemplated.[4–7]

It is incumbent upon individual faculty members to identify mentors to guide them through the academic promotion and faculty development scheme. It is unlikely that any one individual can provide all the advice that is needed in the areas of research, teaching, and career/personal life integration. In general,

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TABLE 1. Suggested Timeline for Academic Promotion for Clinician–Educators*

Academic Rank	Goals	Time in Rank	Proposed Teaching Activities (higher levels do all preceding)	Other Activities
Instructor	Establish basic skills within department and university	Variable	Teach in medical school; lecture in department or hospital.	Serve on local committees. Author chapters in textbooks.
Assistant professor	Establish local and regional reputation	7 years	Develop courses in medical school; lecture in department, hospital, local, and regional venues. Involvement with medical education at university level.	Lead local committees; serve as member on national committee. Author chapters, reviews, original research.
Associate professor	Establish regional and national reputation	6 years	Leadership in medical education at university level. Involvement in medical education at national level.	Lead regional or national committees. Author chapters in major texts, reviews, original research. Editorial service.
Professor	National and international authority	Variable	Lecture at national level. Visiting professorships. Leadership in medical education at all levels.	Leadership in national organizations. Author, editor for major texts and journals.

*Progression through academic ranks varies at each university. Each faculty member should work closely with the department chair and mentors to determine specific details for advancement.

mentors are in more advanced academic positions than the intended protégé and are not in direct competition. Ideas to enhance quality mentorship of junior EM faculty have been published.[8]

The department chair monitors academic progress and provides ongoing support as an advisor and advocate. He or she can create a favorable environment for clinician–educators, design recognition awards for clinical and teaching skills, and provide ample opportunities for learners to praise their teachers in letters of support for promotion. However, the primary goal of the chair as a manager is to ensure that there is a proper balance of faculty to achieve a smoothly running department. Therefore, the chair may not focus on an individual faculty member but can promote career development of both junior and senior faculty by pairing them to enhance the overall mission of the department.

PROMOTION GUIDELINES

Criteria for promotion and value assigned to specific activities vary among medical schools and the various academic series (Table 1). A survey of committee chairpersons designed to investigate how decisions were made about promotion of clinician-educators reported the following assignment of value, in descending order: teaching skills, clinical skills, mentoring, academic administration, developing educational programs, nonresearch scholarship, clinical research, service coordination, and education research.[9] It is difficult to define, measure, and evaluate diverse clinical, teaching, and scholarly activities. For example, the four most important methods of teaching evaluation cited in a survey of promotion committee chairpersons were awards, peer evaluation, learner evaluation, and the teaching portfolio.[9] Issues of reliability and validity impact the use and interpretation of evaluation methods such as learner and peer evaluations.[10] Faculty members can be proactive in providing their own evaluation forms to learners if evaluation of these activities is not routine or if the contents of their files do not represent accurately the faculty member's achievement.

Association of American Medical Colleges (AAMC) guidelines have been proposed for measuring faculty effort and contributions in medical education. Relative value units are assigned to activities, taking into account such variables as time and effort involved in each activity, level of experience, and the importance of each activity to the school's mission.[11] Formulaic measurement of the relative values of educational, research, clinical, and administrative activities is controversial.[12] Concerns include the use of ordinal scales to measure value, arbitrariness of the scaling process, the question of who judges relative values of faculty activities, and the effect this system may have on eliminating underrewarded activities.

Despite problems inherent in judging clinician–educators on the basis of research and regional and national reputation,[4] a 1997 status report on faculty appointment and tenure policies in medical schools confirmed that approximately 70% of clinical tracks had a requirement for at least one other form of scholarship in addition to teaching.[13] Peer-reviewed publications receive the greatest weight, although chapters in textbooks, case reports, and formal curricular learning or evaluative tools may be acceptable. Some medical schools require that faculty provide some evidence of regional or national recognition in

their fields. Letters from external referees, submitted in support of the applicant, highlight the professional caliber of the applicant's accomplishments.

DOCUMENTING PROFESSIONAL ACCOMPLISHMENTS

The teaching portfolio is an efficient means of presenting educational activities and accomplishments required for consideration of promotion in the clinical track and is composed of an ongoing collection of teaching, clinical, and research activities at local, regional, and national levels[14] to provide a means for clinician–educators to demonstrate the quantity and quality of their teaching achievements.[15] The educator selects, assembles, and explains the materials following institutional guidelines precisely to enable members of the promotions and tenure committee who may not be clinicians or physicians to appreciate their value.

The teaching portfolio can form the basis of annual individual faculty development and evaluation meetings with the department chair or can be presented to prospective employers if a job change is contemplated. Portfolio preparation allows for reflection on personal accomplishments and academic and career goals. Projects that have been reviewed as most successful and those that have provided the greatest personal satisfaction can be identified as areas for future academic focus.[16] Continuous prospective development of the portfolio is an effective strategy to capture important activities as they occur and may yield the greatest benefit in terms of personal reflection. Several common elements are recommended for inclusion in the portfolio[14,16,17] (Table 2).

TABLE 2. Common Elements for Inclusion in the Educator's Portfolio

- **Academic appointments**
  - Academic rank (dates of progression)
  - Appointments in medical school, department
  - Administrative responsibilities
- **Education and training**
  - University, medical school, residency, fellowship information
  - Additional training in the field of medical education
- **Publications**
  - Peer-reviewed publications (can be divided into education- and non-education-related)
    - Journal articles
    - Editorials
    - Abstracts
    - Textbook chapters
    - Case reports
    - Monographs
    - Newsletters
    - Multimedia and computer resources
  - Non–peer-reviewed publications (may include same categories as above)
  - Editorial services for journals or other publications (reviewer, editorial board)
- **Grants**
  - Research grants received
  - Funding for educational or clinical programs
  - Service as grant reviewer
- **Lectures and educational sessions** (Number of hours and description of type of learners may be included.)
  - International, national, regional, local invited lectures
  - Lectures or teaching rounds at home institution
  - CME courses developed or taught
- **Committee service**
  - Committee leadership or membership at any level
    - National, regional, local, hospital, department, medical school
- **Documentation of teaching excellence**
  - Quality of teaching
    - Evaluations of teaching activities by students, housestaff, fellows
    - Teaching awards received
    - Peer evaluations
    - Letters from administrators, mentors, colleagues, or learners complimenting work as an educator
  - Development of innovative programs
    - Course curricula or syllabi authored
    - Evaluation instruments designed
    - Patient education materials created
  - Mentoring activities
    - Learners advised or mentored including projects, hours, and outcomes of projects
    - Service as a faculty advisor
  - Attention to professional development
    - Attendance at professional meetings related to teaching, faculty development workshops, etc.
- **Narrative on philosophy of education and career aspirations**

CLINICAL TEACHING IN EM

A nationally developed and accepted curriculum published by the Society for Academic Emergency Medicine (SAEM) in 1998[18] provides EM educators a template that integrates EM into all four years of the medical school curriculum. Participation in the curriculum committee ensures that EM is adequately represented.[19] History and physical examination are introduced during the preclinical years. The clinician-educator could assume responsibility for an introduction to clinical medicine group or teach in ethics, anatomy, or basic life support courses. EM faculty can engage in competency examinations for medical students at any level. During the third and fourth years of the medical school curriculum, there should be a dedicated rotation in EM. A survey by Ling et al. showed that approximately 20% of allopathic medical schools had a required clerkship in EM.[19] Most institutions (97%) had an elective experience, predominately in the fourth year.[19] Development and implementation of a didactic program, emphasizing problem-oriented case management, can supplement the student's bedside learning during an EM clerkship. Procedure-oriented programs such as basic and advanced airway skills, suturing, splinting, and central line placement provide another option. Development of a direct observation program[20] to assess students' clinical skills in a real-time, nonstandardized format is a competency-based assessment tool.

Emergency medicine subinternships for senior students enable faculty to target students interested in EM. In one study, students who were interested in EM evaluated more patients and patients of higher acuity than non–EM-bound students.[21] This distinction provides educators with the opportunity to develop advanced coursework in EM. Although the basic principles and educational experiences in a subinternship are similar to those required in a basic clerkship experience, subinternship students can be expected to perform with a higher level of clinical skill. Specialized electives such as toxicology, occupational medicine, sports medicine, hyperbaric medicine, aeromedical services, research, emergency medical services, and pediatric emergency medicine can be offered.

NONCLINICAL EDUCATIONAL OPPORTUNITIES

Emergency medicine educators can serve as faculty advisors, a group usually identified as leaders within the institution, who are advocates for both students and their specialty. Blumstein and Cone reported that 57% of students received negative information about EM from non-EM advisors.[22] The establishment of a strong network of EM advisors is the best defense against this type of erroneous delivery of information and enhances the educator's reputation as one who is committed to the career success of the students and one who supports the Dean's office in the academic mission of the institution. Advisors may find that recruiting for their programs or clerkships is easier when they have a reputation as a committed mentor.

Advising an EM interest group shows a commitment to students. Skills labs, lecture series, community outreach projects, and career days all can further the goals of a broad-based EM curriculum within the medical school.

Faculty involved in research can include interested students in an ongoing study or a time-limited project where the basic principles of research are taught. Student presentation at university research days, departmental research forums, and regional or national scientific meetings is visible proof of the faculty member's productivity and application of both scholarship and research mentorship.

A student journal club can highlight important clinical concepts and introduce students to evidence-based techniques. In a trial of EM residents, critical literature appraisal skills were taught and resulted in enhanced evidence-based decision-making and literature evaluation.[23]

Web-based educational curricula including lectures, independent study modules, instructional software, and assessment activities do not replace excellent clinical teachers, but provide enduring products that demonstrate their scholarship. They also allow basic materials to be covered in a consistent manner without using faculty time, allowing educators to focus on other areas of educational interest.

For some universities, teaching excellence and innovation are not scholarship until they are made public in some form.[24] A widely accepted means of identifying scholarship is the achievement of recognition as a regionally or nationally known educator. Attainment of this goal mandates that faculty teach outside their institutions.

Most prestigious are invited professorships, where a senior faculty member spends several days at the sponsoring institution. Visiting professorships include opportunities to interact with students and other educators at functions including lectures, small group sessions, and meals. Lectures at regional and national meetings provide opportunities to demonstrate scholarship and validate faculty to the academic community as experts and effective educators. Written feedback provides documentation of scholarship. Most academic institutions expect senior-level faculty to have a national presence within their specialty organizations. To establish a reputation as a regional or national speaker, it is helpful to begin within one's home department at grand rounds and other didactic sessions, seek feedback from seasoned lecturers, and become proficient at the art of lecturing. Lecturing for other departments in the home institution or at neighboring institutions expands one's visibility and experience. When investing the time and energy to prepare a high-quality lecture, it is worthwhile to convert the information into an article or textbook chapter.[25] This principle can be widely applied.

FACULTY DEVELOPMENT PROGRAMS FOR EM EDUCATORS

Because the scholarship of teaching has become an avenue for promotion, those who intend to achieve promotion through the clinician–educator track must be able to hone their teaching skills and develop the necessary tools for pedagogical research and leadership. There are several faculty development programs, including national full- and part-time fellowships, short courses, workshops, and train-the-trainer programs.[26]

Wilkerson and Irby[27] noted that there are several successive levels of academic faculty involvement in education, so that faculty development programs should provide a range of experiences. Junior faculty must acquire excellent basic teaching skills. Teachers with more pedagogical content knowledge require advanced training in the integration of knowledge content with learners' needs and their own teaching skills. Educators in leadership positions must master skills in guided reflection to advise their teaching methods and obtain exposure to educational theory. They need the tools to perform sound research in the

realm of educational program design and outcomes assessment. To address these needs, a comprehensive faculty development program in education should include the following: professional development (faculty are oriented to the academic environment, its requirements, and their roles within it), instructional development (faculty improve teaching skills), leadership development (faculty acquire skills to achieve scholarship in education), and organizational development (faculty are empowered to take on leadership roles in their own institutions). Examples of national and local programs in EM and general medical education are described in Table 3 (available as an online Data Supplement at www.aemj.org). Many universities offer programs in medical education for their own faculty. Faculty development courses are offered during regional and national meetings of the EM organizations (e.g., SAEM, American College of Emergency Physicians). Additional programs, fellowships, and education-related grants are available through the AAMC.[28]

CONCLUSIONS

Clinician–educators demonstrate excellence in teaching from the medical school classroom and ED to the national arena through direct contact with learners and by contributions to professional associations and the medical literature. Meticulous documentation of activities and achievements is mandatory to represent their accomplishments at the time of promotion and tenure review. Faculty can advance their careers through mentorship and faculty development opportunities.

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