PROFESSIONAL DEVELOPMENT

Investing in the Future: Building an Academic Hospitalist Faculty Development Program

Niraj L. Sehgal, MD, MPH
Bradley A. Sharpe, MD
Andrew A. Auerbach, MD, MPH
Robert M. Wachter, MD

Division of Hospital Medicine, University of California, San Francisco, San Francisco, California.

Background: Academic hospital medicine (AHM) groups continue to grow rapidly, driven largely by clinical demands. While new hospitalist faculty usually have strong backgrounds in clinical medicine, they often lack the tools needed to achieve excellence in the other aspects of a faculty career, including teaching, research, quality improvement, and leadership skills.
Objective: To develop and implement a Faculty Development (FD) Program that improves the knowledge, skills, attitudes, and scholarly output of first-year faculty.
Intervention: We created a vision and framework for FD that targeted our new faculty but also engaged our entire Division of Hospital Medicine. New faculty participated in a dedicated coaching relationship with a more senior faculty member, a core curriculum, a teaching course, and activities to meet a set of stated scholarly expectations. All faculty participated in newly established divisional Grand Rounds, a lunch seminar series, and venues to share scholarship and works in progress.
Results: Our FD programmatic offerings were rated highly overall on a scale of 1 to 5 (5 highest): Core Seminars 4.83 ± 0.41, Coaching Program 4.5 ± 0.84, Teaching Course 4.5 ± 0.55, Grand Rounds 4.83 ± 0.41, and Lunch Seminars 4.5 ± 0.84. Compared to faculty hired in the 2 years prior to our FD program implementation, new faculty reported greater degrees of work satisfaction, increased comfort with their skills in a variety of areas, and improved academic output.
Conclusion: Building FD programs can be effective to foster the development and satisfaction of new faculty while also creating a shared commitment towards an academic mission. *Journal of Hospital Medicine* **2011;6:161–166.**
© 2011 Society of Hospital Medicine.

KEYWORDS: academic hospitalists, faculty development, scholarship.

Additional Supporting Information may be found in the online version of this article.

The growth of hospitalists nationally continues at an unprecedented pace.[1] In academic medical centers, the development of hospital medicine groups either as independent divisions or as part of divisions of general internal medicine (DGIM) reflects this trend. Drivers for growth in the academic setting include housestaff work hour restrictions, increased need for oversight on teaching services, development of nonhousestaff services, surgical comanagement, and greater emphasis on efficiency, quality, and safety.[2–6] These drivers have created tremendous opportunities for hospitalists, but the rapid growth has also created challenges to achieving traditional academic success.[7,8]

While hospitalists feel the traditional academic pressures to produce new knowledge and teach, the extraordinary need to expand clinical services has resulted in a young hospitalist workforce, with most lacking fellowship training. At the same time, there are few senior mentors available.

Taken together, many academic hospital medicine (AHM) programs find themselves populated by large cadres of junior faculty without the support, training, and mentoring they need to succeed in a faculty career.[9] For hospital medicine groups, the risk to faculty recruitment, retention, productivity, and morale is high.

In this article, we describe the development and implementation of a multifaceted Faculty Development (FD) program whose goal was to provide our faculty with clinical, educational, leadership, and scholarly skills that would promote academic output and foster work satisfaction.

Methods

Problem Identification

The University of California, San Francisco (UCSF) Medical Center operates nearly 800 beds across 2 hospitals (Parnassus and Mount Zion campuses). The UCSF Division of Hospital

Medicine (DHM) provides care on the teaching service (~90% of all ward months covered by a hospitalist faculty), a nonhousestaff medical service based at Mount Zion,[4] a palliative care service,[10] a medical consultation service, a neurosurgical comanagement service, a procedure service, and comanagement on advanced heart failure and cancer services. Like many AHM groups, ours has experienced explosive growth, more than doubling in faculty size in 3 years (50+ faculty by July 2010).

In addition, many of our new faculty joined the division directly after residency training whereas our early hospitalists were mostly former chief residents and/or fellowship-trained. During a 2-year period, our division lost several faculty to "burnout" from clinically heavy positions or because they felt their ultimate academic success was in doubt. During a 2008 divisional retreat, the single greatest need identified was to invest in the development of our first-year faculty who were felt to be at greatest risk for burnout, dissatisfaction, and failing to integrate into the divisional mission. Based on this result, we set out to develop a program to meet this pressing need.

Needs Assessment

We formed a FD steering committee comprised of faculty from all ranks and career paths in our division (eg, educator, administrator, and investigator), with overrepresentation of recent hires to ascertain how best to meet their needs. Information from the division retreat provided the basis for the program and its priorities. The FD steering committee then outlined ideas that guided program development, which included:

1. New faculty should be required to meet regularly with assigned faculty mentors during their first year, and expectations for that relationship should be outlined for both parties
2. New faculty should be required to attend dedicated sessions that build their teaching skills
3. New faculty should receive a specially designed "first year curriculum" to provide learnings focused on high-yield and relevant topics
4. New faculty should receive a set of goals, or scholarly expectations, for their first year that would foster a partnership between individual faculty and the division to meet those goals
5. The division should create new structures for FD that promote collaboration, sharing of personal and professional growth and challenges, and a culture of continuous learning
6. All of the activities that comprise our new FD program must be aligned with our stated mission: to provide the highest quality clinical care, education, system improvements, and research that benefit our patients and trainees by developing successful academic hospitalist faculty.

Program Goals and Objectives

Our DHM FD program established the goal to provide our new faculty with clinical, educational, leadership, and scholarly skills that would promote academic output and foster work satisfaction. From a broader divisional standpoint, the goal was simply to create new FD structures that fostered the division's commitment to the program. The primary objectives of the program were for new faculty to:

- Increase their knowledge, skills, and attitudes about key academic hospitalist domains following participation in the program;
- Demonstrate successful production of scholarly output, participation in a hospital committee, and participation in a quality or safety improvement initiative by the end of their first year;
- Report high levels of satisfaction with the FD program and their first year on faculty.

Program Development Principles

We began by conducting a literature review to draw on the successes and lessons learned from existing FD programs, particularly in large departments, academic centers, and the hospitalist field.[11–15] We focused our program development on a set of FD principles, which included instructional improvement, organizational development, the development of professional academic skills, and the teaching of specific content.[11] Furthermore, whereas many FD programs traditionally focus on mentoring or a longitudinal set of seminars, we believed a multifaceted approach could help shift our "culture" towards one that prioritized FD and generated a sense of community. We hoped this cultural shift would create an environment that increased faculty satisfaction with their work, with their colleagues, and in our division.

This context drove us to build programmatic activities that not only targeted new faculty, the initial focus of our planning efforts, but also the division more broadly. We wanted to adopt known strategies (eg, mentoring relationships, teaching methods for FD, and grand rounds) but also weave in new ones that targeted AHM and our Division. It was clear that successful programs used a variety of instructional methods, and often combined methods, to create active and engaged faculty. We similarly wanted to create venues for didactic and small-group learning, but also opportunities for peer learning and facilitated discussions around important topics. Allowing new faculty to learn from each other, and having them observe more senior faculty do the same, would be an important and explicit programmatic element.

Program Description and Implementation

All new faculty meet with Divisional leadership (RMW/BAS), administrative staff (they receive an "orientation binder" that highlights frequently asked questions and provides service-specific orientation documents), and the Director of FD (NLS). The latter introduces the DHM FD Program and provides the "road map" for their first year (Supporting Information). The checklist serves to orient, guide, and emphasize the various programmatic goals, expectations, and logistics. Discussion focuses on the activities targeted to new faculty followed by wider divisional offerings. New faculty activities include:

Coaching Program

Rather than having new faculty independently seek out an appropriate mentor, we explicitly paired each with a more senior hospitalist (eg, ≥3 years on faculty). We provided explicit goals and expectations for the faculty coach and used a similar "road map" to guide their role (Supporting Information). We chose to call them "coaches" rather than mentors because in the first year, we felt a new faculty member needed "nuts and bolts" support from a "big sibling" more than they needed formal academic mentoring. We placed the burden of organizing the coaching sessions on the faculty coach and provided them with periodic reminders and suggestions for topics to discuss over the course the year, including supporting the junior faculty's performance against their scholarly benchmarks. Finally, we also organized a "peer mentoring" session for new faculty—designed to create additional peer support and shared learnings, and establish the importance of these relationships moving forward.

Core Seminars

We created a 12-hour curriculum to cover a broad range of relevant AHM topics (Table 1). The choice of topics was informed by our needs assessment, suggestions of the FD Steering Committee, and the new faculty themselves. The sessions included a few didactic presentations, but they were largely interactive in a workshop-style format to allow new faculty to engage the content. For instance, a session on quality improvement asked new faculty to bring a project idea and then work through creating a project plan. We coupled three half-day sessions with a divisional social activity and made every attempt to ensure new faculty were not distracted by clinical responsibilities (eg, not on a clinical service or coverage was provided).

Teaching Course

One of our faculty (BAS) delivered the Stanford Faculty Development Clinical Teaching program[16] (a "train the trainer" model designed to teach faculty how to become more effective teachers) to all new faculty. The program consisted of 14 hours of highly interactive curricula, video review, and role plays. The course was offered after hours (4 PM or 5 PM) and with input from the new faculty to ensure availability and participation.

Feedback and Observation

Each new faculty received directed feedback about their teaching and supervision on the housestaff service following their first rotation. Feedback was based on housestaff evaluations and direct observation of the new faculty during patient care and teaching rounds. One of our faculty (BAS) observed each new faculty member during rounds, and met with them individually to provide feedback and generate a discussion about teaching style and improvement opportunities.

Scholarly Expectations

We developed a set of scholarly expectations for new faculty. These helped inform the coach-new faculty meetings and

our selection of content for the Core Seminars. We initially had concerns that these expectations could overwhelm new faculty, but those junior faculty (years 2-4) on the FD steering committee urged this practice, wishing they had similar guidance in their first year.

From the divisional perspective, we also added a number of new structures.

Grand Rounds

We established a monthly continuing medical education (CME) credit-granting DHM Grand Rounds that combined a 10-minute Hospital Medicine Update with a 45-minute didactic presentation. The updates were presented by new faculty in order to provide them with an opportunity to receive feedback on their teaching and presentation skills (eg, how to give a talk, make PowerPoint slides, etc.). Didactic presentations were given by senior DHM faculty as well as subspecialty colleagues or ones from other departments (eg, dermatology or neurology), disciplines (eg, risk management), or campuses.

FD Lunch Seminar Series

Our division traditionally meets each Monday over the lunch hour to talk about service or academic issues. With a growing division, we believed there was an opportunity to better organize the content of these meetings. Once monthly, we dedicated a lunch session to a Faculty Development Seminar with topics that spanned a variety of interest areas, were driven by faculty suggestions, and were focused on being facilitated discussions rather than didactics. Table 1 provides examples of these seminar topics.

Quality and Safety Lunch Seminars

In addition to our FD seminars, we also used one lunch session each month to provide updates on performance measures, ongoing quality or safety improvement initiatives, or a broader quality or safety topic. Speakers were either divisional or outside experts, depending on the topic, and organized by our director for quality and safety.

"Incubator" Sessions

Our director of research (AA) organized a weekly "works in progress" meeting, to which faculty and fellows brought ideas, grant applications, early manuscript drafts, or other potential scholarship products to obtain feedback and further group mentorship.

Divisional Retreats

We began alternating annual full-day and "mini" half-day retreats as a method to bring the division together, build camaraderie, set strategic priorities, identify divisional goals, and assess needs. These helped guide the creation of additional FD opportunities as well as our overall division's strategy to achieve our academic mission. The outcomes of these retreats led to many significant initiatives and policies, such as changes in compensation models, new scheduling

processes, and decisions to spend resources on areas such as quality improvement.

Program Evaluation

Our evaluation focused on measuring the FD program's impact on our new faculty. We tracked their success in completing the stated scholarly expectations and surveyed them about their satisfaction with the programmatic activities, their first year on faculty, and their preparation for year 2. Prior to implementing the program, we surveyed the previous 2 years of new faculty to provide a comparison.

Results

Seven faculty participated in the inaugural program. We compared their scholarly output and experiences (6 faculty completed the survey; 87% response rate) with that of 11 more senior faculty who completed the comparison survey. Of note, the response rate of the comparison group was 69% (5 faculty who departed from our division during the previous 2 years were not surveyed). New faculty were surveyed at the start of the academic year with the follow-up survey completed the following June. The more senior faculty completed the survey once at the same time as the baseline survey for the new faculty. All new faculty participated in each of the Core Seminars, the Teaching Course, the "required" number of Coaching sessions, and the observed teaching activity. We did not track their attendance at Divisional activities such as Grand Rounds or the Lunch Seminars.

Overall, the FD programmatic offerings were rated highly by new faculty (on a scale of 1 [lowest] to 5 [highest] for a global rating of each FD activity): Core Seminars 4.83 ± 0.41, Coaching Program 4.5 ± 0.84, Teaching Course 4.5 ± 0.55, Grand Rounds 4.83 ± 0.41, and Lunch Seminars 4.5 ± 0.84. Table 2, which compares responses to a series of "end of the year" statements posed to new faculty, highlights notable differences in their level of comfort with specific skills and resource awareness. Given the small sample size, statistical significance was not calculated. Table 3 illustrates similar comparisons focused on academic output, which demonstrate that new faculty gave more talks to trainees, had greater involvement in hospital committees, more actively participated in quality and safety projects, and submitted more abstracts to regional or national meetings. New faculty also responded differently to which part of the FD program was "most influential" with 1 suggesting the Coaching Program, 2 the Core Seminars, 2 the "entire" program efforts, and 1 did not specify.

Table 4 illustrates comparison responses to a series of directed statements. New faculty all reported greater degrees of satisfaction overall, measured by the above responses, compared to previous faculty.

Discussion

We implemented an FD program to foster the academic development of new faculty, and to mitigate the effects of growing clinical demands and a rapid group expansion on our academic mission. The impact of the program was measured by increased work satisfaction and academic output in first year faculty, greater self-reported comfort in a variety of skills and knowledge of resources, and an improvement in our sense of purpose behind our academic mission. Though the program is only in its second year, we believe the model is of value for other AHM groups, and perhaps even nonacademic groups, all of whom may use such an "investment" in their hospitalists as a method to improve recruitment, job satisfaction, and retention.

Reviewing our program's first year suggests there were at least 3 keys to our success. First, we benefited tremendously from the time spent crafting a vision for the program and relying heavily on input from the target audience of junior faculty. Moreover, we made every effort to leverage existing resources (eg, using faculty who already taught about a given topic) and time commitments (eg, reshaping our existing Monday lunch meeting). Finally, we increasingly used our FD venues to connect and build networks with colleagues outside our division and within the hospital. This was a deliberate effort to create opportunities for individual faculty to be exposed to and collaborate with nonhospitalists for academic output.

Our research has some limitations, most notably the small sample size in evaluating the program for statistical significance, and the incomplete survey return rates. However, the results were quite consistent and the nonresponses of departed faculty would tend to bias our results toward the null. We also acknowledge the possibility of other confounding factors (eg, changes in clinical compensation

TABLE 2. Comparison Responses to Questions About First Year on Faculty

Survey Statements Reporting Level of Comfort With…(% responding "somewhat agree" or "agree")	Previous Faculty, % (n = 11)	New Faculty, % (n = 6)
Identifying important resources within the School of Medicine	64	83
Identifying important resources within the Department of Medicine	63	100
Identifying important resources within the Division of Hospital Medicine	90	100
Identifying important resources within UCSF Medical Center	72	67
Having a system to effectively manage my email	64	67
Having a system to keep my CV updated	64	84
Using my non-clinical time for academic success	54	67
Best practices for clinical/medico-legal documentation	54	67
Best practices for billing documentation	62	84
Being an effective supervising ward attending	90	84
Being an effective teacher	90	84
Evaluating students and housestaff performance	90	83
Providing feedback to students and housestaff	90	100
Getting involved in professional societies	27	100
Understanding the difference between promotion pathways	36	67
Getting involved in hospital committee work	54	84
Choosing a good case for a clinical vignette submission to a regional/national meeting	54	83
Creating a poster for presentation at a regional/national meeting	36	84
Giving a lecture to students or residents	64	84
Developing a PowerPoint presentation for a lecture	45	100
Describing my personality type and how it relates to my work	45	100
Understanding important aspects of being a leader	54	100
Explaining the basic principles of quality improvement	45	84
Participating and contributing to a quality improvement project	54	67
Explaining the basic principles of patient safety	45	67
Understanding the factors that contribute to medical errors	36	84
Creating scholarly products from my work	27	50
Identifying what kind of mentors I need for the future	45	100

models) that may have played a role, although compensation changes were relatively minor during the period studied and faculty did attribute many of the benefits in job satisfaction and skill building to the FD program itself.

Hospital medicine is an unusual field in that there is low barrier to entry and exit. Providers can change jobs without having to say goodbye to a large panel of patients, and in the continued mismatch between available positions and hospitalists, alternative positions can easily and quickly be found if they are dissatisfied.[17] In the academic arena, even as hospitalists are hired to fill clinical gaps, they still have to perform under more traditional academic rules in order to be promoted and receive the support and kudos of colleagues and trainees. For both these reasons, early nurturing and socialization is critical to retention and academic success. While some opportunities for FD will be offered by national organizations,[18] groups also have local responsibilities to support, mentor, and develop their junior faculty. Not only is such support crucial for the junior faculty themselves, but in our young field, the "mentored" very quickly become the mentors. Our decision to invest in both mentees and mentors reinforced the importance of mentorship for academic success and retention while planting the seeds for continued success and growth.[19–23] A recent study suggested that the "environment" for mentoring may be as important as the mentoring itself, a finding we did not specifically measure, but would support based our anecdotal experiences.[24] This orientation toward

TABLE 3. Comparison of Scholarly Output and Nonclinical Activities

Category (% completed during first year)	Previous Faculty, % (n = 11)	New Faculty, % (n = 6)
Medical student teaching	90	100
Talk for trainees	45	100
Hospital committee involvement	63	100
Participation in a quality or safety project	33	67
Abstract submission	27	50
Identified mentor for year 2	63	83

future needs and creating the right milieu is crucial because demands for continued hospitalist growth are likely to remain.

Moving into year 2 of our FD program and reflecting on the lessons learned from year 1, we've adopted the same multifaceted approach with only minor adjustments to the curriculum, greater expansion of faculty involved in teaching and coaching, and a continued focus on building a sense of community around our academic mission. For the Core Seminars, we moved away from the 3 half-day sessions and chose to host 2-hour sessions every other month. This allowed for the same curriculum to be delivered but was much easier to logistically orchestrate. It also had the intended effect of bringing the new faculty together more

TABLE 4. Comparison of Reported Experiences After First Year on Faculty		
Categories	Previous Faculty, % (n = 11)	New Faculty, % (n = 6)
Success: To what degree do you feel successful as an academic hospitalist at the end of your first year? (% responding "successful" or "very successful")	27	67
Prepared: To what degree do you feel prepared for academic success moving into your second year on faculty? (% responding "prepared" or "very prepared")	27	100
Part of DHM: I felt like an integral part of our division after my first year on faculty (% responding "somewhat agree" or "agree")	45	84
Expectations: My first year on faculty exceeded my expectations (% responding "somewhat agree" or "agree")	27	84

Abbreviation: DHM, Division of Hospital Medicine.

regularly. In addition, we created dedicated sessions in preparation for our national meeting to allow faculty to bring abstract submissions for review and later, posters and oral presentations for feedback. These added sessions came partly as a suggestion from new faculty in our first year program, and seemed to further energize junior faculty around converting their projects into scholarship. Finally, we continue to further develop coaching and mentoring relationships in our division, partly a result of successful new faculty—coach pairings.

In conclusion, our FD program had a noted impact on our new faculty and had a meaningful impact on our division in terms of camaraderie and cohesion, a shared commitment to an academic mission, and a mechanism for recruitment and retention. We hope our practical description for development and implementation of an FD program, including our specific tools, are useful to other groups considering such an initiative.

Address for correspondence and reprint requests:
Niraj L. Sehgal, MD, MPH, University of California, San Francisco, 533 Parnassus Avenue, Box 0131, San Francisco, CA 94143; Telephone: 415-476-0723; Fax: 415-514-2094; E-mail: nirajs@medicine.ucsf.edu

References
1. Kralovec PD, Miller JA, Wellikson L, Huddleton JM. The status of Hospital Medicine Groups in the United States. *J Hosp Med*. 2006;1(2):75–80.
2. Accreditation Council for Graduate Medical Education: information related to the ACGME's effort to address resident duty hours and other relevant resource materials. Available at: http://www.acgme.org/acWebsite/dutyHours/dh_index.asp. Accessed August 2010.
3. Fletcher KE, Davis SQ, Underwood W, et al. Effects of work hour reduction on residents' lives: a systematic review. *JAMA*. 2005;294(9):1088–1100.
4. Sehgal NL, Shah HM, Parekh VI, Roy CL, Williams MV. Non-housestaff medicine services in academic centers: models and challenges. *J Hosp Med*. 2008;3(3):247–255.
5. Whinney C, Michota F. Surgical comanagement: a natural evolution of hospitalist practice. *J Hosp Med*. 2008;3(5):394–397.
6. Sehgal NL, Wachter RM. The expanding role of hospitalists in the United States. *Swiss Med Wkly*. 2006;136(37–38):591–596.
7. 2007–08 Hospital Medicine Survey. Society of Hospital Medicine. Available at: http://www.hospitalmedicine.org/AM/Template.cfm?Section=Survey&Template=/CM/HTMLDisplay.cfm&ContentID=18412. Accessed August 2010.
8. Saint S, Flanders SA. Hospitalists in teaching hospitals: opportunities but not without danger. *J Gen Intern Med*. 2004;19(4):392–393.
9. Flanders SA, Centor B, Weber V, et al. Challenges and opportunities in Academic Hospital Medicine: report from the Academic Hospital Medicine Summit. *J Hosp Med*. 2009;4(4):240–246.
10. Pantilat SZ. Palliative care and hospitalists: a partnership for hope. *J Hosp Med*. 2006;1(1):5–6.
11. Steinert Y, Mann KV. Faculty development: principles and practices. *J Vet Med Educ*. 2006;33(3):317–324.
12. Steinert Y, Mann K, Centeno A, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Med Teach*. 2006;28(6):497–526.
13. Trowbridge RL, Bates PW. A successful approach to faculty development at an independent academic medical center. *Med Teach*. 2008;30:e10–e14.
14. Howell E, Kravet S, Kisuule F, Wright S. An innovative approach to supporting hospitalist physicians towards academic success. *J Hosp Med*. 2008; 3(4):314–318.
15. Podrazik PM, Levine S, Smith S, et al. The curriculum for the Hospitalized Aging Medical Patient program: a collaborative faculty development program for hospitalists, general internists, and geriatricians. *J Hosp Med*. 2008;3(5):384–393.
16. Stanford Faculty Development Clinical Teaching Program. Available at: http://www.stanford.edu/group/SFDP. Accessed August 2010.
17. Auerbach AD, Chlouber R, Singler J, et al. Trends in market demand for internal medicine 1999–2004: an analysis of physician job advertisements. *J Gen Intern Med*. 2006;21(10):1079–1085.
18. The Academic Hospitalist Academy. Available at: http://www.sgim.org/index.cfm?pageId=815. Accessed August 2010.
19. Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: a systematic review. *JAMA*. 2006;296(9):1103–1115.
20. Wingard DL, Garman KA, Reznik V. Facilitating faculty success: outcomes and cost benefit of the UCSD National Center of Leadership in Academic Medicine. *Acad Med*. 2004;79(10 Suppl):S9–S11.
21. Ries A, Wingard D, Morgan C, et al. Retention of junior faculty in academic medicine at the University of California, San Diego. *Acad Med*. 2009;84(1):37–41.
22. Poloi LH, Knight SM, Dennis K, Frankel RM. Helping medical school faculty realize their dreams: an innovative, collaborative mentoring program. *Acad Med*. 2002;77:377–384.
23. Demmy TL, Kivlahan C, Stone TT, et al. Physicians' perceptions of institutional and leadership factors influencing their job satisfaction at one academic medical center. *Acad Med*. 2002;77:1235–1240.
24. Sambunjak D, Staus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *J Gen Intern Med*. 2010;25(1):72–78.