CAREER SATISFACTION

Career Satisfaction and Clinician-Educators

The Rewards and Challenges of Teaching

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Doctor—from the Latin docere to teach.

A growing number of generalist physicians teach students and residents in their offices, clinics, and hospitals.^{1,2} These clinician-educators play a vital role in our increasingly decentralized educational system. To recruit and retain clinician-educators and ensure high-quality training, medical centers must maximize clinicians' satisfaction with teaching and understand how teaching affects their overall job and career satisfaction. The aims of this article are to (1) discuss physicians' job satisfaction,

including recent work by the Society of General Internal Medicine's (SGIM) Career Satisfaction Study Group, (2) describe the potential effects of teaching on physicians' job and career satisfaction, and (3) offer suggestions for maximizing the satisfying aspects of teaching and minimizing the challenges.

METHODS

Literature Search

To identify studies examining the impact of teaching on the job or career satisfaction of clinician-teachers, we searched MEDLINE (1966–1996), PsychInfo (1984–1996), and CINAHL (1982–1996). The following terms were used as exploded medical subject headings (MeSH) and as text words: *job satisfaction* or *career satisfaction* and *physician* or *clinician* or *clinician educator* or *clinician teacher* or *primary care*. We also reviewed 38 articles on physicians' job or career satisfaction that served as the basis for the SGIM Career Satisfaction Study. References from relevant articles were examined for other appropriate articles.

Literature Quality

We identified 20 studies related to the job and career satisfaction of clinician-teachers. None of these studies examines the job or career satisfaction of clinician-teachers as its primary objective. Most of the studies involved internists or family physicians and fell into four categories: job satisfaction studies that included questions about teaching,^{3–7} studies of clinician-teachers' attitudes about their practice and teaching,^{8–12} studies of the factors that enhance the recruitment and retention of physicians in practices,^{13–15} and studies about the "costs" of teaching.^{11,16–22}

These studies varied significantly in their methodologic approach and rigor. Except for Cook et al.,⁴ these studies suffer from one or more methodologic problems including low response rates, samples limited to one institution, and inadequately developed measures. Because of the variability among the studies and their methodologic problems, we will supplement the results of these studies with personal observations. We recognize the limitations that result from

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our use of studies with methodologic problems and anecdotal evidence. Nevertheless, we present this material with the caveat that it is the best that the literature and experts in the field have to offer, and suggest that this review be seen as a pilot study, or the preliminary step, preceding the research work that needs to be done in the area of clinician-educator satisfaction.

Developing the Conceptual Model

As phase 1 of a national study of physicians' career satisfaction, the SGIM Career Satisfaction Study Group developed a conceptual model of the major factors that affect physicians' job and career satisfaction. We modified the model to highlight factors in it that might be affected by teaching. Development of this model consisted of (1) review of the literature on physician satisfaction, as well as the impact of teaching on satisfaction, (2) informal interviews with physicians, and (3) personal insights gained in working with clinician-teachers. Once the model was developed, it was refined using qualitative data from a national survey of physicians in large group practices²³ and focus group data from selected physician subgroups: female, minority, inner-city, and managed care physicians (J. McMurray, personal communication). The relationships depicted by the model are *hypothesized* relationships suggested by previous studies; they have not been systematically studied.

PHYSICIANS' JOB AND CAREER SATISFACTION

As little is written specifically about clinician-teachers' job and career satisfaction, we will begin by describing what is known about that of physicians in general. Until recently, physicians were perceived to have high levels of career satisfaction and jobs that were interesting, challenging, and respected by society. They had great autonomy in their care of patients, were able to determine their working conditions, and earned considerable personal and financial rewards. However, dissatisfaction may be growing among physicians, particularly among generalists.²⁴⁻²⁶ The rapidly changing health care environment is perceived to be a major contributor to the eroding satisfaction of generalist physicians.^{3,24,27}

Studies thus far have provided only a partial understanding of physicians' satisfaction with their jobs (current practice and daily work) and careers (chosen specialty). Measures of satisfaction are evolving. There is no consensus on how best to measure satisfaction and the factors that affect it.²⁷ Furthermore, there have been few comparisons of job or career satisfaction across subgroups of physicians (e.g., specialists vs generalists, family medicine vs general internal medicine vs pediatrics, clinician-teachers vs nonteaching clinicians).

As a means of organizing what is known, we present our conceptual model of the major factors affecting physicians' job and career satisfaction (Fig. 1). At the core of

FIGURE 1. A conceptual model of the impact of teaching on physicians' job and career satisfaction.

the model are job, personal, family, and community characteristics affecting physicians' job and career satisfaction. Several studies were particularly useful in developing this portion of the model.^{4-7,28-38} These studies identified a wide array of factors related to physicians' job and career satisfaction, including seven job characteristics that emerged from more than one study: resources needed for practice, quality of care provided, professional relationships, patient relationships, autonomy, status, and pay. Physicians also bring a variety of needs, goals, expectations, and preferences to the job. These personal and family characteristics and the characteristics of the community where the physician practices may influence job satisfaction^{28,29,37}; thus, they are included in the model. Besides their direct influence, these factors may indirectly influence job and career satisfaction through personal life satisfaction.^{28,29}

Of these factors, physicians' relationships with patients and colleagues^{4-7,24,29,30,32,35,38} and autonomy^{34,35} are frequently identified as sources of satisfaction with clinical work. The commonly cited sources of dissatisfaction include time pressures, excessive paperwork, loss of autonomy, and on-call schedule.^{4-7,34,35} Because studies of job satisfaction vary significantly in their methodology and focus, care must be taken in interpreting these generalizations. The SGIM Career Satisfaction Study Group is conducting a national study to test this portion of the conceptual model.

This model also indicates why physicians' job satisfaction and career satisfaction are important. First, job satisfaction is associated with retention of physicians in their practices,^{36,37} while dissatisfaction may cause physicians to leave the practice of medicine.^{3,34} Job turnover among physicians is particularly costly for rural and underserved areas, where it is often difficult to replace physicians who have left.^{37,38} Second, physician dissatisfaction may be an indicator of adverse quality for managed care organizations.^{27,39} Third, physician dissatisfaction may be related to patient dissatisfaction and thus have an adverse effect on the quality of patient care.^{8,27}

IMPACT OF TEACHING ON SATISFACTION

Clinician-educators range from clinicians who hold positions within academic institutions and have designated amounts of time (approximately 20% to 40%) devoted to education to community-based physicians who mostly do clinical work and have students and residents join them in their practice. Although much of the following two sections is applicable to the entire spectrum of clinician-teachers, some issues may be more important to clinicians based within academic institutions and others more important to community-based clinicians.

Physicians' job satisfaction may be affected by teaching through its impact on a variety of factors identified in the conceptual model (Fig. 1). Teaching may have positive effects on clinicians' job and career satisfaction by provid-

ing intellectual stimulation, promoting professional growth, and providing personal satisfaction through contact with young and enthusiastic learners. Teaching also has the potential to adversely affect job satisfaction if it diminishes clinical productivity, interferes with the flow of patients, extends the length of the work day, lowers income, upsets patients, or causes conflicts with staff. The following two sections describe some of the positive and negative effects of teaching on job satisfaction.

Rewards of Teaching

Intrinsic or Primary Rewards

Teaching is an activity that brings joy for many. Studies of the satisfaction of grade school and high school teachers conclude that the joy of teaching comes from intrinsic rewards such as helping students learn, seeing their successes, and making a difference in their lives (^{40,41}; Kim I, Loadman WE, unpublished report). Observing the outcomes of teaching satisfies teachers' altruistic need to contribute to society, and interacting with students, in itself, also brings great satisfaction.⁴⁰ These intrinsic rewards are central for those who persevere as teachers and critical to preventing job stress and burnout.⁴²⁻⁴⁵

Similarly, the intrinsic rewards of patient care—patient contact, altruism, intellectual problem solving, and the application of professional knowledge—are important motivators for physicians' clinical work,^{46,47} and sources of job satisfaction (Fig. 1). Teaching may highlight and reinforce these motivators for clinicians. A clinician-teacher participating in the University of Wisconsin's Interdisciplinary Generalist Curriculum project wrote⁴⁸

[It is an] excellent opportunity to remain in touch with why one chooses medicine as a career—the students at this level really understand the altruism, the dedication, the commitment.

Furthermore, clinician-educators may experience the same intrinsic rewards teaching brings to grade school and high school teachers: the joy of teaching itself and the gratification of witnessing students' mastery of skills and future career successes.^{4,11,12,49,50} In an evaluation of a longitudinal primary care course at the University of Illinois College of Medicine at Chicago, community physicians agreed or strongly agreed (on a 4-point scale) that the intrinsic rewards of teaching were important determinants in their motivation for volunteering for the course.¹²

There are several reasons why clinicians may be intrinsically motivated to teach. Clinicians are in a position to share the satisfaction they derive from patient care with students and residents. In a survey of 199 general internists in Canada, Cook et al. found that among the 77 (38%) who were involved in teaching, the opportunity to be a role model and mentor was an important source of satisfaction.⁴ Primary care preceptors at Oregon Health Sciences University and the University of North Carolina at Chapel Hill frequently echo the comments made by a preceptor at the University of Wisconsin:

I like the chance to show students the rewards of primary care—the satisfying relationships with patients and [the] bond that forms. I liked opening their eyes to the “whole person” approach rather than “patients as diseases.”

Medical students and residents are particularly stimulating individuals to teach. They are bright, well-educated, and motivated learners, who bring youthful energy and outlooks, and excitement for their new profession. Community-based clinician-teachers may be ideally situated to appreciate the enthusiasm and capability of student-physicians for the following reasons: (1) community rotations bring clinicians and learners together for blocks of time without competition from other learners; (2) the apprenticeship training model, which is the norm, allows the teacher and student to work closely with one another; and (3) learners are often happy for the break from their teaching hospitals and eager to learn from realistic role models in the type of setting in which they may practice one day. As another clinician-teacher at the University of Wisconsin wrote,

The unbridled enthusiasm of my student was almost infectious. It was a joy to see the confidence she has developed from year one to year two.

It is important to note that individual physicians differ in their interest in teaching and in the enjoyment it brings them. Some find little joy in teaching. For others, it is the most rewarding aspect of their work. For some physicians, the rewards of teaching may substitute for their loss of satisfaction in the practice of medicine. Kirz and Larsen studied the impact of teaching on 57 physicians, 54 nurses, and 2,330 patients at Group Health Cooperative of Puget Sound.¹¹ Of the 57 physicians surveyed, “73.7% felt that the pleasure or interest of their practice was increased by teaching.”

Secondary Rewards

Teaching may bring a number of other benefits to physicians and their practices. First, physicians may feel a renewed sense of the importance of their work. Without receiving feedback from learners, physicians often have no mirror in which to view their work. Many become lost in the day-to-day tasks of patient care. By watching and listening to themselves as they interact with students, and through feedback from students, physicians again see the depth of their knowledge and experience and the contributions they make to people's lives.

Second, working with learners may help physicians keep abreast of changes in the practice of medicine thereby enhancing the intellectual stimulation of their job (Fig. 1). Teaching is a powerful motivator for learning.^{11,12} Students and residents may bring to the clinician-educator knowledge and perspectives they have acquired during their training. They may also serve as a constructive and accepted link between community physicians and academic medical centers.

Third, patients may enjoy the presence of students and residents in their physician's office. They may gain confidence in their physician's skills when the local medical school or residency sees fit to place learners in their office. In some communities, practices have marketed their teaching roles to attract patients (J. Mahaffy, personal communication). Patients may even feel empowered by the opportunity to help students learn, which in turn may bring a new level of trust and collegiality between themselves and their physicians (see Fig. 1). And staff may appreciate the opportunity to contribute to the education of future physicians, adding interest and perceived value to their jobs.

Finally, learners may contribute to a practice by completing projects that address issues important to the practice (e.g., the development of clinical flow charts for data on chronically ill patients, patient education materials, interventions to improve vaccination rates, patient surveys, and evaluations of existing clinical and community health programs). Communities may benefit from students' participation in ongoing community health programs (e.g., smoking prevention programs for grade school children) and assessments of the health care needs of a community (e.g., identifying that caregivers need a list of community resources for patients with Alzheimer's disease). Although there is anecdotal information about these secondary rewards of teaching, they have not been studied.

Positive Effects on Recruitment and Retention

To the extent that teaching increases job satisfaction, it may promote the recruitment and retention of physicians in their practices. Three studies offer conflicting results and do not assess potential confounding factors (e.g., the presence of residents may reduce the on-call schedule, thus promoting recruitment and retention).^{13–15} Unfortunately, we cannot draw conclusions about the effects of teaching on recruitment and retention without more studies.

Challenges of Teaching

Cost of Teaching—Productivity and Time

The major challenge of teaching is balancing patient care and teaching (see work features and income in Fig. 1). The current emphasis on increasing productivity, and constraining costs, further heightens the tension between patient care and teaching. Available data are inadequate to assess the financial consequences of practice-based teaching. Some studies conclude that physicians who teach students in their practices see fewer patients per day and have lower gross charges.^{4,11,16–20} Yet others conclude, on average, there are no significant changes in patients seen or gross charges.^{12,21,22} Two studies suggest that physicians accommodate students by increasing the amount of time they work.^{19,22} Comments from two preceptors at the University of Wisconsin further describe the conflicts between teaching and efficient patient care:

I thoroughly enjoy interacting with medical students, but the environment does not allow for an overall satisfying and minimally frustrating experience. In the setting I work in (HMO), efficiency is a real problem. It is many times too difficult to adequately include students, interact, and answer questions.

The problem is the time spent makes a much longer day for the student. [I] am unable to do records/dictations as well, so this gets pushed to after patients are seen and students are gone.

A review of the literature on this important issue is included elsewhere in this supplement.⁵¹

Patient and Staff Concerns

Beyond its impact on productivity and the length of the work day, teaching may present other challenges that are even less well understood. A University of Wisconsin preceptor notes the problem of not having enough space for students to see patients:

... doesn't give me any time or space allowance for students—and they take both. The benefit [of teaching] to managed care organizations could be stressed to the boards and medical directors.

A second issue is patients not accepting students and residents or not voicing all of their concerns because of the presence of a learner. This may interfere with the physicians' relationship to patients (see Fig. 1), thus diminishing job satisfaction. The previously cited study of Group Health Cooperative patients found that 8.4% were not satisfied with the care provided by a student or resident.¹¹ The practice may also experience increases in clerical and nursing time due to students,¹⁷ and some nurses may experience less pleasure in their work.¹¹

Teaching and Management Skills

Other concerns and challenges relate to the clinician's role as a teacher. Clinician-teachers may experience doubts about their skill as teachers and, even more so, as evaluators. Cook et al. found that providing feedback on a learner's inadequate performance was a source of dissatisfaction for 30.1% of the 77 clinician-teachers in their study, and the opportunity to improve teaching skills was identified as a potential solution for teaching problems.⁴ Even if their teaching skills are adequate, clinician-teachers may not have the knowledge or skills to effectively integrate students into their busy practices. Excessively busy practices may hamper students' educational experiences even though the physicians may be good teachers. A University of Wisconsin preceptor notes this potential problem:

No change in scheduling means I often had students "sit out" for several patients so I could catch up.

Vinson and Paden, in a study of 43 practices, reported that "students felt their educational experiences had been hampered by an excessively busy practice" for 11 physicians with whom they had worked.¹⁹ Besides the educa-

tional issues they create for students, inadequate teaching and management skills may create a frustrating experience for physicians relating to their job preferences and needs (Fig. 1).

STRATEGIES FOR INCREASING SATISFACTION

Strategies to increase clinician-educators' job and career satisfaction have not been studied. The strategies presented here are based primarily on personal experience and are directed exclusively at teaching. Strategies to increase satisfaction with clinical work are beyond the scope of this article.

Strategies for Academic Medical Centers

Emphasize Intrinsic Rewards

It has been difficult to quantify the amount that academic medical centers should "pay" for teaching, whether it occurs in their own hospitals and clinics or in community-based practices. Studies that have tried to measure revenues lost because of learners remain inconclusive.^{11,16-22,51} Even if it were possible to arrive at a dollar amount that each student "costs," compensating physicians for losses in patient care revenue would be prohibitive for many residency programs and medical centers.¹² Furthermore, most physicians are attracted to teaching because of its intrinsic rewards.^{4,11,12,49,50} However, the issue of offering financial incentives is complex and likely to vary depending on the local health care environment and educational institutions.

On the other hand, it is important for the academic medical center to support and serve the clinician-teacher's desire to do a good job and to recognize the work done. Thus, the relationship between the clinician-educator and the teaching program is crucial. This relationship is a partnership characterized by good communication, mutual respect, and joint decision making.

Reward and Recognize Teaching

Giving community-based clinician-teachers faculty appointments provides recognition of their work and acknowledges the honor of teaching. It also signals to physicians that they are part of the academic community and are accepted as an important part of the school's overall efforts. First, for clinician-teachers based in academic institutions, teaching contributions should be systematically recorded (e.g., through the use of a teaching portfolio or departmental databases), recognized in the promotion and tenure process, and supported by their department and medical school. Second, clinician-teachers should be included in educational policy and program development. This involvement ensures their active participation in teaching, strengthens the development of an educational program, and signals that this is a true partnership based on mutual respect.

Increase Teaching Skills

Because most physicians choose to teach out of personal desire, their long-term satisfaction depends partly on their sense of doing the job well. They should be provided opportunities to increase their skills as teachers, lecturers, coaches, mentors, and evaluators,^{4,12} whether they are based at academic medical centers or in the community. Clinician-teachers need feedback on the effectiveness of their teaching coupled with opportunities to improve areas of relative weakness. Several programs have been developed to improve physicians' teaching skills. These include the Stanford Faculty Development Program,^{52,53} Preceptor Education Project,⁵⁴ and a five-step microskills model of clinical teaching known as the One Minute Preceptor.⁵⁵

Suggestions for improving teaching effectiveness do not need to come from academic medical centers and may be more effective from peers.^{4,12,54} Academic medical centers, however, can facilitate such communication by organizing workshops, teleconferences, newsletters, or social meetings that allow preceptors to informally discuss their experiences.

Make the Job Easier

Addressing the following issues may make teaching easier for clinician-teachers. First, most physicians want significant advance notice of dates when students will be in their practice. It allows them to alter their patient and personal schedules, if necessary, and to mentally prepare themselves and their staff for the extra responsibility. Second, newly recruited clinician-teachers appreciate suggestions on how to integrate learners into practices efficiently and effectively.¹² Third, clinician-teachers need practical information on course goals and objectives, expectations of students' (or residents') performance, criteria for evaluating performance, and the types of feedback students would find useful at their level of training. Fourth, standardization of reporting forms across courses and programs simplifies the paperwork burden for clinician-teachers. Finally, clinician-teachers appreciate an easy avenue for contacting the course director or administrative support person (e.g., a toll-free telephone line). Supplying easy access to the course director or administrator is one way to let clinician-educators know that the medical center values them. Also, personal contact with the course director or administrator can help avoid potential problems and miscommunication.

Make the Job Interesting and Fun

Academic medical centers can help promote practices and their work with students by sending press releases to local newspapers describing a physician's involvement in teaching. In addition, medical centers can provide practices with "bio-sketches" of students that can be posted in the office. Furthermore, medical centers can promote clinician-teacher participation in student events or invite

students to share their experiences at faculty-development workshops. This allows clinician-teachers to see the enthusiasm and commitment of their learners—a component of teaching that is associated with satisfaction.⁴

Include Community Service in the Educational Program

Students and residents can contribute to their teachers' practices. Through community service projects, students may open new avenues of communication between practices and communities. Students may also identify previously unrecognized health needs or develop resources that benefit the practice and its patients.

Strategies for Clinician-Educators

Strategies for clinician-educators to increase their satisfaction as teachers complement those outlined for academic medical centers. First, clinician-teachers should consider the factors that affect their job and career satisfaction (Fig. 1) and consider how teaching might affect them personally. Teaching is exhilarating for some clinicians and a burden for others. Also, clinicians should consider the teaching role they would play with various learners (e.g., first-year medical student), educational programs, and institutions. Teaching first-year students, third-year students, and second-year residents are very different experiences. Knowing what motivates and fits individuals and their practices is an important first step. It is also important to select which months to teach, providing breaks when necessary to keep the pace of work from becoming too hectic.

Second, clinician-educators should find ways to enhance their teaching skills. Several articles in this issue offer practical tips for teaching in inpatient and outpatient settings. One can also take advantage of faculty-development programs offered by one's medical center or professional organizations (e.g., the Society of Teachers of Family Medicine and Society of General Internal Medicine). In addition, clinician-teachers can learn ways to make it easier to integrate students and residents into a practice by talking with other clinician-teachers. Clinician-teachers often find sharing their experiences enjoyable. Finally, it is important for clinician-teachers to find time to share their interests with their students and to learn about their students' interests. It is this personal connection that students remember and teachers value.

CONCLUSIONS

As is the case for all individuals who make teaching a part of their work, clinicians who teach do so primarily because they enjoy teaching and interacting with learners. It is important for academic medical centers to recognize this, and to design ways to maximize the intrinsic rewards for teaching. These rewards are increased when teachers are skilled and confident in their abilities, when

there is no unnecessary structure imposed to interfere with the interactions between learners and teachers, when teachers feel respected and appreciated by learners and academic medical centers, and when both learners and teachers have a clear understanding of their roles and responsibilities.

On the other hand, because physicians and practices incur some costs for clinical teaching, it is essential that academic medical centers, clinician-teachers, and their practices work together to minimize the potential negative effects of teaching. Paperwork related to teaching and other demands placed on physicians' time must be kept to a minimum. Creative solutions should be sought to minimize the time and financial effects of teaching on the practice. Finally, whenever possible, clinician-teachers should participate in the design and decision-making process of the educational programs. Their experience and knowledge are important for developing effective strategies for implementing educational programs. Clinician-educators who are satisfied in their teaching and clinical work are likely to remain effective teachers, satisfied clinicians, and positive role models for learners.

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