

Virtual Mentor
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FROM THE EDITOR

The Growing Importance of Business to Medical Students

This month's *Virtual Mentor* examines factors that influence the decisions medical students and residents make about their careers in medicine. There is tension, some perceived, some real, between medicine as an altruistic and healing art and as a business venture. This tension is present as a subtext to virtually every contribution of this month's issue.

This issue begins with the story of Dr. Bryant, a third-year resident, at a crucial point in his career as he confronts the business of medicine—idealizations of different careers, money, and how to go about making it. In his commentary on this case, John G. Halvorsen provides an excellent framework for identifying, committing to, and acting on personal values in choosing the most suitable position. He suggests that Dr. Bryant's real dilemma may not be about his choice of a job, but rather the result of an incomplete examination of his personal goals and desires as a physician.

Perhaps Dr. Bryant was unprepared to make the business decision he confronted. This is the notion Allison Carmichael picks up in her medical humanities narrative. Armed with several perspectives from a diverse group of practicing physicians, Carmichael takes us on a personal journey through the struggles of specialty choice, reflecting on her perception of the good life as a physician and an environment that forces her to prioritize values in order to achieve that good life. As a preclinical medical student, she grapples with medical business concepts in attempting to make an informed choice about her specialty and, ultimately, her job.

A second clinical case focuses on a primary care physician, Dr. Anderson, who is unsure about endorsing a new medical business model in the area—a medical spa. In his commentary, Lionel Bercovitch explores the controversy surrounding medical spas, commenting on the consequences of this business model for dermatologists and the complex, yet disjointed, regulatory structure that may contribute to the perception of these spas as questionable medical enterprises. He proposes that Dr. Anderson's doubts might be less about the nature of the medical spa and more about a business model that is in some respects more desirable than her own. Bercovitch speculates that systemic factors such as our current health care system might be causing Dr. Anderson to wonder about her practice and career choices.

The last clinical case introduces a medical student named Adam who is determined to secure a job that will bring him personal and financial satisfaction, so determined in fact, that he begins to jeopardize his relationships with other students to achieve this goal. In his commentary on this case, Jeffrey Reagan faults Adam's overly

competitive behavior, reminding us that the pursuit of greatness in medicine is through patient-centered care and, therefore, is inevitably team based. Laurel C. Blakemore's commentary also centers on the primary goal of providing excellent patient care; she argues that some level of competition can be good for medicine, as long as patients' interests remain foremost.

The clinical pearl picks up on an issue faced not only by Adam but by virtually all medical students, residents, and attending physicians: stress. In his effort to stand out among his colleagues, Adam demonstrated several classic characteristics of Type-A personality, and, in the pearl, Sundeep Jayaprabhu discusses evidence that links stress in so-called Type-A personalities with negative health outcomes. He acknowledges that the evidence is inconclusive, but does not dismiss the connections. A lack of ironclad evidence, he says, does not diminish the common observation that stress decreases our quality of life, and assures readers that, while attempting to analyze how we manage stress can increase discomfort in the short term, the analysis can lead to long-term benefit.

An undercurrent runs through these articles suggesting that career decisions are not based solely on personal choice. They are influenced by the nature of our medical system, which plays a role in who become physicians, what specialties they choose, and, to some extent, where and how they practice. Other pieces in this issue investigate what effect this system has on the business of medicine and choices in a medical career.

In the medicine and society section, Daniel N. Robinson presents a narrative about the balance of idealism and business throughout the history of Western medicine. He casts light on a central theme running through the many epochs he addresses, which is captured in his conclusion. "If we expect saintly and heroic conduct [from physicians]," he says, "we must be prepared to accord the highest respect, the deepest admiration, and, yes, the right to a rich life during the few hours that can be spared." Robinson reminds us that medicine has worked very well in the past with physicians being highly compensated and that it can also work this way in the future, but he simultaneously warns that medicine should not be considered primarily a business.

In the op-ed section, E. Ray Dorsey et al. echo Robinson's conclusion. The authors are concerned with ameliorating physician shortages, proposing that the best way to do this is by increasing funding for residency programs and for other primary care physicians. One of their most intriguing arguments states that paying residents more would encourage members of underrepresented minority groups to enter medicine. If true, this would accomplish two goals: increasing minority representation in medicine and reducing the comparative economic disadvantage of going into lower-paying specialties.

In their policy forum discussion, Keisa Bennett et al. address the related problem of recruitment, focusing on rural medicine. They note that rural areas have fewer

doctors per capita than urban areas and that the relative paucity of medical students who choose to enter primary care exacerbates this problem. Recent and ongoing expansions of medical school class sizes provide an excellent opportunity for administration to think about what type of student to admit, because research suggests that many of the best indicators of eventual practice in a rural or underserved area can be known at the time of admission.

Though interesting in itself, the question of physician compensation is also relevant to health care reform. Some of the articles in this month's *Virtual Mentor* hint at this relationship, contending that paying physicians more would correct some of the maldistribution and access problems in today's health care delivery. This view dissents from policies that argue physician overpayment contributes to runaway costs in medicine. The opposing arguments presented here cannot be ignored in larger debates about health care reform and the place of physician compensation in the health care system.

In a 2008 *JAMA* article, Hauer et al. explored the multifactorial nature of specialty choice, focusing specifically on the decision to enter an internal medicine residency. David Y. Chen's discussion of this article explores the effects of earning potential on specialty choice and straightforwardly asks if our health care training, funding, or whole system, should be changed to meet society's needs for medical care. He illumines some of the ways in which choices that all medical students make are linked to the broader system in which we operate.

As some of the case commentaries reveal, primary care physicians find themselves caught between dwindling payments and rising stresses, an uncomfortable position that reduces their job satisfaction. One such stress could be the need to keep up with increasing legal intricacies that have become part of the business of medical practice. In the article on fee-splitting, Cheryl Miller describes a case arising from a relationship that might seem innocuous but, as she demonstrates, is actually fraught with legal difficulties. The complexities of the legal practice environment certainly play a role both in the specialty choices that medical students make and the practice decisions that physicians in established practices face.

The complexities of the legal world often seem incomprehensible to physicians. The fact that practice laws and regulations vary among states compounds the issue further. Physicians encounter—and medical students worry about—daunting legal issues, but education about the law and business practices can alleviate some of the perplexity. In the medical education section, James M. DuBois outlines the mission and activities of the Bander Center for Medical Business Ethics in St. Louis, an educational center established to teach medical business ethics across all stages of a medical career. The Bander Center works to ensure that discussion of the ethical dilemmas explored in this issue continues in the medical community.

Whether or not medicine is a business, it cannot ignore the business world. Medicine and business are inextricably interrelated. Ours is not the first generation to grapple

with these questions. As a careful reading of Robinson's article indicates, medicine and business are often discussed together. Their relationship is adjusted as succeeding generations enter medicine and redefine it. The authors in this issue have made valuable contributions to the greater conversation that will help shape medicine for our time.

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CLINICAL CASE

Decision Making at the Crossroads of Practice Choice

John G. Halvorsen, MD, MS

Dr. Bryant was nearing the end of his residency at City Hospital and starting to think in earnest about the next steps in his career. City Hospital was a teaching hospital for residents and medical students and affiliated with the state university's academic health center. City had just offered him a position as an attending physician with an appointment as an assistant professor on the medical school's clinical-educator track, but Dr. Bryant was debating a job offer from Horizons Clinic, a large, multispecialty clinic with an impressive reputation, working environment, and compensation package.

Unable to make a firm decision, Dr. Bryant turned to one of his closest mentors, Dr. Gabriel, for some career advice, telling him about his job offers and asking him for his perspective.

"Remember when you just started here and Mr. Johnson was your patient?" asked Dr. Gabriel.

Dr. Bryant smiled, "Ah yes, I learned a lot about myself because of him."

"Yes, I remember it well too," said Dr. Gabriel. "You never said anything, but your first impressions of Mr. Johnson were all too clear. You thought he was just another hopeless alcoholic indigent with TB, cruising through this hospital system. But I saw you develop a relationship with him, pushing him to stick with the alcohol addiction recovery program. As I watched you work with him over time, I knew you were beginning to understand what medicine was really all about. My point is that you can do whatever you want, but remember that encounter, and remember that there are more Mr. Johnsons out there.

"You'll also have the opportunity to partner with the health department and community agencies to improve the health of this entire community. And with our long-term affiliations in Haiti you'd have the chance to help develop a sustainable system of health care in that impoverished country. These are benefits of a job that no amount of compensation or weeks of vacation can give you."

Inspired by his conversation, Dr. Bryant leaned toward taking the City Hospital job. As he was leaving the hospital one evening, he ran into Dr. Patel, who had recruited him for the interview at Horizons Clinic.

“Decide to join us yet?” asked Dr. Patel.

“Honestly Dr. Patel, I am having second thoughts.”

“Everybody does; I did too,” Dr. Patel said. “Why don’t you tell me about your reservations?”

Dr. Bryant explained that he had been thinking about the mission of medicine and his role in fulfilling it, describing the insights Dr. Gabriel had provided him.

“Entirely understandable,” said Dr. Patel. “In fact, it is very mature of you to think about your obligations to patients of all incomes, and I am aware that our clinic’s clientele are mostly employed in well-paying jobs and have excellent health insurance. But, Dr. Gabriel left some important points out. First, our physicians are compensated well because they provide excellent care, far above average. Just think of the opportunities you will have working and learning with some of most respected physicians in the area and being able to tell your patients confidently that they are receiving the best care available.

“Horizons also has an active charity program in which you could participate, giving free or reduced-fee care on a case-by-case basis. Plus, our physicians can use their personal financial resources however they choose. For example, Dr. Smith has given thousands over his lifetime to various charities, and Dr. Anderson takes 2 weeks of his vacation every year to travel to Guatemala to help staff a clinic there.”

Dr. Bryant went home thinking that Dr. Patel had said a lot of things that made sense, and the allure of working at Horizons had returned. He fell asleep that night unsure about which job to accept.

Commentary

Wrestling with the decision about where to invest your professional career is never easy. The consequences of that choice will significantly impact your personal and professional future as well as the future of one’s family. One way to approach this decision is to employ a process of focused, active self-reflection. “Active reflection” refers to a formal process of critical thinking. Grenz and Olson describe it as:

using our minds to organize our thoughts and beliefs, bring them into coherence with one another by attempting to identify and expunge blatant contradictions, and make sure that there are good reasons (for believing and acting) in the way we do.... Reflection...involves...critical thinking...(that uses) logic...as well as some amount of objectivity toward one’s own assumed beliefs and life practices [1].

Remember Your Calling

In the first stage of active reflection Dr. Bryant may wish to pause and reconsider that point in time when he made his decision to enter the profession of medicine. It

might be enlightening to reread the personal statements he prepared for his medical school and residency applications. Thinking about his commitment he can ask himself, what most attracted me to enter this vocation? To what was I most committed and have those commitments changed? To what, or to whom, am I now most dedicated? The answers to these questions can help clarify his professional motivation and rekindle his calling into medicine.

Those who enter religious vocations commonly speak of a calling. A calling is also important for those who enter the profession of medicine [2, 3]. As Dr. Bryant reexamines his calling to medicine, he may find it helpful to view it through the lens of professionalism and its core values [2-9].

Reynolds reminds us that professionalism is:

[a] set of values, attitudes and behaviors that results in serving the interests of patients and society before one's own. Honesty and integrity are...essential to medical professionalism....Professional behaviors include a nonjudgmental and respectful approach to patients, the pursuit of specialized knowledge and skills with a commitment to life-long competency, and a collegial and cooperative approach to working with members of the health care team in the delivery of patient care. Lastly, community service and public leadership reinforce the responsibility of physicians to fulfill the goals set forth for the profession by the public. In exchange for putting the interests of the patient and public first, physicians earn trust, respect, and the confidentiality of (their) patients [10].

Define Your Professional Values and Priorities

After thoughtfully reflecting on his professional calling and on the core attributes of professionalism, Dr. Bryant should engage in active reflection again to delineate clearly the professional values and priorities he envisions for his life and commit them to writing. Within the context of professionalism, which principles hold the highest value for him? Which will govern his professional life and conduct? Which is he willing to share with others so they can help hold him accountable? How will he define himself as a professional?

Evaluate the Options

Having defined and listed his values and priorities, and with this “professionalism scorecard” in hand, Dr. Bryant is in a better position to evaluate his two employment options. Because of his intimate exposure to City Hospital, he is more capable of assessing the degree to which that vocational option fulfills his criteria.

Since his knowledge of Horizons Clinic is hearsay rather than experiential, Dr. Bryant will need to explore Horizons in greater depth, addressing probing questions to its physicians and staff and to other physicians and health care administrators in the community. For example, he will want to know more about how physicians are compensated. According to Dr. Patel, “physicians are compensated well because they provide excellent care.” But how is excellence or quality assessed? And how is

this tied to compensation? Compensation based on measured quality is not yet the current mode of compensation in the United States. Compensation currently depends more on patient volume, maximizing billing codes, performing higher-paying procedures, aggressive billing and collection practices, limiting or denying access to patients whose health care is reimbursed at low rates (e.g., Medicaid), and productive incentive plans.

In a similar vein, Dr. Patel indicated that Dr. Bryant would be able to tell his patients that they are receiving the best care available. On what basis is that comment supported? How is care measured to determine that it is the best? Furthermore, how is care at Horizons better than the care patients receive at City Hospital?

In terms of career development, Horizons Clinic's focus was directed more on personal development and working and learning with some of the most respected physicians in the area—not on the generative process of helping develop the careers of others as a teacher and mentor for student and resident physicians.

Regarding the charity care program, Dr. Bryant may ask, how are case-by-case decisions made about who is eligible for charity care, and how does that determination relate to the professional's responsibility to duty, service, compassion, ethics, and responsiveness to patients? To what degree is charity care integral to Horizons Clinic's culture? Do all physicians participate? Is it voluntary? Are physicians limited in the extent to which they can participate? What are the financial consequences for participation, or for nonparticipation? How does Horizons Clinic assess and attempt to meet the health needs of the community as a whole?

In terms of the prospect for international health opportunities, Dr. Bryant might ask why one must take vacation to participate, if a commitment to global health is truly part of the organization's culture. He may also wish to determine whether the global health options available to him are really making a significant difference or whether they are a type of medical tourism or a form of professional penance that some physicians feel they must pay to compensate for their high personal income.

Consider the Organizational Culture

In addition to assessing each vocational option in terms of the best possible match to his own professional values, Dr. Bryant will also want to think carefully about the respective cultures of the two organizations to determine which one best fits his personality, professional calling, and professional values. The organization he chooses to join will exert a profound long-term effect on shaping the rest of his professional life.

In *Leading Change*, J. P. Kotter defines culture simply as norms of behavior and shared values among a group of people [11]. Consistent with this definition, Dr. Bryant will need to compare and contrast the cultures of City Hospital and Horizons Clinic to identify those common and pervasive ways of acting within each organization that endure because its members teach them to new members, reward

those who fit in, and sanction those who do not. He will also need to determine those unique concerns, goals, and ethical standards within each organization that shape group behavior, and that persist, even when group membership changes.

Organizational culture powerfully shapes human behavior. It is difficult to change, and, since it is nearly invisible, it is difficult to confront. Its power is vested in the fact that it selects and indoctrinates its inductees well, exerts itself through the actions of numerous influential people, and does so without much conscious intent, again, making it difficult to challenge or even discuss. When you have the option, choose your professional culture carefully.

Conclusion

How will Dr. Bryant decide between City Hospital and Horizons Clinic? Although no decision-making process is foolproof, the one I suggest follows a sequential, semianalytic, critical-thinking method that employs key personally defined standards to help Dr. Bryant arrive at the best possible choice. This method requires engaging in active reflection that takes him through a series of steps. He must:

- Bring to mind his initial calling and commitment to medicine, considering and prioritizing the attributes and values of professionalism to which he is most committed.
- Articulate, perhaps even in writing, his personal professional values and priorities.
- Evaluate his options on the basis of his professional values and priorities.
- Determine the organizational culture that best matches the norms of behavior and shared values of the professional environment in which he will thrive.

A final caveat: making decisions of this importance is rarely accomplished well in isolation. At every stage, Dr. Bryant should consult with trusted friends, professional peers, and mentors who know him well. They can help to validate his thinking and provide perspective that he may lose because of personal bias, persuasive marketing, or loss of objectivity.

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CLINICAL CASE

Mainstream Medicine Meets the Medi-Spa

Commentary by Lionel Bercovitch, MD

A new medi-spa moved to town and approached Dr. Anderson, a family physician, about referring some of her patients. A spa representative gave Dr. Anderson a stack of glossy brochures and cards to place on display in her waiting room. Dr. Anderson had heard of medical spas before, knowing they offered some medical procedures, massages, and other services, all in a luxurious environment that was not inexpensive. She knew that several of her patients could afford to go and might want to have more information about the spa, to which she had never given any thought before.

Subsequently, Dr. Anderson researched the spa and discovered that it was jointly owned and operated by an internist and a chiropractor. She couldn't help but be critical of some of the procedures on offer, especially those that were heavily marketed but lacked any credible evidence of efficacy. Would some of her patients be more willing to undergo such a procedure at the medi-spa because a licensed physician happened to recommend it? Would recommending the spa breach trust in the patient-doctor relationship?

Dr. Anderson glanced past her computer screen and noticed the brochures the spa representative had left and began to think about what she should do. Would displaying this information in her waiting room, or mentioning the spa to some of her patients constitute a tacit endorsement of the spa's procedures? Could such an endorsement affect Dr. Anderson's reputation or cost her the respect of some of her patients? She went to sleep struggling with these issues and thinking about what she wanted for her practice and professional future.

Commentary

Medical spas (often called medi-spas) combine treatments traditionally provided in a beauty salon or day spa with medical procedures and noninvasive cosmetic surgery and dermatologic treatments. The care environment is often more luxurious, attractive, and pampering than the standard medical practice setting. Medi-spas now generate more than \$1 billion per year in the United States, having doubled their revenues between 2006 and 2007 [1]. They typically offer standard cosmetic services such as waxing, eyebrow threading, and microdermabrasion, along with laser hair removal, other nonablative laser treatments, treatments with intense pulsed-light sources, and botulinum toxin and filler injections. Some offer massage and aromatherapy. One of the largest sources of profit for medi-spas is the sale of products such as cosmeceuticals [1].

Medical spas come in many sizes and organizational varieties. They may be freestanding entities or share space with a dermatology or cosmetic surgery practice (one-stop shopping); some are under corporate ownership, and others are owned and operated by dermatologists and plastic surgeons, other physician specialists such as obstetricians and family practitioners, or nonphysicians such as chiropractors, electrologists, and naturopaths. Individual state regulations and a patchwork of licensing boards dictate who can own and operate a medi-spa and who can perform which treatments under whose direct or indirect supervision. These boards also dictate what types of training and credentialing medi-spa staffers must have and what products medi-spas can sell. In many states, such facilities can have nonphysician ownership, or individual physicians can own and operate multiple sites. In several jurisdictions, licensed physician assistants, nurse practitioners, and registered nurses can perform laser treatments and inject neurotoxins and fillers without a supervising physician onsite. Cosmetic procedures for which there is little evidence-based benefit—such as some cellulite treatments, mesotherapy, and even nontherapeutic beauty treatments—can be carried out in a quasi-medical environment that lends an aura of medical acceptance to them.

The ethical dilemmas associated with medical spas (and cosmetic dermatology and cosmetic surgery in general) stem from a central question: is the medi-spa a consumer-driven, profit-motivated business that happens to fall under the purview of medical practice or is it a legitimate and integral part of the health care system? Does the medi-spa fulfill consumers' desires or relieve suffering and promote wellness? Does it follow the medical model, in which physicians have a fiduciary duty to place the interests of the patient above their own, or the business model in which the business has a fiduciary duty to its shareholders to maximize return on investment? If the medi-spa is a hybrid of the two, as many medical business ventures are, these duties will inevitably conflict. By virtue of the medical procedures offered and their potential morbidity, health care professionals have a duty that transcends the obligations of a business contract [2, 3]. The professional role of healer and entrepreneur conflict, and rationalization may play a part in how the physician-owner balances those roles.

Analyzing the Business Model's Details

There is nothing inherently unethical about medical spas unless the business model creates conflicting dual loyalties for the physicians or leads to substandard medical practice. Nor is there anything inherently evil about money in medicine, except when its pursuit and acquisition cause physicians to mismanage conflicts of interest. As in most everything in life, the devil is in the details; some of those follow.

Who supervises and performs the medical procedures? This has become an extremely contentious, high-stakes turf battle in states such as California and Florida. Traditionally, laser procedures and injections of fillers and botulinum toxin have been an integral part of dermatology and plastic-surgery practice. These specialists have the most sophisticated knowledge and best training in medical, surgical, and

laser procedures involving the skin and treatment of photoaging, pigment disorders, and birthmarks. But practitioners in fields as diverse as occupational health, emergency medicine, and obstetrics have argued that they can obtain the same training [4]. From a legal standpoint their licenses permit them to perform any of these procedures. Electrologists have traditionally used physical modalities to remove hair; should they not be able to use another newer physical modality to do so? One nurse practitioner argued that, since she could write prescriptions independently and administer chemotherapy or cardiac drugs without a physician onsite, should she not be able to administer something as relatively safe as botulinum toxin or a hyaluronic acid filler independently [5]?

From the technical standpoint, operating a laser and injecting a filler according to manufacturers' instructions are not complex procedures. But determining patient eligibility, performing the procedures optimally, and preventing or addressing complications cannot be acquired in a 1-day course with minimal hands-on experience. Supervising physicians should evaluate each patient before treatment, obtain informed consent, and remain actively involved in the course of treatment and readily available to deal with adverse events, even if the actual procedure is delegated to a trained assistant. Anecdotes (but no published data) tell of laser burns and adverse outcomes of nonsurgical cosmetic procedures resulting from inexperience and poor judgment of inadequately trained and supervised operators.

Each consumer, physician, state legislature, or licensing body has to struggle with these competing arguments and interests. Physicians, estheticians, physician assistants, nurse practitioners, registered nurses, and consumers all have distinct viewpoints and stakes. No single group can expect regulations that completely satisfy its desires and demands. The Commonwealth of Massachusetts convened a panel in 2006 that deliberated publicly for 2 years to produce a set of draft regulations that will likely serve as a model for other states [6]. The draft makes no mention of specialty requirements, stating only that the owner(s) (physician, nurse, or electrologist) be sufficiently experienced or trained (in what way is not defined) to perform the procedures and that those individuals be onsite at all times when the facility is open [6]. In Florida, the Safe Supervision bill, which became law in 2006, specified that medi-spas be supervised by dermatologists or plastic surgeons [1].

The sale of goods. A major source of revenue for medi-spas is the sale of an array of cosmetic and anti-aging products and cosmeceuticals. Much has been written about the ethics of physicians dispensing these products, and it is not within the scope of this commentary to extensively review the literature on this subject. Virtually all nonprescription cosmeceuticals and cosmetic products sold through dermatologic practices and medi-spas lack conclusive evidence to support their stated claims [7]. Idebenone and green tea products sold in physicians' offices and retail outlets are prominent examples [8].

Products distributed by reputable companies might have relevant physiologic and biochemical effects, be produced according to good manufacturing practice, and be

marketed effectively, but none of those properties equates to clinical efficacy. Physicians and medi-spas may also privately label products made by these manufacturers, a practice that is not always accompanied by full disclosure. Medi-spa retail enterprises often have sophisticated inventory control and marketing tools, such as receipt of cooperative advertising dollars from manufacturers. Although medi-spa operators and cosmetic dermatologists may claim that product sales follow ethical guidelines and that patients and clients are not pressured to purchase any product, the widespread practice of paying sales commissions constitutes incentive for staff to promote products and possibly exaggerate claims of efficacy. Lending one's status as a physician to the sale of unproven products in a medical setting is ethically questionable, especially since consumers look to their physicians and health care professionals as more authoritative than an esthetician or clerk at a cosmetic counter.

Interestingly, the regulations of the Commonwealth of Massachusetts Board of Registration in Medicine forbid the display or sale of products such as cosmetics and similar "nondurable goods" in medical offices and facilities (which is widely ignored), as well as products such as crutches, at a profit [9]. By contrast, the new Massachusetts draft recommendations specify that such products not be displayed or sold in exam or consultation rooms, that charges be reasonable, and that decisions regarding sales of items be guided by what is in the patient's best interest (without specifying any criteria for determining this) [6].

Dr. Anderson's Dilemma

Being asked to endorse and promote this quasi-medical venture makes Dr. Anderson uncomfortable. She might harbor reservations about the ethics and qualifications of the owners, truthfulness of the advertising, and slickness of the marketing or business model. She worries about the lack of evidence supporting the efficacy of some of these expensive cosmetic procedures and wonders whether patients are more willing to undergo them in a medical spa environment.

She also fears patients might view spa procedures recommended by a physician-owner more favorably and wonders whether her support would violate her professional duty to the patient. A health care professional who recommends a procedure or spa in which he or she has an undisclosed financial interest definitely breaches professional ethics, and one can argue that disclosure does not necessarily render the arrangement ethical. Moreover, if spa staff promote procedures of dubious clinical benefit for financial gain, Dr. Anderson's endorsement poses ethical problems.

Before referring patients to the spa, Dr. Anderson has some further research to do. Are supervising physicians well trained in medical skin care? Do they provide limited onsite supervision of the individuals who actually provide the treatments? Do they evaluate the patients being considered for treatment? One wouldn't refer patients to a specialist whose credentials, training, and competence were suspect, and the same should apply to any other type of referral. "Specialty" credentialing by a

confusing array of cosmetic surgical and laser boards not recognized by the American Board of Medical Specialties compounds the referral problem. Furthermore, promoting the business sidelines of a colleague's practice (or her own) to vulnerable patients who depend on their physicians for unbiased advice can compromise Dr. Anderson's fiduciary duty to put her patients' interests first. Were she to receive free or discounted spa procedures in exchange for her display of brochures, or receive a token amount of money for each referral and not disclose this arrangement to patients, Dr. Anderson would violate professional ethics guidelines on disclosure of financial conflicts of interest. Moreover, the reward arrangement, whether disclosed or not, could violate anti-kickback laws.

Suppose Dr. Anderson does not actively promote the spa, but her patients ask her about the facility or its staff. If a patient inquires about specific procedures, Dr. Anderson is obligated to disclose what she knows about the treatment and any lack of evidence for its efficacy. If there are other health care professionals whose work she does know and trust, or if there are better procedures than those offered at the medi-spa, she should recommend them as an alternative.

It has been said that if reading about what you're considering doing on the front page of the next day's newspaper would make you uncomfortable, then don't do it. That is certainly good advice for Dr. Anderson in this situation. Similarly, if she is uneasy enough about the venture that she lies awake worrying about it, there is no dilemma. She should politely decline to get involved.

Dr. Anderson apparently falls asleep struggling with what she wants for her practice and professional future. She might be concerned about how medicine is changing and becoming more entrepreneurial or about the future of traditional physicians such as herself. She might be thinking of whether her practice can remain financially viable if she does not become more entrepreneurial. What is more troubling is that, more than likely, Dr. Anderson is reflecting on how, under managed care and current reimbursement schemes, she finds herself spending less time with each patient, feeling hurried, pressured, and professionally unfulfilled. Her moral angst might be accompanied by symptoms of professional burnout or depression. She might for the first time be looking with envy at how other practitioners are generating income by delivering cosmetic services that are desired by patients, provided in an attractive and relaxing spa environment, and represent a cash business. This is indeed what motivates many practitioners to enter the medical spa business.

In a perfect world, every professional would find his or her practice fulfilling, stimulating, exciting, and generating an adequate living. But such is not the case, and most health care professionals at some point in their careers sense that they are stagnating, not able to provide the kind of care they would like, practicing in a way that conflicts with their moral values, or working harder each year for less income [10]. The resolution to Dr. Anderson's struggle is a "choose your own ending" story. Perhaps she awakes the next morning after a refreshing night's sleep, goes to work, cleans off her desk, tossing the spa brochures into the trash, and enters the first exam

room with a smile on her face and a spring in her step, secure in her decision. Perhaps she learns to resolve her ethical concerns, seeks professional help for burnout, arranges her schedule to suit her practice style, finds fulfilling pursuits and relationships outside of medicine, or adds an exciting and intellectually stimulating area of interest to her practice. And perhaps, in doing so, she decides to open her own medi-spa, run in accordance with her moral convictions. Choose your own ending.

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Lionel Bercovitch, MD, is a dermatologist and experienced laser surgeon who has neither current nor past financial interest in or professional association with any entity affiliated with a medi-spa, nor any financial or professional conflict of interest relating to the subject of this commentary.

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CLINICAL CASE

Competitiveness Can Undermine Team Goals

Jeffrey Reagan, MD, and Laurel C. Blakemore, MD

Adam and Emmett had just finished their third-year clerkships and were doing their first elective. Both had chosen orthopaedic surgery, hoping eventually to be selected for a competitive orthopaedic-surgery residency. Adam's heart had been set on becoming an orthopaedic surgeon for quite some time. He had grown up with an orthopaedic surgeon as a father, and he remembered a conversation with his dad right before he started medical school that, in retrospect, had been a real turning point in his life. His dad had said he would be proud to have Adam join his practice. It was the first time his father had said anything like that. They had talked about it off and on in the years since then, and Adam had grown increasingly interested in the idea of doing orthopaedics and joining his dad's practice, knowing it would mean a comfortable life.

Adam received good clinical grades, scored above average on USMLE Step 1, and continued to develop an interest in orthopaedic surgery. The pressure to do well on the orthopaedic rotation, get a good letter of recommendation, and rank among other well-qualified applicants prompted Adam to become increasingly competitive.

He began arriving before Emmett in order to pre-round on both his and Emmett's patients, hoping that he would be able to answer a vital question if Emmett faltered. Adam was initially disturbed by his increasing willingness to be so competitive, especially at the expense of another student. But, over time, he grew accustomed to it, driven by the prospect of joining his father's successful practice. He reasoned that surgery was difficult, and the competitive culture actually benefited patients; it meant more people were being attentive to the details of each case. He wondered if he was upsetting Emmett, but told himself that Emmett was free to be just as competitive and that, in the end, the harder working, more deserving student would be selected to an orthopaedic residency spot and make a better surgeon.

Commentary 1

by Jeffrey Reagan, MD

The task of securing an orthopaedic-surgery residency or any competitive residency position can be difficult and nerve wracking. With increasing enrollment into medical schools and relatively few orthopaedic-surgery residency training positions, prospective students must find ways to stand out from the crowd. This is not a new concept for students; it is not unlike the process of being accepted into medical school. Candidates must have excellent medical school grades and USMLE Step 1

scores and show exceptional interest in their prospective fields. Research in orthopaedics, including publications, is expected. Extracurricular involvement, volunteer experiences, and leadership experiences are required. High performance on clinical rotations is crucial for acquiring good recommendation letters and ultimately interviews for competitive residency positions. A deficiency in any of these areas may result in a failure to match into orthopaedics.

Residency programs must choose candidates wisely to balance surgical training with effective patient care. When a residency program admissions committee identifies a profile of its ideal candidate, that person is most likely intelligent, teachable, enthusiastic, and professional. Good ways to measure these attributes are by performance on clinical rotations and by letters of recommendation, which give programs an idea of how a candidate will perform as a resident.

In this case, Adam's motivation to become an orthopaedic surgeon is clear. He looks forward to the prospect of joining his father's practice and has excelled in his first year of clinical rotations. It seems that he is on track to achieve his goal by receiving good grades, scoring well on USMLE Step 1, and doing his best on his orthopaedic clerkship.

Driven by his nervousness about his orthopaedic clerkship performance and his desire to join his dad's practice, Adam finds himself increasingly competitive, turning to "one-upping" Emmett and arriving early to pre-round on all the patients. Adam has justified these actions by incorrectly assuming that they are what make a good surgeon and that they will benefit patient care [1]. He further rationalizes that his tactics are acceptable because Emmett could do the same if he chose to work as hard.

Adam has fallen prey to an all-too-common misconception of surgical training and medical education. Perhaps this should not be surprising: who hasn't heard a story about a narcissistic surgeon? The idea that competition has to be cutthroat with a "take no prisoners" attitude, however, is foolish and counterproductive to the team approach of medical care. Current medical care is complex, requiring specialized health professionals and the need for these professionals to collaborate and communicate effectively [1-3]. This may be particularly evident in surgical-training programs, where students and physicians with different levels of knowledge and experience interact to provide patient care both on the floors and in the operating room. Self-serving behavior like Adam's does not benefit patient care, and could anger Emmett, which would lead to a breakdown in team communication.

It is foolish for Adam to think that his poor behavior will go unnoticed. The residents he is working with have overcome similar challenges in their surgical training and may not appreciate Adam's antics. News of his actions may even find its way to attending surgeons who will be wary of introducing a potentially destructive element into their residency programs. Adam's behavior will almost undoubtedly backfire.

Interestingly, Adam himself was initially disturbed by his actions. This should be a good guide that his behavior misses the mark.

If Adam is lucky, the residents he works with will offer constructive feedback about his behavior. I personally would tell Adam that his willingness to work is excellent, but there are better ways to stand out that are not at Emmett's expense. I would direct Adam to focus on his own assigned patients and all aspects of their care including the diagnosis and classification of injury, different types of surgical treatments, postoperative care, and physical-therapy needs.

Adam's behavior will also affect Emmett. There are many ways that Emmett could react, but his best course of action is to discuss the situation early on with Adam. It is reasonable to think that with a cooperative effort both can excel in the rotation.

Medical students strive to stand out from an already exceptional crowd. Despite Adam's example, this can be done while maintaining integrity and professionalism. A competitive environment can motivate one to exceed expectations. On the other hand, it can cause some students to resort to underhanded tactics in an effort to differentiate themselves from their competitors. Hard work and an interest in the field are a good start, but they are not enough. Becoming a well-rounded candidate is also necessary, and this requires developing communication and leadership skills. A hypercompetitive attitude will undermine these aims. Adam and other medical students applying for competitive residencies should work to stand out individually while maintaining a team-player attitude.

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Commentary 2

by Laurel C. Blakemore, MD

How far should medical students go to acquire the accolades that they think will assure them a residency slot in a competitive specialty? I approach this question from two different but related perspectives: that of a program director in orthopaedics and that of a surgeon interested in ethics and professionalism.

There is nothing inherently wrong with Adam's wish to pursue a career in orthopaedic surgery and join his father's practice. Students commonly follow a parent or mentor into the medical field and may have an advantage when they do so—first-hand knowledge of the pros and cons of a given specialty and its associated lifestyle. Although this scenario implies that Adam is pursuing orthopaedics primarily to please his father and join a financially lucrative practice, those motives are not certain; nor are they unethical—but they are probably not going to guarantee Adam a satisfying career. Orthopaedic surgery can be highly rewarding but it's hard work, both during and after residency training, and one must have a real interest and dedication to be happy and successful. There are many paths to financial success that are less demanding than orthopaedic surgery, and (fortunately) most people come to that realization before entering a training program.

As a program director, I would be unhappy to hear about Adam's conduct on the service. Orthopaedic surgeons place great value on teamwork and the ability to enhance the function of a team, so Adam's behavior would be seen for what it is: an attempt to make Emmett look bad. Residents in particular can quickly identify medical students who engage in this kind of behavior [1, 2]. Adam's argument that this sort of competition benefits patients doesn't justify his actions. Rather than rounding on Emmett's patients in hopes of showing him up on rounds, Adam should spend his efforts finding ways to help the entire team take better care of the patients. The team's function is to provide excellent care for patients through attention to detail, compassion, and communication. The team must also work efficiently and accurately. Students who can improve the team's performance are valued; those who give the impression that their purpose is to show themselves in the best light at another student's expense are not.

There is nothing wrong with competition per se. The American Academy of Orthopaedic Surgeons (AAOS) Guide to Professionalism and Ethics in the Practice of Orthopaedic Surgery states that "competition between and among surgeons and other health care practitioners is ethical and acceptable" [3]. At the same time, choosing a career in orthopaedic surgery *solely* for financial gain violates our standards of professionalism, which emphasize that "the orthopaedic profession exists for the primary purpose of caring for the patient" [3]. A surgeon must be able to make decisions in the best interest of the patient regardless of potential financial gain.

Orthopaedic residency is highly competitive, and those who thrive on competition are often successful professionally. Competition may contribute to a surgeon's motivation to maintain clinical productivity, stay current with continuing medical education, and excel in a given area of interest. Nevertheless, the Guide to Professionalism must direct an individual's conduct, keeping patient well-being paramount in all professional actions. The same principles apply to medical students and residents. Competitiveness becomes harmful when it drives a trainee to show himself in a favorable light at the expense of other team members. Striving to deliver

the most conscientious care you can, be as well-prepared for cases as possible, and help teammates perform their duties are all productive means for competing for favorable evaluations while adhering to aspirational ethical standards. This is what program directors want to see in a prospective resident, because those who demonstrate these values will generally be strong residents and successful orthopaedic surgeons.

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MEDICAL EDUCATION

Medical Business Ethics Education: Guarding the Patient-Centered Focus of Medicine

James M. DuBois, PhD, DSc

As professionals, we sometimes act like Jean Piaget's young subjects who focused on only one feature of a container—e.g., its height—when estimating the quantity of liquid it could hold [1]. Such “centrated” children would, for example, reason that, of several 12-ounce containers of varying heights and widths, the tallest would hold the most. One of the principal tasks of cognitive development in many domains—including the moral domain—is *decentration*, which occurs as we move beyond the stage of focusing on one salient feature of a task to the exclusion of others [2]. In approaching an ethical problem in clinical care, for example, we may need to consider many different aspects of a situation—competing stakeholders' interests, ethical or legal norms that need to be balanced, intentions, social processes for resolving disputes, and the consequences of actions. Ignoring any one piece of the puzzle can lead to disastrous results.

Maintaining a Professional Focus on Patients

For physicians, maintaining a broad view in moral decision making can be challenging. The patient-physician relationship is fiduciary, meaning that patients must be able to trust that the physician will prioritize their best interests over his or her own. Thus, it is not contradictory that the American Medical Association's Principles of Medical Ethics states *both*:

A physician shall, while caring for a patient, regard responsibility to the patient as paramount.

[and]

A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care [3].

Other articles in this issue of *Virtual Mentor* explore how weighing one's own needs and preferences against those of patients in society may lead to very different professional choices, including the choice of a medical specialty.

Physicians face many challenges to maintain proper professional perspective. Consider the following examples:

- Medical research may redirect physicians' attention from therapy to generating new knowledge even when there are effective treatments for patients who need treatment [4, 5].

- Financial rewards for performing procedures and diagnostic tests may redirect attention from the patient’s needs to the potential for personal profit [6].
- The needs of one patient may cause one to overlook the needs of another (e.g., in evaluating candidates for living organ donation, patients’ medical suitability may overshadow their financial or emotional unsuitability) [7].

Not one of these examples involves bad choice. To the contrary, new knowledge, financial rewards, and providing a dying patient with a transplanted organ are all good intentions. Shifts in focus need not involve bad will; in fact, some evidence suggests that “self-serving biases” are natural and operate subconsciously [8, 9].

In a complex environment, oversight committees, laws, and professional guidelines help physicians hold patients’ interests about their own. For example, institutional review boards (IRBs) play an important role in ensuring that human subjects are properly protected in medical research [9]; anti-kickback laws can help reduce the exploitation of financial conflicts of interest [10]; and practice guidelines for the evaluation of living organ donors encourage greater attention to the prospective donor’s well-being [7].

Nevertheless, such mechanisms are insufficient to ensure that medicine is patient-centered. First, they are frequently reactive—they arise only in response to problems that have been identified and received broad attention. Second, many issues—such as the selection of career specialization—are best resolved according to one’s own convictions and conscience. Third, such mechanisms risk shifting attention away from patients toward compliance for compliance’s sake [11]. In the end, professional education and mentoring—not regulations and codes—remain essential to engaging matters of focus and integrity.

Bander Center for Medical Business Ethics

With a generous endowment from Steven Bander, MD, Saint Louis University established the Bander Center for Medical Business Ethics in 2008. The mission of the Bander Center is:

To promote ethical business practices in medical care and research through the development of training and investigation opportunities for medical students, residents, and physicians in practice. We are committed to providing learning opportunities for physicians across the full span of their careers, from the first year of medical school through retirement.

The center’s educational and training programs are designed to foster critical reflection and discussion rather than promoting one ideological perspective. Speakers and programs may engage controversial positions, but do so critically and with responses from scholars when feasible. The center seeks to ensure that recommendations regarding practices and policies are grounded in the best available evidence about physician behavior—its influences and impact on patient care. All

activities explore how the manifold business dimensions of medical care and research can be managed to preserve a proper focus on the well-being of patients.

One of the center's most intensive training endeavors involves developing a body of experts in medical business ethics who will serve the university and eventually a broader community of physicians. In the process, a research assistantship (RA) was established to support an MD/PhD student during the doctoral phase of the program in health care ethics. The RA assists in the development of continuing medical education (CME) opportunities, coordinates events, and provides research support for Bander Center faculty and fellows. The RA is encouraged to pursue his or her own research project in the area of medical business ethics. This experience fosters the acquisition of knowledge and academic skills in medical business ethics in an individual who is likely to build a career in academic medicine.

The Bander Center also has a 1-year fellowship program that supports two junior faculty members in the school of medicine each year. The center protects 10 percent of their time for weekly meetings with a mentor, while they research a medical-business-ethics topic of their choice. By the end of the year, they are expected to publish a peer-reviewed article on their topic and produce PowerPoint slides for use in training sessions with medical students or residents. While the Bander Center faculty is interdisciplinary, we believe strongly that physicians should be mentored by physicians. Accordingly, physicians affiliated with the Bander Center direct the fellowship program, mentor residents, and teach medical students.

In addition to these two intensive training and investigation programs, the center offers:

- Small group discussion sessions with medical students.
- Online continuing education units. The first two topics are Physician-Industry Interactions in Medical Care and Ethical Issues Regarding Free Drug Samples.
- Grand Rounds lectures and noon seminars with residents.
- An annual endowed lecture delivered during the Department of Medicine's Grand Rounds. Our first two lecturers were Matthew Wynia, MD, MPH, director of the AMA's Institute for Ethics, who spoke on pay-for-performance and Ezekiel Emanuel, MD, PhD, chair of the Department of Bioethics within the Clinical Center of the National Institutes of Health, who spoke on health care reform.
- A web site (www.slu.edu/bander.xml) with information on upcoming lectures, training opportunities, links to ethics codes and regulations, and other materials.

Finally, the Bander Center collaborates with a newly established program at Washington University in St. Louis, the Bander Business Ethics in Medical Research Funding Program, which offers 1-year grants of up to \$25,000 to members of the Institute for Clinical and Translational Science to support original research.

Building Support

Each educational endeavor requires significant dedication of time, resources, and backing from those in charge of medical education, as well as from adult learners themselves.

Especially during challenging economic times, it can be difficult to find adequate resources. Relating medical-business-ethics training to the professionalism requirements of the Accreditation Council of Graduate Medical Education (ACGME) can help garner support within academic medical centers. In establishing the center, we worked closely with our associate deans for undergraduate medical education, graduate medical education, and continuing education, which was essential to the mission of reaching out to physicians from their first weeks in medical school through their years of practice as established specialists. Within the first year, we conducted an online survey of medical school faculty and residents inquiring into the medical-business-ethics topics they thought most important to address, the educational formats they preferred (e.g., online, lectures, journal clubs), and their availability at different times during the week and have tried to tailor the center's programs to the results of that survey.

Throughout all of our efforts as a center, we constantly engage the question "How might our present topic—e.g., financial conflicts of interest, health care reform, free drug samples, or pay-for-performance—affect patient care?" In the increasingly complex business environment in which medicine operates, this question is more relevant than ever before.

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JOURNAL DISCUSSION

O Doctor, Where Art Thou? Why Fewer Students Pursue Internal Medicine

David Y. Chen

Hauer KE, Durning SJ, Kernan WN, et al. Factors associated with medical students' career choices regarding internal medicine. *JAMA*. 2008;300(10):1154-1164.

Looming large-scale physician shortages have prompted a flood of studies into the nature of the problem, its causes, and its potential ramifications. For instance, last year's Massachusetts Medical Society Physician Workforce Study revealed the already critical deficits in the current supply of doctors in several specialties, with internal medicine and family medicine achieving the most severe ranking of "critical" short supply [1]. Similarly, many workforce studies across the nation have indicated that the demand for medical services has stretched current resources and will far outstrip physician supply by the end of the next decade [2]. With an impending physician shortage, it is particularly alarming that fewer U.S. medical school seniors are choosing to go into first-line primary care professions. Since 1985, the number of residents selecting internal medicine (IM) has dropped more than 40 percent, and general IM training has declined more than 50 percent since 1994 [3].

Student Decision Making

Studies conducted in the 1980s and '90s identified factors that promoted careers in IM—including increased curricular exposure to primary care—and those that were roadblocks to IM—including work hours, income, increasing levels of debt, types of patients seen by generalists, and perceived satisfaction of physicians in the field [4-7]. Since then, there has also been a perceived shift in preference toward career paths that offer a controllable lifestyle [8]. It is thought that these factors led to the trend away from generalist careers and the declining interest in primary care [9]. The question at hand is whether these same motivations hold true still, or whether there are new, dominant factors to consider when devising strategies aimed at attracting students into primary care fields to meet the anticipated future demands of a changing population.

A 2008 study by Hauer and colleagues aimed to identify training experiences and perceptions that influenced medical student choices concerning generalist graduate training, either positively or negatively [3]. Seeking to find modifiable factors related to students' decision-making process, they surveyed graduating medical school students online. The survey was answered by 1,177 respondents from 11 medical schools. Roughly 23 percent of students reported that they were likely to enter an internal medicine training program, but only 2 percent of the sample sought careers

in *general* IM. Surprisingly, around 78 percent of all respondents were satisfied with their IM clerkships, though only 19.4 percent felt this made a career in general IM more attractive, and 48.8 percent thought the IM clerkship made subspecialty IM more attractive. Regardless of residency choice, 78.2 percent of students thought that their core IM clerkship provided enough insight into the life of an internist to adequately inform their decision about IM as a career.

A majority of respondents thought that internal medicine required greater breadth of knowledge than other specialties, but coupled with more paperwork and less pay. The most-cited positive influences included the intellectual challenge of internal medicine, continuity of care, and the quality of training. The most commonly cited detractors from IM included paperwork and charting, attractiveness of other fields, types of patients seen by internists, lack of boundary between home and work, and an overall lack of appeal for being a primary care physician. Surprisingly, debt was not named as a predominant detractor.

Subsequent analysis revealed that students who chose IM perceived the field differently than those who did not; they were more likely to report a perception of greater intellectual challenge and commitment to patient care in IM and exposure to better role models than in other fields. While some students who selected other specialties also reported that IM had greater intellectual challenge and commitment to patient care, they disagreed about the quality of role models in IM. Across the board, students who did not choose IM reported that role models were better in other fields, even though they generally found intellectual challenge and commitment to patient care greater in IM. Both groups of students perceived that personal and professional satisfaction was lower in IM than in other specialties.

Statistical analysis of student answers showed that three factors contributed to 46.1 percent of the variance in responses. Students who favored IM were more positively influenced than other students by the nature of patient care, their educational experiences in IM, and the lifestyle associated with internal medicine. Among students who did not choose internal medicine, 44 percent considered IM a possibility, while 56 percent did not. In both groups, the nature of patient care (including taking care of the elderly, chronically ill, and alcohol- and drug-abusing patients; continuity of care; and the general appeal of being an internist) pushed them away from the field despite their positive educational experiences.

From these data, Hauer and colleagues concluded that, given the positive effect of educational experiences, curriculum development should be part of the strategy to counteract the decline in positive attitudes toward treating chronically ill patients that takes place during training. Positive views on the nature of patient care predict IM residency choice. The authors caution, though, that merely increasing exposure to internal medicine patients could in fact be detrimental to student attitudes toward IM. Care must be taken to ensure that students are involved in organized, team-based care and a streamlined practice environment that effectively manage patients with complicated health problems.

Systemic Changes Required

Hauer et al. further concluded that curriculum development alone is not sufficient to solve the current problems, inasmuch as most respondents claimed high satisfaction with their core IM clerkships. Studies like this one that find significant noncurricular influences in residency choice suggest that the field needs systemic change. The increasing demand on primary care physicians to provide complicated care to chronically ill patients in shorter amounts of time, coupled with increasing administrative burdens, can cause lower job satisfaction, which, in turn, leads internist role models to be less than enthusiastic in recruiting new students to the field.

While the authors mentioned that comprehensive health care reform and the medical-home model might address lifestyle and personal-satisfaction concerns better than looking at reimbursement alone, they did not directly speak about the effect of financial incentives on the choice of particular specialties. In the same issue of *JAMA*, however, a study on mean income versus residency fill rates by U.S. medical school graduates revealed a direct correlation between increased fill rates and higher salary—a linear relationship that had persisted from a study conducted 20 years prior [10, 11]. It suggested that the continuing decline of residency fill rates for IM was dependent upon the increase of more lucrative options, perhaps independent of career perception and other training influences. Since 2004, the number of residency positions available in plastic surgery, otolaryngology, neurology, emergency medicine, diagnostic radiology, and anesthesiology has grown by at least 10 percent, while the number of categorical IM positions has remained stable, and primary care medicine positions in general have fallen by 10 percent [12].

Goodman, in an editorial in the same issue of *JAMA*, identifies another way to approach rectifying the decline in primary care physicians [13]. He focuses less on why students choose to go into nonprimary care specialties and more on the “policy vacuum” that makes it possible for self-interested institutions to generate more resources for subspecialty programs than for primary care residency training. He suggests that public funding for residency positions could align institutional priorities with public need. This “conditional” funding comes with the requirement for a commission that is representative of all aspects of the health enterprise, from patients to educators, physicians, payers, and public health experts, to help guide public health workforce planning. Goodman argues that the current, unregulated system is unlikely to produce a more efficient health care system or one that meets public health needs. Although conditional funding might result in more physicians going into primary care, they would not be there because of the attractiveness of primary care, but because of decreased options.

Is it possible to make primary care more attractive? The predominant focus of the Hauer et al. study was the formative medical school experiences that might influence residency choice. Yet the results indicated high satisfaction with core clerkships in internal medicine. This suggests that noncurricular explanations play key roles in

students' specialty choices and that perhaps students are drawn into other specialties rather than being pushed away from IM. As Hauer and colleagues noted, students who selected IM were likely to associate their choice with their perception of positive role models who exhibit enthusiasm for mentorship and are generally satisfied as residents and attending physicians. These role models, in turn, are a critical reflection of the state of general medical practice; their attitudes regarding their profession—reflecting the nature of patient care, career environment, and overall job satisfaction—are transmitted directly to medical students.

Finally, there is the underlying question of whether having more physicians in general practice will actually create better health outcomes. Though past studies have demonstrated correlations between positive health outcomes and strong primary care structures, further study is needed to determine whether physicians, rather than allied health professionals, need to fill this role [14, 15]. In conclusion, it is imperative to decide what question we want to answer. Should we ask the fundamental question Hauer et al. leaves us with—what should we change about the nature of medical training or career environment that will entice the future generation of physicians to general practice? Or, should we instead examine whether our primary care delivery model and current notions regarding the role of the primary care physician need revision?

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CLINICAL PEARL

What Is the Consensus about Managing Health Risks Associated with Type-A Personality?

Sundeep Jayaprabhu, MD

Strive not to be a success, but rather to be of value.

—Albert Einstein

Anyone who has been accepted into medical school has survived one of the most competitive academic admission processes—a process that is only an introduction to further competition. What effect does this continuous competition have on the health of medical students and residents? Mindful of the dictum, “Physician heal thyself,” how well is the medical profession modeling self-awareness and healthy practices? In particular, what measures should a profession rife with driven, competitive personality types take to safeguard the health of those providing health care?

There are no simple answers to these questions. A model commonly used to study competitive behavior is that of the type-A personality. Numerous studies, for example, have examined the correlation between type-A personality disorder and cardiac disease. Although type-A personality is not an official psychiatric diagnosis, at least not in the most current edition of the *Diagnostic and Statistical Manual of Mental Disorders*, it is described by characteristics such as intolerance, impatience, hostility, and competitive behavior [1].

An obvious presupposition of studying the correlation between type-A personality and cardiac pathology is that increased psychological stress somehow translates into increased physiological stress. One theory of how this cardiovascular pathology may occur is that, in order to cope with higher levels of perceived stress, those with type-A personality tend to have habits that are more toxic to the cardiovascular system, such as smoking and other unhealthy lifestyle choices [2]. Another theory is that prolonged, increased sympathetic nervous system activity contributes to pathologic cardiac effects [3]. Still another theory proposes a relationship between debrisoquine hydroxylation (CYP2D6) capacity and type-A personality, postulating that differences in metabolism of biogenic neurotransmitter amines in the central nervous system may account for significant differences in personalities [4].

A review of these studies shows mixed conclusions [5]. Some illustrate a correlation between type-A personality and coronary risk factors including high cholesterol and blood pressure, smoking, and increased body-mass index, but others find no significant relationship between the two. A prospective study of 58 male medical students found a significantly greater increase in heart rate in the type-A behavior

subjects than in type-B, which, in combination with a rise in systolic blood pressure in both groups, resulted in a statistically significant increase in the estimated myocardial demand for oxygen in the context of exam-related stress [6]. Several other studies, however, have identified no significant change in heart rate, blood pressure, or other study parameters including muscle-sympathetic nerve activity between type-A personality and controls [7].

Some argue that this inconsistency demonstrates a lack of reproducibility and, thus, causality cannot be concluded [5]. Others argue that type-A personality does not predict *if* adverse cardiac events will occur, but rather *when* cardiac events will occur. In other words, type-A personality may result in earlier cardiac pathology in those already predisposed but will not determine the presence or absence of cardiac pathology [2]. It appears that there is no general consensus among researchers on whether those with type-A traits face increased cardiovascular risk.

Differences in personality types stem from differences in how anxiety is processed, and the type-A/type-B personality model illustrates this concept well. Anxiety is central to, if not the starting point for, many of the major psychodynamic theories, including existential, Freudian, and Jungian psychologies. These theories propose that anxiety is always present and that we all develop psychological defenses to keep it at bay. Stressful situations, such as competition, increase our awareness of stress, expose our defenses, and intensify feelings, thoughts, and behaviors that are otherwise kept in moderation. The resulting clash between anxiety and our defensive walls creates conflict that is expressed in feelings, thoughts, or actions. These conflicts often bring about a visit to the therapist, and it is no surprise that academic institutions have discovered the benefit of in-house therapists.

The goal of therapy in this situation is finding healthier ways to deal with the stress of competition and, ultimately, anxiety, since the current coping mechanisms or defenses are not working well. This close observation of one's self and reactions often provokes more anxiety, but ultimately provides relief. The more self-aware one is of his or her anxiety, the more he or she can foster mature defenses to take the place of developmentally primitive ones. The desired result is improved relationships with the self and others and increased tolerance during stressful situations.

A type-A personality at the extreme end of the type-A/type-B spectrum may attempt to decrease anxiety by controlling it, even if this is impossible. If the anxiety is an upcoming exam, this type-A personality may study at the expense of health, socializing, and overall balanced life in order to control the source of the anxiety as much as possible. The extreme type-B individual, however, may avoid studying for the exam to the detriment of his or her performance on the exam. The example of an exam may appear somewhat benign, but imagine a similar pattern when the source of the anxiety is a relationship rather than an exam. With conflicts in relationships, the extreme type-A may attempt to control the situation or the individual by irrational means; the type-B may avoid the conflict altogether through denial. The upshot of both cases is often frustration in others and in the self, intensified conflict, and

significant stress, if not dissolution, of relationships. The resulting clinical symptoms of anxiety or depression are often the presenting chief complaints to mental health professionals.

Although the scientific method is an invaluable tool to understanding the world around us, its limitations cannot be overlooked. Arguably, the information obtained about the brain is occurring at a logarithmic pace. What this knowledge means in the context of contradictory and inconsistent results in studies, however, is yet to be determined. It seems that psychological processes do not fall neatly into the scientific paradigm designed for studying physical phenomena, and it is difficult to draw any definite conclusions about the effects of competitive behavior using the gold standard of a double-blind placebo-controlled method. Can the scientific method overcome the multitude of variables present in a psychological study or will the number of participants in these studies always remain one? This inconclusiveness does not preclude the intuitive wisdom that some ways of dealing with stress and conflict are physically, mentally, and spiritually healthier than others. Discovering this optimal balance is not a scientific endeavor, but one that involves an internal journey.

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HEALTH LAW

Splitting Fees or Splitting Hairs?

Cheryl Miller, JD

Fee-splitting occurs when a physician receives compensation for professional services and then divides or shares it with a person or party who did not render the service. The prohibition against this practice extends to all professional services not actually and personally rendered. A physician may not accept a fee for referring a patient to another physician unless the physicians are in the same practice or concurrently treating a patient and collecting their own fees. Non-physicians may never receive a referral fee, but may accept a fee for legitimate services rendered to the physician on the condition that the fee is not based upon a percentage of the physician's revenues or profits.

Physician practices often enter into agreements with companies for management and administrative services such as billing and payment collection. When management companies collect payments for physicians under such agreements, those companies typically take a percentage of the amount collected. In some states, such as Illinois, payment based upon a percentage of collections is considered illegal fee-splitting and may result in disciplinary action against the physician. Footnote 40 of the Office of the Inspector General's (OIG) Compliance Program Guidance for Third-Party Medical Billing Companies, states that OIG has had a long-standing concern that percentage-based billing arrangements may increase the risk of upcoding and similar abusive billing practices [1]. Percentage-based arrangements are allowed at the federal level for Medicaid funds, but some states, such as Florida, prohibit their use even for Medicaid funds [1]. The OIG established compliance guidelines in an effort to aid physicians and health care workers in creating and using internal controls to monitor third-party billing companies and combat billing fraud and abuse. The OIG urges physicians and other service providers to work with third-party billing companies to develop effective internal controls that promote adherence to applicable federal and state law and the program requirements of federal, state, and private health plans [1].

Recent Rulings and Legislative Trends

States have rarely enforced the fee-splitting prohibitions in third-party billing arrangements. In 2008, however, the Illinois Appellate Court upheld a lower-court ruling that a percentage-based fee-sharing arrangement between a physician group and a medical-billing company was void under Section 22(A)(14) of the Illinois' Medical Practice Act [2]. Section 22(A)(14) prohibits "dividing with anyone other than physicians with whom the licensee practices...any fee, commission, rebate or

other form of compensation for any professional services not actually and personally rendered” [3].

The case that tested this section of the Medical Practice Act was *Center for Athletic Medicine, Ltd., v. Independent Medical Billers of Illinois, Inc.* The Center for Athletic Medicine (Center) had an agreement with Independent Medical Billers (IMB) under which IMB provided percentage billing, accounts receivable, and collection services on all reimbursements and claims not originally processed by IMB [3]. Center filed suit against IMB in 2005 claiming it suffered damages in excess of \$4.4 million as a result of IMB’s breaches of the agreement and further alleging that IMB was unjustly enriched by receiving payment for and failing to provide the agreed-upon services [3]. IMB defended the suit, stating that Center’s claims were invalid because the agreement violated the fee-sharing provision of the Medical Practice Act [3].

Three exceptions to the prohibition to fee-splitting exist under the Medical Practice Act: (1) where physicians divide fees in an approved partnership, corporation, or association; (2) where approved medical corporations form a partnership or joint venture; or (3) where physicians concurrently render professional services to a patient and divide a fee, provided the patient has full knowledge of the fee division and the division is made in proportion to the services performed and responsibility assumed by each [2]. IMB argued that none of the exceptions applied. The trial court agreed and entered summary judgment for IMB; Center appealed.

The Appellate Court affirmed the trial court’s ruling and held that, although percentage-based fee-splitting is common in physician arrangements, it is void irrespective of the purpose and common practices involved in medical-billing agreements [3]. A percentage-based fee-sharing arrangement might motivate a nonprofessional to recommend a particular professional out of self-interest, rather than the professional’s competence [3]. The professional’s judgment might be compromised because the awareness that he would have to split fees might make him reluctant to provide proper (but unprofitable) services to a patient, or, conversely, to provide unneeded (but profitable) treatment [3]. Looking at earlier Illinois Supreme Court cases, the Appellate Court noted that flat fees based on volume of claims and not linked to revenue, gross receipts, or billings collected do not constitute fee sharing under the Medical Practice Act [3].

Early in 2009, an exception to the fee-splitting law that would allow third parties to contract with physicians and bill and collect on a percentage basis was introduced in Illinois [4]. This bill is supported by physicians and businesses who have long relied upon percentage-based payments because, under such arrangements, physician risk is low, and, at the same time, the incentive for contract billers to work zealously in collection efforts on behalf of the physicians is high. If enacted, the law would amend the Medical Practice Act by changing the definitions of entities that may divide or share professional fees and other revenues [4]. The proposed legislation retains language that prohibits physicians from sharing or dividing compensation

with any physician unless they are in the same practice [4]. The legislation, however, allows entities to perform administrative, billing, and collection services based on a percentage of professional fees billed or collected [4]. Flat fee and other arrangements are also expressly permitted [4]. The bill contains language to curb third-party fraud and abuse by allowing the physician or the physician's practice to control the fees charged and collected and also the account into which the fees and charges are deposited [4]. As of this publication date, the bill was passed in the Illinois Senate and the House; based on its activity, there is a strong likelihood it will pass and become effective.

Illinois is the only state currently considering legislation on fee-splitting. It is uncertain whether other states will follow suit. Therefore, all physicians should periodically review with a qualified attorney any percentage-based billing arrangements to confirm compliance with federal and state laws.

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POLICY FORUM

Closing the Gap: Finding and Encouraging Physicians Who Will Care for the Underserved

Keisa Bennett, MD, MPH, Julie Phillips, MD, MPH, and Bridget Teevan, MS

Geographical distribution of U.S. physicians does not promote equitable access to health care. In 2006, nearly 75 percent of U.S. counties or partial counties were designated Health Professional Shortage Areas (HPSAs), meaning that the population-to-physician ratio in these areas exceeded the minimum (3,500:1) considered necessary for adequate access [1]. Meanwhile, experts estimate that, in aggregate, non-HPSAs have a surplus of more than 70,000 physicians [1]. Though HPSAs may be urban or rural, the problem is particularly acute in rural areas. While 21 percent of Americans live in rural areas, fewer than 10 percent of physicians practice in these areas [2]. As a result, rural residents (and the urban underserved) receive fewer preventive services and suffer from worse health outcomes [3, 4]. There is debate over whether a physician shortage is imminent, but the evidence for physician maldistribution is clear [1, 5, 6]. Equitable access to health care is threatened when physicians disproportionately practice in urban and suburban areas.

In the last decade, declining student interest in primary care has exacerbated this maldistribution. People in both rural areas and designated HPSAs are disproportionately cared for by family physicians, the only primary care specialty whose members' geographic distribution comes close to matching that of the U.S. population [7]. Since 2001, however, fewer than half of family medicine residency positions have been filled by graduates of U.S. allopathic medical schools, while the proportion of these positions filled by international medical graduates (IMGs) has increased significantly [8-10]. Due to immigration policies and the possibility of their return to their country of origin, the role of IMGs as a solution to the maldistribution problem is uncertain. Furthermore, the United States' reliance on gifted IMGs from needy countries is ethically troubling in terms of workforce consequences for both the host and the native countries [11].

Given the severity of this crisis, medical schools and state and federal policymakers have a responsibility to take a central role in reversing the trends that have resulted in poor patient access in many areas [12, 13]. The current expansion of medical schools gives medical educators an opportunity to reexamine admissions and curricular policies. Student perceptions of various specialties and our culture's preference for specialty care contribute to the crisis in primary care, but are beyond the scope of our discussion. This article focuses on the ways in which medical schools, residency programs, and government can promote primary care and help resolve disparities in health care access.

Student Characteristics and Medical School Admissions

Personal characteristics are among the strongest predictors of both choice of primary care and practice in underserved settings. While rural and inner-city practice are not for everyone, students with rural backgrounds are much more likely to practice in rural settings, and African American students more often choose inner-city practice [11, 14]. Women and those who declare an intention to practice family medicine when they enter medical school disproportionately choose primary care [15-17]. Studies of institutional programs that provide intensive experiences in rural or underserved areas have even found that those programs' greatest impact arises from their disproportionate selection of students from rural or minority backgrounds with a strong prior interest in family medicine, rural practice, or practice in underserved areas [18, 19]. Unfortunately, admission of underrepresented minority students to medical schools has fallen in recent years despite an increasing or stable application rate [6, 13]. In the meantime, students of rural origin and those with an annual family income under \$20,000 also make up a disproportionately low percentage of medical school enrollment [13, 20]. Medical schools' admission criteria seem to be at odds with society's responsibility to produce physicians who care for the underserved.

One solution is increasing support for premedical "pipeline" programs that expose K-12 students from rural and disadvantaged backgrounds to health professions by providing academic enrichment, mentoring, and research experiences. The heterogeneity of these programs poses a challenge for evaluating their effectiveness, but there is evidence to suggest that they have great potential to improve matriculation of underrepresented minorities in college and medical school [21-23]. Because these students are more likely to work with underserved populations after graduation, increasing their interest in health professions and investing in academic support may help correct the current physician maldistribution [8, 24, 25].

Programs and Curricula

Even after students enter medical school, there are opportunities to influence specialty choice and service to underserved populations. In general, public medical schools produce more primary care physicians and physicians who practice in underserved areas [26, 27]. Schools with departments of family medicine and those that require more time in family medicine in the third or fourth year also produce these outcomes [27, 28]. These factors may be closely related to medical school culture. Schools that value primary care, diversity, and care of the underserved positively impact students' perceptions and choice of primary care and underserved practice [29, 30].

Medical schools are able to provide these positive experiences, in part, through support from section 747 of Title VII of the Public Health Service Act, a federal program designed to improve access to health care by increasing the number of primary care physicians and the quality of primary care education. Title VII grants fund primary care leadership, faculty development programs, and innovative curricula. Studies show that students at institutions with Title VII support are more

likely to choose family medicine and practice in community health centers, primary care HPSAs, and rural areas [26, 31-33].

Curricular and cultural influences can be further magnified at the graduate level, especially when supported by Title VII funding. Residency programs with explicit missions to train physicians for rural or inner-city service, many of which are supported by Title VII, produce proportionately larger numbers of physicians for the underserved [34, 35]. Family physicians trained in community health centers are more than twice as likely to practice in those settings [36]. Residents whose patient panel contains lower percentages of middle-to-upper class patients are also more likely to practice primary care in underserved areas [37]. Training in safety-net sites exposes residents to the most vulnerable populations, often evoking a sense of social responsibility and equipping them to meet the challenges of caring for patients who are neediest [37, 38].

Debt

In addition to changes in medical education, new government and public-sector policies are needed to influence physician maldistribution. The most common interventions in this realm involve financial barriers. The rising debt of medical students is widely believed to steer many students to higher-paying specialties and away from primary care, and students with high debt are more likely than their peers to cite it as a factor in their specialty decision making. Studies examining the relationship between debt and specialty choice, however, have not always shown a clear association. The most comprehensive study of this issue concluded that students who choose primary care actually graduate with slightly more debt than their peers [26]. This may be because these students are more likely to be from lower-income families and borrow more for their education than students in higher-income groups. Thus, it is possible that high debt may deter students from choosing primary care, but the effect could be masked by the larger influence of socioeconomic status. Although it needs more study, there is little direct evidence that reducing or subsidizing tuition will encourage more students to choose primary care fields. Medical schools should be wary of escalating costs for students, but investment in a school's curriculum to promote primary care would not counteract its aims, even if it modestly increased tuition.

Scholarship and Loan-Repayment Programs

The National Health Service Corps (NHSC) is often viewed as an ideal solution for young physicians with high debt who wish to practice primary care. The NHSC offers scholarship support for students or loan repayment after graduation in exchange for primary care service in underserved communities. Many states offer similar programs, and, collectively, these physicians provide a significant portion of care for underserved populations, especially in rural communities. Family physicians (and their predecessors, general practitioners) make up most of this workforce [39].

Medical school graduates who join the NHSC have more debt than their peers, suggesting that loan repayment is a partial incentive for their commitment to

underserved practice. NHSC graduates are more likely than non-obligated physicians to work in underserved communities, even after their service terms are complete—further evidence that exposure to underserved populations motivates students and physicians to care for them [40].

Although the NHSC and many state programs now favor loan-repayment programs rather than scholarships that obligate medical students at the outset of their training, there are important reasons for continuing to support scholarships with appropriate repayment terms. Medical school applicants are daunted by the prospect of incurring high debt, and there is evidence that students from lower socioeconomic backgrounds are less likely to view educational debt as an investment [41, 42]. Scholarships programs that guarantee that the student who completes his or her service agreement will not incur debt may be useful in recruiting disadvantaged students to medical school, and may have an even wider impact in difficult economic times. If these funding programs cut scholarships, they also forfeit their opportunity to engage and inspire students during the medical school years and possibly influence the choice of primary care and underserved careers.

One serious drawback to the scholarship program, however, is a tendency toward stringent repayment terms. If the recipient fails to begin or complete the obligated service, the NHSC requires payment within 1 year of three times the scholarship funds awarded, plus interest. About one in five state scholarship programs have similar penalties [40]. Although punitive repayment terms are associated with higher rates of completed service, physicians who fulfill their obligations under these terms are significantly less satisfied than physicians with more conventional opt-out terms, which require students to pay back money borrowed with interest. Only 36 percent of physicians who enroll in state programs with punitive terms said that they would definitely commit to their programs again—compared to 65 percent of physicians with conventional terms [40]. These programs would appeal to more students, engender greater physician satisfaction, and possibly have higher long-term retention if their repayment terms were fairer.

Scholarship and loan-repayment programs are also limited by inflexible terms of service. NHSC participants are required to work full-time and can spend no more than 7 weeks per year away from the practice for vacation, holidays, continuing professional education, illness, or any other reason without extending their service obligation. Given the high demands of underserved patient populations, this full-time requirement likely equates to substantially more than 40 hours per week, a challenging clinical obligation that may limit young physicians' pursuit of other demands or interests, such as teaching, research, or parenting [7]. As a consequence, the NHSC's current policies may not only deter prospective participants but may inhibit research on care for underserved populations, limit exposure of students and residents to underserved patients, and prevent alliances between university-based medical schools and physicians serving in the neediest communities.

The full-time requirement may also make NHSC service less appealing to women, who account for most of the family physicians who work part-time [43]. Limited access to childcare and school choices, lack of job opportunities for partners, and other barriers to rural and underserved practice also affect women disproportionately [44, 45]. Consequently, although women are much more likely to choose primary care than men, and now make up the majority of family physicians completing residency, they are only about two-thirds as likely to practice in a rural area [7]. More flexible work options and an increased focus on the needs of female physicians would help the NHSC expand its workforce.

Although the work of the NHSC and other programs is admirable, it is not sufficient. Demand for NHSC physicians far exceeds the supply. Some state programs also receive more applications than they are able to fund. Although issues of flexibility are important, the greatest barrier to these programs remains limited funding and capacity.

Income

While the impact of debt and service-obligation programs on specialty choice is elusive, the relationship between potential income and specialty choice is clear. There is a direct correlation between the annual salary of a given specialty and the popularity of that specialty among U.S. medical students [46]. The salary disparity between primary care physicians and specialists is magnified over a lifetime. Economic analysis has demonstrated that there is a greater gap in return on investment between primary care physicians and specialists than between primary care physicians and college graduates with bachelor's degrees as their terminal degrees [26]. Career theorists view high income as a signal of prestige and respect. Thus, this growing income gap perpetuates a view of the higher value put on specialty care within the culture of medicine and society as a whole.

Conclusion

Despite growing knowledge of the factors that drive specialty choice, policymakers have yet to reverse the trend toward students' choice of subspecialty careers over family medicine, general surgery, general internal medicine, and general pediatrics. Further research is needed to refine our understanding of the interaction among financial factors and lifestyle, the role of specific curricula, and the best ways to prepare underprivileged students for medical school. But most importantly, we need policy change at the federal, state, and medical school level. Most students enter medical school with ambitions of service as well as career advancement. Admission criteria should focus on recruiting those students who are most likely to care for the neediest patients, despite the obstacles. Medical school and residency curricula, loan repayment, scholarship programs, and financial incentives should be structured to increase choice of primary care careers, particularly in rural and urban underserved practice locations. By accepting and supporting students and physicians who have an interest in service, we can improve access to care for our neediest citizens at a very reasonable cost.

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MEDICINE AND SOCIETY

The Business of Healing, Then and Now

Daniel N. Robinson, PhD

*...I will use my power to help the sick...*Hippocratic Oath

There is a standard technique in the study of moral reasoning that makes use of stories and asks for judgments as to whether or not the actions depicted are right or wrong in the moral sense. In one such story, a gravely ill woman can be saved only by a medicine that costs more than her husband can afford. The pharmacist refuses to provide the medicine unless it's paid for in advance and in full. After the pharmacy has closed, the woman's husband breaks in, steals the medicine and administers it to his wife, whose life is saved. In some respects, this story is paradigmatic of the long history of medical practice. It is a history that includes noble purposes, the constraints of law, the physician's own personal needs, and the values of that larger society whose judgments are often dispositive.

Economic considerations have long been an integral part of the practice of medicine. In 283 BC, impelled by a mixture of superstition and science, the authorities of ancient Rome looked to medicine as a defense against the plague. Guided by prophecy, they brought the fabled serpent of Aesculapius to Rome as part of the establishment of a center for treatment. Victims of the plague were cared for in an Aesculapium that occupied most of the Tiber Island. Projects of this sort depend on the growing confidence of the community in the power and promise of medical therapy, as well as on a degree of wealth that permits the construction of such facilities. Who paid for all of this? In Rome, responsibility was borne by the head of the family. The best doctors in what we would call private practice were Greek, and it is clear from contemporary writing that their fees were very high indeed. But the Aesculapium was a public facility whose treatments were extended freely to those in need. Private contributions supported much of the venture, with the treasury of the Roman Republic financing a balance.

Romans were serious about good health. If they looked to Greece it was because of its advanced state of medical training. We learn of the famous Greek surgeon Archagathus in the third century BC who was quickly granted citizenship, comfortable housing, and an office to establish his practice in Rome. Supporting such celebrated specialists were cadres of apprentice-residents, nurses, pharmacists, and the occasional woman doctor, along with midwives, valets, and slaves. We see, then, that a population at once rich and health-conscious will attract specialists and create facilities not unlike what we find in today's developed nations.

The gifted physicians of antiquity, however, were celebrities. They were not only treated honorably, but were expected to abide by that aspect of the Hippocratic oath that calls upon the physician to be exemplary in all respects. In other words, the economics of the situation never reduced doctors to the status of employees. The physician's duty was to heal and do no harm. The poor would be charged next to nothing, while the rich would find themselves reluctant patrons. The doctors of highest repute were extremely wealthy. Suits for malpractice were rare and seldom successful. The doctor faced a greater legal liability for assessing excessive fees for failing to heal or making a bad situation worse. At the risk of a misleading simplification, this picture from the ancient Roman record is surprisingly close to what some of us recall of the 1950s.

A radically different picture emerges in the early medieval period. Sickness at that time was often judged to be a punishment and evidence of evil. Superstition overcame the prevailing "science," and medicine took on the character of a cult. Ancient medical education in the West had been largely Hippocratic, emphasizing pragmatic standards. Theory was not absent, but it invariably yielded to observation and clinical experience. Medieval medicine in the West reversed this. Only much later, with systematic and refined approaches to medical education, was there at least a partial recovery of the ancient tradition. Central to these developments was the medical school at Salerno, founded in the 11th century. Only graduates of this program were permitted to practice in the court of the holy Roman Emperor; royalty had chosen science over superstition.

Something of a slander is committed by Boccaccio in his introduction to the *Decameron*. He charges the doctors of Florence with running away from those suffering from the plague lest they compromise their own health. He laments their indifference to suffering. The horrors of the Black Death, he says, should excite the human virtue of compassion. As a matter of fact, the Florentine physicians, as best as we can tell, performed admirably in the face of the truly overwhelming catastrophe. I mention Boccaccio not to discredit his account but to record the fact that doctors were held to a very high ethical standard. Their own lives should be of lesser concern to them than the lives of those who need them.

There is a very important historical document by Paolo Zacchias who was physician to the Pope. The work, *Quaestiones medico-legales*, is a compendium of the relationship between law and medicine, with a particular focus on public health. His inquiry stretches from ancient writings to his own era in the 17th century. A significant part of the treatise deals with the fees paid to doctors and expected by them. Given the moral and spiritual rewards of medical practice, Zacchias asks the otherwise unthinkable question, should fees be assessed at all? He offers the example of Hippocrates' refusing to accept pay on the grounds that it would make him a slave to his paymaster. Moreover, the noble physician is not a mere craftsman who bargains with an employer—one does not barter with a dying man.

Read in a certain light, Zacchias provides at least the intimation of the concept of a right to treatment. It is a right that arises from the physician's duty, rather than something possessed inherently by those who are ill. In other words, it is not a matter of others having a claim on the doctor, it is that the profession of medicine itself imposes special obligations.

This article is painted with a broad brush. I've touched upon four historical periods, each more complex than a brief characterization can honor. The ancient world, the early and later medieval epoch, and the Renaissance bring to light practices that are coextensive with the idea of the doctor. Every age regards what it takes to be medical knowledge as integral to life itself. It is not just another kind of knowledge, but one able to relieve suffering and forestall death. Those who possess this knowledge are prized, but much is expected of them. No matter how great their wealth or celebrity, it is the life of the patient that must matter most to them. At the risk of being controversial, I should say that the notion of physician-assisted suicide, not to mention withholding treatment solely on the grounds of old age, cannot be reconciled with the idea of doctoring throughout its long history.

Every age has faced the problem we refer to as the high cost of medicine. Unlike those in earlier ages, we do not face the Black Death. We know the difference between science and superstition. We know the structure of life in its most minute details. We have the example of cultivated people allowing their leaders to treat life as expendable. In all, then, we should be able to create or re-create a therapeutic ethos that liberates the profession to perform that mission for which the office was created in the first instance. If we make our doctors the hourly employees of the state, we surely cannot expect them to behave as saints and heroes. And if we expect saintly and heroic conduct, we must be prepared to accord them the highest respect, the deepest admiration, and, yes, the right to a rich life during the few hours that can be spared. Medicine is not a wheel that needs to be reinvented. We know a good physician when we see one.

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MEDICAL NARRATIVE

On Money in Medicine and the Angst It Creates for Medical Students

Allison Carmichael

From the outside, it is an office building like any other—angular, uninviting, tones of brown and gray. The noise from the highway is still audible in the dark lobby. There is a distinct odor that I can't place, but it somehow smells medical. I reach the office of Richard Bligh, MD, MBA, and as I enter the waiting room I go from unassuming hallway to what looks like someone's living room. The hues of pink and taupe are a welcome change from the dark corridor. Occupying one wall is a serene landscape that complements the decorative rug. The smell, I now notice, is gone. The receptionist offers me a seat, and I barely have time to savor the softness of the cushion before I am led to a small conference room for my interview with Dr. Bligh, the concierge internist.

Dr. Bligh has succeeded in an undertaking that many considered a gamble on his part. The concierge model involves patients' paying an annual retainer in exchange for, according to Dr. Bligh's web site, "the kind of treatment that the traditional healthcare system is unable to offer." His patients are guaranteed an appointment in a timely manner, and are given ample time when they are seen—often 45 minutes to an hour and a half. They have access to his cell phone number and are invited to call at any time, day or night—which Dr. Bligh says has not been a problem.

"If anything, I get fewer calls," he tells me from across the table. His manner is grandfatherly and easygoing. Not once does he peer at a timepiece, nor does his attention ever appear to waiver. Many of his patients come from referrals, and I imagine that's because he uses this same demeanor in the exam room. In fact, he has recently taken on a partner to accommodate his patient load of 500. He cites disgruntlement with 3,000 to 4,000 patients at his previous internal medicine group as a major reason for his shift to a concierge practice.

"An accountant told our group that if we each saw 1.2 more patients per hour, we wouldn't have to cut back salaries," says Dr. Bligh. "I never saw 0.2 patients in my life."

To a medical student drawn toward primary care but struggling with the prospect of long work hours and dwindling reimbursement, this model seems wildly attractive. More time with patients? Fewer hours per week? No pressure to squeeze in more visits? Where do I sign up? The reality, though, is that rewards from the concierge model come with considerable risk. As with any business there must, by definition, be a customer base, and for many people having a doctor on retainer is neither

affordable nor necessary. There are also significant start-up costs. Though Dr. Bligh has an MBA, he hired a professional to help structure his practice. He had an initial advertising budget of \$30,000 per month, and now spends roughly \$10,000 per month.

Despite these challenges, Dr. Bligh has maintained a thriving business for the past 6 years. He began by sending out a questionnaire to gauge what sort of interest there might be in this form of service. The comforting atmosphere of his office and the time and care he affords his patients have kept them coming back and prompted them to tell their friends. He also offers cosmetic and age-management services that include hormone-replacement therapy, which further bolsters his business.

“Anyone who has entrepreneurial drive can do it,” Dr. Bligh says of the success he has seen with the concierge model. “But if you’re averse to risk, it’s not a good thing to try.”

Dr. Bligh’s practice is an example of the creative methods some primary care physicians have been driven to employ in recent years in order to turn a profit while maintaining their sanity. The fact that his business has done well indicates that patients, too, are fed up with having to compete for their doctor’s attention. Though we constantly hear about the increasing dissatisfaction with primary care, Dr. Bligh has shown that it’s possible to do more than merely survive in this field, given the proper motivation and wherewithal.

As a second-year medical student, I wonder at what point we should start thinking about these sorts of practice issues. How heavily should income and number of patients seen in a day factor into our choice of specialty? For Jason Givan, MD, a fourth-year resident in dermatology at Saint Louis University, these questions have renewed significance as he decides how to put his degree to use. “It’s a whole area that’s not well-addressed in med school,” he says of the basics of running a practice. “You have to be very self-motivated to be in private practice and stay up-to-date.” Yet with physicians finding it more and more difficult to operate independently, and new doctors opting to join groups as salaried employees rather than deal with the hassle of office management, would it not be worthwhile to introduce these topics at the medical school level? In this country medicine is a business, and those of us who are poised to enter the “real world” should have as much information as possible to help us figure out whether or not the job we think we want will prove fulfilling. It seems that no matter how enthralled one might be with family medicine, that thrill may very easily turn to resentment if one is unable to pay bills or must spend the bulk of one’s time doing paperwork rather than seeing patients. Especially discouraging are the admonishments of those already in the field—particularly those like Dr. Bligh who have done relatively well.

“If I had a child who was in medical school I would not encourage him or her to go into internal medicine,” he says.

As a result, there is understandably a strong desire to enter specialty areas in which these problems are minimal. Lifestyle, too, has become a greater incentive. Though Dr. Givan cites his love of “fine detail work” as being the main draw of dermatology, time flexibility was a factor he also considered. His workweek at the moment averages 50 to 60 hours, a schedule with which he has no complaints. “It’s important to have a life outside of medicine,” he states, echoing the concierge doctor’s stance on the matter.

“People want to have more balance in their lives,” states Dr. Bligh. “We’re learning that people don’t want to spend all their life at work, and there’s nothing wrong with that.”

Is it wrong to want to work less? Is our generation of physicians somehow “weaker” because we’d rather not spend our entire lives at the office? Physicians who trained and practiced under more grueling conditions might argue as much. How, they wonder, can we expect to be competent physicians if we don’t work at it? And yet, how could our predecessors have anticipated the direction in which medicine has turned? Surely they would have to agree that being paid a couple hundred dollars to remove a mole in a matter of minutes seems preferable to spending nearly an hour taking a thorough history and performing a physical exam and being paid a fraction of that amount, if anything.

If it were up to Dr. John Morley, choosing a specialty would be a much simpler decision, based solely on whatever piques your interest. Dr. Morley, director of the Division of Geriatric Medicine at SLU, hails from South Africa, where doctors of all specialties are paid equally. Their tuition is covered by the government, eliminating student debt as an influencing factor. “American students would rather specialize in fields that make more money,” he laments, adding that 60 to 70 percent of applicants for the geriatrics fellowship are international, with the few native applicants ranking income as lower on their list of priorities. “You’ll find more people who love it and not people who are doing it for the money,” he says. He asks what I want to be when I grow up, and, when I tell him I’m interested in gastroenterology, he groans. I find myself feeling guilty for this statement because I know that money and lifestyle are partial reasons for my interest, and part of me feels they shouldn’t be. The GI system is by far my favorite and one I would love to work with on a daily basis, but I can’t deny my awareness that gastroenterology is a relatively high-earning field.

Should such business-like considerations enter into decision making in what is often perceived to be a calling rather than a career? In a country grounded in the Protestant work ethic and one that (purposely) does not confer peerage or nobility, material wealth has always been viewed as the reward for success. For natives and immigrants alike, a “better life” means more money.

It seems inevitable—particularly in the area of primary care—that medicine will never again be the highly profitable field it once was. For those of us who nevertheless believe it is the best fit, we must either come to terms with working

more for less pay or attempt to circumvent the system, as Dr. Bligh has done. The only advice anyone can give at the moment, and what is ultimately the most important, is simply, “do what you love.” As Dr. Morley said of the research work for which he is so passionate, “If nobody paid me for it I’d be really happy; it would be the same as playing tennis or chess for me.” I hope I will be able to find a career in medicine about which I can feel the same. And should that happen to be primary care, now seems an opportune time to become accustomed to asceticism.

Allison Carmichael is a second-year medical student at Saint Louis University. She graduated from Washington University in 2003 with a bachelor’s degree in English literature and minors in writing and film studies. Her interests include journalism and nutrition.

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[Higher Pay](#), May 2009

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OP-ED

Higher Pay

E. Ray Dorsey, MD, MBA, John A. Dorsey, MD, MBA, and
E. Richard Dorsey, MD, MBA

The physician labor supply suffers from two maldistributions—specialty and geography. The specialty maldistribution is over a decade in the making as the number of U.S. medical students who choose primary care specialties continues to decline [1, 2]. The geographical maldistribution is due to the aggregation of physicians in urban and suburban areas, leaving large populations, especially members of minority groups and rural residents, underserved. Both maldistributions can be remedied, not by current efforts to increase the number of physicians that go through a dysfunctional system, but by increasing pay for physicians as residents and fully trained clinicians.

Higher pay for residents will reduce the enormous financial burden that current residents bear [3]. The high debt burden and limited ability to service this debt drives residents away from primary care, which contributes to its shortage [4, 5]. Increasing residents' pay would reduce the financial burden of medical training and enable more individuals from underrepresented minority groups and rural areas to enter medicine. For individuals from these two groups, the financial burden is especially daunting, and yet these are the individuals most likely to care for underserved populations [6-9]. Higher pay will require teaching hospitals to contribute a larger proportion of their federal subsidies (more than \$8 billion annually from Medicare alone) to the compensation of residents [10]. Given that the subsidies (on average, over \$80,000 per resident) exceed the compensation (on average, \$60,000 for first-year residents including salary and benefits) of residents and that residents contribute significant labor to teaching hospitals, higher pay is both feasible and desirable [11].

The maldistribution of physicians can also be remedied by higher pay for primary care physicians and those working in underserved areas. Higher pay for primary care physicians will become more important with ongoing efforts to provide health insurance for everyone. For example, the Massachusetts health insurance plan, which has increased coverage for many of those previously without health insurance, has led to concerns about a shortage of primary care physicians. A 2007 *Wall Street Journal* article highlighted the difficulty one individual had finding a primary care physician after gaining health insurance [12]. The problem is not a shortage of primary care physicians; it is a shortage of current and future physicians who are financially able to accept low reimbursement per visit as compensation. The response to such a shortage is not to increase the number of physicians trained (at considerable taxpayer expense) but to increase the compensation of physicians who

are in high demand. With higher compensation, current physicians, many of whom are not able to provide such services at today's reimbursement levels, could offer more hours of primary care.

Medicare, as the largest single payer of physician services, could take the lead to redress the inequitable compensation of primary care physicians. Because of its size and scope, Medicare's lead will most likely be followed by other payers, as have its other reimbursement policies. Reimbursement for hospital procedures is several times the reimbursement for office time spent on prevention and in talking with, diagnosing, and counseling patients—an inequity that has the perverse effect of costing lots of money to fix problems that could readily be prevented by comprehensive outpatient treatment. Raising Medicare reimbursement for office-based cognitive activities would create incentive for the current supply of physicians to offer more primary care services than they do now. Higher reimbursement would also improve the distribution of physicians toward specialties such as primary care and geriatrics [5, 13]. The higher pay for primary care physicians could be extended to those who practice in underserved areas.

The costs of higher pay could be offset in part by decreasing the demand (e.g., through higher copayments) for more expensive (and less valuable) diagnostic services. Less palatable alternatives include freezing or otherwise reducing compensation for certain procedures, especially those with limited evidence of benefit. In any case, the societal cost of higher pay should be compared to that of training more physicians, which, if the cap on Medicare funding of graduate medical education is relaxed, will likely produce larger subsidies for teaching hospitals. Moreover, simply training more physicians will lead to concerns about the ability of physicians to create their own demand for services—more doctors, more doctoring [14].

Higher pay alone will not be sufficient to remedy the maldistribution of physician labor. Other tools are available, including broader utilization of other health care professionals (e.g., nurse practitioners), technology (e.g., telemedicine), and training (e.g., physician-led community-based teams focused on the needs of patients). Other models of physician reimbursement (e.g., pay-for-performance, capitation, medical-home management fees) are also possibilities, but they suffer at present from limited evidence of their benefit, potential adverse secondary consequences, and their complexity.

In sum, increasing the number of physicians that go through today's dysfunctional system will not solve the maldistribution of physician labor, may exacerbate it, and will certainly be costly. Today's reimbursement model is designed to produce exactly the outcome that it does—highly priced, procedure-oriented care. To change the outcome to a patient-centered, preventive model will require considerable effort. Medical students, as the future physicians of America, who can readily organize and have no preexisting stake in the *status quo*, have the unique opportunity to help

shape the system that they will inherit at a critical point in its transformation. Such opportunities should not be missed.

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