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Perspective

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Cost Consciousness in Patient Care — What Is Medical Education's Responsibility?

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It is old news that the cost of medical care in the United States is unsupportable, yet we seem unable to grapple with the issue effectively. As current ideas for health care reform have percolated through Congress, cost-control mechanisms have generally been recognized as the weak component. Our country is remarkably generative in the development of new diagnostic tests, drugs, and procedures — and remarkably undisciplined in their deployment. New diagnostic and therapeutic procedures and the broadened application of established ones account for two thirds of the growth in health care expenditures.[1] Since the importance of this problem has been recognized for nearly 40 years, one might imagine that medical educators have attempted to incorporate cost consciousness into their teaching, but such efforts have been remarkably few, and curricula remain largely silent on the role of cost in the planning of diagnostic and treatment strategies.

The reasons for this silence are historical, philosophical, structural, and cultural. In the 1970s, Jerry Avorn, Wayne Ray, and others attempted to engage physicians in cost control by using a variety of educational approaches, such as "academic detailing" — having trained individuals, often clinical pharmacists, rather than salespeople, provide physicians with information about appropriate prescribing and diagnostic testing. This campaign produced only modest improvements in prescribing patterns and other costly physician practices, and with the rise of managed care, cost-control efforts moved on to administrative control tactics and financial incentives for physicians to provide less costly care — strategies that soured both physicians and the public on approaches that rendered the doctor a "double agent."[2]

Philosophically, we physicians have conceived of ourselves as, and taught students that we are, advocates for each patient,[3] obligated to eschew all considerations other than benefit to that patient and his or her preferences. Intensifying the challenges posed by this conception are the increased emphasis on patient-centered care and the expanded access of nonprofessionals to sophisticated medical information, which have

transformed patients from dependent and acquiescent recipients of the physician's care plan to activated, informed, and sometimes insistent consumers of health care services.

The structural factor contributing to the evasion of cost consciousness is the inpatient setting in which most medical education occurs. A predominant driver of the cost of hospital care is the length of stay, so a high priority is readying patients for discharge[4] — which serves as a rationale for preemptively ordering any test and consultation that might be called for, to avoid delaying discharge. Consequently, students and residents have scarce opportunity to practice devising cost-effective diagnostic strategies and explaining their rationale to patients and families.

Finally, cultural values powerfully influence the selection of teaching topics. Academia celebrates the "high knowledge" of medicine: pathophysiology, molecular biology, genomics. Even evidence-based medicine, although it deemphasizes fundamental mechanisms, is regarded as acceptably intellectual in comparison with "low," real-world concerns such as cost.

Combating such forces is a tall order, but I believe that medical educators have an obligation to address cost. This obligation derives from our responsibility to individual patients and from our role as informed physician-citizens in the larger society. Being a physician is not just about finding benefit for patients; it is also about helping them to understand value. The informed-consent conversation about the risks and benefits of a procedure is such a value-finding discussion. Of course, the patient usually stands to both bear those risks and gain those benefits. But some familiar situations require talking to patients about interventions that have benefits that they would, or think they would, experience and major risks that lie elsewhere; negotiating the use of antibiotics in outpatient settings is an example. I would argue that patients depend on us to help them understand both the likelihood that they will experience benefit and the cost, broadly construed, at which that benefit might be won.

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Our position as professionals with a sophisticated understanding of the implications of medical overconsumption is the second source of our obligation to consider cost. We are advocates for individual patients; we are also stewards of what Hiatt referred to as "the medical commons."[5]

How should we deal with these forces that have resulted in a failure of medical education to address the urgent issue of costs? First, we must acknowledge the lesson of recent history: creating financial incentives for physicians to behave in ways that are not, or are not perceived to be, in patients' interest creates distrust and antagonism. We physicians should not gain from doing too little for patients any more than we should prosper from doing too much.

Second, we must abandon the myth of the physician as single-minded advocate for any amount of benefit for every patient. We make all kinds of choices in caring for patients; some involve denying care that patients perceive as — and that might actually be — beneficial. Given that we make value-based decisions about the deployment of other finite resources, such as our time and the use of beds in the intensive care unit, why not about costly treatments? In fact, numerous studies in the United States and Europe confirm that bedside rationing of care is common practice. Problematically, it is done in an occult and unpredictable manner. If we teach that cost should not be a consideration in the care of patients, then we delegitimize the topic for discussion; the ensuing silence allows marked interphysician variation in practice.

We must also educate medical students and residents in settings where they have opportunities to develop and use cost-conscious strategies in caring for patients — generally, outpatient settings, where costs are predominantly influenced by decisions about diagnostic testing and treatment choices. In addition, training physicians to be cost aware will require knowledgeable, skilled faculty members who — since cost is not an inherently scintillating

topic — are innovative and engaging teachers.

In 1975, Hiatt exhorted physicians to collaborate with other experts and the public to protect the medical commons.[5] Not only have we failed to rise to his challenge, but our overconsumption and waste are now compromising our ability to address other pressing social needs and national priorities. Educating physicians to be cost aware is a critical responsibility of medical schools and residency programs. Like all medical education, it is fundamentally a moral undertaking, but it also requires that learners acquire the requisite knowledge and be afforded the opportunity to develop relevant skills.

First, we must be honest about the choices that we make every day and stop hiding behind the myth that every physician should and does apply every resource in unlimited degree to every patient for even minimal potential benefit. Second, we must prepare every physician to assess not only the benefit or effectiveness of diagnostic tests, treatments, and strategies but also their value. Value can be increased through cost-conscious diagnostic and management strategies and by the engineering of better and less wasteful processes of care. Evidence-based medicine and comparative-effectiveness research help us understand the relative effectiveness of management strategies; appreciation of cost and metrics such as "number needed to treat" help us approach value.

Of course, negotiating with patients or families who insist on a low-value course of action is difficult. Doctors must be provided with the skills to discuss value with patients honestly, effectively, and compassionately. We have devoted much effort to teaching about other difficult conversations; we must rise to the challenge of this one. Like the limitation of interventions at the end of life, consideration of cost must be explicit, transparent, and consistent. We need to present cost consciousness to our students as a positive professional value, clarify its contribution as we discuss diagnostic and therapeutic strategies, and teach skills that support open discussion with patients and families.

Third, we must broaden our programs so that all trainees receive a foundation of exposure to health care management and health services delivery, enabling them to participate as informed citizens in the systems in which they work and learn. Medical school and residency programs should encourage interested learners to pursue these areas in depth through dual-degree and certificate programs and should provide sufficient flexibility and individualization of clinical education to make it feasible to do so. Similarly, we must ensure that all students acquire a basic understanding of how medical care is financed, where national health care policies come from, and the politics that shape financing and workforce choices. Hiatt correctly noted that physicians would not be making the nation's critical health care choices alone; today's question is whether medical education will prepare the next generation to participate in this decision making at all.

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New Medical Schools in the United States

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In 2000, the governor of Florida signed legislation authorizing Florida State University (FSU) to establish a medical school, thus ending a period spanning more than two decades during which no new allopathic medical schools were established in this country. No schools had been created during the 1980s and 1990s primarily because reports issued by federal advisory bod-