THE 'PERFECT STORM'?

by Jeff Mortimer

As complex, turbulent forces — economic, social and technological — converge upon the costs of medical education, the academic system struggles to keep medical training within reach for students and to sustain a robust pool of American-trained physicians for tomorrow's health care needs.

"The vast majority of our medical students are burdened with more debt at graduation than many Americans amass in a lifetime," wrote Jordan J. Cohen, M.D., president of the Association of American Medical Colleges, in the July 2002 issue of the *AAMC Reporter*.

According to data from the association's annual survey of medical school graduates for 2003, 82 percent had borrowed to finance their education — direct costs, such as tuition and fees, as well as indirect subsistence costs — and their median indebtedness was $105,500. Public school students' median debt was lower than that of their peers at private institutions — $100,000 compared to $135,000 — but the gap was narrowing: The median debt for public school graduates jumped 8.7 percent from the year before, compared to a 6.3 percent increase for private school students, as state-supported schools scrambled to offset shrinking revenues from government, clinical practice and endowments with tuition increases. ➤

Illustration: Shayne Davidson

The picture is slightly less bleak at the University of Michigan, where tuition increases for the last five years have averaged about 3 percent a year, more or less matching the rate of inflation. "When we took a cut in state appropriations last year and this year, we did not pass that on to our students," says Dean Allen S. Lichter (M.D. 1972). "We simply absorbed it. We are trying our best to be good stewards of this medical school and recognize that we cannot pass all the costs onto the backs of our medical students."

"If you're a student without means and you know you're going to have to borrow $150,000 or $175,000, you begin to question whether you should go to medical school at all," says Dean Allen S. Lichter. "The hill becomes so steep that many people we would love to see enter the field of medicine go into other fields."

Despite historically low interest rates, a medical school graduate pursuing a four-year residency with $100,000 in federal Stafford loans, the most common variety, can expect to pay more than $50,000 in interest over a 10-year repayment plan. If he or she has chosen a 25-year extended repayment plan, the interest could surpass $200,000, more than double the amount originally borrowed. And due to changes in federal student loan regulations, students have to start repaying their loans during their residency years. A typical monthly loan payment can easily consume more than 40 percent of a resident's net income.

U-M Medical School endowment funds earmarked for scholarships have more than tripled in the last five years, from $7 million to $22 million, and so has scholarship support, from $1 million distributed to 91 students in 1997-98 to $3.2 million awarded to 247 students in 2002-03. About a million of those dollars came from the dean's discretionary fund, paying for 40 full-tuition scholarships, 10 per class.

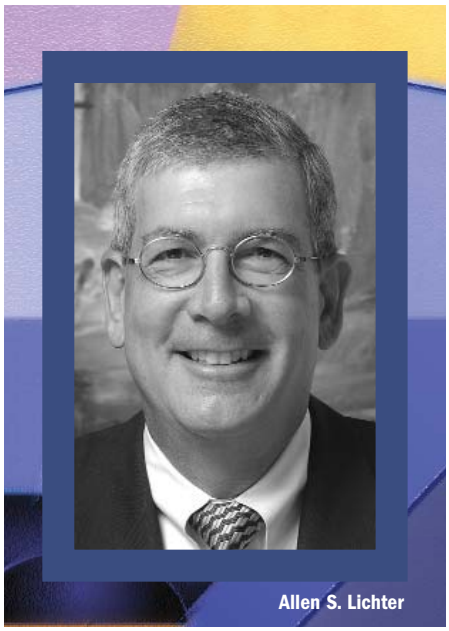
"That money could have been used for faculty recruitment, research support, all the things a medical school is involved in," says Lichter, "but we felt that our best use of some of these discretionary dollars was to help reduce this debt burden. I felt we couldn't begin to ask our alumni and our benefactors for scholarship support if we ourselves inside the medical school were unwilling to do it."

In addition to the dean's office, he says, "Just about every clinical department in the medical school has agreed to support a full-tuition scholarship."

It's a good beginning, but only that. The student debt issue is long-term, systemic and structural, both a symptom of the radical changes in health care finance of the last 20 years and, potentially, a determinant of who gets that care, and from whom.

"You cannot make this question simple," says Roland G. "Red" Hiss (M.D. 1957, Residency 1964, Fellowship 1966), longtime chair of the Medical School's Department of Medical Education. "It's not simple. It's a very complex issue with multiple driving forces."

Photo: Martin Vloet



Allen S. Lichter

It also has a multitude of possible consequences and solutions. Chief among the former, in the view of many authorities, is its effect not only on who goes to medical school but also what they choose to do with that education once they've received it.

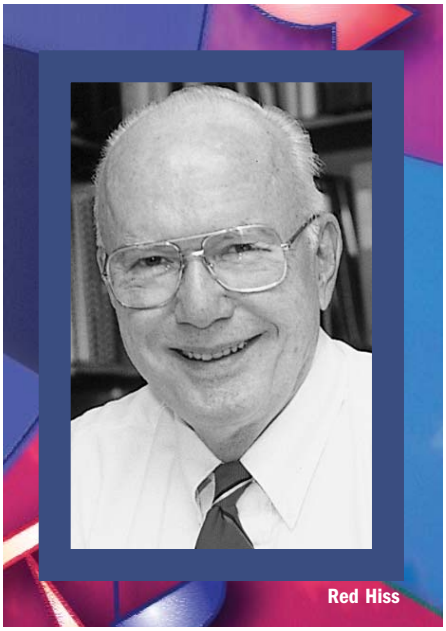
"The more diversified student body that this medical school and many others have achieved during the last 15 or so years, and appropriately so, has obviously brought to the school students who may not have the resources that some of their prior colleagues or some of my colleagues 50 years ago had," says Giles Bole (M.D. 1953, Residency 1956), dean of the U-M Medical School from 1990 to 1996. "If you look at the picture of the class of 1953, it was heavily dominated by white males, probably middle to upper middle class. The resources to go to school as well as to pay the tuition were not as dependent on the individual student's efforts."

But now the prospect of such a debt load may intimidate potential students who come from less affluent backgrounds or groups that have been historically underrepresented in medicine, thus damaging the effort to more closely align the demographics of the profession with the populations it serves, which was one of the goals of expanding the pool in the first place.

"Many members of those groups can't imagine borrowing $100,000 for anything, much less something intangible like education," says Robert Sabalis, the AAMC's associate vice president for student affairs and programs. "If you're living in a $500-a-month apartment, who can think about borrowing $100,000? We don't want to scare off people in this country who we need in the medical profession in the future with the prospect of these huge debt amounts."

"If you're a student without means and you know you're going to have to borrow $150,000 or $175,000, you begin to question whether you should go to medical school at all," says Lichter. "The hill becomes so steep that many people we would love to see enter the field of medicine go into other fields."

The evidence for this is still largely anecdotal, although there are apparently enough such tales that the AAMC is cur-



Red Hiss

rently conducting a study of students who have been accepted into medical school as well as students who considered it but changed their minds, in order to "try to determine what factors lead people to not apply and what factors lead people to apply," says Sabalis. The report is scheduled for publication in 2004.

Does students' debt influence their core decisions at the other end of medical school? What little data there is on the subject is dated, and opinions range from "it's not much of a problem" to "the future of medicine is at stake."

"I don't think anybody knows what the effect of indebtedness is on decisions by medical students," says Peter Ward (M.D. 1960, Residency 1963), chair of the Department of Pathology and interim dean from 1983-85. "One would think that if a student has $100,000-$150,000 debt that he or she would want the highest income in order to pay off the debt as quickly as possible. Whether or not that's true, I think is unclear."

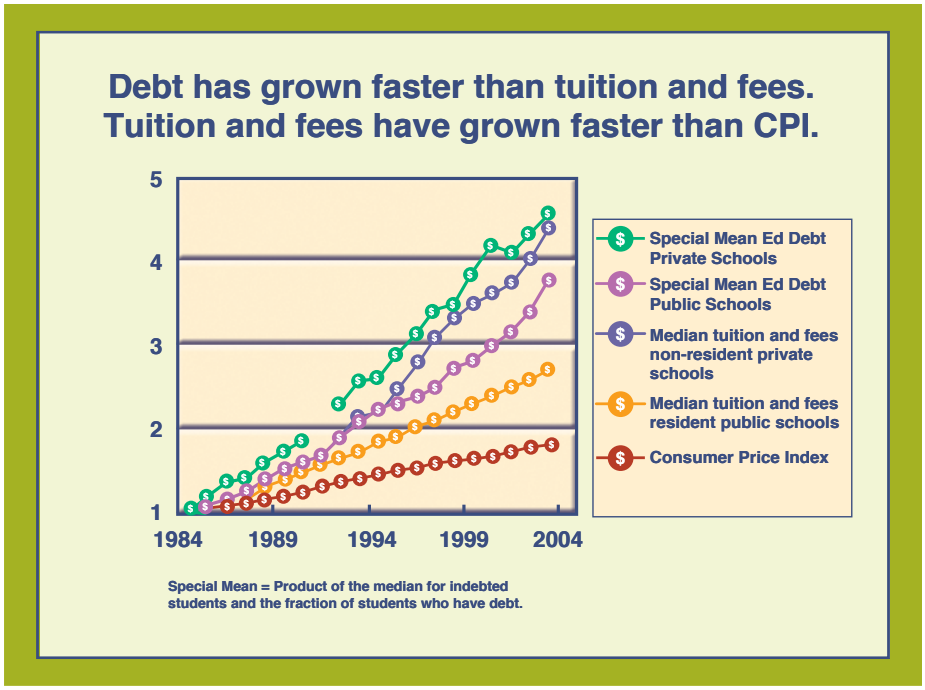
"If it is true, it's relatively true at the margin, but it does need to be studied again," says Michael Whitcomb, the AAMC's vice president, division of medical education. "The last study looking at whether indebtedness had an impact on students' specialty choice was done about five years ago. The data at that time, and all previous data, was of such a nature that it was not possible to make a relationship."

Bole found plenty to concern him during his service in the mid-1990s on a commission advising Congress on physician specialty choice. "Our staff of 15 civil servants did a lot of spadework to look at these accusations [that financial considerations were in the driver's seat], and many times they were just that," he says. "But there was good evidence, as you looked at the percentages of students who were going into the surgical specialties and some of the high-income medical specialties, that to be able to recover that student debt load was at least there as something they would admit to if you quizzed hard."

"I am certain that it discourages some people from pursuing certain aspects of medicine that don't pay as well," says Marc Lippman, M.D., chair of the U-M Medical School's Department of Internal Medicine. "People will now not be as likely go into internal medicine to begin with, and even within internal medicine, they will avoid certain important subspecialties like infectious disease, rheumatology and endocrinology because they don't pay very well. Even if they choose a subspecialty like cardiology or gastroenterology, they will pursue clinical practice rather than research. I think that there is a major domino effect of debt which not only keeps people out of medicine but also keeps them out of parts of medicine that are most critical for its self-renewal."

Hiss is adamant that one critical part of medicine that's seriously endangered by students' deepening financial hole is primary care practice. "The student debt issue is having a major impact on the health care delivery system of this country," he says, "because the students who are burdened with that debt know it will be forever before they pay it off if they go into family practice or general internal medicine or pediatrics. The number of senior medical students who are electing family practice or general internal medicine for post-graduate or residency has been going down for the last three or four years. We are drying up our American-trained primary care physician supply. Student debt isn't the only reason, but it's a significant one."

Like Lippman, many observers believe it's also a growing factor in drying up the supply of researchers, as well as physicians in public service and doctors ➤



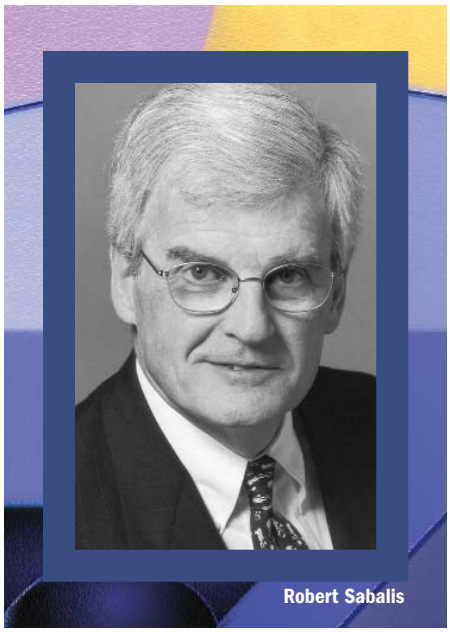
This chart displays the national growth of tuition, indebtedness and consumer prices, reduced to a common scale. Medical education debt is 4.5 times as high in 2003 as it was in 1984, while tuition in private medical schools is 2.7 times as high, and in public medical schools it is 3.8 times as high. The consumer price index is less than twice as high as it was 20 years ago. That indebtedness has increased more rapidly than tuition implies that other components of the cost of attending medical school have risen faster than tuition. Tuition made up less than half of the total cost of attendance in 2002 at public medical schools.

Source: *Medical School Tuition and Young Physician Indebtedness* © AAMC 2004. Reprinted with permission of the Association of American Medical Colleges.

who choose to practice in rural areas or inner cities. It would be naïve to suggest that financial considerations have never played a role in such decisions, but that role seems to grow in tandem with student debt.

"The Michigan State Medical Society does regular surveys of physicians, including their salaries," says Bole, "and there's no question that the same specialist who practices in the Upper Peninsula has a net salary that is probably two-thirds of what he or she would get in Ann Arbor or the northern suburbs of Detroit. And that's hard data; it isn't somebody's opinion."

"It's hard to say about career choice because we don't necessarily follow people that long," says Sabalis, "but people interested in public service won't be able to pay back these loans because they're making salaries that are half the market rate."


Robert Sabalis

"It's always been very difficult to ascertain precisely what it costs to educate a medical student," says Bob Jones, AAMC vice president for medical school services and studies. "I think many schools really don't know."

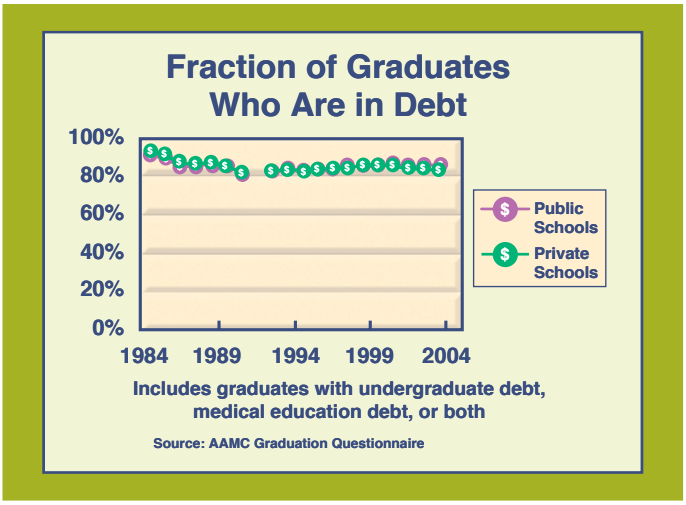
This is not necessarily a failing on their part. "It's not like manufacturing, where you can give precise costs for things," he says. "Think about somebody doing rounds in the hospital and the attending physician interviewing a patient in the presence of medical students and residents. You've got graduate medical education going on, patient care going on, and medical student education going on. And not all schools pay all those costs in real dollars. Schools are very different in the ways they're arranged organizationally and financially."

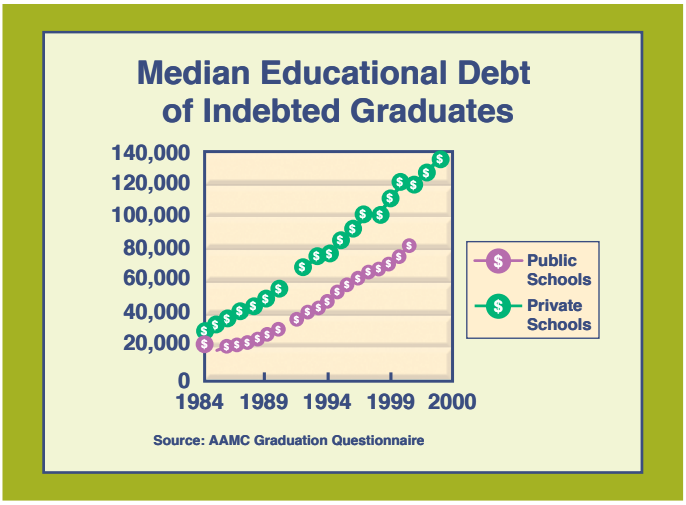
Or, as Sabalis puts it, "If you've seen one medical school, you've seen one medical school. They have different relationships with their sponsoring institutions, different levels of state and private funding, they pay for things in different ways, they have different levels of endowment. Trying to get a national handle on 126 institutions who deal with their finances in many different ways can be a daunting job."

But this is not to deny that the economic driving forces of increased student debt are pervasive and abundant, regardless of their proportions at any particular site. Virtually every significant income category has taken major lumps. Managed care shrank the clinical revenues that helped subsidize research and education. Cash-strapped governments at all levels reduced their support.

At the same time, the cost of providing medical education continued to grow. Expensive technology became commonplace in both practice and pedagogy. More and more training took place in ambulatory rather than hospital settings. Regulatory expenses rose. So did faculty salaries, as schools competed with the private sector for talented clinicians.

With caveats duly stipulated, Jones cites recent research that puts the average medical school's annual educational cost at $55,000-$60,000 per student. "One could argue with certain assumptions and say it's more than that," he says,



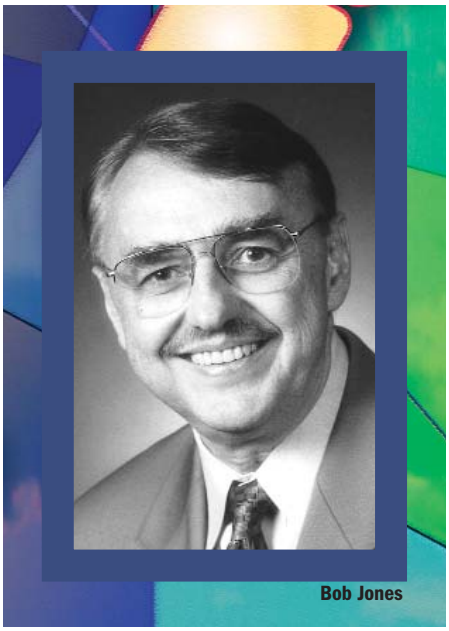


In 1984, 87% of public medical school students graduated with medical school debt, and the median amount for those who had debt was $22,000. For private medical schools, 90% had debt, and the median amount was $27,000. While the fraction of 2003 graduates who have medical school debt has declined to 85% for public school medical students and 81% for private school medical students, the median amounts for those who have debt have enormously increased, to $100,000 and $135,000, respectively. At Michigan's medical school, approximately 85 percent of students graduate with debt, and the average indebtedness has risen from $84,000 in 1999 to an estimated $109,000 in 2004.

Sources: *Medical School Tuition and Young Physician Indebtedness* © AAMC 2004, reprinted with permission of the Association of American Medical Colleges; U-M Medical School Office of Financial Aid.

"but I'm not sure that it's really less. It's certainly much greater than anyone's tuition bill."

The atmosphere is markedly different than it was 20 years ago. "It used to be understood that the medical profession did good things for the populace and we cut it some slack," says Joel Howell, M.D., Ph.D., a professor of internal medicine and the Victor Vaughan Collegiate Professor of the History of Medicine. "Now we have people coming from the auto industry and saying, 'We buy steel, lead, glass, and we want to buy health


Bob Jones

care.' In the good-bad old days, you charged everybody a little more and the people who couldn't pay would be subsidized. Now the people who are paying for health care are working very hard to see that doesn't happen."

"Hospitals used to think having medical students and residents was a good thing," says Sabalis, "but when you start doing cost accounting, you find that it makes the physician less efficient in his or her clinical activity. It's like any other product line, which is how things have changed over the last couple of decades. People in medicine who never thought they'd be hearing language about product lines are now talking that language every day in an effort to keep their heads above water."

And the waves keep rising, on all sides. The phrase "perfect storm" comes to mind.

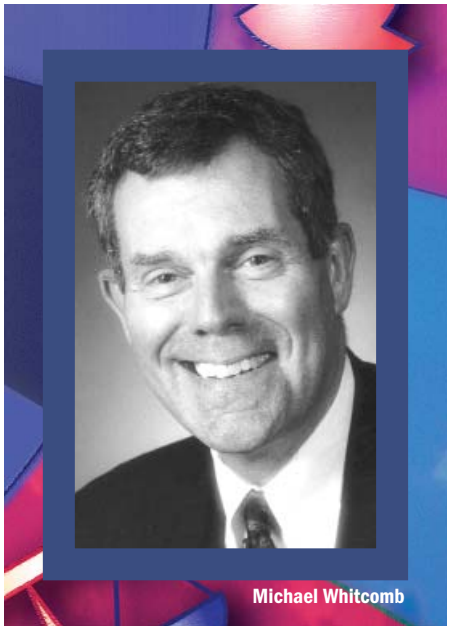
"There's been a huge increase in costs related to regulatory requirements with no offsetting access to federal revenue," says Ward. "At Michigan right now, we're budgeting close to two million dollars a year for the institutional review boards required for biomedical research. Five years ago, it was about $250,000. The Americans with Disabilities act is a mandate that has no offsetting revenues from the federal government but represents a series of regulations that are quite costly to implement. And increasing federal regulations for animal care have caused the per diem rates for animals to probably triple over about a two- or three-year period. All of these costs have had to be absorbed by the institutions, so it's not surprising that the costs of operating a medical school have risen substantially over the past five to 10 years."

"In the 1960s and into the early 1970s, professors in the medical school made salaries that were not too different from professors in the English department," says Dean Lichter. "That means there wasn't nearly as much strain on tuition. But as physicians' salaries began to rise in the private sector, we had to keep some pace in order not to lose the entire faculty. That's true of every medical school in the country."

Not only that, but teaching itself is more labor-intensive, for both practical and philosophical reasons.

"Medicine has changed so much that if you spend most of your time in the hospital, you'll miss a huge amount of education," says Lichter. "Today, we manage people entirely as outpatients who, when I went to medical school, we managed as inpatients. We used to have ward service with an attending physician and four or five medical students and lots of house staff doing a lot of teaching. Now, more and more, a tremendous amount of learning about medicine occurs in the outpatient clinic, where a student is one-on-one with a faculty member. It's a much more costly venue to teach in but it's absolutely critical that we do it, and we do. We are on track to deliver close to half our clinical education in ambulatory clinics.

"We are also now beginning to divide up classes into small groups of 10 or 15 with a faculty member in front of each group, so there's much more interaction and self-directed interactive learning. But


Michael Whitcomb

you need a faculty member in front of each group, so it takes eight or 10 faculty members to deliver educational content vs. one faculty member standing in front of a class."

Does looking only at averages and means and totals mask circumstances that would mitigate the scope of the problem?

"I think, in part, the increase in student debt is a function of the fact that the availability of student loans has risen quite significantly over the years," says Ward.

In Whitcomb's view, that availability could have the same effect as those daily credit card solicitations in the mail, which induce students to incur debt when they otherwise might not have done so or needed to. "By declaring themselves as independent, with no resources from family funds, they can borrow all the money even if they come from families that could have paid their entire way," he says. "Where does the responsibility lie within families who have the means, but find it easier to have their son or daughter borrow the money?"

Moreover, he adds, "Students — and I can say this about my own kids who are in professional school — tend to borrow to the limits, believing that they'll be able to retire that debt in a reasonable way once they complete all their training. They aren't limited by other activities in terms of the amount they're willing to borrow in order to go to school. I don't think they concern themselves very much with the amount that they borrow." ➤

That includes consumer debt. While expenses unrelated to education aren't included in any of the student indebtedness figures that have been cited, those costs have also grown, causing some to wonder if medical students aren't, well, getting soft.

"The idea that you were going to live the Spartan life through those medical school and residency years has faded," says Bole. "It's still tough sledding, but I think students have expected to live at least a decent life."

"There are people who are questioning whether this generation of students is willing to sacrifice as much as prior generations," says Sabalis. "There is some discussion that they don't want to sacrifice the family side of their lives for the professional side. It's a controversial issue, and I don't want to be misperceived. I don't think everyone thinks it's a negative thing to balance your private life and your professional life."

Photo: Martin Vloet

Giles Bole

But trying to do that can raise those loan balances, too.

While not dismissive of the potential effects of student debt, some in the profession question the consistency of attempting to convince prospective students who are financially challenged that it's a good investment on the one hand, while asserting that its enormousness will adversely affect the course of medicine on the other.

> "I think it's an achievable goal for us over time to retire the debt of many, if not all, of the students who want to get a medical education here, and at the same time improve the quality of the students."
>
> *—Marc Lippman, chair, U-M Department of Internal Medicine*

"$150,000 is a lot of debt," says Howell, "but if you're going to walk into a job with a starting salary from $100,000 to $250,000 a year, you can pay it off. Can you pay it off and buy a vacation house and a new car and send your children to private school? Probably not. I know I'm going against the party line, but physicians get so much privilege in society that sometimes I wonder if this whole issue isn't a little bit overdrawn."

"The reverse side of the debt picture is something that I've been trying to figure out now for a couple of years," says Sabalis. "This is not debt like buying a car that loses 20 percent of its value the minute you drive it off the showroom floor. This is an educational investment that is pretty much guaranteed to 'pay off,' in that if the average bachelor's degree holder in this country makes perhaps $40,000 a year and the average physician makes $160,000 a year, this $100,000 or $110,000 is a sound investment financially for the future of his or her family. We have to look at both sides of the coin."

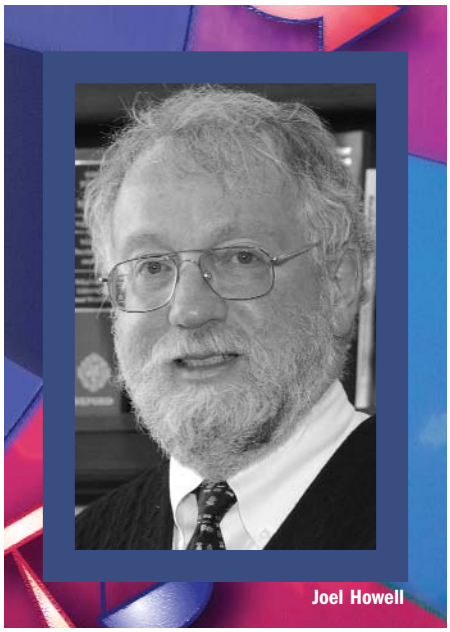
Such a view doesn't alter Bole's concerns. "Not everybody nets $150,000 the day they walk out of their residency," he says, "and the bills are coming due both from this debt load and from the other things you have to do if you're raising a family or trying to live a reasonably secure professional life. If you look at some of the primary care disciplines that have taken a dip in the last five to seven years in terms of the number of individuals entering them compared to the number that the managed care folks want us to believe we have to have, those folks take a long time before they mature to a net of $150,000, so the primary care disciplines will be all the more difficult to fill with American-trained medical students."

And Sabalis qualifies his comments with an emphatic "for now." "If you look at five more years of reduced support for higher education, students are going to be another $30,000-$40,000 in debt in five years. There eventually comes a breaking point. I don't think we're there yet, but …"

But why wait until there's a front-page crisis before attempting to reduce student debt and level the playing field? Those who spoke with *Medicine at Michigan* offered myriad suggestions, some radical, some more ordinary.

"I think medical education should be subsidized by the government — federal or state," says Howell. "After one completes one's medical education, one ought to owe some period of service to the state — we can debate how long that ought to be — and I would not let people buy their way out of it. I think we would wind up with just as good, if not better, physicians, who would be just as focused on healing. I don't make policy or sit in policy-making bodies, but I think offering enough financial aid so that anybody who is smart enough and dedicated enough to go to medical school can do so is a wonderful place to start."

Photo: Martin Vloet

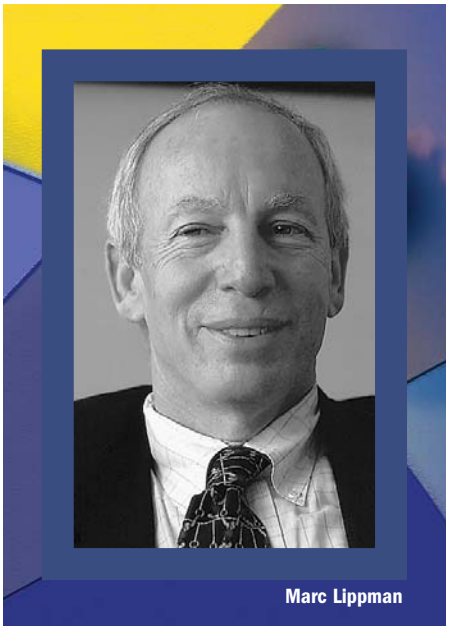


Joel Howell

There are templates for such a plan. As Whitcomb says, "Students do have other

choices to make about how to finance their education. There are state programs in which students can go into underserved areas and have their debt retired." The National Health Service Corps is a similar federal program, and some medical schools, as well as the National Institutes of Health, will forgive the educational debt of graduates who join university faculties and engage in research.

Photo: Martin Vloet



Marc Lippman

But, says Ward, "The number of graduating medical students who take up such offers is pretty small, and I believe the attitude of the public is 'They're well paid anyway, so why should public funds go to offset the indebtedness they've incurred?' I don't get the impression that the public is strongly supportive of a program of debt forgiveness to entice M.D.s to locate in certain areas or practice under certain conditions."

Such practical considerations are why Bole sees any proposal for government-subsidized medical school as a non-starter. "Can you convince the state or the feds to put more money into medical education?" he asks. "I doubt it. I put in a lot of time on a couple of commissions and I never heard anybody in the U.S. Congress express much sympathy for medical students, for many of the reasons we've talked about. The perception is 'They're a high-income cohort, so let them pay for it.'"

Bole believes better counseling could be both economical and effective. The AAMC has two debt management programs — (MD)2, or Monetary Decisions for Medical Doctors, for premedical and medical students, and DEBTHELP for residents — but the dean emeritus thinks intervention should start sooner.

"The issue of better counseling is something that really needs to be addressed," he says. "I did a very detailed study of pre-med counseling the year after I left the dean's office and was amazed. The Michigan undergraduate school always ranks in the top three or four schools that place students in medical schools. Berkeley is another school of that cut. And yet if you look at how students are advised in the pre-medical setting, it's a pretty ragged affair, and I don't think it's changed, here or anywhere else, since I rendered my report."

If some of these ideas sound like patches, they are. The system, such as it is, is a patchwork. To change that, "We're going to have to turn around a couple of decades of thinking about how medicine should be approached and develop a new solution," says Sabalis. "We're talking about a whole system, from the way physicians are educated to the way patients are treated, that's broken and probably needs to be rethought. That's going to take a systemic approach."

Until that happy day, school-based scholarships, funded by endowments, would take the biggest bite of all out of student debt. "Career selection is a national problem," says Hiss, "and a significant cause for that problem is student debt. Therefore, the most likely principal means for solving it is scholarships."

"Can the scholarship funds that Dean Lichter has pushed very hard as a priority for the school help with this?" asks Bole. "I think the answer is yes. It depends on whether previous generations of physicians and other people interested in medicine make it a higher priority, and it's going to have to be sold very hard as a legitimate societal goal. It's certainly more promising than trying to convince the state legislature to give us more money."

Michigan's heightened efforts are already bearing fruit. In Pathology, for example, the first department to establish an endowed scholarship fund, more than $2.6 million has been raised for it, and four scholarships are awarded annually. Internal Medicine gives a free ride for the fourth year to outstanding students in the department who are interested in academic careers.

The first year that the dean funded 12 scholarships from his office's discretionary funds, the results were dramatic. "Instead of getting 5 or 10 percent of the top students he went after, he got 80 percent," says Lippman. "He wound up going only to about number 15 on the list to get those 12. Money talks."

And it's music to Lippman's ears. "It's a business, or at least in my view it is," he says. "If you thought that Michigan was as good as some peer institution, or maybe 1 percent less desirable because it's not near salt water, and Michigan offered a free ride, what would you do? I think it's an achievable goal for us over time to retire the debt of many, if not all, of the students who want to get a medical education here, and at the same time improve the quality of the students."

Lippman was on the faculty at Georgetown University for 13 years before coming to Michigan in 2001. "There was much more of a tradition of philanthropy and much more of a tradition of fundraising there," he says. "It was done with a great deal more intensity and a great deal more conviction and a great deal more investment than is currently made here. It's just an area that we don't do well. There are a million explanations given, none of which is cogent to me. The fact is we have a tremendous case statement. We are among the best medical schools and potentially the best hospital in America, but we haven't approached succeeding at philanthropy the way we've approached succeeding at other aspects of our mission. And it's not only a central part of our mission, but one of the most effective ways to achieve greatness as a medical school."

That's reason enough to keep it on the radar. "We've already begun to make a difference with gift support," says Lichter, "but I'm not unrealistic enough to think we're going to solve this problem in a couple of years. We're in this for the long haul." m