COMMENTARY

Making Medical Education More Affordable

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Physicians are members of a profession that provides medical care to all members of society. During the past quarter century there has been an increasing percentage of students entering medical schools from the higher socioeconomic levels of our society, in part, because of the high cost of medical education. In 2004, more than 60% of medical students in the United States came from families in the top quintile of family income,¹ and this percentage continues to increase.

Medical education is costly at both private and publically supported medical schools. The yearly tuition in a private medical school in the United States is in the range of \$35,000 to \$40,000,² with tuition at publically supported schools about one-quarter of this amount. Room, board, and living expenses add another \$15,000 per year. Some scholarships and loans are available at private and public medical schools to medical students from families who cannot afford these expenses. The overall effect of the high cost of medical education is a reduced likelihood that well-qualified students from the lower and middle socioeconomic strata of our society will apply to medical schools, especially if they already have a preexisting financial debt from college education or other accumulated expenses. The net result is a reduction in the diversity of medical students entering our profession.

In 1953, yearly medical tuition at a private university in the United States was \$1,000, approximately 23% of the median yearly family income of \$4,200 at that time. The yearly medical school tuition in private schools in 2006 averaged about

\$37,000, approximately 88% of the current median yearly family income of \$42,000. The total yearly cost of a medical education in these schools (tuition plus room, board, and fees) is an amount considerably greater than the current median family income. Many older American physicians have remarked that had the cost of medical education relative to family income been as high in the 1950s when they entered medical school as it is now, they would not have been able to attend medical school. If medical tuition in the United States had remained at roughly 23% of the median family income, then the current tuition at private and publically supported medical schools would be about a quarter of what it is now, certainly a more affordable tuition for students choosing a medical school in the first decade of the 21st century.

A patchwork of support is generally available for medical students who are in need of financial assistance for their medical education. In the U.S., the cornerstone of the loan package is the Federal Direct Stafford Loan (fixed interest rate at 6.87%), which meets up to \$8,500 of need. The Perkins Federal Loan and various low-interest loans (interest of 5–7%) can augment yearly loans to a maximal amount of approximately \$24,000. While in school, interest does not accrue and payments are not required. Approximately 50% of medical students in the United States receive loans, grants, or scholarships during their medical education.

In 2006, the average indebtedness of a student graduating from a private medical school in the U.S. was approximately \$110,000 (range \$4,200 to

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\$268,000], with an average monthly repayment of \$1,340 based on an 8% interest rate with a 10-year repayment schedule beginning after residency or fellowship training.³ Such a heavy debt with need for early repayment significantly impacts on the career decisions of graduating physicians. This heavy debt burden may contribute to the increasing number of medical students in the United States who choose a remunerative specialty for their future career in order to pay off their accumulated loans from college and medical school in the shortest time possible.

The afore-mentioned imbalance between the cost of medical education and average family income is compromising the ability of medical schools to attract diverse, well-qualified students despite the currently available loans, grants, and scholarships that exist at the academic institutions. In addition, the large debt-burden that currently exists for many U.S. medical students, and will surely increase in the future unless something is done about it, will progressively impact the career decisions of graduating physicians in the years ahead.

APPROACHES FOR EASING THE FINANCIAL BURDEN ON MEDICAL STUDENTS

Reduction in Medical School Tuition

One option is for medical schools to significantly reduce tuition. A reasonable tuition at private medical schools might be an amount in the range of 20–25% of the yearly median family income, i.e., to approximately \$10,000 per year in the current time frame when the median yearly income is about \$42,000. Tax-supported public medical schools should also reduce their tuition proportionately. With significant reduction in tuition, both public and private medical schools would attract a more diverse group of well qualified students. The existing loans, grants, and scholarships could be used to support a larger percentage of room and board expenses for students in need. Such a meaningful reduction in medical school tuition, while requiring a significant new financial commitment from medical schools, would transmit important values to medical students that could have long-term, positive implications for their future careers.

Increase in Scholarships

Scholarship funding based on financial need already exists to some degree in all medical schools, with the source of the scholarship funds coming from specific individual and corporate gifts, alumni donations, and endowment funds. A considerable augmentation of the scholarship funds is needed to meet the needs of medical students if they are to be appropriately selected from more diverse socioeconomic backgrounds than currently exists. Such an increase in scholarship funds would require a meaningfully larger allocation of resources including alumni donations to the scholarship fund. Outright university grants to students, as is currently being done in some of the smaller private U.S. liberal arts schools for undergraduate students, is scholarship aid by another name.⁴ A concerted campaign to direct alumni donation requests specifically for scholarship aid or grants would be helpful. This approach is certainly possible, and more attention needs to be given to this option.

Initiation of an Income-Contingent Loan Program

Another way of financing medical education involves utilization of an innovative income-contingent loan program similar to what exists in Australia for higher education. Two prior Nobel laureates in economics, Professor Milton Friedman from the University of Chicago⁵ and Professor James Tobin from Yale University,⁶ championed what has been called an income-contingent lending program for higher education. In brief, repayment of a student loan that covers tuition and/or living expenses at an educational institution would be tied to the individual's future taxable income. Repayment could be structured as a small percentage, say 3–4%, of the physician's future taxable income during an extended term of 30 years, with monthly repayments much like a mortgage. As a safeguard for the individual, payment based on a percentage of overall taxable-income would begin after residency/fellowship training. Such an approach would, in the long run, be self-financing and should optimize professional productivity by investing in the student's human capital. In addition, the low loan-repayment rate would not unduly burden the future physician during his or her

professional career. A more complete description of income-contingent lending, its applicability in higher education, the key benefits (educational access for all), the administrative logistics, and past and current experience with this approach can be found in a Tobin Project report entitled *College Access for All*.⁶

CONCLUSION

The expensive cost of medical education in the United States and many other countries throughout the world has engendered an economic selection bias such that a majority of medical students presently attending these schools come from families in the upper levels of family income. We believe that medical schools need to make medical education more affordable if they are to achieve an appropriate diversity of well-qualified students. Three possible approaches for accomplishing this challenging task include reduction in tuition, increase in scholarship aid and/or grants, and initiation of an innovative income-contingent loan program. By combining these three approaches, the cost of a medical school education would be spread out over time thus reducing the upfront costs to the

student. It is likely that such an approach would attract a higher quality and a greater diversity of students attending medical schools, an important ingredient in the long-term commitment of our profession to further improve patient care in the years ahead.

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