Opinion and Special Articles: “Physician debtor”

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ABSTRACT

The increasing cost of attending medical school has contributed to increasing physician indebtedness. The burden of medical school debt has implications for physician career choice, professional satisfaction, and burnout. This opinion discusses the impact of physician indebtedness, the importance of improving debt awareness among neurology trainees, and program- and policy-level solutions to the debt crisis. **Neurology® 2016;86:e29–e31**

Wilt thou heal others thou thyself full of sores?
—Plutarch

Federally backed US student loan debt principal surpassed \$1 trillion in 2013.¹ As of 2014, the American Association of Medical Colleges (AAMC) reports median medical school debt at public and private universities to be \$170,000 and \$200,000, respectively, placing the average medical school graduate in the top 2%ile among all student debt holders.² According to published AAMC data, between 1998 and 2010 the compounded annual growth rate in the cost of attendance was 4.5% and 5.7% for public and private medical schools, respectively. The graduates shoulder the burden of this cost escalation disproportionately as a deferred liability. Medical education debt levels have increased substantially in comparison to prior decades. Also according to published AAMC data, mean medical educational debt in 1978 when adjusted for inflation was approximately \$49,000 (2015 US dollars). By 1998, mean debt had increased to approximately \$125,000 (2015 US dollars). The median debt will be lower than mean debt reported here, reflecting the sensitivity of the mean to outliers. There are legitimate concerns about the sustainability of medical student debt in the United States. Medical student debt has been shown to impact a variety of factors ranging from timing of major life decisions³ and specialty choice (and by extension, patient access to care).⁴ This brief opinion discusses the current state of physician indebtedness, its relevance to neurology trainees and training programs, and some policy- and program-level solutions.

CURRENT STATE The cost of attending medical school is typically financed through the Department of Education. Loans can be consolidated through

the Federal Direct Program and interest rates currently range from 3.4% to 7.9%.⁵ Assuming AAMC debt figures, the median annual interest expense for servicing this debt is approximately \$11,560 and \$13,600 for public and private university graduates, respectively. Historically, all student loan interest payments were tax deductible at the federal level, until this benefit was repealed by the Tax Reform Act of 1986. The Taxpayer Relief Act of 1997 restored the student loan interest deduction but with an annual maximum allowable deduction of \$1,000. Subsequent legislation increased the maximum allowable annual deduction to where it stands today: \$2,500. Furthermore, student debt holders become ineligible to claim the student loan interest deduction at incomes of approximately \$75,000 for single filers and \$150,000 for joint filers.

MEDICAL EDUCATION DEBT AND SPECIALTY CHOICE

Does educational debt affect choice of medical specialty? The AAMC cites data that suggest that medical education debt does not have an influence on subsequent specialty choice.⁶ A closer examination of the literature reveals the difficulty determining the influence of debt on the complex process of specialty choice. In one analysis, a 4-variable logistic regression of 5 years of medical school (2 state, 1 private) graduates, educational debt failed to predict specialty choice as a binary outcome: primary care or not primary care. The second study cited was a 1999 questionnaire of 4,500 US women physicians. In this survey, medical school graduation debt failed to predict primary care vs non-primary care specialty choice outcome as a dichotomous variable. Fewer than half of the survey respondents in this study graduated after 1980 and only 5% of those graduates reported educational debt in excess of \$100,000 (\$178,000, inflation adjusted to

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2014). The final study cited was a large cross-sectional survey of third-year internal medicine resident attitudes towards further subspecialization. This study did not include any medical student data. While excellent studies, they provide insufficient evidence to conclude that educational debt does not affect choice of specialty. Certainly no studies have addressed this topic as it relates to pursuing a neurology residency. Therefore, in regard to how medical debt affects specialty choice, the absence of evidence is not evidence of absence. The influence of indebtedness on medical student choice of specialty, and its impact on other decisions such as choice of practice geography, requires further study. Reports of comparatively low professional satisfaction among neurologists⁷ and the relationship between debt and burnout⁸ make the issue of physician indebtedness particularly relevant for neurology as a specialty.

TAXATION ON PAID INTEREST? The current student loan interest federal tax deduction appears inadequate when compared to contemporary levels of medical student indebtedness. An example illustrates this case. Assume a resident physician with adjusted gross income of \$50,000 annually servicing consolidated loans totaling a principal of \$170,000 under a modified repayment scheme such as income-based repayment (IBR) or income-contingent repayment (ICR). The IBR and ICR debt management programs defer the large financing costs of educational debt during residency by modifying current monthly payments. Therefore, annual paid interest expense on this debt would total approximately \$5,000 annually (and unpaid interest is capitalized). The maximum allowable deduction of \$2,500 is reached, leaving \$2,500 in additional paid interest that cannot be deducted. The resident is taxed on paid interest. For this resident physician, filing single with tax bracket of 25%, these unrealized deductions cost approximately \$700 annually. Following completion of training, physicians are generally ineligible to claim the student loan interest deduction (excluded for incomes greater than \$160,000). With a 10-year repayment schedule of \$185,000 in principal, a conservative estimate of total interest expense is \$100,000. The true financing cost would likely be higher because of interest capitalization after residency and graded repayment schemes. The physician cannot deduct any paid interest. At a 28% tax bracket, this amounts to an extra tax bill of at least \$28,000 over the term of loan in this best-case scenario. The true economic cost of the inability to fully deduct student loan interest and the associated finance expense of contemporary educational debt levels are not fully realized until the opportunity cost is appreciated. Because this

cost is absorbed at the beginning of a physician's career, there is a substantial loss of lifetime earnings. Based on current AAMC data for median educational debt, a conservative estimate of financing costs for medical education is approximately \$100,000. Assume a 35-year career with this figure accruing at an interest rate of 5% compounded annually. At retirement, this initial amount would be worth over a half million dollars without any further contribution to the principal. The income lost to taxation on paid interest itself alone would be worth over \$150,000 under this conservative estimate. A contrarian opinion might view these concerns as negligible, citing low medical school admission rates that reflect large, competitive applicant pools, extremely low educational debt default rates for medical school graduates, and published salary data that support physicians being among the highest paid professionals in America. While valid, these mitigating factors should not justify continued inflation of medical school tuition, ignore the growing long-term indebtedness of mid-career physicians, nor excuse a continuation of unfair tax policy.

POLICY REMEDY Indebted resident physicians and young attending physicians should be aware of recent legislation introduced in the 114th Congress addressing student loan interest and debt repayment. The first bill, HR 509, The Student Loan Interest Deduction Act of 2015, seeks to double the maximum allowable federal student loan interest deduction to \$5,000 for single filers and \$10,000 for joint filers where both parties have student loan debt.⁹ The second bill, HR 1352, Student Loan Borrowers' Bill of Rights Act of 2015, outlines broad expansions in loan management and repayment assistance.¹⁰ Three key items in this legislation are (1) the exclusion from taxable income any forgiven debt (both principal and interest); (2) the removal of educational debt from the list of loans that are not dischargeable in bankruptcy; and (3) amending the Public Service Loan Forgiveness program to forgive 50% of the balance of eligible loans after 60 payments. It is critically important that all medical students, residents, and young indebted physicians familiarize themselves with this legislation and contact their legislative offices to voice support of these bills' passage.

EDUCATING TRAINEES ON THE RISKS AND MANAGEMENT OF STUDENT DEBT Medical students and resident physicians are likely well aware of the magnitude of their indebtedness. However, they may not appreciate the impact of indebtedness on their nonfinancial well-being, or be prepared to manage the financial implications of indebtedness.

The exploding array of medical knowledge and clinical skills that trainees are expected to master during the period of medical training often crowds out other areas of professional interest. Recognizing the numerous competing demands for trainees' time, undergraduate and graduate medical training programs should seek to educate students and residents on the implications of accumulation of debt, strategies to manage indebtedness, and tools to recognize the nonfinancial impact of high levels of student debt. The resources required to integrate this education into existing programs could be considerable, possibly requiring internal or external financial expertise, and would likely require recognition and support at the institutional level.

DISCUSSION There are no signs that physician indebtedness is improving, and in fact there are concerns regarding GME funding and physician burnout that could exacerbate the problem. Undergraduate and graduate medical education leadership should be aware of these factors, and develop strategies to help physicians manage debt early in their careers. Currently, policy solutions exist but will require physician and resident advocacy to enact meaningful change.

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Eugene L. Scharf: drafted and revised the manuscript, design and conceptualization. Lyell K. Jones, Jr.: drafted and revised the manuscript, design and conceptualization.

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