What Should I Do With My Student Loans? A Proposed Strategy for Educational Debt Management

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Becoming a physician in the United States is an increasingly expensive venture, as educational debt is rising at a rate that far outpaces inflation.[1] In 2016, 76% of graduating medical students had educational debt, with a median debt burden of $190,000.[2,3] When loan forbearance is applied during a 3-year residency, followed by repayment over 10 years, then monthly payments for this level of debt will be $2,800.[3] Heavily indebted students are more likely to choose high-income specialties, which may have contributed to the shortage of primary care physicians.[4] In addition, physicians with high levels of debt experience higher rates of burnout and lower quality of life and satisfaction with their work-life balance.[5]

Currently, many residents stand to benefit from Public Service Loan Forgiveness (PSLF). The average primary care physician has the potential to ultimately save approximately $150,000 by utilizing PSLF, and some individuals could save significantly more.[6] However, those eligible for PSLF may be uninformed, confused about qualifying repayment plans, or unaware of the importance of beginning repayment immediately after graduating medical school. Use of PSLF is growing, but the program is still relatively underutilized. A recent study found that of medical school graduates choosing primary care specialties, 11.7% intended to use PSLF in 2010 compared to 25.3% in 2014.[6]

The aim of this perspective is to provide an overview of the options available to physicians with educational debt. We place specific focus on PSLF to simplify the decision-making process for loan repayment. For the sake of clarity and conciseness, we have emphasized the most important features of each option.

Public Service Loan Forgiveness

Public Service Loan Forgiveness is designed to provide employees of nonprofit institutions educational loan forgiveness.[7] Participants are eligible for complete loan forgiveness after making 120 monthly payments in qualified plans while working full-time as employees of 501(c)(3) nonprofit organizations. Currently, 75% of hospitals in the United States qualify as 501(c)(3) organizations,[8] and this number is rising. Given this growth, combined with the trend toward recent graduates becoming employees of these organizations,[9] a large percentage of residents may benefit from PSLF.

Physicians receive the highest degree of forgiveness if they start making payments at the beginning of residency. For physicians who have completed training, monthly payments in PSLF-eligible plans are usually the same as those in 10-year standard repayment plans. As a result, if payments are not started until residency completion, the loans will be paid off prior to becoming eligible for forgiveness. However, since most PSLF-eligible plans are "income-driven," payments made during residency are usually significantly lower, which can result in a substantial remaining balance forgiven after 120 monthly payments. While most residents stand to benefit from PSLF, those with large debt burdens, in long residency programs, or in lower-income specialties have the potential to benefit the most.

Only Federal Direct Loans or federal loans consolidated into a Direct Consolidation Loan qualify for PSLF. Private loans cannot be consolidated into a Direct Loan. An individual must enroll in a qualified repayment plan (TABLE 1) and make 120 qualifying payments while working as an employee for a 501(c)(3) organization. Employees should submit employment certification forms to verify their employers' 501(c)(3) status.[10] If a borrower becomes ineligible for PSLF through a change of employment, then loan forgiveness is simply not granted, but the payments made still apply toward reducing the balance. The 2017 presidential budget proposed limiting maximum forgiveness by capping PSLF at $57,500[11]; however, it did not pass. Even if a cap is

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TABLE 1
Repayment Plans That Qualify for Public Service Loan Forgiveness

	REPAYE	PAYE	IBR
Payment amount	10% of discretionary income	10% of discretionary income	15% of discretionary income or 10% if new borrower after July 1, 2014
Eligible loans	Direct Federal Loans	Direct Federal Loans disbursed after October 1, 2011	Direct Federal Loans
Spouse's income included in payment calculation	Yes	Yes, if taxes filed jointly No, if filed separately	Yes, if taxes filed jointly No, if filed separately
Interest subsidy	Yes (50% of interest not covered by monthly payments)	No	No
Monthly payment cap	No (monthly payments increase with salary with no upper limit)	Yes (monthly payment capped at 10-y Standard Plan amount)	Yes (monthly payment capped at 10-y Standard Plan amount)

Abbreviations: REPAYE, Revised Pay As You Earn; PAYE, Pay As You Earn; IBR, Income-Based Repayment.

instituted in the future, it is unlikely that current plan participants will be affected since, historically, changes to plans generally only have been applied to new borrowers.[11]

Repayment Plans That Qualify for PSLF

Qualifying PSLF plans are income-driven, with payment amounts calculated based on income and family size, not loan amount.[12] Payments equal 10% or 15% of discretionary income. These plans include Revised Pay As You Earn (REPAYE), Pay As You Earn (PAYE), and Income-Based Repayment (IBR). Key features of each plan are summarized in TABLE 1.

Student Loan Refinancing

Physicians who are certain they will not pursue PSLF (or who have private loans) should consider refinancing. Refinancing is only provided by private lenders, and involves taking out a new private loan at a lower interest rate to pay off existing student loans. Those who choose to refinance their federal student loans are no longer eligible for PSLF. In addition, most private lenders do not offer income-driven plans, the lowest rates are only available to attending physicians, and a government interest subsidy is not available for private loans. For these reasons, in most cases, residents should only refinance their federal loans upon completion of training. Physicians with a combination of loans can refinance their private loans while repaying their federal loans within a PSLF qualifying plan.

Student Loan Management Algorithm

To simplify the decision-making process for educational debt, we provide an algorithm (FIGURE) that incorporates the most important factors. The rationale for the algorithm is 3-fold: (1) borrowers pursuing PSLF should choose the plan with the lowest payments, since the remaining balance will be forgiven after 10 years; (2) all borrowers regardless of PSLF eligibility should prioritize the plan that maximizes the government interest subsidy; and (3) those not eligible for PSLF should select the plan that minimizes interest, and then pay off the loan as quickly as possible. Payment plans should be chosen based on an individual's situation and the key differences between the plans. A calculator is available on the US Department of Education's student loan website that enables the calculation of an individual's exact payment amount with each plan, and should be used in conjunction with this algorithm.[13] As all variables are *not* incorporated into the algorithm, individuals should consider their specific situations in making these decisions. Examples are provided in TABLE 2.

A few noteworthy examples of additional programs that might apply to a borrower include loan forgiveness or repayment for service in health shortage areas,[14] the military,[15] and National Institutes of Health mission-relevant research.[16] In addition, an individual's risk tolerance should be assessed with the help of a financial advisor as this will impact his or her overarching financial plan, including the decision to pursue PSLF.

Financial Education for Residents

Public Service Loan Forgiveness is most advantageous if payments begin early in residency. While ideally borrowers would be provided this information during medical school, the underutilization of PSLF,[6] combined with low financial literacy among residents,[17]

TABLE 2
Case Studies

Examples	Single	Spouse With No Income	Spouse With High Income	Long Training Period	Large Debt Burden	Employer Not 501(c)(3)	30-y Repayment Plan Selected[a]
Family status	Single	Married, 2 children	Married, No children	Single	Single	Single	Single
Debt at graduation, $	190,000	190,000	190,000	190,000	400,000	190,000	190,000
Loan type	Federal	Federal	Federal	Federal	Federal	Federal	Federal
Interest rate, %[b]	6	6	6	6	6	6	6
Residency/fellowship							
Training program, y	3	3	3	7	3	3	3
Yearly salary, $	54,000	54,000	54,000	54,000	54,000	54,000	54,000
Plan enrolled	REPAYE	REPAYE	PAYE	REPAYE	REPAYE	REPAYE	REPAYE
Monthly payment, $	302	146	302	302	302	302	302
Monthly interest subsidy, $	324	402	0	324	849	324	324
Balance at end of training, $	201,664	204,944	213,328	216,216	430,564	201,664	201,664
Posttraining							
501(c)(3) employer	Yes	Yes	Yes	Yes	Yes	No	Yes
Yearly salary, $	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Action taken	Stay in REPAYE	Stay in REPAYE	Stay in PAYE	Stay in REPAYE	Stay in REPAYE	Refinanced to 5-y Private Loan at 4%	Changed to 30-y Repayment Plan
Monthly payment, $	1,516	1,359	1,516	1,516	1,516	3,880	1,237
Years payments made	7	7	7	3	7	5	30
Monthly interest subsidy, $	0	0	0	0	318	0	0
Total forgiven through PSLF, $	150,527	171,273	168,066	199,600	457,345	0	0
Total of interest subsidy, $	11,664	14,472	0	27,216	57,276	12,564	12,564
Total paid by borrower	138,216	119,412	138,216[c]	79,944	138,216	243,672	456,192

Abbreviations: REPAYE, Revised Pay As You Earn; PAYE, Pay As You Earn; PSLF, Public Service Loan Forgiveness.
[a] This scenario is provided as an example of the impact of choosing a 30-year repayment plan, and is not recommended by the authors.
[b] The interest rate available to medical students for federal loans as of September 2017 was approximately 6%.
[c] Due to filing taxes separately for 10 years, the total amount of taxes paid is likely greater than if taxes had been filed jointly.

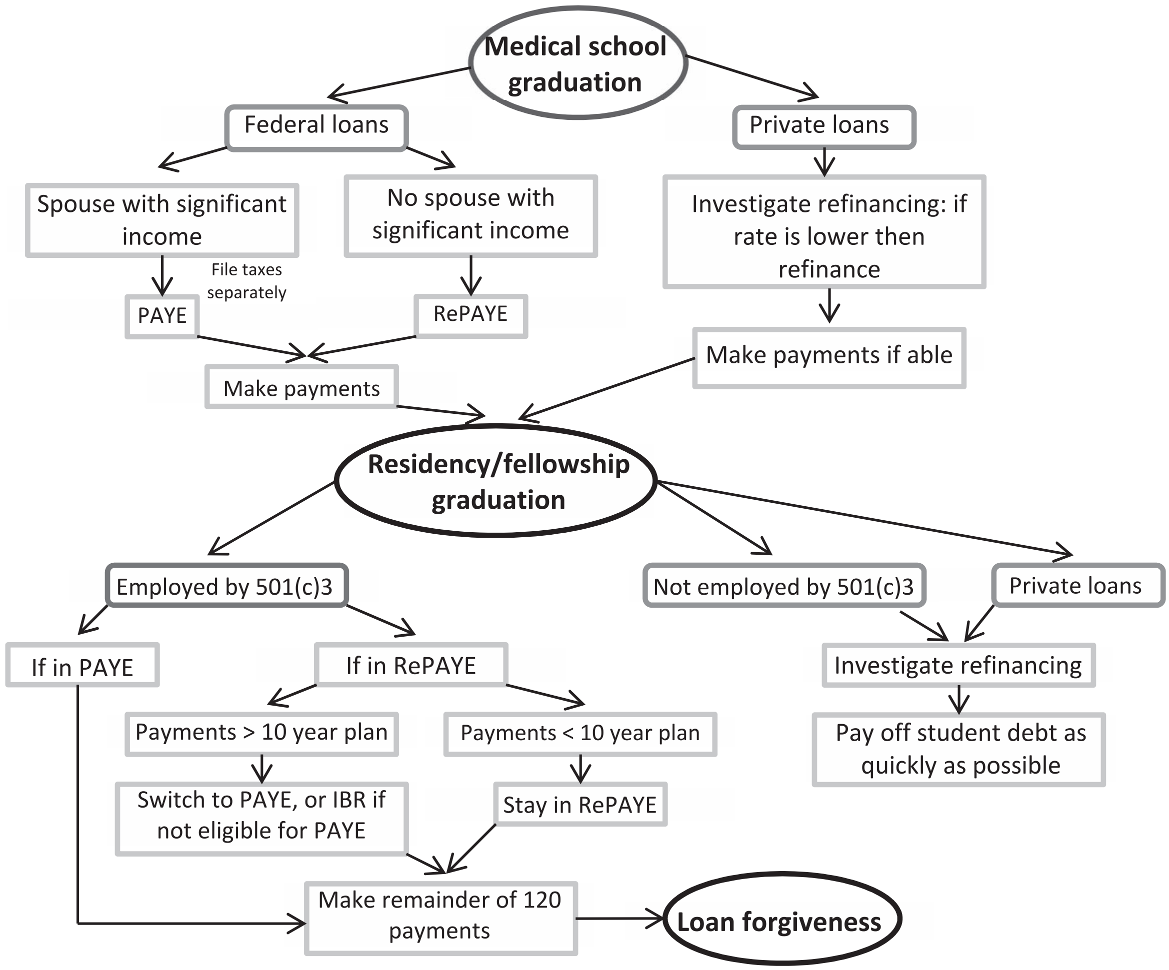

FIGURE
Student Loan Management Algorithm

Abbreviations: PAYE, Pay As You Earn; REPAYE, Revised Pay As You Earn; IBR, Income-Based Repayment.

Note: Assumptions made in development of algorithm: (1) Residency/fellowship is completed while employed at a 501(c)(3) institution; (2) the only income source is earned income reported on a W2 form from the employer; (3) the current rules governing Public Service Loan Forgiveness will not change; and (4) the student loan interest rate is greater than the after-tax return of other guaranteed investments.

highlights the fact that current university-level education about student loans is not effective. This makes it important that program and institutional leaders provide trainees with appropriate financial education, such as arranging for education from reputable financial experts.[18,19] However, caution should be taken, for many financial advisors are not aware of the details of educational debt management for physicians.

Conclusion

At the beginning of residency all physicians should evaluate their financial situation with the help of a financial advisor well versed in PSLF, and utilize the algorithm in this perspective to develop a plan to eliminate their educational debt.

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