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Introduction

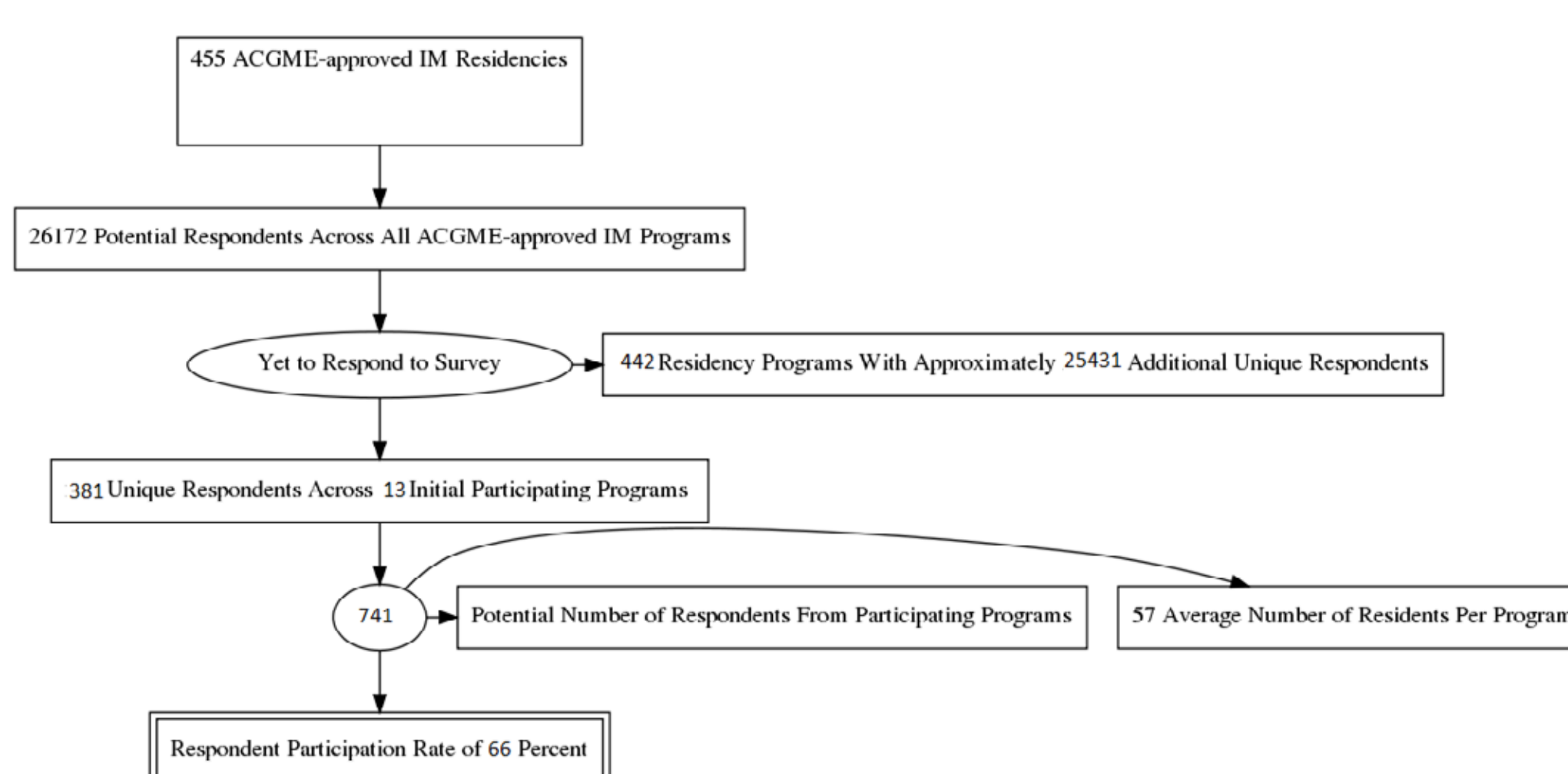
Medical education debt is a growing problem among new physicians with the American Academy of Medical College's reporting 2016 average graduate indebtedness of \$189,000. While public awareness of rising education debt is increasing at the national and state level, there remains a vacuity in the literature on if or how resident indebtedness affects career choices such as specialty selection, practice type, payer-mix, and willingness to treat underserved populations.

Internal Medicine trainees are a group of particular interest since the majority will choose to subspecialize versus a career in General Internal Medicine. Given the shortage of primary care physicians nationally, barriers that undermine students matriculating into these subspecialties have implications for both educators and policy-makers alike. In this cross-sectional study we seek to analyze these evolving relationships.

Methods

A survey assessing key metrics of medical education loan burden, repayment strategies, borrower attitudes towards indebtedness, and the impacts of debt on career planning was created. This IRB-approved anonymous survey was disseminated to all ACGME-accredited Internal Medicine residencies through direct e-mail contact of Program Directors. Program Directors then had the option of involving their residency trainees.

Preliminary data was drawn from 381 responses from the first 13 residency programs to respond, with an approximate response rate of 66%.



Results

- Of 381 unique respondents, 80.1% reported medical education debt, **with 52.1% being greater than \$200,000**. 60.4% reported education debt to be a significant source of stress.
- 87.2% reported a strategy for debt repayment, with Income-Driven Repayment and Standard Repayment being the most utilized methods at 63.3% and 12.2% respectively.
- Difficulty in making loan payments on a resident's salary was reported by 69.5%, and this was the most cited reason for forbearance (90.7%). While the majority of trainees were familiar with Public Service Loan Forgiveness (PSLF), only 40.0% report current or planned participation. 47.5% said uncertainly surrounding the continuity of PSLF influenced their decision not to utilize this program.
- A slight majority of respondents (54.2%) report that their level of indebtedness strongly influenced their plans to pursue subspecialization over primary care.
- Influence between debt burden and anticipated initial practice type (self-employed vs partnership vs academic career vs hospital group employee) came in at 57.9. This influence was consistent into graduate choice to practice in traditional vs underserved populations. **31.5% report their student debt burden will significantly impact the Medicare and Medicaid insurance payer-mix they will be willing to accept in their practice.**

Figure 1.

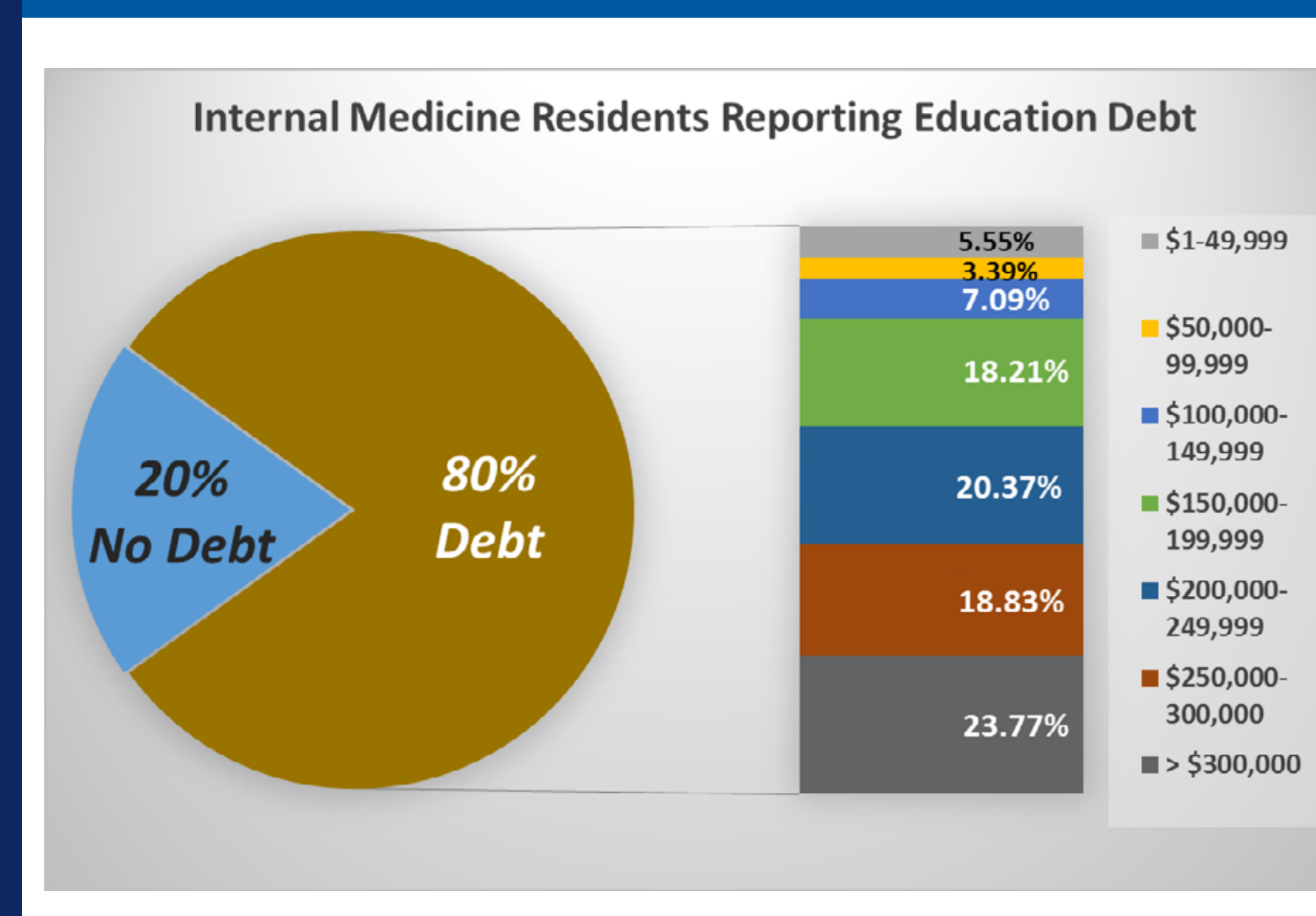


Figure 2.

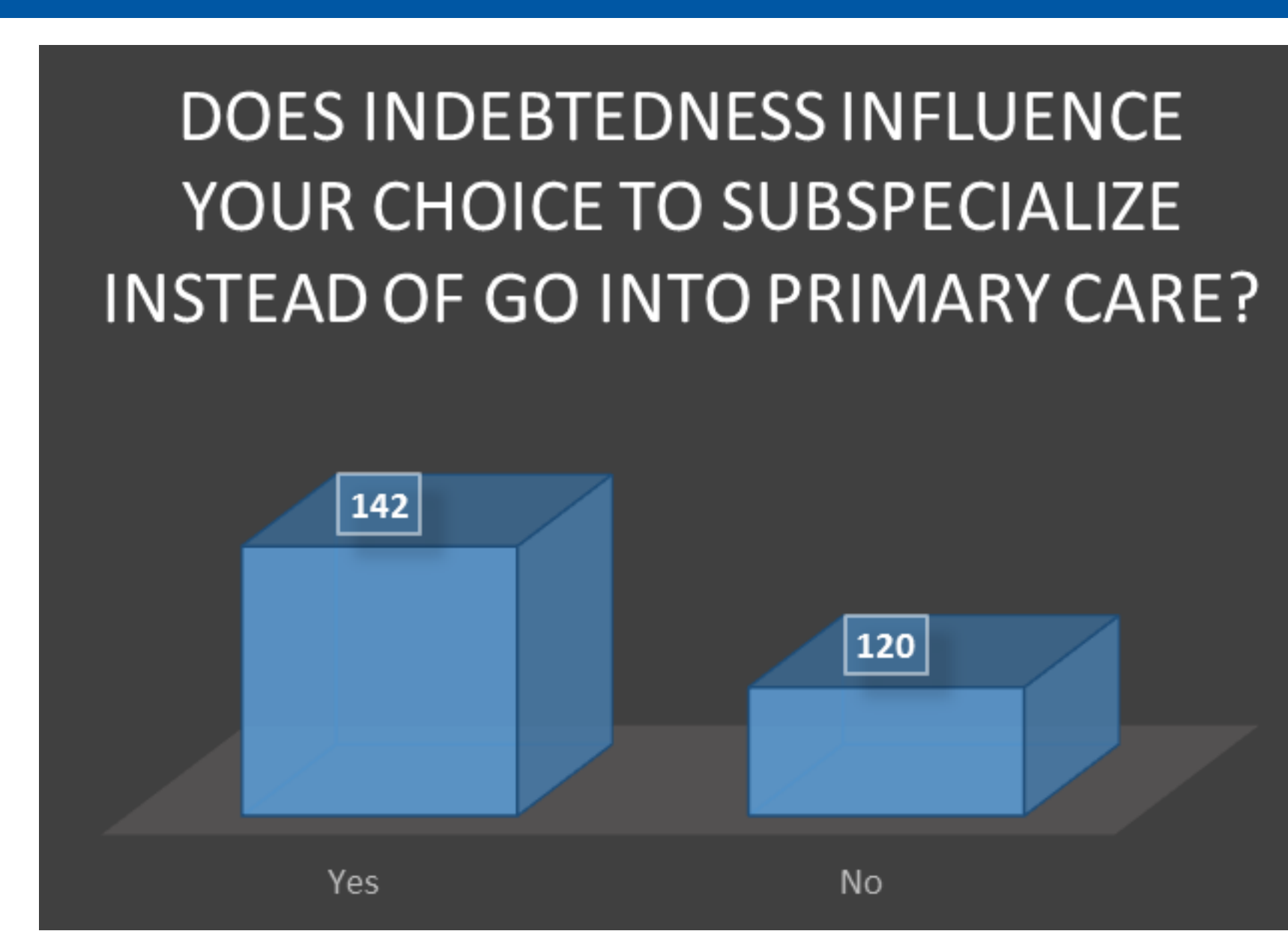
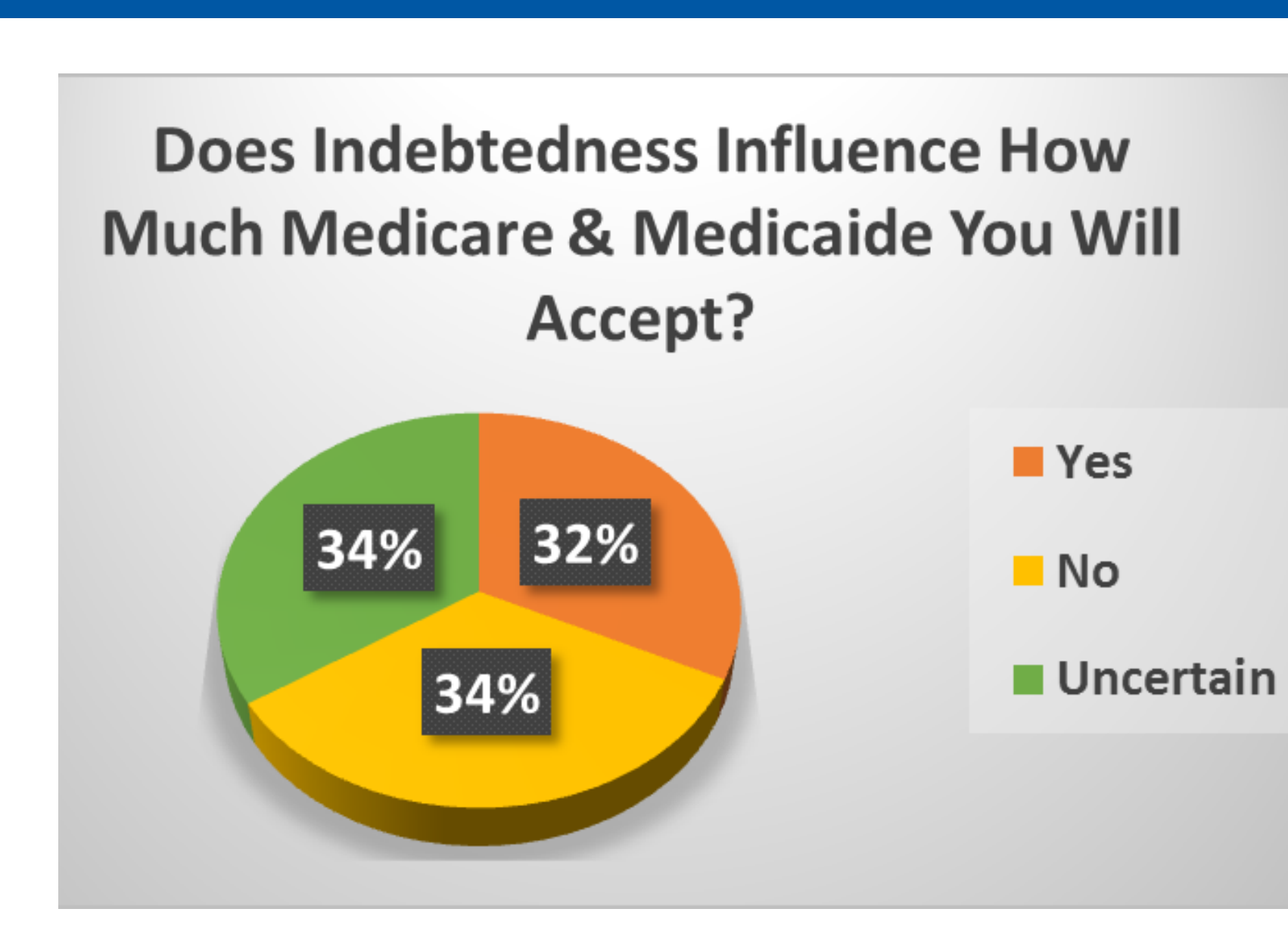


Figure 3.



Discussion

Graduate indebtedness is an influential variable in new physician career choices. Rising debt may influence medical graduates to pursue practice characteristics that are incongruent with federal and state-level policies signed into law to address the shortfall of primary care physicians and to shrink health discrepancies in underserved populations. Over the past decade, legislative changes to healthcare policy have often targeted enrollment of previously uninsured persons into plans that new physicians may limit or be altogether unwilling to accept.

The multifactorial nature of graduate debt and potential methods of repayment underscores the importance of ongoing dialogue between academic institutions, national medical organizations, and policy-makers. Previous thinking on education costs, methods of financing, and repayment models must be scrutinized and potentially upgraded to encourage the next generation physicians to meet the healthcare needs of a changing nation.

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