The Impact of Debt Load on Physician Assistants

PROJECT REPORT: EXECUTIVE SUMMARY
The central question of this investigation is: To what degree, if any, does physician assistant (PA) student loan debt impact the career decisions of PAs? A mixed-methods approach to this question found that PA students are heavily influenced by their clinical rotations, especially their preceptors, and that a few weeks prior to graduation PA students may still be “undifferentiated” in their specialty choice. Additionally, PA student loan debt appears to have a non-linear relationship with a student’s desire to practice in a rural location or an area with an underserved population. In other words, PA students in lower and higher debt categories were found to have a different response to debt load than PA students in middle debt categories.

The average total resident tuition for PAs has increased almost ninefold in 27 years, from around $6,000 in 1985 to more than $63,000 in 2012. The surge in health education costs is of increasing concern to professional organizations, policy makers, and planners. These stakeholders suspect—and anecdotal evidence suggests—that rising tuition costs and indebtedness may negatively impact students’ selection of high-need specialties and their desire to practice in underserved and rural settings. This concern is reinforced by the documented trend that the percentage of PAs practicing in primary care settings has fallen from almost 51 percent in 1996 to 31 percent in 2010.

Hoping to shed light on these suspicions, the Physician Assistant Education Association (PAEA) requested that the staff of the Robert Graham Center for Policy Studies in Family Medicine and Primary Care:

1. Review the current medical and other health care education literature;
2. Characterize the debt load of PA students;
3. Describe students’ perception of anticipated debt load and its impact on the decision to attend PA school and/or choice of PA school, as well as its impact on personal and professional decisions after graduation;
4. Analyze the impact of debt load on career choice; and
5. Describe the trends associated with increased or decreased student debt.

This report from the Graham Center relies on three available sources of information: (1) a brief review of relevant literature; (2) a quantitative analysis of data from the 2011 American Academy of Physician Assistants (AAPA)–PAEA Graduating Student Survey; and (3) qualitative analyses of seven focus group discussions with second-year PA students.
A thorough search of the grey and peer-reviewed literature on the impact of education costs on career decisions of PA students and practicing PAs yielded limited evidence. Evaluations to date have included only small samples of PAs, who list debt as an influential factor in their practice specialty decisions. Although PAs differ from medical students in the length of their education, and thus education expenses and total debt load, the richer literature on the impact of debt on medical student choices may offer insights into the factors that influence PA students’ choices.

Studies of factors influencing practice setting decisions of medical students reveal complicated findings. Specifically, one prominent study’s modeling suggests that the lowest and highest levels of debt appear to be inversely related to the likelihood of primary care selection. The preponderance of minimal debt load in this study strongly hints at the confounding impact of medical student socioeconomic status at the outset of training on the selection of specialty and location of practice. The study also highlights the potentially greater impact of income, or lifetime return on investment, on those choices.

The Graham Center’s attempt to replicate the study of medical student debt using data sources on PA students reveals gaps in the data currently available on PAs. However, the availability of the 2011 AAPA–PAEA Graduating Student Survey, a survey completed by PA students shortly before graduation, permitted an investigation of PA student debt and career intentions.
The cohort of PA students responding to the 2011 AAPA–PAEA Graduating Student Survey was predominately female (78 percent), white (88 percent), and 20–30 years old (77 percent), and entered the PA program with at least a bachelor’s degree (95 percent). Only 6 percent identified as Asian, and only 2 percent reported being African American.

Results:

• Slightly more than half of the respondents reported currently owing no pre-PA student loan debt, almost one-third reported owing an amount of $25,000 or less, and almost one-fifth reported owing more than $25,000. (See Figure A.)

• Almost one-fourth of 2011 graduating PA students reported currently owing more than $100,000, slightly more than one-third reported owing between $50,001 and $100,000, slightly more than one-fourth reported owing an amount of $50,000 or less, and approximately one-seventh reported owing no PA education loans. (See Figure B.)

• More than 70 percent of respondents expressed a preference for both primary care specialties and other subspecialties. (See Figure C.)

• More than two-thirds of respondents expressed interest in practicing in an underserved or rural location.

Student interest in practicing in a rural or underserved setting was statistically significantly related to the student’s demographic and financial status:

• Single students were less likely to express an interest in a rural or underserved area than students who are part of a couple.

• Students living the majority of their lives in an urban or suburban setting indicated a much lower interest in a rural practice setting than students who have resided the majority of their lives in a rural location.

• Students who received more than $25,000 in non-loan financial aid for their PA program were twice as likely as students who received no aid to express an interest in a rural or underserved area.

• Students at both ends of the debt spectrum—those owing some debt but less than $50,000 in total debt and those owing more than $150,000—were more likely to express an interest in serving in a rural or underserved area compared with those owing no debt at all.
**KEY QUANTITATIVE FINDINGS**

**FIGURE A.** Percentage of Students Reporting Currently Owing Pre-PA Education Loans

Source: Robert Graham Center Analysis of the 2011 AAPA-PAEA Graduating Student Survey. Percentage are of those who responded to the questions only.

**FIGURE B.** Percentage of Students Reporting Currently Owing PA Education Loans

Source: Robert Graham Center Analysis of the 2011 AAPA-PAEA Graduating Student Survey. Percentage are of those who responded to the questions only.

**FIGURE C.** Distribution of Primary Care and Specialty Care Interest

Source: Robert Graham Center Analysis of the 2011 AAPA-PAEA Graduating Student Survey. Percentage are of those who responded to the questions only.
Additionally, qualitative data was gathered via seven focus group discussions with PA students. Each group consisted of four to eight second-year PA students from a mix of publicly and privately funded PA programs in the mid-Atlantic region, which were selected for convenience given limited study funding. Students shared their perspectives on four key areas of interest.

1. **Choice of PA Career**
   Themes that motivated a student’s choice to pursue a career as a PA include:
   - Previous medical experience: Many students stated they were pursuing a PA career after having experience in the health care sector. These students stated that they saw greater career growth potential in the PA field, as opposed to their first career field.
   - Profile of the profession
     - Altruism: Most PA students revealed their career decision was driven by a desire to help people.
     - Duration and career opportunities: PA students noted that PA training is “manageable” in length and flexibility, and there are many job opportunities. Also, students anticipated taking advantage of the unique capability PAs have to change their specialty over time.
     - Autonomy/team balance: Students appreciated the autonomy to work on their own within a team environment.
   - Lifestyle
     - Family/work life balance: One of the attractive elements of the PA profession that students mentioned was a good balance between work and family time.
     - Work environments and schedules: Many students enjoy the idea of having a flexible and dynamic career in which they will not engage in the same activities every day.

2. **Choice of PA School**
   Themes that motivated a student’s choice of PA school include:
   - Program attributes
     - Prerequisite requirements: Some students indicated that they applied to PA programs with a lower number of required patient contact hours. Some students did not want to take specific academic courses prior to beginning the program.
     - Length of training and timing of program decisions/start date: Students wanted to begin their PA studies as quickly as possible and did not wish to waste any time or money prior to embarking on their new career.
   - Program location
     - Proximity to home or support: Students emphasized the need to rely on family and community for support—financial and emotional—throughout their education.
     - Urban setting: Some students sought an urban location.
   - Tuition: Although tuition was a factor in the decision to apply to and enroll in a particular PA program, it was rarely the top reason cited.
3. **Choice of Practice Specialty**
Themes that motivated a student’s choice of practice specialty include:

- **Intentions prior to entering PA school**: When students expressed a firm idea about what specialty they originally intended to pursue, they frequently made this decision based on previous work, academic experience, or their relationship with a practicing PA.

- **Preceptors**: A good preceptor was often cited as the key influencer in a student’s specialty choice decision, and a negative preceptor experience was often cited as the reason a student decided against a particular specialty.

- **Changing specialty**: Students expect to change their specialty for a variety of reasons that include broadening their skillsets, preventing boredom, and other lifestyle-related factors. Many students expressed a desire to practice primary care at some point during the course of their careers, even if they did not begin in a primary care specialty.

4. **Financing of PA Education**
Themes from student discussions of education financing methods include:

- **Terminology (i.e., debt versus loans)**: Students who used the term “debt” talked about the financial implications of paying back the money they have borrowed, while students who used the term “loans” talked about borrowing money in a more abstract way, as if they have not considered the implications of repaying these loans.

- **Age**: Older students focused more on the price of their education and amount of education debt than their younger/early career colleagues. Older students were looking for career opportunities that will let them pay down their debt quickly; thus, they focused on specialty practice.
One of the major limitations of the quantitative data analysis is the lack of robust, complete data. Only 20 percent of PA students responded to the survey used in the analysis. Further, the majority of the questions had an additional 5 percent non-response rate. A second limitation is that the survey captures PA students’ intentions for future career decisions and not their actual career outcomes. One important next research step is to link the 2011 AAPA–PAEA Graduating Student Survey to a dataset that has career outcomes for these students. This would allow an investigation of the relationship between PA students’ career intentions and their actual initial job placement.

Because the focus group sample was selected from the mid-Atlantic region of the United States for convenience, the responses may not represent the population of PA students across the nation. In particular, the students expressed their belief that it is easy to find a high-paying surgical specialty job in their area. Students in less urban areas of the United States might not have as many high-paying job opportunities. Additionally, few of the students expressed an interest in seeking a position in a rural or underserved area.

To address the regional bias in the original focus group sample, PAEA approved additional “remote” focus groups. Preliminary findings from these focus groups suggest that the regional bias in the original focus group sample might be substantial. The final results of the remote focus group discussions are forthcoming in a separate report.

PAs have the ability to change their specialty setting over the life of their careers. Further research is needed to characterize the frequency of these career decisions and what influences them. Such research may identify methods to encourage PAs to remain in—or change to—a primary care field. Additionally, investigating the longitudinal relationship between student loan debt at graduation and career trajectory might shed light on the future distribution of PA students across practice specialties.
Our findings suggest that the PA education community has ample opportunities to influence PA students’ decisions because the majority of PA students are undecided regarding specialty choice when they matriculate to a PA program. Financial considerations that may decrease PA student interest in primary care specialties are salary differential with subspecialties and high levels of student loan debt. The largest and best-controlled study to date of debt and the likelihood of medical student selection of a primary care versus a specialty career highlights a non-linear relationship. Additionally, students who are closer to graduation are more likely to speak about their student loans as “debt” they must pay back. If students are making career decisions at a time when they are more aware of the financial implications of their student loan debt, they might be more influenced by financial considerations than by their experience in various clinical rotation settings.

Specifically, although the AAPA reports that the average PA salary was approximately $90,000 in 2013, a primary care PA’s salary is only $85,000 compared with $105,000 for “other specialties.” Given that the median debt load of PA students in 2011 was $88,000, this $20,000 annual difference could have a substantial impact on the specialty decision of a PA student.

Overall, for the PAEA to achieve its strategic goals of increasing the percentage of PAs practicing in primary care and increasing the percentage of PAs practicing in locations with underserved populations, barriers must be overcome. First, PA students need more exposure to high-quality primary care preceptors during their clinical rotations and more exposure to clinical rotations in rural and underserved locations. Second, the difference between the salaries of primary care specialties and the salaries of subspecialties must be reduced to enable students with high debt load to view a primary care specialty as a viable option.
RECOMMENDATIONS

The PA education community should consider how to exploit the many policy and curricular opportunities to influence PA student practice decisions, as well as how to increase data collection efforts to document career interests and outcomes. Specifically, the PA community could:

- Increase PA student interest in primary care by investing in initiatives that will distinguish primary care as a specialty (i.e., a body of knowledge with a distinct set of skills and competencies) and better construct matching curricular exposures.
- Increase interest in rural and underserved areas by targeting rural born and educated students and by increasing opportunities for training exposure in rural and underserved locations.
- Increase investments in primary care training exposures, grooming highly qualified and well-prepared preceptors and mentors operating in team- and IT-driven patient-centered medical homes.
- Encouraging payers to address the PA salary differential between primary care specialties and subspecialties.
- Consolidate current data and enhance data collection to increase student and practicing PA response rates.


