Debt and the Emerging Physician Workforce: The Relationship Between Educational Debt and Family Medicine Residents' Practice and Fellowship Intentions

Julie P. Phillips, MD, MPH, Lars E. Peterson, MD, PhD, Bo Fang, PhD, Iris Kovar-Gough, MA, MLIS, and Robert L. Phillips Jr, MD, MSPH

Abstract

Purpose
Educational debt is increasing and may affect physicians' career choices. High debt may influence family medicine residents' initial practice setting and fellowship training decisions, adversely affecting the distribution of primary care physicians. The purpose of this study was to determine whether debt was associated with graduating family medicine residents' practice and fellowship intentions.

Method
The authors completed a cross-sectional secondary analysis of 2014 and 2015 American Board of Family Medicine (ABFM) examination registration questionnaire data and ABFM administrative data. They used multivariate logistic regression to determine whether educational debt was associated with graduating residents' practice (ownership and type) and fellowship intentions.

Results
Most residents (89.7%; 3,368) intended to pursue an employed position, but this intention was not associated with their debt. Residents with high debt ($150,000–$249,999) had lower odds of intending to work for a government organization (odds ratio [OR] 0.57; confidence interval [CI] 0.41–0.79). Those with high or very high debt (> $250,000) had lower odds of choosing academic practice (OR 0.55, CI 0.36–0.85 and OR 0.62, CI 0.40–0.96, respectively) or a geriatrics fellowship (OR 0.36, CI 0.20–0.67 and OR 0.29, CI 0.15–0.55, respectively).

Conclusions
High educational debt may contribute to national shortages of academic primary care physicians and geriatricians. Existing National Health Service Corps loan repayment opportunities may not offer adequate incentives to primary care physicians with high debt. The medical community should advocate for policies that better align financial incentives with workforce needs.

High educational debt for medical students is a growing concern for medical educators, policy makers, and students. In particular, educators and policy makers have expressed concern that medical students' debt is affecting their career choices.[1–4] However, few studies have examined the impact of educational debt on residents' career choices. Although students choose a primary area of specialization, graduating residents decide on secondary areas of specialization (or they choose not to specialize). Residents also choose their first jobs, setting their careers in motion and shaping future expectations for their scope of work, income, patient population, and practice location. The early-career decisions of family medicine residents are particularly important because the United States is facing a significant primary care shortage.[5,6] In this study, we examined the relationship between educational debt and the practice and fellowship intentions of a national sample of family medicine residents.

Please see the end of this article for information about the authors.

Correspondence should be addressed to Julie P. Phillips, Sparrow-MSU Family Medicine Residency Program, 1215 Michigan Ave., Suite 245, Lansing, MI; telephone: (616) 234-2672; e-mail: julie.phillips@hc.msu.edu; Twitter: @juliephillips07.

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Introduction

The landscape of medicine is changing. Primary care physicians are shifting from owning private practices to holding employed positions (working for an organization or another person),[7] and young physicians (under 40) are twice as likely to be employed as older physicians (over 55).[8] These changes are important because while primary care physicians who own their practices have added management responsibility, they likely have more autonomy over their work. Alternatively, employed primary care physicians may have more job turnover, disrupting continuity of care; and they may see fewer patients, decreasing access to care.[9]

Several forces are likely contributing to these changes, including marketplace consolidation, technology, quality and safety reporting requirements, and physicians' desire for income stability.[9] However, because the majority of family medicine residents now graduate with very high levels of educational debt,[10] the opportunity to take part in the federal Public Service Loan Forgiveness (PSLF) program also may be influencing their job choices. Through the PSLF program, physicians employed by nonprofit organizations in the United States are eligible to have their federal loans forgiven after 10 years of payments. As most hospital systems in the United States are nonprofit organizations,[11] most physicians begin their eligible employment during residency. The promise of loan forgiveness is a strong incentive to continue in an employed position, rather than transition to private practice ownership, after completing residency. If it remains in the federal budget, the PSLF program has the potential to greatly benefit individual family physicians with high educational debt,[12] but it also may increase the number of young physicians who seek employed positions. Even without the incentive of the PSLF program, high educational debt may lead graduating residents to seek

positions that maximize their income or reduce their financial risk.[13,14]

The impact of high educational debt on medical students' career choices has been studied extensively, and there is evidence that students with high debt are less likely to choose primary care specialties,[1,15–17] which have a lower lifetime income potential than many other specialties.[18,19] Economic modeling has demonstrated that current levels of debt make it difficult for students to choose primary care careers without taking on service obligations, living in lower-cost-of-living locations, or delaying buying a home or saving for their children's college tuition.[20,21]

Few studies, however, have examined the effects of debt on primary care residents' career intentions.[18,22–24] A 2008 national study of third-year internal medicine residents found that those residents with more debt were more likely to pursue hospitalist careers; however, the relationship between debt and fellowship intentions was unclear.[22] Another, recent study also found that debt was negatively associated with family medicine residents' interest in an optional fourth year of residency.[25]

Loan repayment programs also may influence residents' career choices. For example, federally qualified health centers (FQHCs), rural health clinics, and state and local public health clinics typically offer physicians the opportunity to apply for assistance with their loan repayment, either through the National Health Service Corps (NHSC), state loan repayment programs, the PSLF program, or a combination of these options.[26]

The purpose of this study was to determine whether graduating family medicine residents with more debt were more likely to choose career paths with higher salaries, opportunities for loan repayment, or both. We hypothesized that residents graduating with more debt would be more likely to report interest in hospital or government practice, compared with private practice, and would be less likely to report interest in practice ownership. We further hypothesized that residents with more debt would be more likely to report interest in a sports medicine fellowship (which increases earning potential) but less likely to choose a geriatrics fellowship, academic or research fellowship, or academic practice (all of which decrease long-term earning potential).[27–29]

Method

Data sources

We conducted a cross-sectional secondary analysis of 2014 and 2015 American Board of Family Medicine (ABFM) examination registration questionnaire data and ABFM administrative data. The questionnaire is a required component of the ABFM examination registration. Approximately 96% of residents graduating from family medicine programs accredited by the Accreditation Council for Graduate Medical Education completed the examination, and thus the questionnaire, in the years we studied.[30] The examination had initial pass rates of 90.1% and 90.6% in 2014 and 2015, respectively.[31] The American Academy of Family Physicians institutional review board approved our study.

Key variables

We used several questionnaire items to examine the relationship between educational debt and residents' practice and fellowship intentions. We used categorical responses to a question about total educational debt at the end of medical school as our main predictor variable. Response options were $0; $1–$74,999; $75,000–$149,999; $150,000–$249,999; and > $250,000. Residents also were asked to identify the ownership of their intended primary care practice site from 16 possible response options. We combined these response options for analysis into 5 practice types—government, hospital, private practice, academic, and other. Government practice included all government-owned or subsidized practices, including FQHCs, rural health clinics, the Indian Health Service, the Public Health Service, state and local government-operated clinics, and the Department of Veterans Affairs. Hospital practice included all hospital-owned practices, including hospital-owned outpatient facilities. Private practice included private solo or group practices. Academic practice included academic medical center or faculty group practices. Other practice included all other choices (i.e., freestanding urgent care centers, ambulatory surgical centers, industrial outpatient facilities, mental health centers, health maintenance organizations, and "other"). An additional questionnaire item asked whether residents would be employees, owners, or contractors at their anticipated practice site.

Another questionnaire item asked residents whether they intended to complete fellowship training and, if so, what type of fellowship. We examined the impact of high educational debt on intended fellowship training in the three largest family medicine subspecialty certifications: sports medicine, geriatrics, and hospice and palliative care medicine. Sports medicine fellowships allow family physicians to earn substantially higher salaries, with only one year of additional training, and they are highly competitive.[29,32] Geriatrics training, also a one-year fellowship, actually lowers physicians' anticipated future salary.[28,29,33] We also examined residents' intentions to pursue an academic or research fellowship and grouped them into a single outcome variable.

We created an underrepresented in medicine (URM) variable to identify residents who were American Indian or Alaska native; black or African American; native Hawaiian or other Pacific Islander; or Hispanic or Latino.[34] Gender, age, degree type (MD or DO), and international medical graduate (IMG) status were determined using ABFM administrative data.

Analyses

We used descriptive statistics to characterize our data. As level of educational debt was our main predictor of practice and fellowship interest, we used chi-square analyses (Wilcoxon rank-sums) to determine the significance of the associations between residents' categorical debt level and their demographic characteristics. We then used multivariate logistic regression (generalized logit) to analyze whether debt level (categorical variable) was predictive of each of our three outcomes: intended practice ownership, practice type, and fellowship. Owning a practice, private practice, and not pursuing a fellowship were used as the reference values, respectively. Gender, age, degree type, IMG status, and URM status were included as control variables. Low debt ($1–$74,999) was used as the reference value in all analyses. We did not test interactions because there was no theoretical reason for doing so.

We excluded residents with prior service commitments to the military or NHSC.[35]

We also excluded residents who indicated that they did not know their future practice plans from the practice ownership and type analyses; similarly, we excluded those who did not know whether they would pursue a fellowship from the fellowship analyses. Because the ABFM does not collect examinees' citizenship information, all graduates of international medical schools were included regardless of the country of their citizenship. Residents who did not take the ABFM examination in their year of graduation were excluded.

We used chi-square analyses (Wilcoxon rank-sums) to compare educational debt levels and demographics of those residents with and without known plans to determine whether our samples differed from the population of all residents. All analyses were conducted using SAS version 9.3 (SAS Institute Inc., Cary, North Carolina). Because of the large number of analyses we conducted, we set significance at $P < .01$.

Results

Study population

We included 6,229 family medicine residents seeking ABFM certification in 2014 and 2015 in our study. Differences in their educational debt levels, with corresponding demographic variables, are displayed in Table 1. As has been described previously,[10] more than half of the residents in our study (60.1%; 3,746) had more than $150,000 of debt, and 28.5% (1,777) had more than $250,000 of debt. Of note, debt was significantly associated with gender, degree type, and IMG status; however, the association between debt and gender was small. Residents with a DO degree had substantially more debt than those with an MD degree, with 44.9% (515) of DO residents carrying more than $250,000 of debt, compared with 24.8% (1,262) of MD residents ($P < .01$). Many more IMGs than U.S. graduates had no debt (33.7% [721] vs. 8.2% [336], respectively; $P < .01$).

Because of the timing of the ABFM examination registration, more than a third of residents had not yet chosen their practice path (39.7%; 2,472), and nearly a quarter had not yet decided on their fellowship plans (22.2%; 1,385), accounting for the differences in sample sizes for these analyses (see Table 1 and Appendix 1). Residents without known practice plans were more likely to be women and MD graduates ($P < .01$). Residents who had not yet determined whether they would complete a fellowship were more likely to be URM, older, IMGs, MD graduates, and have lower debt ($P < .01$; see Appendix 1).

Practice and fellowship intentions

The numbers and percentages of residents intending to pursue each practice type and fellowship are displayed in Table 2. The vast majority of residents (89.7%; 3,368) intended to pursue an employed position; only 5.7% (215) anticipated pursuing practice ownership. However, private practice was the most commonly chosen practice type (31.4%; 1,182); 25.7% (961) indicated intentions to pursue an employed position with a hospital or hospital system. Most residents (79.0%; 3,828) did not intend to complete a fellowship. However, sports medicine fellowships were most common (6.6%; 318), followed by geriatrics fellowships (2.8%; 135).

Educational debt and practice and fellowship intentions

The results of our logistic regressions are displayed in Table 3. Those residents

Table 1

Graduating Family Medicine Residents' Educational Debt Level by Demographic Characteristics, 2014–2015[a]

Characteristic	Debt level					Total	*P* value
	None ($0)	Low ($1–$74,999)	Moderate ($75,000–$149,999)	High ($150,000–$249,999)	Very high (> $250,000)		
Race/ethnicity, no. (%)[b]							.50
Underrepresented in medicine (URM)	196 (18.8)	112 (10.7)	116 (11.1)	322 (30.8)	298 (28.5)	1,044 (16.8)	
Non-URM	861 (16.6)	576 (11.1)	622 (12.0)	1,647 (31.8)	1,479 (28.5)	5,185 (83.2)	
Gender, no. (%)							< .01
Female	614 (17.8)	357 (10.3)	439 (12.8)	1,099 (31.9)	932 (27.1)	3,411 (55.2)	
Male	443 (15.9)	331 (11.9)	299 (10.7)	870 (31.2)	845 (30.3)	2,788 (44.8)	
Age							< .01
Mean	34	33	32	32	33	33	
Median	33	31	31	31	32	32	
Medical school location, no. (%)							< .01
U.S.	336 (8.2)	428 (10.5)	579 (14.2)	1,588 (38.8)	1,159 (28.3)	4,090 (65.7)	
International	721 (33.7)	260 (12.2)	159 (7.4)	381 (17.8)	618 (28.9)	2,139 (34.3)	
Degree type, no. (%)							< .01
MD	978 (19.2)	572 (11.3)	653 (12.9)	1,618 (31.8)	1,262 (24.8)	5,083 (81.6)	
DO	79 (6.9)	116 (10.1)	85 (7.4)	351 (30.6)	515 (44.9)	1,146 (18.4)	
Total	1,057 (17.0)	688 (11.1)	738 (11.9)	1,969 (31.6)	1,777 (28.5)	6,229	

[a]Percentages are within demographic categories (across rows), except for the total column to the right.
[b]URM includes residents who were American Indian or Alaska native; black or African American; native Hawaiian or other Pacific Islander; or Hispanic or Latino.

Table 2

Graduating Family Medicine Residents' Initial Practice and Fellowship Intentions by Educational Debt Level, 2014–2015[a]

Practice/fellowship intentions	Debt level, no. (%)					Total
	None ($0)	Low ($1–$74,999)	Moderate ($75,000–$149,999)	High ($150,000–$249,999)	Very high (> $250,000)	
Practice type						
Academic	47 (15.3)	42 (13.7)	41 (13.4)	100 (32.6)	77 (25.1)	307 (8.2)
Hospital	140 (14.6)	85 (8.8)	96 (10.0)	334 (34.8)	306 (31.8)	961 (25.7)
Government[b]	133 (16.9)	94 (11.9)	107 (13.6)	237 (30.1)	217 (27.5)	788 (21.0)
Private practice	201 (17.0)	109 (9.2)	144 (12.2)	402 (34.0)	326 (27.6)	1,182 (31.4)
Other	84 (16.2)	55 (10.6)	51 (9.8)	148 (28.5)	181 (34.9)	519 (13.8)
Total	605 (16.1)	385 (10.2)	439 (11.7)	1,221 (32.5)	1,107 (29.5)	3,757
Practice ownership						
Employee	549 (16.3)	351 (10.4)	386 (11.5)	1,091 (32.4)	991 (29.4)	3,368 (89.7)
Contractor	25 (14.4)	16 (9.2)	27 (15.5)	55 (31.6)	51 (29.3)	174 (4.6)
Owner	31 (14.4)	18 (8.4)	26 (12.1)	75 (34.9)	65 (30.2)	215 (5.7)
Total	605 (16.1)	385 (10.2)	439 (11.7)	1,221 (32.5)	1,107 (29.5)	3,757
Fellowship						
Academic	6 (13.0)	4 (8.7)	10 (21.7)	18 (39.1)	8 (17.4)	46 (0.9)
Geriatrics	54 (40.0)	20 (14.8)	17 (12.6)	24 (17.8)	20 (14.8)	135 (2.8)
Hospice and palliative care medicine	9 (13.2)	9 (13.2)	8 (11.8)	19 (27.9)	23 (33.8)	68 (1.4)
Sports medicine	38 (11.9)	26 (8.2)	38 (11.9)	109 (34.3)	107 (33.6)	318 (6.6)
Other fellowship	91 (20.3)	55 (12.2)	47 (10.5)	125 (27.8)	131 (29.2)	449 (9.3)
No fellowship	524 (13.7)	342 (8.9)	456 (11.9)	1,325 (34.6)	1,181 (30.9)	3,828 (79.0)
Total	722 (14.9)	456 (9.4)	576 (11.9)	1,620 (33.4)	1,470 (30.3)	4,844

[a]Percentages are within practice/fellowship categories (across rows), except for the total column to the right.
[b]Government includes federally qualified health centers, rural health clinics, Indian Health Service, Public Health Service, Department of Veterans Affairs, and state and local government-operated clinics.

with more educational debt did not differ from those with less debt in their odds of choosing employed practice compared with practice ownership. Similarly, those with more debt did not have significantly greater odds of intending to work for a hospital or hospital system compared with private practice. However, those with high debt ($150,000–$249,999) had lower odds of intending to work for a government organization, such as an FQHC (odds ratio [OR] 0.57; confidence interval [CI] 0.41–0.79). Those with very high debt (> $250,000) were not significantly more or less likely to work for a government organization compared with those with low debt (OR 0.77; CI 0.55–1.07).

Those with high or very high debt had lower odds of choosing academic practice (OR 0.55, CI 0.36–0.85 and OR 0.62, CI 0.40–0.96, respectively). High and very high debt also were associated with lower odds of intending to complete a geriatrics fellowship (OR 0.36, CI 0.20–0.67 and OR 0.29, CI 0.15–0.55, respectively) but had no significant relationship with other fellowship choices.

Discussion

Our findings indicate that family medicine residents with high educational debt are less likely to choose careers in public service, academics, and geriatrics. However, contrary to our hypotheses, we found no relationship between residents' debt and their intentions to pursue an employed position, whether by a hospital system or otherwise, compared with owning a private practice. Even though residents were overwhelmingly inclined to take an employed position, high debt was not associated with any variance in this choice. Debt was also not associated with residents' likelihood of choosing to work for a hospital-owned or independent private practice. These findings suggest that both ownership-model and employment-model private practices remain able to compete financially with hospital systems, including those that enable participation in the PSLF program, for family physicians with high debt.

Surprisingly, residents with high debt were significantly less likely to pursue a career with a government-owned or subsidized practice, including an FQHC, rural health clinic, the Indian Health Service, the Public Health Service, a state or local government-operated clinic, or the Department of Veterans Affairs. This finding was not significant for residents with very high debt but trended in the same direction. It may be attributable to the compensation packages offered by many private employers, because, in comparison, NHSC and state loan repayment incentives are relatively small. For example, median salaries for internal medicine and family physicians, as reported by Merritt-Hawkins, are

Table 3

Adjusted Associations Between Graduating Family Medicine Residents' Practice and Fellowship Intentions and Their Educational Debt Level, 2014–2015[a]

Practice/ fellowship intentions	Debt level			
	Low ($1–$74,999)	Moderate ($75,000–$149,999)	High ($150,000–$249,999)	Very high (> $250,000)
Model 1: Practice type				
Academic	Reference	0.61 (0.37–1.01)	0.55 (0.36–0.85)[b]	0.62 (0.40–0.96)[b]
Hospital	Reference	0.88 (0.60–1.29)	1.09 (0.79–1.50)	1.19 (0.86–1.66)
Government[c]	Reference	0.70 (0.48–1.02)	0.57 (0.41–0.79)[b]	0.77 (0.55–1.07)
Other	Reference	0.71 (0.45–1.12)	0.72 (0.49–1.05)	1.07 (0.74–1.56)
Private practice		Reference	Reference	Reference
Model 2: Practice ownership				
Employee	Reference	0.70 (0.37–1.31)	0.73 (0.43–1.24)	0.81 (0.47–1.38)
Contractor	Reference	1.20 (0.50–2.88)	0.93 (0.43–1.99)	0.95 (0.44–2.05)
Owner		Reference	Reference	Reference
Model 3: Fellowship				
Academic	Reference	1.45 (0.45–4.69)	0.98 (0.33–2.93)	0.74 (0.22–2.51)
Geriatrics	Reference	0.74 (0.38–1.45)	0.36 (0.20–0.67)[b]	0.29 (0.15–0.55)[b]
Hospice and palliative care medicine	Reference	0.62 (0.23–1.63)	0.49 (0.22–1.09)	0.67 (0.30–1.45)
Sports medicine	Reference	1.21 (0.71–2.05)	1.04 (0.66–1.63)	1.12 (0.71–1.77)
No fellowship		Reference	Reference	Reference

[a]Odds ratios (confidence intervals) are displayed.
[b]Statistically significant at $P < .01$.
[c]Government includes federally qualified health centers, rural health clinics, Indian Health Service, Public Health Service, Department of Veterans Affairs, and state and local government-operated clinics.

approximately $40,000 more than those for physicians practicing in FQHCs, as reported by the National Association of Community Health Centers,[36] a difference comparable to the NHSC loan repayment incentive of $30,000 to $50,000 annually.[37] Private employers also may offer additional signing bonuses and loan repayment packages. Finally, the PSLF program may make the NHSC incentive less influential in shaping contemporary medical students' and residents' career choices because it offers loan forgiveness without a meaningful service commitment.[12,38]

High educational debt has also been associated with resident burnout.[39,40] Thus, it is possible that family medicine residents with more debt approached career planning with less altruism and so were less likely to consider careers with a service orientation.

In addition, residents with high educational debt were less likely to pursue an academic career. As undergraduate medical education in the United States expands, committed family physicians are needed in faculty roles to ensure that all medical students receive a robust education. The needed expansion of graduate medical education in family medicine will also require more family medicine faculty. Challenges in recruiting and retaining these faculty physicians have been exacerbated in recent years by the high demand for family physicians outside academia and a widening salary gap.[27] In 2017, the Medical Group Management Association reported median total compensation of $233,770 for nonacademic family physicians (who do not practice obstetrics) but only $182,776 for academic family physicians, a gap exceeding $50,000 annually.[29] Academic institutions need to provide appropriate financial incentives to ensure that family physicians are successfully recruited and retained as faculty.

Although research-focused faculty in other disciplines may obtain loan repayment through the National Institutes of Health, very few family medicine faculty qualify for this program.[41–44] Federal funding agencies should consider developing loan repayment incentives for academic careers with a teaching focus.

Finally, residents with high educational debt were much less likely to indicate interest in fellowship training in geriatrics. This finding is concerning because the United States is experiencing a significant shortage of geriatricians to care for an aging population. Despite this shortage, many geriatrics fellowship positions remain unfilled.[33] Developing loan repayment incentives; adjusting Medicare payments to match private insurance reimbursement rates; and increasing compensation for complex, nonprocedural care would increase geriatricians' income, which might motivate more residents to choose geriatrics training and practice.

Although we labeled the debt levels discussed above as "high" ($150,000–$249,999) and "very high" (> $250,000), it would be more accurate to label them "average" or "typical." In 2016, the average debt for graduating medical students who had any debt was $190,000, which was 50% more than the debt for those graduating in 2000, even after adjusting for inflation.[45] More than half of family medicine residents have more than $150,000 in educational debt.[10] Thus, the associations we found in this study apply to the majority of the emerging family physician workforce.

Strengths and limitations

Strengths of this study include our use of a large, national, representative sample of family medicine residents. In addition, no previous studies we found examined the relationship between educational debt and family medicine residents' career intentions. However, our study also has several important limitations. We assessed residents' intended career plans rather than their actual practice or fellowship paths. Also, although our study had a large and representative sample size, some subgroups of residents (such as those planning to become practice owners) were smaller, limiting the power of some analyses. Next, relatively large proportions of residents were not sure of their future practice and fellowship plans when they completed the ABFM examination registration questionnaire.

In addition, because our study was a secondary data analysis, some variables of potential importance were unmeasured and thus not included. For example, educational debt is associated with the socioeconomic status of students' families of origin, which we did not measure but could be a confounding variable.[1,46] We also did not have access to residents' countries of citizenship. Debt level was available only as a categorical variable, limiting our ability to conduct more complex analyses. Finally, we do not know the generalizability of our findings to primary care physicians making later career decisions or to resident physicians in other specialties.

Conclusions

Our findings provide further evidence that the accumulation of educational debt influences learners' career choices, often in ways that are counterproductive to the health care needs of the nation. The medical community should advocate for financial incentives that reward physicians who provide the care that is most needed for the patients who need it the most. Several policy changes, including stronger investment in the NHSC, reform of the PSLF program, Medicare payment reform, federal support for academic primary care physicians, and educational debt relief, could help ensure that learners' practice choices are not unduly influenced by their educational debt.

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Disclaimer: The study findings and their interpretation are the authors' own, and they do not reflect the views of the American Board of Family Medicine or the American Board of Family Medicine Foundation.

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J.P. Phillips is assistant dean, Student Career and Professional Development, Michigan State University, and associate professor, Sparrow-MSU Family Medicine Residency Program, Lansing, Michigan; ORCID: https://orcid.org/0000-0001-5566-2384.

L.E. Peterson is research director, American Board of Family Medicine, Lexington, Kentucky; ORCID: https://orcid.org/0000-0003-4853-3108.

B. Fang is research assistant, American Board of Family Medicine, Lexington, Kentucky.

I. Kovar-Gough is liaison librarian to the College of Human Medicine, Michigan State University Libraries, East Lansing, Michigan; ORCID: https://orcid.org/0000-0002-2154-7916.

R.L. Phillips Jr is vice president for research and policy, American Board of Family Medicine, Lexington, Kentucky.

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Appendix 1

Graduating Family Medicine Residents With and Without Known Practice and Fellowship Plans by Demographic Characteristics, 2014–2015[a]

	Practice plans			Fellowship plans				
Characteristic	**Known**	**Unknown**	***P* value**	**Intends to pursue**	**Does not intend to pursue**	**Unsure**	***P* value**	**Total**
Race/ethnicity, no. (%)[b]			.09				< .01	
Underrepresented in medicine (URM)	643 (61.6)	401 (38.4)		197 (18.9)	600 (57.5)	247 (23.7)		1,044 (16.8)
Non-URM	3,327 (64.2)	1,858 (35.8)		864 (16.7)	3,353 (64.7)	968 (18.7)		5,185 (83.2)
Gender, no. (%)			< .01				< .01	
Female	2,111 (61.4)	1,330 (38.7)		521 (15.1)	2,259 (65.7)	661 (19.2)		3,411 (55.2)
Male	1,859 (66.7)	929 (33.3)		540 (19.4)	1,694 (60.8)	554 (19.9)		2,788 (44.8)
Age			.89				< .01	
Mean (standard deviation)	33 (4)	33 (5)		33 (4)	33 (4)	34 (5)		33
Median	32	32		32	31	32		32
Medical school location, no. (%)			.05				< .01	
U.S.	2,642 (64.6)	1,448 (35.4)		735 (18.0)	2,699 (66.0)	656 (16.0)		4,090 (65.7)
International	1,328 (62.1)	811 (37.9)		326 (15.2)	1,254 (58.6)	559 (26.1)		2,139 (34.3)
Degree type, no. (%)			< .001				< .001	
MD	3,160 (62.2)	1,923 (37.8)		848 (16.7)	3,187 (62.7)	1,048 (20.6)		5,083 (81.6)
DO	810 (70.7)	336 (29.3)		213 (18.6)	766 (66.8)	167 (14.6)		1,146 (18.4)
Debt level, no. (%)			.15				< .01	
None	637 (60.3)	420 (39.7)		204 (19.3)	541 (51.2)	312 (29.5)		1,057 (17.0)
Low ($1–$74,999)	448 (65.1)	240 (34.9)		128 (18.6)	365 (53.1)	195 (28.3)		688 (11.1)
Moderate ($75,000–$149,999)	473 (64.1)	265 (35.9)		126 (17.1)	481 (65.2)	131 (17.8)		738 (11.9)
High ($150,000–$249,999)	1,271 (64.6)	698 (35.5)		304 (15.4)	1,359 (69.0)	306 (15.5)		1,969 (31.6)
Very high (> $250,000)	1,141 (64.2)	636 (35.8)		299 (16.8)	1,207 (67.9)	271 (15.3)		1,777 (28.5)
Total, no. (%)	3,970 (63.7)	2,259 (36.3)		1,061 (17.0)	3,953 (63.5)	1,215 (19.5)		6,229

[a]Percentages are within demographic categories (across rows), except for the total column to the right.
[b]URM includes residents who were American Indian or Alaska native; black or African American; native Hawaiian or other Pacific Islander; or Hispanic or Latino.