

## Supplemental materials for:

Phillips JP, Petterson SM, Bazemore AW, Phillips RL. A retrospective analysis of the relationship between medical student debt and primary care practice in the United States. *Ann Fam Med*. 2014;12(6):542-549.

## Appendix 1: Supplemental Tables

**Table 1: Data Sources**

Source	Measures
AMA Physician Masterfile, 2000-2005 and 2010	<ul style="list-style-type: none"> <li>• Demographic information:               <ul style="list-style-type: none"> <li>○ Age at medical school graduation</li> <li>○ Born in rural county</li> <li>○ Gender</li> </ul> </li> <li>• Public or private medical school</li> <li>• Medical school in a rural area</li> <li>• Practicing primary care or family medicine in 2010</li> </ul>
AAMC Graduation Questionnaire	<ul style="list-style-type: none"> <li>• Marital status at graduation</li> <li>• Loan information (types of loans received)</li> <li>• Medical education debt</li> <li>• National Health Service Corps scholarships</li> </ul>
NHSC (National Health Service Corps) Participant Database	<ul style="list-style-type: none"> <li>• NHSC obligation, and the type of obligation</li> <li>• National Health Service Corps (NHSC) service</li> </ul>
Primary Care Medical Residency Training History Database	<ul style="list-style-type: none"> <li>• Primary care or specialty residency match</li> </ul>

**Table 2: Loans Used as Proxy Indicators of Medical Student Socioeconomic Status**

Loan	Eligibility and Recipient Information	Limitations
Loans for Disadvantaged Students	Students must demonstrate exceptional financial need or be from a disadvantaged background. <sup>1</sup>	Students whose families have more financial resources are eligible if they are disadvantaged in other ways.
Perkins Loans	Each medical school determines eligibility and distribution of funding. Institutions are mandated to give “priority to the neediest students.” <sup>2</sup> In 1995-96, the mean adjusted gross family income of dependent undergraduate recipients was \$33,566, and 30.8% of all recipients were from underrepresented minority groups. <sup>3</sup>	Specific eligibility requirements vary from one institution to another. <sup>2</sup>
Health Professions Student Loan	Must demonstrate financial need, as defined by Title IV. Specifically, expected family contributions, combined with other funds, are not sufficient to cover the costs of attendance. Parents’ information has to be included in this calculation unless parents are deceased. <sup>4</sup>	Not available after 1993 (became the Primary Care Loan).

**References**

1. Health Professions: Loans for Disadvantaged Students. HRSA. [http://bhpr.hrsa.gov/dsa/sfag/health\\_professions/bk1prt2.htm](http://bhpr.hrsa.gov/dsa/sfag/health_professions/bk1prt2.htm).
2. U.S. Department of Education: Programs. <http://www2.ed.gov/programs/landing.jhtml>. Accessed June 7, 2011.
3. Redd KE. Is There Still a Need for Perkins Loans? Differences in the Demographic Characteristics and Income Levels of Perkins and Stafford Loan Borrowers. *Journal of Student Financial Aid*. 1999;78(4):9.
4. Health Professions Program: Health Professions Student Loan (October 2000). [http://bhpr.hrsa.gov/dsa/sfag/health\\_professions/bk1prt1.htm](http://bhpr.hrsa.gov/dsa/sfag/health_professions/bk1prt1.htm). Accessed June 12, 2011.

**Table 3: Percentages of 1988-2000 Graduating Medical Students Practicing Primary Care, by School Type, Loan Type and Level of Debt. (Unadjusted Analysis).**

Debt Level	School Type			Loan Type		
	All	Public	Private	Perkins or Disadvantaged	Health Professions	No Loans Based on Parents' Income
No Debt	30.6%	33.0%	27.0%			
Debt \$1-50k	34.6%	36.8%	29.6%	39.0%	34.7%	33.7%
Debt \$50-100k	39.1%	41.1%	33.1%	40.6%	39.4%	37.8%
Debt \$100-150k	39.8%	42.7%	34.8%	41.2%	37.8%	38.7%
Debt \$150-200k	37.8%	42.7%	36.0%	38.4%	35.6%	37.8%
Debt > \$200k	37.3%	42.2%	36.4%	36.8%	32.8%	38.5%

**Table 4: Percentages of 1988-2000 Graduating Medical Students Practicing Family Medicine, by School Type, Loan Type and Level of Debt. (Unadjusted Analysis).**

Debt Level	School Type			Loan Type		
	All	Public	Private	Perkins or Disadvantaged	Health Professions	No Loans Based on Parents' Income
No Debt	10.1%	12.6%	6.4%			
Debt \$1-50k	13.8%	16.2%	8.2%	16.0%	15.0%	13.3%
Debt \$50-100k	16.7%	19.3%	9.3%	18.0%	17.6%	15.6%
Debt \$100-150k	16.9%	21.1%	10.1%	18.1%	16.6%	15.9%
Debt \$150-200k	14.6%	22.4%	11.6%	15.7%	14.1%	13.6%
Debt > \$200k	13.6%	21.6%	12.2%	14.3%	11.5%	13.3%