

AACOM 2012 Entering and Graduating Student Surveys Comparison Report



Prepared by the Research Department
American Association of Colleges of Osteopathic Medicine

AACOM 2012 Entering and Graduating Student Surveys Comparison Report: Abstract

Each year, AACOM asks the nation's colleges of osteopathic medicine (COM) to conduct the AACOM Entering Student and Graduating Student Surveys. The surveys compile a comprehensive snapshot of osteopathic medical education debt, graduate medical education plans, and future specialty and practice plans. A total of 2,076 class of 2012 graduates self-identified in both the 2008-2009 Entering Student and the 2011-2012 Graduating Student surveys. A comparison of these students' expectations when entering osteopathic medical school and their responses as graduates is explored in this report. Demographic analyses presented in this report can be considered along with the demographic data presented on AACOM'S Data and Trends web page: <http://www.aacom.org/data/Pages/default.aspx>

Note: A problem in the 2008-2009 online survey invalidated some of the data obtained from the AACOM Entering Student Survey. Please reference the appendix to see response rates by report section.

Reported versus Expected Osteopathic Medical Education Debt and Scholarship/Grant Awards

Class of 2012 graduates reported a significantly higher (21 percent) mean osteopathic medical education debt (\$207,245) than they had expected as 2008-2009 entering students (\$170,681). Graduates reported a significantly lower (14 percent) mean scholarship/grant award (\$74,694) than they had expected (\$86,403). The percentage of students reporting debt on graduation was higher by 3 percent than the percentage expecting to have debt on entry: 90 percent reported compared to 88 percent expected. Conversely, a statistically significant increase (14 percent) of graduates reported scholarship/grants awarded on graduation than the percentage expecting awards on entry: 37 percent reported, 23 percent expected.

Statistically significant increases between reported and expected medical education debt and likeliness to be in debt were found among the following student groups:

- Male
- White
- Single
- Financially independent
- Parental incomes between \$49,999 and \$100,000
- Graduate/professional parental education

Statistically significant increases between reported and expected medical education debt we found among the following student groups:

- Female
- Married/cohabiting
- Financially dependent
- Parental incomes less than \$50,000 or more than \$99,999
- No graduate/professional parental education

Charts 1 and 2 show the difference in expected and reported mean debt and scholarship/grant awards 2012 graduates reported. In Chart 1, the percentage of students indicating debt levels greater than \$200,000 increased between matriculation (32 percent) and graduation (53 percent). Conversely in Chart 2, the percentage of students indicating no scholarship/grant awards decreased between matriculation (77 percent) and graduation (63 percent). Chart 3 shows 2012 graduates did not indicate significant differences in osteopathic medical education cost distribution between matriculation and graduation.

Reported versus Expected Graduate Medical Education and Professional Practice Plans

While matriculating, 88 percent of 2012 graduates expected to take the AOA boards. By graduation, 62 percent expected to take the AOA boards. Similarly, while 59 percent of students indicated plans to take ABMS boards at entry, only 44 percent indicated the same at graduation. Twenty percent more graduates reported plans to take only the ABMS boards, while 8 percent more reported plans to take only the AOA boards. Students indicated the belief that "ABMS board certification provides more opportunities" as the top reason for to pursue ABMS or dual AOA/ABMS certification at matriculation and graduation.

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While matriculating, 43 percent of graduates expected to practice in a group or other type of private practice and 14 percent expected to be self-employed or practicing with a partner. By graduation, 49 percent reported plans to practice in a group or other type of private practice and 9 percent reported plans to be self-employed or practicing with a partner.

Reported versus Expected Primary Care Specialty Plans

From matriculation to graduation, the increase in the percentage of respondents planning to specialize in primary care more than doubled from 15 percent to 31 percent (a statistically significant increase). This increase in primary care specialty selection remains statistically significant and consistent among demographics such as:

- Gender
- Marital status
- Financial independence
- Parental income
- Parental education

The reasons for specialty selection ranked by 2012 graduates at matriculation and graduation remained relatively similar. The intellectual content of the specialty, the interaction with people and the skills/abilities associated with the specialty remained the top three influential reasons.

Role models of the specialty significantly increased in influence between matriculation and graduation (2.3 mean influence rating to 2.8 mean influence rating). The academic environment and peer influence also increased significantly in influence (2.1 mean influence rating to 2.4 mean influence rating, 1.7 mean influence rating to 1.9 influence rating, respectively). On the other hand, prestige/income potential and debt level decreased significantly in influence (1.8 mean influence rating to 1.7 influence rating, 1.7 influence rating to 1.6 influence rating, respectively).

Table 1: Mean Osteopathic Debt and Scholarship Awards, 2012 Graduating Class

Source of Debt	Debt [‡]			% in Debt		
	All Schools	Public	Private	All Schools	Public	Private
Osteopathic Medical Education Loans						
Expected in 2008	\$170,681 ^a	\$162,628 ^a	\$171,834 ^a	88%	86%	88%
Reported in 2012	\$207,245 ^b	\$198,311 ^b	\$208,523 ^b	90%	91%	90%
Total Scholarships/Grants						
Expected in 2008	\$86,403	\$89,857	\$85,874	23% ^α	24% ^α	22% ^α
Reported in 2012	\$74,694	\$70,882	\$75,297	37% ^β	39% ^β	36% ^β

*All debt data are self-reported by respondents of the survey.

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly ($p < 0.05$) by T-test.

α,β Percentages within subrow noted by distinct letters differ significantly ($p < 0.05$) by Z-test.

Table 2.1: Mean Osteopathic Debt

Gender	Debt [‡]	% in Debt
Male		
Expected in 2008	\$172,157 ^a	87% ^α
Reported in 2012	\$206,736 ^b	90% ^β
Female		
Expected in 2008	\$168,855 ^a	89%
Reported in 2012	\$207,889 ^b	91%

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly, ($p < 0.05$) by T-test.

α,β Percentages within subcolumn noted by distinct letters differ significantly, ($p < 0.05$) by Z-test.

Table 2.2: Mean Osteopathic Scholarship Awards

Gender	Award [‡]	% Awarded
Male		
Expected in 2008	\$94,313	23% ^α
Reported in 2012	\$83,399	38% ^β
Female		
Expected in 2008	\$75,443	22% ^α
Reported in 2012	\$62,680	35% ^β

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly, ($p < 0.05$) by T-test.

α,β Percentages within subcolumn noted by distinct letters differ significantly, ($p < 0.05$) by Z-test.

Table 3.1: Mean Osteopathic Debt

Race/Ethnicity	Debt [‡]	% in Debt
White		
Expected in 2008	\$174,766 ^a	87% ^α
Reported in 2012	\$211,360 ^b	91% ^β
Asian		
Expected in 2008	\$154,442	86%
Reported in 2012	\$174,607	90%
Hispanic		
Expected in 2008	\$148,588	95% ^α
Reported in 2012	\$211,004	100% ^β
Black		
Expected in 2008	\$196,272	96%
Reported in 2012	\$219,124	95%
All Others*		
Expected in 2008	\$150,561 ^a	88%
Reported in 2012	\$205,535 ^b	91%

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly, (p<0.05) by T-test.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

*Includes respondents claiming American Indian and Alaskan Native, Native Hawaiian and Pacific Islander or multiple races.

Table 3.2: Mean Osteopathic Scholarship Awards

Race/Ethnicity	Award [‡]	% Awarded
White		
Expected in 2008	\$91,730	24% ^α
Reported in 2012	\$79,880	38% ^β
Asian		
Expected in 2008	\$16,038	10%
Reported in 2012	\$26,841	17%
Hispanic		
Expected in 2008	\$89,583	32%
Reported in 2012	\$128,656	46%
Black		
Expected in 2008	\$59,082	31%
Reported in 2012	\$41,633	50%
All Others*		
Expected in 2008	\$86,250	23%
Reported in 2012	\$60,003	37%

‡Mean taken from responses greater than zero.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

*Includes respondents claiming American Indian and Alaskan Native, Native Hawaiian and Pacific Islander or multiple races.

Table 4.1: Mean Osteopathic Debt

Marital Status	Debt[‡]	% in Debt
Married/Cohabiting		
Expected in 2008	\$186,584 ^a	86%
Reported in 2012	\$216,678 ^b	90%
Single		
Expected in 2008	\$167,693 ^a	86% ^α
Reported in 2012	\$201,012 ^b	90% ^β

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly, (p<0.05) by T-test.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 4.2: Mean Osteopathic Scholarship Awards

Marital Status	Award[‡]	% Awarded
Married/Cohabiting		
Expected in 2008	\$105,769	26% ^α
Reported in 2012	\$89,169	41% ^β
Single		
Expected in 2008	\$64,069	24% ^α
Reported in 2012	\$63,746	34% ^β

‡Mean taken from responses greater than zero.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 5.1: Mean Osteopathic Debt

Financial Status	Debt[‡]	% in Debt
Independent		
Expected in 2008	\$187,164 ^a	88% ^α
Reported in 2012	\$220,325 ^b	92% ^β
Dependent		
Expected in 2008	\$143,014 ^a	82%
Reported in 2012	\$169,653 ^b	84%

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly, (p<0.05) by T-test.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 5.2: Mean Osteopathic Scholarship Awards

Financial Status	Award[‡]	% Awarded
Independent		
Expected in 2008	\$93,729	24% ^α
Reported in 2012	\$85,251	41% ^β
Dependent		
Expected in 2008	\$42,459	26%
Reported in 2012	\$21,493	23%

[‡]Mean taken from responses greater than zero.

^{α,β} Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 6.1: Mean Osteopathic Debt

Parental Income	Debt[‡]	% in Debt
\$49,999 or less		
Expected in 2008	\$177,510 ^a	94%
Reported in 2012	\$217,481 ^b	96%
\$50,000 - \$99,999		
Expected in 2008	\$178,546 ^a	90% ^α
Reported in 2012	\$217,572 ^b	95% ^β
\$100,000 - 199,999		
Expected in 2008	\$170,760 ^a	88%
Reported in 2012	\$206,785 ^b	90%
\$200,000 or more		
Expected in 2008	\$151,141 ^a	79%
Reported in 2012	\$176,484 ^b	81%

[‡]Mean taken from responses greater than zero.

^{a,b} Means within subcolumn noted by distinct letters differ significantly, by one-way ANOVA followed by the Games-Howell post-hoc test when applicable.

^{α,β} Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 6.2: Mean Osteopathic Scholarship Awards

Parental Income	Award [‡]	% Awarded
\$49,999 or less		
Expected in 2008	\$71,442	25% ^α
Reported in 2012	\$58,399	45% ^β
\$50,000 - \$99,999		
Expected in 2008	\$90,388	24% ^α
Reported in 2012	\$77,986	38% ^β
\$100,000 - 199,999		
Expected in 2008	\$94,514	26% ^α
Reported in 2012	\$77,870	40% ^β
\$200,000 or more		
Expected in 2008	\$83,344	15% ^α
Reported in 2012	\$86,761	26% ^β

[‡]Mean taken from responses greater than zero.

^{α,β} Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

Table 7.1: Mean Osteopathic Debt

Parental Education [†]	Debt [‡]	% in Debt
Graduate/Professional Degree		
Expected in 2008	\$164,348 ^a	83% ^α
Reported in 2012	\$194,549 ^b	87% ^β
Bachelor's Degree		
Expected in 2008	\$173,664 ^a	92%
Reported in 2012	\$214,332 ^b	93%
No College Degree		
Expected in 2008	\$178,974 ^a	92%
Reported in 2012	\$222,785 ^b	94%

[‡]Mean taken from responses greater than zero.

^{a,b} Means within subcolumn noted by distinct letters differ significantly, by one-way ANOVA followed by the Games-Howell post-hoc test when applicable.

^{α,β} Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

[†]Highest education level indicated between mother and father considered.

Table 7.2: Mean Osteopathic Scholarship Awards

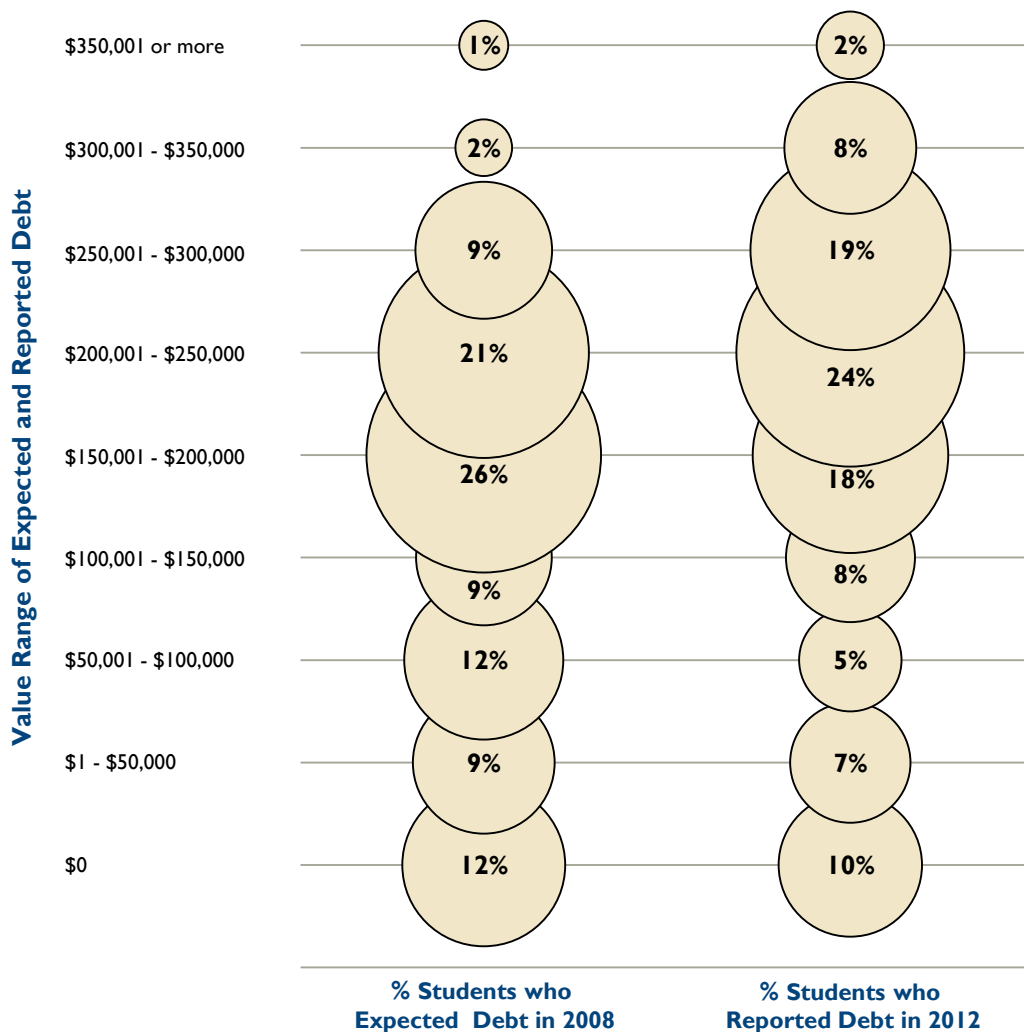
Parental Education[†]	Award[‡]	% Awarded
Graduate/Professional Degree		
Expected in 2008	\$97,520	22% ^α
Reported in 2012	\$88,044	35% ^β
Bachelor's Degree		
Expected in 2008	\$76,432	21% ^α
Reported in 2012	\$61,453	39% ^β
No College Degree		
Expected in 2008	\$75,578	26% ^α
Reported in 2012	\$74,694	38% ^β

‡Mean taken from responses greater than zero.

α,β Percentages within subcolumn noted by distinct letters differ significantly, (p<0.05) by Z-test.

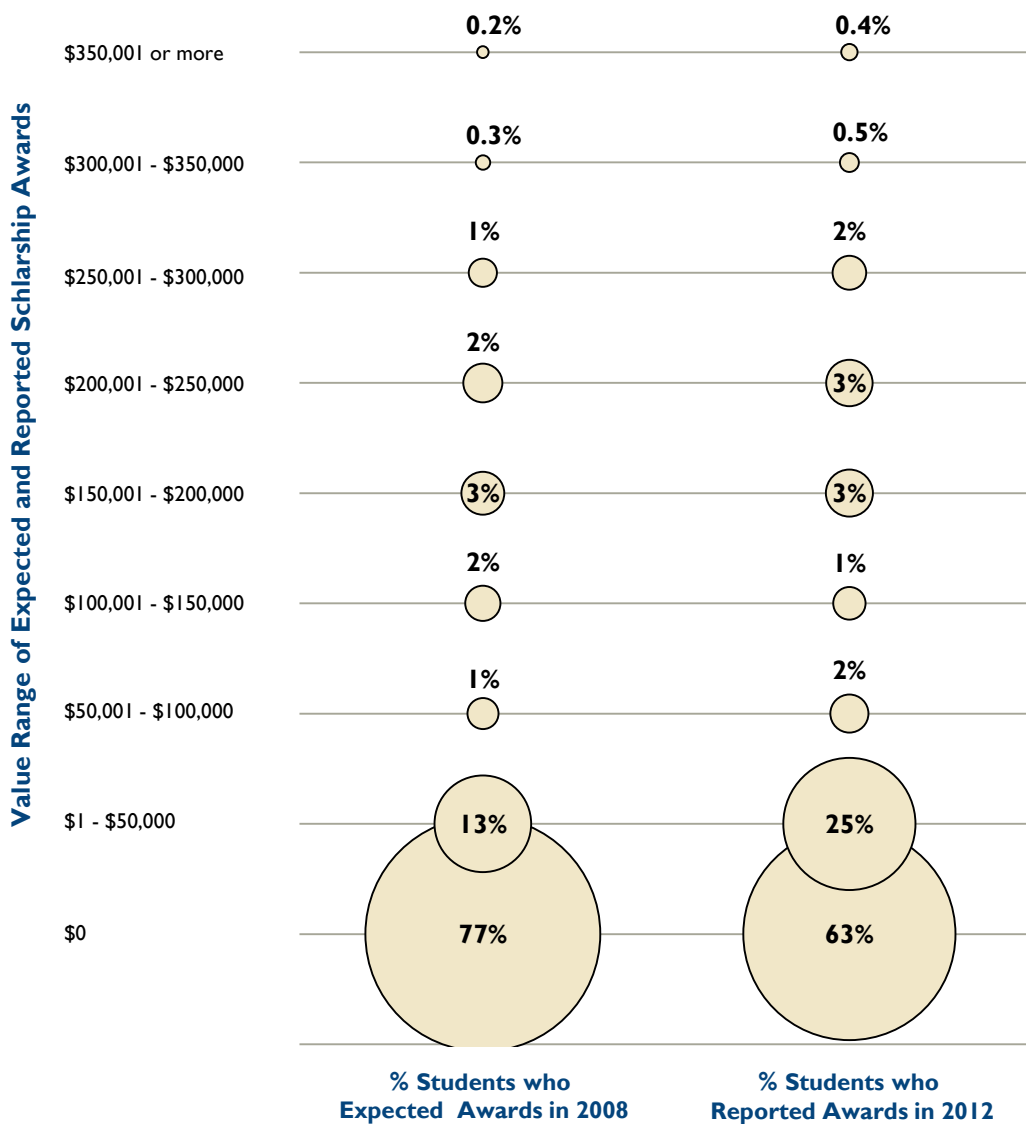
†Highest education level indicated between mother and father considered.

Chart I: Percentage of Students who Expected and Reported Debt, 2012 Graduating Class



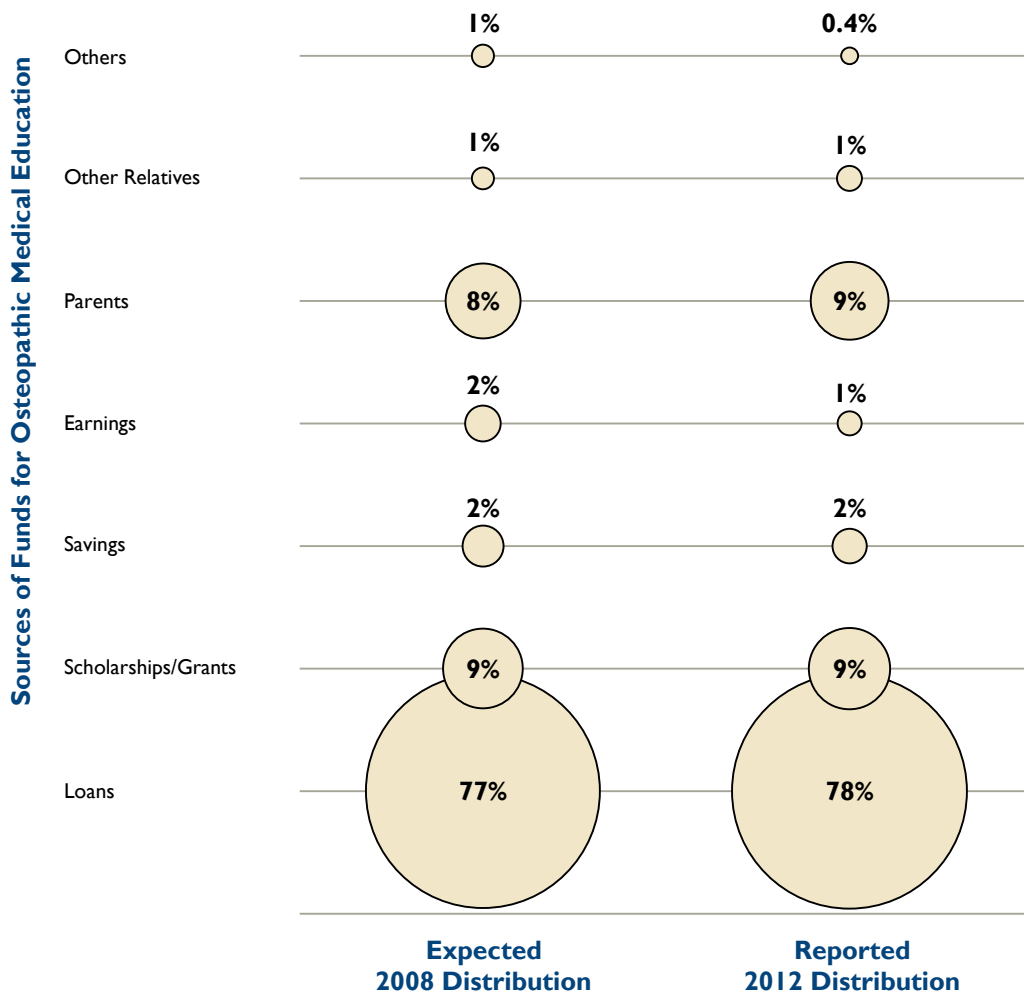
*Bubble sizes are proportional to the percentage/number of students with debt/scholarships and may appear inconsistent due to rounding.

Chart 2: Percentage of Students who Expected and Reported Scholarship Awards, 2012 Graduating Class



*Bubble sizes are proportional to the percentage/number of students with debt/scholarships and may appear inconsistent due to rounding.

Chart 3: Expected and Reported Distribution of Funds for Osteopathic Medical Education, 2012 Graduating Class



*Bubble sizes are proportional to the percentage/number of students with debt/scholarships and may appear inconsistent due to rounding.

Table 8: Sources of Funds for Osteopathic Medical Education (% of total cost provided by each source)

	All Schools	Public	Private
Loans			
Expected in 2008	77%	76%	78%
Reported in 2012	78%	76%	78%
Scholarships/Grants			
Expected in 2008	9%	9%	9%
Reported in 2012	9%	11%	9%
Savings			
Expected in 2008	2%	2%	2%
Reported in 2012	2%	1%	2%
Earnings			
Expected in 2008	2%	2%	2%
Reported in 2012	1%	1%	1%
Parents			
Expected in 2008	8%	8%	8%
Reported in 2012	9%	9%	9%
Relatives			
Expected in 2008	1%	0%	1%
Reported in 2012	1%	1%	1%
Other			
Expected in 2008	1%	1%	1%
Reported in 2012	0%	1%	0%

AACOM 2012 Entering and Graduating Student Surveys Comparison Report: Post Graduation Plans

Note: Significance testing was not performed on graduate medical education and professional practice plans data as the corresponding survey questions had changed significantly in format between 2008-2009 and 2011-2012.

Table 9: Board Certification Plans, 2012 Graduating Class

	% Students	
	2008 Survey	2012 Survey
Osteopathic AOA Boards	31%	39%
Both AOA and ABMS Boards	57%	22%
Allopathic ABMS Boards	2%	22%
Other	0%	0%
Not Planning Board Certification	0%	0%
Undecided	9%	16%
Total	100%	100%

Table 10: Reasons Given for Taking ABMS (Allopathic) or Both Boards*

	% Students	
	2008 Survey	2012 Survey
ABMS board certification provides more opportunities	59%	61%
Personal desire for dual certification	51%	29%
ABMS board certification is more widely recognized	31%	56%
Hospital privileges more readily obtained with ABMS board certification	14%	27%
ABMS board certification has more colleague acceptance	11%	39%
ABMS board certification carries more prestige	7%	24%
Licenses more readily obtained with ABMS board certification	7%	21%
It is a requirement of the residency program	N/A	45%
Other	4%	7%

*Each respondent indicating allopathic or dual AOA/ABMS-approved residency plans could choose one or more of the listed reasons influencing board certification choice.

Table 11: Long-Range Career Plans, 2012 Graduating Class

	% Students	
	2008 Survey	2012 Survey
Group or Other Type of Private Practice	43%	49%
Self-Employed, with or without a Partner	14%	9%
Government, NHSC, Military, VA, etc.	7%	9%
Practice in an HMO	4%	7%
Other Professional Activity	3%	7%
Undecided	30%	20%
Total	100%	100%

Table 12: Planned Specialization, 2012 Graduating Class

	% Students	
	2008 Survey	2012 Survey
Family Practice	10%	20%
Internal Medicine, General	3%	7%
Pediatrics, General	3%	4%
Emergency Medicine	10%	12%
Orthopedic Surgery	8%	4%
Internal Medicine, Subspecialty	7%	14%
Pediatrics, Subspecialties	6%	5%
Surgery Subspecialties	5%	1%
OB/GYN and Subspecialties	4%	5%
Anesthesiology	4%	5%
Surgery, General	4%	3%
Radiology and Subspecialties	3%	2%
Sports Medicine	3%	1%
Dermatology	3%	1%
Neurology and Subspecialties	2%	1%
Physical Medicine & Rehabilitation Med.	2%	3%
Psychiatry and Subspecialties	1%	4%
Ophthalmology	1%	1%
Pathology and Subspecialties	1%	1%
Preventive Medicine and Subspecialties	1%	0%
Urology/Urological Surgery	1%	1%
Vascular Surgery	1%	0%
Critical Care	0%	1%
Otolaryngology	0%	1%
Geriatrics	0%	0%
Allergy and Immunology	0%	0%
Plastic Surgery/Reconstructive Surgery	0%	0%
Osteopathic Manipulative Medicine	0%	0%
Thoracic Surgery	0%	0%
Medical Genetics	0%	0%
Proctology	0%	0%
Nuclear Medicine	0%	0%
Colon Rectal Surgery	0%	0%
Undecided or Indefinite	16%	1%
Total	100%	100%

Primary Care
Specialties

Table 13: Primary Care Plans, 2012 Graduating Class

	% Students	
	2008 Survey	2012 Survey
Primary Care	15% ^a	31% ^b
Non-Primary Care	69%	68%
Undecided	16% ^a	1% ^b
Total	100%	100%

a,b Means within subrow noted by distinct letters differ significantly ($p < 0.05$) by Z-test.

Table 14: Percentage Class of 2012 Graduates Who Plan to Practice in Primary Care Specialties

	% Students	
	2008 Survey	2012 Survey
Gender		
Male	12% ^a	25% ^b
Female	20% ^a	40% ^b
Marital Status		
Married/Cohabiting	25% ^a	34% ^b
Single	18% ^a	29% ^b
Financial Status		
Independent	16% ^a	33% ^b
Dependent	14% ^a	27% ^b
Parental Income		
\$49,999 or less	12% ^a	39% ^b
\$50,000 - \$99,999	17% ^a	33% ^b
\$100,000 - 199,999	16% ^a	33% ^b
\$200,000 or more	15% ^a	33% ^b
Parental Education		
Graduate/Professional Degree	16% ^a	28% ^b
Bachelor's Degree	14% ^a	31% ^b
No College Degree	15% ^a	31% ^b
Parental Profession		
DO/MD†	20%	26%
Non-DO/MD	15%	27%

a,b Percentages within subrow noted by distinct letters differ significantly ($p < 0.05$) by Z-test.

†Category includes respondents who indicated a DO/MD father and/or mother.

Table 15: Planned Specialty Choice Decision Factors

	Mean Influence Rating*	
	2008 Survey	2012 Survey
Intellectual Content of the Specialty	3.1 ^a	3.2 ^b
Like Dealing with People	3.0	3.0
Skills/Abilities	2.9 ^a	3.0 ^b
Lifestyle	2.8	2.8
Like the Emphasis on Technical Skills	2.4	2.5
Desire for Independence	2.3	2.4
Role Models	2.3 ^a	2.8 ^b
Previous Experience	2.2	2.2
Academic Environment	2.1 ^a	2.4 ^b
Prestige/Income Potential	1.9 ^a	1.8 ^b
Debt Level	1.7 ^a	1.6 ^b
Peer Influence	1.7 ^a	1.9 ^b
Opportunity for Research/Creativity	1.7	1.7

*Scale from 0 to 4; 0 being "No Influence," 4 being "Major Influence."

a,b Percentages within subrow noted by distinct letters differ significantly ($p < 0.05$) by T-test.

Table AI: 2011-2012 Response Rate to Debt, Scholarship and Specialty Survey Questions

	Response Rate
Debt	
Expected Osteopathic Medical Education Loans 2008	93%
Reported Osteopathic Medical Education Loans 2012	99%
Scholarships/Grants	
Expected Total Scholarships/Grants 2008	100%
Reported Total Scholarships/Grants 2012	78%
Specialty	
Expected Specialty Choice 2008	31%
Reported Specialty Choice 2012	100%