

# AACOM 2009-10 Academic Year Entering Student Survey Summary Report



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

## AACOM 2009-10 Academic Year Entering Student Survey Summary Report, Abstract

Each year, AACOM asks the nation's colleges of osteopathic medicine (COM) to conduct the AACOM Entering Student Survey. The survey aims to gather a comprehensive snapshot of the expected cost and graduate medical education, professional practice and specialty plans of the entering osteopathic medical school student body. Beginning in 2009-2010, the survey has been administered solely via an online form to facilitate a more consistent and efficient data collection process. 3,230 students participated in the 2009-2010 Entering Student Survey. Demographic analyses presented in this report can be considered along with matriculant demographic data presented in our Osteopathic Medical College Matriculant Profile -- Class entering in Fall 2009 report.

<http://www.aacom.org/data/Documents/Matriculants/2009MatriculantSummary.pdf>

### **Student Debt**

In 2009-2010, first-year osteopathic medical school students expected a mean debt of \$168,674 at the time of graduation--13 percent more than the \$148,896 expected by 2008-2009 first-year students. Students at public osteopathic medical schools anticipated a mean debt of \$144,428 at graduation, while students at private osteopathic medical schools anticipated a mean debt of \$175,110 at graduation.

Twenty-eight percent of 2009-2010 first-year students expected to receive scholarships and/or grants, up 5 percent from the 23 percent of 2008-2009 first-year students. However, 2009-2010 students anticipated a mean award of \$70,392--15 percent less than the \$82,923 expected by 2008-2009 first-year students. Compared to private school students, a greater percentage of public school students received scholarship/grant awards in comparable award amounts.

The distribution of scholarship awards did not change greatly from 2008-2009 to 2009-2010. Most students received awards from their respective osteopathic medical schools. The reported mean \$15,636 school scholarship/grant award increased 19 percent from the \$13,192 awarded to 2008-2009 first-year students. The largest mean awards came from the National Health Services Corps and the Armed Forces Health Professions.

On average, students expected to earn \$129,952 the first year upon completing their residencies--only slightly more than the \$128,923 expected by 2008-2009 first-year students. The slight change in expected income was not consistent with the significant increase in expected mean debt and decrease in mean scholarship/grant awards.

For the 2009-2010 Entering Student Survey summary report, we have included analysis demonstrating how expected debt and scholarship/grant awards statistically differ across qualitative factors such as gender, ethnicity and socio-economic background.

### **Graduate Medical Education, Professional Practice and Specialty Plans**

Fifty-one percent of 2009-2010 first-year students anticipated pursuing an osteopathic residency, a dual AOA/ACGME-approved residency or an osteopathic internship upon finishing medical school. Forty percent of students planned to practice in an underserved/shortage area, while 58 percent of students planned to practice in a city with a population greater than 50,000.

Twenty-three percent of 2009-2010 students planned to pursue a primary care specialty, up 7 percent from the 16 percent of 2008-2009 first-year students. Analysis also showed how planned primary care specialty selection differed between genders and across parental incomes.

**Table 1: Mean Expected Debt, First-Year Students 2009-2010\***

Source of Debt	Debt			% in Debt		
	All Schools	Public	Private	All Schools	Public	Private
Loans for Osteopathic Medical Education	\$168,674	\$144,428 <sup>a</sup>	\$175,110 <sup>b</sup>	90%	89%	90%
At Entry, Loans Owing for Undergraduate Education	\$19,085	\$17,533	\$19,498	51%	51%	52%
Family Loans to Be Repaid by Student	\$2,425	\$2,009	\$2,532	4%	4%	4%
Non-Educational Debt	\$15,651	\$13,795	\$16,148	39%	38%	39%

\*All debt data are self-reported by respondents of the survey, see response rate Table A2 in Appendix.

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

The \$168,674 mean osteopathic medical school debt expected by 2009-2010 first-year students was 13 percent greater than the \$148,896 expected by 2008-2009 first-year students. This increase in expected debt is greater than the five percent increase in tuition and fees from 2008-2009 to 2009-2010. Among debt sources, only osteopathic medical school debt differed significantly between public and private osteopathic medical schools. The \$175,110 mean debt anticipated by 2009-2010 first-year students at private osteopathic medical schools was 16 percent greater than the \$150,427 anticipated by 2008-2009 students. However, the \$144,428 mean debt anticipated by 2009-2010 first-year students at public osteopathic medical schools was just 4 percent greater than the \$139,190 anticipated by 2008-2009 students. Among debt sources, the expectation of having any debt did not differ significantly between students in public and private osteopathic medical schools.

The mean \$19,085 undergraduate education debt expected by 2009-2010 first-year students was 25 percent greater than the \$15,315 expected by 2008-2009 first-year students. A greater percentage of first-year students expected greater family loan debt in 2009-2010 than in 2008-2009. Three percent of 2008-2009 first-year students expected to repay an average of \$1,467 in family loans. In contrast, 4 percent of 2009-2010 first-year students expected to repay an average of \$2,425 in family loans.

**Table 2: Mean Debt by Socio-Economics**

	Debt	% in Debt
<b>Gender</b>		
Male	\$165,779	89% <sup>α</sup>
Female	\$171,871	91% <sup>β</sup>
<b>Race/Ethnicity</b>		
White	\$171,388 <sup>a</sup>	90% <sup>αβ</sup>
Asian	\$153,318 <sup>b</sup>	88% <sup>α</sup>
All Others	\$177,345 <sup>a</sup>	93% <sup>β</sup>
<b>Marital Status</b>		
Married/Cohabiting	\$175,167 <sup>a</sup>	92% <sup>α</sup>
Single	\$166,871 <sup>b</sup>	89% <sup>β</sup>
<b>Financial Status</b>		
Independent	\$184,546 <sup>a</sup>	92% <sup>α</sup>
Dependent	\$138,376 <sup>b</sup>	85% <sup>β</sup>
<b>Parental Income</b>		
\$49,999 or less	\$193,201 <sup>a</sup>	94% <sup>α</sup>
\$50,000 - \$99,999	\$179,829 <sup>a</sup>	93% <sup>αβ</sup>
\$100,000 - 199,999	\$165,914 <sup>b</sup>	91% <sup>β</sup>
\$200,000 or more	\$140,492 <sup>c</sup>	81% <sup>γ</sup>
<b>Parental Education*</b>		
Graduate/Professional Degree	\$160,432 <sup>a</sup>	87% <sup>α</sup>
Bachelor's Degree	\$170,870 <sup>b</sup>	92% <sup>β</sup>
No College Degree	\$184,190 <sup>b</sup>	93% <sup>β</sup>

a,b,c Means within subcolumn noted by distinct letters differ significantly ( $p < 0.05$ ) by one-way ANOVA followed by the Games-Howell post-hoc test when applicable.

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

\*Highest education level indicated between mother and father considered.

At least 95 percent of respondents indicated gender and/or race/ethnicity in addition to osteopathic medical school debt. In Table 2 (and subsequent tables), the All Others category includes the 299 respondents claiming African American, American Indian/Alaskan Native, Hispanic, Native Hawaiian/Pacific Islander or multiple race/ethnicities. Males were significantly less likely than females to anticipate being in debt, and Asians reported the lowest debt figure amongst race/ethnicities. While Asians also had a lower likelihood of expecting to be in debt compared with students in the All Others category, at  $p < 0.05$ , the z-test indicated that Asians were just as likely to anticipate being in debt as white students.

At least 96 percent of respondents indicated their marital status and/or financial independence/dependence, in addition to their anticipated medical school debt. Single students were less likely to anticipate medical school debt than married/cohabiting students; single students also expected a lower mean debt amount. Financially dependent students were less likely to anticipate medical school debt, and reported an expected mean debt of \$138,376—\$46,170 less than the \$184,546 expected by financially independent students.

Differences in debt were found among the 90 percent of first-year respondents indicating parental income and education in addition to medical school debt. Students indicating parental incomes of \$100,000 - \$199,999 expected significantly lower debt than students indicating parental incomes less than \$100,000, and significantly higher debt than students indicating parental incomes of \$200,000 or more. In addition, students indicating parental incomes of \$100,000 - \$199,999 were significantly less likely to anticipate being in debt than students indicating parental incomes of less than \$50,000, and were significantly more likely to anticipate being in debt than students indicating parental incomes of \$200,000 or more. Students indicating a parent holding a graduate/professional degree reported the lowest anticipated mean debt, and were the least likely to anticipate being in debt.

**Table 3: Mean Debt, Parental Income and Financial Independence/Dependence**

Parental Income	Debt		Debt %	% in Debt	
	Dependent	Independent	Difference	Dependent	Independent
\$49,999 or less	\$183,198 <sup>a</sup>	\$196,167 <sup>a</sup>	7%	96%	94%
\$50,000 - \$99,999	\$166,279 <sup>a<math>\alpha</math></sup>	\$185,272 <sup>a<math>\beta</math></sup>	11%	93%	93%
\$100,000 - 199,999	\$135,928 <sup>b<math>\alpha</math></sup>	\$184,606 <sup>a<math>\beta</math></sup>	30%	89%	92%
\$200,000 or more	\$102,530 <sup>c<math>\alpha</math></sup>	\$175,365 <sup>b<math>\beta</math></sup>	52%	69% <sup>*</sup>	91%

a,b,c Means within subcolumn noted by distinct letters differ significantly ( $p < 0.05$ ) by one-way ANOVA followed by the Games-Howell or Hochberg post-hoc test.

$\alpha, \beta$  Means within subrow noted by distinct letters differ significantly ( $p < 0.05$ ) by one-way ANOVA.

\*Starred percentage within subcolumn and subrow differs significantly from non-starred percentages ( $p < 0.05$ ) by z-test.

Eighty-nine percent of 2009-2010 first-year students reported parental income, financial independence/dependence and anticipated osteopathic medical school debt. Table 3 shows that as parental income increases, the percentage difference in expected mean debt between financially independent and dependent students also increases. Twenty percent of respondents indicated financial dependence and parental incomes of \$100,000 or more. The 8 percent of respondents indicating financial dependence and parental incomes of \$200,000 or more not only anticipated less debt than students in any other socio-economic category considered, but also were the least likely to anticipate being in debt; just 69 percent of financially dependent students with parents earning \$200,000 or more anticipated medical school debt.

**Table 4: Osteopathic Education Debt Consolidation**

	% Students	2009-2010 first-year students expected to repay their osteopathic medical school loans in an average of 12 years.
Will Consolidate Debt	39%	
Will Not Consolidate Debt	19%	
Undecided	42%	

**Table 5: Expected Net Income**

	Mean	Median	Mode	2009-2010 first-year students expected incomes that did not greatly differ from those reported by 2008-2009 first-year students. While 2009-2010 first-year students expected to earn an average of \$129,952 after completing an internship/residency, 2008-2009 first-year students expected to earn an average of \$128,923 the first year after completing an internship/residency.
One Year After Residency	\$129,952	\$120,000	\$100,000	
Five Years After Residency	\$187,780	\$170,000	\$200,000	
Ten Years After Residency	\$247,982	\$200,000	\$200,000	

**Table 6: Mean Expected Scholarship/Grants, First-Year Students 2009-2010\***

Source of Scholarship	Award <sup>‡</sup>			% Awarded		
	All Schools	Public	Private	All Schools	Public	Private
Total Scholarships/Grants	\$70,392	\$69,876	\$70,547	28%	31%	27%
National Health Service Corps (NHSC) Scholarship	\$108,756	\$101,200	\$111,778	1%	2%	1%
Armed Forces Health Professions (AFHP) Scholarship	\$211,953	\$217,442	\$210,421	6%	7%	6%
State Government Scholarship/Grant	\$18,502	\$21,350	\$17,863	4%	3%	4%
Award from Osteopathic School or its Parent University	\$15,636	\$17,983	\$14,949	9%	9%	8%
Tuition Waiver	\$37,764	\$38,150	\$37,213	1%	0% <sup>a</sup>	2% <sup>b</sup>
Osteopathic Association	\$7,160	\$7,580	\$6,970	2%	2%	1%
Other Sources	\$26,736	\$17,504	\$29,602	4%	4%	4%

\*All scholarship data are self-reported by respondents of the survey, see response rate Table A2 in Appendix.

‡Mean taken from responses greater than zero.

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

The \$70,392 mean award expected by 2009-2010 first-year students was 15 percent less than the \$82,923 expected by 2008-2009 first-year students. The \$70,547 mean award anticipated by 2009-2010 first-year students at private osteopathic medical schools was 17 percent less than the \$85,622 anticipated by 2008-2009 first-year students. However, the \$69,876 mean award anticipated by 2009-2010 first-year students at public osteopathic medical schools was 4 percent greater than the \$67,193 anticipated by 2008-2009 first-year students. The Armed Forces Health Professions (AFHP) Scholarship, osteopathic school/parent university, tuition waiver and "other sources" awards increased from 2008-2009 to 2009-2010.

**Table 7: Mean Award by Socio-Economics**

	Award <sup>‡</sup>	% Awarded	
<b>Gender</b>			For the 93 percent of first-year respondents indicating gender and/or race/ethnicity in addition to scholarship/grant awards received, Table 7 shows that females reported a significantly lower mean award than males. Among race/ethnicities, Asians had the lowest likelihood of receiving awards. However, while the \$36,279 mean award reported by Asians was significantly lower than the \$78,055 reported by white students, at $p < 0.05$ , the one-way ANOVA Games-Howell post-hoc test indicated the mean award reported by Asians did not differ significantly from the \$60,794 mean reported by students in the All Others category. Sample size of each race/ethnicity category may explain the failure of statistical tests to detect significant differences between the mean awards of students in the Asian and All Others categories.
Male	\$78,139 <sup>a</sup>	29%	
Female	\$62,083 <sup>b</sup>	28%	
<b>Race/Ethnicity</b>			
White	\$78,055 <sup>a</sup>	29% <sup>α</sup>	
Asian	\$36,279 <sup>b</sup>	22% <sup>β</sup>	
All Others	\$60,794 <sup>ab</sup>	34% <sup>α</sup>	
<b>Marital Status</b>			
Married/Cohabiting	\$91,170 <sup>a</sup>	32% <sup>α</sup>	
Single	\$63,147 <sup>b</sup>	27% <sup>β</sup>	
<b>Financial Status</b>			At least 94 percent of respondents indicated marital status, and/or financial independence/dependence in addition to scholarship/grant awards received. Married students reported a greater mean award and were more likely to receive awards than single students. Financially independent students were also more likely to receive awards, and they reported a mean \$83,129 award—\$43,333 more than the \$39,796 expected by financially dependent students.
Independent	\$83,129 <sup>a</sup>	30% <sup>α</sup>	
Dependent	\$39,796 <sup>b</sup>	24% <sup>β</sup>	
<b>Parental Income</b>			
\$49,999 and less	\$64,994	34% <sup>α</sup>	
\$50,000 - \$99,999	\$69,228	31% <sup>αβ</sup>	
\$100,000 - 199,999	\$79,483	28% <sup>β</sup>	
\$200,000 or more	\$65,402	19% <sup>γ</sup>	
<b>Parental Education</b>			
Graduate/Professional Degree	\$69,042	25% <sup>α</sup>	
Bachelor's Degree	\$68,170	28% <sup>α</sup>	
No College Degree	\$75,278	34% <sup>β</sup>	

‡Mean taken from responses greater than zero.

a,b Means within subcolumn noted by distinct letters differ significantly ( $p < 0.05$ ) by one-way ANOVA followed by the Games Howell post-hoc test when applicable.

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

Eighty-nine percent of respondents indicated parental income in addition to scholarship/grant awards received. Students indicating parental incomes of \$200,000 or more were the least likely to receive awards. At  $p < 0.05$ , the z-test showed the likelihood of receiving awards among students indicating parental incomes of

\$100,000 - \$199,999 differed significantly from students indicating parental incomes less than \$50,000 and more than \$199,999. For the 95 percent of respondents indicating parental education in addition to scholarships/grant awards received, Table 7 shows the likelihood of receiving awards was greatest for students indicating parents not holding a college degree.

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

	<b>All Schools</b>	<b>Public</b>	<b>Private</b>
Loans	72%	71%	72%
Scholarships/Grants	10%	10%	10%
Savings	3%	5%	3%
Earnings	5%	4%	5%
Parents	9%	8%	9%
Relatives	1%	0%	1%
Other	0%	1%	0%

\*Sources of Funds survey responses were disregarded when, compared to prior loan and/or scholarship amounts indicated, the responses were inconsistent; 20 percent of Sources of Funds responses were disregarded for this reason.

Table 8 shows that the adjusted 2009-2010 first-year student data indicates a similar distribution of funds for osteopathic medical school education as that reported by 2008-2009 first-year students. 2009-2010 first-year students reported a 5 percent decrease from the 2008-2009 figure of 77 percent indicating loans as a source of funds.

For Entering Student Surveys prior to 2009-2010, students were asked to separately indicate plans to participate in an osteopathic internship before their residencies. The complex wording and formatting of the questions led to inconclusive data. Thus, for the 2009-2010 Entering Student Survey, the Immediate Post-Graduate Plans questions were redesigned. The options of pursuing an internship or beginning a residency directly after graduation are listed as categorical choices within a single question.

**Note that because of the significant change in the Immediate Post-Graduate Plans section of the survey, attempts at analyzing 2009-2010 first-year data against previous first-year data would lead to inconsistent conclusions.**

**Table 9: Immediate Post-Graduate Plans, First-Year Students 2009-2010**

	% Students	Gender		Race/Ethnicity		
		Male	Female	White	Asian	All Others
Osteopathic Residency	28%	25% <sup>a</sup>	33% <sup>b</sup>	29% <sup>αβ</sup>	24% <sup>α</sup>	33% <sup>β</sup>
Dual AOA/ACGME-Approved Residency	14%	14%	14%	14% <sup>α</sup>	18% <sup>β</sup>	15% <sup>α</sup>
Internship	8%	7% <sup>a</sup>	10% <sup>b</sup>	8%	10%	7%
Allopathic Residency	7%	9% <sup>a</sup>	5% <sup>b</sup>	6% <sup>α</sup>	11% <sup>β</sup>	5% <sup>α</sup>
Government, NHSC, Military, VA, etc.	6%	8% <sup>a</sup>	5% <sup>b</sup>	7% <sup>α</sup>	2% <sup>β</sup>	6% <sup>α</sup>
Other or Undecided	36%	38% <sup>a</sup>	34% <sup>b</sup>	36%	35%	34%
Total	100%	100%	100%	100%	100%	100%

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

When compared with their male counterparts, 2009-2010 first-year female students were more likely to indicate plans to pursue an osteopathic residency or an internship, and they were less likely to indicate plans to pursue an allopathic residency or post-graduate activities within the government or related institutions. Female first-year students also were less likely to be undecided about future post-graduate plans than male first-year students.

Among race/ethnicities, Asian students were most likely to indicate plans to pursue a dual AOA/ACGME-approved or allopathic residency, and they were least likely to indicate plans to pursue post-graduate activities within the government or related institutions. While Asians also were less likely to pursue an osteopathic residency than students in the All Others category, at p<0.05, the z-test failed to indicate whether Asian students were more or less likely to pursue an osteopathic residency than white students.

**Table 10: Reasons Given for Planning an Allopathic or Dual AOA/ACGME-Approved Residency\***

	% Students
Opens more career opportunities	89%
Located in more suitable geographic location(s)	80%
Located in larger institution(s)	74%
Allows ABMS board certification	58%
Believe better training and educational opportunities available	57%
Better chance of being accepted in program	41%
Desire specialty training not available in osteopathic program	38%
Higher pay	24%
Shorter training period	10%
Other	3%

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

In Table 10, the percentages listed for each reason are taken from the 21 percent of students indicating a dual AOA/ACGME-approved or allopathic residency plan in the Immediate Post-Graduate Plans question.

At least 74 percent of respondents indicating a dual AOA/ACGME-approved or allopathic residency plan believed the residencies open more career opportunities and are located in more suitable geographic locations and/or larger institutions.

**Table 11: Board Certification Plans, First-Year Students 2009-2010**

	% Students	Gender		Race/Ethnicity		
		Male	Female	White	Asian	All Others
Osteopathic AOA Boards	28%	24% <sup>a</sup>	31% <sup>b</sup>	30% <sup>α</sup>	18% <sup>β</sup>	29% <sup>α</sup>
Both AOA and ABMS Boards	54%	56% <sup>a</sup>	52% <sup>b</sup>	52% <sup>α</sup>	67% <sup>β</sup>	52% <sup>α</sup>
Allopathic ABMS Boards	3%	4% <sup>a</sup>	2% <sup>b</sup>	3%	2%	2%
Other	0%	0%	0%	0%	0%	0%
Not Planning Board Certification	0%	0%	0%	0%	0%	0%
Undecided	15%	15%	15%	16%	13%	17%
Total	100%	100%	100%	100%	100%	100%

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

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

Table 11 shows that among 2009-2010 first-year students, females were more likely to indicate plans to take the AOA boards and less likely to indicate plans to take the ABMS or both boards than males. Among race/ethnicities, Asians were more likely to indicate plans to take both boards and less likely to indicate plans to take the AOA boards than white students or students in the All Others category.

While 54 percent of 2009-2010 first-year students indicated plans to pursue both AOA and ABMS board certifications (Table 11), Table 9 shows that only 43 percent (due to rounding) of first-year students indicated pursuing the prerequisite AOA or dual AOA/ACGME-approved residencies needed to pursue both the AOA and ABMS board certifications.

**Table 12: Reasons Given for Taking ABMS (Allopathic) or Both Boards\***

	% Students
ABMS board certification provides more opportunities	91%
ABMS board certification is more widely recognized	79%
Personal desire for dual certification	75%
Hospital privileges more readily obtained with ABMS board certification	55%
ABMS board certification has more colleague acceptance	53%
Licenses more readily obtained with ABMS board certification	44%
ABMS board certification carries more prestige	30%
Other	2%

\*Each respondent indicating allopathic or both AOA and ABMS board certification plans could choose one or more of the listed reasons influencing board certification choice.

In Table 12, the percentages listed for each reason are taken from the 57 percent of students indicating an ABMS or both boards certification plan.

At least 79 percent of students indicating an ABMS or both boards certification plan believed ABMS board certification provides more opportunities and is more widely recognized. Three-quarters of the students indicating an ABMS or both boards certification plan reported a personal desire for dual certification.

**Table 13: Long-Range Career Plans, First-Year Students 2009-2010**

	% Students	Gender		Race/Ethnicity		
		Male	Female	White	Asian	All Others
Group or Other Type of Private Practice	41%	40%	41%	43% <sup>α</sup>	35% <sup>β</sup>	37% <sup>β</sup>
Self-Employed with or without a Partner	12%	13% <sup>a</sup>	10% <sup>b</sup>	12%	10%	10%
Practice in an HMO	10%	9%	11%	9% <sup>α</sup>	15% <sup>β</sup>	7% <sup>α</sup>
Government, NHSC, Military, VA, etc.	8%	8%	7%	8% <sup>α</sup>	5% <sup>β</sup>	11% <sup>γ</sup>
Other Professional Activity	3%	3%	3%	2% <sup>α</sup>	5% <sup>β</sup>	6% <sup>β</sup>
Undecided	27%	27%	28%	26%	31%	29%
Total	100%	100%	100%	100%	100%	100%

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

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

Among 2009-2010 first-year students, males were more likely to indicate plans to be self-employed with or without a partner than females; white students were more likely to indicate plans to enter a group or other type of private practice than other race/ethnicities; students in the All Others category were more likely to pursue a practice within the government or related institutions than white or Asian students; and Asians were more likely to indicate plans to practice in an HMO than other race/ethnicities.

The preference for future HMO practice by Asians may be due to the number of Asians planning to practice in California, where a large portion of physicians practice within an HMO. Among 2009-2010 first-year students, 24 percent of Asian students indicated plans to practice in California--at p<0.05 (z-test), a statistically greater percentage than the 7 percent of white students and the 10 percent of students in the All Others category also planning to do so. Thus, the difference in future practice plans in California across race/ethnicities may account for the statistical difference in HMO practice plans across race/ethnicities.

**Table 14: Practice in Underserved/Shortage Area**

	% Students	% Decided
Yes	40%	83%
No	9%	17%
Unsure	51%	--
Total	100%	100%

Nearly all 2009-2010 survey respondents answered the question regarding their plans to practice in an underserved/shortage area. More than one-half were uncertain as to their future decision. Among the decided respondents, 83 percent indicated plans to practice in underserved/shortage areas.

**Table 15: Size of Location Planned for Practice After Residency**

	% Students	% Decided
Major Metropolitan Area (1,000,001 +)	15%	19%
Metropolitan Area (500,001 - 1,000,000)	16%	20%
City (100,001 - 500,000)	17%	22%
City (50,001 - 100,000)	10%	13%
City or Town (10,001 - 50,000)	13%	17%
City or Town (2,501 - 10,000)	6%	7%
Town under 2,501	2%	2%
Other or Undecided	21%	--
Total	100%	100%

Almost all 2009-2010 survey respondents also answered the question regarding their post-residency practice location size plans. While 21 percent of respondents were uncertain about post-residency practice location size, 74 percent of decided 2009-2010 first-year students indicated plans to practice in a city with a population of more than 50,000.

**Table 16: Percentage of Students Who Plan to Practice in Underserved/Shortage Areas by Socio-Economics**

	<b>% Students</b>
<b>Gender</b>	
Male	35% <sup>a</sup>
Female	45% <sup>b</sup>
<b>Race/Ethnicity</b>	
White	38% <sup>a</sup>
Asian	38% <sup>a</sup>
All Others	58% <sup>b</sup>
<b>Marital Status</b>	
Married/Cohabiting	45% <sup>a</sup>
Single	39% <sup>b</sup>
<b>Financial Status</b>	
Independent	44% <sup>a</sup>
Dependent	34% <sup>b</sup>
<b>Parental Income</b>	
\$49,999 and less	52% <sup>a</sup>
\$50,000 - \$99,999	43% <sup>b</sup>
\$100,000 - 199,999	36% <sup>c</sup>
\$200,000 or more	30% <sup>d</sup>
<b>Parental Education</b>	
Graduate/Professional Degree	37% <sup>a</sup>
Bachelor's Degree	40% <sup>a</sup>
No College Degree	47% <sup>b</sup>

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

At least 92 percent of respondents indicated gender, race/ethnicity, marital status, financial independence/dependence, parental income and/or parental education in addition to underserved/shortage area practice plans. Considering these factors, females, students in the All Others category, married students, financially independent students, and students indicating parents not holding a college degree were more likely to indicate plans to practice in underserved/shortage areas. Table 16 also shows the lower the parental income of the student, the more likely the student plans to practice in an underserved/shortage area.

**Table 17: Specialization, First-Year Students 2009-2010**

	% Students
Family Practice	13%
Internal Medicine, General	5%
Pediatrics, General	5%
Emergency Medicine	11%
Internal Medicine, Subspecialty	9%
Orthopedic Surgery	7%
Pediatrics, Subspecialties	6%
OB/GYN and Subspecialties	4%
Surgery Subspecialties	3%
Surgery, General	3%
Anesthesiology	3%
Sports Medicine	3%
Dermatology	2%
Radiology and Subspecialties	2%
Neurology and Subspecialties	2%
Psychiatry and Subspecialties	2%
Physical Medicine & Rehabilitation Med.	1%
Ophthalmology	1%
Plastic Surgery/Reconstructive Surgery	1%
Pathology and Subspecialties	1%
Geriatrics	1%
Osteopathic Manipulative Medicine	0%
Otolaryngology	0%
Preventive Medicine and Subspecialties	0%
Thoracic Surgery	0%
Allergy and Immunology	0%
Urology/Urological Surgery	0%
Medical Genetics	0%
Vascular Surgery	0%
Critical Care	0%
Nuclear Medicine	0%
Colon Rectal Surgery	0%
Undecided or Indefinite	13%
Total	100%

Primary Care  
Specialties

**Table 18: Primary Care Plans, First-Year Students 2009-2010**

	% Students	% Decided
Primary Care	23%	26%
Non-Primary Care	65%	74%
Undecided	13%	--
Total	100%	100%

**Table 19: Percentage of Students Who Plan to Practice Primary Care Specialties by Socio-Economics**

	% Students
<b>Gender</b>	
Male	18% <sup>a</sup>
Female	27% <sup>b</sup>
<b>Race/Ethnicity</b>	
White	22%
Asian	23%
All Others	24%
<b>Marital Status</b>	
Married/Cohabiting	24%
Single	22%
<b>Financial Status</b>	
Independent	23%
Dependent	22%
<b>Parental Income</b>	
\$49,999 or less	26% <sup>a</sup>
\$50,000 - \$99,999	24% <sup>a</sup>
\$100,000 - 199,999	23% <sup>a</sup>
\$200,000 or more	17% <sup>b</sup>
<b>Parental Education</b>	
Graduate/Professional Degree	21%
Bachelor's Degree	24%
No College Degree	25%
<b>Parental Profession</b>	
DO/MD*	20%
Non DO/MD	23%

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

\*Category includes the 14 percent of respondents who indicated a DO/MD father and/or mother.

Twenty-three percent of 2009-2010 first-year respondents indicated that they plan to pursue primary care specialties (Tables 17 and 18), 7 percent more than the 16 percent of 2008-2009 first-year respondents who indicated likewise.

At least 92 percent of all respondents indicated gender, race/ethnicity, marital status, financial independence/dependence, and/or parental income in addition to specialty plans. Considering these factors, Table 19 shows females were more likely to indicate primary care specialty plans, while students with parental incomes of \$200,000 or more were less likely to indicate primary care specialty plans.

**Table 20: Specialty Choice Decision Factors**

	Mean Influence Rating*	
Like Dealing with People	3.1	Strong Influence
Intellectual Content of the Specialty	3.1	
Skills/Abilities	2.8	
Lifestyle	2.8	
Like the Emphasis on Technical Skills	2.4	Moderate Influence
Role Models	2.3	
Desire for Independence	2.3	
Previous Experience	2.2	
Academic Environment	2.1	
Prestige/Income Potential	1.8	
Debt Level	1.7	
Opportunity for Research/Creativity	1.7	
Peer Influence	1.7	

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

Nearly all 2009-2010 first-year respondents rated the importance of each factor listed in Table 20 in future specialty choice selection on a scale from zero to four; zero being "No Influence," four being "Major Influence."

Respondents indicated that dealing with people and the intellectual content of the specialty selected were the strongest influences on specialty choice, with each of these factors receiving the highest mean influence rating of 3.1.

Respondents indicated that prestige/income potential of the specialty selected, debt level, the opportunity for research/creativity of the specialty selected and peer influence were moderate influences on specialty choice, with each of these factors receiving the lowest mean influence rating of 1.7.

**Table A1: 2009-2010 First-Year Student Response Rate to the AACOM Entering Student Survey**

Response Rate Range	Number of COMs
90% or more	Seven
75% - 89%	Six
50% - 74%	Three
25% - 49%	Nine
Less than 25%	Three

Mean response rate for all COMs: 62%

The 62 percent mean response rate for the 2009-2010 Entering Student Survey was down 9 percent from the 71 percent response rate of the 2008-2009 survey. While all schools participated in the survey, less than half the entering student body responded at 12 schools.

2009-2010 was the first academic year the Entering Student Survey was administered solely through an online form.

**Table A2: Response Rate to Debt, Scholarship and Specialty Survey Questions**

	Response Rate
<b>Debt</b>	
Loans for Osteopathic Medical Education	98%
At Entry, Loans Owning for Undergraduate Education	99%
Family Loans to be Repaid by Student	77%
Non-Educational Debt	94%
<b>Scholarships/Grants</b>	
Total Scholarships/Grants*	96%
National Health Service Corps Scholarship	64%
Armed Forces Health Professions Scholarship	65%
State Government Scholarship/Grant	64%
Award from Osteopathic School or its Parent University	65%
Tuition Waiver	64%
Osteopathic Association	64%
Other Sources	64%
<b>Specialty</b>	
Specialty Choice	100%

Responses to all debt and scholarship/grant survey questions are voluntary.

\*The 96 percent response rate for total scholarships reported by 2009-2010 first-year students is an aggregate of all scholarship question responses.