

Some Factors Impacting Osteopathic Medical School Graduates' Specialty Selection—A Preliminary Exploration of Recent Historical Data

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The American Association of Colleges of Osteopathic Medicine (AACOM) annually surveys its first-year and graduating students. The first-year student survey is administered on each college campus during the first weeks of the academic year. The graduating student survey is administered to graduating seniors by each of the colleges in the second semester of the graduation year. Some colleges administer the survey before match results are known and others after match results are known. Response rates for the first-year survey

range from 78 percent to 90 percent; response rates for the graduating student survey range from 66 percent to 86 percent.

- Both surveys ask students to indicate their likely specialty choice.
- The graduating student survey also includes questions on the “whys” of specialty selection.
- Both surveys collect demographic data including gender, race and ethnicity, marital status, dependent status, citizenship status, state

of legal residence, size of community of legal residence, parent(s)' education level and financial dependency status.

This presentation reports on a preliminary analysis of some elements of these data. The comparisons of first-year to graduating-student responses are comparisons of cohorts and not of individual responses. The authors welcome suggestions for additional analysis and comments.

First-Year and Graduation-Year Specialty Selection

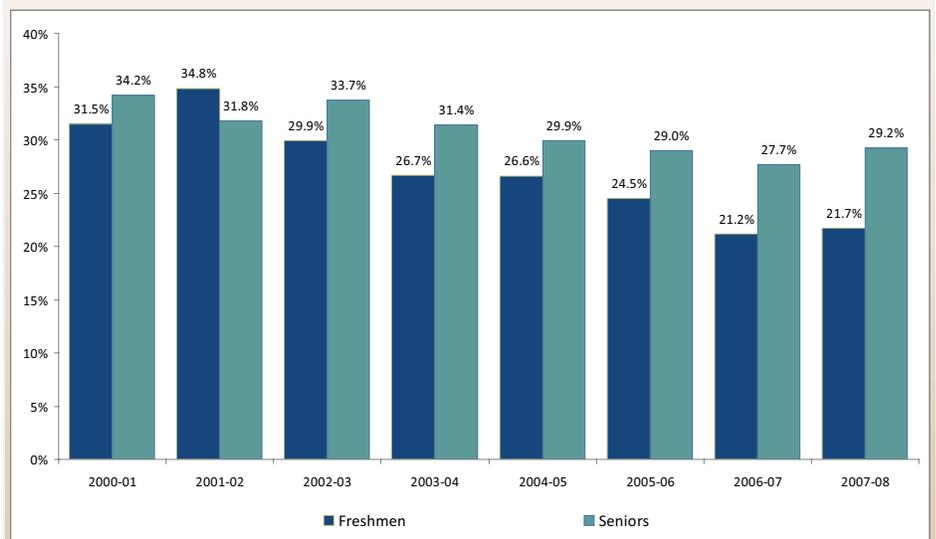
With the exception of the 2001-2002 academic year graduates, the percentage of 2000-2001 through 2007-2008 osteopathic graduates planning to specialize in the primary care disciplines (general internal medicine, family practice and general pediatrics) increases from the entering year to the graduation year. The percentage of 2001 graduates (who entered medical school in fall 1997) planning to specialize in primary care increased by 2.7 percent, from 31.5 percent to 34.2 percent. The change among 2008 graduates (who entered medical school in fall 2004) was 7.5 percent to 29.2 percent planning to specialize in primary care.

The factors accounting for this increase in primary care plans by osteopathic students over the four years of medical school present an interesting area for further exploration: Does osteopathic medical education or the osteopathic medical student body display distinctive characteristics that might explain this growth in interest in primary care?

The overall percentage of graduates planning to specialize in primary care declined from 2000-2001 to 2006-07, but increased in 2007-2008. Dur-

ing these years, the same decline is evidenced among first-year medical students.

Percentage of Students Planning Primary Care Specialties



Primary Care Specialty Selection and Gender

The percentage of graduates planning to specialize in primary care has consistently declined for both female and male graduates, but the rate of decline for both men and women has varied little since 2006.

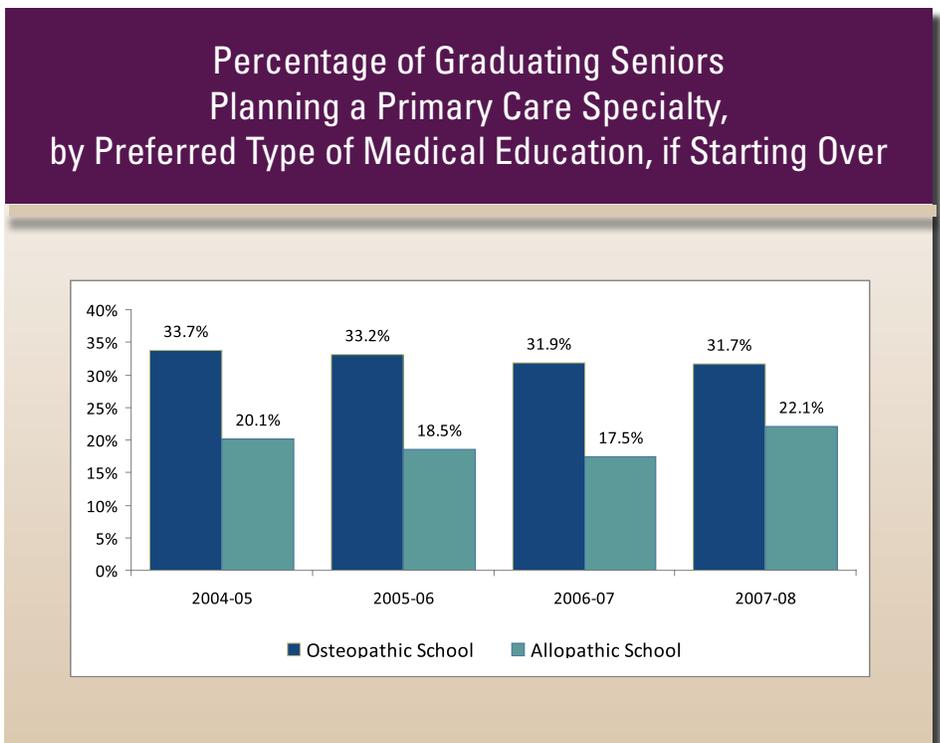
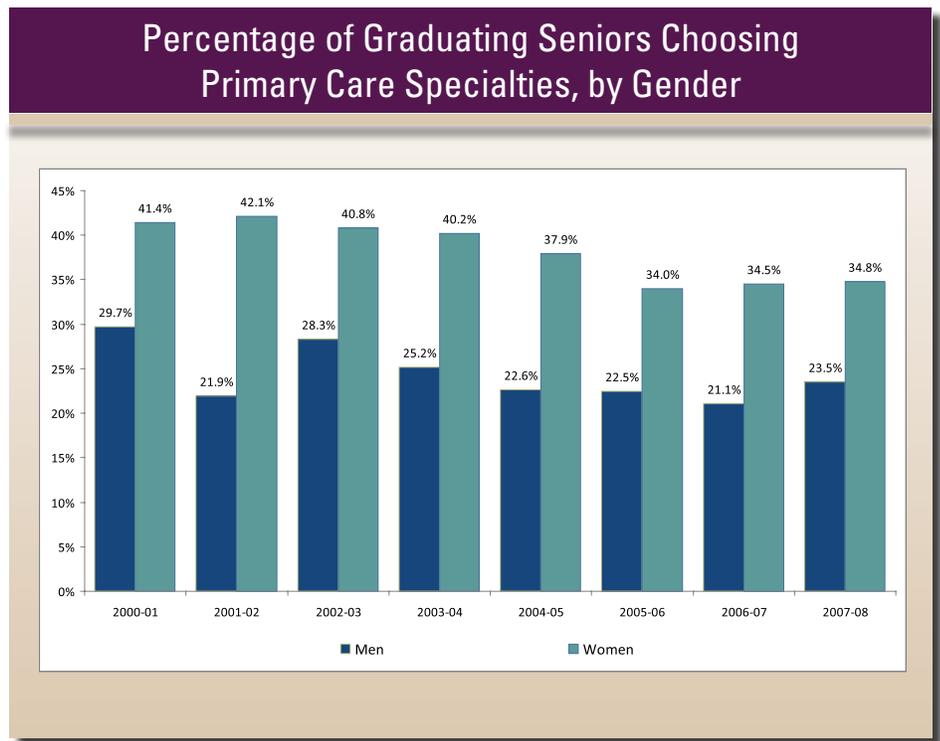
The percentage of female osteopathic graduates planning to specialize in one of the primary care disciplines of general internal medicine, family medicine and general pediatrics has declined by about 8 percent since 2001. From the 2001 graduating class through the 2008 graduating class, the percentage of female graduates planning to specialize in primary care has ranged from a high of 42.1 percent in 2002 to a low of 34.0 percent in 2006. Among male graduates, 2001 was the class with the largest percentage of graduates (29.7 percent) planning to specialize in one of the primary care disciplines; 2007 saw the lowest percentage of male graduates (21.1 percent) planning a primary care specialty.

Selecting an Osteopathic Medical Education and Primary Care Specialty Selection

Since 2005, graduating seniors have been asked the following question: If given the opportunity to begin your medical education again, would you prefer to enroll in:

- The osteopathic medical school from which you are about to graduate;
- Another osteopathic medical school;
- An allopathic medical school; or
- Would not have gone to medical school at all.

Over the four years, the overall percentage of those reporting that they would repeat an osteopathic medical education is 74 percent, compared with 21 percent who would select an allopathic



education and 5 percent who would not attend medical school.

We compared the primary care specialty selection of those respondents who indicated that they would attend an osteopathic medical school, either the same or a different one, with the responses of those who indicated they

would attend an allopathic medical school. For all four years studied, roughly one-third of those who would repeat an osteopathic medical education indicate a primary care selection, compared to roughly one-fifth of those who would select an allopathic medical school were they to do it over again.

Factors Influencing Specialty Choice Decision

A series of questions asks graduating seniors to indicate the relative strength of the influence of various factors in specialty choice. The specific item reads:

Please indicate the importance of each of the following factors affecting your specialty choice decision:

- Intellectual content of the specialty (type of work, diagnostic programs, diversity);
- Like dealing with people (type of person, type of patient) more than techniques;
- Prestige/income potential;
- Lifestyle (predictable working hours, sufficient time for family);
- Like the emphasis on technical skills;
- Role models (e.g., physicians in the specialty);

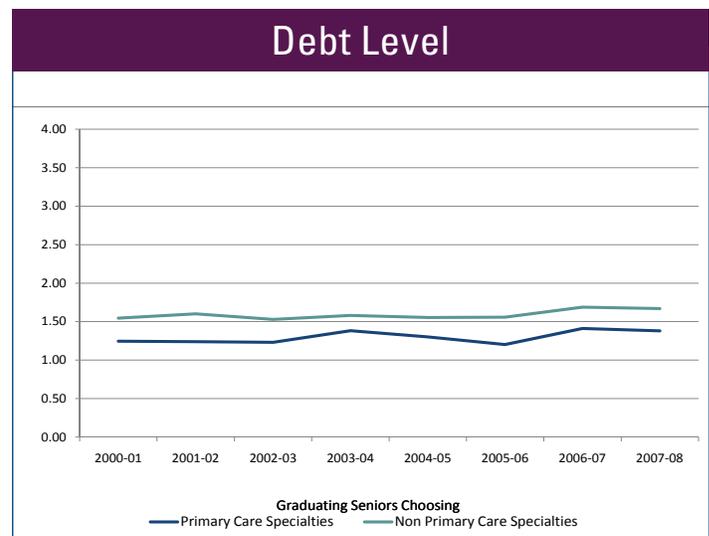
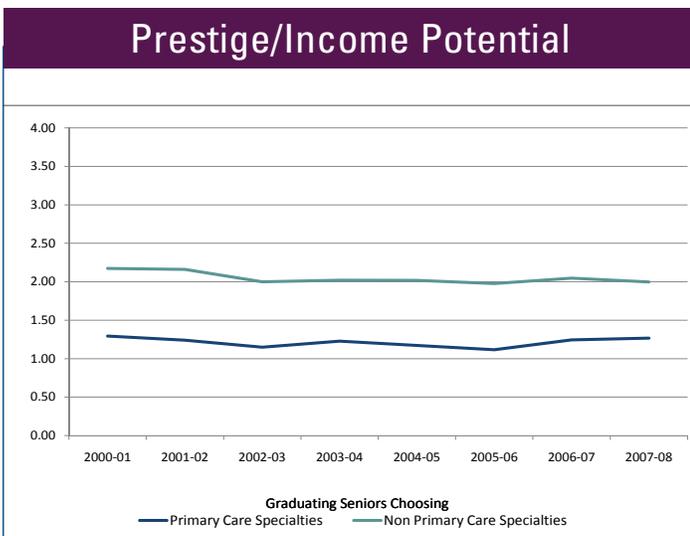
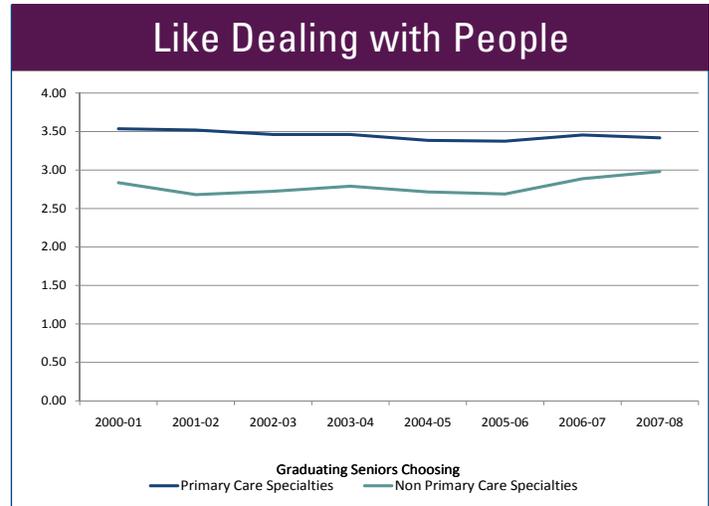
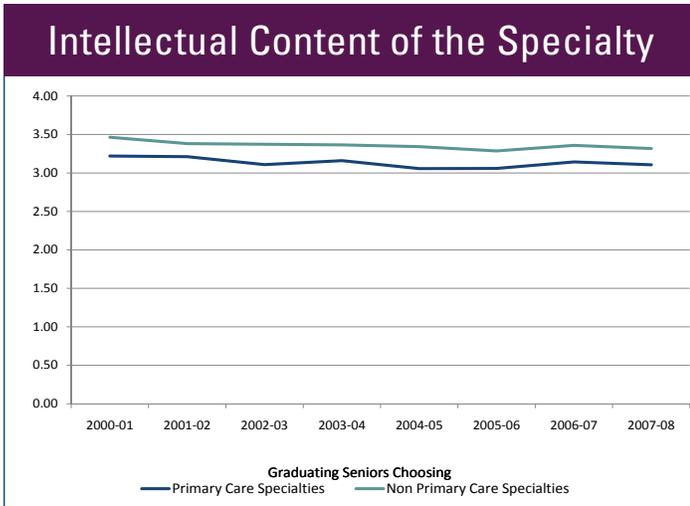
- Peer influence (encouragement from practicing physicians, faculty, or other students);
- Skills/abilities (possess the skills required for the specialty or its patient population);
- Debt level (level of debt, length of residency, high malpractice premiums);
- Academic environment (courses, clerkships in the specialty area);
- Opportunity for creativity/research;
- Desire for independence; and
- Previous experience.

The responses range from a high of 4 to a low of 0, with the anchor phrases “4-major influence,” “3-strong influence,” “2-moderate influence,” “1-minor influence” and “0-no influence.”

Mean scores were calculated for those indicating a plan to specialize in primary care and those not planning to specialize in primary care. The means were compared using the ANOVA test. Several of the comparisons are notable:

Graduating seniors choosing primary care specialties indicate a greater affinity with the factor “like dealing with people” at a statistically significant level for each year. The mean ratings for those planning to specialize in primary care range from 3.37 to 3.54, compared with ratings ranging from 2.69 to 2.89 for those not planning to specialize in primary care. This is the only influence for which the mean ratings of those planning to specialize in primary care are consistently higher over time.

Several other influences show a statistically significant difference between the mean ratings by graduates planning on primary care and those who are not planning on primary care specialties.



The mean ratings of the following influences are higher for those *not* planning a primary care specialty:

- Intellectual content of the specialty (type of work, diagnostic programs, diversity);
- Prestige/income potential;
- Like the emphasis on technical skills;
- Skills/abilities (possess the skills required for the specialty or its patient population);
- Debt level (level of debt, length of residency, high malpractice premiums);
- Academic environment (courses, clerkships in the specialty area);
- Opportunity for creativity/research.

However, among all respondents, only a few of the influence factors drew mean ratings above “strong influence (3)”:

- Intellectual content of the specialty — for both those planning to specialize in primary care and those not planning to specialize in primary care;
- Like dealing with people for those planning to specialize in primary care; and

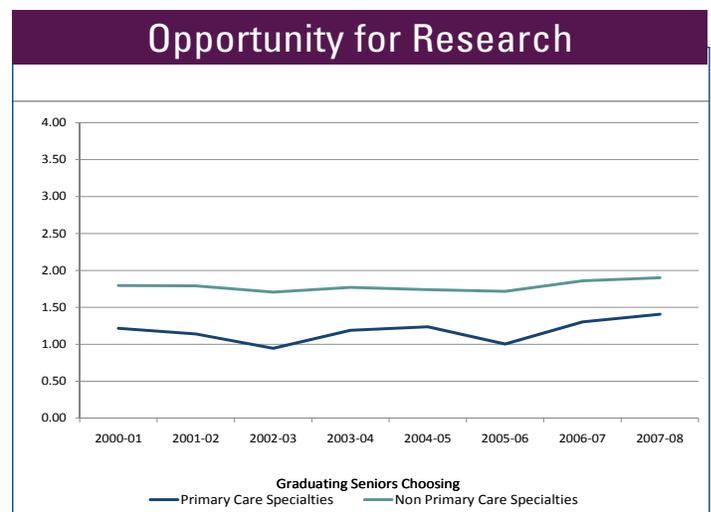
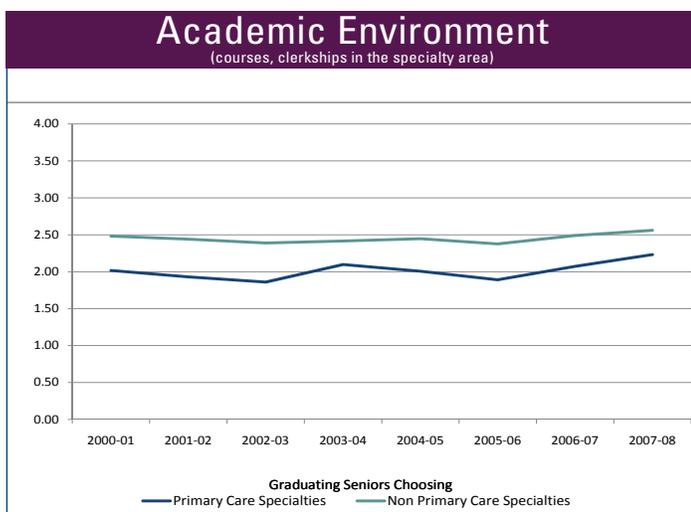
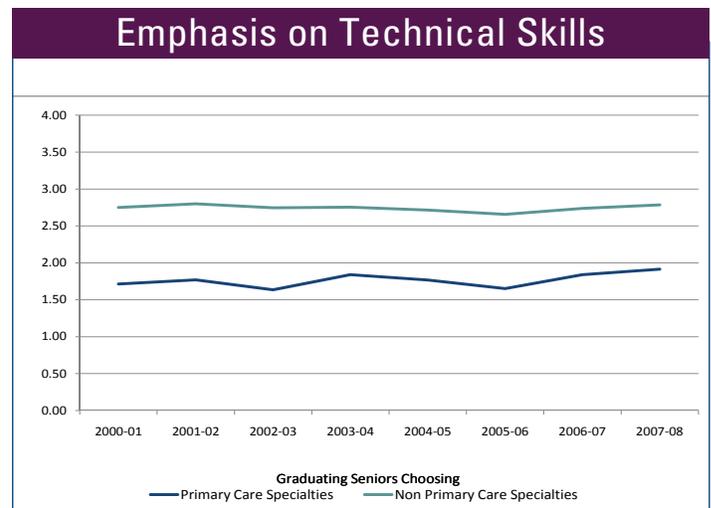
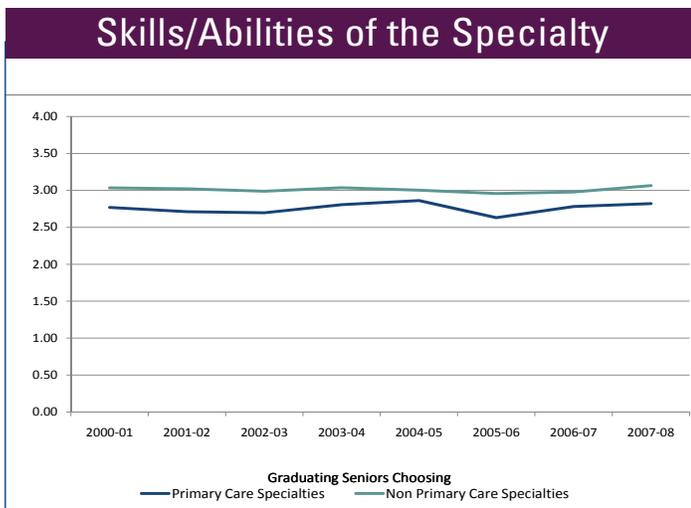
- Skills/abilities for those not planning to specialize in primary care.
- Opportunities for further exploration will come from combining these influences for further analysis.

Questions for Further Research

The data from the first-year and graduating student surveys, combined with data that might be mined from the applications to osteopathic medical school, offer rich opportunities to explore additional factors influencing specialty selection by osteopathic medical students.

- The curricular and other medical school experiences of students who plan to specialize in primary care;
- Demographic factors that might influence primary care specialty choice;
- Satisfaction with pre-clinical and clinical medical school experiences; and
- Influences of faculty members and other mentors in medical education.

The authors welcome suggestions for further exploration of these data.



* All Factors Influencing Specialty Choice Decision means differences are significant at the <.05 level using Analysis of Variance.

About AACOM

The American Association of Colleges of Osteopathic Medicine (AACOM) promotes excellence in osteopathic medical education, in research and in service, and fosters innovation and quality among osteopathic colleges to improve the health of the American public.

An ongoing goal for AACOM is to improve the comprehensiveness and quality of the longitudinal data that it collects and maintains on osteopathic students. This will further enable useful research on osteopathic medical education and specialty choice determinants.

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