

## Future Medical School Applicants, Part II: Gender Diversity

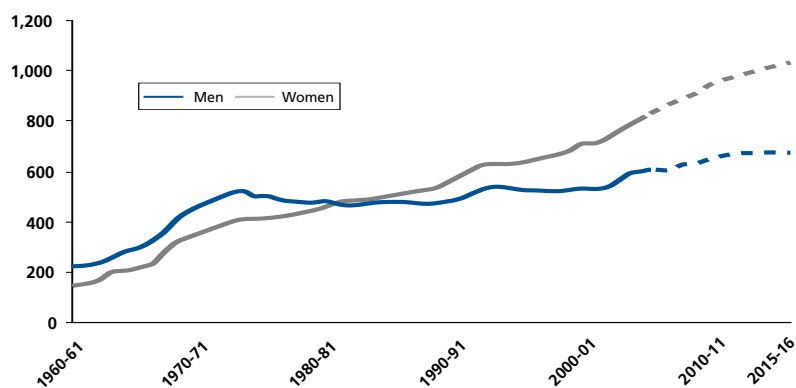
In a previous *Analysis in Brief*, we examined whether enough new applicants will apply to medical school to sustain increases in medical school enrollment.<sup>1</sup> We projected that if 2 percent of new college graduates apply to medical school annually, then by 2010, there should be enough applicants to support a 30 percent increase over 2002 entering enrollment. Yet while the size of future applicant pools appears adequate, questions remain about the composition of these pools. If medical schools expand, will enough women and minorities apply to maintain and improve diversity in both the medical school classroom and the physician workforce? In this *Analysis in Brief*, we examine applicant trends by gender. (In a forthcoming analysis, we address race/ethnicity in applicant trends.)

### Gender Gap #1: Undergraduate Degrees

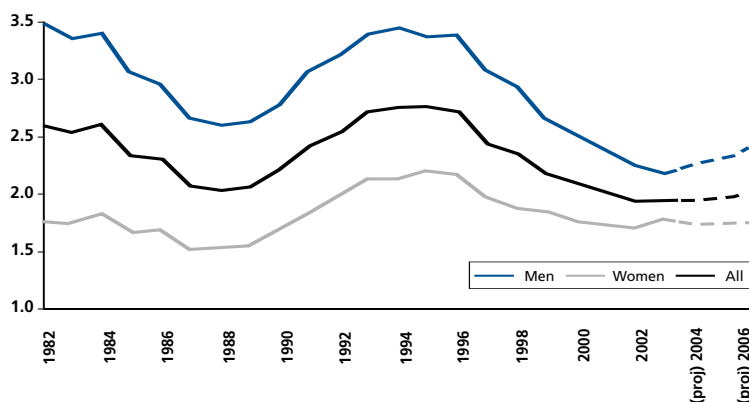
Figure 1 graphs data from the National Center for Education Statistics (NCES) on the annual number of baccalaureate degrees awarded nationally by gender.<sup>1</sup> Note the shift in this population. Women first earned more degrees than men in 1981–82, and this gap has widened. Since 2002, women have earned 58 percent of B.A./B.S. degrees; by 2015–16, women's share is projected to grow to 60 percent: 1,028,000 degrees compared to men's 677,000.

The shift in baccalaureate degrees towards women did not immediately translate to more women applying to medical school than men. It was not until 2002—a generation after the

**Figure 1.**  
Actual and Projected Baccalaureate Degrees by Gender, U.S. 4-year Institutions, 1960–61 to 2015–16 (in thousands)



**Figure 2.**  
Applicant Yields by Gender, U.S. Medical Schools, 1982 to 2006



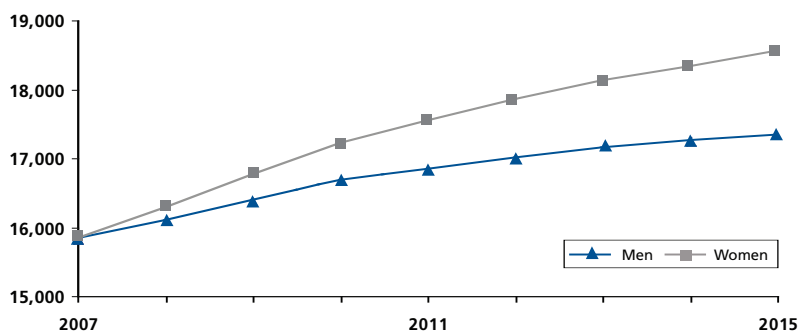
undergraduate shift—that women constituted over half of all first-time applicants to medical school. Women have constituted more than 50 percent of all first-time applicants since then, with a high of 52.5 percent in 2003.

### Gender Gap #2: Applicant Yields

While women now comprise a majority of first-time medical school applicants, that majority is much slimmer relative to women's undergraduate numbers. This fact suggests that—although a number of factors may be involved—

<sup>1</sup> References and additional data available at [www.aamc.org/data/aib](http://www.aamc.org/data/aib)

**Figure 3.**  
Projected First-time Applicants by Gender, U.S. Medical Schools, 2007 to 2015



medicine has not been as attractive to women as it has been to men.

One way of comparing medicine's relative attraction is to compare men's and women's "applicant yields." We computed applicant yield by dividing the number of first-time applicants in one year by the number of baccalaureate degrees awarded nationwide the previous year. This calculation indicates that, despite fluctuations, men's annual applicant yields have been consistently higher than women's yields (Figure 2).

From 1982 to 2006, men's applicant yields declined from 3.5 to 2.4 percent, with a low of 2.2 percent as recently as 2003. It is encouraging that, if NCES estimates for recent years prove accurate, men's applicant yields appear to have stabilized since 2003, which may signal an end to a long-term decline in men's interest in medicine.

In absolute numbers, men's applications to medical school fluctuated more dramatically than women's applications. But women applied to medical school at lower rates than men, with applicant yields ranging between 1.5 and 2.2 percent during 1982–2006. Still, the variation between lowest and highest yields is less for women than for men; thus, it can be said that women have

been more constant in their interest in medicine—a point first made by Cooper (2003).<sup>1</sup>

### Will Future Applicant Pools Be Gender Diverse?

The conflicting characteristics of the two gender gaps make it difficult to paint an exact picture of the gender makeup of future applicant pools. Using applicant-yield calculations, Figure 3 offers estimates for first-time applicants through fall 2015. For these estimates, we multiplied the average men's (2.6%) and women's (1.8%) applicant yields for the past 10 years (1997–2006) by NCES projections for baccalaureate degrees by gender.

Applicants to medical school have been relatively balanced between men and women in recent years. Since 2001, women have constituted between 49 and 53 percent of first-time applicants and between 48 and 51 percent of all applicants. The two countering gender gaps—more women earning B.A./B.S. degrees but a higher men's applicant yield—may contribute to this balance. But the balance may be short-lived. If the undergraduate gender gap widens as projected, then more of the applicants knocking on the doors of medical school could be the women earning more of the B.A./B.S. degrees.

To further complicate the picture, we note that these projections do not factor in the reality that women have begun to dominate the undergraduate biology major, which is still the primary pathway to medical school for both male and female applicants. According to National Science Foundation (NSF) data, from 1995 to 2004, women's share of bachelor's degrees awarded in the biological sciences by U.S. degree-granting institutions jumped from 52.6 to 62.5 percent.<sup>1</sup> Still, further research is needed to clarify just how the growth in biology degrees is translating to women's decisions to pursue medicine or other graduate programs in science. We point out, for example, that the NSF data show that, during the same period, men dominated doctorates in the biological sciences by a 2:1 margin.

### Conclusion

In a prior *Analysis in Brief*, we projected that growth in the undergraduate population will likely boost applicant numbers to levels needed to sustain a sizeable increase in medical school enrollment. This current analysis of undergraduate trends indicates that medical schools will see a greater share of women applicants, especially if men's interest in medicine, as measured by applicant yield, does not rise. One item to watch for in the next few years is whether more men will apply to medical school and reverse the decline in male interest in medicine evidenced during the last decade.

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