Medical School Graduates Entering Family Medicine: Increasing the Overall Number

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In this issue of Family Medicine, Biggs et al provide the 31st annual report of the American Academy of Family Physicians (AAFP) Division of Education on the number of graduates of allopathic medical schools choosing family medicine residencies. While this valuable report provides both the raw number and the percent of students entering family medicine from each school, it ranks schools only by percent. The schools with the highest percentages over the preceding 3 years determine the recipients of the AAFP’s annual “Top Ten” awards. We believe that both number and percent are important characteristics to consider and that the number has traditionally been undervalued relative to the percent.

The impact that schools with high percentages of students entering family medicine have on increasing the family medicine workforce may be limited because many of these schools have smaller class size. For example, the University of North Dakota had one of the nation’s highest percentages (21.8%), with 12 of its 55 graduates entering family medicine. The University of Indiana had a percentage just slightly above the national average (9.9%), but produced 2.5 times as many family medicine residents (30) because it has one of the largest class sizes in the nation (303). Thus, while schools that have higher percentages of students entering family medicine are obviously doing an excellent job, the contribution to the family medicine workforce may be greater from larger schools with larger numbers of students entering the specialty even when their percent production is only at the national average.

To account for both of these factors, as well as to produce a longer-term view, we have compiled 10 years of data from these reports (2002–2011), averaging both the number and percent of graduates from each school over that period. We ranked them all by both number and percent and then totaled the rank number in each category to get a “sum” ranking, where lower is better. By this sum, the University of Kansas ranked first, with a sum score of 3 (#1 in average percent of students, 18.85%, and #2 in average number of students, 31.3), and the University of Minnesota with a score of 6 (#1 in average number of students, 36.8, and #5 in percent, 17.16%) ranked second. The top private school, Loma Linda University, was ranked #4 overall, with a sum score of 15 (#6 in average # of students, 24.4, and #9 in average %, 15.85%). This provides us with an opportunity to look at the contribution of schools to the family medicine workforce and decreases the impact of year-to-year variation.

One trend we have noticed is that while the number of US allopathic students entering family medicine has leveled off at about 8% of total graduates, this is a significant decrease from previous blocks of years. For example, the University of Minnesota was the school with the highest total number of students entering family medicine in the 10-year period from 2002–2011 (368), but this was 18 fewer than the 10-year period ending 1 year earlier (386) and 78 fewer than the 10-year period ending just 3 years earlier (1999–2008). Most of the schools in the top tier are producing half the number of students entering family medicine compared to what they were 10
years ago: The University of Minnesota went from 62 in 1999 to 26 in 2011, the University of Kansas went from 54 to 23, the University of Iowa went from 45 to 27, and Wayne State University went from 43 to 24.

In spite of this decline, it is clear that some large schools have been consistently more successful in graduating a high percentage of students entering family medicine than others. The two top-ranked schools for producing family physicians as ranked by the sum score, the University of Kansas and the University of Minnesota, have important similarities. Both are Midwestern public schools with a mission to provide doctors for their state health care needs. Both have a regional campus with strong commitment to placing doctors in rural practice. Both states have active scholarship programs to encourage students to enter primary care practice in rural areas.

Other large public Midwestern schools also have high numbers and percentages. These include the University of Arkansas (17%; 8th in total number, sum rank #3) and the University of Iowa (15.9%; 9th, sum rank #5).

However, there are other public Midwestern universities that have not done nearly so well in producing family doctors. Indeed, by whatever criterion one chooses to divide medical schools into categories (private/public, large/small, national/regional, etc), some schools are doing better than others. Our cumulative ranking, based on the percentage and total number of students going into family medicine can be used to measure the success of a school compared to other similar schools.

Comparing the sum ranking to other rankings of national significance is interesting. Only one of the schools in the 2011 US News and World Report “Top 10” for family medicine was in the top 10 for actually producing family medicine residents (the University of Washington); indeed, three of US News’ “Top10” schools were in the bottom 25 of all schools for producing family medicine residents. When comparing the sum ranking to rankings for overall funding from the National Institutes of Health (NIH), only the University of Washington is in the top 10 for both, and in NIH rankings for family medicine, only the University of Minnesota is in the top 10 for both. Thus, a metric that looks at production of family medicine residents does not seem to correlate to other national measures of departmental success and may be useful for discussions with academic center leadership.

More importantly, to increase the family medicine workforce sufficiently to even approach an appropriate primary care/specialist ratio, we cannot continue to produce an average of 8% of students entering family medicine. Our worst-performing schools need to be at the level of our currently best-performing schools, around 20%. Our biggest schools must be challenged to also be high percent producers. In the current environment of reduced student interest in primary care, it is important to identify the reasons that some schools have been able to be more successful than others and, hopefully, to replicate their success.

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References