Trends in Faculty Attrition at U.S. Medical Schools, 1980-1999

Access to reliable, nationwide data on faculty attrition is essential for leaders in academic medicine who wish to put the rates and patterns of faculty leaving their own institutions within a national context. To provide these data, AAMC researchers have analyzed trends in the attrition of full-time faculty in U.S. medical schools over a 20-year period between 1980 and 1999. In this analysis, we addressed the following questions: 1) Are medical school faculty members leaving their positions at an increasing rate? 2) Do trends in attrition rates vary among faculty by degree (M.D. vs. Ph.D.) and department type (clinical vs. basic science)? and 3) Do trends in attrition rates vary among faculty by gender and race?

For the purposes of this study, we defined attrition as leaving a full-time faculty appointment at a medical school for any reason. We obtained data from the AAMC’s Faculty Roster System (FRS), which contains information on more than 90% of all full-time medical school faculty in the United States.

Between 1980 and 1999, the numbers of U.S. medical schools and medical students remained essentially unchanged. But the same period saw the number of full-time medical school faculty rise steadily, a trend driven primarily by substantial increases in the number of clinical faculty. The number of M.D. clinical faculty reported to the FRS nearly doubled over this period from 30,689 to 60,973 individuals. The number of Ph.D. clinical faculty more than doubled from 5,656 to 11,887 individuals. In contrast, the number of Ph.D. basic science faculty grew modestly from 8,894 to 11,393 individuals. And the number of M.D. basic science faculty remained virtually unchanged, comprising 3,157 individuals in 1980 and 3,497 individuals in 1999.

Such a pronounced increase in faculty size would naturally lead to a rise in attrition counts (e.g., the number of faculty leaving their positions). Indeed, during this 20-year period, the average annual attrition count for M.D. clinical faculty rose steadily from 3,163 to 4,586 (see Figure 1). Similarly, the number of Ph.D. clinical faculty leaving full-time positions increased from 551 to 844. In contrast, the attrition count for Ph.D. basic science faculty remained virtually unchanged, comprising 3,157 individuals in 1980 and 3,497 individuals in 1999.

In each group, relative increases in faculty attrition counts do not correspond to increases in faculty size. Thus, the attrition rate has been on the decline over

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4 While the number of faculty members leaving full-time appointments is increasing, the proportion of the total faculty they represent is declining.

4 Women, non-white, and clinical faculty members are leaving full-time appointments at a higher rate than men, white, and basic science faculty members.
During the period spanning 1995-1999, the average annual attrition rates for M.D. clinical, Ph.D. clinical, and Ph.D. basic science faculty were 8.4%, 7.4%, and 6.5%, respectively, compared to 10.2%, 8.8%, and 8.6% between 1980 and 1984. During the same 20-year period, the number of both women and non-white faculty increased substantially. The number of women full-time faculty members nearly tripled from 8,814 to 25,638. Similarly, the number of non-white faculty increased more than 2.5 times from 6,983 to 17,299. As a result, in 1999 women faculty represented 28% of medical school faculty nationwide, up from 17% in 1980. Non-white faculty represented 19% of total U.S. medical school faculty members, up from 14% in 1980.

Not surprisingly, the attrition counts for both women and non-white faculty members have also been on a steady rise while their attrition rates have been declining (see Figures 2 and 3). The decline in the attrition rate for women faculty (from 11.8% in 1980-1984 to 9.1% in 1995-1999) is greater than that for male faculty (from 9.5% in 1980-1984 to 7.7% in 1995-1999), helping to reduce the gender gap. Over the same 20-year period, the attrition rate for non-white faculty declined by 2.0 percentage points from 11.7% to 9.7%. Similarly, white faculty experienced a reduction in their attrition rate by 1.9 percentage points from 9.6% to 7.7% (see Figure 3).

The analysis revealed differential attrition rates according to gender and race as well as degree and department type. In future research, we will examine the impact of other factors that may influence individuals’ decisions to leave faculty positions, such as rank, tenure status, length of service, and age. We will also investigate institutional characteristics related to attrition rates and analyze attrition from a “community” perspective, focusing on those who leave academic careers entirely. If changes in academic medicine are negatively influencing job satisfaction and morale, they might be reflected in rising community attrition rates. Alternatively, if low morale stems from changes besetting all physicians — not just those in academia — we would observe little effect on career shifts.

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To simplify this analysis, we divided faculty into two groups: “white” and “non-white.” The “non-white” group comprises American Indians, Alaskan Natives, Asians, Pacific Islanders, African-Americans, Mexican-Americans, Chicanos, Puerto Ricans, and other Hispanic groups.