Analysis IN BRIEF

AAMC
Tomorrow's Doctors, Tomorrow's Cures®

Volume 8, Number 4
June 2008

Association of American Medical Colleges

The Long-term Retention and Attrition of U.S. Medical School Faculty

Given the financial, personnel, and facility resources that medical schools expend in developing their faculty to meet educational, research, clinical care, and service objectives, the academic medicine community has had a long-standing interest in faculty retention. Yet there is a dearth of literature about long-term retention at the national level. Therefore, this *Analysis in Brief* investigates 10-year retention rates—with special attention to first-time assistant professors (i.e., faculty with no prior appointments at or above the rank of assistant professor).

Data for this analysis came from the AAMC's Faculty Roster, the only national database on the employment, training, and demographic backgrounds of individual U.S. medical school faculty. We tracked every full-time faculty member in each of the 17 academic years from 1981 through 1997 for 10 years, resulting in 17 retention outcomes that we averaged (see Table 1) or that we examined individually (see Figures 1 and 2). We chose 10 years in recognition that some medical schools extend the tenure-track period beyond the traditional 7-year period, although we examined full-time faculty regardless of tenure status. We started with academic year 1981 in light of the AAMC's March 2002 *Analysis in Brief* that examined one-year faculty retention rates starting with that academic year. We ended with 1997 because that is the last academic year with 10-year outcomes available. The number of full-time faculty increased from 56,401 in 1981 to 95,674 in 1997, and the number of first-time assistant professors grew from 3,684 to 4,619 across that period. As we will discuss, this growth is important for understanding the context of retention and attrition.

Average Retention Rates

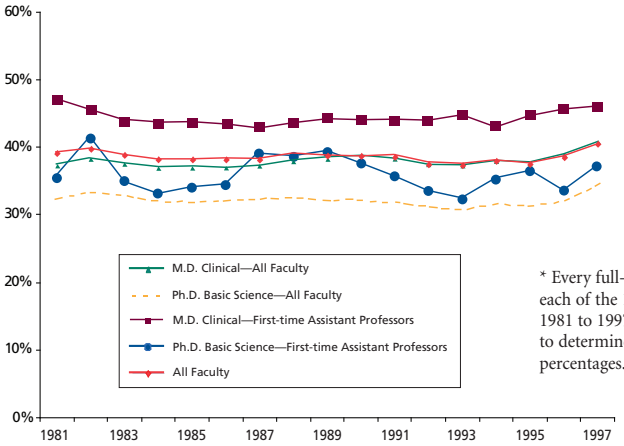
Table 1 presents 10-year retention rates for selected faculty cohorts. For all faculty in our analysis, 52 percent remained at their medical schools, 10 percent switched medical schools, and 38 percent left academic medicine. First-time assistant professors were more likely than faculty members overall to leave academic medicine, with a 43 percent attrition rate versus a 38 percent attrition rate. The percentage of faculty switching medical schools was also higher for first-time assistant professors (13 percent) than it was for all faculty (10 percent). Moreover, first-time assistant professors with both M.D. and Ph.D. degrees were more likely than other first-time faculty to switch medical schools, regardless of whether these dual-degree faculty were in clinical departments or basic science departments.

Table 1. Average Cohort Size, Retention Rate, and Attrition Rate of 17 Ten-Year Cohorts of Full-time Medical School Faculty*, Academic Years 1981 through 1997

	Cohort Size		Percent of Faculty Remaining at their Medical Schools		Percent of Faculty Switching Medical Schools		Percent of Faculty Leaving Academic Medicine	
Study Group	All Faculty	First-time Assistant Professors	All Faculty	First-time Assistant Professors	All Faculty	First-time Assistant Professors	All Faculty	First-time Assistant Professors
All Faculty	73,752	4,279	52	43	10	13	38	43
M.D. or Equivalent, Clinical Departments	43,151	2,806	51	42	11	14	38	44
Ph.D. or Equivalent, Clinical Departments	9,378	587	51	44	9	12	40	44
M.D.-Ph.D. or Equivalent, Clinical Departments	3,462	220	53	46	16	20	31	34
M.D. or Equivalent, Basic Science Departments	2,113	84	52	41	9	16	39	43
Ph.D. or Equivalent, Basic Science Departments	9,669	389	60	50	8	14	32	36
M.D.-Ph.D. or Equivalent, Basic Science Departments	928	42	54	44	12	19	34	37
Men	57,349	2,983	53	43	10	14	37	43
Women	16,347	1,293	48	43	9	12	43	45
White (Not Hispanic/Latino)	60,524	3,348	52	44	10	14	38	42
Non-white	10,510	771	50	41	10	14	40	45

* Every full-time faculty member in each of the 17 academic years from 1981 to 1997 was tracked for 10 years to determine retention and attrition percentages.

Figure 1
Percentage of Attrition from Academic Medicine for 17 Ten-Year Academic Cohorts,* by Degree and Department



* Every full-time faculty member in each of the 17 academic years from 1981 to 1997 was tracked for 10 years to determine retention and attrition percentages.

Trends in Attrition

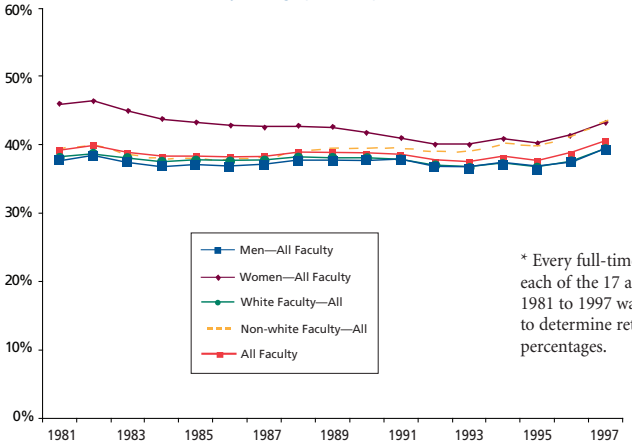
Figure 1 illustrates how the 10-year outcomes for each study group in Table 1 changed little from one academic year to the next. For all faculty, the percentage leaving academic medicine ranged from 37 percent to 40 percent. Overall, attrition rates remained lower for basic science Ph.D.'s than for clinical M.D.'s. Among first-time Ph.D. assistant professors in basic science departments, small faculty numbers may influence the fluctuation in attrition rates.

Figure 2 shows differences in trends between men and women as well as between demographic groups, although attrition rates were relatively stable within groups. For example, the percentage of faculty leaving academic medicine fluctuated from 40 percent to 47 percent for women and from 36 percent to 39 percent for men. The corresponding percentages for white faculty members varied from 37 percent to 39 percent, while the percentages for non-white faculty members varied from 38 percent to 44 percent.[1] Although attrition from academic medicine changed little across academic years, this stability coincided with consistent differences between men and women as well as (to a lesser extent) between white and non-white faculty.

Discussion

The average attrition rate for all faculty over the study period was 38 percent, but what constitutes reasonable retention and attrition depends on the specific context of a medical school, department, or faculty member. Nevertheless, this study may provide insight into numerous policy issues. When applied to the increasing number of faculty members in academic medicine over the period analyzed, the stable attrition rates in this study implied an increasing number of departures that medical schools have had to address, with the attendant challenges of how best to recruit and integrate new faculty. Since the number of faculty members has increased by a third since the period analyzed, one might speculate about whether such challenges have continued. Furthermore, support structures for new faculty may need to be reviewed in light of attrition rates for first-time assistant professors that are higher than those for medical school faculty overall. In addition, the mobility of clinical M.D.'s versus basic science Ph.D.'s is consistent with theories about different market opportunities for these faculty members. This analysis may provide context to diversity efforts as well. The disproportionately high departure rate of both women and non-white faculty from academic medicine, for example, points to challenges for recruitment and mentoring programs.

Figure 2
Percentage of Attrition from Academic Medicine for 17 Ten-Year Academic Cohorts,* by Demographic Group



* Every full-time faculty member in each of the 17 academic years from 1981 to 1997 was tracked for 10 years to determine retention and attrition percentages.

1 The non-white faculty category includes individuals with Hispanic/Latino ethnicity as well as Alaska Natives, American Indians, Asians, Blacks, Native Hawaiians, and Other Pacific Islanders. Preliminary analyses suggest relatively stable and similar attrition rates for these faculty until the last few years studied, when attrition rates may have increased.

Authors:
Hershel Alexander, Ph.D., director, Medical School and Faculty Studies, halexander@aamc.org, 202-828-0649

Jonathan Lang, senior database specialist, jlang@aamc.org, 202-862-6283

Association of American Medical Colleges
2450 N Street, N.W.
Washington, D.C. 20037-1127
analysis@aamc.org
www.aamc.org/data/aib