The Changing Demographics of Full-time U.S. Medical School Faculty, 1966-2009

Despite the continuing effort of increasing the representation of women and non-white faculty, when full-time faculty are viewed in aggregate, the diversity of medical school faculty has not kept pace with the diversity of medical school students or of society overall. While much has been written on the challenges of faculty diversity, there seems to be little long-term trend information to document the extent to which newly appointed faculty have been contributing to the diversity within the demographic composition of medical school faculty over the years. In 2009, for example, 48.8 percent of U.S. medical school graduates were women and 35.7 percent were non-white whereas 34.9 percent of U.S. medical school full-time faculty were women and 25.9 percent were non-white.

To fill this gap, our Analysis in Brief presents the proportion of women and non-white among faculty new to academic medicine or new to rank in comparison to other faculty appointments. The findings have implications for a variety of policy issues regarding the training, recruitment, development, and retention of future medical school faculty.

Methodology

Data for this analysis came from the AAMC’s Faculty Roster, the only national database on the employment and demographic backgrounds of individual U.S. medical school faculty. We examined new versus continuing full-time U.S. medical school faculty every year by race, gender, and department from 1966 to 2009 using data snapshots taken on December 31 of each year. Newly appointed faculty were individuals who were new to academic medicine or who were newly promoted in that calendar year. Continuing faculty included all other individuals. This analysis ended with 2009 because that is the last year for which reliable and complete December 31 snapshot information was available as medical schools submit information on a rolling basis.

Results

Newly appointed faculty were generally more diverse than continuing faculty. In 20-year intervals, Table 1 shows the changes in the proportion of faculty consisting of non-white members and women members. In 2009, for example, 20.2 percent of full professors new to academic medicine were non-white, while 14.1 percent of full professors continuing in their positions were non-white. In 2009, women accounted for 24.0 percent of full professors new to academic medicine and for 18.2 percent of full professors continuing in their positions. For women, this pattern held for associate professors and assistant professors as well but not for instructors or other (e.g., unranked) faculty. A supplement to this analysis breaks out the non-white and women faculty in Table 1 by department type and degree.

Diversity tended to decrease with increases in rank. Figure 1 suggests a relationship between the representation of women in academic medicine and rank, with a decrease

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3 AAMC Data Book 2010. Student data came from Table B8 and B10 on medical students graduated in academic year 2008-09, excluding unknown race. Faculty data came from C4 and C5 on medical school faculty in AAMC Faculty Roster as of December 31, 2009, excluding unknown race or gender.
4 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.
5 For supplemental materials, go to www.aamc.org/ailb.
in representation of women for each increase in rank. This pattern held for women new to academic medicine as well as for women continuing in academic medicine. By and large, Figure 2 shows non-white faculty making up a greater proportion of new academic medicine faculty than continuing faculty for many years, regardless of rank. Nevertheless, the relationship between representation and rank does not appear to be as strong for non-white faculty as for women faculty.

In addition, Figures 1 and 2 illustrate that over time women faculty and non-white faculty tended to grow faster as a percentage of new faculty than as a percentage of continuing faculty at the ranks of full professors, associate professors, and assistant professors. Women and non-white faculty who were new to rank have a similar trend (not shown) as their counterparts who were new to academic medicine. Among instructors or other unranked faculty, Figure 1 shows that women new to academic medicine were less well represented than women continuing in those positions.

**Discussion**

This *Analysis in Brief* documents that the diversity of U.S. medical school faculty in gender and race has increased over the last four decades, with newly appointed faculty generally more diverse than continuing faculty. The results suggest that diversity has increased among faculty who were newly promoted as well as among faculty who were new to academic medicine. What constitutes ‘reasonable’ rate of change, and whether this rate of change is satisfactory or needs continued attention, may depend on the context of each medical school and department. Furthermore, how individuals and institutions conceive of diversity can extend to issues such as socio-economic status, national origin, sexual orientation, and religion.

These findings may help inform a variety of policy issues. For example, one might wonder whether the increasing representation of women faculty and non-white faculty at each rank points to generally successful early-career, mid-career, and late-career diversity programs. Despite the overall increase of women faculty and non-white faculty across ranks, the different trend lines for the two groups may reflect different recruitment and professional development opportunities. Moreover, the decline in the representation of women faculty and non-white faculty as one goes up the ranks may reflect pipeline issues—the relatively recent arrival of these demographic groups to academic medicine in appreciable numbers may require time for a significant presence among the senior ranks. Nonetheless, the lower retention rates, lower promotion rates, and longer times to promotion for women faculty and non-white faculty that other *Analysis in Brief* studies have found indicate that there may be non-pipeline issues impacting the progression through the ranks as well.6, 7

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