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Faculty Diversity and Inclusion Program Outcomes at an Academic Otolaryngology Department

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Objectives/Hypothesis: To describe a 10-year diversity initiative to increase the number of women and underrepresented minorities in an academic department of otolaryngology–head and neck surgery.

Study Design: Retrospective review.

Methods: A multifaceted approach was undertaken to recruit and retain women and underrepresented minority (URM) faculty: creation of a climate of diversity, aggressive recruitment, achievement of parity of salary at rank regardless of gender or minority status, provision of mentorship to women and URM faculty, and increasing the pipeline of qualified candidates. Primary outcomes measures included number of women and URM faculty, academic rank, and salary.

Results: From 2004 to 2014, the percentage of women clinical faculty increased from 5.8% to 23.7%; women basic science faculty increased from 11.1% to 37.5%. The number of women at associate professor rank increased from 0 to eight. During this period, underrepresented minority faculty increased in number from two to four; URM full professors increased in number from 0 to 1. In 2004, women earned 4% to 12% less than their male counterparts; there were no salary differences for URM. In 2014, salary was equal by rank and subspecialty training independent of gender or minority status.

Conclusion: A comprehensive diversity and inclusion initiative has increased representation of women and URM faculty in an academic department of otolaryngology–head and neck surgery. However, there continue to be opportunities to further increase diversity.

Key Words: underrepresented minority, faculty development, diversity, inclusion.

Level of Evidence: N/A.

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INTRODUCTION

The US population continues to change over time, with the most recent 2010 U.S. census demonstrating that 25%[1] of the population is nonwhite, and projections that in 2050 this percentage will grow to be 50%.[2] The 2010 U.S. census also found 50.8% of the population to be women.[1] In contrast, the number of underrepresented minority (URM) faculty at U.S. medical schools is estimated to be only 8%,[3] illustrating the relative lack of diversity at academic medical institutions in comparison to the general U.S. population. Women are also underrepresented in academic medicine. Recent figures show women comprise 37% of academic faculty at U.S. medical schools.[4] When considering diversity by specialty fields in medicine, women and URM are underrepresented in academic otolaryngology departments, with 2% from URMs and 31% women. It is estimated that, despite the increasing number of women training in surgical specialties, the number of women trainees will not achieve parity with male trainees until the year 2028.[5] In addition, the number of women in leadership roles at full professor will not achieve parity until 2096.[5]

Increasing the diversity of medical school faculty is thought to have many potential benefits. The Association of American Medical Colleges (AAMC) has stated that increasing the diversity of academic health centers is a significant part of the strategy to reduce health care disparities in the United States.[6] It is thought that increasing the diversity of those in academic medicine can speed and increase the research in health disparities and public health, help to train others in cultural competency, provide mentorship to trainees, and provide leadership in health policy to reduce health care disparities.[7,8] Furthermore, URM faculty members are more likely to work with underserved populations.[9–11] Minority patients are reported to have higher patient satisfaction rates when being treated by racially concordant physicians, and these greater patient satisfaction rates have translated to improved health outcomes for patients with diabetes and hypertension.[9–11]

In 2004, the Johns Hopkins Department of Otolaryngology–Head and Neck Surgery formally adopted the principle that a diverse and inclusive environment is critical to attaining the best research, scholarship, teaching, and health care. The department initiated a comprehensive program of recruitment and retention of URM and women faculty. The purpose of this report is to

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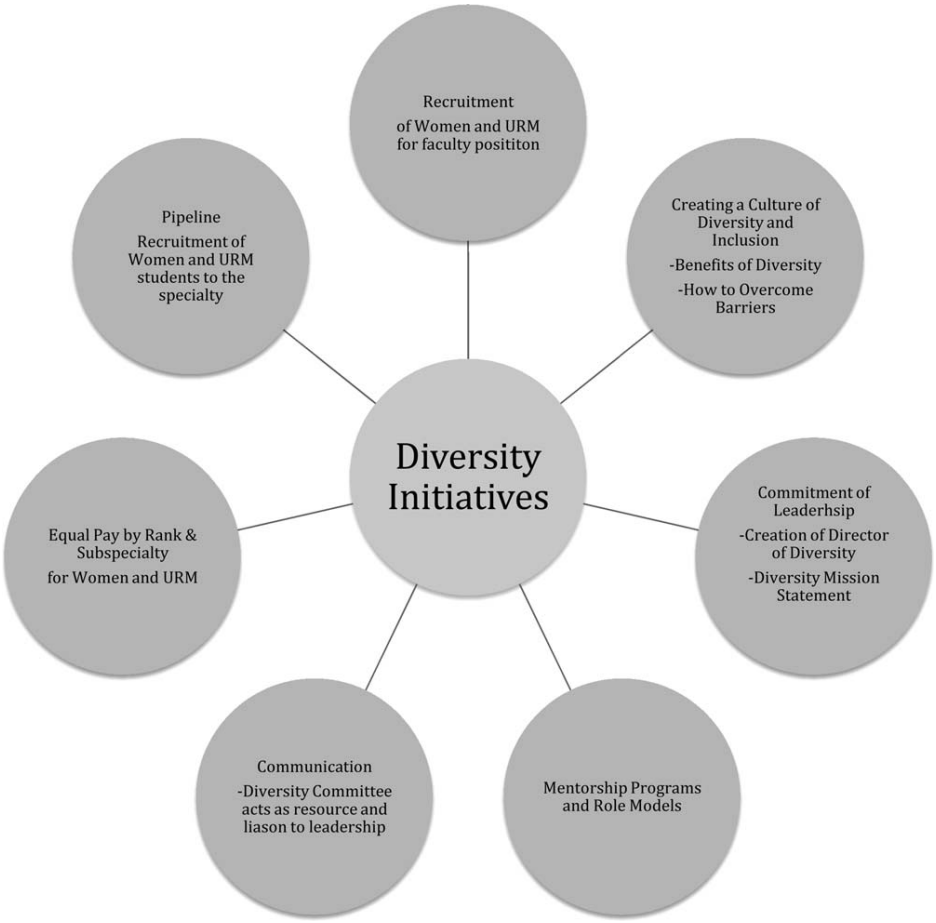

Fig. 1. Overview of departmental diversity initiatives..

present the results of the past 10 years of this program and its effects on achieving its goals. Core facets of this effort consisted of 1) outreach to women and URM faculty during the recruitment process; 2) the establishment of competitive compensation and academic development packages, including a mentorship plan; and 3) an increased emphasis on cultivating a culture of professionalism and inclusion in the department.

MATERIALS AND METHODS

In 2004, the Johns Hopkins Department of Otolaryngology–Head and Neck Surgery embarked upon several programs to actively recruit and retain a diverse faculty, including women and URM. A multifactorial approach was undertaken and included creation of a climate of diversity and inclusion, aggressive recruitment of qualified URM and women faculty, achievement of parity of salary at rank regardless of gender or minority status, provision of mentorship to women and underrepresented faculty members, and efforts to increase the pipeline of qualified candidates (Fig. 1). These efforts also mirror the increasing institutional emphasis on improving diversity of the faculty at the medical school and preventing attrition of women and URM from academic medicine. The local institutional review board approved the review and reporting of these results of these programs (IRB00051742).

In order to create a culture of diversity, the department created a diversity committee in 2004 whose charge was to facilitate a climate of inclusion. The first charge of this committee was to define the diversity mission of the department:

> The Johns Hopkins Department of Otolaryngology–Head & Neck Surgery ... is committed to sharing values of diversity and inclusion in order to achieve and sustain excellence. ... We can best promote excellence by recruiting and retaining a diverse group of students, residents, faculty and staff by creating a climate of respect that is supportive of their success. This climate for diversity, inclusion and excellence is critical to attaining the best research, scholarship, teaching, health care and other strategic goals of the department.

The department created the position of director of diversity and inclusion, to lead the efforts to fulfill that principles stated in this mission statement.

To familiarize the existing faculty with the mission statement, the need to improve diversity, and the benefits to patient care and research that can be achieved with a diverse faculty, a daylong diversity retreat was held with the faculty. During the retreat, potential barriers and solutions to increasing diversity were discussed, as well as ways to create an environment supportive of all colleagues regardless of gender or minority status. Ongoing efforts throughout the years have continued these efforts with speakers and book clubs to discuss advancement of women and minorities in medicine. In addition, prominent women and URM leaders in academic medicine have been invited to lecture to the department on a regular basis, and an endowed annual lectureship was created in order to recognize

TABLE I.
Comparison of Number of Women and Men Faculty 2004–2014.

	Year 2004 Number of Women/Men	Year 2014 Number of Women/Men
Clinical assistant professor	1/7	5/10
Clinical associate professor	0/4	4/11
Clinical full professor	0/5	0/8
Basic science assistant professor	1/3	4/3
Basic science associate professor	0/1	2/4
Basic science full professor	0/4	0/3

women leaders in otolaryngology. The departmental diversity committee also continues to serve as a resource for faculty who wish to address issues of diversity and inclusion; individual faculty can approach the committee with concerns in a confidential manner.

With the goal of continuously advancing a culture of professionalism that supports excellence in all mission areas and inclusion of an increasingly diverse workforce, the department committed itself to engaging faculty and residents in multiple opportunities for self-assessment, reflection, and improvement. In addition the diversity committee, the department created a professionalism committee and held faculty development and workshops on mentorship, conflict resolution, and providing feedback. These efforts further contributed to advancing the professional and inclusive climate of the department.

Efforts at improving the climate of diversity and inclusion were paired with a firm commitment by departmental leadership to support the diversity mission and to recruit qualified women and URM for open faculty positions. The department's principle of recruitment is to align interests and strengths with career development opportunities and appropriate mentorship. For example, three women faculty members have completed masters in public health training programs that were completed within the first 3 years as part of their recruitment package. The department also performed an internal audit of salary by rank, subspecialty, gender, and minority status. The results of this audit revealed a discrepancy in the salary of women compared to male peers. In response to this, the departmental leadership corrected this difference, and there are continued processes in place annually to monitor the salaries of women and URMs in comparison to their peers.

In the past 10 years, both the department and institution led a campaign to increase mentorship to women and URM. The department regarded mentorship to be a key component in the retention of women and URM faculty. The department of otolaryngology created a women in otolaryngology mentorship program, which meets regularly, to include women faculty, fellows, and residents. The purpose of the mentorship program is not only to allow younger faculty and trainees to connect with women mentors in the department but also to discuss practical approaches to work–life balance, discuss networking opportunities in the specialty, and present strategies for professional advancement. On the institutional level, an Office of Women in Science in Medicine was created, offering mentorship across departments, structured curriculum for women on how to advance their careers, routine lectures on issues of particular importance to women in academic medicine, and a leadership program for women faculty. The institution created several programs targeted toward URM faculty focusing on peer support and mentorship planning for URM faculty, headed by the assistant dean of the office of diversity and cultural competence.

During departmental recruitment efforts of women and URM faculty, the need to increase the pipeline of URM became particularly apparent, and the department created a program to recruit talented medical students to the specialty. A clerkship for visiting URM students interested in the specialty of otolaryngology–head and neck surgery was created. This program pairs visiting students with a faculty mentor and provides financial support for travel/living expenses. Nineteen URM students have participated in the program, and six have successfully matching in to otolaryngology residency training programs. Three of these students who participated in this program are in the otolaryngology–head and neck surgery residency program at Johns Hopkins. The diversity committee has also reached out to local medical student groups of URM and women and has provided opportunities for those students interested in otolaryngology–head and neck surgery to spend time with faculty members.

RESULTS

In 2004, the clinical faculty consisted of 17 members, with one woman (5.8%) at the rank of assistant professor and the remainder men; of the nine basic science faculty, there was also one woman assistant professor (11.1%) (Table I). Five years after initiation of the department's diversity and inclusion efforts in 2009, eight of 24 clinical faculty were women (33.3%), with three associate and five assistant professors; three of the 14 research faculty were women (21.4%), with one associate and two assistant professors. In 2014, nine of the 38 clinical faculty are women (23.7%), with four associate and five assistant professors. Comparatively, the 2014 AAMC of U.S. Medical School Faculty report found that women made up 20.8% of those identified with MD or MD/PhD degrees in academic otolaryngology departments.[4] Of the department's 16 basic science faculty, there are six women (37.5%), with four associate and two assistant professors in 2014. No women achieved full professor rank during this 10-year time period, but presently three have been proposed to the professorial promotions committee. In 2004, women at the assistant professor level earned 88% to 96% of their male counterparts; in 2014, salary was equal by rank and subspecialty training independent of gender. Before these diversity initiatives were instituted, no women held departmental leadership positions. After initiation of diversity initiatives, several women have assumed leadership roles: two women serve as medical directors of outpatient clinics sites, one as the director of diversity initiatives, one as chair of the patient satisfaction committee, and one as cochair of the professionalism committee. In addition, during this time period one of the women faculty became president of the medical faculty senate and continues to serve in several leadership roles for the health care system.

The number of underrepresented faculty members (African Americans, Africans, Caribbean, Native American, Latin) increased from two to four during the same 10-year time period (Table II). In 2004, there was one clinical (5.9%) URM faculty and one basic science (11.1%), both at the rank of assistant professor. By 2014, the number of clinical URM increased to two (8.3%), with one clinical assistant professor and one full clinical

TABLE II.
Comparison of Number of Underrepresented Faculty 2004–2014.

	Year 2004 Number of URM/Non-URM	Year 2014 Number of URM/Non-URM
Clinical assistant professor	1/7	1/15
Clinical associate professor	0/4	0/15
Clinical full professor	0/5	1/7
Basic science assistant professor	1/3	2/5
Basic science associate professor	0/1	0/6
Basic science full professor	0/4	0/3

assistant professor. Basic science URM increased from one to two (12.5%), both at assistant professor rank. In comparison, the 2014 AAMC report on U.S. medical schools shows that only 2.2% of otolaryngology faculty are URMs.[4] Both in 2004 and in 2014, URM faculty salaries were comparable to the median by rank and subspecialty training. One of the URM faculty served as residency program director during this period and currently is vice-chair of education for the department.

DISCUSSION

Although the number of women and URM in academic medicine has been shown to be far from similar to the composition of the general U.S. population, the potential benefits to society of increasing the diversity of academic medical faculty have been described.[4,7–11] In order to create programs to improve these numbers, one must first understand the existing barriers to academic medicine for these groups. Prior studies have shown that the URM faculty have a sense of isolation and therefore lower career satisfaction.[12] After controlling for years at rank and academic productivity, URM were found to have lower rates of tenure and promotion, which can translate to lower compensation for URM faculty.[12] Underrepresented minority students may face financial constraints, lack of URM role models, lack of social support, challenges with standardized testing, and racial bias as barriers to pursuing a career in medicine.[13,14]

Women in academic medicine have described similar barriers, including a sense of not belonging and isolation, as well as a perceived bias with professional disadvantages due to their gender.[15] Women in academic medicine who achieve similar levels professional tasks and academic productivity have been found to receive fewer rewards in terms of academic rank and compensation than their male colleagues.[16] A 2011 study found that newly trained women physicians in New York State earned $16,819 less than their male counterparts, with women earning less than men across nearly all specialties; this salary gap has increased from $3,600 in 1999.[17] In addition, women academic faculty with children have been found to have lower levels of secretarial support than male counterparts.[18] In this same study, women faculty with children describe some of their day-to-day barriers to advancement, including frequent meetings before 8 AM and after 5 PM, lack of onsite childcare, and inadequate emergency/parental leave.[18]

In order to address these and other barriers to women and URM in academic medicine with the goal of increasing their numbers, Merchant and Omary recommended several changes that need to be made to the system at large.[13] These changes include increasing the pipeline to target undergraduate and high school students, providing strong mentorship (with both URM and non-URM mentors who are committed), emphasizing in medical schools the improvement of care to underserved populations, establishing diversity deans and directors, providing subsidized and protected time to URM faculty to be mentors, encouraging faculty participation in community activities at local schools, establishing institutional endowments to support training of URM students, providing a supportive environment to minimize attrition, and establishing initiatives to address underrepresentation in biomedical and clinical arenas.[13] A recent systematic review found 73 citations of published mentoring programs for URM, which found the barriers to mentorship included time-restricted funding, significant time commitments from mentors, and difficulty in overcoming institutional challenges faced by URM faculty.[6] Prior studies have demonstrated that diversity programs with *greater intensity*, defined as present for more than 5 years and with more components, are more effective and more likely to be associated with greater increases in URM faculty representation.[3]

Our department's diversity initiatives have embraced many of the principles outlined above and are comprised of multiple, intensive components, with a committed effort ongoing for 10 years. The results of our department's approach to increasing the number of URM and women illustrate how a comprehensive approach to increasing diversity can yield substantial improvements for academic departments over time. The clear, unequivocal support for diversity from leadership was instrumental in the success of these diversity efforts. The commitment by leadership signaled to the entire department the importance of the diversity efforts and that diversity should be a priority for the department. In addition, the commitment of leadership allowed for the dedication of financial resources to achieve salary parity for women and URM, to support a pipeline effort in the form of mentored clerkships with financial support for students interested in otolaryngology, and to provide funds in recruiting/retaining women and URMs. The commitment of departmental leaders to the diversity mission also helped women and URMs assume several leadership roles within the department. Finally, the creation of a director of diversity efforts within the department has helped to create a sustained, coordinated, *greater intensity* effort. Because these interventions were multifaceted and ongoing at the same time, it is difficult to say which ones were the most effective; however, some of the more fruitful efforts appear to be the departmental recruitment/retention/promotion of women and the pipeline of URM medical students participating in the mentored clerkships program. The impact for URM is more modest in terms of actual

numbers of URM faculty, likely in part due to the relatively smaller pool of URM versus women in otolaryngology as far as candidates for recruitment. This highlights the importance of the pipeline effort to increase URM in academic otolaryngology.

One of the limitations of the current study is the lack of a control group. Whereas overall departmental diversity increased from the period of 2004 to 2014, it is possible that the changes are not only due to the diversity initiatives but other changes in medicine, otolaryngology, or society at large.

These women and underrepresented minority faculty who were recruited as part of our departmental diversity efforts have been instrumental to the growth of the department, and their expertise has allowed the department to develop new clinical and research programs. In addition, these women and URM faculty are instrumental in the department's continues efforts; the literature demonstrates that these faculty are excellent resources for identifying strategies to continue improvement of diversity and inclusion.[3,19] Although the department has made significant gains with multifaceted diversity initiatives, it continues to seek opportunities to increase diversity and inclusion, recognizing that there are continued opportunities to improve the number of women and URM faculty—and to foster their professional development in their institution and in the specialty of otolaryngology–head and neck surgery.

CONCLUSION

A comprehensive diversity and inclusion initiative has increased representation of women and URM faculty in an academic department of otolaryngology–head and neck surgery; however, opportunities exist for continued improvement of this effort.

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