MAYO CLINIC

Gender Distribution Among American Board of Medical Specialties Boards of Directors

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Abstract

Since 1995, women have comprised more than 40% of all medical school graduates. However, representation at leadership levels in medicine remains considerably lower. Gender representation among the American Board of Medical Specialties (ABMS) boards of directors (BODs) has not previously been evaluated. Our objective was to determine the relative representation of women on ABMS BODs and compare it with the in-training and in-practice gender composition of the respective specialties. The composition of the ABMS BODs was obtained from websites in March 2016 for all Member Boards. Association of American Medical Colleges and American Medical Association data were utilized to identify current and future trends in gender composition. Although represented by a common board, neurology and psychiatry were evaluated separately because of their very different practices and gender demographic characteristics. A total of 25 specialties were evaluated. Of the 25 specialties analyzed, 12 BODs have proportional gender representation compared with their constituency. Seven specialties have a larger proportion of women serving on their boards compared with physicians in practice, and 6 specialties have a greater proportion of men populating their BODs. Based on the most recent trainee data (2013), women have increasing workforce representation in almost all specialties. Although women in both training and practice are approaching equal representation, there is variability in gender ratios across specialties. Directorship within ABMS BODs has a more equitable gender distribution than other areas of leadership in medicine. Further investigation is needed to determine the reasons behind this difference and to identify opportunities to engage women in leadership in medicine.

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Since 1995, more than 40% of all medical school graduates have been women.[1] Furthermore, one-third of physicians currently in practice are women. Although the number of women in medicine has increased, women remain underrepresented in leadership roles. The Association of American Medical Colleges has reported that as of 2011, only 12% of medical school deans and 14% of department chairs are women.[2]

The American Board of Medical Specialties (ABMS), working through its specialty Member Boards, is the certifying body for more than 840,000 physicians in the United States and represents an opportunity for leadership spanning both academic and community practices.[3] We sought to determine the degree to which women are represented in the leadership of ABMS Member Boards compared with the gender distribution across the represented specialties as a whole.

The gender distribution among medical specialties varies considerably, with certain fields disproportionately composed of women (obstetrics and gynecology, pediatrics) and others of men (neurosurgery, orthopedics).[4] We expected that the relative ratio of women to men in leadership positions on each individual board should reflect a similar gender ratio of physicians within each specialty.

METHODS

This study was Mayo Clinic Institutional Review Board exempt.

The ABMS recognizes 24 Member Boards. The composition of the boards of directors (BODs) for each Member Board was obtained via information from each individual board's website. In cases in which the gender of the board member was unclear, biographical information from the listed institution's website was evaluated. If this information

Mayo Clin Proc. ■ November 2016;91(11):1590-1593 ■ http://dx.doi.org/10.1016/j.mayocp.2016.08.007
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was not available on the website, an Internet search was performed to obtain biographical or photographic data. With this method, gender-identifying information was available for all Member BODs.

Data regarding physicians in practice and in training was obtained from the most current Association of American Medical Colleges and American Medical Association reports. All Member Boards had complete data available.

Neurology and psychiatry share a common BOD. However, the two fields have disparate practices, and the gender distribution of their practicing physicians and trainees is considerably different. For this reason, the two specialties were analyzed as individual entities. A total of 25 BODs were studied.

Descriptive statistics were utilized in the determination of whether a BOD was representative of the gender ratio of physicians in practice. The proportion of women on the board was compared with the proportion in practice and in training. The BOD was considered balanced by gender if the ratio of women to men on the BOD was proportional to practicing physicians within one person.

RESULTS

The Table compares gender distribution by specialty of physicians both in practice and in training to the respective membership of the ABMS BODs. The more heavily represented gender (if applicable) on the BOD is also indicated.

A total of 25 specialties were evaluated. Twelve of the BODs have gender representation that is proportional compared with their constituency. Seven specialties (anesthesia, internal medicine, neurology, nuclear medicine, ophthalmology, plastic surgery, and surgery) have a larger proportion of women serving on their BOD compared with physicians in practice. Although some of these specialties have a higher proportion of women in training than on their current BOD, internal medicine and nuclear medicine both have a higher proportion of men in training than on their BODs. Plastic surgery has a proportionately larger representation of women on the BOD compared with physicians in practice; however, this proportion is similar to the proportion of women in training. A similar pattern holds true for neurology.

Six specialties (allergy and immunology, obstetrics and gynecology, otolaryngology, pediatrics, radiology/diagnostic radiology, and urology) have a predominance of men populating their BODs compared with their representation among practicing physicians. The proportion of women trainees in these specialties is greater than the proportion of women currently in practice.

DISCUSSION

With roughly half of all ABMS Member Boards having gender representation that has parity with current physicians in practice, it appears from our data and prior studies evaluating women in leadership in medicine that this area of leadership may be more accessible than academic and hospital leadership positions.[2] The reasons for this difference are unclear and are beyond the scope of this study. However, ABMS BOD membership does not require a faculty appointment or specific academic rank. This regulation provides an opportunity for increased recruitment of women physicians to serve on their respective boards, regardless of academic vs community practice setting. Gender representation on ABMS Member Boards, therefore, has the potential to be more balanced, coming from a larger and presumably more diverse candidate pool.

Lessons from outside the medical sphere have revealed that the presence of women on leadership boards contributes to continued diversity of the board itself.[6] This finding bodes well for those boards that currently have or are approaching proportionate representation, especially those anticipating increasing numbers of women joining the specialty.

The reasons for the disproportionate gender representation on some ABMS BODs are not immediately clear and are outside the scope of this study but are likely specific to each board. The ABMS BODs in many instances have succeeded in recruiting women to these leadership roles, and many ABMS BODs have tipped the balance toward predominance of women on their boards.

Other assessments have attributed disproportionately lower numbers of women in leadership to intrinsic characteristics, personal choices regarding work-life balance, or the existing system of conscious or unconscious

TABLE. Boards of Directors Gender Representation, Stratified by ABMS Member Board[a]

ABMS specialty Member Board[4,5]	2016 Board of Directors membership		2016 Women on board (%)	2013 Women in specialty (%)	Gender predominance on BOD compared with in practice	2013 Women in training (%)	Gender predominance of trainees compared with BOD
	Women	Total					
Allergy and Immunology	4	17	23.5	35.2	M	65.8	F
Anesthesia	4	13	30.8	21.1	F	36.0	None
Colorectal surgery	4	17	23.5	19.9	None	38.6	F
Dermatology	7	17	41.2	47.0	None	64.0	F
Emergency Medicine	5	17	29.4	27.1	None	37.4	F
Family Medicine	7	17	41.2	39.4	None	55.2	F
Internal Medicine	7	12	58.3	35.6	F	43.5	M
Medical Genetics and Genomics	8	17	47.1	50.7	None	61.7	F
Neurology[b]	4	8	50.0	31.8	F	44.7	None
Neurosurgery	1	14	7.1	8.6	None	15.9	F
Nuclear Medicine	7	14	50.0	24.1	F	38.2	M
Obstetrics and Gynecology	5	15	33.3	53.4	M	82.5	F
Ophthalmology	7	25	28.0	23.9	F	44.7	F
Orthopedics	3	21	14.3	6.6	None	13.7	None
Otolaryngology	2	19	10.5	17.2	M	34.3	F
Pathology	5	13	38.5	39.7	None	54.1	F
Pediatrics	6	15	40.0	57.9	M	73.1	F
Physical Medicine and Rehabilitation	4	14	28.6	33.6	None	38.4	F
Plastic Surgery	5	23	21.7	16.0	F	24.7	None
Preventive Medicine	7	11	63.6	57.9	None	54.5	None
Psychiatry[b]	3	9	33.3	40.6	None	54.2	F
Radiology/Diagnostic Radiology	5	28	17.9	23.0	M	27.2	F
Surgery	10	41	24.4	20.7	F	37.5	F
Thoracic Surgery	1	15	6.7	5.5	None	18.8	F
Urology	0	14	0.0	9.3	M	22.7	F

[a]ABMS = American Board of Medical Specialties; BOD = board of directors; F = female; M = male.

[b]The American Board of Psychiatry and Neurology is a single entity; these specialties were evaluated individually because of demographic differences in gender representation within each specialty.

gender bias that may perpetuate this thinking and exert an influence on criteria for promotion as well as the selection process itself.[7] Lower levels of female visibility in leadership positions and in senior academic ranks may play a role in trainees' perception and pursuit of career advancement. A potential first step to better involve women in leadership would be to develop strategic engagement and mentorship systems for women early in their careers. Engaging those ABMS BODs that have achieved gender parity may benefit other areas of leadership in medicine by providing specific strategies for advancement of women.

In consideration of the future of medical practice, for every medical specialty evaluated but one (preventive medicine), the percentage of women in training exceeds the proportion currently in practice. Although it will take many years for changes in the composition of trainees to affect the overall ratios of practicing physicians, the results of this study provide an opportunity for all specialties to proactively identify methods to engage women in leadership.

STUDY LIMITATIONS

In consideration of what an appropriately balanced BOD should look like, we chose to focus on a representation equal to that of the physicians in practice within one person, acknowledging that other proponents might wish a more aspirational goal of a 50:50 gender ratio regardless of specialty composition. In light of multiple specialties with very

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low representation of women in practice, we believe it is impractical to expect that they would achieve a BOD representation of 50% with a substantially smaller pool of female candidates from which to choose.

Determination of gender was initially based on name and photographic information, with supplementation of biographical information for self-identification when gender was not clear. This analysis did not consider the representation of transgender individuals.

Gender is just one aspect of the overall diversity of an organization, and we recognize the equal importance of other aspects of diversity such as race, ethnicity, and sexual orientation. Assessment of these characteristics is outside of the scope of our study but represents an important area for further investigation.

CONCLUSION

The number of women in both medical training and the practice of medicine is approaching parity with men, with substantial variability across specialties. However, gender representation at top leadership levels in medicine in general continues to lag behind. Promisingly, our study found that directorship within the ABMS has a more equitable gender representation than other areas of leadership. All ABMS boards should examine evolving demographic characteristics within their specialty to develop strategies to ensure balanced representation in the future. Boards of directors should remain vigilant in their representative selection processes and when necessary should focus on actively engaging women in leadership opportunities, recognize diversity considerations in succession planning, and develope mentorship programs for women. In this way, the ABMS can continue to adhere to the proclamation that they support professional development of *all* physicians.

Abbreviations and Acronyms: **ABMS** = American Board of Medical Specialties; **BOD** = board of directors

Potential Competing Interests: Dr Goyal is on the Board of Directors of the American Board of Emergency Medicine, an ABMS Member Board.

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