Innovative Wellness Models to Support Advancement and Retention Among Women Physicians

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abstract

Despite improvements in representation of women in academic medicine, the rate of promotion and career advancement remains unequal. Compared with their male colleagues, women report lower rates of personal-organizational value alignment and higher rates of burnout. Particular challenges further exist for Black women, Indigenous women, women of color, and third gender or gender nonbinary faculty. Promoting the well-being of women physicians requires innovative approaches beyond the traditional scope of physician well-being efforts and careful attention to the unique barriers women face. Three wellness-oriented models are presented to promote the professional fulfillment and well-being of women physicians: (1) redefine productivity and create innovative work models, (2) promote equity through workplace redesign and burnout reduction, and (3) promote, measure, and improve diversity, equity, and inclusion. By engaging in innovative models for equitable advancement and retention, it is anticipated that diverse groups of women faculty will be better represented at higher levels of leadership and thus contribute to the creation of more equitable work climates, fostering well-being for women physicians.

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Women in medicine face many challenges to professional fulfillment and overall well-being. Despite representing more than half of medical school students, women continue to be underrepresented at higher academic ranks and among academic leadership positions. A study of >500,000 faculty from 1997 to 2013 found that, after adjustment for race, department type, and year of graduation, the odds of promotion for women, compared with men, to advance from assistant professor to associate professor and from associate professor to full professor and to professor and from associate professor to full professor and to assistant professor to associate professor, compared with men, to advance to department chair were 0.76 and 0.46, respectively. Trends did not improve over time, suggesting little to no progress in closing the equity advancement gap. Gender inequities in medicine are complex and result from many well-described problems, including insufficient numbers of women in leadership roles; lack of pay equity; the burden of family responsibilities for women; experiences of microaggressions, bias, and harassment; and personal-organizational values misalignment. The cumulative effect of these persistent inequities threatens the well-being and professional fulfillment of women physicians and ultimately, quality patient care and scientific advancement. In the current article, we incorporate the perspectives of the article’s diverse group of authors, as well as evidence from the academic literature, and propose several means to rectify this long-standing organizational and personal challenge, identify current gaps in knowledge, and recommend future areas of exploration and research.

**MODEL 1: REDEFINE PRODUCTIVITY AND CREATE INNOVATIVE WORK MODELS**

Traditional promotion tracks for physicians, both within academia and within many community health care organizations, are predicated on demonstration of productivity and excellence (in research, education, and clinical care). Although many physicians struggle to meet such demands, women physicians may be affected more because they may also disproportionately carry the burden of “invisible work” in their professional roles. Examples of such invisible work may include serving on mission-driven assignments, mentoring other young professionals, advocacy work, and leading training surrounding workforce-related nuances. Invisible work also includes, as importantly described by Dhara, the work and time of being fully present for patient encounters.

As one example of a way to address invisible work, after a successful pilot initiative, the Stanford Medical Center Emergency Medicine Department adopted the practice of a time bank. The purpose of this initiative was to provide credit to physicians for uncompensated work, such as mentoring or serving on committees. These credits could then be used for services or assistance that facilitated better work-life harmony. Medical school faculty reported benefits to both physician health and job satisfaction. By changing promotion metrics to include indicators of this invisible work, or cultural taxation, a major barrier to academic promotion and diversity within the higher ranks of leadership could be removed.

Traditional measures of productivity are also a key barrier to career advancement for any faculty member who has numerous roles both within and outside an institution. In many circumstances, the careers of women physicians are characterized by work weeks exceeding 100 hours if including work at home. The burden of “household work” goes uncounted, and when added to the numerous aspects of work that are not counted toward promotion in which women faculty engage, women physicians work more hours for less recognition. Thus, both models of work and approaches to promotion need to be more reflective of the realities, the experiences, and the true and complete work lives of women and of all clinicians. For example, meetings held before and after the workday are not equally accessible to women given child care responsibilities; thus, women may be less available for important academic and networking opportunities. Not only would such an approach of being more intentional about the academic medicine workplace for gender equity inherently enhance the well-being of most clinicians, but it would also begin to rectify a persistent lack of fairness in the metrics by which women and men faculty are measured and promoted. Many of these issues may be particularly salient for women from groups that are historically marginalized and excluded, who may experience additional pressures to serve as role models for others and who may be more frequently overlooked for participation in scholarly activities. The specific case for diversity and inclusion regarding underrepresented minorities will be described in model 3.

Physicians with the greatest work-life balance experience lower rates of burnout. Balancing work schedules can be an effective (and not necessarily expensive) intervention to prioritizing well-being. Allowing physicians to customize their schedules to allow space for both clinical and nonclinical activities may be important to maintaining equity in opportunity. This may include
working a few longer days and more short days, starting earlier or later to allow time a physician needs to balance work and child care responsibilities, or even customizing a standard time block clinic schedule so that physicians have control over the location of the complex visit slots in their template. Offering incremental time slots (20, 30, or 40 minutes) to allow 10% to 20% more time with patients\textsuperscript{14} and adjusting panel sizes by the gender of patients\textsuperscript{15} have both been proposed to accommodate the expectations on women physicians for more listening and time spent in visits.

Creating a part-time career path with flexible career opportunities and nonresearcher promotion tracks is another way for this to be accomplished.\textsuperscript{13} Part-time positions can be stand-alones, job shares, or even hospitalist-style schedules (7 days on and 7 off) for outpatient physicians. On a larger scale, part-time options for K awards would allow a greater pool of clinician researchers the opportunity to innovate and advance in their careers.\textsuperscript{16}

Recent studies have revealed the correlation between burnout of women who provide medical care and negative experiences related to gender.\textsuperscript{17} Although it is well known that women are disproportionately underrepresented in science, technology, engineering, mathematics, and medicine fields, more research surrounding innovative models to address challenges in recruitment, hiring, and retention of women\textsuperscript{18} has emerged. Through a longitudinal study\textsuperscript{15} comparing the correlation between a traditional productivity-driven compensation model and an alternative compensation model that aligns with population management goals and coordination of care at the University of Wisconsin Health system, physician satisfaction increased overall, and physician recruitment increased by 19% over the 4 year study period. Although this study did not explicitly look at gender differences, the benefits of redefining productivity and including nondirect patient care into compensation structures do reveal overall improvement of physician satisfaction and overall improvement of productivity.\textsuperscript{15}

\textbf{MODEL 2: PROMOTE EQUITY THROUGH WORKPLACE REDESIGN}

Achieving equity for women physicians requires a comprehensive multimodal approach. Workplace redesign has been associated in a randomized trial with a substantially lower risk of burnout in primary care.\textsuperscript{19} Thus, workplace redesign efforts may be fruitful in terms of reducing burnout and fostering equitable career advancement. To demonstrate how an organization might undertake such an important task, we will highlight the approaches taken by one health system in Wilmington, Delaware, and propose broader approaches for other health systems to consider.

At ChristianaCare, well-being efforts that promote career advancement for women physicians include the following:

- **External audits of compensation and promotion**: Contract with an external vendor to independently assess physician compensation models and identify any areas of inequity. Many organizations have undertaken gender equity exercises in compensation and have made recommendations for achieving compensation equity, demonstrating that this work should and can be done.
- **Measurement of mistreatment by gender**: Conduct regular assessments among physicians regarding perceived mistreatment by colleagues or supervisors. Share results to encourage open dialogue and create action plans for improvement. Reporting of harassment, bias, and microaggressions by patients, colleagues, and other employees should be straightforward and confidential, and systems should be in place to ensure timely follow-up. Such events can be tracked and used as metrics in evaluating the well-being of women physicians.
- **Revision of family leave policies**: Implement paid parental leave for all genders, in the case of adoption, fostering, or childbirth, for the recommended duration of leave for optimal maternal and infant health (12 weeks). Organizations may consider options for parents to “ramp up” gradually after return, recognizing that the first year of life is a physically and emotionally intensive time. In addition, organizations can consider the responsibility many clinicians have in caring for aging parents or ill family members and create policies that support leave for such responsibilities. Having float physicians and other back-up coverage for predictable life events is a prudent policy to account for leave by faculty of all genders and alleviate feelings of guilt by faculty for not being present during leave time.\textsuperscript{20}
- **Implicit bias awareness and mitigation campaign**: Design multiple experiential and educational efforts to raise awareness of and counteract implicit bias. There are many evidence-based initiatives proven to decrease bias and foster an inclusive organizational climate, such as an educational intervention at Stanford that successfully taught trainees about bias.\textsuperscript{21} Organizations should prioritize these types of interventions and require participation of employees.
• Lactation lounge project: Provide adequate access to pumping resources, including a private, clean space for women returning to work after leave. An ideal space would also include a sink for cleaning pump supplies and a refrigerator to store milk. Of note, a recent Accreditation Council for Graduate Medical Education program requirement now includes specifications regarding availability of lactation facilities, implemented July 1, 2020.

• Environmental scan: Conduct an environmental scan to identify elements of the physical environment that might contribute to inequity. Environmental scans can use both active and passive data collection of formal and informal sources to better understand a work environment over time. One opportunity identified at ChristianaCare was the “white dude wall” in the main education center, which displayed portraits of past leaders of the Delaware Academy of Medicine. Although an important part of the organization’s history, the portraits did not reflect the current diverse population of employees and were viewed as a microaggression by many underrepresented caregivers. The portraits have since been relocated, and efforts are underway to create a visual display that celebrates the true diversity of the health care workforce. Organizations are encouraged to conduct such environmental scans and work collaboratively to ameliorate potential contributors to inequity in the physical environment.

• Survey health care workforce: Conduct regular assessments of the physician workforce experience, for example, in the context of an annual wellness or engagement survey. Creating ongoing mechanisms for the identification of negative experiences due to gender and race discrimination and bias is a first step in building trust and fostering inclusive environments.17,21

• Women’s networking and mentorship: Encourage the development of Women in Medicine committees or working groups to provide an essential component and advocacy unit for advancing the causes of equity, wellness, and career advancement for women faculty. At the national level, the Association of American Medical Colleges has undertaken work to promote intersectionality and connections between women of color and other groups of women.24

As with many disparities, systemic factors most likely contribute to the disproportionately negative effects in job satisfaction, compensation, and work-life harmony.17 By investing in innovative practice models, redefining compensation models to reflect nondirect care work, and creating organizational intentionality in the creation of supportive work environments, women will experience improved job satisfaction, will increase productivity, and will more likely stay in (and thrive in) the same work environment.

MODEL 3: RECRUIT, PROMOTE, MEASURE, AND IMPROVE DIVERSITY, EQUITY, AND INCLUSION

In 2017, AthenaHealth reported that of doctors aged >65, 80% were men, and for physicians younger than 35 years of age, 60% were women.25 Although leadership in many major professions has become more reflective of comparable compositions of men and women workers, the composition of leadership in medicine remains less equitable. Several themes that may help organizations redesign their promotion pathways to achieve greater equity have been identified. In addition to addressing the barriers to promotion described above, a brief overview of approaches to diversify leadership drawn from both within and outside academia are described below.

Examples of innovative frameworks to enhance diversity in leadership come from surveys in nonmedical companies. In surveying >10 million corporate employees, McKinsey & Company discovered that a woman’s likelihood of advancement into executive leadership was reduced by not being recognized for promotion after achieving a management-level role.26 Black women, Indigenous women, and/or women of color and women with disabilities experienced more microaggressions and disciplinary actions and found that promotion was less likely. The data also revealed that companies who created opportunities more encouraging of women leaders achieved more diverse representation at the executive levels.26 What can be seen is that a woman’s experience in the work environment is not one size fits all. Until organizations begin to measure and identify data that reflect this varied experience, then the additional burdens that minorities and women with differing abilities face will continue to detract from further advancement. Although companies appear to recognize that women generally work at the same level or better than men in upper management levels, further introspection regarding biases that cisgender women of color face is necessary to narrow the achievement gaps even between women cohorts of varying demographics.

Thus, developing a more diverse leadership team in medicine would be enhanced by identifying a goal for intentionally promoting more
women and persons of color into first-level management. To accomplish this, institutions should require diverse applicant pools and implicit bias training for recruitment, hiring, and promotions, with explicit criteria for promotion identified before reviews begin.\textsuperscript{26} For this plan to gain traction in medicine, however, institutions must invest in the recruitment, support, and development of women, with particular attention paid to not only gender diversity but also diversity in ethnicity, sexual orientation, and ability. Without intentional and strategic implementation of efforts, the inertia of the status quo will persist.

Through a pro-diversity intervention program led by Dr Molly Carnes at the University of Wisconsin–Madison, the Bias Reduction in Internal Medicine Initiative\textsuperscript{27} provides a methodologic approach\textsuperscript{18} to implicit bias, referred to as a “bias habit.” The study resulted in an increase in hiring of women into science, technology, engineering, mathematics, and medicine departments within the identified institution. On the basis of this model, the Bias Reduction in Internal Medicine Initiative undergoes a 2-year long curriculum and implementation program that centers around 3 core mitigating factors: (1) becoming aware of when one is vulnerable to unintentional bias, (2) understanding the consequences of unintentional bias, and (3) learning and practicing effective strategies to reduce the impact of unintentional bias.\textsuperscript{18}

Women from historically marginalized and excluded groups may often provide service to their communities; this meaningful work can generate challenges to well-being. Because this work is often invisible and does not count toward success and also inadvertently undervalued and burned-out.\textsuperscript{8,28,29} Recognizing that inclusion activities have tangible organizational value and addressing invisible work as a component of service requirements for promotion will support the well-being of women and all faculty who participate in these efforts.\textsuperscript{29}

Finally, organizations that are serious about women physicians’ well-being must understand that diversity efforts and particularly inclusion efforts are overlapping and intertwined with overall well-being. Feelings of connection to one’s organization and to people within that organization are crucial to workplace well-being. Inclusion, defined as “a series of institutional policies and cultural norms which promote a high sense of belongingness of individuals within organizations or institutions, while simultaneously recognizing and valuing individuals’ uniqueness”\textsuperscript{30} is essential in creating a workplace environment in which women physicians can thrive. As such, leaders within organizations should collaborate to ensure well-being initiatives incorporate wellness, equity, and inclusion and recognize and value the unique experiences of women and other marginalized groups.

FUTURE DIRECTION AND RESEARCH OPPORTUNITIES

Knowledge Gaps

Improvement in workplace gender equity requires providing career advancement opportunities, specifically for women physicians, while simultaneously implementing changes in the medical system as a whole. On their own, well-intentioned opportunities geared only at women in medicine have limited potential for sustainable change because they do not address the inherent systemic barriers to success and also inadvertently suggest that women are responsible for their own career challenges.\textsuperscript{31}

As innovative work models are developed to address specific barriers to women in medicine, opportunities for future research efforts become more apparent. The body of evidence around best practices for building equitable work environments is still evolving and is therefore rather limited. Research is needed to understand whether these best practices, when implemented, are both sustainable and meaningful. In a letter to the editor of Academic Medicine, Bickel\textsuperscript{32} points out that almost 20 years of evidence about gender inequities in medicine have not resulted in improvements for women physicians. However, the current climate may be different for acceptance of solid research, and thus we advise continuing to seek and test best practices for linking wellness and career advancement for women and other underrepresented groups.

Little guidance exists in the literature regarding how to address resistance to the broad systemic changes that would be required to positively impact gender disparities in medicine. In addition, most of the research on gender inequities in medicine has been focused primarily on heteronormative binary gender norms. More studies are needed to characterize the profound experience of gender inequities by people of color or persons identifying as lesbian, gay, bisexual, transgender, queer, or questioning (LGBT Q+) in medicine because of the compounding nature of discrimination seen with intersectionality.

The Coronavirus Disease 2019 Variable

Existing data on how to improve gender disparities in medicine predate the novel challenges...
presented by the coronavirus disease 2019 pandemic. The extent to which the recommendations suggested in this article are applicable to the new post-coronavirus disease 2019 landscape of medicine is largely unknown. Early reports from the summer of 2020 illustrated the magnified effect that the pandemic has had on mothers compared with fathers in dual-income households. When the workplace rewards those who do not have familial responsibilities and society places domestic responsibilities more heavily on women, it is not surprising that many heteronormative couples have decided to sacrifice the woman partner’s career in the face of an economic downturn and the challenges of a global pandemic. Women physicians are particularly vulnerable to the barriers magnified by these gender roles because they face structural gender discrimination while carrying high medical school debt and feeling accountable for the same work expectations as men. The impact of the pandemic on the advancement of women physicians may need to be monitored closely, and interventions to enhance equity and well-being need to be adjusted accordingly.

Future Directions

It is widely accepted that the talents of women physicians will not be fully realized until there is a universal commitment to change seen in policies, attitudes, education, and clinical practice. This article promotes the tenet that an explicit commitment to wellness, with changes in the workplace and the inclusion of all faculty, will hasten the time when equity and career advancement for women can be achieved. The well-being of women physicians is imperative to a well-functioning health system; as such, several approaches to achieving gender parity in fulfillment and well-being have been highlighted. To foster meaningful change, systems must examine all elements of the organization and understand how the status quo contributes to inequities. Such approaches should include examinations of productivity metrics; promotion of equity, diversity, and especially inclusion; sharing of ideas across industries; and rethinking the pathways to academic promotion to recognize underappreciated, yet integral, invisible work led by women throughout academic medicine. By incorporating creative and innovative approaches to achieving equity at work, disparities can be eliminated, thereby creating a thriving medical culture that will contribute to a healthier society.

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