

WOMEN IN MEDICINE: THE VALUE PROPOSITION OF GENDER EQUITY

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Women make up the vast majority of the health care workforce but are underrepresented in positions of leadership, especially amongst physicians. The differential impact of choices and sacrifices that accompany the profession of medicine are not equitably distributed between men and women. Read this brief to learn more about the value imperative for equity in health care staffing and delivery.

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It is understood that social and biological differences between men and women produce differential risks for health conditions and outcomes, and any strategic population health management strategy attends to these factors appropriately. Similarly, essential to any value-based care delivery strategy is a competent, dedicated team of health care providers who also experience social and biological differences, some of which are defined by gender. Women make up the vast majority of the health care workforce, but they experience substantial inequities in terms of opportunities for advancement and compensation. Institutional policies that effectively support their needs can foster a culture of equity, trust, respect, and inclusion that can lead to better outcomes for organizations, staff, and patients. Addressing this issue involves not only a value imperative, but also a moral imperative. As elaborated elsewhere, the COVID-19 pandemic sharpened the focus on societal priorities of wellness and equity, and those serve as a backdrop for this brief, which summarizes just a few of the specific challenges of women in medicine, many of which have reached a tipping point.

Background

Health care is the [largest](#) employment sector in the US and women have long been the backbone of the health care system, [accounting](#) for 75 to 80 percent of the workforce. Unfortunately, they are not proportionally represented within top health care leadership positions, where they account for less than 15 percent of executives. While women [account](#) for just over half of all medical school enrollments, they have consistently graduated from medical school at rates [below](#) their male colleagues, although that gap has narrowed in recent years. Further, only 18 percent of hospital CEOs are women. Studies have [identified](#) a “general culture of overwork” in the US that impacts both women and men, and may result in some women making family-related accommodations that derail their career progress due to inequitable and unrealistic expectations in qualifications for the “leadership track” in many professions, including medicine. This need for accommodation can come early in women’s careers but also extends beyond medical school and training. According to a recent study, almost three in four women physicians [reported](#) scaling back or thinking about scaling back on their work status within six years of completing medical training, often for family-related reasons. The [message](#) comes through early, even while still in medical school, that “striving, no matter the cost, is integral to...success,” and that cost is often disproportionately borne by women physicians. Perhaps not surprisingly, some [surveys](#) of physicians have found that women

would recommend medicine as a career at lower rates than their male counterparts, and would, in retrospect, choose a profession other than medicine at higher rates than men.

What are some of the root causes that disadvantage women in terms of opportunities for personal and professional growth and well-being? The list is long and often deeply personal, but typically includes lack of mentorship opportunities, [inequitable support and promotion](#), [institutional policies](#) that disadvantage women (i.e., those associated with family leave, lactation, or caregiving), [bias or outright discrimination](#), and [sexual harassment](#). The reality of being a woman in medicine is often incredibly complex and sometimes marked by individual anguish.

“ *I have known female physicians across the spectrum of specialties who have suffered in their own striving in medicine. Barely healed from childbirth, some have been traumatized by short parental leaves; others have mourned the loss of milk supply, due to lack of support around lactation and pumping at work. For those desiring children, this natural drive must be weighed against the intense and lengthy demands of training that overlap with prime reproductive years and the palpable stigma of physician parenthood.*

- [Jennifer Adaeze Okwerekwu](#), MD, MS

The history of discrepant opportunities for women in medicine is long-standing and, according to recent studies, it is not improving in any meaningful way. Looking back over 35 years, [researchers](#) found that women physicians in academic medical centers were 23 percent less likely than their male counterparts to be promoted to the status of associate or full professor and 54 percent less likely to be appointed department chair, especially in more procedure-oriented specialties. For example, in a [study](#) from 2020, only seven percent of US

surgical department chairs were women. Women physicians are also [less likely](#) than their male colleagues to receive research or grant funding, which may arise, at least in part, from preferential [selection](#) for committee service, leaving less time to pursue research.

Even when functioning at the same professional level as their male counterparts, women in medicine experience substantial [differences](#) in compensation. In 2020, the gender wage gap was 28 percent – an increase over 2019, largely [attributed](#) to the differential impact of the COVID-19 pandemic on women physicians – with women earning an average of \$116K less per year than their male physician counterparts. This difference is sometimes attributed to the under-representation of women physicians in procedure-oriented specialties, as well as the historical under-valuing of medical evaluation and management services. Wage gaps are often largest in specialties such as otolaryngology, geriatrics, orthopedic surgery, research, and obstetrics/gynecology, while smaller gaps are evident in nuclear medicine, hematology, urology, colorectal surgery, and emergency medicine. Within internal medicine specialties, [cardiology](#) tends to demonstrate significant gender gaps, both in terms of representation and compensation equity.

Bias (whether conscious or unconscious) and outright discrimination are also factors that constrain the advancement of women in medicine. In a 2017 [survey](#) of physician mothers, almost 80 percent reported experiencing discrimination at work, based on their gender or maternal status. A female surgeon [described](#) disparate treatment by gender, including lack of private dressing areas and suitably-sized surgical equipment such as smaller gloves for women physicians. Experiences of gender bias are not limited to colleagues and may also manifest in patients who fail to recognize their female physician as their physician and instead direct comments to males on the medical staff (including trainees).

In particular, the experience of bias against maternal status can lead to incredibly difficult and intensely personal choices. According to a [study](#) published in 2021, women physicians, especially those in specialist practice, may delay childbearing when compared with nonphysicians. As a result of initiating reproduction at older ages, these women

may be at increased risk of resulting adverse reproductive outcomes. In another [study](#) from 2021, female surgeons in the US were more likely to report delayed or complicated pregnancies, as compared to the female partners of their male colleagues. More than four in ten female surgeons reported experiencing a miscarriage, a rate more than double that of the general population. This is indeed a very high cost to bear in pursuit of professional success.

The Impacts and Legacies of the COVID-19 Pandemic

Although burnout in physicians is a phenomenon that long predates the COVID-19 pandemic, it is precipitating something of a [crisis](#), as the intersection of acute burnout and a history of systemic inequities dramatically reduced resilience in many women physicians over the last year. While all physicians are subject to feelings of burnout, there is [some evidence](#) that this phenomenon is experienced differently by male and female physicians. Few studies report differences by gender, but studies of the Maslach Burnout Inventory indicate women are more likely to report burnout in terms of symptoms of emotional exhaustion, while men are more likely to report feelings of depersonalization. Burnout is associated with many work-related stressors, which vary in their impact on individual physicians. While the following factors associated with burnout may apply to both male and female physicians, they tend to have a greater impact on females: type of specialty, workload, work hours, administrative tasks, increased responsibilities, lack of autonomy or control, financial stress, career stage, loss of meaning and joy in work, having children at home, work-life integration, decreased support, real or perceived lack of fairness in promotion and compensation, other manifestations of gender bias/discrimination, and sexual harassment.

In addition to the experience of various individual personal and professional stressors associated with the pandemic, systemic health care operations have also been impacted. While the overwhelming focus has been day-to-day crisis management for many, [pipelines](#) to leadership, tenure tracks, access to networking and collaboration resources, and research activities have been largely slowed or scaled back, worsening the disparities for women in medicine.

Further, leadership failures (whether perceived or real) in response to the pandemic have negatively impacted organizational reputations, on behalf of both the public and medical staff. According to a [report](#) regarding trust in the US health system published in 2021, only two-thirds of physicians indicated trust in **their own** organizational leadership, one of the lowest scores across categories, and slightly over half of physicians report trust in health care leaders and executives in general. Thirty percent of physicians report a decrease in their level of trust over the course of the pandemic, with one-quarter indicating their workplaces did not effectively address their well-being during the pandemic. Meaningful action is needed from the leadership of health care organizations in order to rebuild trust with medical staff.

It has been said that within every crisis, there is opportunity. Some of the most poignant positive legacies of the pandemic might be an increased focus on equity in the US, in terms of both economic and health outcomes, and wellness, writ large. Within health care, momentum is strong for identifying and reducing disparities in care and outcomes, especially for disadvantaged populations. Similarly, attention to mental and physical well-being and work-life balance or integration are emerging as priorities.

While there is often a tendency to under-prioritize self-care, some physicians may require a [recovery](#) period of healing, post-pandemic. Some beneficial [supports](#) may include temporary leaves of absence, role adjustments, relaxed workflows, and reduced hours. Existing benefit packages are likely to be insufficient, and some flexibilities borne from the extenuating circumstances of the pandemic (especially those enabled by technology) may prove themselves as effective adaptations that can be retained indefinitely, if not permanently.

Similarly, formal and informal organizational policies – especially those around professional advancement – should not penalize those who avail themselves of these necessary benefits. Further, organizations can use this opportunity to review and address [other](#) policies that may increase physician role strain as the US emerges from the pandemic, such as administrative tasks lacking an evidence base, and strategic initiatives that are not immediately mission critical. Other important positive legacies of the pandemic can improve the experience of women in medicine if we “[apply](#)

[the same focus, agility, and collaboration](#)” that served to shape many health systems’ response to an unprecedented health crisis to address the systemic inequities for women, hardwiring efforts that affirm the promotion of diversity, equity and inclusion. While not all health systems were able to effectively rise to the challenges presented by the pandemic, an opportunity to better is at hand.

Women in Medicine and the Value Proposition

Women are essential to the health care workforce, not only in terms of volume but also in terms of outcomes. Female doctors are [concentrated](#) in primary care specialties, often seen as the frontline of delivering value-based care for improved population health. A multitude of studies demonstrate high quality care processes and outcomes associated with physicians who are women:

- ▶ In a [study](#) of elderly hospitalized patients, those treated by female internists had lower mortality and readmissions.
- ▶ In a [study](#) of surgical patients, female physicians had more favorable patient mortality and post-operative outcomes than male physicians.
- ▶ A systematic [review](#) found more guideline-concordant care patterns and some better outcomes from female physicians.
- ▶ Other [studies](#) have identified associations between positive outcomes for patients and physician female gender, including more time spent with patients.

Establishing and reinforcing a culture of inclusion is a sound organizational investment in staff engagement and value-based care for patients. An [analysis](#) of health care organizations’ culture index and key health care metrics found that meaningfully connecting with staff and promoting feelings of pride and affiliation translated to beneficial physician referral patterns and measures of productivity. Further, physicians who are satisfied with their jobs and lives are [associated](#) with improved patient outcomes.

Failing to act on gender equity risks poor outcomes for patients and staff, and ultimately, undesirable consequences for any health care organization.

Effective teamwork is necessary to maintain a culture of safety, but studies indicate [conflict](#) may be present in high-stakes settings like operating rooms, and gender bias is often [evident](#). Microaggressions, sexual harassment, and outright discrimination erode psychological safety and make a team more [prone](#) to medical errors. Acting on the value proposition of gender equity may confer a safety, quality, and competitive advantage to health systems.

Highlight: Geisinger

The Center for Professionalism and Well-Being at Geisinger [focuses](#) on the provider experience to improve engagement, recruitment, retention, and communication, while benefitting patient care and experience, and reducing the risk for medical errors. The Center promotes cultural goals such as transparency, decentralized decision-making, and continuous quality improvement for the organization. In 2020, the National Business Group on Health [awarded](#) Geisinger with the platinum Best Employers: Excellence in Health & Well-Being Award for supporting the “enhancement and maintenance of personal and professional well-being” for staff.

Directing the Center’s efforts on well-being, Dr. Charlotte Collins oversaw the administration of a provider engagement survey in 2018, which included some questions on burnout. After reviewing qualitative data from thousands of comments and follow up conversations, many common themes emerged but there were also specific areas of opportunity – women providers reported higher levels of burnout and they also reported very specific barriers and constraints, especially in work-life integration. Many respondents identified interest in pursuing leadership opportunities but were constrained by a lack of mentorship and a supportive community, leading to feelings of isolation. Some women also verbalized a sense of value-conflict between “being a good wife and mother and being a good doctor.”

In the midst of the discovery process around the factors driving burnout for women in medicine, the pandemic emerged, escalating and intensifying the need to spotlight and address the extraordinary stressors experienced by medical staff, and women in particular. In August of 2020, unable to conduct the focus groups she originally envisioned and

during a relative lull in COVID-19 cases, Dr. Collins issued a follow up survey to women clinicians at Geisinger, seeking to better understand their career aspirations, perspectives on leadership opportunities, experiences with sexual harassment, and other topics. The results, including almost 80 pages of responses to open-ended questions, were compelling. As noted in other workforce surveys across the industry, the women described inequities in career opportunities and compensation, and an environment of bias and discrimination that was not improving in any meaningful way. As one respondent noted, “I was told I could be a physician or a mom, but I couldn’t be both.”

Initially, the plan was to convene and mobilize around this topic, identifying metrics and setting targets for improvement. However, the timeline has been disrupted as the pandemic continues to limit such gatherings, so in the interim Geisinger has taken some preliminary steps, implementing an organizational effort to recognize women in the health care workforce in March 2021, honoring “31 Women in 31 Days.” Further, while still gathering and analyzing the data to fully inform the picture of recruitment and retention across the system, Geisinger recognizes the “crippling effects” of losing great women and clinicians, so they have already implemented improved maternity and paternity leave benefits.

Dr. Collins identifies opportunities for strengthened lactation policies, childcare benefits, flexible scheduling, and a formal structure of career ladder planning and program of mentorship by and for women in medicine at Geisinger as additional actions that are under consideration for improving the orientation toward personal and professional wellness and development. With ongoing surveys identifying not only increases in burnout but also an escalation of disparities between men and women clinicians, the plan is to formally address the issues with Geisinger leadership and develop a plan of action, as soon as circumstances (and pandemic-related care demands) will allow.

What is your health system doing to help promote equity and advancement for women in medicine? We’d love to recognize and share your promising practices, please reach out [here](#).

Next Steps: Taking Action to Promote a Culture of Inclusion

In general, a number of factors are associated with a gender-inclusive workplace, and these are especially pertinent in medicine, given the historical context. Considering [Wharton’s Social Impact Initiative](#), some of these areas of focus and action include:

Opportunities to Improve Equity	Opportunities to Improve Equity
Pay and benefits	<ul style="list-style-type: none"> ▶ Gender equity in compensation, employees are paid equitably for equal work, regardless of sex ▶ Company benefits include paid parental leave that accommodates needs both before and after childbirth
A ‘female friendly’ workplace	<ul style="list-style-type: none"> ▶ Policies that support breastfeeding and other family-related needs ▶ Effective bias, discrimination, and sexual harassment prevention programs
Leadership development	<ul style="list-style-type: none"> ▶ Women are recruited, mentored and actively promoted ▶ Women make up a substantial percentage of staff at various levels throughout the organization, especially in leadership roles
Culture	<ul style="list-style-type: none"> ▶ Empowered and enlightened managers provide employees with autonomy, flexibility, and a supportive and inclusive work climate

At the individual level, there are many new and existing resources for women in medicine who are looking for a community and to promote social justice and equity for themselves and their colleagues. Organizations like the [Group on Women in Medicine and Science](#) “...advances the full and successful participation and inclusion of women within academic medicine by addressing gender equity, recruitment and retention, awards and recognition, and career advancement,” while other [groups](#) seek to empower women through supportive communities and educational resources. As the pandemic recedes, conferences and networking events will likely resume, and there is some [evidence](#) that participation in these kinds of events is associated with increased rates of promotion and salary for women in general.

At the organizational level, there is little doubt about what needs to be done to [improve](#) the experience of women in medicine. [Studies](#) point to a few common system-level [interventions](#) that support women physicians and those who wish to have children at all career stages, and many of these have been previously described or alluded to within this brief:

- ▶ Leadership training to reduce stigma, conscious and unconscious bias, and discrimination toward physician-parents
- ▶ More generous and flexible allowances for parental leave, lactation, and dependent and childcare needs
- ▶ Adaptive and inclusive paths to leadership (e.g., not considering family leave or modified work schedules as automatic demerits toward promotion)
- ▶ Meaningful opportunities for mentorship and sponsorship
- ▶ Equity and transparency in compensation
- ▶ Flexible scheduling (e.g., retaining some of the flexibilities that were required during the pandemic, which have proven to remain effective and viable for care delivery beyond the crisis)
- ▶ Facilitated re-entry processes by state medical boards for physicians who have taken extended leave but wish to return to practice

While these are not particularly novel or innovative interventions, they are also not particularly common. For example, in a 2020 [survey](#) of 152 academic medical centers by the Association of American Medical Colleges, only around half offered some kind of support for child care, a rather straightforward benefit. This is clearly an opportunity for improvement in how physician mothers are supported, one that would potentially accrue to physician parents of any gender.

As illuminated by Dr. Collins' experience at Geisinger, a first step is to ask women physicians how they are doing and what they need. The next critically essential steps are to [hear them and take action](#) – collectively and across the board, working to achieve effective and permanent system change. Experiences during the pandemic have resulted in many individuals re-evaluating their values and priorities, and the extent to which their employers are aligned with and supportive of those values and priorities. Equity is a moral imperative that must be addressed, for the well-being of our medical

workforce and for promoting the health of the US health system and the patients it serves.



We mothers and doctors are barraged with messages that we do not belong here, straddling both roles. The work of dismantling these messages will be impossible for any single person, but cumulatively we can. And for future young women who are budding doctors and hopeful mothers, I hope their search for answers and advice results in them finding a large community of support and belongingness. And I will continue my part to advocate, to mentor, to fight this cycle of self-blame that our training system perpetuates, to continually question these messages of what priorities “belong” in medicine, until finally, we expand this radius of belonging.

-[Eunice Stallman](#), MD

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About the ACLC

The Accountable Care Learning Collaborative (ACLC) is a non-profit organization with a mission to accelerate the readiness of health care organizations to succeed in value-based payment models. Founded by former Secretary of Health and Human Services, Gov. Mike Leavitt, and former Administrator of the Centers for Medicare and Medicaid Services, Dr. Mark McClellan, the ACLC serves as the foundation for health care stakeholders across the industry to collaborate on improving the care delivery system. To learn more about the ACLC, visit accountablecareLC.org.

