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Redesigning healthcare with women in mind

FemTechnology | KEARNEY

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Foreword

For many years, there was an overlooked inequity at the heart of the global healthcare industry: one that continues to have potentially devastating—if not deadly—consequences for half of the population. What is it? A decades-long history of inadequate awareness, underinvestment, missed opportunities, and institutional bias in women's health.

In today's world, health equity is by no means a given, and recently, the penny has started to drop that change is not only necessary, but long overdue. More and more evidence has come to light, showing that women spend a greater part of their lives in ill health and disability compared with men and are more likely to have their concerns dismissed, misdiagnosed, or missed altogether when they do seek help.

In response, high-profile programs such as the World Economic Forum's Women's Health Initiative and UNFPA's 2030 Equity Alliance have started to give the issue more consideration, while large corporations such as Roche, UCB, Philips, Hologic, and GE Healthcare have picked up the baton in the private sector. Now more than ever, health outcomes for women and girls are being specifically addressed.

The digital and data revolution has also enabled some huge leaps forward. Femtech, the branch of technology innovation designed to support and advance women's health, has given many women control over their menstrual cycles and hygiene; fertility, pregnancy, and postpartum treatment; reproductive, sexual, and family health; preventive care; and more. The femtech industry is forecast to be a trillion-dollar sector by 2027. Similarly, digital health companies such as Owkin and Huma and tech giants such as Microsoft have turned their attention toward advancing women's health in particular, contributing to addressing a significant data gap.

But at the same time, a dizzying array of statistics tell us that biological sex and gender continue to form deep fault lines in healthcare provision, which negatively and disproportionately impact people who are biologically assigned female at birth and those who identify as women.

While most theories of health communication, public health, and medical education currently do not consider issues of gender or identity, we believe not widening out this lens has the potential to worsen inequalities within the system. In this report, we examine the nature of care required and the experience of care for individuals across biological sex and gender. For the purpose of simplicity, we will use the words "woman" and "women" to apply to anyone who fits either category, unless we are talking specifically about the female sex or sex-based differences in healthcare.

This isn't the first time these issues have been presented. The causes are complex, varied, and often buried under layers of historical norms and bias. However, in our view, it's time for practical solutions and fixes and a lasting commitment to regenerating women's health. It is also our view that, like raising a child, closing the women's health gap will take a village: companies acting alone will certainly have an impact, but the step-change required will only come from cross-sector collaborations and partnerships.

That's why this movement, backed by this report, was born. To create a cross-sector community, representatives from the healthcare industry, education, government, the medical profession, financial investors, and all other parties have committed to come together to shape a more equitable future for women's health. We are committed to change things for the better, together.

Will you join us?

Paula Bellostas Muguerza
Senior Partner and European Healthcare and Life Sciences Practice Co-Lead, Kearney

Oriana Kraft
Founder and Producer, FemTechnology Summit

A tale of two halves

In 2012, four Berlin-based entrepreneurs co-developed an app called Clue, one of the world's first technology tools for tracking menstrual cycles and their side effects. It proved popular and grew quickly, gaining three million active monthly users in just two years. Fast forward to 2022, and Clue had been joined by many similar solutions, pushing the global menstrual health app market to a valuation of $1.2 billion.

Even as the demand for and provision of women-specific healthcare initiatives and tools is on the rise, policy changes that adversely affect women's health are still being enacted, and critical issues remain unaddressed, as the UK government's recent rejection of mandatory menopause training for general practitioners (GPs) demonstrates.

This illustrates both the critical need for—and precarious state of—women's health today, and it's just one example of the myriad ways in which women's lives and well-being are fundamentally disadvantaged by a lack of understanding, lack of data, lack of investment, and far too often a lack of interest in their specific health issues and needs.

Women's health: where is the care?

Several reports have already identified what has been referred to as a gender gap in healthcare. It's undeniable that the socially constructed norms, attitudes, and behaviors around what comprises different genders and identities holds sway over how people are regarded within the healthcare system, what they experience when they participate in it, and how this influences their health outcomes. It's also true that sex-based differences (in other words, the biological and anatomical differences between those assigned male or female at birth) have a huge influence on all these factors. In this report, we examine the specific impacts on those assigned female at birth and those who identify as women.

Biological sex impacts health

Most people assigned female at birth experience reproductive health events exclusive to their sex, namely menstruation, pregnancy, and menopause. These come with a wide variety of associated conditions, such as endometriosis, which is thought to affect 10 percent of reproductive females globally; perinatal mood and anxiety disorders, which affect around 15 to 21 percent during or after pregnancy; pelvic floor disorder, thought to afflict up to a third of adult females; and menopausal symptoms such as hot flashes, night sweats, insomnia, and "brain fog," which have been reported as causing one in three women to face problems coping at work. Interestingly, it was these topics, along with mental health, that most respondents to the UK government's consultation on its Women's Health Strategy for England wanted to see prioritized.

But the repercussions go far beyond the reproductive cycle.

Hormonal influences are also at play in conditions such as osteoporosis, which is four times more common in females age 50 and above than in males. If you're a member of the female sex, you also are two to three times more likely to suffer from migraines, are twice as likely to experience depression and anxiety or develop Alzheimer's disease, and have up to a four times higher risk of autoimmune diseases including lupus and rheumatoid arthritis. What's more, within five years of having a heart attack, almost one in two (47 percent) females will die, develop heart failure, or have a stroke, compared with 36 percent of males. Overall, while female life expectancy is generally longer than that of the male sex across geographies (83 years versus 78 years in the European Union, for example), females consistently report poorer health throughout their lives and spend longer in poor health.

Clearly, there is limited awareness of—and/or willingness to explore how—female health conditions as well as general health conditions that affect both sexes, impact females specifically.

On the other side of the coin are issues related to gender, which can be trickier to uncover and root out, given their importance in shaping identity at all levels of society and the many biases and stereotypes that come in their wake.

"The history of medicine, of illness, is every bit as social and cultural as it is scientific."

Elinor Cleghorn, *Time* magazine

"Dementia disproportionately affects women, both as patients and as primary caregivers. This double burden underscores a critical need for redesigning healthcare with a female-centric approach."

Carl R. Hanna, PhD, CEO/Co-Founder, Evva Health

Gender norms and biases also impact health

The great double bind in women's health today is that, on the one hand, women are routinely treated differently from men because of the sex-based, biological differences between males and females, and on the other, they are treated as an "average male" because medicine hasn't yet interrogated these differences sufficiently. What impact does this have?

There's a persistent stigma around female and women's health topics

This is particularly the case when it comes to menstruation, sexual and reproductive health, and mental well-being (hysteria, coming from the Greek word for uterus, being routinely used to explain many of the symptoms reported by women historically).

Even today, almost one in two women (42 percent) have experienced period shaming, while according to a Public Health England report, less than half of those experiencing severe reproductive symptoms have sought help.

In many ways, whether due to a lack of understanding, social taboos, or a combination of these and other factors, so-called "women's issues" such as heavy bleeding, period pain, menopause symptoms, contraceptive side effects, and even birth damage have become normalized.

It's not difficult to see why women feel hard done by in this respect if we look at some other statistics. For example, in one 2022 women's health survey, almost 30 percent of participants said that their concerns had been dismissed by a healthcare provider, while 15 percent said their provider didn't believe they were telling the truth. Elsewhere, women attending emergency departments are less likely to be taken seriously and wait longer for opioid painkillers when reporting acute pain. This is despite the fact that women are more likely to seek out healthcare than men, a fact that could be problematic in itself. Sixty-two percent of people with autoimmune disease (a population dominated by women) have been labeled "chronic complainers" by doctors.

Women-specific conditions are under-researched, under-represented, and under-funded

Something that might have escaped many people's attention is women's exclusion from clinical trials following the thalidomide scandal, which led to babies being damaged in the womb. In truth, they have been routinely excluded for years on the basis that hormonal fluctuations could skew results. It wasn't until 1993 that the United States National Institutes of Health (NIH) mandated women's inclusion in trials, meaning that 30 to 40 years of progress was almost entirely devoted to the male body—justified by a belief that what would work for one sex would work for the other.

The repercussions of this are still being felt today. For example, although women account for 70 percent of chronic pain patients, 80 percent of pain medication has been tested only on men or male mice. Going back to heart failure, which we know is more prevalent in women following a heart attack, the NIH reported in 2022 that the proportion of women enrolled in clinical trials for the condition had remained stagnant at around 20 to 30 percent since the 1980s.

When it comes to investment, even government health agencies such as the NIH are now revealing a huge funding gap in women's health research, with conditions that have been found to disproportionately affect women (such as mental illness, headaches, migraine, and anxiety disorders) receiving significantly lower funding relative to their burden on the population compared with those that affect males. As an example, The WHAM Report found that women account for 78 percent of autoimmune disease patients in the United States, yet only 7 percent of NIH funding for rheumatoid arthritis goes to women-focused research. In the UK, only a few years ago, less than 2.5 percent of publicly funded research was dedicated to reproductive health, although one in three women will suffer from reproductive health issues during their lifetime. Looking farther afield, women's digital health start-ups accounted for only 3 percent of global digital health funding in 2020.

"There has been a shocking lack of investment in understanding the biology of conditions that disproportionately affect women and girls. … In nearly three-quarters of the cases where a disease has affected primarily one gender, NIH funding has favored males."

Bill & Melinda Gates Foundation, Women's Health Innovations program

Perhaps none of this is surprising when we consider medical education, which has an equally long history of male dominance, and of differentiating women primarily based on the reproductive system. The Reference Man—white, age 20 to 30, five feet seven inches tall, and weighing 154 pounds—was first developed in the 1970s to understand safe levels of radiation. It is still used in anatomy classes, a staple part of the medical curriculum, and as a standard for transplant organ sizes. Until 1991, it was also used (with reproductive organs added) to represent women, who were effectively treated as "small men."

This approach has not only limited many doctors' ability to recognize potential symptoms relating to female-specific health conditions and sex-specific differences in others; it has also had the trickle-down effect of preventing patients from acting as informed advocates for their own care. In 2021, a Freedom of Information Act request submitted to the UK's medical schools found that 41 percent did not have mandatory menopause education on the curriculum, the expectation being that students would gain this knowledge on GP training placements.

On the patient side of the equation, research by University College London recently revealed that nine in 10 women were never taught about menopause at school and that more than 60 percent only started looking for information about it once they started to experience symptoms. Fewer than 20 percent of UK women feel they have adequate information on a range of gynecological conditions from menstrual well-being to gynecological cancers, menopause, specialist services for victims of gender-based violence, fibrosis, and endometriosis.

What's more, none of these findings have delved into the specific issues that are experienced by transgender women. In a letter to the editor of the *Medical Education* journal, two then-student doctors stated that issues regarding transgender patients were often missing from their program of studies, "even in genitourinary medicine and sexual health, where this is vitally important."

Taking an even broader view, social factors such as income, education, employment, and living environment, along with other characterizations including race, class, and sexuality, also play a huge role in determining women's health outcomes. Often, these add additional layers of inequity.

Just as a few examples, we know that 95 percent of maternal deaths occur in low and lower middle-income countries, that LGBTQ+ individuals suffer poorer mental health and have a higher suicide risk than their heterosexual counterparts, and that Black women face higher rates of certain chronic conditions such as anemia, cardiovascular disease, and obesity, leading to excess mortality compared to other women in the United States.

Data is patchy, at best

All of these issues and more continue to contribute to a massive, woman-shaped gap in medical data, with blind spots in exactly the places they are needed to drive decisions on everything from research topics and funding to treatment development, education programs, resource allocation, and public awareness.

Like every other sector, healthcare has benefited enormously from the digital revolution in recent years, with the result that more data is being produced than ever before. However, women's health is still in catch-up mode. Whether from a lack of common understanding about the issues that fall under this umbrella, gaps in reported data when women do interact with the healthcare system, national reporting systems that lump everyone together (even the World Health Organization's global health statistics have only been categorized by sex since 2019, indicating the scale of the challenge here), or analysis that doesn't accurately reflect the experience of women, the problems they face at every stage of the healthcare process, as we will see in the next section, only compound the problem.

Like every other sector, healthcare has benefited enormously from the digital revolution in recent years. However, women's health is still in catch-up mode.

Worse outcomes for women, across the board

If we look at women's experience of the current health system on this basis, we can see that they suffer from worse health outcomes throughout the healthcare process, from pre-diagnosis to ongoing care.

Pre-diagnosis

As we have discussed, women are more likely than men to have their conditions downplayed or ascribed to mental health issues, especially when it comes to chronic pain and autoimmune disease, which often lead to anxiety, depression, or even suicidal thoughts. As a result, they face lingering conditions with worsening symptoms that are poorly managed. On top of this, there are too many stories to mention of women having to persistently advocate for themselves to secure a diagnosis, often over multiple visits, months, or years.

Diagnosis

There's also plenty of evidence that women face delayed or inaccurate diagnoses as a result of healthcare practitioners' lack of detailed insight into female-specific conditions or how general health conditions present differently in women:

— One study including data from the entire Danish population found that women wait four years longer on average than men to receive a diagnosis across a range of more than 700 diseases.

— Women are seven times more likely to have a heart condition misdiagnosed or be discharged during a heart attack, according to a report by the World Economic Forum.

— Even as female-specific diseases such as endometriosis are becoming better understood, the same report indicates it takes 10 years on average for the condition to be diagnosed, a situation that is only compounded by a lack of non-invasive diagnostic tools.

— Despite sexual function issues being a common side effect of cancer treatment, female patients are asked about their sexual health 41 percent less often than men.

The specialized nature of medicine that allows patients to see particular healthcare providers for different conditions also means that vital information can slip between the cracks, meaning missed opportunities to connect symptoms and provide accurate and timely diagnoses.

One prime example for women is data collection during and after pregnancy, which could be used to identify indicators of future health. If we consider the fact that women with gestational diabetes are more likely to develop type 2 diabetes at a later stage or that those who develop pre-eclampsia or hypertension during pregnancy are more likely to experience a stroke or cardiovascular disease at another point in their life, the case for breaking down these barriers becomes even clearer.

Treatment

"Reference Man" syndrome rears its head again at the treatment stage, a spillover from research approaches designed around men and male animals. Respondents to a UK government consultation on women's health called out limited discussion of treatment options and the risks associated with these, and treatment preferences being ignored as examples of not being listened to by healthcare professionals. For example, it's been found that women are half as likely as men to receive treatment for cardiovascular disease, and many women with chronic illnesses are required to stop taking essential medication during pregnancy due to drugs not having been tested during gestation.

Since 2000, women have reported 52 percent more frequent adverse effects from drugs than men, and of the 10 prescription drugs taken off the market by the United States Food and Drug Administration (FDA) between 1997 and 2000 because of serious adverse effects, eight of these caused greater health risks in women.

Post-treatment

This is often limited. Four in 10 of the women who responded to the UK government's consultation on women's health reported not being listened to when discussing follow-up care. Many of the poor experiences cited related to the period following childbirth or baby loss, while a smaller number felt this was lacking when they needed help with medication side effects.

Evidence also points to women experiencing additional complications and comorbidities compared with men, which is not surprising given the focus on how diseases and treatments affect the male body. For example, a woman with type 1 diabetes is 37 percent more likely to die from a stroke than a man with the same condition and 44 percent more likely to die from kidney disease. Another study found that women were consistently less likely to stick to the prescribed regimens for diabetes and cardiovascular disease, for example, which could potentially be linked to the fact that they experience more side effects.

Clearly, so long as the medical and healthcare professions continue to prioritize the Reference Man, women will continue to face poorer treatment and long-term care options.

"Women fare more poorly compared with men in relation to disease prevalence, access to healthcare, and outcomes after treatment."

Neena Modi, The British Medical Association

Of course, there are knock-on effects from this experience of care that affect women both psychologically and economically.

In addition to experiencing stigma, shame, and judgment on the basis of sex or gender, many women feel sidelined, unsupported, and even patronized by the medical profession. As a result, their experience is minimized, and they often disengage from the care process or fail to adhere to their treatment programs. As one paper that addresses male dominance in medical education describes, there is congruence between what we think, say, and do, and "part of empathy involves placing primacy on the patient's experiences and expertise, allowing practitioners to set aside their own expectations of medical omnipotence."

Ultimately, if trust is lost in the healthcare system, individuals are less likely to listen to experts or engage in maintaining their own health.

From an economic perspective, lower productivity at work is often the first casualty of poor health outcomes for women. For example, according to a study published in the *British Medical Journal*, while 13.8 percent of women reported being absent from work during their period, a massive 80.7 percent said that they attended but were less productive as a result.

Sick days can also put a dent in people's paychecks and career plans. A US-based study found that workers suffering with chronic pain lost 10.3 working days on average each year compared with 2.8 days for their peers, while a survey of employers' reasons for not promoting employees revealed that 49 percent were less likely to advance those who took too many sick days.

Finally, with many women's menopause symptoms leaving them less able to cope at work, one in four consider leaving, and one in 10 actually do. Research has suggested that the effects of perimenopause and menopause are costing UK businesses 14 million working days per year, the equivalent of £1.88 billion in lost productivity. Meanwhile, the more women that go off sick, the more pressure is piled onto the healthcare system.

Really, what we have discussed here is only the tip of the iceberg: there are many more studies and statistics that demonstrate the damaging effects of continuing with the status quo in women's health.

What's more, investing in women's health is not only a moral imperative; it also makes economic sense. As an article in the *British Medical Journal* states, "Human rights, theory, evidence, and common sense all suggest that greater investment in women's health could be among the 'best buys' for broader economic development and societal well-being." Putting a figure on it, the World Economic Forum's *Insights Report on Closing the Women's Health Gap* has projected that "investments addressing the women's health gap could potentially boost the global economy by $1 trillion annually by 2040."

There's a lot to fix, to put it mildly. But with so many issues at every point of interaction between women and our healthcare systems, where do we start to tackle them?

In addition to experiencing stigma, shame, and judgment, many women feel sidelined, unsupported, and even patronized by the medical profession.

Doubling down on equity

With this in mind, we have outlined the priorities for change and the actions required to begin the process of redesigning healthcare systems with women in mind around six themes.

Shaping the public health agenda

Increase public health advocacy to raise awareness around women's health.

This needs governments to put women's health on—and higher up—the political agenda and target sources of stigma and bias around women's health in the general population. As we have referenced, the UK government has taken steps in this direction. In 2022, it published the Women's Health Strategy for England, outlining its ambitions and actions over a 10-year period to improve the health and well-being of women and girls. Based on input from more than 100,000 individuals and more than 400 organizations and experts in healthcare, it reflects critical issues across each stage of a woman's life course, from disparities in health outcomes to the need for more women-based research, as outlined in this report.

At the same time, patient advisory groups (PAGs) and policymakers should work together to weave compelling communications about novel women's health solutions and how they are improving outcomes for women, not only in terms of their health, but also psychologically and economically. PAGs can play a connecting role across the ecosystem to bring all relevant stakeholders together to share women's experiences of the healthcare system, engage, and feel empowered to collaborate on solutions.

Overhauling medical education

Expand the medical curriculum to cover female and women's health topics adequately and eliminate sources of bias.

This effort must be two-fold:

Educating medical professionals. At the policy level, this means embedding women's health in national school curriculums to build up knowledge and understanding at a young age, and the same must be done in higher education settings—in much more detail—so that the medical profession is armed with scientific and social knowledge relating to female and women's health and knowledge and skills gaps for medical professionals who are already qualified can be bridged. As part of the Women's Health Strategy for England referenced above, specific teaching and assessments on women's health will become mandatory in medical training.

Educating patients. With the right policies in place, female and women patients will benefit from having more useful information at their fingertips about the diseases and conditions that are likely to affect them at all relevant life stages. New technologies and solutions that can offer help to women in a more accessible, less invasive way should also be included on the curriculum. One example is The Femedic, a health platform dedicated to women. Offering education, advice, and information, it is intended to complement professional health advice.

Finally, the importance of listening, an empathetic approach, and training in psychosocial skills cannot be overstated. Healthcare professionals should understand how their own social markers—including class, race, ethnicity, and sexual orientation as well as gender and biological sex—have the potential to influence their interactions with patients and be able to adjust their behaviors accordingly. Dealing with the emotional aspect of the patient relationship sensitively is just as important as the medical aspect (if not more so) and should be included as a core element of medical training.

Raising the stakes on research and development

Increase the volume of clinical and policy research trials on female and women's health conditions, and ensure fair gender representation in all trials.

First, this requires pharmaceutical companies to ensure that all sexes and genders are represented in the development of any new drugs and therapies, for example, by including more women in clinical studies and trials and carrying out more research into female-specific conditions and the impact of other general health conditions on women.

But it doesn't end there. We know that underneath the surface-level problem of not enough women being included in trials, women of color are even more systematically excluded. In the United States, Congress commissioned a report as a means of surfacing and addressing this intersectionality, which includes policies, programs, and projects aimed at increasing the inclusion of these groups in clinical research, and a set of recommendations to boost participation.

Academic institutions can also promote knowledge sharing, dialog, and collaboration on new solutions for women's health by establishing interdisciplinary forums, partnerships, and alliances. One example is the University of Oxford's Research Alliance on Women's Health. This strategic partnership between the university and Bayer HealthCare is focused on researching gynecological therapies and discovering new treatment options for endometriosis and uterine fibroids. Another is the EU's Finding Endometriosis using Machine Learning (FEMaLe) project, part of the Union's funding program for research and innovation. This has brought a coalition of 17 partners from nine European countries together to develop a personalized model for early risk prediction, prevention, and intervention for people with endometriosis.

Building women-centric integrated care pathways

Create care pathways that are accessible and easy for patients to navigate, covering all patient touchpoints.

Enabling policies are the first step here. By building a public health infrastructure that is simple and straightforward for women to access and use—for example, by ensuring sanitary materials, contraception, and sexual and reproductive health services are funded properly and readily available—girls and women will have more control over their own health.

"We live in a world where we have the technology already in our hands to eliminate barriers to care access, but we still see unacceptable gaps in health outcomes for women. We need a committed effort to adopt digital health at scale if we want to expand women's participation in clinical research, learn more about their responses to therapy, and deliver personalized care pathways that take their unique experiences into account."

Dan Vahdat, CEO and Founder, Huma

In addition, building convenience into the system through such initiatives assumes even more importance when we consider that women are not only more likely to assume the burden of unpaid work and care than men, they also struggle to put themselves first when it comes to health and well-being. Community pharmacies can provide a first touchpoint for women to discuss their health issues before diagnosis. Virtual clinics, as provided by Tia, a US-based healthcare provider for women, enable users to get help at home, rather than having to attend a doctor's surgery or clinic.

Collaboration across different segments of the medical profession, such as pharmacists and GPs, can also make sure pathways stay intact wherever they are needed and that patients are treated holistically and put at the center of care. For example, Maven is the largest virtual clinic for women's and family health and through a comprehensive platform offers continuous holistic care across fertility, pregnancy, adoption, pediatrics, and menopause. Other new healthcare companies, such as Maeve, have the ambition to build a healthcare system that treats the "whole human" in an integrated way. Maeve is focused on delivering integrated, tech-enabled, and empathetic care whereby dedicated health coaches work alongside an integrated care team (including the likes of GPs, OB-GYNs, physios, therapists, dermatologists, nutritionists, dentists, acupuncturists, personal trainers, and others) to treat women holistically and concurrently.

"With the ongoing advances in imaging and generative AI in healthcare, no matter which hospital you are at or who the doctor is, well-trained AI algorithms can automatically detect disease earlier with increasingly high accuracy. I am excited about how AI can democratize healthcare for women by reducing variability in care and increasing access to life-saving treatments."

Christopher Mansi, CEO and Co-Founder, Viz.ai

Getting serious about data

Ensure gender-specific data is collected, regulated, analyzed, and used in a responsible way across the healthcare ecosystem.

There are four main areas to address here.

Empowering women to proactively manage their own health. The rise of wearable technologies and apps such as Clue and Flo, the female health app with more than 300 million users globally, has given women better knowledge, control, and agency over their own health. This not only is in terms of how their body is functioning at a given time, but is also opening up access to related topics and conditions that might affect women in the future and encouraging a more preventive approach to healthcare.

Going beyond the individual. Related to the above point, these advances have also started to provide a noticeable uptick in data collection and could be a useful integration point with healthcare systems at each stage of the process—they can even send information such as your heartbeat, respiratory rate, and temperature to a healthcare professional in real time. For example, Ava, a technology company dedicated to women's health, proved the potential benefit of using tech to advance general health when it ran clinical trials to determine whether the fertility data gathered via its tracking bracelets could also be used to detect COVID-19.

Putting a connecting infrastructure in place. Again, policy is the key to making data work for the health-care system and for women. This includes making electronic health record (EHR) systems—supplied by a variety of vendors—fully interconnected and interoperable so that data flows are uninterrupted and any woman's health—including her history, potential flags for certain diseases, and where comorbidities could show up—can be managed holistically. For example, NHS England's Federated Data Platform (FDP), operated by Palantir, will aim to connect data at scale in a safe and secure environment across the health service to deliver more responsive services and more joined up patient care and make it easier for healthcare staff.

Building in security and protection. In addition to ensuring that data is high quality, secure, usable, reliable, and compliant with all required laws and regulations, it's crucial that data is used only to promote women's health and well-being, that its use doesn't place women at risk in any way, and that any fears around trust, identity, privacy, and individual security can be overcome.

"Nuffield Health has been campaigning to raise awareness about the long-standing barriers women and girls face when it comes to their health and fitness. Data from our Healthier Nation Index shows that women are more likely to report barriers to exercise than men, which is why we have launched Move Together, an initiative that offers free exercise classes to girls across the UK."

Davina Deniszczyc, Medical Director, Nuffield Health

Accelerating investment

Increase funding across the ecosystem for academic research, product research and development, and consumer health solutions.

Policy input is vital here to make sure funding for research and innovation is directed appropriately and proportionately into female- and women-specific health conditions as well as developing new business models to create affordable solutions. Academic institutions should also consider increasing funding, grants, and special programs to attract more medical and science research into these areas, particularly those that are currently underserved. Pharma companies also have the resources and influence to fund more women-specific clinical research.

Last but not least, private investors and investment funds can make a real difference to women's health. Venture capital funding for women-focused health start-ups was previously sitting at less than $100 million. However, women's health investment has flourished in recent years, experiencing a 314 percent increase compared with a 28 percent increase in overall healthcare investment. One reason could be that more women founders and investors are becoming active in the market. Of women's heath companies, 76 percent have a female founder, which is three times higher than the overall innovation ecosystem. As Jessica Federer, the head of a New York investment company, told the *Financial Times*: "Every human on the planet is the product of women's health. … Waiting on male investors to invest in [it] clearly hasn't been working."

"Investing in research and business in women's health is a mandate that can shift healthcare outcomes, reduce economic burden, promote gender equality, and create economic opportunities. It is a strategic investment and commitment that creates more productive and healthier societies."

Carolee Lee, CEO & Founder, Women's Health Access Matters (WHAM)

Making it happen: for everyone, by everyone

As with all complex whole-of-society issues, there's no way for any individual or group to solve this on their own. So although various stakeholders can (and must) play their own hand, the real power—and real transformation—will come from deep-rooted, continuous collaboration across all aspects of the health ecosystem. The needs are clear:

Rethinking what equitable healthcare means:

— Understanding what drives worse health outcomes for women, and recognizing the combined impact of all social determinants of health, in addition to biological sex and gender

— Changing the conversation about women's health in schools, at home, at work, and in healthcare settings—and getting society behind this shift

— Increasing the representation of women where it matters

Resyncing all stakeholders around this new mission:

— Establishing more well-funded and highly visible women's health programs and infrastructure that are based on women's experiences, expertise, and insights and joining these together across educational settings, workplaces, and the healthcare system so they become even more dynamic forces for change

— Setting up the communities and groups that provide education, support, encouragement, and safe spaces wherever they are needed

— Supporting, endorsing, and driving action at the most senior leadership levels in government, research, and industry

And ultimately:

Changing the mindset everywhere that matters from "women as the exception to the Reference Man rule" to the rightful "women as 50 percent of the population worth investing in" and therefore **regenerating** healthcare systems so they have true equity at their core.

Full regeneration is a tough—and essential—ask. But it's possible, especially if done through creativity, community, and collaboration. In the words of Gloria Steinem, one of the original advocates for women's reproductive rights, health, and well-being, "The future can be what it should be, because we are going to make it what it should be."

Come and join us.

Our team

Stephanie Allen
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Paula Bellostas Muguerza
Partner, London

Anna Bode
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Kate Fitzpatrick
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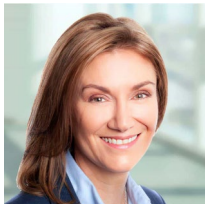
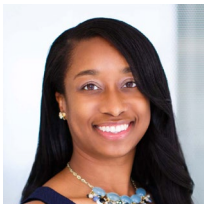


Tamara Gilberto
Content Strategy Director, London

Amelia Gosztony
Consultant, London

Anna Grove
Executive Assistant, London



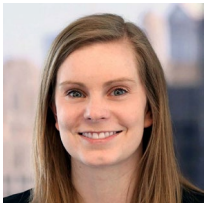
Dominique Harris
Partner, Chicago

Abby Klanecky
Partner & CMO, Chicago

Oriana Kraft
Founder, FemTechnology

Saumya Krishna
Partner, Gurugram

Kim Leung
Community Mgr., Stockholm



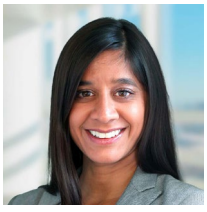
Kate Maheu
Partner, Chicago

Juliana Muir
Partnerships & Events, London

Aoife Mulhearne
Consultant, London

Shivani Parekh
Partner, Chicago

Birja Patel
Marketing Specialist, London

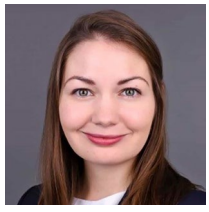


Keena Patel-Moran
Partner, Boston

Betty Pio
Partner, San Francisco

Katy Rauen
Partner, San Francisco

Amanda Riszko
Marketing Specialist, Chicago



Natalie Schmid
Consultant, Zurich

Bettina Schultheiss
Consultant, Zurich

Ekaterina Strelnikova
Consultant, Amsterdam

Ridhi Thukral
Consultant, London

Detria Williamson
Partner, Düsseldorf

Karen Yocky
Consultant, Chicago

About FemTechnology

FemTechnology.org is on a mission to close the gender data health gap via their flagship **Summit** – bringing together corporates, femtech start-ups, researchers, and clinicians for a 360-degree perspective on innovation in order to tackle collective pain points in women's health; **University Series** – scouting groundbreaking researchers and innovators in women's health to help disseminate their work to a broader audience and connect them to funding opportunities; and **Guide** – aggregating women's health solutions to match innovations directly to women in need and build the foundational database for future breakthroughs in women's health.

femtechnology.org

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Kearney is a leading global management consulting firm. For nearly 100 years, we have been a trusted advisor to C-suites, government bodies, and nonprofit organizations. Our people make us who we are. Driven to be the difference between a big idea and making it happen, we work alongside our clients to regenerate their businesses to create a future that works for everyone.

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