

JUNE 2021

ACHIEVING A DOUBLE DIVIDEND:

THE CASE FOR INVESTING IN A GENDERED APPROACH TO THE FIGHT AGAINST MALARIA



THE FIGHT AGAINST **MALARIA** CAN NO LONGER BE **GENDER BLIND**

As the saying goes, disease does not discriminate. Anyone can get malaria. But women bear the health, societal and economic brunt of this ancient and deadly disease that thrives in and exacerbates poverty and deepens inequalities. Year after year, hundreds of millions of pregnant women and children under the age of five are particularly vulnerable to malaria, with children under five making up 2/3 of all malaria deaths. Others—especially adolescent girls—fall through the many gendered gaps in the provision of malaria services, sometimes with lifelong consequences.

But malaria is treatable and preventable. Since 2000, the world has made tremendous progress against malaria: driving deaths from the disease down by 60 percent and cases by almost 40 percent; saving 7.6 million lives; reducing the strain on health systems; and unlocking billions in the global economy. However, this significant progress has now slowed. We need new strategies and approaches to accelerate progress to end this disease for all.

Women in malaria-endemic countries are the leading—but little-acknowledged—investors in the fight against malaria. They make up 70 percent of the community health workforce that has been instrumental in driving down malaria cases and deaths in remote and rural communities over the last two decades. Women and adolescent girls are also the greatest contributors in the informal “care economy.” But caring for children and family members who may suffer from malaria multiple times in a year keeps them from steady work or school attendance.

And yet, for too long, the fight against malaria has been gender-blind—including the lack of disaggregated data on how many men and women fall sick and die from malaria every year, and need to better tailor and target access to life-saving interventions such as mosquito net distribution and indoor residual spraying (IRS). The global community has not consistently taken the critical gender lens to the fight against malaria—until now.

It is time to address malaria’s hidden toll on women and girls, and to empower women and girls to be greater change agents in the fight against malaria. This report offers solutions for rectifying the gender blind spot in our collective efforts to fight the disease.

It shows, for instance, that when women have agency in household decision-making, it leads to better malaria outcomes. It tells us that investing in a female health workforce creates pathways for them to becoming decision-makers, not just implementers of malaria programs and policies; they also serve as role models for other women and girls in their communities. Gender considerations also are critical when countries are chasing the last cases of malaria on the road to elimination. And it warns us that adolescent girls face the greatest hurdles in accessing health services, especially when they are pregnant, contributing to malaria being

the fifth leading cause of death for 10- to 14-year-old girls worldwide and a contributing factor for girls missing school, which can put them at greater risk of early marriage, child-bearing, and sexual exploitation.

The bottom line is that when families and communities suffer less from the deadly or long-term consequences of malaria, new opportunities open to women and adolescent girls that are critical for improving other health outcomes, maximizing their potential, catalyzing economic recovery and lifting families out of poverty. When we invest more in women and adolescent girls at the fulcrum of the malaria fight, the impacts will be transformative and far-reaching for both health and gender equality outcomes.

Gender-based investments in malaria prevention, control and elimination efforts are key to achieving progress toward eradication that has long been elusive. Ending malaria is an unrealized opportunity for advancing gender equality in health. And when women and adolescent girls are empowered and gender equality improves, we spur a virtuous cycle: greater access to healthcare leads to lower child-mortality rates and an earlier end to malaria and other diseases. Gender-based investments in malaria also will deliver a powerful double dividend, addressing many of the long-term gender inequities that are perpetually exacerbated by the disease.

To achieve this, we need leadership at all levels—from communities to countries, from family tables to global forums, and from men and women alike. It is time to fast-track strategies that leverage the investments already made by women and adolescent girls and focus on the outsized impact they could have if they were put at the center of this fight and win it sooner. The Investment Case tells us why it matters and how we can achieve it.

Her Excellency Ellen Johnson Sirleaf

Co-Chair, End Malaria Council

Founder, Ellen Johnson Sirleaf Presidential Center for Women and Development



WHY BRING A GENDER LENS TO THE FIGHT AGAINST MALARIA?

Malaria, a vector-borne disease transmitted by mosquitoes, is preventable and treatable. Thanks to increased global investments and partnerships over the past two decades, the world has made tremendous progress against the disease, scaling up access to the innovative tools (such as diagnostics and bed nets) that have saved more than 7.6 million lives and prevented 1.5 billion malaria cases since 2000. Since then, 24 countries have eliminated malaria and another 25 are on track to do so by 2025. In fact, we could end this deadly disease worldwide within a generation.

Yet over the past few years, funding has flattened and the rate of progress toward eradicating malaria has slowed in the highest-burden countries. According to the World Health Organization's 2020 World Malaria Report, the disease killed 409,000 people and caused 229 million new infections in 2019.¹ The families and communities at greatest risk are among the hardest-to-reach populations, living in remote, rural parts of low-income countries and migrant and refugee communities with poor access to health services. Two-thirds of global malaria deaths are children under 5 in sub-Saharan Africa.

As patients, caregivers and healthcare providers, women and adolescent girls experience differentiated vulnerabilities to, and impacts from, malaria. Recurring infections often strike families multiple times a year, which is a contributing driver of time poverty for women.² Further research and analysis of malaria's direct and indirect burden on women and adolescent girls is needed to better inform government policies and global and national investments in malaria programs.

An initial analysis of peer reviewed literature, conducted by researchers at the Swiss Tropical Health Institute and Columbia University, estimated the hidden costs of malaria's impact on the opportunity costs for women as patients, caregivers and Community Health Workers. It showed significant gendered differences in time spent on unpaid household caregiving duties and community health work.

This initial estimation suggests that:

- Women spend more than **four times the number of days spent on caregiving** for malaria cases in a household compared to men.
- Women Community Health Workers spend **four times as many hours on unpaid work** compared to men.

The ubiquity of malaria for hard-to-reach populations (with many of the poorest households experiencing multiple episodes during high transmission seasons) and its impacts extend well beyond direct health consequences for those it infects. Malaria burdens fragile health systems, reducing health capacity to address other deadly existing and emerging diseases. Malaria also keeps children and adolescents home from school and their parents—especially their mothers—from the steady work that could reduce cycles of poverty. And it is responsible for billions of dollars in lost annual income, productivity, and time, drastically impeding economic growth and societal progress. For example, in Uganda, the 3.3 million children under 5 who seek treatment for malaria every year amounts to an economic impact of \$333 million to patients and \$32 million to the government.³

At the same time, malaria eradication is one of the most effective levers we have to bend the curve on poverty for women. When malaria is eliminated, mortality due to other pathogens and causes goes down, as well. When children survive past their 5th birthday and families are not sick with malaria, parents can keep steady work, children stay in school and families are more productive, all of which reduces poverty and helps improve gender equality.

Eradicating malaria is possible, but only if the rate of progress is accelerated. Achieving this requires significantly more resources to expand life-saving investments to all those in need and optimizing impact with more efficient and equitable interventions. It also requires new strategies for directing and maximizing current investments to leave no one behind.

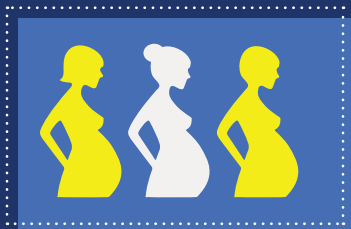
A ONCE-IN-A-CENTURY PANDEMIC SPIKES GENDER INEQUITIES DURING A MILLENNIA-LONG EPIDEMIC

The COVID-19 pandemic has laid bare what a health shock does to devastate lives, communities, health systems, and economies. And as a recent UN Women Report points out: “the impact of crises is never gender neutral, and COVID-19 is no exception.” Analysis by UN Women and United Nations Development Programme shows that COVID-19 has pushed 47 million women and girls into poverty and could result in an 8 percent to 45 percent increase in deaths among pregnant women and young children. The gendered impacts from COVID-19 are multifold and include:

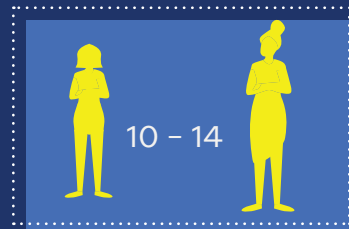
- Loss of income and employment in informal and feminized sectors where women’s employment is **19 percent more at risk** compared to men’s.
- Widening poverty gaps, especially for the **critical age group 25–34**.
- New burdens from “**time poverty**” due to increased demands of unpaid care and domestic work.
- Disruptions to sexual and reproductive **health services**.
- De-prioritization of **sex disaggregated data** and widening information gaps related to **gender data**.

The residual fallout will not be fully understood for a long time and will take decades to recover from—but studies show that the opportunity to hasten economic recovery and reduce the widened gender inequities from COVID depends on “including and supporting women, and the organizations and networks that represent them,” putting women at the center of the response.⁴

MALARIA'S GENDERED IMPACT ON WOMEN AND ADOLESCENT GIRLS AS **PATIENTS**



In 2019, over **11 MILLION PREGNANT WOMEN WERE INFECTED WITH MALARIA** in sub-Saharan Africa, resulting in 10,000 maternal deaths, hundreds of thousands of cases of maternal illness such as anemia, and nearly 900,000 children born with low birth weight.⁵

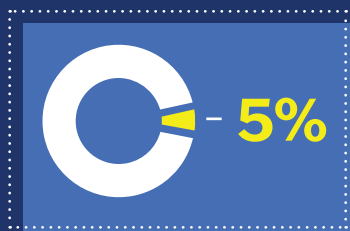


In 2016, malaria was the **5TH LEADING CAUSE OF DEATH AMONG ADOLESCENT GIRLS** between the ages of 10 and 14.⁶

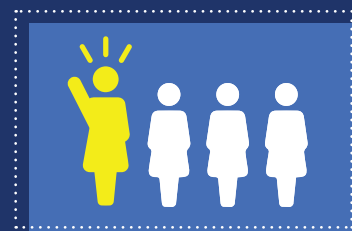
WOMEN'S IMPACT ON ELIMINATING MALARIA AS **PROVIDERS**



INVESTING IN COMMUNITY HEALTH WORKERS YIELDS RETURNS AS HIGH AS 10:1 when accounting for increased productivity from a healthier population, the avoidance of the high costs of health crises, and the economic impact of increased employment.



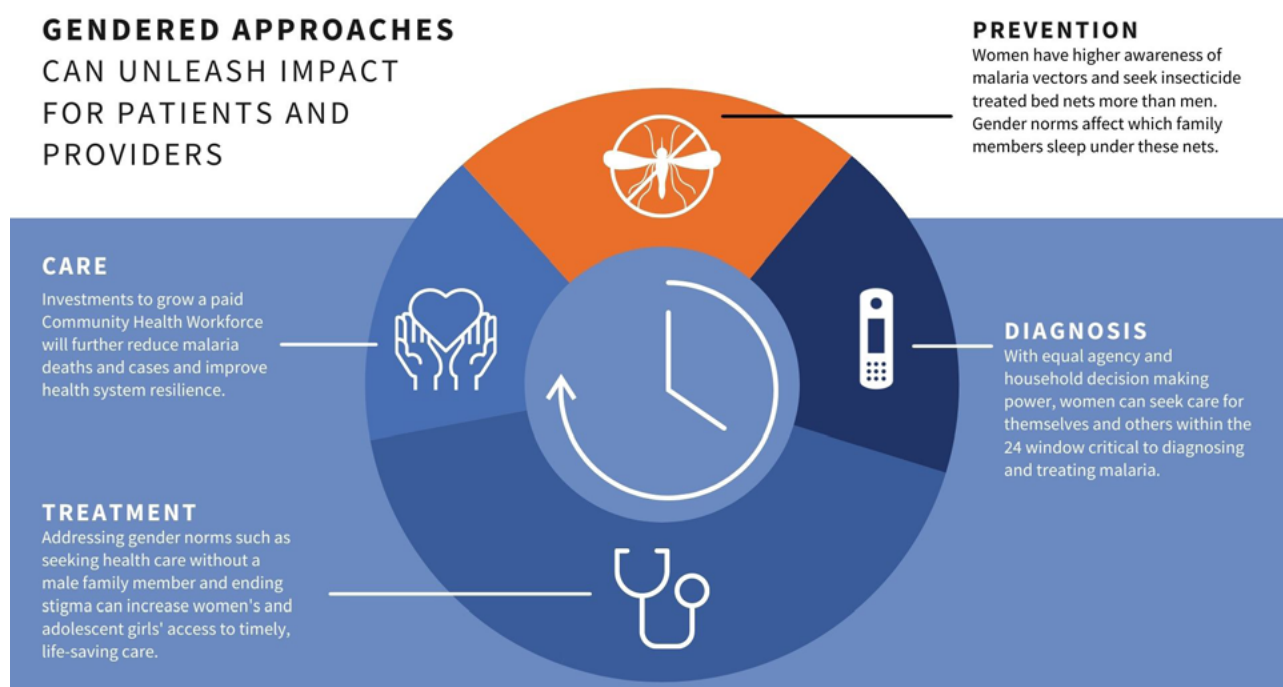
The financial value of **WOMEN'S CONTRIBUTION TO THE GLOBAL HEALTH SYSTEM** is estimated to be 5% of Global GDP, **HALF OF WHICH IS UNPAID** which is approximately 1 trillion dollars.⁷



70% OF THE GLOBAL HEALTH AND SOCIAL CARE WORKFORCE IS MADE UP OF WOMEN but only **25% HOLD SENIOR ROLES**⁸

IT IS TIME TO BRING AN INTENTIONAL GENDER LENS TO THE FIGHT AGAINST MALARIA.

The investment case for gendered strategies in the fight against malaria will help accelerate progress towards malaria eradication, as well as gendered resilience, resources and pathways to empowerment. The impact of this approach will deliver returns beyond a single disease and will help countries build back better in the wake of COVID-19.



THE EFFECTS OF MALARIA DISPROPORTIONATELY IMPACT WOMEN.

Malaria itself does not discriminate. In some settings, such as among migrant and outdoor workers, men and boys are at greater risk of contracting the disease than women are. In other cases, women and adolescent girls are more vulnerable, particularly when they are pregnant—and especially during their first pregnancy, which often takes place during adolescence.

During pregnancy, malaria risk increases exponentially, targeting the placenta and putting the pregnant girl or woman and the unborn baby at greater risk of death, illness, anemia and stunted growth. This risk continues during subsequent pregnancies. In 2019, 11 million pregnant women in sub-Saharan Africa were infected with malaria, resulting in nearly 900,000 children born with low birth rate and 10,000 maternal deaths.⁹ Stagnation or inability to reach these adolescent girls and women effectively is one reason we are losing the fight against malaria.

Cultural and systemic barriers to gender equality hinder women's access to life-saving malaria interventions

While the gendered risks of malaria may be known, the determinants and impacts associated with malaria risk and outcomes are not well-researched, nor are they consistently factored into malaria programs or data. Cultural and systemic barriers to gender equality hinder women's access to the life-saving interventions responsible for the world's progress against the disease. The unequal balance of power between men and women in individual households can have grave consequences for women's health. In many cases, the use of insecticide-treated nets (ITNs) is subject to the gender norms that govern sleeping patterns.

And the indirect costs of malaria—the lost schooling and jobs, unequal caregiving burden, higher rates of all-cause under-5 mortality, and so much more—fall unequally on women and girls. This is particularly the case for poor women and their children who continue to bear the brunt of malaria's morbidity and mortality. They and their families fall through multiple gaps in the provision of effective malaria prevention and treatment, often due to gender-related barriers. Epidemiological data does not typically measure these health and economic costs.

Timely access to malaria prevention and to treatment **within 24 hours of fever onset** is a matter of life and death, opportunity and potential.

Malaria outcomes worsen when gender inequalities prevent women and adolescent girls from making decisions about when and what resources to use for their and their families' healthcare. Innovations in how to fight malaria more effectively also could be unlocked with greater inclusion of women and adolescent girls.

- **Gender dynamics** can influence who within a household has access to a bed net, as well as when or whether to seek healthcare.
- Gender dynamics within a household influence **who can decide if and when care is sought** within the critical 24 hour window.
- Norms may require a woman to receive **male approval** before seeking care or to be accompanied by a male household member when she does.
- **Stigma and taboo associated with pregnancy**, and particularly adolescent pregnancy, create barriers to timely care-seeking.

All these imbalances reduce the full impact of community health and access to malaria prevention and treatment tools and have life consequences.

WOMEN CARRY THE LOAD IN THE FIGHT AGAINST MALARIA.

While women and adolescent girls are disproportionately vulnerable to malaria and its effects, they simultaneously serve as the vanguard of the global fight against the disease—in the public sphere as healthcare and vector-control workers, as community leaders and advocates, as leaders in the malaria community, and at home, as mothers and caretakers themselves. Their roles related to malaria are multifold and time intensive.

In a “formal” capacity, women account for 70 percent of global Community Health Workers (CHWs) who have proved vital to the malaria detection, treatment and surveillance that has driven significant progress against malaria to date. Their life-saving work includes education about prevention, distribution of ITNs, rapid diagnostic testing, and provision of antimalarial treatment.

Through integrated case management at the community level, CHWs also contribute to reducing under-5 child mortality in several critical ways, including by diagnosing and treating pneumonia and diarrhea. Simply put, an investment in their work is an investment in reducing under-5 mortality overall—not just from malaria.

Beyond the formal health sector, women and girls are also the greatest contributors to the informal “care economy,” which includes disproportionate task sharing related to care of children, the elderly and the infirm, and management of household chores. In Ghana, for example, researchers estimate that women provide informal care in 83 percent of malaria cases. Additional modeling shows that women in agricultural households invest up to 246 days of caregiving for malaria cases among children in a household compared to 66 days by men, resulting in an inequality of 180 days over a lifetime of child rearing.¹⁰

Ending malaria is an unrealized opportunity for advancing gender equality because it is preventable, treatable, and beatable.

All this caregiving carries a cost. Despite evidence that shows that care by CHWs increases utilization of services, researchers note that “women health workers are concentrated into lower status, lower paid and often, unpaid roles, facing harsh realities of gender bias and harassment.”^{11, 12} Moreover, there is another significant opportunity cost to unpaid labor that is particularly pernicious for women in low income settings: time-poverty.¹³ Indeed, the unpaid, informal labor provided by women as caregivers “leads to a vicious cycle in which time poverty prevents women from achieving economic independence.”¹⁵ Women health workers face a third major challenge: they do not typically hold leadership or decision-making roles even when they do have paid caregiving positions. One study found that 70 percent of the global health and social care workforce is made up of women, but only 25 percent hold senior roles.¹⁴

Added to this are the opportunity costs of lost economic productivity, education, and career advancement due to the recurring and pervasive nature of this debilitating—yet entirely preventable and treatable—disease.

GENDER-INTENTIONAL APPROACHES CAN HELP ACCELERATE PROGRESS AGAINST MALARIA.

While partners in the malaria fight have begun taking steps to address gender, the gender dynamics of the malaria fight are under-researched. This lack of research, gender analysis, data, and insight prevents policy makers from understanding the true impact of the disease on families' health and on women's and adolescent girls' economic and social empowerment. It also keeps the global community from better targeting investments and programs and from developing more effective policies and programs that could increase the uptake of life-saving malaria interventions.

Applying a gender lens to malaria investments can return a double dividend, accelerating malaria eradication efforts and addressing long term gendered educational, leadership, and economic costs of malaria on women and girls.

Gender-intentional strategies can increase equitable access and improve uptake of malaria interventions, reducing the disease's burden and accelerating malaria eradication. It also can address the long-term educational, leadership, and economic costs of malaria on women and girls, advancing gender equality to help break the cycle of poverty. Women's leadership is key, and to enable women's participation and leadership in the malaria response, structural barriers to their engagement—such as gender norms—must be removed through interventions that target community leaders and men and boys.

When women are empowered with decision-making agency and valued as health workers, they can improve maternal and child health, reduce malaria's impact on health systems, and lift themselves and their families out of poverty.

- **Female heads of households** are more likely to use mosquito nets and purchase repellants compared to male heads of household.¹⁶
- Households are at least **16 times more likely** to have used a mosquito net for a minimum of 8 months during the previous year if their women members have high levels of decision-making power.¹⁷
- One standard deviation **increase in women's bargaining power** decreases likelihood that a family member contracts malaria by 40 percent.¹⁸
- In 2020, **20,000 female seasonal workers** hired to support indoor residual spraying (IRS) campaigns in 16 countries earned over **USD \$2.5 million in wages**, providing substantial financial support to these workers, their families, and communities.

INVESTMENT AREAS AND CASE STUDIES

The fight against malaria serves as a critical entry point for gendered strategies that will help reduce overall inequities and result in gendered resilience, resources and empowerment. Two major areas of investment for achieving the double dividend of reduced malaria cases and deaths and improved gender equality are investing in women in the healthcare workforce and empowering adolescents as agents for change. The following provides a deeper analysis of each of those investment areas with case studies highlighting the impacts of bringing a gendered lens to the fight against malaria.

INVESTMENT AREA: WOMEN AS THE DRIVING FORCE FOR MALARIA ELIMINATION AND ECONOMIC RESILIENCE

As global health workforce shortage and maldistribution issues increase, the need for a stronger, foundational community health workforce will only intensify. In fact, achieving the global goal of universal health coverage by 2030 will require 18 million more health workers in low- and lower-middle- income countries. Designing and enabling this workforce with women's financial inclusion and protection needs in mind can be a pathway to increase women's empowerment and to improve malaria outcomes.

Build on success and invest in growing the paid community health workforce.

The ability to promptly prevent, detect and radically cure malaria infections—and to address other preventable diseases—in remote communities has been a driving factor in the tremendous progress made against malaria since 2000. Increased global investment in fighting malaria over the last two decades has enabled the mass training and scale-up of a community health workforce to reach hundreds of millions of people—mostly pregnant women and children under 5, living in remote and rural communities—with effective tools to prevent, diagnose, and treat malaria and other preventable diseases. These CHWs, made up of 70 percent women (mostly from the poor and remote communities they serve), are responsible for educating communities about the signs and risks of malaria. Through integrated community case management, CHWs quickly diagnose malaria cases and track the disease, which prevents cases from becoming severe and deadly, and significantly minimizes its transmission in communities and within households. In addition to malaria, CHWs also are responsible for treating and effectively preventing 40 percent of newborn and child deaths, including pneumonia, diarrhea and sepsis.¹⁹ Their efforts make otherwise hard-to-reach healthcare more equitable, and they enable better health outcomes.

Ending malaria requires supporting and growing this resilient workforce to deliver to at-risk communities the tools that prevent, diagnose, track and treat malaria and other diseases at the community level. Saving lives from malaria and equipping CHWs to be the eyes and ears on the ground to identify and respond to new disease threats also is critical for reducing strains on fragile health systems, limiting cycles of poverty, and improving global health security.

However, many of the women who disproportionately bear the burdens of malaria as compared to their male counterparts are the same ones who subsidize malaria healthcare delivery as volunteers, without fair compensation and protection. Beyond expanding CHWs' reach into remote communities to accelerate progress against malaria, countries can realize significant economic benefits from valuing and investing in CHWs. As residents of the high-burden, often poorest communities they serve, paid CHWs can reap significant economic and therefore health benefits for the community as a whole.

Create pathways for equitable participation and professional advancement in the workforce.

Renewed investments in CHWs on the frontlines of the malaria fight can be catalytic in achieving greater gender equality at scale, by influencing more coordinated and gender-inclusive policies and by financing and paying women a fair wage for their work. Sustainable investments must be made to align the malaria, CHW, gender equality, and health security communities, including collecting and sharing data on the direct, indirect, and hidden costs of malaria on the poorest women, as well as data on investments into malaria service delivery. Other areas for coordination and policy change include formulating the economic case for improved alignment of investments. Also critical is conducting trainings and changing policies to combat discrimination and change gender norms that limit women CHWs' recruitment and professional advancement (such as a limited ability to travel or need for additional schooling or training).



Empower women as **decision-makers**.

The malaria community—including donors and malaria-affected countries, the private sector, and other stakeholders—also has a role to play in empowering women for their role in protecting communities from malaria and other diseases. This creates a transformative opportunity for countries to empower women CHWs and to accelerate generational prosperity by increasing women’s participation in a paid workforce.

In addition to CHWs, the fight against malaria will benefit from more women leading it—in their communities, in research labs and programs, in health clinics, in non-governmental organizations, and in government. Enabling more women to serve in leadership positions across all levels of malaria policy, programs and research will expand the innovative approaches needed to achieve eradication while empowering women to be decision-makers, and not just implementers.

Measure and evaluate the **economic and societal impacts** of paid malaria work.

Studying the broader impacts of paid work and the benefits of valuing, investing in and promoting a female workforce will make a stronger case for governments to invest further. Evidence shows the multiplier effects that could result from advancing gender equality in the malaria workforce. According to UN Women, “Women’s economic empowerment boosts productivity, increases economic diversification and income equality in addition to other positive development outcomes.”²⁰

DOUBLE DIVIDEND:

BRINGING A GENDER LENS TO THE MALARIA COMMUNITY HEALTH WORKFORCE

MALARIA OUTCOMES

LIVES SAVED

Millions reached with life-saving malaria interventions and treatments.

CASES REDUCED

Cases of severe malaria reduced.

TOOLS USED

Increased use of proven malaria interventions.

PROGRAMS SUSTAINED

Growing CHW networks under domestic stewardship increases sustainability of malaria programming

RESILIENCE BUILT

More resilient health care systems prepared to respond to disease outbreaks.

PARTICIPATION INCREASED

Greater community participation in the pursuit of improved health.



GENDER EQUALITY OUTCOMES

PAY & LEADERSHIP INEQUITIES REDUCED

Workplace inequalities including pay gap and opportunities for advancement reduced and ultimately eliminated.

AGENCY INCREASED

Economic empowerment, and decision-making agency increased due to paid work.

WOMEN LEADERSHIP SUSTAINED

Greater accountability and less workforce attrition when women are decision makers not just implementers.

PROTECTIONS IMPROVED

Safety, privacy, anti-harassment employment policies implemented.

DIGNITY RECOGNIZED

Global recognition of the critical role that women play in the healthcare delivery system and should receive equal pay for equal work

CASE STUDY: MAINSTREAMING GENDER EQUALITY IN VECTOR CONTROL

Indoor residual spraying (IRS) is one of the most effective ways to prevent malaria among millions of people at greatest risk. It kills mosquitoes and disrupts malaria transmission. IRS requires spray operator teams to access thousands of households in a community. To effectively limit malaria transmission, spray teams must cover at least 85 percent of households in a community before the rainy season begins, making trust and acceptance of sprayers vital to entering as many homes as possible within a limited time frame. Historically, men and women faced unequal employment opportunities with IRS programs.

In 2012, with a mandate to promote gender equality and female empowerment, the U.S. President's Malaria Initiative (PMI) took steps to improve gender equality in employment through IRS-supported programs in 19 (since increased to 24) sub-Saharan African countries. This intentional approach also sought to improve malaria outcomes while building capacity and economic benefits across the communities where IRS campaigns took place.

After working with women to identify barriers to their participation in IRS campaigns, PMI funded vector-control (including the Africa Indoor Residual Spraying and VectorLink) projects to implement policies ensuring that women and men could participate fully and equally—from truck drivers and logistics managers to spray operators and supervisors. This required actively recruiting women, improving women's employment opportunities (especially in higher-level and higher-paying jobs and supervisory roles), and creating equitable work environments with enhanced safety, privacy, and security policies that also guaranteed job security during pregnancy. The projects measured and evaluated results, including gender, recruitment, retention, and professional growth; compliance; and household acceptance rates (and observed broader community benefits such as income generation during childbearing years).

This intentional approach brought health, societal and economic benefits to individual spray team members, their families, and their communities. PMI VectorLink hired nearly 50,000 women as malaria health workers over the past three years, even during COVID-19.

In several countries, female sprayers had greater access to households than male sprayers due to cultural norms limiting access to a household when its male head is away. In many cases, the women also serve as credible sources of malaria prevention information for other women in the communities they serve. In some countries, this has been shown to increase communities' uptake of IRS and other malaria-prevention measures.²¹

A gender intentional approach brought health, societal and economic benefits to the workers, their families and communities.

As IRS workers, the women also serve as role models for their families and communities and transform women's roles in society through increased economic opportunities and empowerment.²²

Creating pathways for women to serve in supervisory positions, by giving them mentors and training, also paves the way for additional employment opportunities and for other female health workers to advance their careers and earning potential. In 2017, 40 percent of PMI's VectorLink Project supervisors were women, up from 15 percent in 2012.²³ The program also created and implemented policies specific to women's needs, ensuring a safe and harassment-free work environment.

Earning a good wage provides women with greater agency and financial security and increases the likelihood that a woman can decide how to spend those funds for herself and her family. It also helps to increase status in the community and create new employment options. Anecdotally, mobile payments (used by PMI) further empowers women by giving them direct access to electronic funds and more control over their money, allowing for independent financial planning, saving, and purchasing. Economic empowerment also has health and societal benefits: research shows that women's control of financial resources and decision-making power increases the uptake of mosquito nets and other malaria prevention methods on an individual and family level, as well as other decisions for the woman and household related to health, other job opportunities and education.²⁴



With income from her job as a seasonal IRS Operations Site Manager in Malawi, Veronica Chembezi plans to finish school and invest in businesses.



A bicycle taxi will employ other people. I wouldn't be able to do any of this without this job... I'm proud to show other women that as females we can do this. There's nothing that can stop us. Thanks to this project, people do not think of me as just a lady, but as a leader."

– VERONICA CHEMBEZI,
IRS OPERATIONS SITE
MANAGER IN MALAWI

INVESTMENT AREA: EMPOWERING THE GENERATION THAT WILL END MALARIA

When it comes to malaria and malaria interventions, adolescent girls fall into multiple gendered gaps that can have adverse lifetime ripple effects. Adolescent girls are especially vulnerable to malaria and its effects during pregnancy. As future mothers, scientists, community health workers, advocates, and political leaders, adolescent girls also have high potential to become “agents of change” in the global goal of malaria eradication. Efforts to empower adolescent girls with greater confidence can impact their health as well as their life choices and influence in their households and communities.

In 2019, one in four young women in sub-Saharan Africa gave birth before they turned 18.²⁵ Adolescents are at high risk of placental malaria, which increases risk of still birth, low birth rate and anemia.²⁶

A concerted focus on understanding and addressing adolescent girls’ needs and realities must be central to a gender-intentional strategy to eliminate malaria risk and empower young women to become change agents in the malaria fight.

In part, this is because adolescent girls face unique hurdles accessing life-saving malaria interventions—especially if they are pregnant. Studies show that while pregnant adolescents recognize the importance of seeking preventive care for malaria, obstacles to doing so include stigma, reduced status in the home and community and negative attitudes of health workers. Additionally, adolescent girls also may not be comfortable sleeping with siblings under a bed net during menstruation. When health information is provided, it often is not tailored to their needs nor is it reflective of girls’ realities. Finally, adolescent girls are often tasked with caregiving of younger family members sick with multiple bouts of malaria, which means reduced school attendance at a critical time of maturation.

These barriers often are not assessed but do delay access to life-saving treatment in early pregnancy including getting the minimum doses of intermittent preventive treatment in pregnancy (IPTp) or intermittent preventive treatment for infants (IPTi). The long-term impacts include missing more days of school, which can reduce confidence, educational attainment and lifetime earning potential, and also can increase risk of early forced marriage or lead to sexual exploitation to cover family medical costs associated with malaria.²⁷ A concerted focus on understanding and addressing adolescent girls’ needs and realities must be a central part of a gender-intentional malaria-eradication strategy if we are to eliminate the risk of malaria in this particularly vulnerable population and empower young women to become change agents in the malaria fight.

Disaggregate Data.

Without data disaggregated by gender and age, the full impact of malaria on adolescent girls' ability to access antenatal care, including intermittent preventive treatment in pregnancy and insecticide-treated nets, is unknown. With only 34 percent of pregnant women in Africa getting the full recommended course of IPTp and IPTi, the need to understand what is working and where the barriers to treatment are for these vulnerable girls is critical.²⁸

Integrate malaria-related programs with other sectors.

Adolescent girls are in need of multiple health services, which often are provided by Reproductive, Maternal, Child, Newborn and Adolescent Health programs. Other sectors, including Water and Sanitation and Financial Services, are reaching out to this population with multiple messages and programs. Maximizing resources and centering the outreach around the needs and realities of adolescent girls can improve reach and impact of these vital and life-changing services.

Empower adolescents in the malaria fight.

Research by the RBM Partnership to End Malaria, in collaboration with Gallup International, finds that 9 in 10 African youth want to take personal action in the fight against malaria, with almost two-thirds (61 percent) believing the disease can be eliminated in their lifetimes.²⁹

Put girls' needs and realities at the center of malaria programs.

Adolescent girls can be at the nexus of the conversation on gender and malaria. Tailoring malaria information and programs to their needs gives them the health information necessary to protect themselves, their newborns and children from the disease. By accelerating efforts to end malaria, adolescent girls living in areas of high malaria transmission will benefit from less caregiving and more days in school, which has been shown to help a girl avoid early marriage and childbearing and participate more fully in community life.



Invest in **mentorship and leadership**.

Develop programs that reflect girls' realities, provide them with mentorship and instill greater confidence and acceptance among their families and communities to support them in their life choices and increase their influence in their household and community. This will enable them to become “agents of change” in the global goal of malaria eradication as future mothers, scientists, community health workers, advocates, and political leaders.

Dialogue with men, boys and community leaders to remove barriers from participation and agency at home and in the community.

Men and boys also have a stake in ensuring the best health of their families and communities. More focused efforts are needed to educate and involve men and boys in addressing the traditional cultural and societal norms that put their wives, mothers, daughters and sisters at risk of malaria. As leaders in the household and community, programs must engage men and boys to gain their support for and encouragement of welcoming adolescent girls' participation.

DOUBLE DIVIDEND: EMPOWERING ADOLESCENT GIRLS IN THE MALARIA FIGHT

MALARIA OUTCOMES

LIVES SAVED

Reduction in maternal and child deaths .

IMPROVED HEALTH

Reductions in complications from pregnancy and healthier newborns.

INFORMED AND ENGAGED

Girls navigate their own healthcare and enact change within families and communities.

CHAMPIONS OF THE FIGHT

Girls become leaders in the malaria fight, as health workers, researchers, advocates, scientists and policymakers.



GENDER EQUALITY OUTCOMES

INCREASED OPPORTUNITY

Reduction in caregiving responsibility leads to more days in school, increased opportunity and reduced risk of early marriage or sexual exploitation.

FULL POTENTIAL ACHIEVED

Girls gain confidence to participate more fully in community life.

STRUCTURAL BARRIERS REDUCED

Men, boys and community leaders value adolescent girls' right to agency inside and outside the home.

LEADERSHIP VALUED

Girls become leaders in their communities, as health workers, researchers, scientists, or policymakers who will influence malaria programs and policies.

CASE STUDY: INSPIRING ADOLESCENT GIRLS AS AGENTS OF CHANGE

Since 2016, Girl Effect has been working with Gavi, the Vaccine Alliance, to build greater knowledge about cervical cancer and to build trust in and uptake of the human papillomavirus (HPV) vaccine among young women in sub-Saharan Africa. Despite the vaccine's life-saving value, traditional health messaging did not resonate with adolescent girls, and solutions to reach them were often ineffective as girls did not view the services to be “for them.” They also often did not understand the vaccine's value to their health and, longer-term, their schooling, maturation and life choices.

To address this, Girl Effect used peer-to-peer research to design solutions that reflected an understanding of girls' realities and the lives of their peers. This data plays an essential part in bridging the data gap in considering girls' perspectives and was used in Girl Effect-created, girl-led content that was channeled through Girl Effect brands, media and digital channels covering Ethiopia, Rwanda, Tanzania and Malawi. The content offered a holistic approach to providing essential information about health, including the HPV vaccine, as well as education and life skills. Today, the programs reach millions of girls and families through a combination of drama, journalism, music, clubs and community-based activities.

Program measurement and evaluation reports that girls who watched the program cited its effectiveness in giving them more confidence in the vaccine's safety and prompted them to act. For example, in Ethiopia, girls aged 13–15 who watched Girl Effect's Yegna TV drama reported they are 29 percent more likely to be aware of the HPV vaccine than non-viewers, and are 27 percent more likely to take future doses of the vaccine. Many girls also cited the program's effectiveness in giving them more confidence to talk to their families and friends about the importance of getting the HPV vaccine.

The approach suggests how generating research and insights to create girl-centered malaria communications and programs can actively engage young women in preventing malaria for themselves, their families and their communities. The insights also are critical for helping girls see how access to malaria interventions can positively impact their life choices and enable them to become agents for change in their families and communities.

Photo: Aron Simeneh



...watching Yegna has given me confidence to talk about things that matter to me.... It talks about issues I face at home and at school, and gives me ideas on how to handle challenges... it inspired me to talk to my friends about why we shouldn't miss the HPV vaccine, because it can save our lives.”

**– 14-YEAR-OLD GIRL,
ETHIOPIA**

A FRAMEWORK FOR ACTION: THE TIME IS NOW

Defeating malaria within a generation is possible.

Unlocking the power and agency of women and adolescent girls is essential to achieving this goal.

There is a growing movement calling for an intentional, cohesive, and sustained approach to gender and malaria—a pathway to reducing malaria as well as increasing economic opportunities for women. The recently updated World Health Organization’s Global Technical Strategy for Malaria 2016-2030 has recognized this imperative with the addition of a call for adding gender-responsive, equity-oriented and human rights approaches as a new principle that will accelerate progress.

To research and validate this Investment Case, we engaged more than 100 gender equality and malaria experts in the process to interrogate the premise, test assumptions, define guiding questions, and identify specific investment areas and opportunities. This included conducting desk research, expert interviews, thematic workshops and a policy forum. The work explored the health, human rights and economic imperatives of bringing a gender lens to the malaria fight.

The framework below details priority areas for scale-up and investment with specific opportunities for countries, donors, and partners to improve malaria outcomes and affect gender equality through malaria programs, policies, research and leadership.

The framework is intended as an actionable plan to:

- **Advance the health and economic gains of gender-focused strategies for malaria;**
 - **Catalyze a diverse global and national network of champions, advocates and change agents, and increase political will;**
 - **Maximize existing—and mobilize new—resources to address systemic gaps in reaching women and girls with effective malaria interventions;**
 - **Create pathways for new policies, programs and research addressing gaps and barriers in advancing malaria eradication and gender equality, and,**
 - **Detail priority areas and scale for investment that will dually accelerate malaria elimination and advance gender equality.**
-

It is time for stakeholders including governments, donors, researchers, implementers, policy makers, civil society organizations and the private sector to step out of our typical silos and use this Framework for Action to determine the best ways to move forward. Together, malaria and gender equality partners can strengthen health systems and rebuild a better, stronger, more equitable post-malaria world.

A FRAMEWORK FOR ACTION: MALARIA AND GENDER INVESTMENT PRIORITIES

The following priorities are the result of a comprehensive research and stakeholder engagement process that identified specific areas for additional inquiry and investment in areas of Leadership, Policy and Advocacy, Research and Data, and Programming. Each investment activity is associated with expected outcomes and is correlated with achieving impact in both malaria eradication and advancing gender equality. Further action will be required, including determining partners responsible, time frames for delivery, targets and metrics, as well as a broader accountability structure.

TARGET AREA: POLICY AND ADVOCACY

Create pathways to develop targeted, holistic policies that address malaria, prevention, treatment and management across the lifecycle of women & girls.

INVESTMENTS	OUTCOME	MALARIA-IMPACT	GENDER IMPACT
Develop and contribute to intersectional and integrated approaches that address silos within health systems – at the national, facility and community levels – between Reproductive, Maternal, Newborn, Adolescent, Child Health + Nutrition (RMNACH+N), malaria, and Sexual Reproductive Health and Rights, and other infectious diseases and pandemic preparedness efforts.	Holistic, integrated approach to malaria elimination that more effectively mirrors the rhythms and interactions of women across their entire lifecycle. More effective and efficient use of resources with more lives saved and broader health impact beyond malaria.	Increased access to information and prevention tools (e.g., IPTp, insecticide treated nets, indoor residual spraying) leading to increased uptake of life-saving malaria interventions.	Improved and more equitable delivery of health services for girls and women.
Develop malaria-supported-policy argument for closing the gendered pay and advancement gap for Community Health Workers (CHWs). Ensure coordination with partners and donors and with existing efforts in RMNCAH-N, Integrated Community Case Management, and Primary Health Care.	Better aligned financing, that incentivizes equitable advancement of women within the growing CHWs networks that are required to bolster health systems to meet a country's holistic health needs including malaria prevention and treatment.	Greater coverage of Malaria prevention and treatment accelerated by a larger, better equipped, trained, and incentivized health workforce.	Women, who make up the majority of CHWs, have a professional pathway that allows for fair pay, adequate training, job satisfaction and equal opportunities for advancement.
Advocate for gender-focused approaches to be integrated into global, regional, and national malaria policy and resourcing frameworks.	Gender inclusive and responsive malaria policies are implemented and championed by donors and country governments.	Acceleration of country and global malaria elimination targets.	Improved malaria outcomes for women and girls.

TARGET AREA: LEADERSHIP

Foster gender balanced representation in all areas of malaria leadership from policy makers, researchers and scientists, healthcare supervisors, and vector control.

INVESTMENTS	OUTCOME	MALARIA-IMPACT	GENDER IMPACT
Develop mentorship programs that bridge the experience and expertise of women leaders in malaria with the passion and potential of adolescent girls.	Creation of generational leadership continuity through a cadre of adolescent girls on the leadership path in their communities and as champions for malaria eradication.	Adolescent girls strengthening the fight against malaria and becoming prepared, focused malaria advocates and leaders to innovate on and diversify the fight for the future.	Foundation for and pathways to communities supporting and welcoming leadership positions for adolescent girls, initially within their own communities.
Develop a platform for documenting and amplifying case studies on women leaders' impact in the fight against malaria.	Platform for modeling women leadership for adolescent girls and global communities as well as improved global awareness of, and advocacy for, the impactful work being done by women in the malaria field including the importance of gender balance in malaria leadership positions.	Increase in availability of and access to effective leadership models for malaria elimination, and increased pipeline of inspired young women and men joining the fight against malaria and advancing in their critical roles.	Strengthened advocacy base for women in leadership positions.
Support existing and create new leadership training and networks that inspire and equip a new generation of leaders who shape and direct government ministries, malaria elimination programs, non-governmental and civil society organizations, scientists, researchers, and academics, communities.	Increase the valuing of and participation of women leaders. Increase gender balance across global and national malaria programs, partner organizations, and R&D, including clinical trials.	Women as decision makers, not just implementers. Increased effectiveness and/or comprehensiveness in malaria approaches and therapies. Development of innovative and tailored approaches.	Improved breadth and depth of opportunities for girls and women to enter and excel in the leading organizations shaping and investing in malaria eradication as well as the workforce of key malaria sectors: R&D, civil society, NGOs, and academia. Equal gender norms around women's leadership would have a positive impact on women's leadership and participation in general in society.
Contribute to change unequal gender norms that influence women's meaningful participation and create an enabling environment for their engagement.			

TARGET AREA: RESEARCH AND DATA

Further identify and fill critical gender based data gaps to uncover additional information & needs required to develop effective interventions focused on gender and malaria.

INVESTMENTS	OUTCOME	MALARIA-IMPACT	GENDER IMPACT
Commission modeling of the longitudinal gender- related economic costs of malaria including costs of the unpaid care burden.	Learnings and data to effectively target program interventions that take into account the long hidden costs of and impact of malaria on women and adolescent girls.	Innovation in malaria programming to close coverage gaps of key tools and create efficiencies that can speed up achievement of malaria elimination.	Reduction of gender based “time poverty.”
Fill evidence gaps on the cost/benefit analysis of providing women community health workers with fair salaries, and disseminate findings beyond malaria community.	Improved evidence base on community health workers from which to develop programming and policies.	Ability to better target malaria interventions that involve the community health workforce.	Better representation of women through increased data used to make policy and program decisions.
Invest in accelerating existing efforts to collect national and subnational sex and age disaggregated data from endemic countries.	Better understanding of where, when and if gender inequalities exist to allow for more informed program, resourcing, and policy decisions.	Malaria programs are tailored and strengthened based on accurate and complete data sets.	Women and girls are represented in the data used to make policy, resourcing, and programming.
Support the integration of gender-relevant indicators in malaria program research methods and monitoring and evaluation plans.	Analysis of underlying gender norms and expectations that drive inequalities and extent to which malaria programs are affected by gender inequity.	Malaria program effectiveness is systematically better understood and able to be iterated and adapted with gendered precision.	The true impact of programs on women and adolescent girls is systematically reflected in evaluation by implementers and donors.
Fill evidence gaps in understanding of unique barriers and obstacles for access and uptake of prevention and treatment interventions for women and girls, as clients, caregivers and community health workers. Improve dissemination of gender and malaria research findings.	Enhanced research base and access to findings that help to tailor malaria programs and policies to meet specific needs of different populations leading to increased uptake of interventions.	Improved malaria program effectiveness.	Improved gender balance and representation in research and evidence base. Increased opportunities for girls and women to engage in research and program development within their own communities.
Design and implement a grant program targeted to grassroots and civil society organizations to identify gaps in the research base, particularly with respect to country and local context. Emphasize the need for locally-based women and girls to be instrumental in the design and implementation of the research.	Enhanced research base and access to findings that help to tailor malaria programs and policies to meet specific needs of different populations, leading to increased uptake of life-saving interventions.	Improved malaria program effectiveness.	Improved gender balance and representation in research and evidence base. Increased opportunities for girls and women to engage in research and program development within their own communities.

TARGET AREA: PROGRAMMING

Design, refine and implement malaria programs with gender considerations at the center.

INVESTMENTS	OUTCOME	MALARIA-IMPACT	GENDER IMPACT
Improve use of existing evidence on gender considerations in malaria to design programs that address critical barriers to access and use of malaria prevention and treatment services for people of different genders.	Increase uptake of malaria prevention and treatment services for people of different genders.	Lower incidence of malaria and better outcomes for people of different genders.	Gender-equal representation in malaria program strategies.
Engage community and traditional leaders, men and boys to support the development of programs and messaging related to understanding the benefits of quick and equal access to effective malaria treatment and care.	Programs better meet the unique needs of adolescent boys and girls and they become champions of the malaria fight, and of gender equality.	Increase in malaria prevention and treatment within 24 hours due to increased males' understanding of the value of women's agency and leadership.	Increase male support for women's and adolescent girl's health and decision-making. Enhanced engagement of community leaders, men and boys in addressing malaria.
Identify, document, and amplify existing gender equality programs to capture success, and to provide program models and case studies.	Increased understanding and application of best practices and lessons learned from gender equality community, which inform and enhance malaria initiatives.	Improved integration of gender-based approaches into malaria programming; increasing the overall impact of malaria programs.	Further amplification of successful gender-focused approaches for use by advocates.
Strengthen global technical guidance on improving gender integration into national malaria programs.	Malaria prevention education, diagnosis, and treatment tools are tailored to meet local gender needs.	Malaria programs and policies are innovated based on best practices with input from gender equality experts on-the-ground and aligned with local contexts.	Gender as a concept is increasingly mainstreamed into national policy.
Create holistic malaria programming and information by integrating malaria with other issues that impact adolescent girls, e.g., sexual and reproductive health, nutrition, vaccines and financial services, through intentionally engaging girls on their needs and realities.	Adolescent girls are equipped with timely, age-appropriate information and have more seamless and consistent access to life-saving malaria interventions across their entire lifecycle, including during reproductive years and when they become pregnant.	Increase in health-seeking behavior among adolescent girls.	Increase in empowerment and influence of adolescent girls.

PARTNERS AND STAKEHOLDERS

Representatives of the following organizations were engaged throughout the process of developing this investment case, including participating in interviews, workshops and a policy forum, and by providing document review and input.

African Leaders Malaria Alliance	International Center for Research on Women	Population Services International
Asia Pacific Leaders Malaria Alliance	Impact Santé Afrique	RTI International
Akili Dada	IPAS - Africa Alliance for Women's Reproductive Health and Rights	Stanford University Global Center for Gender Equality
BRAC	jhpiego	United Nations Foundation
U.S. Centers for Disease Control and Prevention	Kati Collective	UN Women
Chevron	Kesho Kenya	United Nations Development Programme
End Malaria Initiative Nigeria	Kisumu Medical & Education Trust	UNICEF
Foreign, Commonwealth & Development Office, UK	Living Goods	UNOPS
Bill & Melinda Gates Foundation	Malaria Consortium	United States Agency of International Development
GBCHealth	Medicines for Malaria Venture	World Health Organization
Georgetown Institute for Women, Peace and Security	Merck for Mothers	Women for Women
Girl Effect	Spanish National Research Council	Women in Malaria Research
Global Fund to Fight AIDS, Tuberculosis and Malaria	Northwestern Pritzker School of Law, Access to Health	Women Networking Platform
Global Fund for Women	Novartis	Women Story Telling Salon
Global Health 50/50	Oxfam	WomenLift Health
Global Network of People Living with HIV	Pan Africa Mosquito Control Association	World Association of Girl Guides and Girl Scouts
Goodbye Malaria	PATH	World Bank
Grameen Foundation	U.S. President's Malaria Initiative	World Food Programme
Harvard T.H. Chan School of Public Health	Population Council	

RESOURCES

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