



**COMMUNITY-BASED
PRIMARY HEALTHCARE:
THE KEY TO UNLOCKING
HEALTH FOR ALL**

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“At the community level all major causes of death in children under the age of five can be addressed by well-trained and supported community health workers.”

Dr Henry Perry and Dr Paul Freeman (2016)

“Thanks to the project, people have become more productive and their quality of life has improved. Children are not falling sick and missing school. Rather than spending money on medical care, they can spend it on other preferred issues in their homes. They get a chance to interact with the VHTs (community health workers in Uganda), who are one of their own. They have begun to own their healthcare system.”

Dr Charles Tusiime, District Health Officer in Kyenjojo District, on the impact of Malaria Consortium’s iCCM MaCS project in Uganda (page 18)

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INTRODUCTION

The last two decades have seen impressive progress in global health. As a result of increased efforts and a huge mobilisation of funding, malaria deaths fell by 62 percent between 2000 and 2015.¹ There were 3.6 million fewer deaths of children under five in 2013 than there were in 2000, with half of the lives saved attributed to the gains made in preventing and treating pneumonia, diarrhoea and measles.² Maternal mortality rates also dropped by 43 percent between 1990 and 2015.³

Progress, however, has been uneven, with the poorest and most vulnerable still being left behind, largely due to a lack of access to vital health services. In many rural villages access to hospitals and health facilities is often limited. In these remote communities, 5.9 million children still die from illnesses that are easily preventable and treatable,⁴ and over 300,000 women die from maternal complications every year.⁵ This is exacerbated by a global health worker shortage of over seven million – a figure which is expected to rise to nearly 13 million by 2035.⁶

As the international community mobilises towards realising the Global Goals for Sustainable Development, it is clear that more needs to be done in order to achieve universal health coverage and secure healthy lives for all by 2030.

This report points to community-based primary healthcare (CBPHC) as a key mechanism to delivering health services to hard-to-reach and under-served communities. CBPHC has existed in some form for over 60 years but is now receiving renewed attention with the advent of easy-to-use diagnostics and mobile technology for health (mHealth), together with a growing body of evidence indicating its potential.

CBPHC involves using trained community health workers, who may or may not be paid, to deliver health services to under-served communities in remote areas. Community health workers are provided with training, tools and medicines to provide basic health services to the rural communities that they live in. This allows CBPHC programmes to reach into the heart of communities to tackle the major causes of childhood and maternal illness and mortality. In this way, CBPHC leverages greater efficiencies from health services and has the potential to address many of the remaining challenges in global health, becoming an essential vehicle in the achievement of the Global Goal on health.

This report makes the case for the urgent need to invest in scaling up CBPHC programmes as a cost-effective and impactful means of extending vital health services, tackling disease burdens and addressing the growing global health worker gap. It calls upon the international community, governments, development partners, donors and academia to commit resources and mobilise political will to support this agenda.

CALL TO ACTION



The **international community** should promote the scale-up of community-based primary healthcare (CBPHC). It has the potential to be the vehicle to achieve universal health coverage and the Global Goal on health, and contributes to achieving many of the other Goals



National governments should invest in scaling up CBPHC as an effective and cost efficient means of extending health services to remote populations. Community health workers must be adequately trained, supported and equipped with the right tools



Development partners and academia should conduct research to establish how to scale up CBPHC successfully and ensure integration with the formal health system. Sustainable models of CBPHC that will work in different contexts need to be developed



Donors should provide funding for the development of CBPHC programmes that will demonstrate their viability, and then support a phased transition to national funding and ownership



Development partners should develop innovative ways to improve the quality, sustainability and cost-effectiveness of CBPHC. They should work with national governments to ensure CBPHC interventions are implemented in a way that integrates with, extends and strengthens the national health system

WHAT IS COMMUNITY-BASED PRIMARY HEALTHCARE?

Community-based primary healthcare (CBPHC) covers a range of community-based interventions for delivering health services to hard-to-reach and under-served communities, who often represent the poorest sectors of society. CBPHC is commonly introduced in countries with limited financial and health worker resources to effectively serve remote villages.

The CBPHC approach involves the use of community health workers (CHWs), who are mainly unskilled local volunteers typically selected from the communities in which they serve. CHWs are trained to promote good health practices (such as handwashing, breastfeeding and good nutrition) and to provide basic prevention, diagnosis and treatment for some of the most common childhood illnesses that cause the majority of deaths of children under five. These include malaria, pneumonia, diarrhoea, acute malnutrition and neglected tropical diseases (NTDs). CHWs can also be trained to detect and treat maternal and newborn complications, and can play an important role in other health interventions, such as:

- Supporting mass drug administrations, mosquito net distributions, immunisation campaigns and seasonal malaria chemoprevention (this involves administering preventive treatments for malaria to children under five during the rainy seasons, when malaria transmission peaks)
- Improving community knowledge of hygiene, sanitation and good health-seeking behaviour
- Encouraging uptake of maternal services, such as antenatal care and intermittent preventive treatment of malaria in pregnancy (IPTp)

- Acting as the cornerstone to the global HIV response. A third of the tasks identified by the World Health Organization (WHO) as essential for the prevention of HIV transmission can be carried out by CHWs⁷
- Facilitating community discussion and ownership of healthcare, such as women's care groups and village health clubs (see case study on page 18)

Historically, CHWs were unpaid volunteers who took on the role to help improve the health of their community. However, low CHW retention and poor integration into the formal health system have led to a number of countries beginning to formalise their role by introducing monthly salaries or other performance-based mechanisms.^{8,9}

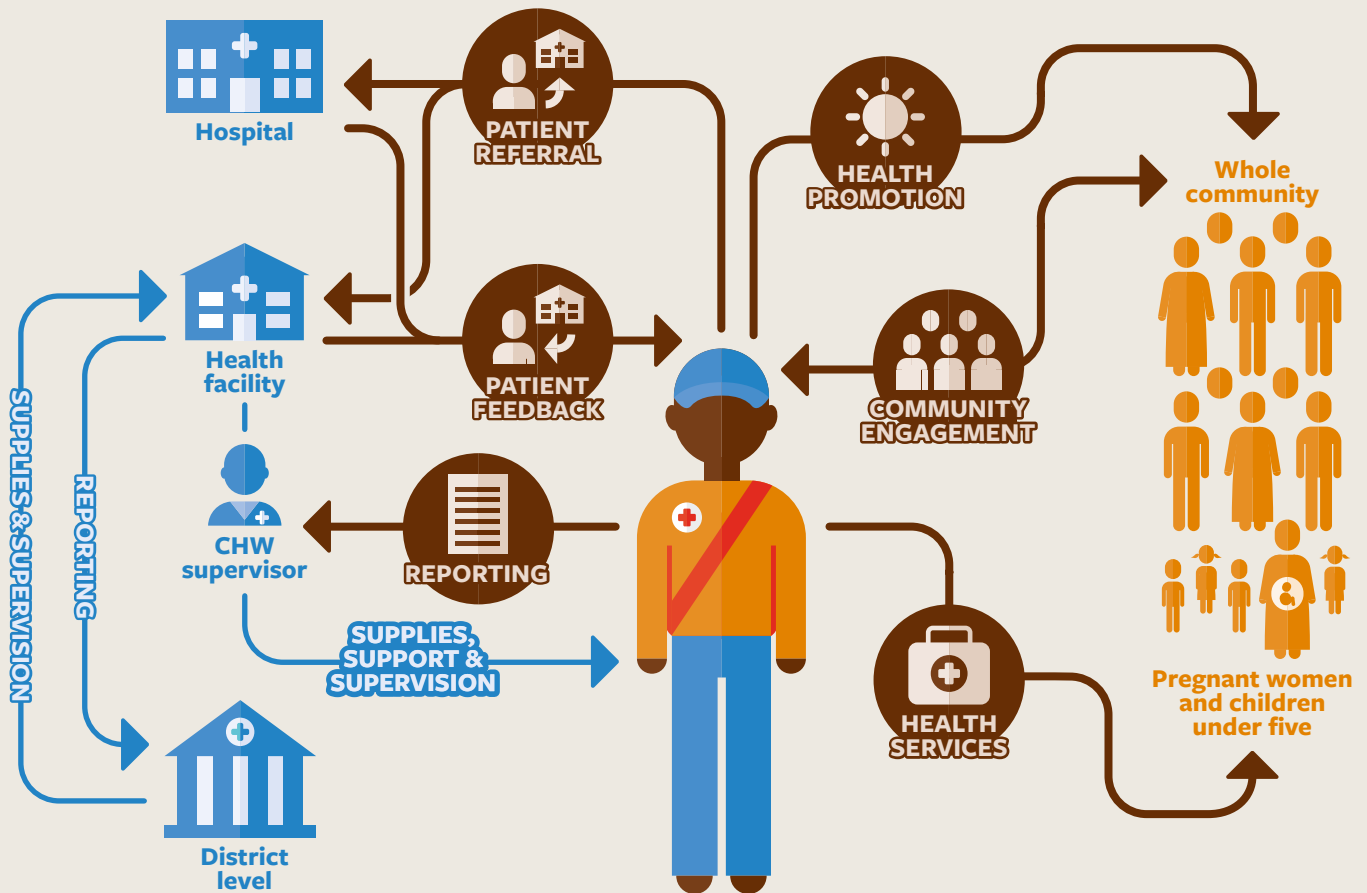
One of the great strengths of CBPHC is that it can be an entry point into the formal health system. The CHW is someone the community knows, are likely to trust, and to whom they can express their views. This trust, through the CHW's connection, has a knock-on effect of building confidence in the health system. When interventions such as mass drug administrations, mosquito net distributions and immunisation campaigns are carried out by CHWs, they are better received and more effectively implemented. There is strong evidence showing that community engagement improves the chance of success of an intervention, and positively impacts health behaviours, health planning, health service access, health literacy and a range of other health outcomes.^{10,11}

Although the provision of CBPHC through the private sector is recognised as a crucial mechanism through which communities can access healthcare, particularly more specialised and niche services, it is not included within the scope of this report.

COMMUNITY-BASED PRIMARY HEALTHCARE: HOW IT WORKS

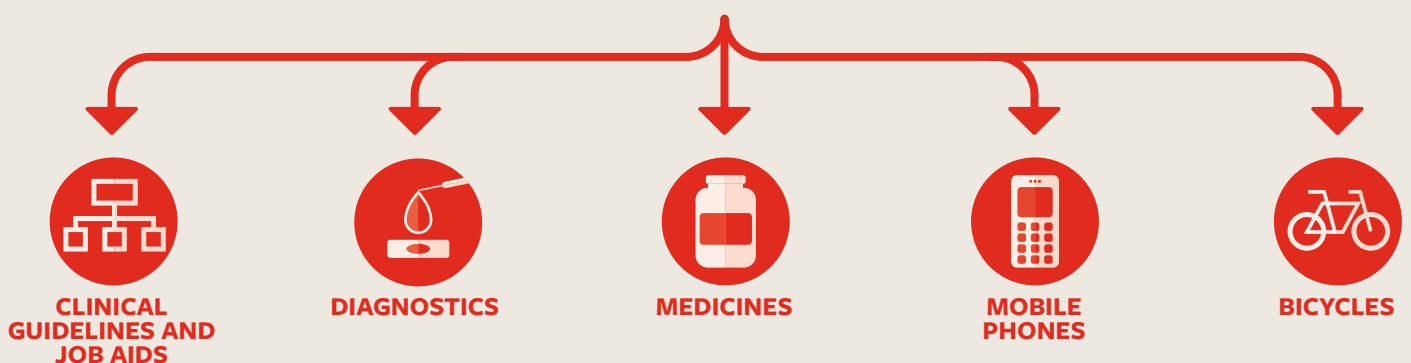
HEALTH SYSTEM

COMMUNITY



COMMUNITY HEALTH WORKER

TOOLS



The diagram on page 4 outlines Malaria Consortium's approach to delivering CBPHC and includes all the elements we believe represent the ideal model. The supported and supervised CHW acts as a crucial link between the health system and remote community, providing vital health

services and contributing to improving the continuum of care available for vulnerable populations. Continuous community ownership and engagement is essential to ensure that CBPHC continues to be accepted by the community and responds to their health needs.

LESSONS FROM EARLY COMMUNITY-BASED PRIMARY HEALTHCARE PROGRAMMES

The roots of the first national CBPHC programmes can be traced to the 1950s, with the Chinese 'barefoot doctor' programme. However, it was not until the publication of WHO's 'Health by the people' collection of case studies in 1975¹² and the Alma-Ata Declaration in 1978¹³, which identified primary healthcare as key to achieving health for all, that the approach began to flourish.

In countries that began adopting the approach, such as Brazil, Nepal, Bangladesh and Mozambique, there were some notable successes. However, many of the early CBPHC programmes faced a number of challenges. Often, CHWs were not given sufficient incentives or remuneration for their service, nor did they receive adequate training and supervision. There was also a lack of regular supply of health commodities and medicines for CHWs, and poor integration with the wider health system. In general, there was a lack of appreciation for the financial cost and the logistical effort required for an effective CBPHC programme. The result was that many low and middle income countries scaled back or discontinued their CBPHC programmes, leading to primary healthcare through CHWs falling out of favour in global health discourse from the late 1980s onwards.¹⁴

One of the limitations of early CBPHC programmes was that its narrow and vertical focus on prevention, diagnosis and treatment of the most pressing illnesses among children within a strict age range (under five) failed to provide a continuum of care that considers the whole health of a child throughout their life. This was exacerbated by poor documentation and record-keeping of patient history.

Changing circumstances, recent refinements in the CBPHC approach and new technological advancements, however, have demonstrated that CBPHC has great potential for tackling many of the big challenges in global health (see page 6).¹⁵ Correctly implemented at scale, CBPHC could be the solution to unlocking universal health coverage as well as achieving the Global Goals.

CHALLENGES IN GLOBAL HEALTH



Many countries lack the financial resources to adequately fund an effective, equitable and accessible health system, especially in remote areas



400 million people worldwide do not have access to good quality, essential health services, with poor and rural populations worst affected



Despite good global progress, many countries continue to suffer from high burdens of malaria, pneumonia, diarrhoea, malnutrition, and newborn and maternal complications



There is an estimated global shortage of 7.2 million health workers, projected to rise to 12.9 million by 2035



Vulnerable groups – such as children under five and pregnant women – do not always receive healthcare within the critical 24-hour period after the onset of symptoms



There is low confidence in the health system in many countries due to a lack of community involvement and poor quality and intermittent health services



Community health worker, Bitekarezo Leo, travels from a remote village in Uganda to the nearest health centre 10 kilometres away to collect the drugs he needs to treat people in his community

In recent decades, and particularly since the advent of the Millennium Development Goals (2000-2015), there have been some notable successes in global health. Global maternal and child mortality rates fell by 43 percent and 53 percent respectively between 1990 and 2015,^{16,17} and the number of deaths from malaria reduced by 62 percent since 2000.¹⁸

However, progress has not been universal or equitable, with the poorest and most vulnerable falling furthest behind. As a result, while urban and more affluent communities have seen their access to healthcare increase significantly, rural, poor and remote populations remain unable to access basic services.

These trends are playing out against the backdrop of a growing health worker shortage, caused by an ageing health workforce, a lack of young people entering the profession or being adequately trained, increasing demands due to a growing global population, and regional imbalances exacerbated by the international migration of health workers.¹⁹ It is critical that the shortage of health workers is addressed, particularly at the primary level, in order to enable access to the services to achieve universal health coverage for those who need it most.

WHY COMMUNITY-BASED PRIMARY HEALTHCARE IS THE SOLUTION

In light of recent research and technological developments, **the reputation of, and potential for, CBPHC is changing.** A literature review due to be published this year concludes that all major causes of child mortality can be addressed by well-trained and supported CHWs.²⁰ New easy-to-use diagnostic tools for malaria and pneumonia, as well as new drugs and the adoption of mHealth approaches, are making it easier for CHWs to provide high quality healthcare and increase the range of health services they can offer. These tools are helping CHWs register patients more easily and record patient data accurately – tasks that proved challenging in early CBPHC programmes, hindering the ability of CHWs to progress beyond treating acute illnesses towards providing a continuum of care for children.

Scaling up CBPHC programmes means that **countries can extend effective health services to rural and remote communities who are currently isolated from the formal health system.** This can help to increase access to care for the most vulnerable populations, especially during the critical 24 hours after the onset of illness symptoms. Diseases such as malaria and many NTDs – where reaching every case is crucial to global elimination efforts – could be easily treated in the home. This reduces the burden on health centres and hospitals, freeing up resources to treat patients with other conditions. It has been estimated that expanding CBPHC coverage could save up to three million maternal, perinatal, newborn and child deaths each year.²¹

CHWs also have a crucial role in **educating communities about disease prevention, hygiene, water and sanitation, and correct health-seeking behaviour.**

Mechanisms for community engagement, such as establishing village health clubs (see page 18) and women's groups, and using other participatory approaches, allow communities to take control of their own healthcare and devise innovative, local solutions to their health problems, which is more sustainable in the long-term.



Catarina, a trained community health worker in Jogo area in Mozambique, is the first point of contact for the community when people get sick

Implementers have begun to **integrate other components into CBPHC** in order to widen the impact of existing CBPHC programmes and make use of these structures to improve the cost-effectiveness of delivering services. For example, in some countries including Uganda, CHWs receive additional training to deliver maternal and newborn services, such as supporting and promoting antenatal clinic attendance for pregnant women and supporting the uptake of IPTp, encouraging breastfeeding, and monitoring the health of newborns. This can be especially important in some cultural contexts where women are unable to leave the home unattended and so may struggle to access health services. Similarly, nutrition services are being integrated into CBPHC programmes, such as the provision of nutrition supplements to tackle malnutrition, which can be particularly complementary given that under-nutrition can increase susceptibility to diseases like malaria.²²

The additional benefit of extending the reach of the formal health system via CBPHC is that it allows **greater reporting of cases and improved integrated disease surveillance**, which enables governments to better plan health interventions. This can in turn support early detection and response to disease outbreaks, and is vital for continuing post-elimination surveillance. Uganda successfully dealt with five Ebola outbreaks between 2000-2012 partly by using community health workers (locally called village health teams) to quickly identify and isolate each case before the disease could spread.²³

Having sufficiently trained, supervised and incentivised CHWs would also **help tackle the global health worker shortage**, which is predicted to grow globally to 12.9 million by 2035.²⁴

COMMUNITY-BASED PRIMARY HEALTHCARE AND THE GLOBAL GOALS

The root causes of many of the world's problems – such as poverty, conflict and poor health – are intricately interconnected. For example, the health costs associated with preventing and treating diseases such as NTDs are a leading cause of poverty, and at the same time, the poorest are most susceptible to these diseases.²⁵

It is important, therefore, that development approaches tackle such cross-cutting issues in a coherent and integrated manner. The Global Goals recognise these causal relationships and work on the principle that achieving each of the 17 goals will require making progress towards the others.²⁶

The health goal, *'To ensure healthy lives and wellbeing for all at all ages'*, recognises that the health of a population impacts across all development outcomes. Illness caused by diseases such as malaria is one of the main causes of children being absent from school and lost productivity amongst adults. Seventeen percent of the world's population is pushed or drops further below the US\$2/day poverty line by out-of-pocket health costs.²⁷

Ideally, health interventions should have knock-on benefits to other development areas to ensure that limited financial resources are most effectively used. CBPHC is one such intervention. The diagram on page 11 demonstrates how CBPHC positively impacts on more than half of the Global Goals, which makes a compelling rational for investment in CBPHC.

Achieving universal health coverage – which involves extending access to basic health services to all, without causing financial hardship – is one of the most important yet challenging aims of the Global Goals. With its focus on extending health services to the most vulnerable and remote, CBPHC is becoming increasingly recognised as an important component,²⁸ and a critical requirement,²⁹ of global efforts to achieve this.



1 NO POVERTY

By improving care and reducing the severity of illnesses through community-based primary healthcare, the high financial costs of sickness are reduced



2 ZERO HUNGER

Malnutrition both contributes to and is worsened by the presence of common illnesses, such as malaria and pneumonia. Nutrition supplements for treating malnutrition have the potential to be integrated into community-based health programmes



3 GOOD HEALTH AND WELL-BEING

Community-based primary healthcare directly contributes to improving child and maternal health, and reducing mortality rates and disease prevalence. It also supports achieving universal health coverage and strengthens health workforces



13 CLIMATE ACTION

Bringing health services to the community reduces the need to travel long distances to receive care. Increasing community knowledge of malaria equips them to better mitigate shifts in malaria epidemiology caused by climate change



4 QUALITY EDUCATION

Reducing the severity of illness in children contributes to lower school absenteeism. The reduced cost of treating illness means parents have more money to invest in education



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Through accurate diagnosis prior to treatment at the community level, drugs such as antibiotics and antimalarials are used rationally, reducing the risk of resistance developing



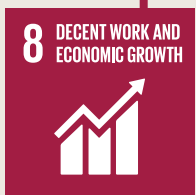
5 GENDER EQUALITY

House-to-house visits by community health workers and integrated maternal and newborn services increase access to health services for women and girls



10 REDUCED INEQUALITIES

Community-based mechanisms established as part of community-based primary healthcare, such as the village health clubs in Uganda, provide the means to support older people and people with disabilities



8 DECENT WORK AND ECONOMIC GROWTH

Reducing the burden of disease and illness allows a community to spend more time and energy in employment and on enterprise



6 CLEAN WATER AND SANITATION

Community health workers are well-placed to educate communities about WASH, leading to improvements in access to water, improved sanitation and better hygiene



COMMUNITY-BASED PRIMARY HEALTHCARE

CONSIDERATIONS FOR THE SUCCESS OF COMMUNITY-BASED PRIMARY HEALTHCARE

Important lessons from implementing CBPHC in the 1970s and 80s can be applied to future CBPHC programmes. One of the fundamental weaknesses was that CBPHC was considered to be an inexpensive or low-cost option that required little financial investment to support the volunteer CHWs. Experience has shown that for CBPHC programmes to be successful, there needs to be investment in training, supervision, motivation and/or compensation. It is crucial that CHWs are integrated into the health system based upon a core set of skills defined at the national level.³⁰

It is also important that CHWs are provided with refresher training and clear reporting and referral systems, as well as regular diagnostic and drug supplies to maintain the community's trust in the system.

CBPHC naturally focuses on extending health services to communities, however it is important that sufficient attention is given to the quality of the care being provided. Communities will not be helped by poor quality healthcare and it could contribute to an undermining of both CBPHC and broader health services provided to the community.³¹ Quality assurance mechanisms should be incorporated into CBPHC programmes to ensure healthcare remains high quality.³²

CHWs have the potential to ease health worker shortages at facility level, however, a sufficient number of CHWs at health facilities is needed to avoid high turnover caused by overburden and de-motivation. Many CHWs are volunteers who may have family and work responsibilities outside of their roles as CHWs. CHW retention can also be helped with formalising their role in some manner, including through the provision of a stipend or basic salary, or formal training and paths into the main health service.³³

There is much debate about how CHWs should be compensated for their work and whether this should be in the form of financial remuneration. At present, there is no standard approach – programmes in the same geographical area may follow different models or offer different levels of payment. Anecdotal accounts, as well as Malaria Consortium's experience, show that tensions can arise in such situations and can result in refusals to work, unrest or collapse of a programme.



A malaria volunteer screens a child for malnutrition in a remote village in Sagaing Region in Myanmar

Uncertain funding is a challenge for the sustainability of many CBPHC programmes, which largely rely on support from international donors and NGOs. Transitioning a CBPHC programme to be owned and managed by the national government can be a time consuming and logistically difficult process and may not often be possible or desirable. However, sustainability should always be considered at the earliest possible stage – ideally at the programme design – so that wherever possible the programme can be effectively transitioned to government control.

A robust national regulatory framework, and strong institutes to enforce it, are important for the oversight of all health services both in the public and private sectors, including community-based programmes. Donors, NGOs and development partners should seek to strengthen and not undermine these systems.

Finally, one of the major challenges is a lack of an evidence base for the effectiveness of CBPHC programmes, particularly when implemented at scale and over the long-term.³⁴ Although there are an increasing number of examples of CBPHC programmes at scale, there remains a need for current evidence on what works, in what contexts, and how to replicate the impact seen in smaller scale projects into larger, national level programmes.

THE CASE FOR INVESTING IN COMMUNITY-BASED PRIMARY HEALTHCARE OVER OTHER MECHANISMS

Competition for funding in global health, whether from donors, finance ministries or the private sector, has never been so fierce. Therefore, it is crucial that CBPHC interventions are designed with a focus on value for money, economic benefits and positive health outcomes.

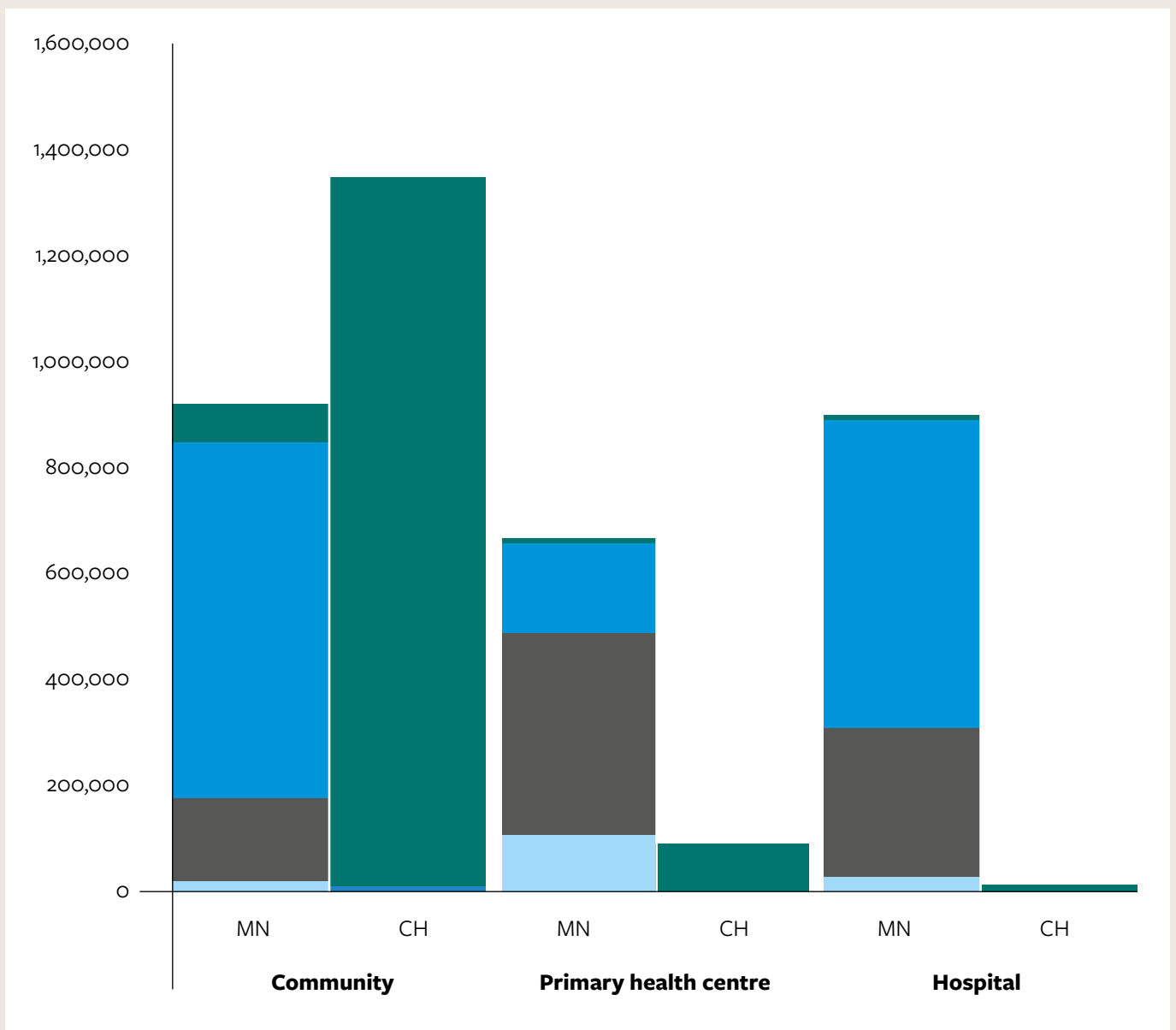
Evidence regarding the cost-effectiveness of CBPHC is currently limited, but one estimate puts the cost per disability-adjusted life year (DALY) averted for health services delivered through CBPHC as being between US\$1 and US\$150.³⁵ This shows that CBPHC can be one of the most cost-effective health interventions today. This is further backed up by recent studies.^{36, 37} More research is needed, however, to build a larger evidence base.

There is also a strong economic argument for investing in CBPHC. A joint report authored by the WHO, UNICEF, One Million Community Health Workers Campaign and other partners estimates that the combined cost savings and added economic benefit from scaling up one million CHWs across sub-Saharan Africa is \$21.7 billion annually. Against an estimated cost of \$2.2 billion, this represents an impressive return on investment of ten to one.³⁸

The graph on page 15 demonstrates that investments in community-based delivery mechanisms have the greatest impact on averting deaths in all three key vulnerable populations. While it is important to invest in different levels of the health service, this evidence suggests that prioritising CBPHC may have the largest impact on reducing maternal, newborn and child mortality.

A recent review showed that all major causes of child mortality can be addressed by well-trained and supported CHWs.⁴⁰ With sufficient funding and by incorporating the considerations described in this report, CBPHC can fulfil its potential to be a cost-efficient and highly effective means of achieving universal health coverage and health for all.

DEATHS AVERTED BY HEALTHCARE PACKAGES THROUGH THREE SERVICE PLATFORMS



Source: Analysis using the Lives Saved Tool (LiST). Note: CH = child health package; MN = maternal and newborn package.³⁹

■ Maternal deaths averted
 ■ Stillbirths averted
 ■ Neonatal deaths averted
 ■ Child (age 1-59 months) deaths averted

OUR APPROACH

Malaria Consortium has been one of the leading implementers of CBPHC programmes for over a decade. Many of our programmes use malaria as an entry point but go much further by including disease prevention, the diagnosis and treatment of pneumonia, diarrhoea, NTDs and malnutrition, as well as providing maternal and newborn services. We are currently involved in CBPHC programmes in Burkina Faso, Chad, Ethiopia, Mozambique, Myanmar, Nigeria, South Sudan and Uganda.

Malaria Consortium's approach to CBPHC is governed by a set of principles and beliefs outlined below.

1. Malaria Consortium focuses on the engagement of community members to provide services that improve the health of their own communities. Our CBPHC programmes are therefore tailored to fit the context and meet the specific needs of communities. We conduct community sensitisation before CBPHC programmes are developed and implemented, involving community leaders, such as chiefs, village headmen and religious leaders, so that all interventions are relevant, appropriate and acceptable.

2. To ensure communities use the services provided by CHWs, Malaria Consortium implements community-led social and behaviour change communication strategies, which increase health knowledge and community service delivery acceptance:

- Structured discussions or community dialogues engage community members, improve knowledge and practices, and encourage ownership over health issues. In Mozambique, our COMDIS-HSD research programme⁴¹ demonstrated that this approach was well-received by the community with respect to schistosomiasis prevention and control.

- Community forums such as village health clubs in Uganda, which we supported through our Innovations at Scale for Community Access and Lasting Effects (inSCALE) research programme,⁴² provide a space for community members to identify health challenges together and develop locally-relevant and community-owned solutions. We are currently introducing village health clubs in 1,322 villages in mid-western Uganda involving over 2,600 CHWs.

- To motivate communities to support prevention and control practices for malaria and other diseases such as dengue, we introduced a positive deviance approach in Cambodia and Myanmar. This approach identifies existing model behaviours within a community, and then promotes and amplifies these to the rest of the community.

3. Malaria Consortium always seeks to avoid establishing parallel programmes and promotes sustainability by working with governments to integrate CBPHC into the formal health service. This ensures that CBPHC acts as a complementary strategy that strengthens formal health services by reducing overcrowding, rather than damaging confidence in, or reducing uptake of, national health services. We consider CBPHC as part of the continuum of care and therefore aim to strengthen linkages between communities and formal health facilities. Through this, CHWs receive continued support and engagement from health facility staff at the local level. Wherever feasible, we work with ministries of health and health facility staff, and work within government structures and policies.

4. Malaria Consortium considers strengthening and maintaining the capacity of CHWs to be crucial to the success of CBPHC programmes.

- Integrated community case management (iCCM) is an effective approach whereby CHWs provide access to lifesaving care for sick children. We are supporting the national scale-up of iCCM through our Rapid Access Expansion (RAcE) Programme in Nigeria and Mozambique. Our work focused on building CHW capacity through improving CHW supervision, motivation and information flows.



Community members in Nampula province, Mozambique gather for a community dialogues session on schistosomiasis

5. Malaria Consortium is committed to ensuring the **collection of evidence from the community level** to help measure the sustainability, cost-effectiveness and quality of community-based health interventions.

- Malaria Consortium’s inSCALE project evaluated a range of interventions to improve the motivation and performance of CHWs providing iCCM services. It also provided evidence on the cost benefits of implementing iCCM.
- Supporting governments to strengthen integrated disease surveillance contributes to the success of national malaria elimination strategies. In Myanmar, we are conducting a pilot study to demonstrate to the government that expanding the scope of malaria volunteers to include community-based treatment of malaria, pneumonia and diarrhoea is both feasible and acceptable.
- Nutrition is inextricably linked to good health. Where appropriate, through our iCCM projects, Malaria Consortium trains CHWs to inform communities about good nutrition, screen for cases of acute malnutrition and refer cases of acute malnutrition to health facilities.

- In South Sudan, we are integrating nutrition services in our previous iCCM programmes. Children under five with severe acute malnutrition are referred for treatment to community-based outpatient therapeutic treatment sites, run by trained volunteer community nutrition workers.⁴³

6. Malaria Consortium explores areas where **technology can play an important role in CBPHC**, particularly to improve the motivation and supervision of CHWs, provide effective diagnostic tools and strengthen data management.

- Effective mHealth systems can help governments manage malaria and disease control programmes better. In Mozambique, our upSCALE mHealth systems strengthening project⁴⁴ is designing and implementing an integrated national mHealth system using real-time data collected by community health workers to improve the management and delivery of quality services.

CASE STUDY

Access to quality health service for childhood diseases and maternal and newborn care in Uganda

In Kitengule, in mid-western Uganda, the community is solving their health problems through trained community health workers, who are called village health teams (VHTs) in Uganda, and by participating in community groups.

“Malaria is the most common cause of ill health. It is a very big problem in the district, mainly affecting pregnant women and children under five,” explains Kahirita Sam, a District Health Educator. Pneumonia, diarrhoea and poor maternal and newborn health are also leading causes of ill health and mortality in Kitengule.

These problems persist partly due to the large distance between Kitengule and the nearest health facility seven miles away, and the poor state of the roads, which in the rainy season can become impassable. This means that villagers lack easy access to basic healthcare services that are more readily available elsewhere in the country.

Malaria Consortium’s iCCM MaCS (Maternal and Child survival) project, funded by Comic Relief, is strengthening the community health worker system in Kitengule and 15 districts across Uganda, by providing drugs and diagnostic tools and expanding its scope to deepen its impact on communities.

In rural villages such as Kitengule, maternal and newborn mortality rates remain higher than elsewhere in Uganda, in part due to a lack of access to health advice and services. iCCM MaCS is integrating maternal and child survival into the existing iCCM system, training VHTs to diagnose illness, provide basic care and refer sick individuals.

VHTs are trained to spot danger signs in both children and mothers. When these danger signs are identified, the VHTs refer them to the nearest health facility for further care from trained health workers. They also encourage pregnant women to make use of antenatal services as attendance is historically low.

iCCM MaCs established village health clubs (VHCs), which are voluntary groups open to the entire community and facilitated by the VHTs who are trained in how to lead them. These VHCs are providing a mechanism for communicating health messages, such as how to hang up a mosquito net and how malaria is transmitted. Through VHCs, people are able to identify the health problems that the community face, and then find local solutions that they can implement themselves. In this way, VHCs are empowering communities to take responsibility for their own health, and to work together to identify and solve challenges in their villages.

The issues communities are solving through VHCs go beyond health. Ali Karim Bagyenye, one of the VHTs in Kitengule, describes how the VHC has worked so far:

“The first problem identified in the village was the need for a ‘hang up’ campaign for mosquito nets; going house-to-house and showing people how to use a net properly. We have also been focusing on improving hygiene in the village, so we have been training people how to maintain hygiene. Also, we have constructed two kitchens for vulnerable people.”



A community health worker in Kitengule village in Uganda collects blood samples from a child using finger-prick blood

We have a small amount of savings – a thousand shillings each per week, per person – which we give to the village member with a problem, so that they can solve that problem. We are planning to have a fund for emergency money, so if someone needs to be referred to a health facility, but they cannot afford transport, they can use that fund to pay for transport.”

While the VHCs have not been going on long, there are already successes:

“Seventy to eighty percent of people sleep under nets since the start of the VHC. Hygiene in families has improved. Immunisation has happened, and we’re encouraging pregnant women and their partners to go to antenatal care together,” says Ali.

“There is a family whose house was about to fall down, and they didn’t have a latrine, so as a community we came together and repaired the house with iron sheets and built a new latrine, as well as a kitchen,” says Fred Rwaboona, the Kitengule village local council chairperson.

iCCM MaCS is proving that by using health as a gateway to empowerment, helping communities to realise the potential of collective action to solve other problems – for example, improving the infrastructure in their village, caring for the elderly and disabled, improving water sources, providing transport for the vulnerable and improving livelihoods.

CONCLUSION

This report demonstrates that CBPHC has strong potential for being the mechanism through which the Global Goal on health can be achieved – extending health services to the most vulnerable in remote communities and making universal health coverage a reality. Through CBPHC, the most common infectious diseases, childhood illnesses and maternal and newborn conditions can be diagnosed, treated and referred, and critical disease surveillance and patient reporting strengthened. When CHWs are suitably trained, supervised, supported and supplied with medicines and the correct tools, they can treat every major cause of child mortality, as well as provide a wide range of other health services.

The benefits of CBPHC go well beyond health. By operating at the heart of the community, CBPHC programmes can help tackle poverty, reduce malnutrition, support gender equality, extend services to the disabled, and empower communities to take charge of their own development. In this way, CBPHC can be a powerful tool for achieving over half of the Global Goals for Sustainable Development.

For CBPHC to be successful, this report recommends that:

- CBPHC must be adequately funded and effectively integrated with the formal healthcare system.
- The community should be engaged throughout the planning and implementation stages, so that CBPHC programmes are accepted and fully utilised by communities.
- National governments should invest in national CBPHC programmes, but also have an important role in coordinating the various actors delivering CBPHC to ensure synergy rather than fragmentation.⁴⁵
- Donors should work with governments to provide funding and expertise and then transition responsibility to governments over time.
- Development partners and academia should conduct operational research to establish how to scale up CBPHC successfully and ensure integration with the formal health system to develop much needed sustainable models of CBPHC that will work in different contexts.

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Malaria Consortium

Development House
56-64 Leonard Street
London
EC2A 4LT
United Kingdom

info@malariaconsortium.org
www.malariaconsortium.org

UK Registered Charity No: 1099776
US EIN: 98-0627052

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