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UBS Philanthropy Services

Picture of health

A guide for philanthropists and changemakers toward better health for all

Content

How to navigate this guide

This guide has three main sections to help you make more informed decisions about your health-related philanthropy.

Understanding the issues
Provides you with a high-level understanding of the issues facing health and well-being.

Promising solutions
Highlights solutions and real-life examples via short case-studies, editorials and interviews with leading experts and philanthropists.

Taking action
Aims at giving you advice to drive your health-related philanthropy more strategically.

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Your philanthropic journey

"The first wealth is health," wrote American philosopher Ralph Waldo Emerson many decades ago. How true this remains for all of us. Good health is the foundation on which all else is built: families, communities, economies. Children need to be healthy to learn. Adults need to be healthy to be productive and earn a living. Countries need healthy communities to promote a healthy economy.

The pandemic has made all too clear just how fragile our health can be. It also revealed how interconnected our health is with all members of the global community. And how similar some basic health needs are. We've learned that what we need to do to safeguard our health for the future is to build strong, responsive and resilient health systems.

A well-functioning health system does more than just address one disease or health issue. It is an adequately funded organization of people, institutions and resources that deliver evidence-backed healthcare – from basic preventative and primary care at the community and primary health center level to hospital and specialist care.

We need to invest in these health systems now to improve access, quality, equity and efficiency. Not only so we're better prepared to detect and respond to the next pandemic. But also so children everywhere – not only those living in the wealthiest countries – are able to survive and thrive, breaking the cycle of poverty for their families and their nations.

Whether you're a philanthropist with a passion for health or someone who is exploring, we hope this guide will assist your efforts. Our goal is to help equip you with the information and insights you need to have an impact. If you're at the start of your journey, you'll get a sense of the main issues challenging health systems. And, we'll share some promising solutions to those challenges. If you're further along on your philanthropic journey, we hope you'll find some fresh insights that can inspire your vision and approach (and maybe even your desire to join forces with others).

Whatever stage you've reached, we wish you a passion-filled, inspiring and impactful journey. We're here alongside you navigating the challenges facing our world's health systems and exploring ways to improve them. Together, let's help lay the groundwork for healthy and wealthy societies across the globe.

Warmly,

Your UBS Philanthropy Team

Health is at the heart of all prosperity.

Without it, all other advancement is largely irrelevant.

Health and the SDGs

SDG 3 is focused on ensuring that health services, especially primary health, are accessible to all – particularly those who are most vulnerable. Investment in increasing equity in health systems is critical to improving people's health and well-being. And this reduction of inequity of health is uniquely positioned to be an enabler for other SDGs.

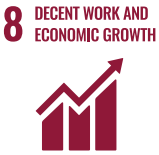
The world's most pressing social and environmental problems are encapsulated by the United Nations Sustainable Development Goals (UN SDGs). The 17 SDGs call for sustainable solutions that end poverty, improve health and education, provide clean water and sanitation, reduce inequalities and spur economic growth. When the UN member nations agreed to the goals in 2015, the target date to achieve them was 2030. Unfortunately, the world does not appear on track to achieve the goals. Developing countries alone need to fill an average annual funding gap of USD 2.5 trillion.[1] No doubt the COVID-19 pandemic will result in an even greater shortfall.

As the World Health Organization defines it, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." SDG 3 is focused on health and well-being for all. But equity in health impacts (and is impacted by) inequities across the SDGs. Promoting health and well-being by supporting the development of equitable health systems has a direct positive impact on a number of other key development goals.

[1] UN SDG Group. (2018). Unlocking SDG Financing: Findings from Early Adopters.

Health and the SDGs

Source: Adapted from: World Health Organization. (Accessed 2021, November 22). Sustainable Development Goals.



The economy can't function without healthy workers. Good health helps individuals find work, succeed at work and provide for themselves. Well-functioning human-centered health systems are an integral part of fighting poverty and promoting a thriving economy.

Health and nutrition are inextricably linked. Ill health can inhibit the ability to acquire adequate nutrition. And malnutrition can have lasting effects on mental and physical health. Improved health systems can both help individuals stay well so they can work and feed themselves while also improving knowledge about correct nutrition, especially for infants and children.

Unhealthy learners (and teachers) are unable to thrive in the classroom. Unwell students are absent more and this may even lead to dropping out. Simple health interventions like deworming have been proven to improve attendance.[2] Education provides health literacy. And we know that improved education is correlated with a variety of lifelong improved health outcomes like reduced premature deaths and chronic disease – benefits that are passed down to the next generations.

Societal inequities have health impacts. From an unhealthy diet to substandard housing, from polluted environments to limited opportunities for employment, socioeconomic and gender inequalities can lead to poor health. Gender norms and racial and ethnic stereotypes also affect willingness to seek healthcare, where systems often fail to meet the needs of the powerless. Health systems that speak to the needs of the marginalized help alleviate the negative impact of social inequities.

A healthy environment is directly connected to human health: polluted air, water and land are correlated with decreased well-being of humans. And the impacts of climate change like increasing heat stress and severe weather events like floods and droughts can lead to ill health and disrupt health systems. Our impact on natural ecosystems, like with deforestation, also threaten our health by expanding the reach of know disease vectors – like malaria – and increase the likelihood of new pathogens – like COVID-19. Equitable health systems are central to resiliency and early detection of emerging health threats.

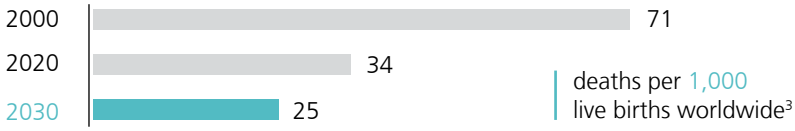
[2] World Bank. (2003). School Deworming. At a glance.

Global health indicators at a glance

COVID-19 has put progress further at risk and we need to accelerate our efforts now to achieve SDG 3 by 2030.

Child under-five mortality

(SDG target **3.2**)



4 out of 5 deaths of children under age 5 occur in sub-Saharan Africa and Southern Asia[4]

810 women died daily from preventable causes related to pregnancy and childbirth in 2017

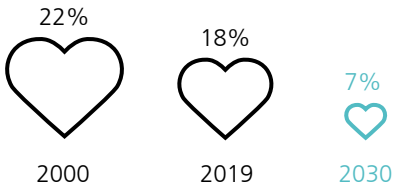
94% were in low and lower middle-income countries

In Afghanistan, Somalia and Chad, the maternal mortality ratio is over 1,000 out of 100,000 live births, while it is 21 for the European region.[5]

The world is likely to miss SDG 3.4 on noncommunicable diseases (NCDs)

Global premature mortality

Probability of dying from one of the four major NCDs between the ages 30 and 70 years[6]



[3] Bill & Melinda Gates Foundation. (2021). Global Progress and Projections for Under-5 Mortality.
[4] World Health Organization. (2020). Children: improving survival and well-being.
[5] Lankester, T., Grills, N. J. (Eds.). (2019). Setting up Community Health Programmes in Low and Middle Income Settings. Oxford Medicine Online.
[6] World Health Organization. (Accessed 2022, January 19). World health statistics 2021: A visual summary.

Health is wealth. Good health and well-being are critical aspects of sustainable development globally. Although some progress has been made, healthcare systems and services are improving at a rate that is insufficient to meet the UN's targets. People in wealthy nations can expect to live 18 years longer than their poorer neighbors. And wealth can also determine access to healthcare within countries and individual cities.[7]

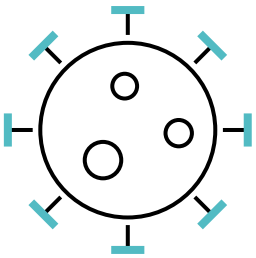
The world is falling short on its promise of universal health coverage for all by 2030.

Universal health coverage means that all people have access to the health services they need, when and where they need them, without financial hardship.

(SDG target **3.8**)

Half of the world's population lack access to essential health services.[8]

In Africa **83%** of people in rural areas are not covered by essential healthcare services, compared to 56% worldwide.[9]



90% of 105 surveyed countries reported disruptions to essential health services during the pandemic.[10]

3.16 billion people cannot reach a healthcare facility by foot within one hour [11]

100 million people are pushed into extreme poverty each year due to out-of-pocket health expenses[12]

Massive shortage of healthcare workers forecast to grow to 18 million by 2030[13]

Gender norms restrict women's movement and decision-making power

[7] World Health Organization. (2020). Urgent health challenges for the next decade.
[8] McNeill, K., Jacobs, C. (2019). Half of the world's population lack access to essential health services – are we doing enough? World Economic Forum.
[9] Lankester, T. and Grills, N. J. (eds.). (2019). Setting up Community Health Programmes in Low and Middle Income Settings. Oxford Medicine Online.
[10] Willmer, G., (2021, May 18). How the 'expressway' to UHC can help prepare for the next pandemic. Devex.
[11] Weiss, D. J., et al. (2020). Global maps of travel time to healthcare facilities. Nature Medicine, 26(12), 1835–1838.
[12] World Health Organization. (Accessed 2022, January 19). Universal Health Coverage.
[13] World Health Organization. (Accessed 2022, January 19). Health Workforce.

Key takeaways

What's most important to keep in mind when looking to improve health and well-being for all? Here's what we found:

Take a systems view

- Address all health needs, not just one disease or one aspect of health.
- Strengthen existing health systems rather than reinventing the wheel.
- Focus on equity and quality of care.

Support governments

- Partner with governments to help strengthen capacity of the public health system.
- Fund initiatives that build leadership and management skills.
- Improve national data systems (and integrate them).

Put people first

- Seek input from locals on local needs.
- Focus on primary care where there is the greatest opportunity to achieve better health equity.
- Use evidence of positive health impact in developing policies and programs.

Improve the workforce

- Support efforts to train and employ health workers locally.
- Make sure workforce investments don't further perpetuate women's low status with low or no pay.
- Promote greater gender equity within the health system, especially for leadership positions.

Use tools wisely

- Don't donate medical equipment without also providing proper training on use and maintenance.
- Make lifesaving medicines more affordable and available by addressing weaknesses in supply chains and markets.
- Digital tools need to be fully embedded within the health system and owned by governments to have impact and be sustained over time.

Focus on impact

- Support interventions with evidence that they actually improve health outcomes.
- Create evidence that can justify scale-up.
- Link payments to achievement of results wherever possible.

Use innovative finance

- Invest in blended finance solutions that use philanthropic funds to attract commercial capital for sustainable projects, while potentially providing returns for investors.
- Invest in sustainable investments that put money to work for good while aiming to provide returns comparable to traditional investments.

Scale effective solutions

- Support programs with a scalable model and encourage iterations based on learning, with an eye toward deployment elsewhere (with the necessary local tweaks) and an ultimate exit.
- Scale through governments or market solutions.
- Use solutions that already exist when possible.

Be prepared for the next pandemic

- Improve awareness of health issues and acceptability, availability and affordability of health services by addressing inequities in health systems.

Collaborate in collectives

- Join an existing collective to combine resources, roll out proven solutions and increase impact.
- If an issue is not currently being addressed, join forces with others to propose a solution.

02 Understanding the issues

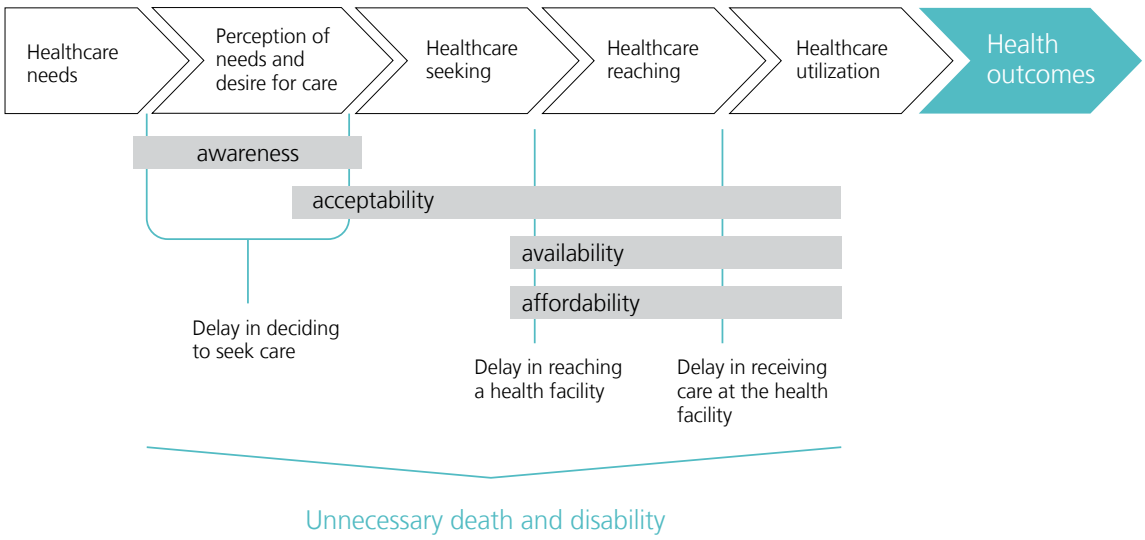
Access to quality healthcare continues to be rife with inequities across the globe. The COVID-19 pandemic has laid bare many of the injustices affecting patient healthcare.[14] The challenges to accessing quality healthcare are multi-dimensional, including issues on both the supply and demand side of healthcare. The four areas we focus on here are not exhaustive. But we find them to contain the most critical barriers.

Achieving good health for all depends on providing everyone with the opportunity to reach and receive quality healthcare services in situations of perceived need for care. This is what makes a strong health system. On the journey to health a patient must overcome many obstacles in four main areas: **awareness, acceptability, availability** and **affordability.** Failing to address these barriers results in three key delays that contribute to unnecessary death and disability:

1. delay in deciding to seek care
2. delay in reaching a health facility
3. delay in receiving care at the health facility

[14] We highlight four challenges here drawing from the work of scholars who have conceptualized various multidimensional concepts of access building off of the seminal work in the area: R. Penchansky and J. W. Thomas. (1981). The concept of access: definition and relationship to consumer satisfaction.

Let's look at barriers to accessing quality healthcare within these four areas, using COVID-19 as an example:



Source: Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. International Journal for Equity in Health, 12(1), 18.

Access to healthcare depends on **awareness.** During the pandemic, we've seen the importance of individuals being able to recognize the symptoms of COVID-19 infection and know what to do. Individuals need to have the information that loss of smell is a good indication to get tested. They also need to be aware of a testing location. Having this knowledge depends on a well-functioning system that gets such information to individuals.

Even with awareness, patients won't seek and adhere to healthcare without **acceptability.** A person with COVID-19 symptoms won't accept care without trust in the healthcare system. Promoting access to healthcare must take account of social and cultural barriers to care so that patients feel safe with healthcare personnel and confident in their proposed course of treatment.

Of course, access to quality healthcare depends on **availability.** For those living at the last mile, basic healthcare is often not reachable. If the closest healthcare center is 10 kilometers away, a person without transportation may be dissuaded from seeking care. Even with a healthcare center in reasonable range, quality access depends on trained medical professionals equipped with the right tools – like COVID-19 tests – so that the journey is worth it.

Even with awareness, acceptability and availability, **affordability** is a barrier to access for many. A lack of universal health coverage in many countries globally means that healthcare is out of reach for those without means. As we've seen throughout the pandemic, many will need hospitalization and oxygen supplementation in order to survive COVID-19. If such care comes at a high cost, people may not seek the care they need, sometimes paying with their lives.

02.1 Awareness

What do my symptoms mean? Is there anything that can be done? Awareness of illness and the healthcare services available to treat it is the first step in getting appropriate care. Yet this is a stumbling block in many environments, even where affordable health services are available.

There are two ways we can think about awareness: awareness of health symptoms and awareness of health services to treat such symptoms. The first has to do with a certain amount of health literacy about signs of illness. The second has to do with awareness of medical interventions available to help with illness, as well as awareness that such care holds promise of being effective. This awareness is a prerequisite for benefitting from the healthcare system.

A lack of awareness on both fronts creates cascading negative impact on health. Limited awareness not only reduces the chances of positive health outcomes due to the delay in seeking care but also leads to misconception about illness, which can then lead to stigmatization, making it even more difficult for patients to get the care they need.

5 mn

children under the age of 5 died in 2019

Knowing the signs and symptoms

Parents will do anything to protect their children. But to protect them, you need to know when there's danger. Many caregivers in low- and middle-income countries (LMICs) lack adequate knowledge of symptoms of illness in their children and the available treatment. Living remotely doesn't help. Traditional home treatments may be preferred in these areas where awareness (and trust – see **Acceptability**) is low.

An example where lack of awareness has deadly consequences is with child mortality. Despite progress, more than 5 million under-five children died in 2019. Infectious disease, pre-term birth, birth asphyxia and congenital anomalies are leading causes of these deaths. Yet, many of these deaths can be avoided by proper medical interventions that often are simple and affordable, including skilled delivery, postnatal care, adequate nutrition, vaccination and treatment for disease. Receiving these interventions in time requires knowledge of the signs and symptoms of an illness. Unfortunately, many children die unnecessarily because of delays in seeking and reaching care due to lack of awareness. According to a World Health Organization estimate, seeking timely and appropriate healthcare could reduce child deaths due to acute respiratory infections (one of the leading causes of child death) by 20 percent.[15]

Recognizing there's treatment

Community health clinics form the backbone of primary care in LMICs, where they exist. In poor, rural areas they often are the only healthcare services accessible to these populations. Recognizing the importance of expanding access to such clinics, the Government of Bangladesh established 18,000 community health clinics across the country in recent years. So that means those populations are now receiving the care they need, right? Not necessarily.

A study of women aged 15 to 49 years living in rural settings across seven divisions in Bangladesh in 2014 showed that just over one-third were aware of the existence of the community health clinics.[16] The lack of awareness was correlated with level of education, with less than a quarter of those who only had a primary education being aware of the clinics. This lack of knowledge that there are clinics, coupled with poor knowledge about symptoms of illness and certain cultural beliefs about healthcare (see **Acceptability**) means the mere existence of community health clinics is not likely to have a positive impact on health outcomes.

[15] See, for example, Abegaz, N.T., et al. (2019). Mothers/caregivers healthcare seeking behavior towards childhood illness in selected health centers in Addis Ababa, Ethiopia: a facility-based cross-sectional study. BMC Pediatrics.
[16] Yaya, S., et al. (2017). Awareness and utilization of community clinic services among women in rural areas in Bangladesh: A cross-sectional study. PLOS ONE.

Example

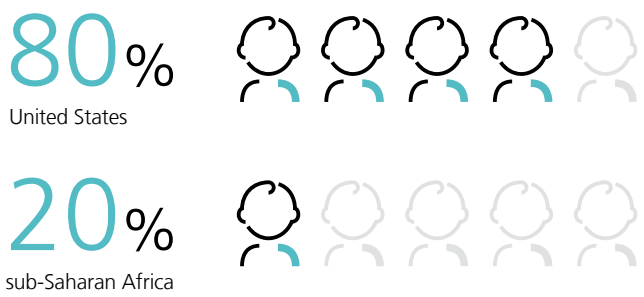
How awareness affects cancer treatment

Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020.[17] Lack of symptom awareness for diseases like cancer can delay diagnosis, drastically reducing chances of survival.

It is estimated that about 40 percent of cancer cases could be prevented by improving awareness and avoiding risk factors. Unfortunately, more than 80 percent of cancer patients in Ethiopia are at advanced and incurable stages at the time of cancer diagnosis and treatment. Availability of treatment is critical to survival, but without awareness so that the disease can be caught early, such treatment will be less effective. In Ethiopia, there is lack of awareness on both fronts: less than a quarter surveyed had knowledge of cervical cancer and even fewer knew a place where cancer treatment was provided.[18]

Although improving survival rates for cancer worldwide also requires adequate staff, equipment, referral networks, finances and medicine – as we'll see later – these alone won't prevent mortality if cancer isn't caught early due to lack of awareness. Frontline health workers in LMICs often lack awareness because they are not trained to recognize the signs and symptoms of cancer in order to promptly refer patients.

5-year survival for a child diagnosed with cancer



Source: Howard, S. C., et al. (2018). The My Child Matters programme: effect of public–private partnerships on paediatric cancer care in low-income and middle-income countries. The Lancet Oncology, 19(5), e252–e266.

No diagnosis and late diagnosis, treatment abandonment and relapse were identified as the main challenges in delivering effective pediatric cancer care. Global inequities in survival are unacceptable: A child diagnosed with cancer in the US has an 80 percent chance of surviving five years after beginning treatment. In sub-Saharan Africa, this number is 20 percent and, in some countries, maybe even lower than 20 percent.

[17] World Health Organization. (2021). Cancer.
[18] Labisso, W.L., et al. (2020). A descriptive cross-sectional study on awareness and belief of people about cancer in southern Ethiopia: special focus on breast and cervical cancers. Risk Management and Healthcare Policy.

02.2 Acceptability

Healthcare needs to be acceptable for people to benefit from it. Taking into account patient trust in the health system, perceived quality of care and patient social norms are an important part of removing barriers to healthcare.

Acceptability has implications at every step of the patient journey from seeking care, accepting treatment and adhering to the course of therapy. And acceptability itself is not static. Perceptions of acceptability can change due to the patient's experience with healthcare professionals and care interventions.

Distrust in the system

Health system distrust is a serious factor that can impact people's willingness to seek and receive care. An analysis of perceptions of health systems in 20 sub-Saharan African countries found that public opinion of the overall health system was strongly correlated with willingness to seek care.[19]

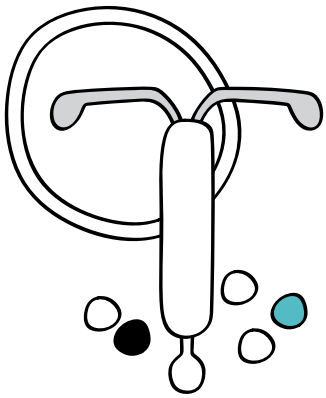
In Liberia, distrust in the health system existed before the 2014–15 Ebola outbreak. Only about half of Liberians at that point believed that they could obtain needed services for themselves or their children if they became sick.[20] Using the results of this study, researchers found that during the Ebola outbreak, those who had expressed distrust were less likely to take precautions against the virus or abide by government-mandated social distancing.[21]

During the COVID-19 pandemic we've been able to see the importance of acceptability in terms of trust in the health system and public health officials. From masking to vaccinating, a lack of trust in many countries globally has led to failures to follow public health guidelines, seek treatment and get vaccinated. No one will be safe until everyone is safe. But this solidarity needed to halt pandemics is less likely in the context of distrust in the health system.

Perception of poor quality

Closely related to trust is the importance of patient perception of quality of care. People who have poor experiences (or hear of others who do) may not find healthcare services acceptable even if they are available.

[19] Abiola, S. E., Gonzales, R., Blendon, R. J., & Benson, J. (2011). Survey In Sub-Saharan Africa Shows Substantial Support For Government Efforts To Improve Health Services. Health Affairs, 30(8), 1478–1487.
[20] Svoronos, T., Macauley, R. J., & Kruk, M. E. (2014). Can the health system deliver? Determinants of rural Liberians' confidence in health care. Health Policy and Planning, 30(7), 823–829.
[21] Blair, R. A., Morse, B. S., & Tsai, L. L. (2017). Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia. Social Science & Medicine, 172, 89–97.



218

million women in LMICs haven unmet need for contraception

A study assessing maternal mortality in Malawi determined that negative experiences with healthcare in the past and expectations of poor quality caused women to avoid seeking care. Long waiting times, inept staff and missed diagnoses can all lead to a perception of poor quality that inhibits acceptability and care-seeking behaviors.[22]

Social and cultural norms

Gender roles, cultural beliefs and tradition play a large role in acceptability of healthcare interventions. Perhaps nowhere is this more apparent than with reproductive healthcare, including family planning.

Globally, an estimated 218 million women in low- and middle-income countries (LMICs) have an unmet need for modern contraception. About half of all pregnancies – 111 million – are unintended. Furthermore, an estimated 133 million women of reproductive age in LMICs need, but do not receive, treatment for one of the four major curable sexually transmitted infections: chlamydia, gonorrhea, syphilis or trichomoniasis.[23]

A scoping review of articles on contraceptive access in LMICs found that the reasons for this unmet need for family planning are varied.[24] The determinant issues for failed access to family planning revolve around awareness – access to family planning information – and availability of clinics and trained practitioners. But beyond these reasons, myriad have to do with socio-cultural factors related to gender that affect acceptability:

- lack of trust in healthcare provider
- opposition from family or community
- couple's lack of communication
- partner's fear of infidelity
- woman's fear of violence and stigma
- woman's lack of autonomy

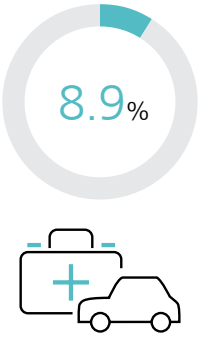
A study across 63 LMICs showed that pregnant women's autonomy and concerns about domestic violence are correlated with her likelihood to seek antenatal care and give birth in a healthcare facility. Researchers found that women with the highest autonomy in decision-making were about 30 percent more likely to deliver in a healthcare facility and 42 percent more likely to get antenatal care than women who scored lowest.[25] So, women's ability to make decisions needs to be considered in designing healthcare services.

[22] Mgawadere, F., Unkels, R., Kazembe, A. et al. Factors associated with maternal mortality in Malawi: application of the three delays model. BMC Pregnancy Childbirth, 17, 219 (2017).
[23] Sully, E. A., et al. (2020). Adding It Up: Investing in Sexual and Reproductive Health 2019.
[24] Wulifan, J. K., Brenner, S., Jahn, A., & de Allegri, M. (2016). A scoping review on determinants of unmet need for family planning among women of reproductive age in low and middle income countries. BMC Women's Health, 16(1).
[25] Sripad, P., Warren, C. E., Hindin, M. J., & Karra, M. (2019). Assessing the role of women's autonomy and acceptability of intimate-partner violence in maternal health-care utilization in 63 low- and middle-income countries. International Journal of Epidemiology, 48(5), 1580–1592.

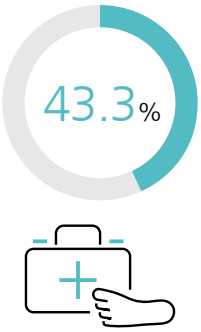
02.3 Availability

Is there a doctor in the house (or even nearby)? Access to healthcare depends on the availability of health centers, trained medical professionals and the right tools. Too many populations lack one or all of these elements.

Can't reach healthcare centers in an hour by car



Can't reach healthcare centers in an hour on foot



Source: Weiss, D. J., et al. (2020). Global maps of travel time to healthcare facilities. Nature Medicine, 26(12), 1835–1838.

A long trip to health

In low- and middle-income countries (LMICs) health centers are often spread thin. Especially in rural areas, people must travel a long distance to reach health facilities. Distances of five or more kilometers are common. Long distances are especially likely to hinder the most vulnerable in a community – often those who need care the most – further exacerbating inequities.

It isn't just long distances that matter to health outcomes. A study across 21 LMICs found that even distances over a kilometer from health facilities are associated with significantly increased mortality for children.[26]

A shortage of both people and training

When patients can get to a healthcare facility, they are faced with another challenge: a lack of doctors, nurses and midwives. Healthcare workforce density is lower in LMICs than in wealthier countries.[27] The world will need 18 million additional health workers by 2030, primarily in LMICs, including nine million nurses and midwives.[28] And it isn't just a matter of having a workforce – they need to be trained with the right skills to make correct diagnoses and give quality treatment.

A chronic underinvestment in education and training of health workers, coupled with a mismatch between health education strategies and population needs causes continuous shortages in many countries. And getting health workers to rural, remote and underserved areas poses its own challenge. A lack of health workers globally also means that workers from low-income countries are often recruited for positions elsewhere.[29]

A workforce without the right tools

Even the best trained workforce can only perform their jobs well when quality infrastructure, equipment, supplies and medicines are available. Basic infrastructure like electricity is critical to safe and effective care.

[26] Karra, M., Fink, G., & Canning, D. (2016). Facility distance and child mortality: a multi-country study of health facility access, service utilization, and child health outcomes. International Journal of Epidemiology
[27] World Health Organization. (2020). World health statistics 2020: monitoring health for the SDGs, sustainable development goals.
[28] World Health Organization. (Accessed 2021, November 8). Health workforce.
[29] Ibid; World Health Organization. (2016). Global strategy on human resources for health: workforce 2030.

Providing patients with high-quality medicines in a timely and cost-effective manner requires effective supply chains. But in LMICs – where disease burdens are often highest – these supply chains function poorly, resulting in frequent stockouts. Stockouts can have serious consequences. For people with HIV on antiretroviral (ARV) drugs, stockouts can be deadly because the interrupted treatment can cause illness or antimicrobial resistance. A survey in South Africa found that a quarter of facilities had at least one ARV or tuberculosis drug stockout within a three-month period. A similar survey in Tanzania found that almost 3 in 10 facilities surveyed had ACT (a first-line anti-malarial therapy) stockouts during the entire 15-month study.[30]

[30] Pisa, M. and McCurdy, D. (2019). Improving global health supply chains through traceability. Center for Global Development.

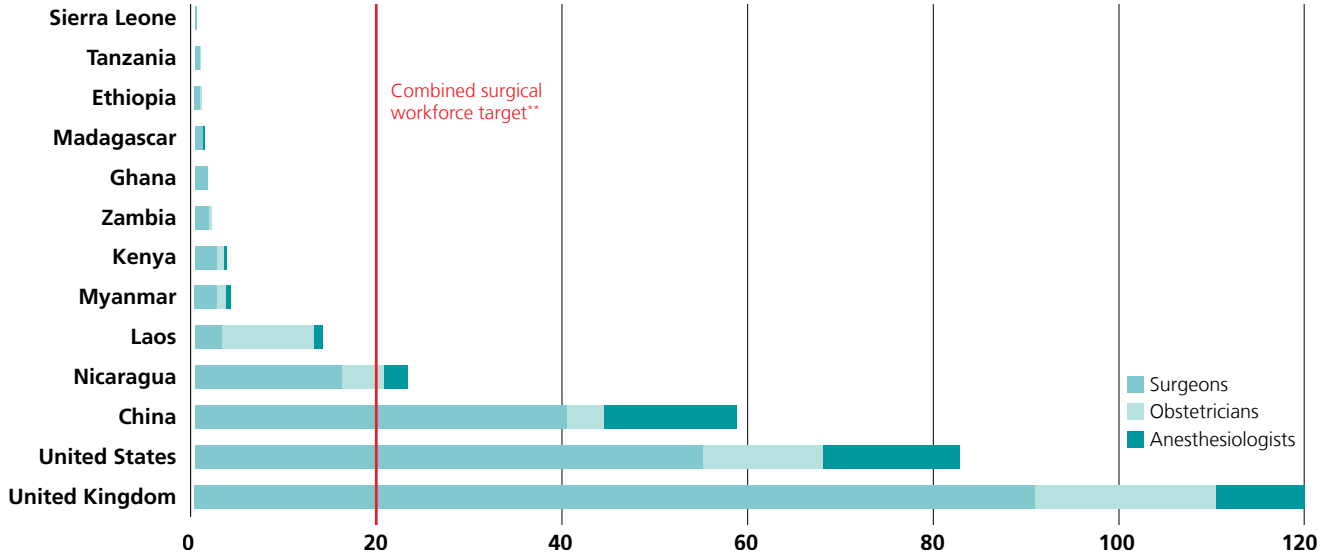
Example

The surgical workforce shortage in LMICs

About two-thirds of the global population lacks access to safe, affordable surgical and anesthesia care. The problem is dire in LMICs, where nine out of ten people lack access. An estimated 143 million more surgical procedures are needed in LMICs each year to save lives and prevent disability. A key barrier is the severe shortage of surgical personnel – over a million surgical, anesthesia and obstetric providers across 136 LMICs.[31]

Of course, it isn't just a matter of increasing the surgical workforce. Where surgery is available but training is lacking, surgical procedures can do more harm than good. Surgery remains a dangerous undertaking throughout much of the world: In LMICs, past studies suggest the death rate during major surgery is a shocking 5–10 percent.[32] Maternal deaths associated with caesarian sections are 100 times higher in LMICs than in high-income countries. Women in sub-Saharan countries have the worst outcomes. Poor practices during and after surgery can cause infection or even directly cause death.[33]

Ratios of surgical workforce to 100,000 population*



Source: Meara, J. G., et al. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. The Lancet, 386(9993), 569–624. https://doi.org/10.1016/s0140-6736(15)60160-x; WHO data; WDI indicators; Cambodia Society of Gynecology and Obstetrics; Cambodia Society of Anesthesiologists

* Data from latest available year (2012–2016 time period)

** Lancet Global Surgery Commission estimates that to fill the 1.27 million gap in surgical workforce by 2030, developing countries should reach a combined surgical workforce (surgeons, obstetricians, anesthesiologists) of 20 per 100,000 population.

[31] Meara, J. G., et al. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. The Lancet, 386(9993), 569–624.
[32] World Health Organization and WHO Patient Safety. (2008). The second global patient safety challenge: safe surgery saves lives.
[33] Sobhy, S., et al. (2019). Maternal and perinatal mortality and complications associated with caesarean section in low-income and middle-income countries: a systematic review and meta-analysis. The Lancet, 393(10184), 1973–1982.

Infrastructure

70%
of hospitals in sub-Saharan Africa lack reliable sources of water and electricity

Equipment

70%
of operating rooms in sub-Saharan Africa lack pulse oximeters

Supplies

73%
of hospitals in low-income countries lack on-site blood banks, severely limiting speedy access to blood

Source: Meara, J. G., et al. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. The Lancet, 386(9993), 569–624.

02.4 Affordability

Medicine or food? Surgery or rent? Half the world's population lack financial resources to access essential health services. A significant barrier is affordability. Poverty is not only an impediment to receiving healthcare. It can also be the result of accessing it.

Crippling out-of-pocket expenses

In 2017, only about one-third to one-half of the world's population had access to essential health services through universal health coverage.[34] For those not covered, the need to pay directly for care at the time of service forces a choice between spending on health or other necessities. Many have to forego needed care as a result.

In low- and middle-income countries (LMICs), out-of-pocket payments are the main source of healthcare financing, with taxes and health insurance playing a small role.[35] When people do use services, they often incur high – sometimes catastrophic – costs in paying for their care. Unexpected illness can decimate life savings, prompt a selling of assets or require borrowing – destroying future wealth of families and their children.

In 2015, health spending contributed to anywhere from 89 to 183 million people globally falling into poverty (depending on how the poverty line is defined).[36] Catastrophic out-of-pocket spending – defined as spending exceeding 10 or 25 percent of the household budget – has actually increased since 2000.

The poverty penalty

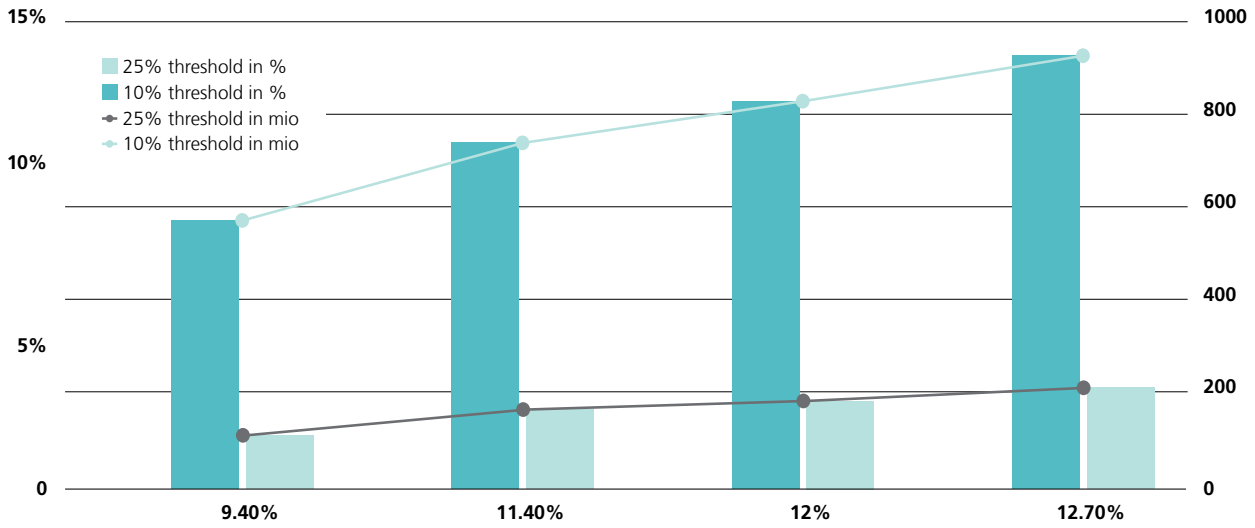
Adding to the problem of affordability of health services in LMICs is the fact that prices for many health interventions are relatively higher in these countries than elsewhere. For example, medicines account for 20 to 60 percent of health spending in LMICs compared with 18 percent in OECD countries.[37]

What about lowering prices? When prices are so low as to preclude profits, companies often just leave the market, as happened with antivenom medicines.

[34] World Health Organization. (2019). Primary healthcare on the road to universal health coverage: 2019 monitoring report. World Health Organization and World Bank. (2017). Tracking universal health coverage: 2017 monitoring report.
[35] Nemati, E., Nosratnejad, S., Doshmangir, L., & Zarea Gavgani, V. (2019). The out of pocket payments in low and middle-income countries and the affecting factors: a systematic review and meta-analysis. Bali Medical Journal, 8(3), 733.
[36] World Health Organization and World Bank. (2020). Global monitoring report on financial protection in health 2019.
[37] World Health Organization. (2017). Ten years in public health, 2007–2017: report by Dr Margaret Chan, Director-General, World Health Organization.

Catastrophic out-of-pocket health spending

Percentage of the global population with out-of-pocket health spending exceeding 10% or 25% of the household budget



Source: World Health Organization.(Accessed 2021, November 8). The Global Health Observatory.

Did you know?

In cases where patients pay out of pocket for their cancer drugs, these costs can be crippling. The Clinton Health Access Initiative (CHAI) calculates that in Ethiopia, one full treatment course for a child with Acute Lymphoblastic Leukemia is equal to nine months of an average Ethiopian salary.

And it isn't just that medicines are often *relatively* more expensive in LMICs. A study by the Center for Global Development found that basic, everyday drugs can cost far more in LMICs. Purchasers in some LMICs pay as much as 20 to 30 times more than high-income countries for basic generic medicines like omeprazole, used to treat heartburn, or acetaminophen, a common pain reliever.[38] Many of the LMIC procurement systems are plagued by inefficiencies that leave them paying some of the highest drug prices in the world, placing them further out of reach for individuals who already stretch to pay out-of-pocket costs.

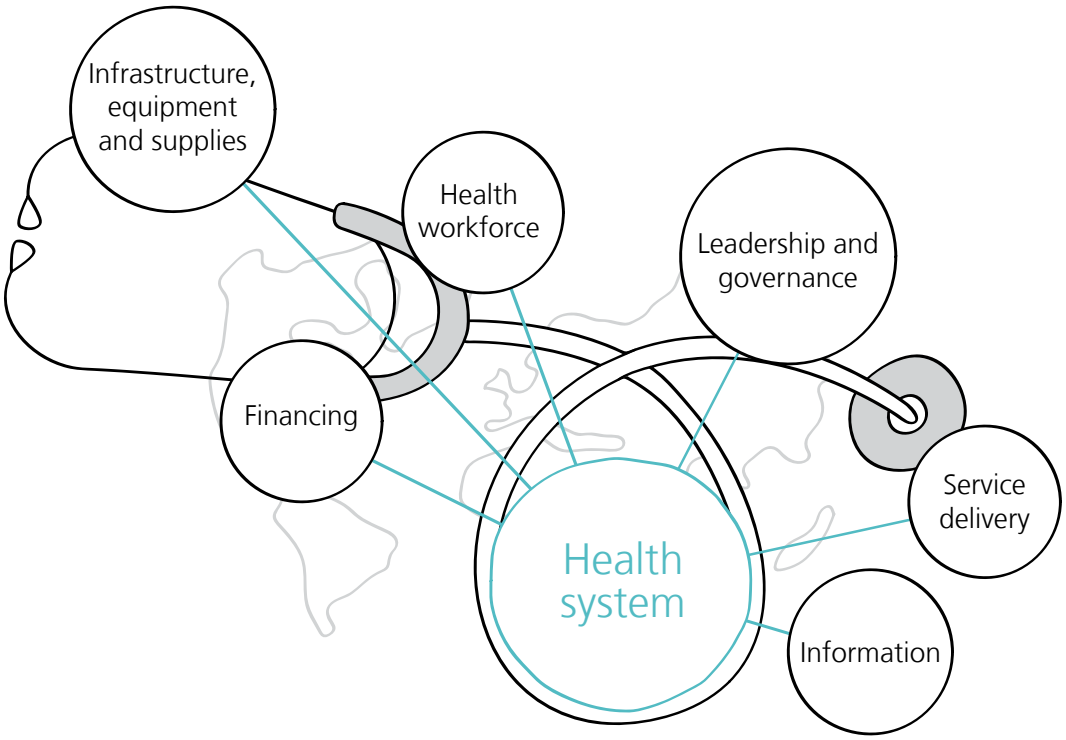
According to the World Bank, India's total healthcare expenditure as a percentage of GDP is still one of the lowest in world: 3.5 percent compared to a global average of 9.3 percent. Public sector expenditure accounts for only around 27 percent of total healthcare expenditure compared to a global average of 60 percent. This means that that private sector dominates in India. The vast majority of healthcare expenditure ends up coming from people's pockets. Why don't Indians choose the public sector where costs are low or nothing? Because the public system is perceived as low quality and unreliable.[39] So, affordability alone won't solve the issue. As we've seen, acceptability is a prerequisite, too.

[38] Silverman, R., Keller, J.M., Glassman, A., Chalkidou, K. Tackling the triple transition in global health procurement. Center for Global Development.
[39] Kasthuri A. (2018). Challenges to Healthcare in India - The Five A's. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 43(3), 141–143.

03 Promising solutions

What's the answer? There are several. Fund health system improvements that are centered around people. Build a sustainable workforce equipped with the right tools. Measure evidence of impact. And then scale the interventions that succeed.

03.1 How to improve the whole health system



TIP ›
You can support strengthening of both the public and private sides of health systems. On the public side, this typically involves funding for NGOs that are partnering with governments to demonstrate innovative ways of reaching hard-to-reach populations or improving the quality of care. On the private side, this typically involves investing in social enterprises that are serving lower-income populations or funding NGOs who provide technical support to private clinics to improve quality of care and financial sustainability.

Strengthening the whole system

What is a health system? Simplistically, it's the organization of people, institutions and resources that deliver healthcare – from basic preventative and primary care at the community and primary health center level to hospital and specialist care.

Why focus on health systems? Strong health systems can address inequities, reducing unnecessary death and disability. Through a systems approach that addresses all components from leadership to workforce to financing, health outcomes are improved through increased awareness of health issues and availability, acceptability and affordability of health services.

Unfortunately, much funding in global health is allocated in silos – antiretroviral treatment, mosquito nets, vaccination campaigns – instead of strengthening entire systems. This results in inefficiencies, delays in care and inequities in quality of care received. And, it means the interventions are rarely sustainable.

Achieving impact

Health system strengthening is where we see the greatest potential for impact at scale. A recent review found that health system strengthening interventions are associated with reductions in mortality at several stages in the life cycle: neonatal and/or perinatal, infant, under-five and maternal. Health system strengthening interventions also are associated with reductions in morbidity for a range of conditions – acute and chronic, infectious and non-infectious – including diarrhea, sexually transmitted diseases, undernutrition, malnutrition, low birth weight and complications, diabetes and mental disorders. These interventions also lead to improvements in service utilization, financial protection and quality service provision, all important to improved health.[40]

Resisting the pull of the vertical

It's easy to see why philanthropists and external aid organizations would be attracted to interventions that target a specific disease – so-called vertical health interventions. Wiping out malaria, for example, is an aim that seems perfect for donor funding: it's urgent and we can measure the results easily. But it isn't clear this is always the best kind of intervention to support.

TIP >
You should prioritize the strengthening of health systems rather than parallel, temporary programs aimed at one disease. As much as possible, interventions should target multiple components of the health system simultaneously.

The problem can be that these interventions take energy away from supporting the community in creating sustainable, people-centered health systems – so-called horizontal health interventions. Even worse, they can even undermine the progress of the systems needed to promote health and prevent disease across the spectrum. Too much focus on one disease in a community can funnel attention away from basic healthcare. And then, when that disease has been addressed, resources often leave the community, without having any sustainable positive impact beyond the one disease.

Vertical health interventions Disease control	**Horizontal health interventions** People-centered healthcare systems
Focused on specific diseases	Focused on health promotion
Short-term program	Ongoing and sustainable care
Population is the target of the intervention	Population partners to manage their health
Outside decision makers	Community ownership
Popular with donors	Funding is harder to obtain

[40] Hatt, L., et al. (2015). Impact of Health Systems Strengthening on Health. Health Finance and Governance Project, Abt Associates Inc.

Strategic philanthropy in a shifting Chinese landscape

Warren Ang,
Managing Director, East Asia,
at Global Development Incubator

What makes philanthropy unique in China?

First, government is generally seen as one of the main scale pathways for impactful philanthropy. And in China, the speed and extent of the government as a scale pathway is unparalleled. Philanthropy has a unique opportunity to leverage this rapid scale engine by piloting and demonstrating social service models that can inform policy implementation.

Second, China is unique for philanthropy because of the sector's early stage. The rules of philanthropy are currently being written and while this brings challenges (like the big need for capability building), it does provide the opportunity to do things more strategically from the start.

What shifts have we seen in China in social service delivery, including health services, over the past decade?

In the past, the focus of philanthropy in health services has been mostly on providing "hardware" (like building health centers or running sanitation projects) and training village doctors. Very little was spent on health promotion and prevention as well as on social services that complement medical services in the community.

Going forward, we see this changing as the government's goals change. The government aims to move from treatment to prevention and from hospital to the community. These two shifts imply more public health promotion and prevention as well as the need for a stronger primary care system rooted at the village and township levels. This provides new opportunities for social services to complement these objectives and for more spending in public education, strengthening primary care and connecting medical and social services.

These shifts are critical if one looks at the bigger picture. China's aging population means higher prevalence in chronic diseases and dementia. Mental health challenges are also growing across the board. Each of these population health challenges require not only medical services, but also social services, to keep people healthy in communities.

With the policy environment in place, how can philanthropists best support health equity in China?

Philanthropy can help drive this shift toward prevention and strengthen community-based social services to complement the health system. The most vulnerable are in rural areas, so focusing on the Central and Western provinces – and strengthening health systems at township and village levels – are especially crucial.

Specifically, philanthropists can fill hardware gaps, support manpower capacity building, pilot medical-social collaboration services (for example, to support chronic disease management in communities), pilot targeted public education and promotion campaigns, and demonstrate how to leverage technology to improve the effectiveness and efficiency of the whole system.

Philanthropists need to move away from one-off, independent projects to a portfolio approach with shared learning. Look at what others are doing and see where you can collaborate. Join a network to see where potential gaps are so you're not just starting with your own pilot from scratch. You can contribute to the evidence base to avoid just delivering outputs and outcomes in one project. Sustainability requires both building on the evidence generated by other philanthropists and actors, as well as contributing to the evidence base for others to learn.

03.2 How to promote people-centered healthcare

What the people need

Why do health systems exist? To serve people. The goal of a health system is to create a healthier society. A well-designed, people-centered health system can ensure awareness of health issues and acceptability, availability and affordability of health services – and, in the end, save lives.

To be people-centered, the health system needs to address all health needs, not just one disease or one aspect of health. A health clinic, for example, shouldn't only assess blood tests related to HIV and administer antiretrovirals. It also ought to provide antenatal care and address treatment for bacterial infections, and so on. A strong health system will also do more than just diagnose and treat diseases and illnesses: it is focused on prevention and is able to address health issues related to poverty, the environment and gender.

> "Making healthcare truly universal requires a shift from health systems designed around diseases and health institutions towards health systems designed around and for people."[44]
>
> **Zsuzsanna Jakab,** WHO Regional Director for Europe

It's primary

Primary care is where there is the greatest opportunity to achieve better health equity and provide more holistic care. People also need hospitals and specialized care. So it's important for all levels of the health system to be strong and well-integrated with each other, with clear and effective referral pathways so people get to higher levels of care when they need it.

[41] Yerramilli, P., May, F. P., & Kerry, V. B. (2021). Reducing Health Disparities Requires Financing People-Centered Primary Care. JAMA Health Forum, 2(2), e201573.

Integrated primary care has long been recognized as the foundation of responsive and protective health systems. The World Health Organization's 1978 Alma Ata declaration says primary care, "forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community." Researchers note that "robust data show that access to primary care is associated with improved health metrics – including vaccination rates, quality of life, and survival – and reduced health disparities.[41]"

How do you serve people best? Listen to them.

The COVID-19 pandemic has shown us the consequences of neglecting health systems. The state of the health system doesn't just lead to poor outcomes for the pandemic itself: "Pandemics often precipitate declines in essential health service utilization, which can ultimately kill more people than the disease outbreak itself."[42] Early stage research across four countries in sub-Saharan Africa found community health workers (CHWs) supported in line with the WHO Guidelines and protected with adequate personal protective equipment (PPE) were able to maintain speed and coverage of community-delivered care during the pandemic period.[43]

TIP >
You should examine whether and how organizations are meaningfully engaging the communities you are serving.

Engaging communities

How do you serve the people best? Listen to them. Health policy can't have positive impact if it overlooks the very people it's meant to serve. Stakeholder engagement is especially critical to addressing health inequities and increasing acceptability.

[42] Ballard, M., et al. (2021). Continuity of Community-Based Healthcare Provision During COVID-19: A Multi-Country Interrupted Time Series Analysis. SSRN Electronic Journal. Published.
[43] Ibid.
[44] The Lancet. (2018). The NHS at 70 and Alma-Ata at 40. The Lancet, 391(10115), 1.

Listening to the needs of the community

Jennifer Schechter,
CEO and Co-Founder,
Integrate Health

What is Integrate Health's model? And how and why is it integrated?

Effective primary health systems meet patients where they are, whether at home or at the clinic. Integrate Health is integrating care delivery by professional community health workers (CHWs) in Togo with improved clinic-based care. CHWs are trained, equipped and salaried individuals from the community who provide home-based care for population-level coverage. Trained clinical mentors provide peer coaching to nurses and midwives in public clinics. Pharmacy managers are trained in improved supply chain management. Plus, basic infrastructure improvements are made to ensure that providers have the tools they need. Point-of-care fees for women and children under five are removed to eliminate financial barriers.

Integrate Health was initially founded in 2004 in partnership with a community-based association of individuals living with HIV/AIDS, known as Association Espoir pour Demain (AED-Lidaw) to respond to the acute need for HIV/AIDS care and treatment in northern Togo. Together, Integrate Health and AED-Lidaw built and scaled one of the most effective HIV treatment programs in Togo. Recognizing the enormous need across Togo, Integrate Health decided to launch the integrated approach directly through the public sector, to serve all women and children. In integrating HIV care delivery within broader maternal and child health services, Integrate Health aimed to breakdown vertical program delivery and model a seamlessly integrated patient-centered approach.

How does Integrate Health's model address issues of awareness, acceptability, availability and affordability?

The integrated approach leverages this effective delivery model to overcome the major barriers to seeking care in Togo, namely distance, poor quality, lack of supplies and high costs. Also, the approach is delivered as a learning health system whereby rigorous data are collected and used to drive continuous quality improvement as well as shared with policymakers to inform national scale.

Integrate Health aims to overcome all barriers to accessing quality healthcare. With family planning, Integrate Health observed low demand for services. Through community meetings, Integrate Health came to realize the need to involve men in discussions. Integrate Health identified men whose wives used family planning and trained them to be peer educators, having sessions with other men to answer questions and discuss the benefits of family planning. This innovation, combined with family planning delivery by CHWs to women in their homes, led to significant uptake, including in remote communities.

How does Integrate Health make sure the quality of care is high?

Integrate Health is accountable to patients, first and foremost. Patients' voices are sought through community meetings that inform program design and delivery, as well as biannual community townhall meetings to discuss program results. This intentional cultivation of community ownership is combined with rigorous monitoring of key performances indicators that measure patient level outcomes. Preliminary data from Integrate Health pilot implementation sites reveal a reduction in under-five mortality, from 51 deaths per 1,000 live births in 2015 to 36 in 2020. We also observed increases in healthcare coverage and health service utilization as well as improved quality of service delivery.

How has Integrate Health progressed from innovation to scale?

Over the past five years, in partnership with the Ministry of Health, Integrate Health has expanded this approach to serve nearly 200,000 people across northern Togo. The government of Togo has demonstrated strong political will, recently announcing its Roadmap 2025 that commits to making significant advances toward universal health coverage through increased investments in CHWs and primary healthcare infrastructure, training and supply chain. This moment presents an opportunity to ensure high-quality primary healthcare delivery for all Togolese.

TIP >
You should look for integrated health when assessing healthcare delivery models and support local organizations when feasible.

TIP >
You can provide funding for initiatives that build leadership and management skills and nurture health system leaders to maximize their potential.

Who's running the show? Without strong leadership and governance, health systems won't reach their potential.

Learning from the private sector

CEOs of multinational corporations are groomed with management training and coaching to be effective stewards of shareholder interests. Health system leaders need the same to uphold the health interests of its stakeholders – the general population who will use the system.

Why is strong leadership so important? Strong leaders can foster the political will that is needed to ensure health is prioritized, a priority reflected in clear laws and policies. Strong leaders can also make sure the system gets funding and that these funds are mobilized most effectively. Finally, strong leaders will make sure that policies are rigorously monitored and evaluated, advocating for and implementing changes when needed.

Strengthening leadership and management capabilities

Robert Newman,
Executive Director, AMP Health

What are the key principles of AMP Health's model?

AMP Health helps governments build visionary and effective teams. We're committed to the vision of a world where governments and societies prioritize, promote, and protect people's health and well-being. Governments play a critical role in addressing complex problems and bringing this vision to reality, which is why we work with public sector teams to help them develop the leadership and management capabilities needed to achieve ambitious goals.

We believe that teams are at the heart of a government's ability to deliver quality services. Talented individuals cannot thrive within institutions that confine them. The best policies cannot lead to meaningful change without the backing of a competent team that can execute on them. But teams – small groups of dedicated, capable people – have the power to do extraordinary things. To build highly effective public sector teams, the AMP Health model combines embedded mentoring and capability development, experiential learning, coaching and peer exchange across countries.

What is an example of how the AMP Health model has achieved impact?

AMP Health launched its partnership with the Zambian Ministry of Health (MoH) in 2017. At that time, the MoH did not have any staff dedicated to leading and managing the community health system. The MoH recognized

that there was a need for clear ownership and accountability for the community health system at the national level for Zambia to succeed in achieving its goal of providing universal access to quality, affordable health services. So the MoH asked us to provide recommendations for a governance and management structure for community health. These were adopted and the MoH established the Community Health Unit in 2018.

Since then, AMP Health has provided embedded support and leadership and management training to the Community Health Unit to help them achieve their goals. This has led to the development of the country's first national community health strategy, an investment case targeted at funding partners, and new partnerships to develop guidelines and training for community health workers. The strategy and investment case are laying the groundwork for an expanded and strengthened community health system in Zambia, which will ensure improved access to healthcare for all Zambians, including the most remote populations.

What role has philanthropy played for AMP Health?

From the outset, close partnership with philanthropy has been critical to AMP Health's work. Several philanthropic organizations were instrumental in AMP Health's incubation. Our Partnership Board, which acts as a strong thought partner to the AMP Health management team, is largely composed of individuals from the world of philanthropy. Our government partners in low-income countries are not yet in a position where they can take on the full cost of developing and delivering leadership and management training across the public sector, although they do commit non-financial resources to our partnerships. We have relied on a mix of corporate and private philanthropy, together with some public funding, to execute our mission.

How can philanthropists support leadership and management skills for better performing health systems?

We see leadership as a mindset – a set of skills and behaviors that can be learned. And like a muscle, it becomes stronger with practice. The best leadership development programs look to provide people with an opportunity to practice their skills and exercise this muscle. This means moving away from overly theoretical and abstract classroom-based approaches, toward designing programs that provide skills and tools that can immediately be put into practice. When leadership and management development programs meet people where they are, there is greater buy-in and desire to improve how things get done. This is how we achieve the kind of durable behavior change that is needed to cultivate visionary leaders and capable managers.

What's data got to do with health? A lot, it turns out.

Mining the data

TIP >
You can advocate for and help governments improve their national data systems. On a grantmaking level you can support their partners to improve their data disaggregation efforts and help improve integration between program data and national data systems (which is crucial for scale-up).

What's in a health information system? Paper or – more commonly now – electronic health records. But there is also data. Data by population, health facility and local communities. Financial data and data on human resources. Supply chain data about availability of supplies. And surveillance data about disease outbreaks and other trends.[45] The data within the systems offer reliable information for national health policies, human resources, research, training and delivery of care. Plus the data can support reliable procurement and supply of health products by providing up-to-date information on needs and usage. But the data are only reliable and useful when timely, of high quality and unfragmented (see section 3.4 for further discussion of interoperability of digital systems).

People-centered health systems use data to understand what patient needs are and how best to serve them. By collecting and reporting data on everything from utilization of services to disease outbreaks in order to inform policy, resource allocation and decision-making, the health system can become more effective and efficient, improving health outcomes at all levels. This data and the way data are captured is referred to as the health information system.

[45] UNDP. (Accessed 2022, January 19). Health information systems.

Did you know?

Sometimes to get at the inequities it becomes necessary to doubly disaggregate, looking at two dimensions of inequality. "In Benin, the under-five mortality rate was higher in rural areas than in urban areas. However, a closer inspection reveals that, when disaggregated again by economic status, the rate of under-five mortality among the urban poor was even higher than the rate in rural areas."[46] If policymakers only look at rural versus urban, or rich versus poor, in isolation, the vulnerability of the urban poor might be missed.

Unmasking blind spots

Health information systems are indispensable for designing equitable health programs as they reveal groups that are vulnerable. This requires collection, analysis and reporting of health data disaggregated by dimensions like sex, age, economic status, education, place of residence, ethnicity and other context-specific population subgroups. In this way, health information systems can serve as the foundation for monitoring health inequities.

Despite this, data in many countries are inadequate to assess the situation of vulnerable populations. Lack of disaggregated data remains a significant challenge across the world. "Only half of countries included disaggregated data in their published national health statistics reports. These data blind spots can mask the struggles of vulnerable groups and people living in specific areas misleading policymakers' efforts to allocate resources effectively and prioritize interventions properly."[47]

[46] World Health Organization. (2015). State of inequality: reproductive, maternal, newborn and child health.
[47] World Health Organization. (2021). World health statistics 2021: A visual summary.

Did you know?

The under-five mortality rate in low-income countries is almost 14 times higher than the average rate in high-income countries. High under-five mortality rates often reflects a combination of failures of the health system, indicating inequity and systemic health challenges. Since a majority of these deaths are preventable, the under-five mortality rate is a perfect proxy for tracking lack of access to critical and fundamental healthcare.[48]

Case study:
Rwanda under-five mortality[49]

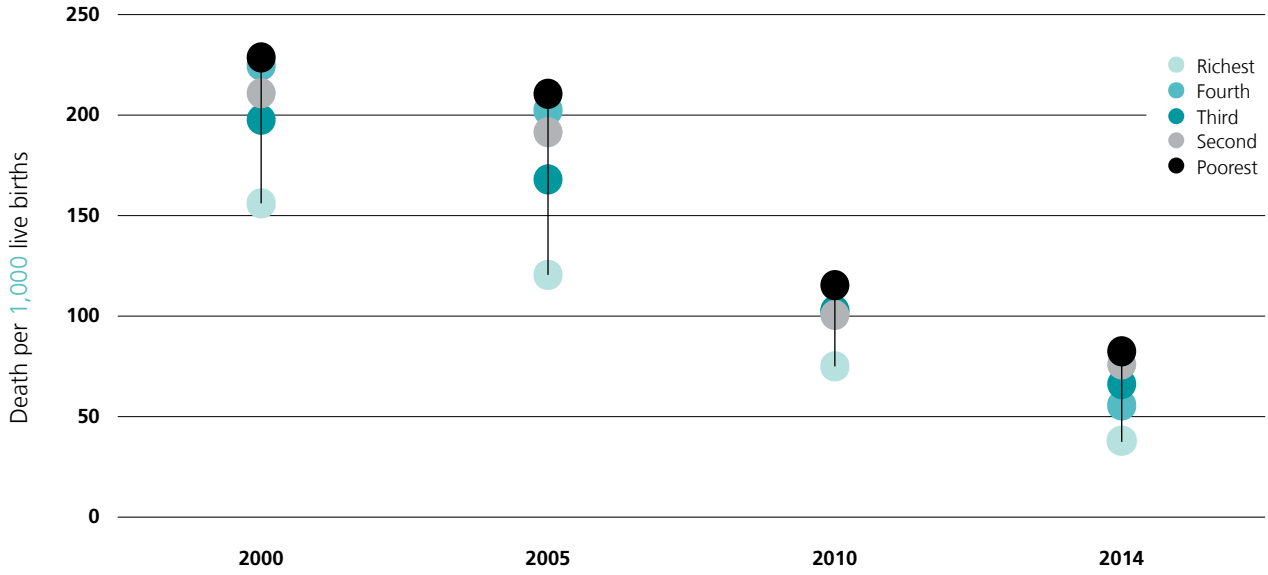
By explicitly focusing on reaching the poorer segments of the population through people-centered healthcare, strong government leadership and the use of data to drive health system reform, Rwanda was able to significantly close the gap between rich and poor in terms of healthcare coverage between 2000 and 2014.

Rwanda's political will and commitment to build a strong health system is behind their success. Rather than pursuing vertical interventions (favored by donors) that are disease-specific, Rwanda focused on strengthening the primary care system. The government's July 2000 policy document, Rwanda Vision 2020, highlighted this commitment: "Health policies must be targeted at the poorest members of the population to improve access to healthcare, the quality of that healthcare and to reduce its cost." Rwanda took leadership over its policies, making sure that the interventions by donors and NGOs aligned with their vision of a strong national health system.

The government invested heavily in its data infrastructure. This focus on evidence was used before and during implementation, with a willingness to course correct based on emerging data.

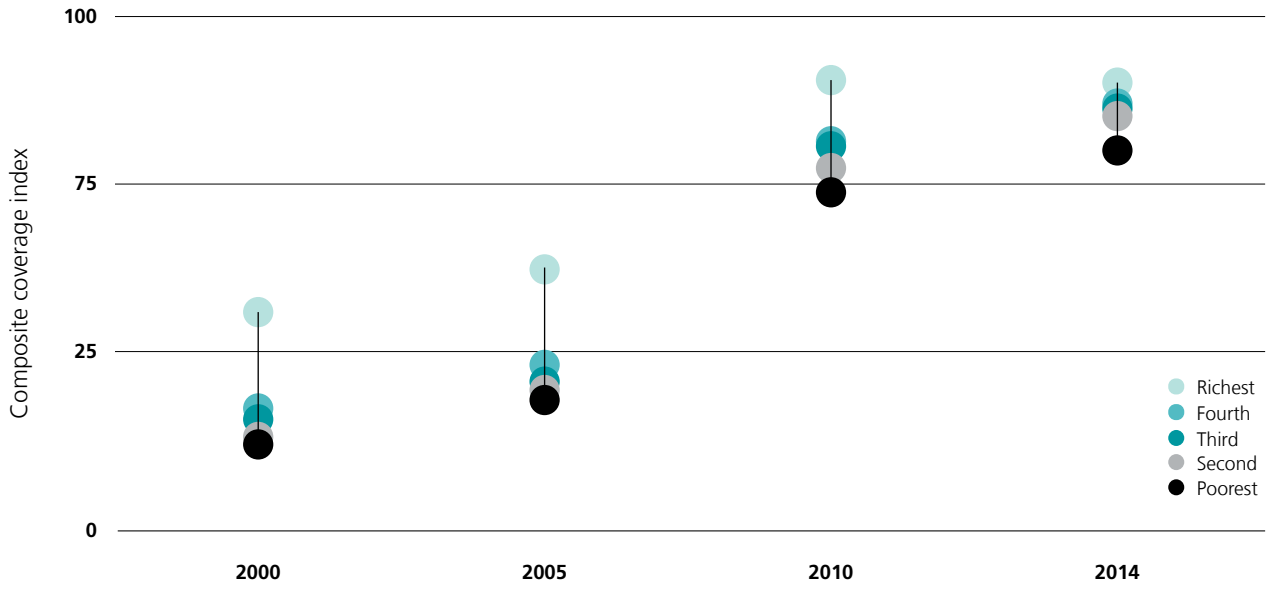
[48] Exemplars in Global Health. (Accessed 2022, January 19) Under-five mortality.
[49] Exemplars in Global Health. (Accessed 2022, January 19) Under-five mortality.

Under-five mortality by wealth quintile



The composite coverage index

a weighted average of the coverage of eight interventions along four stages of the continuum of care: reproductive health, maternal health, immunizations and childhood illness



Source: Exemplars in Global Health. (Accessed 2022, January 19). How Did Rwanda Implement?.

Reaching the most vulnerable to benefit all

Agnes Binagwaho,
Vice Chancellor of the University of Global Health Equity,
former Minister of Health of Rwanda

What was the principle that you had in mind as you designed the health system reform in Rwanda?

When I took my first leadership position in the health sector in 2002, I went there with a lot of humility saying, "I know nothing." I'm a pediatrician and I had never run a public program before, so I decided to ask the people what they need. It worked well as it's giving agency to the people, so I continued even when I took office as Minister. I was blessed because everyone along the chain of services gave me what was the best for them and I tried to make it work. I was always concerned about the poor who, even when treated for free, had no money for transport or had no understanding of what we tried to do for their child because of lack of access to education. This is what I had in mind from the beginning. It is also why I stayed in my country during difficult times. If a program does not put the most vulnerable at its core, they will always be left out. But if you go with this principle of prioritizing the vulnerable everybody will be served. This is the principle of Rwanda's health system.

How did you put this priority into practice?

The people who have a voice will always be served. You need to think about how to set up a system that will care about the vulnerable first. Once this principle is embedded in the law you put in place a system in the ministry, in health service locations and in society. You need to be aware of the national, regional and local contexts – for each you will encounter favorable factors and obstacles. You tackle one obstacle after the other until your policy is embedded. It's all about how you advocate for your mission to your bosses, your colleagues and the people you want to serve, so they accept and utilize the services you propose.

How can philanthropists best support governments to implement their national health priorities?

Philanthropic money is for the well-being of people. Data is your best advisor to help you identify the needs and gaps in national health systems. There is a very simple thing to do. Ask the people at the Ministry of Health, "What is your biggest issue to improve the health of your people?" Then follow that! Philanthropy has the big advantage of being free of politics and can go directly to what matters.

03.3 How to build a sustainable health workforce

What's behind every health system? Health workers. When health workers are not supported, given adequate resources and well managed, it is ultimately the health of the population that suffers.

40

million new health and social sector jobs by 2030

Demographic changes and rising healthcare demands are expected to lead to 40 million new health and social sector jobs by 2030. The World Health Organization (WHO) estimates that almost half of the investment required to achieve the health Sustainable Development Goals (SDGs) relates to education, training and employment of health workers.[50]

Serving the population with qualified health workers who have culturally relevant skill sets requires the right strategies for recruiting and retention. Investing in education and having appropriate infrastructure in place are as important as motivating existing health workers with compensation, professional development, performance management and workplace safety.

In short: health workers need the right skills. So what are some approaches toward upping their skills, adding more workers and then making sure people are used in the right way? Task-shifting, local training programs and health partnerships are key.

Shifting tasks to serve more patients

You don't need a brain surgeon to remove a mole. And you wouldn't really want to use a brain surgeon in this way. Task-shifting, or task-sharing, looks to create different cadres of health workers for different tasks. Highly trained health workers, like brain surgeons, shouldn't be used for more routine procedures. Simple surgical procedures, for example, can be shifted to non-physician clinicians, allowing lesser-trained workers to provide care while maximizing the use of those with advanced training.

You can also shift tasks by moving location. A simple skin infection might be better treated at the pharmacy level rather than taking up a spot in a hospital. Community health workers can offer contraceptives and child vaccinations through home visits or local clinics rather than expecting people to travel to larger health facility.

[50] World Health Organization. (2019). Delivered by women, led by men: A gender and equity analysis of the global health and social workforce.

TIP >
You can provide funding to test innovative approaches to workforce capacity building, such as task-shifting.

Through task-shifting you can expand care in two ways. First, the potential pool of health workers can widen to allow people to perform many routine tasks without a full medical education. Second, by having these layers of cadres in different locations, the population can be served more efficiently – meaning more get the care they need. Task-shifting approaches need to be tested and proven to produce the same health outcomes as the standard of care before they can be widely adopted.

Think global, train local

It's contextual. Delivering health services in Ghana is going to be quite different than doing so in Finland. Surgeons, physicians, nurses and community health workers should be trained in their own environments. Acceptability of healthcare depends on trust and cultural sensitivity. Developing a workforce that understands the local context is key to healthcare uptake, particularly in remote and rural areas.

Training locally can also help retain talent. The College of Surgeons of East, Central and Southern Africa (COSECSA) offers a common training program and standardized examinations across 12 member countries. Most surgeons – 93 percent – remain in Africa. And 85 percent practice in the country where they were trained.

Sharing leads to better caring

Formal health partnerships between countries and institutions facilitate sharing of skills and knowledge over time. Twinning programs, for example, can result in mutual benefits and learnings by bringing together health institutions in different countries toward a common goal. An institution in a high-income country (HIC) can share expertise, skills and knowledge with an institution in a low- and middle-income country (LMIC) with twinning led locally and solutions built collaboratively. This kind of partnership can address a variety of needs but can be resource intense.

Health partnerships that promote international health electives by residents or medical missions to LMICs can address skill shortages and raise awareness of challenges in these countries. However, there is not much opportunity for systemic impact with this kind of partnership because of limited learning opportunities for local practitioners. Fellowships for health workers in LMICs to train at foreign institutions in HICs can be rich with opportunities to gain skills and knowledge. However, should the health worker not return, this kind of partnership can result in "brain drain."

TIP >
You should support efforts that train health workers locally, rather than flying in workers from abroad or sponsoring local health workers to train abroad, neither of which is sustainable (and leads to dreaded "brain drain").

Health partnerships, when structured properly, can result in benefits for individuals and institutions. And both sides benefit. Whereas HICs might have the most to offer LMICs with knowledge and use of advanced technology and cutting-edge treatments, they also have a lot to learn. LMICs have knowledge to share when it comes to providing services in remote areas, decentralization of management, creative problem-solving and innovation in mobile phone use for health. Whatever partnership style is chosen, there are some key guidelines to keep in mind.

The Dos and Don'ts of health partnerships

Good practices to adopt

Establish a clear long-term vision
Build a common understanding of the partnership and a shared vision for long-term sustainability

Apply a needs-based approach
Deliver what is requested and transfer knowledge appropriate to the local health system conditions

Foster local leadership and commitment
Identify local champions and ensure an inclusive and collaborative approach

Build a strong relationship
Cultivate trust and ensure effectiveness through frequent communication, collaboration and networking

Pitfalls to avoid

Lost talent
Training abroad contributes to "brain drain" and is rarely appropriate for the local context

Failure to engage the Ministry of Health (MoH)
Engaging with the MoH can influence policy and training, increasing impact and system strengthening

Small-scale thinking
Lack of capabilities leads to isolated interventions with limited impact and reach

Providing instead of enabling care
Visiting healthcare practitioners should be trainers, advocates and cheerleaders

Increasing expertise locally

Piera Freccero,
Director of Programmes,
World Child Cancer

Treating childhood cancer effectively requires a skilled multi-disciplinary team. Supported by the UBS Optimus Foundation, World Child Cancer has been able to expand its support for healthcare staff in Ghana through specific education and training programs for various professional groups involved in childhood cancer services: clinicians, pharmacists, pathologists, nurses and play therapists.

The establishment of a fellowship for clinicians across West Africa has been a significant milestone for increasing expertise in Ghana. In addition to Ghanaians, some of the 12 residents come from nearby countries and will be able to take their expertise back home, in some cases establishing the first pediatric oncology services in their country. This program has already tripled the numbers of qualified pediatric oncologists in Ghana and laid the foundation for starting the first childhood cancer units led by qualified specialists in Sierra Leone and Liberia.

"Brain drain" is a key problem in low-and middle-income countries, with healthcare professionals leaving for higher paid or better resourced positions abroad. When the system encourages newly qualified staff to grow services locally, remaining in their home country becomes a more attractive option.

The fellowship program in Ghana benefits not only the individual, but also the entire health system. Staff may not be able to work abroad for extended periods due to family commitments or financial constraints. For those who do attend training overseas, sometimes for years at a time, this can bring huge disruption to teams and the services they can provide. Having the education delivered locally mitigates such issues.

The model can be replicated at additional pediatric oncology units by ensuring the whole health system is robust enough to support quality training at the new site: leadership, infrastructure, human resources, diagnostics, drugs, and data and referral systems. To sustain this model, the leaders at the pediatric oncology units need to be supported to deliver education and training of future staff alongside their clinical and nursing duties.

Improving workforce quantity and quality

Robyn Calder Harawi,
Executive Director,
The ELMA Foundation

Melissa Morrison,
Program Manager,
ELMA Philanthropies

Why does ELMA prioritize investing in workforce development?

The World Health Organization (WHO) reports that babies born in Africa are 10 times more likely to die in the first month of life than babies born in high-income countries. However, the majority of causes of newborn and child mortality can be prevented or treated by skilled health workers. The ELMA Foundation focuses on building the pediatric workforce across all levels of the health system: community health workers as frontline responders, nurses and midwives to support safe birth, and pediatric specialists to lead child-centered improvements to health systems.

What are the key success factors of workforce development programs?

Supporting and aligning with government plans and priorities are critical. Where governments commit to sustaining expansion of the health workforce, philanthropists can support local and national partners as well as training institutions to improve the quantity and quality of the workforce. To advance sustainability and quality of workforce development programs, philanthropists can support faculty development and competency-based and simulation training. To incentivize newly trained health workers to serve under-resourced areas, recruit them from those areas and see that governments are supported to appropriately track workforce gaps. Finally, for retention, make sure health workers are appropriately remunerated, equipped, and provided ongoing professional development and upskilling opportunities.

In which areas of workforce development can philanthropic capital be most catalytic?

Upstream investments such as supporting national workforce planning can enable governments to mobilize larger resources and/or coordinate donors in alignment with government priorities. Building the capacity (both the soft and hard infrastructure) of key training institutions to deliver high-quality training and increase production can have a long-term impact on both the quantity and quality of health workers.

One example of a catalytic philanthropic investment is the African Paediatric Fellowship Program (APFP) based out of three South African universities that, since 2005, has trained 205 child-health specialists from 17 countries across Africa, including the first and only neonatologists in Zambia, Malawi and Uganda. Almost all – 98 percent – of APFP trainees have returned to their home countries where they are improving child health outcomes by expanding services, training more doctors and nurses, conducting research and developing child health policies. Further investment in APFP could double its capacity in South Africa as well as develop regional hubs in East and West Africa.

Health systems need the best talent they can find to deliver improved outcomes. Why would you leave half the workers behind?

TIP >
You should consider gender dynamics in your health workforce investments to make sure you aren't further perpetuating women's low status through, for example, low pay. You should advocate for health workforce policies and programs that promote greater gender equity within the health system, especially within leadership positions.

Building an equitable workforce

Women make up 70 percent of the global health workforce but hold only 25 percent of senior roles. Gender norms and stereotypes help cluster women in lower-status, lower-paid jobs. Even when performing the same roles, the gender pay gap for health workers is estimated to be around 28 percent, higher than in other sectors. On top of that, women in health often experience bias and sexual harassment at work.[51] Critical, then, to building a sustainable workforce is to address gender inequities.

Addressing gender inequities in the health workforce could have an enormous impact in helping to fill those 40 million new jobs in the health and social workforce, improving health and well-being for many. Improved health is just one of the many benefits of achieving equity. We know that when there is gender equity so many aspects of development improve – from education to economic growth.

Gender equity for better health

Geeta Rao Gupta,
Senior Fellow, United Nations Foundation; Founder and Senior Advisor, 3D Program for Girls and Women

How can we build gender equity into the health workforce?

To answer that question, we need to think about the three dimensions of gender inequities in the health workforce. One is the representation issue, with only a quarter of leadership positions in health occupied by women. Second, is the resulting inequity in the ability to make decisions that shape the field and set priorities. And third, related to the other two, is remuneration, with women stuck in the lower ranks and, so, paid much less and valued less within the system.

One area where these inequities need addressing is with community health workers (CHWs). In the global South, women make up the vast majority of CHWs. These countries depend upon CHWs to reach people in remote locations with basic health services, like contraception, nutrition information and checks on normal child development milestones, referring people to a health center when they need care. Yet most of them are volunteers or paid very poorly. And they are often placed in unsafe situations, travelling to remote areas. When I was working on polio eradication at UNICEF I witnessed these CHWs going out into harsh geography – crossing streams and climbing mountains – just to reach one child who hadn't yet been vaccinated.

We need to ensure that those CHWs are getting paid for what they do commensurate with the contribution they make to health outcomes. We need to focus on incentivizing women to take on these important roles and making it a professional opportunity, with career pathways to rise to decision-making

[51] Boniol M, McIsaac M, Xu L, Wuliji T, Diallo K, Campbell J. (2019). Gender equity in the health workforce: analysis of 104 countries. Working paper 1. Geneva: World Health Organization.

positions of power. And with that, a more relevant set of priorities can emerge, representative of all of the people served. So addressing inequities starts with valuing the women who are doing the main work with compensation, safety and tools. And then we need to create opportunities for women to play a larger role in decision-making and rise to leadership positions.

How is this gender equity related to quality of care?

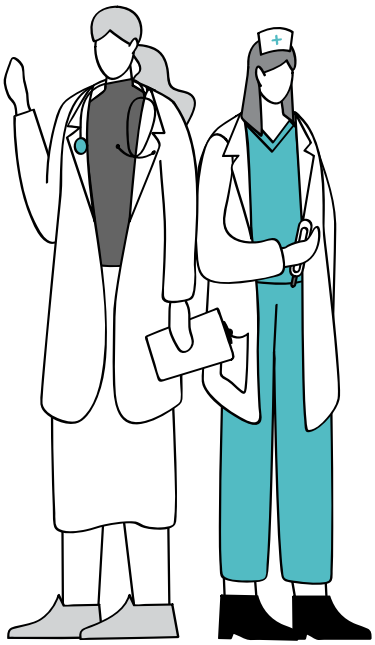
What we have seen is that when CHWs are treated poorly and undervalued, they treat their patients the same way. If these primary providers at the community level are not being treated right, you can't expect them to provide good quality care. If you convey a message of dignity and value, this will result in better quality care.

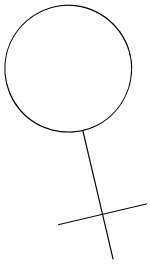
If you fix the gender inequity overall in the system, with more women in leadership roles, my sense is that you would have a more relevant set of priorities. In essence, the agenda would be more representative of all of the people it serves. And this, ultimately, will improve quality of care.

What is the role of philanthropy in reducing gender inequities in the health workforce?

Philanthropists can invest in validating solutions that result in better outcomes. So, for instance, by demonstrating that when this largely female CHW workforce is given the right tools and professional skills you get improved quality of care, greater job satisfaction and better health outcomes, you have a model to share with governments.

In many of these countries there is no feedback loop from the ground to the top. So it's important for philanthropists to support feedback at the community level from the people the system is seeking to help, especially those who have less of a voice in leadership, like women. If you invest in accountability mechanisms, then people with decision-making power can hear about what's working or not working.





Women make up **70%** of the health workforce

but hold only **25%** of senior roles

Sometimes it's basic HR. Collaborative improvement. Timely feedback. And good mentoring. It's what we all need to do a good job.

TIP >
You should view workforce development holistically. It doesn't end after training and upskilling. Effective supervision, mentoring and coaching are key to healthcare workers' performance and job satisfaction. The good news? Supportive supervision is a cost-effective way to boost motivation and productivity.

Enhancing supervision for high impact

USAID estimated that so-called enhanced supervision had the highest impact on the health workforce in saving maternal and child lives. What is enhanced supervision? It can be defined as "a broad set of supervisory interventions that improve provider performance through team-based, learning approaches, including supportive supervision, the use of checklists and in-person visits."[52]

So what are some examples of these enhancements to supervision? HRH2030 (Human Resources for Health in 2030) is supporting countries to strengthen their health workforces to better meet the needs of their populations, especially with regards to ending preventable maternal and child deaths. The 2019 landscape analysis on enhanced supervision noted the following among what they saw as the most impactful enhancements:[53]

- **QI (quality improvement)** methods like group problem-solving or collaborative improvement initiatives can help workers understand quality gaps, find ways to address underlying issues, and use data to continuously monitor and adapt.
- **Timely, multi-level feedback loops** across health worker networks and to districts and national programs can enforce standards and motivate.
- **Digital data integration** can facilitate timely feedback and reduce supervisor workload.
- **Links to health system performance indicators** can target resources and improve quality and equity.
- **Scaling successful supervision systems** across delivery areas and districts with contextualization can multiply impact.
- **Clinical mentoring** can support local ownership, especially for task-shifting.
- **Community engagement** on quality of services can complement supervision.

[52] USAID. (2017). Acting on the Call: Ending Preventable Child and Maternal Deaths: A Focus on Health Systems.
[53] USAID and HRH2030. (2019). Enhanced Supervision Approaches: Phase 1 Landscape Analysis Findings Report.

Case study:

Muso performance management with 360° Supervision

Ari Johnson, CEO, Muso

Muso is working with government and NGO partners in Mali and Côte d'Ivoire to redesign health systems to deliver rapid, universal healthcare. With Muso's proactive care model, community health workers (CHWs) are the frontline changemakers. CHWs go door-to-door to search for patients and connect them to lifesaving services.

A key element of the Muso model is what they call 360° Supervision. Evaluations across multiple countries have documented gaps in the quality, coverage and frequency of CHW supervision. Such gaps can harm not only performance and productivity but also motivation and retention.

To solve for this challenge, Muso designed and built 360° Supervision, a CHW performance management system for supervisors to assess and support CHWs from multiple angles:

1. interviews with patients
2. direct observation
3. dashboard analytics
4. group supervision
5. 1:1 coaching

Dashboard analytics summarize CHW performance along three metrics: speed, quantity and quality of care. Each supervisor is responsible for an average of 18 CHWs, conducting monthly visits with each CHW and convening at least two group visits per month with all 18 CHWs. Group supervision enables peer learning between CHWs and supports stock monitoring and resupply.

Detailed cost estimating of 360° Supervision shows that this strategy is scalable at a low cost. Unique to the Muso supervision model are solo visits by the supervisor to patient homes to collect patient feedback on the CHW and verify CHW reporting. National scale-up of this supervision model is one of the fastest-growing parts of the national healthcare reform now underway in Mali. A randomized controlled trial (RCT) of the 360° Supervision program in Mali found that this monthly supervision and personalized feedback using performance dashboards can increase CHW productivity.[54]

See also ›
3.5 Case Study: The Living Goods Smart Health platform

[54] Whidden, C., et al. (2018). Improving Community Health Worker performance by using a personalised feedback dashboard for supervision: a randomised controlled trial. Journal of Global Health, 8(2).

03.4 How to equip the health workforce with the right tools

Without the necessary tools, even the best doctor in the world can't be effective. The health workforce needs the right infrastructure and electricity.

Medical equipment for diagnosis and treatment are critical for health professionals to have positive impact. Access to essential medicines is central to ensuring that patients receive the treatment they need. And many digital tools hold promise for driving forward quality of care in low- and middle-income countries (LMICs).

Equip. Train. Maintain.

Often in LMICs, clinics with staff exist but they lack the basics. Without the needed medical equipment, the electricity to run it and the workforce skills to use it, it will have no positive impact on health outcomes. But filling this gap is not as simple as it sounds.

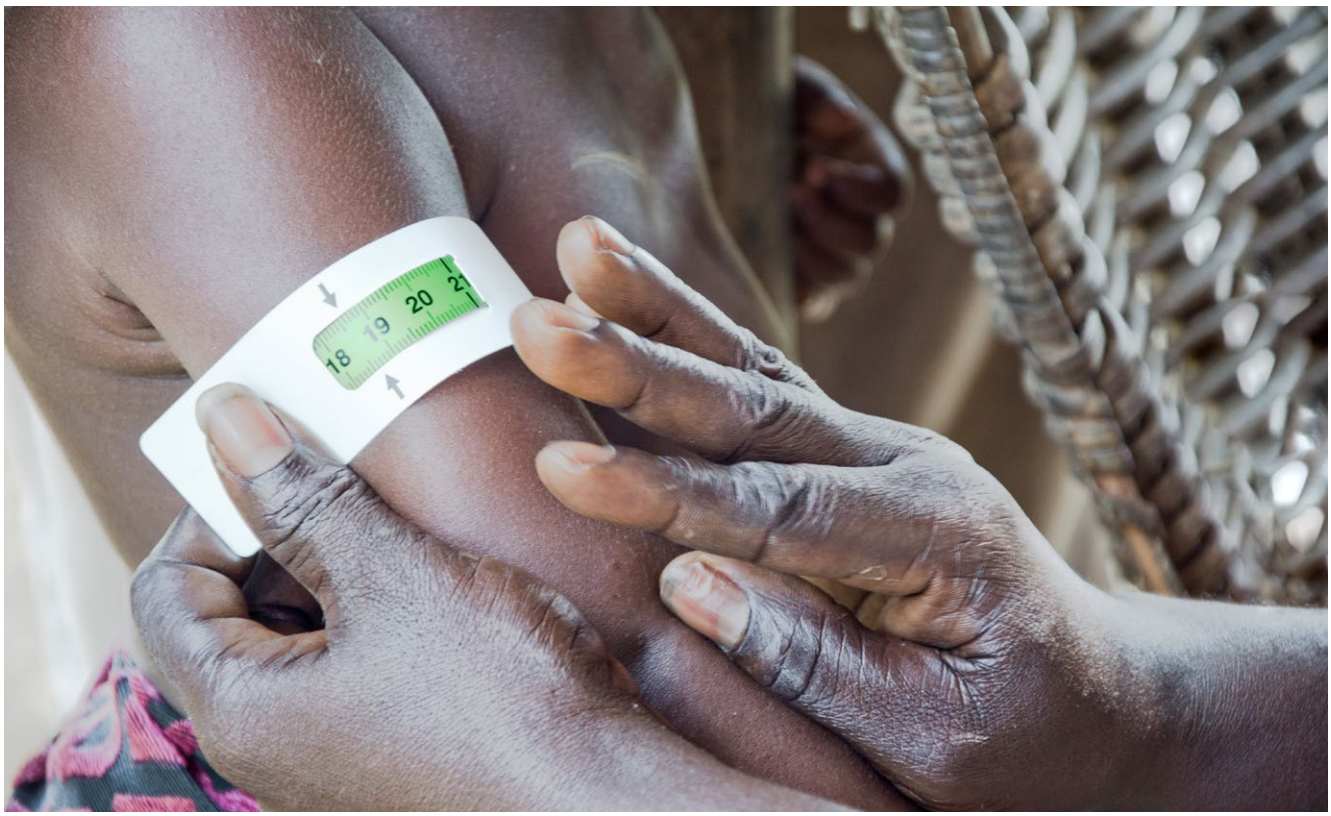
You can't just donate equipment and leave it at that. Equipment graveyards – rooms filled with unused equipment that is broken, lacks necessary parts or was never fit for the context – are common in low-income country hospitals. But they can be avoided. Philanthropists shouldn't donate medical equipment without also providing proper training on use and maintenance of it. And, it's got to fit the environment: high-electricity-use equipment won't be appropriate for some low-resource environments.

Light Every Birth

Laura Stachel,
Co-Founder and Executive Director,
We Care Solar

The proportion of the global population with access to electricity increased to 90 percent in 2018, the UN reports. But that still leaves 789 million people lacking the reliable energy demanded by sustainable development goal 7 (SDG 7). Most live in sub-Saharan Africa and – partly due to this privation – suffer higher infant and maternal mortality rates.

For over a decade, We Care Solar (WCS) has been on a mission to reduce infant and maternal mortality in developing regions by providing health workers with reliable lighting, mobile communication and medical devices using solar electricity. WCS promotes safe childbirth in last-mile facilities in nearly 50 countries across Africa, Asia and South America with the award-winning We Care Solar Suitcase®. The easy-to-use solar electric system captures the sun's energy during the day to power lights, mobile phones and small medical devices – like fetal monitors – at night. WCS partners with governments to implement sustainable plans for training and maintenance.



Safe surgery for children

Garreth Wood,
Co-Founder and Chairman, KidsOR

TIP >
You should improve existing infrastructure rather than building all new clinics (unless this is a government priority). Fund infrastructure improvements in existing clinics with things like solar power and needed equipment (ask the local workforce what they need!). And make sure that training and maintenance are part of the plan.

Many people think that surgery is too expensive and too complicated, that equipment will break or that you need to fly in surgeons, but that's not what KidsOR found. A remarkable return on investment can be achieved through investing in local health systems. KidsOR provides surgeons and their teams the necessary skills and equipment they need to do their jobs. The results KidsOR has achieved in just a few short years – approximately 30,000 surgeries a year for children who wouldn't have had access otherwise, saving lives and avoiding lifelong disability – make a strong argument for the approach.

KidsOR recognizes the need for sustained political will to achieve long-term change. Every investment is planned in close collaboration with each ministry of health, taking into consideration the local context. A Memorandum of Understanding (MoU) is established to ensure that a designated champion for children surgery is appointed within the ministry of health and that the ministry prioritizes children's surgery in their national surgical plan, employs the graduating surgeons and anesthesia providers, and commits to providing basic supplies and maintaining the equipment.

In Tanzania, KidsOR supported the development of the country's first dedicated operating rooms for children. The local team reduced waiting times for surgery from three years to two weeks. In Burundi, a country fighting hard to move on from civil war, KidsOR is sponsoring training for the first children's surgeons.

Until now, every aid organization that went to Burundi only saw an opportunity to send in foreign doctors. But these interventions sustain dependency with questionable outcomes for patients. Investing in local systems is respectful, saves lives, is cost effective and moves nations forward.

What if the only thing preventing good health was lack of a pill? There are solutions.

Getting the right medicine

One of the targets of SDG 3 is "access to safe, effective, quality and affordable essential medicines and vaccines for all." The WHO Model List of Essential Medicines, updated every two years since 1977, lists safe and effective medicines that meet the most important needs in a health system. But the cost of many of these essential medicines can be a barrier to access. In fact, globally, about a quarter of health expenditure is medicines.[55] Particularly in low- and middle-income countries (LMICs), costs are often too high, quality often inconsistent and supply too frequently spotty.

Governments and health systems need to provide essential medicines, but how can they do so affordably while making sure medicines are safe and effective? Market shaping and improved supply chain functioning are two solutions to consider.

1

Shape the market.

Health outcomes depend upon a well-functioning healthcare market. Medicines need to be affordable, high quality, available in the right quantities, and administered with appropriate education for health worker and user. Market shaping can help fix the areas where the market currently fails to deliver.

Countries, philanthropists and buyers can use their purchasing power, financing, influence and expertise to influence market dynamics and promote better health outcomes as a result. The goal is to reduce long-term supply-and-demand imbalances and develop sustainable access to lifesaving medicines. There are three key market-shaping interventions typically used to address market shortcomings:[56]

- **Reduce transaction costs** by lessening barriers to participating in the market.
- **Increase and improve access to market data** to reduce transaction costs and operational risks.
- **Balance supplier and buyer risks** by reducing supplier financial risks through shifting them to philanthropists or purchasers, attracting new suppliers or more active involvement by existing suppliers.

[55] Wirtz, V. J., et al. (2017). Essential medicines for universal health coverage. The Lancet, 389(10067), 403–476.
[56] USAID Center for Innovation and Impact (CII). (2014). Healthy Markets for Global Health: A Market Shaping Primer.

Shaping the market for pediatric HIV treatment

Carolyn Amole,
Senior Director, HIV Access Program, Clinton Health Access Initiative (CHAI)

Globally, 1.7 million children around the world live with HIV. Approximately 100,000 children with HIV die every year because they lack access to antiretrovirals (ARVs) or because the ARVs they take are suboptimal. Historically, high-quality suppliers of ARVs were largely uninterested in servicing individual lower-income, low-volume markets. That resulted in high prices, shipment delays and a limited response to tenders, forcing countries to procure low-quality products sold by local distributors, often with large markups. Such an unreliable market meant that children were left without treatment due to stockouts and manufacturing lead times of many months.

Beginning in 2006, UNITAID supported the Clinton Health Access Initiative (CHAI) to make significant progress in stabilizing the global supply of pediatric ARVs. CHAI's approach involved simultaneously engaging with manufacturers of essential commodities (supply) and governments and other major purchasers (demand), as well as with international bodies. The project worked to consolidate ordering, communicate regularly with suppliers with 12-month forecasting, and collaborate with partners to improve country forecasting and supply management.

CHAI's efforts to scale up pediatric HIV treatment systems, drive the market toward optimal formulations through the ARV Procurement Working Group and pool procurement across multiple small procurers enabled scale-up from 80,000 children treated in 2005 to over 900,000 by 2020. The efforts also resulted in price reductions of 80 percent on key pediatric ARVs.

2

Improve supply chain functioning.

The functioning of supply chains impacts health outcomes. Medicines (not to mention point-of-care diagnostics and personal protective equipment) not only need to be safe, effective and affordable, they need to be consistently available when and where they are needed. In turn, well-functioning supply chains can also supply information about demand and inventory that can help control costs. Particularly in LMICs, weaknesses in supply chains inhibit the ability of the health system to respond to needs of the population and can put treatment regimens at risk.

It's important to consider how the health supply chain fits in with other elements of the system. Dependable and sufficient health financing for procurement of essential medicines is critical to how well the supply chain can function without interruption. But equally important are well functioning health information systems (discussed in 3.2). Strong government oversight can make sure that suppliers are appropriately registered and that quality is maintained.

Finding solutions to some of these issues in the supply chain can help bring safe and affordable medicines to the most vulnerable, having a huge impact on health equity. So, what works? Researchers have identified the following reform measures as promising:[57]

- Fewer tiers in the supply chain
- Reduced lead time from suppliers
- Streamlined information about stock, consumption and shipments
- Standardized performance metrics, including cost transparency
- Outsourced transportation of medicines
- Strong supply chain leadership and talent
- Transparency and strong governance

Improving availability of essential medicines at Liberia's last mile

Tiwonge Mkandawire,
Senior Manager, Supply Chain, VillageReach

National community health worker (CHW) programs are increasingly being recognized as one of the most valuable tools for achieving the health-related targets of the UN Sustainable Development Goals – like universal health coverage and an end to preventable child and maternal deaths – by 2030. In many LMICs, CHWs are the point of contact for the most basic health services, including distribution of lifesaving medicines like the antibiotic amoxicillin, oral rehydration salts and zinc for child health.

UBS Optimus Foundation partners VillageReach and Last Mile Health are supporting Liberia's Ministry of Health (MoH) to reach the most vulnerable through scaling of CHW programs. Yet, in 2018-2019 fewer than half of CHWs had zinc or amoxicillin. A 2017 diagnostic of facility stock, found that 47% of essential medicines were unavailable. Most shortages were attributed to suboptimal supply chain practices.

VillageReach and Last Mile Health are supporting the MoH's procurement and distribution, providing technical assistance for optimal distribution strategies. The goal is for 90 percent of CHWs to have essential medicines by improving monthly procurement and delivery of commodities to 729 CHAs in Grand Bassa, Grand Gedeh and Rivercess counties, as well as through capacity building by county supply chain specialists to strengthen data collection, quality review, digitizing reporting and analysis of data for decision-making.

VillageReach and Last Mile Health's support has improved service levels in the areas they serve with 97 percent average availability of antimalarials in May 2021 and a 10 percent increase in child treatment of malaria within 24 hours. Reporting rates have increased by 82 percent. These interventions demonstrate that improving procurement, distribution and data within supply chain practices can have a positive impact in making lifesaving medicines available when they are needed. VillageReach's three-stage Transitioning Well approach aims to sustain impact in transition of responsibility to the government.

[57] Yadav, P. (2015). Health Product Supply Chains in Developing Countries: Diagnosis of the Root Causes of Underperformance and an Agenda for Reform. Health Systems & Reform, 1(2), 142–154.

What holds more promise for driving impact at scale than almost any other tool? You've got it in your pocket.

TIP >
You should not donate drugs. The sustainable solution is to address weaknesses in the local supply chains or support work to shape markets to make lifesaving medicines more affordable and available.

The power of digital

For the past few decades, electronic technologies have changed the way people get health information, helped doctors diagnose and streamlined storage of health data. Using mobile devices to diagnose, monitor and upload health data has the potential to revolutionize healthcare delivery, particularly for the world's most vulnerable.

Almost half the world's population has a smartphone. And a full two-thirds have some kind of mobile device. With these and other digital devices there is immense potential for scaling impactful health interventions digitally. From using telehealth to bridge geographic distances between patients and health providers to helping community health workers (CHWs) make accurate diagnoses, on to tracking medicine stocks, the opportunities for improving health are numerous.

Avoiding the pitfalls

In supporting creation of these new tools, philanthropists need to be careful not to simply back one more app that won't ultimately be used. The World Health Organization cautions, "Amid the heightened interest, digital health has also been characterized by implementations rolled out in the absence of a careful examination of the evidence base on benefits and harms. The enthusiasm for digital health has also driven a proliferation of short-lived implementations and an overwhelming diversity of digital tools, with a limited understanding of their impact on health systems and people's well-being."[58]

An understanding of what health system challenges can realistically be addressed by digital technologies, along with an assessment of the ecosystem's ability to absorb such digital interventions, is needed to inform investments in digital health. Challenges that exist across health systems – poor leadership, lack of training and absent equipment – also need to be considered in making sure that newly developed digital tools can support positive health outcomes. If you digitize a malfunctioning process you won't solve any issues.

[58] World Health Organization. (2019). WHO guideline: recommendations on digital interventions for health system strengthening.

TIP ›

You can help unlock the potential of digital health solutions by evaluating digital health interventions based on the Principles for Digital Development:[59]

1. **Design with the user in mind.** Speak to patients, health providers and government stakeholders.
2. **Understand the existing ecosystem.** Be aware of the political and regulatory environment, rural connectivity, local languages and digital literacy.
3. **Design for scale.** Build on existing technologies, systems or platforms, ensuring interoperability with national and local systems (not to mention alignment with the national digital strategy).
4. **Build for sustainability.** Training, maintenance and support costs need to be considered, alongside capacity building for long-term leadership.
5. **Be data driven.** Make sure health information systems are interoperable, avoiding redundancy and manual transcription.
6. **Use open standards, open data, open source and open innovation.** Use common standards (like DHIS2 or OpenSRP), promote collaboration in the digital development community and avoid duplicating work that has already been done.
7. **Reuse and improve.** Take the work of the global development community further by not going it alone.
8. **Address privacy and security.** Low data privacy risks reducing acceptability of the services, especially among vulnerable populations with stigmatized health conditions.
9. **Be collaborative.** Create a platform for like-minded organizations to exchange best practices and lessons learned, avoid "pilotitis" and siloed approaches, and consider aligning around a specific effort with collective funding.

Did you know?

"Pilotitis" is the scourge of too numerous small intervention pilot projects without ever bringing a solution to scale, wasting resources, promoting duplication of efforts and complicating health systems. In 2010, for example, there were over 50 digital health pilots being funded by donors in Uganda. Uganda's Ministry of Health (MoH) placed a moratorium on digital health projects until it could release its own National eHealth Policy and Strategy laying out the guidelines for sustainable governance that eliminates fragmented pilot projects and health information silos.[60]

[59] Principles for Digital Development. (Accessed 2022, January 19). Principles.
[60] Uganda Ministry of Health. (2016). Uganda National eHealth Policy 2016.

Improving quality of care with tech

Mohini Bhavsar,
Global Head of Digital Health Partnerships, Living Goods

Tell us why you developed the Living Goods Smart Health app?

With the Smart Health app on their phone, Living Goods community health workers (CHWs) can access a guided process for diagnosing common childhood diseases like malaria, pneumonia and diarrhea. The app helps them ask the right questions, keep records of key data, and offer appropriate diagnosis and treatment – increasing both standardization and quality of care. The app also allows CHWs to track who in the community needs their support, generating a detailed task list based on patient data. For example, the app might remind a CHW that an expectant mother is due for her checkup, prompting a visit. The app can also be used to contact patients directly. For example, it can send automated text messages to the parents of young children, reminding them of key vaccination dates.

The health impacts of the platform are wide-ranging and particularly evident as COVID-19 closed or limited access to health facilities. A recent analysis of government data in Uganda and Kenya showed a 35 percent decrease in the number of people who sought facility-based care for common childhood diseases. At the same time, CHWs supported by the Living Goods Smart Health platform nearly doubled the treatments they issued for these diseases, saving an estimated 18,000 lives in 2020.

What have been the key success factors for the implementation and scaling of the Smart Health app?

Constant testing in the field has allowed us to generate a fast feedback loop. We are able to quickly see a need, roll out a solution using our in-house development team, and then iterate and improve based on data from CHWs and patients.

This was key to our COVID-19 response: we were able to create a new COVID-19 workflow soon after the pandemic hit, integrate it into our existing platform, then improve it over time. This workflow prompts CHWs and communities members to stay socially distanced and safe while supporting CHWs in diagnosing suspected cases of COVID-19 and accessing care for patients. In Uganda, for example, CHWs referred over 70,000 suspected COVID-19 cases for testing using the new COVID-19 workflow. In terms of scaling, Living Goods is platform agnostic and supports open standards for data in healthcare. We work with governments to help them find and implement the tech solution that best fits their needs, regardless of who originated it.

TIP >
You should remember that digital tools are just tools. The focus should always be on creating a people-centered health system that improves health outcomes.

How does the Smart Health app contribute to a stronger health system and reduce health inequities?

The app can integrate directly with government health databases, ensuring that decision makers have a timely and accurate portrait of local health needs. And the app specifically targets at-risk populations, directing CHWs to visit them more frequently to ensure their health needs are met. In Kenya, for example, Living Goods worked extensively with both the national government and local champions in places such as Isiolo and Kisumu counties. By building a track record of trust and success over time we now have the opportunity to work under the direction of the Kenyan Government to support their new nationwide eCommunity Health initiative. The SmartHealth platform was recently selected as the reference tool for the program's pilot phase.

03.5 How to focus on outcomes and impact

Where's the evidence?

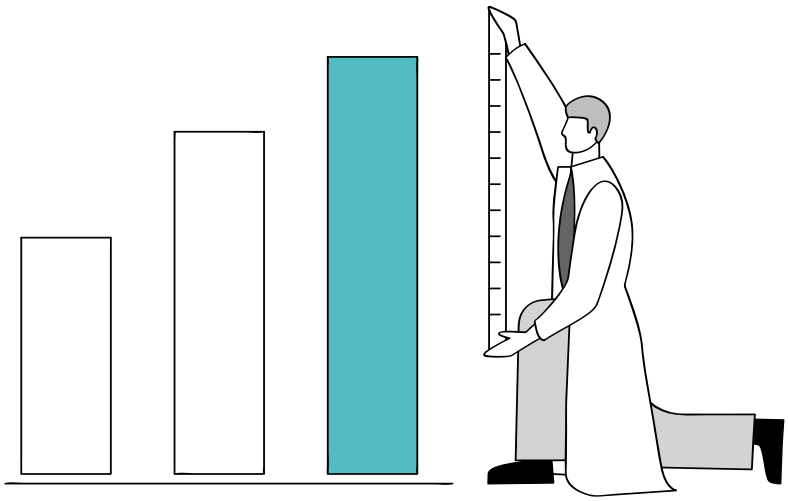
One million children treated! Great news, right? Not necessarily. Essential to meaningful impact is evidence of improved health outcomes, not just services delivered or patients reached. Without any understanding of the number of children who would have been treated otherwise alongside comparison of children treated with this intervention versus another, it's difficult to interpret what this metric means. Without sound evidence it's too easy to waste resources and possibly even harm already-vulnerable people. That's why a laser focus on evidence of impact is critical.

One million children treated! Great news, right? Not necessarily.

When should we assess evidence of impact? From the first funding decision to monitoring throughout, to final assessment. Evidence must support existence of a real problem to solve and an effective intervention to improve the situation. Even among programs that do work, there can be huge variation in how much impact is achieved per dollar spent. Evidence helps us give proof for innovative solutions and maximize impact.

Evidence should be gathered in advance of philanthropic funding. This includes evidence about the nature of the problem, the cause(s) and effective solution(s). In selecting programs to fund, several questions need to be answered, which require evidence:

- Does the intervention address a real problem?
- How can the intervention be implemented effectively?
- How is impact measured?
- Is the program set up in a way to leverage and incorporate learnings arising from implementation?
- What is needed to scale the intervention?
- How can the program be integrated into policy?



Measuring impact

A wide range of methodologies can be employed for evidence gathering, from randomized controlled trials (RCTs) to quasi-experimental studies, to participatory approaches to evaluations. RCTs are the gold standard for measuring impact, but are not always the most pragmatic approach. Some health outcomes are difficult (very time-consuming or expensive) to measure, so we rely instead on what are called proxy measures – that is, outcomes that are causally linked to impact. Maternal mortality can be difficult to measure, but we know from established evidence that delivering in a facility with a skilled birth attendant is a predictor of maternal survival, so we can use the rate of women delivering with a skilled birth attendant as a key indicator of maternal health.

Evidence available varies and part of our work involves building evidence through various fit-for-purpose methodologies. Evidence often is crucial to making a case for scale-up of an intervention, and for any intervention to have a meaningful impact it needs to reach significant scale (see 3.7 Scale impactful health interventions).

Constructive feedback

To promote learning, knowledge management is essential: capturing findings, institutionalizing learning and organizing the wealth of information continuously produced.[61] Learning should not be seen merely as a linear process where lessons learned are only incorporated at the end of a thorough process of monitoring and evaluation. Instead, implementing partners may consider using rapid feedback loops, quickly incorporating lessons learned. Rapid feedback loops work in a "try, learn, adapt" fashion[62]. Rapid-fire testing, or A/B testing, is a method in which participants are randomized into different groups and exposed to variations in a program's design or messaging. Rapid-fire testing is most suited for answering questions that generate a fast feedback loop and for which administrative data are recorded. It's particularly valuable in the design or pilot stage – or when expanding a program to new areas or new populations.

Did you know?

You can learn more about how to maximize your impact through monitoring, evaluation and learning in our whitepaper *Learn. Improve. Repeat.*

[61] Kusek, J. Z., & Rist, R. C. (2004). Ten steps to a results-based monitoring and evaluation system: a handbook for development practitioners. World Bank Publications.
[62] Andrews, M., Pritchett, L., Woolcock, M. (2012). Escaping Capability Traps through Problem Driven Iterative Adaptation (PDIA). CID Working Papers 240. Center for International Development at Harvard University.

Case study:

COVID-19 Relief Grant Prize and Healthy Learners

Lonnie Hackett, President and Co-Founder, Healthy Learners

In 2020, UBS Optimus Foundation launched the COVID-19 Relief Grant Prize with the goal of identifying and replicating evidence-based interventions that increase the resiliency of children, youth and communities affected by COVID-19. Following an open call and rigorous review process involving internal and external experts, the Foundation awarded the COVID-19 Relief Grant Prize to Healthy Learners and Young 1ove. Each organization received nearly USD 1 million to scale their approaches. Both demonstrated rigorous evidence of achievement of outcomes in the context of COVID-19. In health, we were looking for solutions that sustained maternal and child health outcomes, targeting the most vulnerable populations with low-cost approaches with broad applicability across multiple developing country contexts and potential for rapid scale-up.

Healthy Learners trains teachers to become school health workers, offering timely diagnosis and treatment for school-aged children – a population often neglected by current health interventions – thereby reducing sickness and absenteeism. A 2019 study by the Harvard T.H. Chan School of Public Health found that children in the program were 38 percent less likely to be sick. Following initial implementation, the annual ongoing cost of the model is only USD 2 per child. It's been managed so that the Zambia Ministry of Education can take over ownership of the Healthy Learners model and incorporate school-based health into national policy and teachers' performance appraisals.

With help from the COVID-19 Relief Grant Prize, Healthy Learners and technology partner THINKMD have expanded their existing collaboration to monitor and mitigate the effects of COVID-19 on school-aged children and support the Zambian government in reopening schools safely. Healthy Learners scaled its model quickly to all 105 public primary schools in Zambia's capital city of Lusaka, serving a total of 250,000 children, making Zambia one of the first countries on the continent to reopen schools. The program has sustained performance as schools reopened: the number of children utilizing school health services has remained high and support for biannual deworming and vitamin A supplementation – interventions which have well-proven benefits on health and educational achievement in children – has continued. Healthy Learners is now working with the Zambian government to scale the program nationally.

TIP >
You can make a positive difference by funding programs based on evidence. Evidence should be both a necessary condition for development spending and a product of it, monitored and evaluated throughout for improvement and scaling. And you should aim to support generation of evidence for interventions that don't yet have a strong evidence base.

TIP >
You should seek to support health interventions that tie funding to outcomes. Whether through grants or social finance, all funding should depend on achieving actual outcomes – such as lives saved – rather than just offering an intervention to a certain number of people. The consequences or not doing so are wasting money – or worse.

Tying funding to outcomes

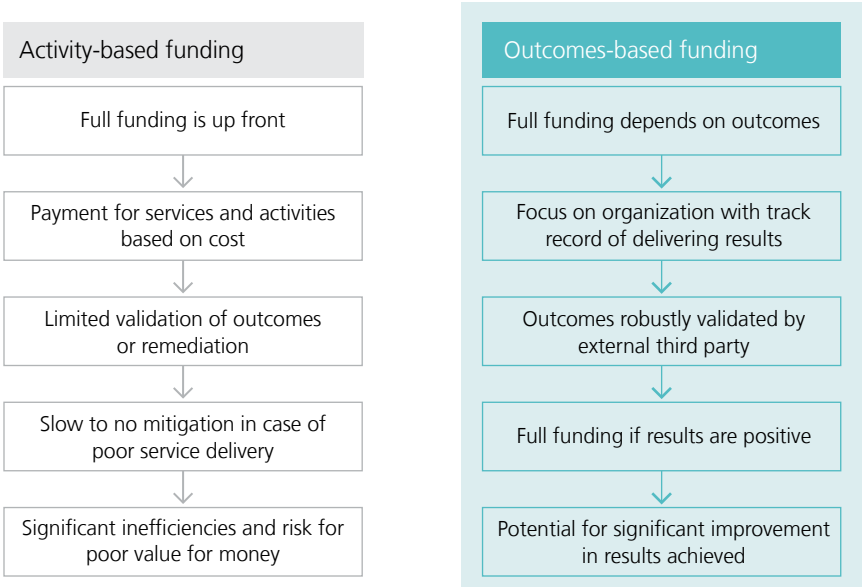
Funding for health solutions should focus on outcomes rather than activities. Often projects are funded up front, without any real assessment of results. This kind of funding is frequently not achieving the social impact it intends to achieve.

Fortunately there's another way. A promising shift is how various funders around the world are moving away from activity-based funding toward a paradigm of outcomes-based funding. Instead of paying for things with mere hope that they work, private investors, philanthropists, foundations and other investors are seeing the value of linking funding with specific targeted outcomes.

With outcomes-based funding, the investors fund organizations that have proof they can deliver impactful results in areas like healthcare. Proof of positive impact – independently evaluated, of course – is tied to funding. If results are not achieved, the intervention is modified or ended without full funding. In this way, full and continued funding is contingent on achieving positive impact – quite better than throwing darts at activities.

We are particularly enthusiastic about the potential for outcomes-based funding to enhance the efficiency, transparency and scalability of development interventions. Tying funding to results that improve the lives of the most vulnerable offers an impactful alternative to long-term development aid programs. It helps shift the development's sector's focus from inputs and activities to outcomes, thereby maximizing impact.

Activity-based vs. outcomes-based funding



03.6 How to scale impactful health interventions

Setting scale

If an intervention works in one city, why not try it in another? Or in one country, why not a similar country with similar challenges? Scaling across contexts means that impact can increase with each iteration. Once a concept has proven itself in one location, bringing the same intervention to another location is often faster, easier and cheaper.

The goal of an evidence-based health system solution should be scale, so that as many people as possible can benefit from an innovation. Interventions need to be designed to be scalable from the beginning with a clear "exit" plan in mind. Philanthropic capital should be deployed as a catalyst for change, but not sustain a program forever.

Scaling it right

Kevin Starr,
CEO, Mulago Foundation

The most urgent challenge in the social sector is not innovation, but replication. No idea will drive big impact at scale unless organizations – a lot of them – replicate it. And there are plenty of high-impact ideas awaiting high-quality replication. Scaling is more than when you add two more clinics to the one you have now; that's just "growing." A "scalable solution" is one that has the potential to make a big dent in a big problem and the solution is "scaling" when the curve of impact over time steepens dramatically, even exponentially, in a sustained way.

What's great is that the phrase "scalable solutions" has thus far been mostly confined to the business world. We still have a chance to define it tightly enough to be useful. So here we go. A scalable solution consists of five things:

1. A **Big Idea** that drives and organizes it
2. A **Mission** that focuses the idea on a specific outcome
3. A **Theory of Impact** that articulates the connection between the idea and the mission (the basic mechanism to achieve that outcome)
4. A **Model** that lays out a systematic and replicable way to apply that theory
5. A **Strategy** that identifies who is going to replicate the model at really big scale and who is going to pay for all that replication (call them the doer-at-scale and the payer-at-scale)

TIP >
You can make a positive difference by funding programs based on evidence. Evidence should be both a necessary condition for development spending and a product of it, monitored and evaluated throughout for improvement and scaling. And you should aim to support generation of evidence for interventions that don't yet have a strong evidence base.

Replication of that model is what's going to grow your impact, and so the model itself has to be inherently scalable. It needs to be "enough" in four ways:

- **Effective enough.** Nobody should try to scale up a model without strong evidence of impact, and effect sizes matter too: a 3 percent increase in income, or a 4 percent in literacy might not be worth the bother. "Statistically significant" does not equal "meaningful."
- **Big enough to matter**. It addresses a big problem, and the overlap between where it is needed and where it would work needs to be big enough to make a significant dent in an important problem.
- **Simple enough that the doer-at-scale can do it.** It needs to be systematic and replicable, yes, but that alone isn't enough. Whether that doer is government, businesses or NGOs, you need to find persuasive examples of that doer doing a decent job of something comparable.
- **Cheap enough that the payer-at-scale will pay.** Whether customers, governments or Big Aid, every payer – from a mom buying a stove to a finance minister who will decide the fate of your health worker idea – has a price point. You have to figure out what that price point is and hit it.

What are the two main pathways for scaling health innovations? Revenue generation and government adoption.

1

Scaling through market solutions

Some health system challenges are best addressed by market solutions: when consumers are willing and able to pay, a social enterprise can generate revenue and self-sustain its operations in perpetuity without any philanthropic or other donor funding. For these kinds of enterprises that can generate revenues, grant funding frequently is not the most appropriate. To demonstrate a sustainable business model and achieve sufficient growth and scale, debt and equity investments likely are best to help such enterprises scale and be sustained.

Equity investments grant patient capital to social enterprises with established proof of concept where there is exceptional potential for scalable problem-solving. Equity participation allows the investor to directly influence the social enterprise by taking an active role as a shareholder to positively influence the organization's social mission. Earlier stage organizations can benefit from this kind of equity participation, as these organizations may not yet have established regular revenue streams. Once these have been established, debt funding can be considered.

Social enterprises in the health space that can demonstrate measurable social impact and already have (potential of) a sustainable business model with cash flows can be financed with debt. Debt through impact loans – where the interest rate is negatively correlated with outcomes delivered by the borrower – results in a lower interest rate the greater the social outcomes. By linking the interest rate to performance on social metrics, the borrower is encouraged to keep a strong focus on achieving results. This instrument should demonstrate that the delivery partner can service a commercial investment return and therefore become attractive to commercial investors.

Given the challenging markets in which social enterprises work and the sometimes unattractive risk-return profiles for investors, some philanthropic capital may be needed to subsidize the enterprise in order to make it viable, especially in its early stages. Accessing the right financing at the right points in the journey is critical to scaling success.

Case study:

An impact loan for lifesaving oxygen in East Africa

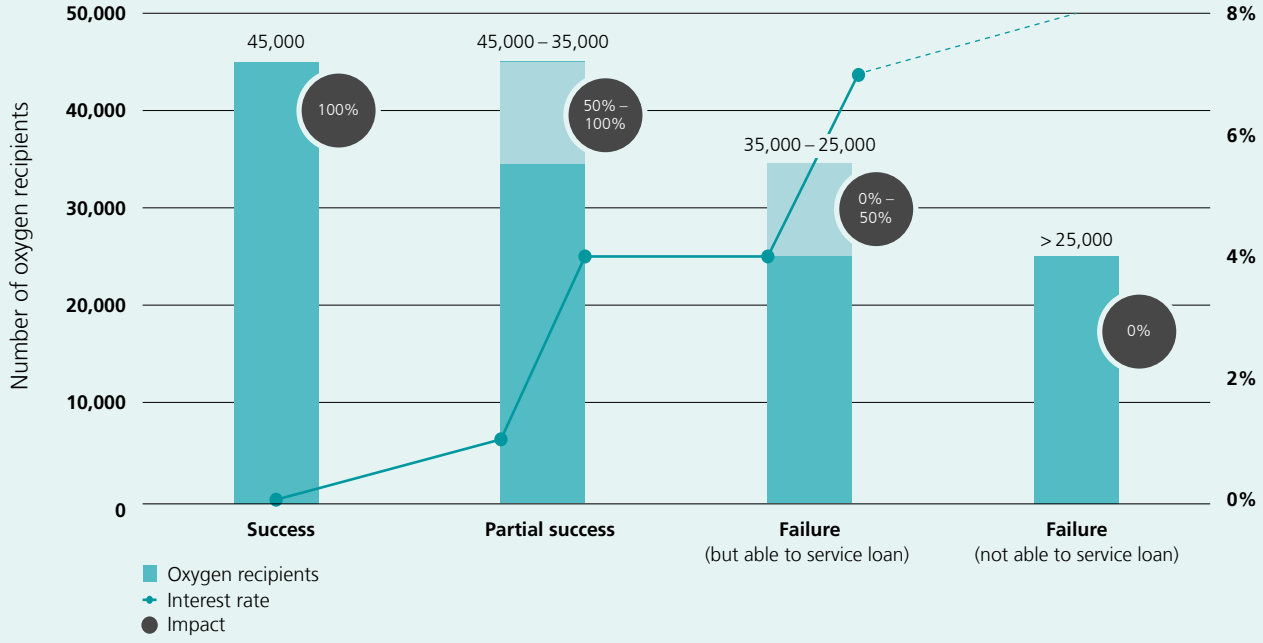
Dr. Bernard Olayo, Founder, Hewatele

Hewatele ("plentiful air" in Swahili) is a social enterprise focused on saving lives by addressing the shortage of affordable, accessible and quality medical oxygen solutions at healthcare facilities in East Africa. Hewatele provides reasonably priced oxygen for needy patients and trains healthcare workers on delivery. Access has become even more crucial during the COVID-19 pandemic because oxygen serves as first-line treatment in severe illness.

With the impact loan, UBS Optimus Foundation (lender) is helping to fund Hewatele's investment in oxygen cylinders to support development and scaling of a sustainable business model. The impact loan is structured as a USD 400,000 5-year loan and will help provide medical oxygen to 45,000 people.

Depending on the number of oxygen recipients, the impact loan's interest rate varies from 0% to 7%. Importantly, the structure encourages Hewatele to achieve the impact targets and lower funding costs.

How high is the interest rate in case of failure?



As with any investments, the value may fall as well as rise and you may not get back the amount you originally invested.

2

Scaling with government

For most development issues, governments are major players. In fact, with health, governments are the primary player, so they are instrumental to sustainable scale-up. To sustainably improve health systems it is vital for philanthropists and the private sector to coordinate with governments toward a health system that offers services to all members of society.

How to influence government varies depending on the intervention. It might involve working with a government department to show the feasibility of an intervention, its value or how to do it. Ultimately, having a proven intervention adopted by government can impact the lives of all citizens and result in long-term sustainability. Plus, government adoption is often the most effective way to reach marginalized groups.

Advice for scaling with government

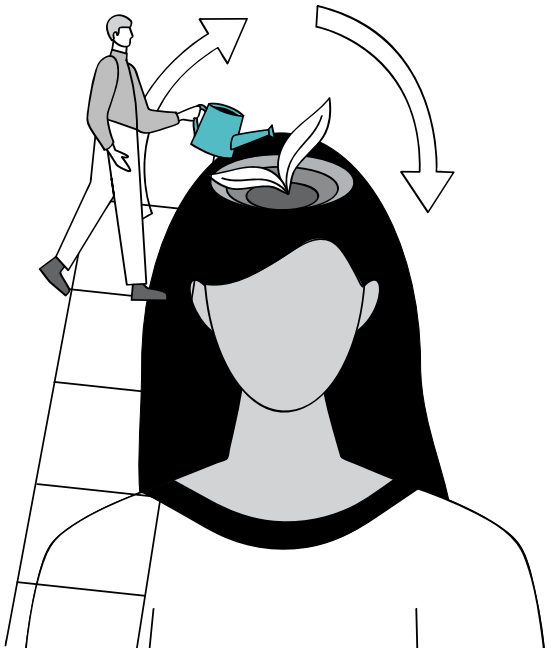
Megan Armishaw,
Senior Consultant, Spring Impact

Spring Impact and VillageReach, in collaboration with government, funders (including UBS Optimus Foundation) and social impact organizations from 16 countries, have co-created a tool to support government ownership of solutions: The journey to scale with government.[63] In support of government ownership for sustainability, Spring Impact recommends centering the role of government as a partner and valued member of the system throughout the journey. This often requires a funder mindset shift. ›

What are the key things government partners advise to think about when scaling with government?[64]

- **Align priorities.** Donor-funded solutions and innovations must support government priorities and strategic plans, requiring co-developing solutions with government from the outset.
- **Ensure broad engagement.** Partnerships need to be formed across government agencies, from government leaders to technical teams at the national and local levels, as well as across different sectors.
- **Build trust.** True partnerships require patience, empathy, flexibility and transparency, and building these relationships takes time, listening and mutual understanding.
- **Prove impact.** The government needs rigorous evidence of impact to be willing to invest resources, so funders should be prepared to support robust evaluation to help governments invest resources in solutions with sustainable impact at scale.
- **Consider accountability.** Government accountability ultimately comes from higher-level political leadership and the community, so funders can play a role in empowering communities to hold the government accountable.

[63] Spring Impact. (2020). The journey to scale with government.
[64] Spring Impact. (2020). Government insights on the journey to sustained impact at scale.



The funder mindset shift

I used to think...	Now I think...
How do I best support grantees to scale their solution?	How can we provide the support that enables government to solve the most pressing problems?
Government's role is to pick up the solution and implement it.	Government's role is to co-create the solution and eventually take full ownership of sustaining the solution.
Evaluations are driven by my needs.	Governments need evidence that the solution works before scaling. We should provide the time and financial resources to help build that evidence.
M&E is primarily about accountability.	M&E is primarily about learning and adapting.
Adding a new solution is the best way to solve a government's problem.	Focusing on integrating and strengthening existing solutions may be just as important as creating new ones.
Government is slow and bureaucratic.	Government takes time to engage and be responsive to a wide set of stakeholders.

Source: Spring Impact. (2020). The journey to scale with government: Interactive tool.

Supporting a national scale-up

William E. Walker Jr.,
Deputy Director National Community Health Systems, Last Mile Health

Peter Kaddu,
Deputy Managing Director, Health System Strengthening, Last Mile Health

How does Last Mile Health think about scaling through policy reform?

Good ideas are not enough to turn innovation into meaningful change. In the community health space, impact evidence shows that well-supported community health programs can deliver dramatic improvements in maternal and child health when combined with systems supports like supportive supervision, quality training, meaningful remuneration, equipment and supplies, and linkages to the wider health system. Indeed, during the COVID-19 pandemic, countries with robust community engagement often did better in their response. However, promising health practices have a long journey to scaled impact. Successfully scaling and sustaining community health programs often requires a combination of technical design, willing politics and operational feasibility – all as part of a reform process.

How did you support Liberia in scaling their community health?

In 2015, Liberia renewed its health sector policy and community health policy to formalize and institutionalize community health. This reform process followed a devastating Ebola virus outbreak. While the health crisis fueled urgency, this vision was built upon decades of progress toward improved health outcomes, experience from existing community health pilots operating in Liberia and a coalition of reform actors. Since 2016, Last Mile Health has supported Liberia's Ministry of Health in scaling its National Community Health Assistant (CHA) Program with trained, paid and supervised CHAs.

What are some lessons you learned supporting Liberia's health policy reform process?

- **Prepare for windows of opportunity.** Reform actors were able to make the most of the Ebola window because of years of innovation, evidence-building and coalition building – key domains of leadership and governance. Coalitions are the vehicles for scale, but it is difficult to build these from scratch once an opportunity arises. Investments in coalition forming before the opportunity are critical.
- **Match local and outside evidence to decision makers.** All evidence is not created equal and all decision makers are not moved by the same evidence. Tailor the approach via combinations of local data and lived experience combined with thoughtful use of global evidence.
- **Combine ideas with political will and finance.** Policy change was most accelerated when strong technical ideas met with political champions and were backed by actionable operational plans and costing, budgets and investment cases. This included philanthropists who invested in leadership, policy and innovation that built the rails for public sector finance.

- **Take an integrated health systems approach.** The durability of these innovations is directly linked to its integration within health infrastructure. Design not just the service delivery, but also data information systems, training and supervision, human resource changes, health financing approach and the learning agenda.

What impact has Liberia's National CHA Program had so far?

From launch in July 2016 to March 2021, CHAs have treated nearly 700,000 cases of malaria, diarrhea, and pneumonia, conducted over 800,000 malnutrition screenings and made over 5.4 million home visits. As of December 2020, 3,430 CHAs and 388 Community Health Services Supervisors have been trained and deployed in communities across Liberia and 14 of the 15 targeted counties are fully implementing the National CHA Program.

During the COVID-19 pandemic, the program has continued to serve the health needs of the population. Compared to 2019, in 2020 Liberia's CHAs conducted 33 percent more routine household visits.

03.7 How to prevent the next global pandemic

Preparing for the worst

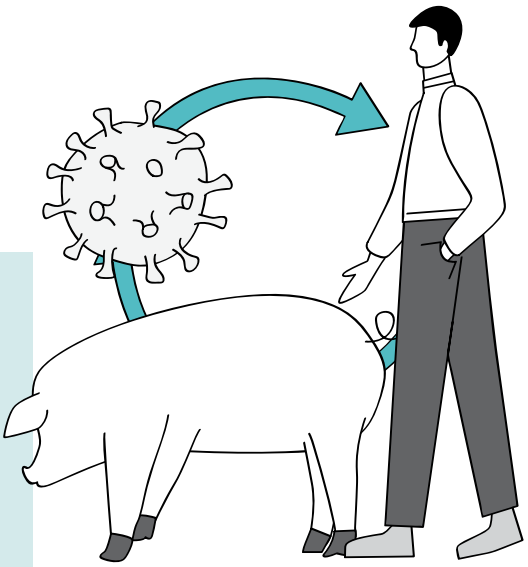
Because of urbanization, climate change and increased human-animal contact (not to mention widespread global travel) pandemics like COVID-19 might become more prevalent in the coming decades.

We need to act now to prevent future outbreaks. Philanthropists have a role to play in helping to strengthen health systems to prevent future pandemics. It is important to reach the most vulnerable with quality healthcare services – those living in the most marginalized communities, amid conflict and with limited education – because this is where the likelihood of a new outbreak is the highest. Philanthropists play an important role in shining a light on the most vulnerable, making sure they are seen and heard, and demonstrating ways they can be reached (cost efficiently).

75%

Three-quarters of all emerging infectious diseases cross from animals to humans. Threats to biodiversity and the environment, like illicit wildlife exploitation and deforestation, are also threats to our health.

Want to know more about the connection between the environment and pandemics? See *Seeds of change: A guide for philanthropists and changemakers to protect biodiversity and all life on land*



Being prepared
Gavi invested in Ebola vaccines through an Advanced Purchase Commitment, committing to purchasing them from manufacturers. This incentivized development of a vaccine able to be stockpiled and readied for an outbreak. It was through this stockpile of half a million doses that Gavi and its Alliance Partners managed the early 2021 Ebola outbreak in the DRC and neighboring countries.[65]

Strengthening health systems is at the core

Throughout this chapter we've highlighted the key areas where philanthropists can have the most impact in improving health outcomes, especially for the world's most vulnerable. Addressing the inequities in health systems is not only the foundation of improving awareness of health issues and acceptability, availability and affordability of health services – it is also the foundation for preventing the next pandemic.

Here are just some of the ways in which the improvements we've discussed here are directly applicable to avoiding (or controlling) the next pandemic:
With people-centered and integrated healthcare, people can more easily be made aware about how to prevent the spread of a disease and they are more likely to trust that information.

- A strong community health workforce (along with good data systems) plays an essential role in early detection of disease and surveillance.[66]
- Well-functioning supply chains in place for medicines and personal protective equipment could help meet the challenge of the next pandemic.
- Catalytic investments by philanthropists can scale improvements in health systems.

Using AI to gather intelligence about disease outbreaks

Dr. Kamran Khan,
BlueDot Founder and CEO

UBS Global Visionary Kamran Khan founded BlueDot, a software-as-a-service platform (SaaS) for outbreak intelligence. The company uses a unique mix of human and artificial intelligence (AI) to provide insights to detect, assess and respond to outbreaks. BlueDot helped predict the Zika outbreak in Florida six months before it began. And in early January 2020, BlueDot published the world's first scientific paper on the pneumonia outbreak of unknown cause in Wuhan that would later become known as COVID-19. The platform analyzed flight schedules to accurately predict eight of the first ten cities to import the novel coronavirus.

[65] Joi, P. (2021, May 3). Why routine immunisation is vital for pandemic preparedness. Gavi.
[66] The Independent Panel. (2021). COVID-19: Make it the Last Pandemic.

Being prepared for the next pandemic

Raj Panjabi,
U.S. Global Malaria Coordinator
and Co-Founder of Last Mile Health

What has the COVID-19 pandemic taught us about the importance of strong, equitable health systems?

I think it's taught us a lot. It's taught us that outbreaks start and stop in communities. It's taught us that we need to bring care to people instead of waiting for people to come to care. And it's taught us that the best emergency system actually is the everyday healthcare system that leaves no one behind, reaching all people before these crises strike.

What is philanthropy's role in catalyzing improvements in health systems that can help prevent the next pandemic?

Philanthropists can take more risk than governments. Here's a good example: I recently participated in Time magazine's expert poll[67] on how to mitigate the next pandemic. Participants were given a list of 50 initiatives and asked to score each strategy's priority and feasibility on a scale of 1 to 5. Strengthening the public health workforce was ranked among the top five strategies in terms of priority, but also the least feasible of the top five. The other strategies in the top five – related to vaccine development, manufacturing and financing as well as ensuring existence of strong surveillance systems and early detection – are not going to be handled completely by governments, but governments will put a lot of financing in those areas.

So the comparative advantage for philanthropy is to complement those investments by investing in health workers. Because as we've learned in the COVID-19 pandemic, vaccines don't deliver themselves, health workers do. Alert system alarms don't ring themselves, health workers do. The simple idea of leveraging the community health workforce to create the largest door-to-door fever surveillance network in the world is something that's within the reach of philanthropy. And governments will be more likely to move in that direction when they see exemplar programs, hopefully reaching sub-national or national scale, that government financing can get behind. When philanthropists demonstrate and generate the evidence to change a policy, then governments can finance it at scale.

What is one exemplar where government and philanthropy have worked in this complementary fashion?

I think the big value is the long-term engagement philanthropy can make. In Liberia, for multiple years philanthropists have made investments to build a system of 4,000 community health workers who are not just doing malaria testing and treatment and prenatal care, but also community event-based surveillance: simply meaning that they are the eyes and ears for the 13 or 14 reportable public health conditions. Things like unexplained death in the community would be an alert for the potential next pandemic.

[67] See Wolfson, E. (2021). A Blueprint For Preventing Another Pandemic. Time.

Today, the President's Malaria Initiative and the Global Fund are investing millions of dollars in this community health system, which treats half of the rural children for malaria in the country. That system was sustained during the pandemic and helped drop malaria deaths by about to 60 to 70 percent in the country overall.

I think the basic idea that local public health workers are just as much global public goods that keep us all safe, especially at the community level, is vital. We shouldn't think that simply investing in things like vaccines, medicines, tests and PPE – as important as they are – is sufficient. All of those things protect, are delivered by, or depend on frontline and community workers. They're the ones who are able to get the community ready to get vaccinated because they're trusted as a neighbor, daughter or son, brother or sister, or parent in that very community.

04 Looking beyond traditional philanthropy

There is an imperative to bring more capital into development. Sustainable finance offers solutions along a spectrum between philanthropy and traditional investing. From using philanthropic capital to de-risk mainstream investment to using investment capital to have intentional positive social impact, to incubating promising solutions, philanthropists have a significant role to play in these efforts.

Mind the funding gap

Improving health systems costs money. But there is often very narrow fiscal space in the countries that need it. And there is plateauing or declining donor funding for international development. Existing estimates suggest that the additional annual financing required to achieve SDG 3 in 67 low and middle-income countries (LMICs) is USD 274 billion. To reach SDG 3 targets, including scale-up of health workforce and infrastructure, is USD 371 billion. The corresponding per capita spending would need to increase to at least USD 249 per year. But more than half of LMICs are in danger of failing to reach those goals by 2030.[68] The COVID-19 pandemic has only exacerbated the gap in the estimated funding needed to reach the SDGs.

Even with the funds that are reaching LMICs, too little is going toward supporting health systems. Development assistance funds 20 to 40 percent of primary healthcare spending in low-income countries.[69] This is mostly a consequence of funds channeled through vertical programs, with little funding going to integrated services.

[68] Stenberg, K., et al. (2017). Financing transformative health systems towards achievement of the health sustainable development goals: a model for projected resource needs in 67 low-income and middle-income countries. Lancet Global Health.
[69] World Health Organization. (2019). Global spending on health: a world in transition.

The Institute for Health Metrics and Evaluation (IHME) at the University of Washington tracks spending toward progress in reaching SDG 3.[70] Using estimates of domestic health spending for 195 countries and territories, IHME found:

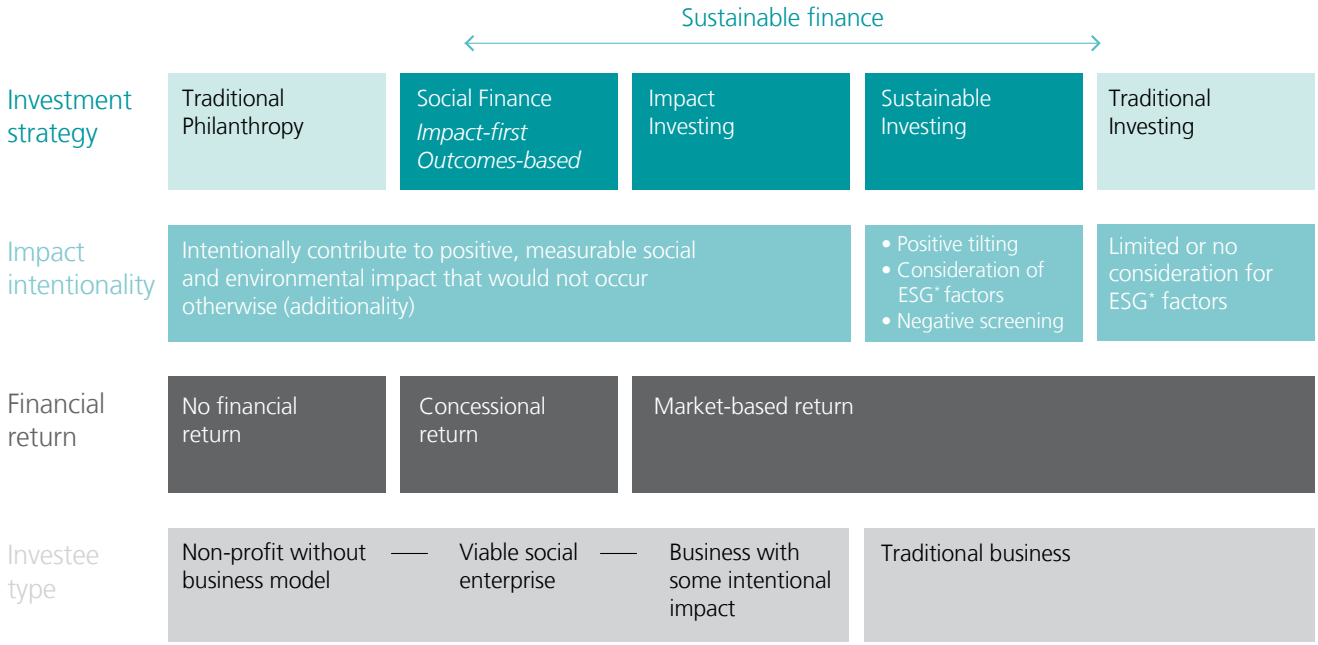
Global health spending increased to USD 7.9 trillion in 2017 and is expected to increase to USD 11.0 trillion by 2030

In 2017, LMICs spent USD 20.2 billion on HIV/AIDS, USD 10.9 billion on tuberculosis and USD 5.1 billion on malaria

Development assistance for health was USD 40.6 billion in 2019, with HIV/AIDS receiving the most assistance since 2004

In 2019, USD 374 million in development assistance for health was provided for pandemic preparedness, less than 1% of development assistance for health.

[70] Institute for Health Metrics and Evaluation (IHME). (2020). Financing global health 2019: tracking health spending in a time of crisis.



* Environmental, Social and Governance

04.1 Target impact with social finance

Social finance
An approach to investment that focuses explicitly on generating positive social and environmental outcomes. It incentivizes and rewards the delivery of results, thereby putting impact first.

As a philanthropist, you want to see results. Social finance is one way of funding that can help support this objective. The financial incentives and rewards inherent to social finance are structured to help ensure delivery of positive outcomes. Using evidence from both internal monitoring and external evaluation, the results serve as an indicator for which activities generate impact and which do not. These insights can help inform the future interventions but, more importantly, increase the potential of these models to scale and result in even greater impact.

Contracting for impact

Impact contracts, also known as (development) impact bonds (DIBs), are one kind of social finance instrument. They've emerged as one of the more innovative investment instruments allowing investors, development partners and implementing organizations to focus on impact rather than simply fund activities. These impact contracts can allow philanthropists to fund innovative health interventions with promise of an outcome payment from governments or aid agencies if such interventions achieve what they intend. When successful, the initial funding is repaid to philanthropists with a financial return, so they can invest in additional philanthropic initiatives.

How does it work?

1. Investors (like UBS Optimus Foundation) provide upfront funding for a partner to deliver an intervention, with predefined outcomes targeted for full funding.
2. Program partners operate autonomously to innovate and to maximize impact delivered.
3. An independent evaluator measures program results.
4. Outcome payers (governments, aid organizations, initiatives or large foundations) pay for results once they are achieved (measured by an independent evaluator). Investors receive the initial capital depending on the level of outcomes achieved, plus a performance-related return.
5. Returns can then be recycled within the program or into further impactful development programs.

Impact contracts work well to allow philanthropists to take risks that governments, aid organizations and other funders wouldn't be willing to take initially, find a scalable solution and essentially sell the whole intervention to these larger funders. This amplifies impact and allows innovative solutions to scale.

Case study:

The Utkrisht Maternal and Newborn Healthcare Impact Bond

The Utkrisht Impact Bond is the world's first health development impact bond and the largest and most ambitious impact bond to date. Interventions will reach up to 600,000 pregnant women with improved care during delivery and could lead to up to 10,000 lives being saved over a five-year period.

The quality of healthcare at many of India's private small healthcare organizations (SHCOs) lags behind the public sector. The Utkrisht Impact Bond focused on bettering maternal and newborn health through improved quality standards for over 500 SHCOs between April 2018 and April 2021. These improvements resulted in over 400 SHCOs already achieving accreditation so that they can benefit from the national insurance scheme as well as some government subsidies for low-income patients. The improved, accredited healthcare facilities have already benefitted over 450,000 pregnant women and newborns.

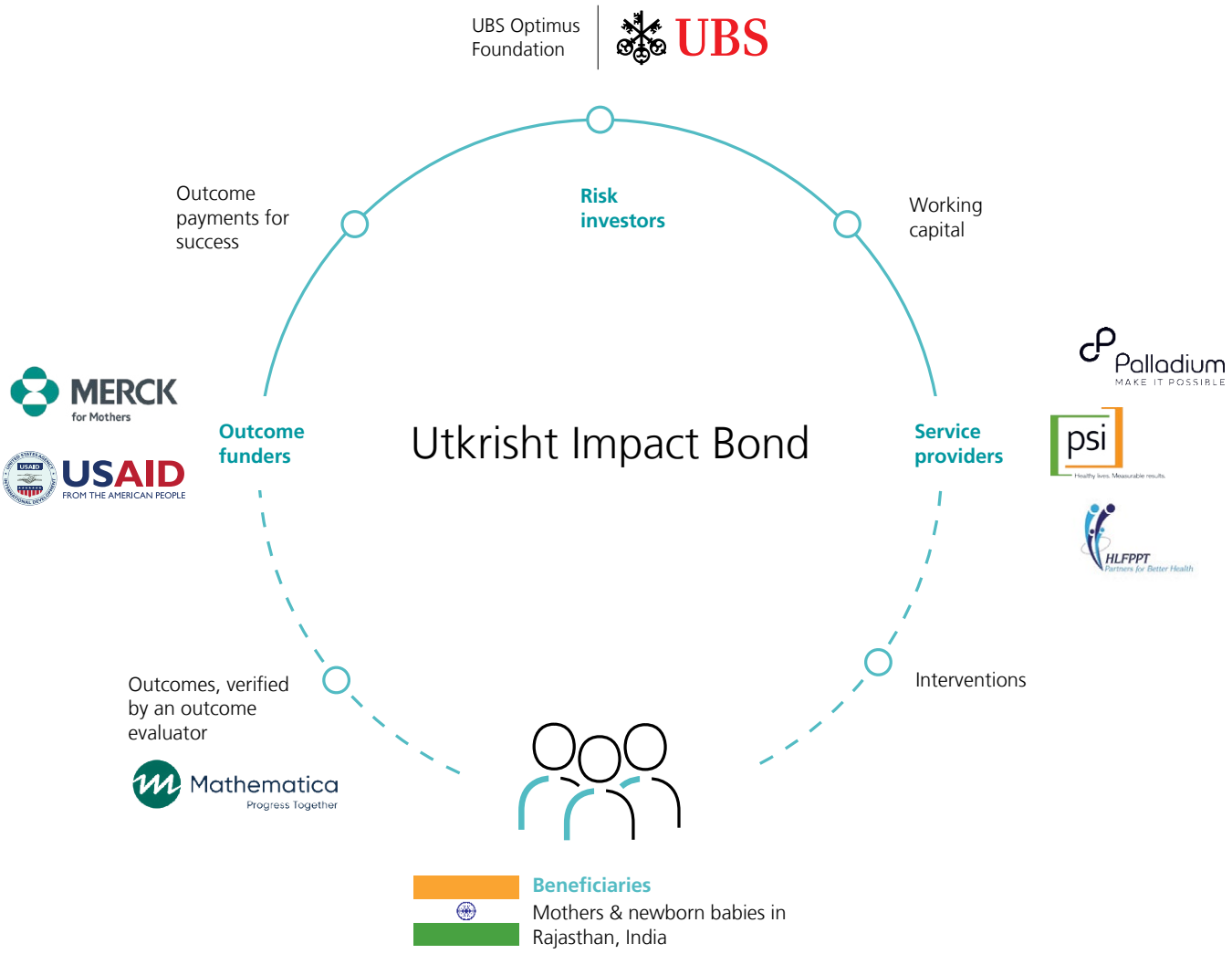
UBS Optimus Foundation provided USD 2.9 million as working capital.

The three service providers worked closely with local SHCOs to improve quality of care.

Outcomes were independently evaluated by Mathematica, tracked against Indian health quality standards.

USAID and MSD for Mothers provided funding for successful outcomes.

Facilities that reach the accreditation standard received a success payment of USD 18,000. And UBS Optimus Foundation recovered its initial investment including a return.


UBS Optimus Foundation
UBS
Risk investors
Working capital
Service providers
Interventions
Beneficiaries
Mothers & newborn babies in Rajasthan, India
Outcomes, verified by an outcome evaluator
Outcome funders
Outcome payments for success
Utkrisht Impact Bond
MERCK for Mothers
USAID FROM THE AMERICAN PEOPLE
Palladium MAKE IT POSSIBLE
psi
HLFPPT Partners for Better Health
Mathematica Progress Together

Blended finance
Blended Finance structures public or philanthropic funds with private sector funds to increase the pool of available funding allowing private investors with various return expectations to tap into social finance opportunities.

Blending finance to crowd in private capital

A promising development in social finance is using philanthropic funding to catalyze private capital investment through blended finance. By blending philanthropic capital with private capital, the funding of innovative health solutions can become more palatable to mainstream investors. Rather than just giving money, philanthropists "invest" in a way that takes first risk. This way, philanthropists can get the funding needed to scale promising health interventions. Traditional funders can earn financial returns while improving global health. And, when successful, philanthropists can also earn financial returns to be recycled into further programs

Increasing private sector investment in health

Aakif Merchant,
Associate Director, Convergence

Blended finance refers to use of catalytic capital from public and/or philanthropic sources to increase private sector investment in SDG-aligned projects. It addresses the two main barriers private investors face when considering investments in developing countries: 1) high perceived and real risk, and 2) poor returns for the risk relative to comparable investments. By shifting and/or mitigating risks and enhancing returns, blended finance seeks to attract additional private financing by improving the risk-return ratios of near-bankable transactions.

Philanthropists play a role in blended finance: according to Convergence's database they have participated in just over 17 percent of transactions. Philanthropy in the blended finance space has most commonly played a catalytic role, either through providing small amounts of financing to seed large-scale and ground-breaking initiatives or by providing smart forms of subsidy and risk mitigation (like interest rate reductions and/or junior capital) to crowd in the private sector.

The health sector represents a small proportion of blended finance activity to date, making up only 6 percent of transactions in Convergence's database. This is because many health-related activities do not lend themselves to paying back a commercial investor over time – a critical characteristic of a blended finance transaction. However, as the global pandemic has demonstrated the urgent need to enhance the capacity and infrastructure of health systems, there has been a discernible increase in the number of health-related blended finance transactions currently fundraising. Approximately 23 percent of transactions fundraising on the Convergence platform are health-related. These range from a blended fund seeking to make equity investments in health technology startups addressing the unmet health needs of women, children and adolescents to a company that provides portable sterilization solutions for surgical instruments and equipment in low-resource settings.

There are certain challenges to mobilizing additional private finance to the healthcare sector that can be addressed through blended finance:

1. **Local currency financing.** Healthcare services in particular (even some production) require long-term local currency funding which is very challenging to secure in developing countries. Therefore, blended finance structures that can help to de-risk investors' currency exposure can play an important role in crowding in private investors.
2. **Credit support for SMEs.** Small and mid-size enterprises (SMEs) dominate the health space in developing countries and often lack access to products and basic medical equipment. As they are small, untested and usually lack a credit record, blended finance solutions can be put into place to support mechanisms for either leasing or selling equipment on a long-term payment basis.
3. **Lack of consolidation.** Creating networks in healthcare is key for quality standardization and economies of scale. Creating consolidated networks in the SME market requires both a high risk appetite and patience. Patient capital can help promote the consolidation of the market and thereby build economies of scale.

Philanthropists are uniquely positioned to make a difference in health-related blended finance transactions due to their aptitude for flexible financing, long-term vision for achieving impact and focus on using gifted resources to catalyze change. They can play a few different roles when it comes to participating in blended finance transactions by providing:

- **grant funding** for the design of blended finance solutions
- **catalytic investment capital**, typically at below-market rates, into blended finance transactions – increasingly from Program Related Investments (PRI)
- **senior investment capital** into blended finance transactions, either from PRI or the foundation's endowment fund
- **grant funding** for technical assistance to support a transaction's investment activity
- **grant funding for market building and ecosystem development**

There is great potential for philanthropists to think about where and how to strategically deploy patient and flexible capital to mobilize additional private capital in the health sector. Relative to other sources of capital, philanthropists have limited resources to deploy and therefore need to be strategic about the transactions they support. Blended finance is one way to ensure their limited funds go further.

Case study:

Global Health Investment Fund

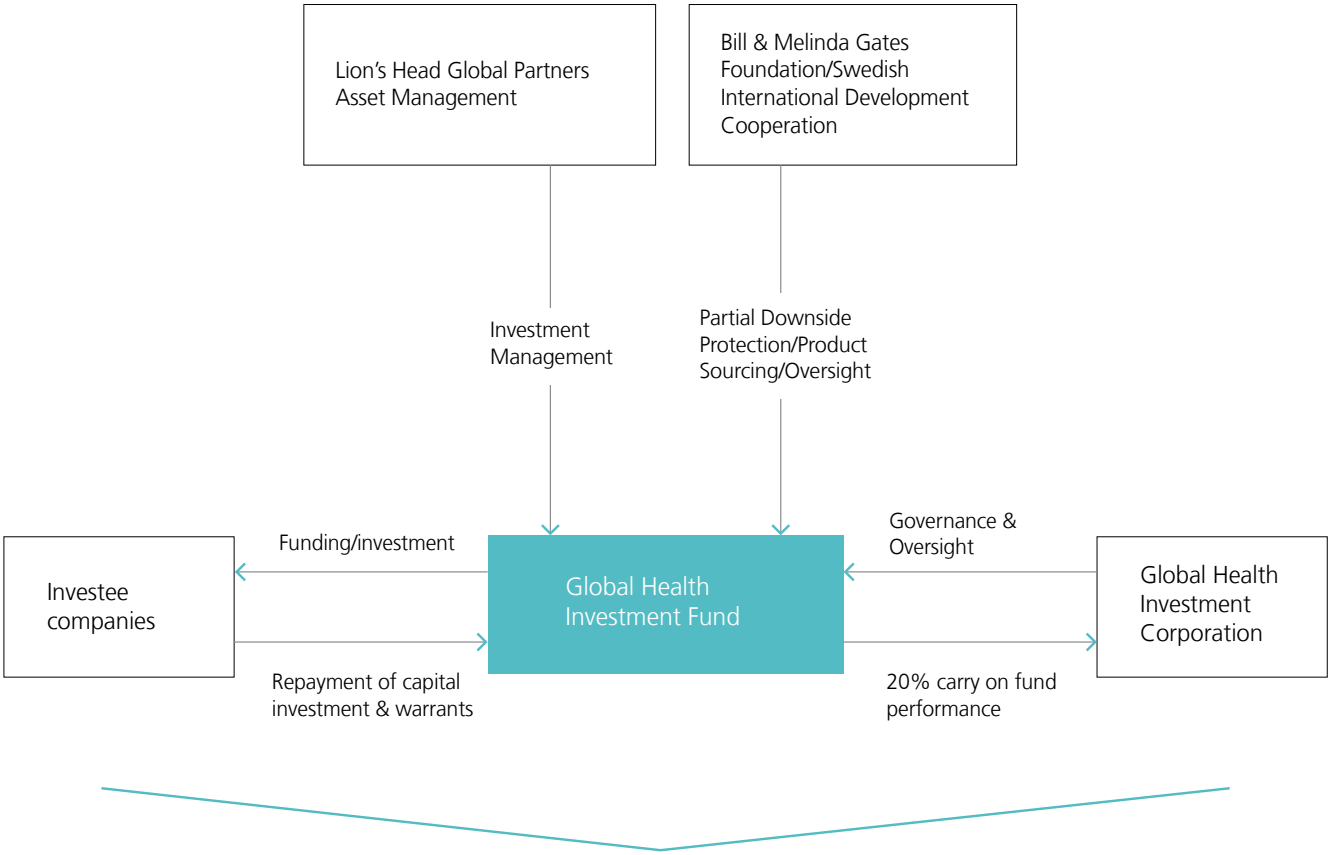
The Global Health Investment Fund (GHIF) is a blended finance impact investment fund designed to support the development of new drugs, vaccines and medical devices for public health challenges that disproportionately burden low and middle-income countries (LMICs). As a double-bottom-line fund, GHIF seeks both financial returns and positive social impact – both metrics are carefully evaluated when making investment decisions.

GHIF is structured as a blended finance transaction with various risk mitigation mechanisms embedded to attract financing from commercial investors. The Bill & Melinda Gates Foundation (BMGF) provides first-loss protection of up to 20 percent of investors' contributed capital. BMGF also committed to reimburse investors for 50 percent of any additional downside experienced beyond the first-loss protection, which means that 60 cents on every dollar invested in GHIF is guaranteed by philanthropic capital. The support from BMGF has proven to be highly catalytic as it has led to USD 108 million in committed capital from a range of investors including JP Morgan Social Finance, AXA Impact Fund, IFC and several high net worth individuals and family offices.

GHIF plays a pivotal role in the health ecosystem as its strategy focuses on getting high-potential products over the hump, from late-stage development to actual distribution, which is where so many potentially transformative products die. While GHIF investments have the potential to earn profits in wealthy countries, each transaction is also complemented by a global access agreement that obligates the investee to bring the new products to the developing markets where they are critically required.

GHIF currently has approximately 12 investee companies, a handful of which are actively working to address the COVID-19 pandemic through efficient diagnostics to identify and track cases as well as innovative technologies for vaccine development and manufacturing.

GLOBAL HEALTH INVESTMENT FUND



Global Health Objectives
– New Products
– Lower Princes
– Greater Volumes
– New Markets
– Data Gathering

04.2 Achieve impact through investing

Investing is one way to mobilize private capital at scale to improve health. Sustainable investing has emerged as a preferred way for individuals and organizations to align their investments to their values and signal preference for sustainable solutions. Impact investing takes a step further in aiming to contribute to the financing and resource gap to achieving the SDGs. Sustainable and impact investing solutions can often be integrated into investors' diversified cross-asset portfolios, as these approaches target competitive financial returns alongside sustainability objectives.

Impact investing
Impact investing differentiates itself from broader sustainable investing by aiming to intentionally contribute to positive, measurable social and environmental impact that would not occur otherwise. This key intention of investing for impact is shared by philanthropists who engage in both traditional philanthropy and social finance. Within impact investing the investor is catalytic. This catalytic contribution can come from additional capital in underserved areas or through stewardship, engagement, networks and expertise. Viable social enterprises focused on improving health would be a target of impact investors in this space, alongside shareholder or bondholder-driven engagement within healthcare or pharmaceutical companies.

Sustainable investing
Where broader sustainable investing differs from impact investing is that the investor it not engaged in driving impact but seeks to support enterprises that actively address environmental, social and governance challenges within their operations and supply chains and/or develop impactful products and services. Here, investors could look for businesses within the health and medicine space that develop innovative treatments or enable access to care, or who prioritize employee health and well-being.

By targeting market-rate risk-adjusted financial return, impact investors and broader sustainable investors might be somewhat constrained to investment areas that can deliver such return. For instance, investing in health solutions that do not have broader market applicability might not always be appealing because these usually can't offer a sufficient financial return to cover the level of risk. Investors could still, however, address lower income markets if expectations around risk and return can be met.

How can investors unleash private capital for positive health impact? By targeting investments in key areas.

Investing allows philanthropists to scale capital in key targeted areas – like health technology, medical devices or targeted treatment for diseases. Most importantly, investing can help philanthropists align their wealth to their personal values and unleash private capital that was previously reserved for conventional investments only. Private capital can access such opportunities within venture capital and private equity, but also through stocks and bonds of public healthcare companies.

Investing in health technologies

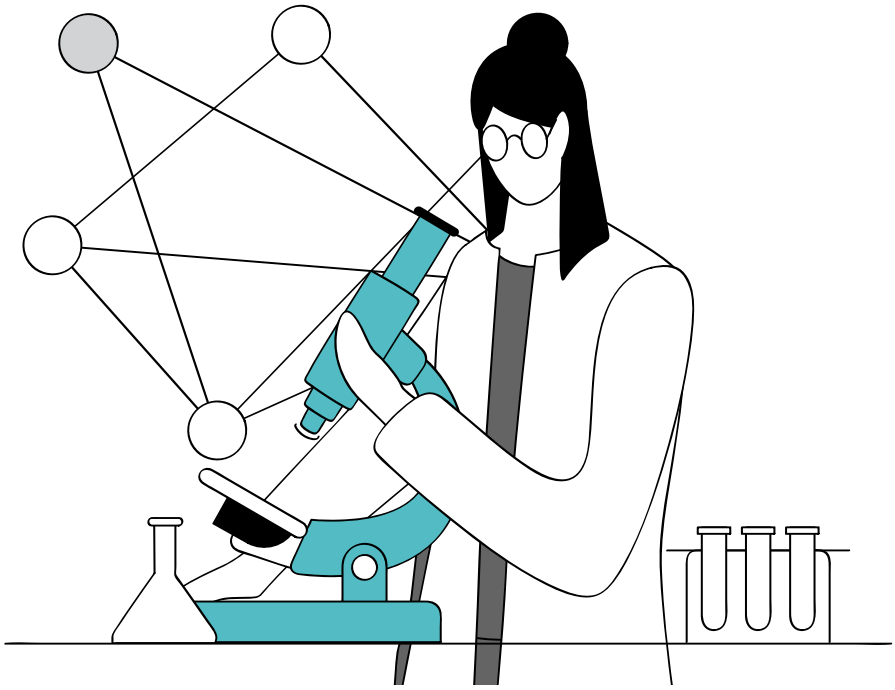
The historical underinvestment in healthcare in low- and middle-income countries (LMICs) results in their healthcare systems lacking both critical infrastructure and trained healthcare professionals relative to levels in developed countries. Greater use of technology – particularly remote monitoring, connectivity and big data analysis – could help with the efficient and effective deployment of scarce resources and talent where it is most needed.

For example, telemedicine provides access to medical care wherever there is internet access, giving patients access to both primary and specialty care that would otherwise be out of reach. Drone technologies are used to deliver blood and essential medications to regions with limited transportation links, while mobile applications allow experienced doctors to guide surgeons during procedures in remote areas. Investing in such technologies has the potential to not only support underserved communities but also lends itself to attractive financial considerations because of the dual-market potential.

Investing in infrastructure
Investing in infrastructure is another critical lever. Multilateral development bank bonds have emerged as a preferred way for private investors to address the challenge. These instruments are issued by the World Bank and other multilateral development banks and offer a similar risk/return profile as a US Treasury bond. But proceeds go to financing a range of development projects in developing countries, including within healthcare.

Investing in healthy nutrition
Effective prevention can help alleviate some of the pressure on our healthcare systems. Healthy nutrition and overall food resilience play a significant role. According to the United Nations, the number of undernourished in the world has fallen by almost 200 million people over four decades. Better diets and modern medicine have contributed to increases in the average global life expectancy over the same period. At the same time, the World Health Organization estimates that unhealthy diets are still responsible for 1 in 5 deaths globally, amplifying the need for further innovation. Precision farming, especially in regions under water or other resource stress, as well as solutions for nutritional density improvement, resilient food supply chains, traceability and waste management are some examples of potentially impactful investments that have attracted private capital in recent years.

Investing in employee well-being
Well-being at work is critical to our health, especially since the majority of the population in the world cannot afford not to work. According to the World Bank, lower-income countries have the higher labor participation and employment rates. Yet, employee health, safety and security might often be neglected, especially within industries with a high degree of physical and manual work, such as agriculture and non-automatized factory work. In turn, this could put a strain on health resilience within entire communities, especially those reliant on income that comes with higher risk of injury and harm. Considering a company's treatment of its employees is a way for investors to align their portfolios to to their values and signal to other investors that health at work matters.



Investing in therapies and drug development
The global population is aging, which creates an increasing demand for healthcare products. Medical research remains largely dependent on public funding, but private investors can increasingly support impactful therapies and drug development and help accelerate innovation. Personalized medicine and genetic therapies, in particular, have emerged as a preferred way for investors to support innovation. And targeted disease therapies can help address some of the most challenging health issues in both developed and developing countries, like cancer and diseases related to obesity and air pollution.

As with any investments, the value may fall as well as rise and you may not get back the amount you originally invested.

For illustrative purposes only

TIP >
You should consider the number of different ways in which capital can support targeted impact outcomes. Some opportunities to build better healthcare systems lend themselves to investment-like activities and financial returns. Others would be better served by philanthropic capital. Combining the two approaches can have a powerful effect, enabling scale-up of effective solutions.

Case study:
Using private capital to scale up

In 2016, UBS partnered with the biotech investment firm MPM Capital to tackle a challenge that resonates with too many people and families around the world. While great developments have been made in diagnosis and treatment over the past generation, cancer remains a leading cause of death globally.

Finding new and better forms of cancer treatment is, and will continue to be, a global concern. And perhaps the greatest obstacle to developing new treatments is what researchers call the "Valley of Death." The phrase refers to the significant funding and resource gap that exists between basic oncology research and initial clinical trials – that is, the stage at which discoveries at a chemical level are turned into potentially viable treatments.

This was born to fill a gap in both the investment market and the medical funding sector. It invested in early-stage cancer treatments – where private capital can be most catalytic given scarce funding. As an impact investment, the fund aimed to generate a compelling financial return by investing in a rapidly growing market while having a positive long-term impact on patients' lives. In addition, a portion of the performance fee of the fund as well as a share of the royalties for new drugs and therapies was channeled to support academic research and provide better access to cancer care in the developing world via the UBS Optimus Foundation and the American Association for Cancer Research.

The first iteration of the fund raised USD 470 million, making it the largest dedicated healthcare fund at the time. It funded a number of innovative oncology therapies, which are now at various stages of regulatory approval. A second iteration – in 2021 – added another USD 650 billion from UBS clients, a testament to the ability of impact investing to scale private capital and use a strategic philanthropy-like approach to drive impact outcomes.

04.3 Nurture and grow health innovations

How can you help fund the next great idea? Incubate and accelerate.

Good ideas can die before they get traction if there are no more resources. Incubators – organizations that support early-stage start-up enterprises – are aimed at stimulating innovation and often offer physical space, technical support, networking opportunities and fundraising advice. Once a social enterprise looks viable, accelerators can help provide the resources and mentorship to bring it to scale.

Financing incubators and accelerators in low- and middle-income countries (LMICs) can be challenging. Philanthropists can help support these kinds of programs in order to create an ecosystem of potential sustainable finance investments down the road. Incubators and accelerators are not going to be able to find solutions to all health system challenges. But, for those sustainable social enterprises that can help drive forward impactful health outcomes, they can be a good place to offer support.

TIP >
You can support efforts that build the ecosystem for direct investment in social enterprises by providing early incubation, acceleration or other technical assistance.

Case study:
Villgro Innovation Foundation

Srinivas Ramanujam, CEO, Villgro Innovation Foundation

Villgro Innovation Foundation (Villgro) is India's oldest social enterprise incubator. Villgro funds, mentors and incubates early-stage, innovation-based social enterprises in sectors such as skilling, health and sustainable land use that impact the lives of India's poor. Villgro has presence across developing economies in South East Asia and Africa with a team of experienced executives and successful entrepreneurs leading individual sector strategy. Villgro has experience running successful health incubators for foundations, corporations and banks.

Villgro designs and implements incubator/accelerator programs that combine deep curriculum and customized one-on-one support for companies, adapted to the stage and product/service. The accelerator program includes structured mentorship from industry experts, investment readiness support, technical assistance, access to potential industry partnerships, and a pitch day in front of investors and other potential partners, leading to a strong pipeline of social health companies.

Since its inception in 2001, Villgro has supported more than 310 social businesses that have raised more than USD 30 million in follow-on investment (as much as 60 percent of a cohort goes on to raise follow-on funding) and impacted over 20 million lives. Some of Villgro's incubatees – like Biosense Technologies and 5C Network – have scaled up and been acquired by health corporates.

UBS Optimus Foundation is partnering with Villgro to create a strong pipeline of investment-ready enterprises developing solutions that help improve access to affordable and quality healthcare to India's underserved – especially children.

05 Taking action

Health is at the heart of all prosperity. Without it, all other advancement is largely irrelevant. The need to guarantee this basic need to all has never been more pressing.

So now it's over to you. As a philanthropist or an investor, you can help advance systemic change. Start by discovering what resonates with you. Explore the issues. Connect with like-minded people. Forge alliances. Take your mission to the world.

No one's saying it will be easy. The issues and challenges related to health systems are complex and interrelated. But with time, patience and passion, you'll succeed. Rest assured, there will be many kindred souls keen to join you on your journey.

Imagine, just for a moment, how you might help all people on the planet gain access to healthcare and improved well-being.

Surely that's a cause worth fighting for.

To find out more about how you can improve health and well-being globally, please contact sh-philanthropy@ubs.com.

05.1 10 tips for impactful philanthropy

1. Reflect

Think about your values and priorities. What motivated you to focus on health? What assets and expertise can you put to work: money, time, networks or skills?

2. Research and understand

Think about the issues you'd like to address and research them by browsing online, reading reports, talking to experts, and attending webinars or conferences. Consider where your support is most needed, and find out what other people and organizations are doing already.

3. Define, refine and focus

Philanthropists and organizations that make the biggest difference are those that have clearly defined an issue and focused their resources on finding an effective approach or solution. Defining, refining and focusing on an issue will help you shape your vision. It will also clarify why you're getting involved, how you're providing support and who will benefit from your efforts.

4. Turn your vision into a plan

Consider how you can maximize your impact. Set clear goals and make a logic model (words or diagrams describing your activities and goals). This will help you understand how the resources you use (inputs) can trigger activities and outputs, which generate outcomes (actual changes) that maximize your impact.

5. Use the right charitable vehicle

A vehicle is only a means to reach your goals. You can choose from many different types of charitable solutions, including foundations, charitable trusts, donor-advised funds and even giving directly to the charity. Pick a solution that's right for you and your vision.

6. Be brave and think big – there are no rewards without risk

Improving health is a big task. But being a philanthropist frees you to rise to the challenge. Try new approaches, learn along the way, adapt your plans as you go and gather evidence at every step. Proving your work is successful will help you attract more investors and expand your efforts.

7. Measure, learn, adapt and share

Seasoned philanthropists understand the importance of asking smart and challenging questions about their efforts. They also use qualitative and quantitative measurement systems that are ethically, culturally and financially appropriate. If you're willing to share your insights, even better – you'll really be advancing the cause.

8. Collaborate with others

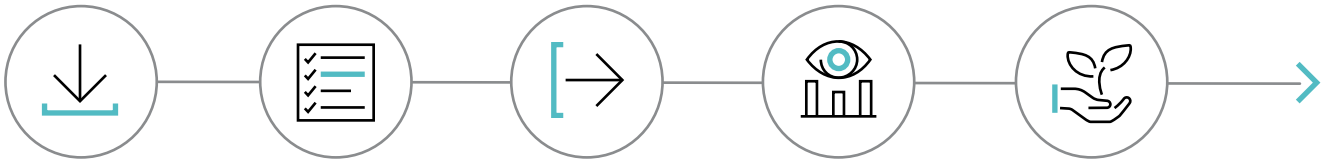
The issues facing the planet are too big for any individual or organization to tackle alone. Collaborating with others will achieve more because you can combine your resources, expertise and influence. Working on your own means you may only achieve results locally.

9. Think beyond philanthropy

There are many paths to making a difference and they can all complement each other. Awarding grants is one. Social financing in the form of equity or loans is another. Or you could look into engaging personally with a cause, setting up your own venture and investing sustainably.

10. Enjoy the journey

No one has ever achieved greatness without being passionate and enthusiastic. So enjoy the journey, knowing you're helping create a better world.



Inputs

Human, financial, organizational and community resources

Activities

What you'll do with the available resources

Outputs

Results of your activities

Outcome

Specific changes observed

Impact

The fundamental change in organizations, communities and systems

05.2 Joining forces

The power of collectives

Why not join forces? Collectives are groups of key players from different sectors working together to solve issues on a big scale.

What are the benefits of collective philanthropy?

- Increased impact through **pooled funds** with longer-term or larger-scale grants, reducing reporting duties for grantees and increasing operational effectiveness
- **Joint due diligence and measurement of impact and learnin**g for course correction, and peer exchange on best practices to inform future giving strategies
- **Better risk management** compared to acting alone in a new sector or geography, and less tendency to duplicate efforts
- **Joint accountabilit**y among partners to achieve the intended outcomes of the shared vision

The five key ingredients to success

1. **Common agenda** – shared understanding and narrative of the issue
2. **Strategic learning** – measurement and collective decision-making based on ongoing learning
3. **Mutually reinforcing activities** – leveraging the strength of each participant
4. **Stakeholder engagement** – participation based on trust
5. **Backbone support** – dedicated staff to challenge mental models and coordinate members

Joining an existing collective. Starting a new collective isn't always the quickest, easiest or best approach. Many quality alliances already exist. Together with other philanthropists addressing the same issue, you can multiply impact.

Championing a new initiative. You may want to champion a new effort to tackle a complex issue in a location where other collective impact efforts don't yet exist.

How to initiate collective impact:

Scope issue and assess readiness

- Identify or recruit co-champions
- Engage community, build trust and relationships
- Assess readiness and develop a plan to launch a collective impact effort

Initiate action

- Kick off and build a steering committee to champion the effort
- Create a baseline to identify key issues and gaps
- Engage community stakeholders beyond the steering committee on findings

Organize for impact

- Co-create a common agenda, including a vision, goals and indicators to measure progress
- Review and test common agenda with community stakeholders

Develop strategies Sustain action and impact

- Co-design the facilitating backbone organization
- Develop change pathways, including forming working groups for each change area
- Design an approach to shared measurement and strategic learning

05.3 Expert tips for philanthropists

We asked respected experts to share their top tips with you. Here's what they said…

Take risks

Fund positive outliers to demonstrate and generate evidence to change a policy. Governments need exemplars to get behind to finance at scale. And stay at it. That can sometimes seem boring – but a fundamental commitment and consistency have created some of the best businesses in the world. That same philosophy applied to social change will make a big impact, too.

Raj Panjabi
US Global Malaria Coordinator for the President's Malaria Initiative

Work with government partners

Be sure organizations are seeking out and meeting with government officials in the countries where they work to understand their digital health strategy and where their need and gaps are. This will ensure that the projects and programs implemented have long-term and scalable success.

Mohini Bhavsar
Global Head of Digital Health Partnerships, Living Goods

Learn and share learnings

Philanthropists need to move away from one-off, independent projects to a portfolio approach with shared learning. Sustainability requires both building on the evidence generated by other philanthropists and actors, as well as contributing to the evidence base for others to learn.

Warren Ang
Managing Director, East Asia, Global Development Incubator

Prioritize equity

Now more than ever, it's time to think about how you can help the vulnerable with an entrepreneurial spirit and with equity in mind. Use data so that you're sure you're making positive impact. Health is not a commodity – it's a human right. You can help this right to be exercised.

Agnes Binagwaho
Vice Chancellor of the University of Global Health Equity

Need help on your philanthropic journey? Our UBS philanthropy advisors can help you maximize your impact locally, nationally and globally. To learn more and access guides and resources, please visit ubs.com/philanthropy

Think long term

Accept that behavior change requires a long-term commitment. Short-term programs that target individuals with a few months' training at a prestigious business school will never be enough to realize lasting change at an institutional level.

Robert Newman
Executive Director, AMP Health

Identify strong partners

This moment calls for strategic and timely investments to strengthen health systems – and their leaders. Identify partners, organizations and leaders with (1) an embedded local footprint, (2) linkages to consortia of willing local and global partners, and (3) an understanding of their potential in the health ecosystem.

William E. Walker Jr.
Deputy Director National Community Health Systems, Last Mile Health

Peter Kaddu
Deputy Managing Director, Health System Strengthening, Last Mile Health

Think local

Health systems need long-term partners who can help build a local team to care for local people. Help strengthen the system and you will achieve genuine, transformative impact.

Garreth Wood
Co-Founder and Chairman, KidsOR

Strengthen systems

Health system strengthening means finding what works and what doesn't – drawing on the knowledge of those with firsthand experiences to create long-lasting solutions. For the 400,000 children who will develop cancer each year, it means a chance to reach their potential.

Piera Freccero
Director of Programmes, World Child Cancer

Need help on your philanthropic journey? Our UBS philanthropy advisors can help you maximize your impact locally, nationally and globally. To learn more and access guides and resources, please visit ubs.com/philanthropy

Listen to women

Set your priorities with input from women on what will work best for them. Don't have preconceived ideas. Be guided by what women say is important to them.

Geeta Rao Gupta
Senior Fellow, United Nations Foundation / Founder and Senior Advisor, 3D Program for Girls and Women

Don't reinvent the wheel

We don't need new innovations to save lives. We need to scale proven solutions. Activating women around the world to work as professional community health workers will get this job done and produce ripple effects across economies and societies.

Jennifer Schechter
CEO and Co-Founder, Integrate Health

Support national priorities

Invest in the visions of African public health leaders in governments, universities, businesses and NGOs.

Robyn Calder Harawi
Executive Director, The ELMA Foundation

Melissa Morrison
Program Manager, ELMA Philanthropies

Invest in supply chains

Stronger supply chains save lives. Investments in electronic solutions, developing and deploying fit-for-context operating procedures, and the right skilling for supply chain cadres enables responsive and effective supply chains that deliver optimal services to communities.

Tiwonge Mkandawire
Senior Manager, Supply Chain, VillageReach, Liberia

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- **Robyn Calder Harawi,** Executive Director, The ELMA Foundation
- **Piera Freccero,** Director of Programmes, World Child Cancer
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- **Ari Johnson,** CEO, Muso
- **Peter Kaddu,** Deputy Managing Director, Health System Strengthening, Last Mile Health
- **Dr. Kamran Khan,** Founder and CEO, BlueDot
- **Christian Leitz,** Head of Corporate Responsibility Management, UBS
- **Aakif Merchant,** Associate Director, Convergence
- **Tiwonge Mkandawire,** Senior Manager, Supply Chain, VillageReach

- **Melissa Morrison,** Program Manager, ELMA Philanthropies
- **Robert Newman,** Executive Director, AMP Health
- **Dr. Bernard Olayo,** Founder, Hewatele
- **Raj Panjabi,** US Global Malaria Coordinator and Co-Founder of Last Mile Health
- **Geeta Rao Gupta,** Senior Fellow, United Nations Foundation/Founder and Senior Advisor, 3D Program for Girls and Women
- **Antonia Sariyska,** Investment Strategist Sustainable and impact Investing, UBS Global Wealth Management
- **Jennifer Schechter,** CEO and Co-Founder, Integrate Health
- **Srinivas Ramanujam,** CEO, Villgro Innovation Foundation
- **Laura Stachel,** Co-Founder and Executive Director, We Care Solar
- **Kevin Starr,** CEO, Mulago Foundation
- **William E. Walker Jr.,** Deputy Director National Community Health Systems, Last Mile Health
- **Garreth Wood,** Co-Founder and Chairman, KidsOR

About UBS

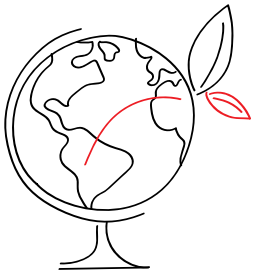
Changing the world needs leadership. As one of the world's largest wealth managers, at UBS we want to lead the way to a better future – for ourselves and generations to come.

At UBS, sustainability means thinking and acting with the long term in mind. Our promise is to continue doing just that – in the products we develop and the advice we offer, in the way we conduct our own business, and in how we interact with the larger world. Our concept of sustainability is guided by the United Nations (UN) Sustainable Development Goals (SDGs). The SDGs bring together the enormous societal and environmental challenges the world faces. We recognize that it is important to understand these challenges as well as the opportunities arising from them, to consider their relevance to UBS and to identify potential actions our firm may need to take. For us, it's all about making an impact, so we focus our efforts on the planet, people and partnerships.

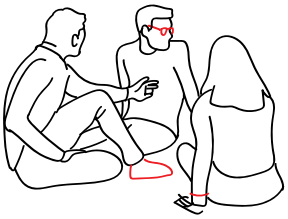
"Sustainability is high on our clients' agendas and we want to help them on this journey."

Suni Harford,
Group Executive Board sponsor for Sustainability and Impact and President Asset Management

Planet

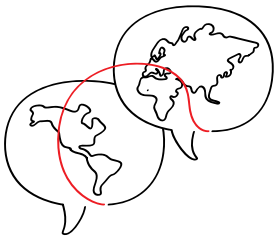


Our Net Zero statement sets out our ambitions. We're setting tougher environmental standards and will develop a detailed road map to take us to net-zero carbon emissions by 2050 across all our operations. As a founding member of the Net Zero Banking Alliance and Net Zero Asset Manager initiative, we'll partner with peers to identify the fastest and most effective routes towards a net-zero global economy. We also recognize the critical role of financial institutions in nature protection. Hence with our Biodiversity Statement we have developed a structured approach to protecting biodiversity and ecosystems across all of our activities globally. We'll work to raise awareness among our clients about the risks and opportunities surrounding climate and help them to mobilize their capital in the transition to a low-carbon economy.



People

We want to help create a fairer, more prosperous society and will sharpen the focus of our philanthropy and community activities on health and education, in particular, to address inequalities at their root. There are two concrete goals we want to reach by 2025. We aim to raise USD 1 billion in donations to our client philanthropy foundations and funds, with the goal to reach 25 million people. And we want to support one million people in learning and developing skills for employment and entrepreneurship through our community engagement activities.



Partnerships

By calling on other large investors, our clients, peers and standard setters as well as our communities and our own employees to work together, we can achieve a real impact on a truly global scale. For example, we're proud to be among the founding signatories of the Principles for Responsible Banking (PRB) of the United Nations Environment Programme Finance Initiative (UNEP FI). The global framework specifies how banks must support a sustainable future.

We believe people's desire to make the world a better place will continue to grow. People worldwide will increasingly seek to do good by choosing sustainable investments and philanthropic solutions. We're here to help you have more impact with your wealth. Together, we'll explore your purpose and help you make a difference with your wealth through giving, investing, connecting and leading the change you want to see. We're recognized globally for our philanthropy services and expertise.

With over 20 years' experience, we can help you and your family maximize your impact locally, nationally and globally.

Did you know?

One of the greatest aggravating factors in the pandemic has been inequality, which impedes testing and treatment while also worsening underlying health factors. UBS committed USD 30 million to various COVID-19-related initiatives around the globe. We matched client and employee donations for COVID-19 related programs and raised an additional USD 15 million for the UBS Optimus Foundation's COVID-19 Response Fund, which supports various organizations, including those in the healthcare industry that facilitate testing and increase capacity for emergency treatment.

What started in 1999 with a small Swiss foundation in Zurich, has evolved into a global network with seven locations. Since its inception, UBS clients and employees have donated more than CHF 600 million – totaling more than CHF 700 million including UBS contributions – through the UBS Optimus Foundation. This impacted the lives of more than 18 million people in the last seven years.

Our approach to philanthropy is based on three core pillars: **Advice** – such as advising clients who are considering establishing their first charitable fund. **Insights** – connecting our clients to a global network of experts, both within and outside UBS. This could be in the form of an insights trip to visit impactful programs on the ground, a report on the latest charitable-giving tax rules or an invitation to a networking event with fellow philanthropists. **Execution** – providing clients with flexible options on how to manage their philanthropic giving, including structures like our Donor-Advised Fund (DAF) or the UBS Optimus Foundation that make it easier and more cost effective to put their strategy into practice.

The UBS Optimus Foundation connects clients with inspiring social entrepreneurs, new technologies and proven models that seek to make a measurable, long-term difference to the most serious and enduring social and environmental problems. The Foundation has a 20-year track record and is recognized globally as both a philanthropic thought leader and a pioneer in the social finance space, through which we leverage solutions to mobilize private capital in new and more efficient ways. The UBS Optimus Foundation takes an evidence-based approach and focuses on programs that have the potential to be transformative, scalable and sustainable. We conduct extensive due diligence and only recommend what we consider to be the most innovative programs that have the capacity to achieve long-term, measurable impact.

To find out more about...

…what we do as a firm:
ubs.com/insociety

…how we can support you with your philanthropy:
ubs.com/philanthropy

…how you can invest more sustainably:
ubs.com/si

...how we support visionary social entrepreneur:
ubs.com/globalvisionaries

Whatever your passions and philanthropic goals may be, we can help you understand how and where your resources can be the most effective, giving you more confidence in your giving and making the philanthropic journey even more rewarding for you and your family.

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