



Future-proofing healthcare systems across Africa

Prioritised solutions inspired by the Africa Sustainability Index and the expertise of the healthcare community across the continent

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I. Introduction

Now in its third year, the FutureProofing Healthcare initiative examines the fundamental drivers of sustainable healthcare systems. It compares approaches between countries, identifies elements that lead to more sustainable care and promotes best practices through a future-focused discussion of real-world solutions. In 2021, the Africa Sustainability Index was launched, comparing 18 health systems on the continent and identifying key drivers that may affect their capacity to cope with system-level strain.

Using publicly available, credible and open-source data, the Sustainability Index aims to drive meaningful dialogue and cooperation to help deliver on some of Africa's biggest challenges, including supporting health systems' resilience and their capacity to handle major shocks, like pandemics or climate change. Most importantly, the Index aims to provide countries across the continent with pointers to accelerate progress towards the UN's goal of Universal Health Coverage (UHC) by 2030.

The COVID-19 pandemic has only heightened the relevance of using a data-driven approach, to recover from the crisis and shore-up system resources so that the next challenge finds us better prepared. The Africa Sustainability Index identifies best practice approaches that, if replicated or adapted to a local context, can deliver better healthcare for all, stronger, more sustainable and resilient health systems, and innovations that will transform African society for the better.

Policy action appears more urgent than ever, with the Sustainability Index highlighting the importance of;

- i [Closer regional collaboration](#)
- ii [Technologies to improve healthcare delivery](#)
- iii [Re-prioritising healthcare spending](#)
- iv [Improving gender equality in healthcare as essential to the sustainability of African healthcare systems.](#)

These four areas of action were identified by our expert panel as likely to play a determining role in achieving UHC across the continent.

These four areas of action were presented to a broad audience made of policymakers, healthcare professionals, researchers, and health experts at the Africa Health Agenda International Conference on 9 March 2021. During this interactive event, the audience heard about best practices which were collectively identified by members of the FutureProofing Healthcare advisory panel of experts. Attendees were also asked for their input on a range of policy recommendations that could contribute to achieving UHC by 2030. These collected insights, combined with the Index and inputs gathered from more than 11,000 health experts across Africa, underpin the proposed policy recommendations and best practices outlined in this paper. Resources - financial and human - are limited, so this white paper aims to focus on solutions, policy actions and important actors, but most importantly prioritises these. This will enable stakeholders to move forward constructively together to create a more sustainable future for African healthcare.



II. Broader context: the path to Universal Health Coverage (UHC)

Universal Health Coverage (UHC) means that any patient anywhere can access essential quality health services without facing financial hardship. By considering the adequacy of health coverage in this way, it is clear that there is an urgent need to address huge inequities in access to healthcare around the world particularly in lower and middle income countries, where providing quality healthcare to everyone remains an elusive goal. Achieving UHC is key to address these inequities

and promote wider access to quality medicines and healthcare. To enable this path towards UHC, this paper highlights the strategic shifts necessary and recommends dialogue for the strengthening of regions.

Many African countries have made considerable progress towards UHC, although this has been hindered by COVID-19. The additional stressor on health systems across Africa, already facing significant challenges, has fragmented health systems' ability to provide uninterrupted services to all. COVID-19 forced countries to respond to the immediate issues of health security which may have slowed progress towards UHC. However, the creation of more resilient systems is foundational to achieving sustainable UHC programs.

Views on prioritisation

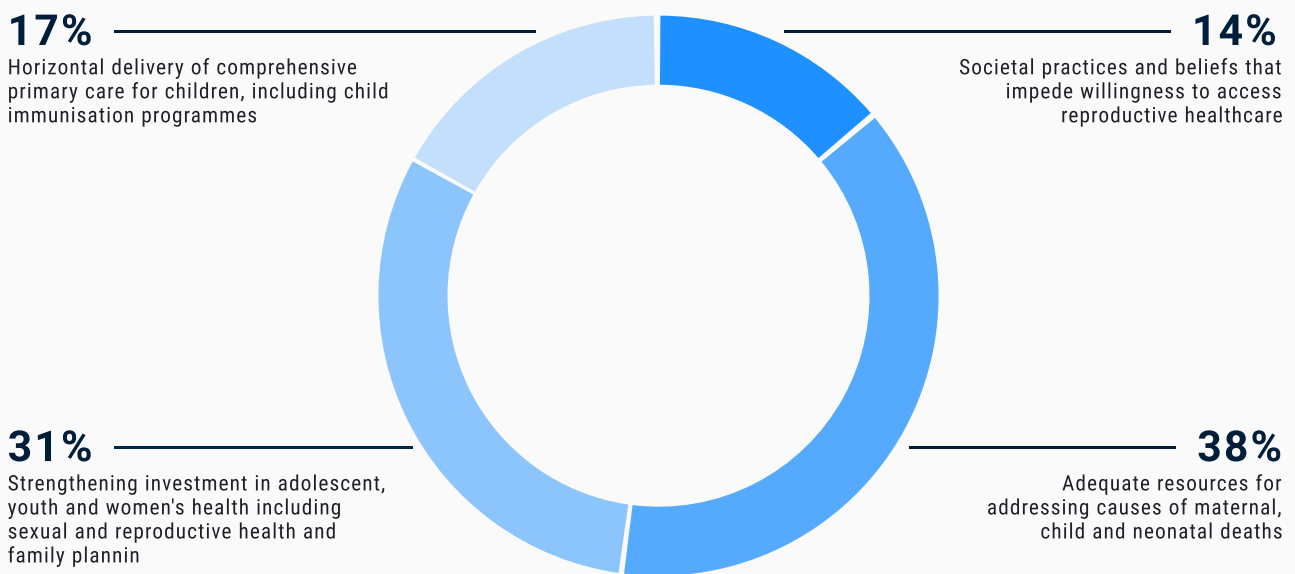
The drive towards UHC is a prominent focus for the World Health Organisation (WHO) and other international organisations. In the progression towards UHC, countries face political, social and economic challenges alongside prioritisation decisions. In order to guide priority setting the WHO has outlined a path for countries to follow so that countries can assess their own needs in the transition to universal health coverage, and this paper describes actions which could be taken and best practice examples from across Africa in achieving this transition.

The WHO categorises essential health services into four main areas that indicate the level of quality and equity of coverage within countries:

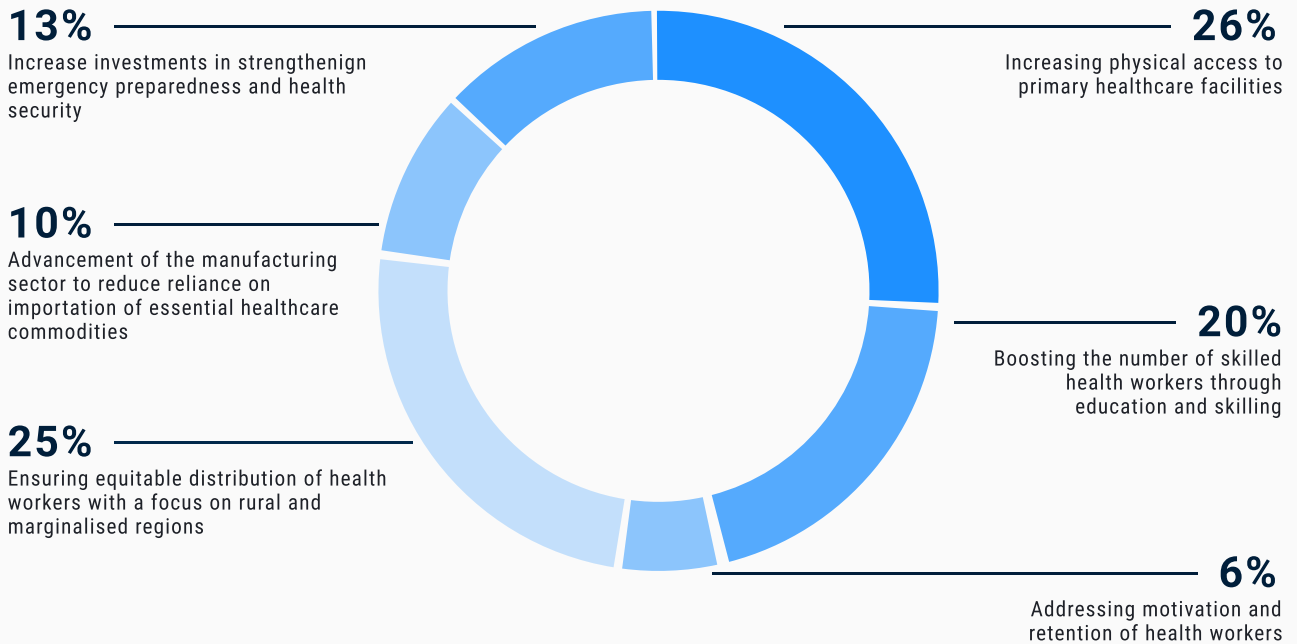
- Reproductive, maternal, newborn and child health;
- Infectious diseases;
- Noncommunicable diseases;
- Service capacity and access.

In a survey administered to members of the healthcare industry, institutional representatives, experts and members of Academia who have an interest in Africa, we asked how countries can consider prioritising these categories. By further refining this prioritisation to include advice about which areas need most urgent attention within each category, we are able to refine the actions that countries may consider taking to implement UHC. The cumulative scores given by respondents indicate that the most important area in achieving UHC in Africa is 'reproductive, maternal, new-born and child health'. Second most important was 'service capacity and access', with 'infectious diseases' and 'noncommunicable diseases' ranked third and fourth respectively.

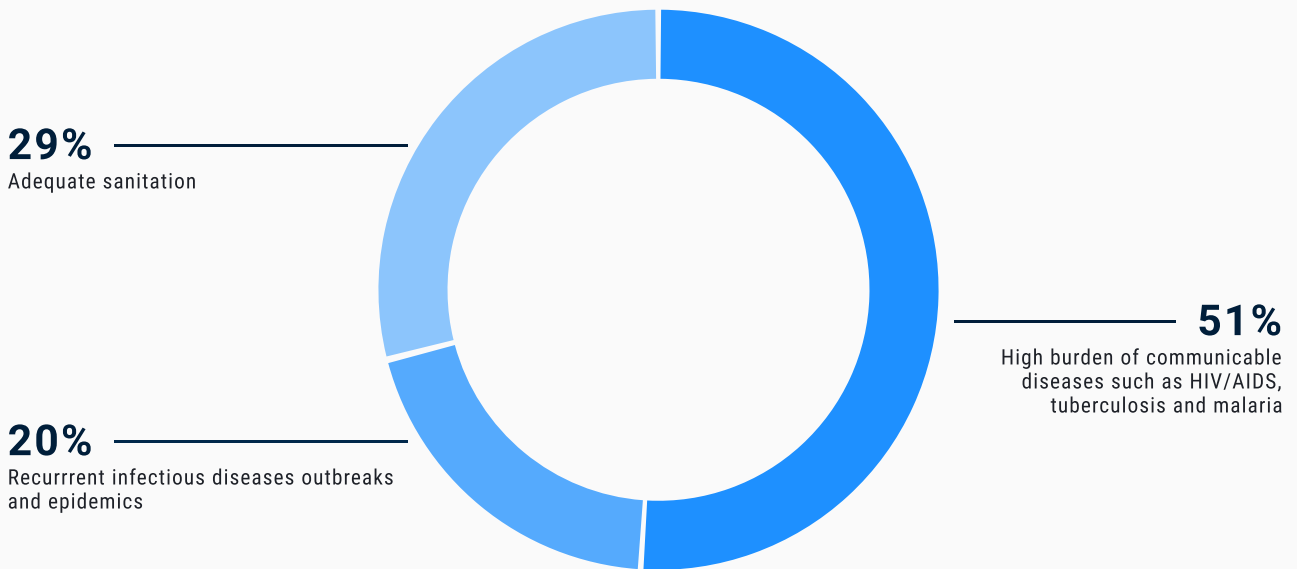
Priority areas within Reproductive, maternal, newborn and child health



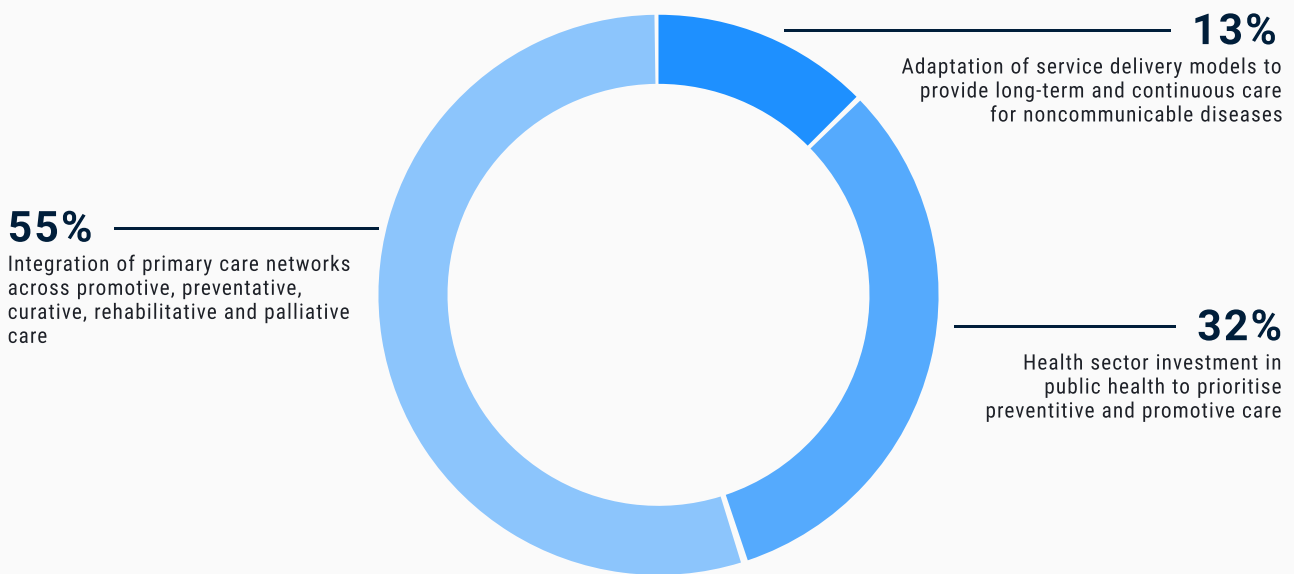
Priority areas within Service capacity and access



Priority areas within Infectious diseases



Priority areas within Noncommunicable diseases



Current health policy discussions

Current discussions concur that there are critical policy choices and issues that need to be addressed on the road to UHC. Debates arise around the implementation of UHC, whether comprehensive services or a minimum basic package should be covered[1], and the issue of prioritising disease-specific interventions or primary health care[2]. Within the literature, there is some agreement that policymakers need to accurately assess the financial capabilities of the population, identify gaps and better understand coverage needs in order to make informed choices about trade-offs and design an approach that fits the country context[3].

One focus of discussion is the need to **reform district health systems in Africa**, which have suffered due to poor governance and a misallocation of funds[4]. District health systems serve as an anchor for universal healthcare coverage in communities and are important given their wealth of local knowledge, which is a necessity when targeting funding and services to areas that need it most[5].

It may appear that poor financing and low GDP are the most significant barriers to achieving UHC. Other **significant social, economic and political factors are frequently overlooked**, however, such as high levels of corruption, insufficient human and physical resources, and weak tax structures. UHC can be achieved by low-income countries, and research shows that this is more likely when the country makes a political commitment to achieving UHC[6]. In practice, progress towards UHC enabled by progressive tax reforms and democratic governance can lead to GDP gains and even greater investment in the health sector[7].

Robust financing structures are an integral part of efforts to move towards UHC. Countries should move away from models that are dominated by foreign and private financing, towards more sustainable models[8], namely those that compel the wealthier members of society to subsidise the poorer and more vulnerable, e.g. tax systems and social health insurance. Redistributing this financial burden is a highly political process, with pressure from powerful interest groups, which makes sustained political commitment vital to achieving UHC[9].

III. Key areas for action

The focus of this section is on the four specific areas that have been identified by the expert panel;

- A. How can regional collaborations encourage innovation? P9**
- B. How can technology speed up system-level changes and improve health delivery? P14**
- C. How can countries re-prioritise healthcare spending to address system gaps? P19**
- D. How can healthcare systems further gender equality? P24**

For each of these areas we will present a short overview of the topic and why it matters, alongside views on the way forward gathered as part of the survey research executed following the AHAIC conference, and policy recommendations for each area. The information presented comes from input received from the panel of healthcare experts who supported the development of the Africa Sustainability Index, feedback gathered via a survey of stakeholders whose work focuses on healthcare systems across Africa and from a review of secondary literature.

Areas of common concern where key stakeholders will have the biggest impact

Across all four action areas there are some common priorities and trends identified by the experts and the healthcare community alike. **Accountability** and **transparency**, for example, have both begun to appear as essential values in many health systems across Africa. Several countries have made addressing government corruption an imperative and have been successful in adopting clear strategies to oversee healthcare management and delivery, creating a transparent environment that can foster accountability and trust between the public and private sectors.

Another common thread relates to the important role of data and evidence in decision-making. When governments make decisions regarding the prioritisation of health strategies and resources, adequate evidence is crucial. Establishing government health policy in all areas of health management and delivery needs to be defined by values of long-term planning, evidence gathering and rationality to ensure the efficiency of resource allocation, which is important in attaining sustainable health service coverage for all.

There is also a universally recognised need for **sustained political commitment** to implement strategies and withstand political pressure from powerful stakeholders that may cut across much-needed health reforms. **Aligning policies with the global health community** on the basis of scientifically identified priorities is an important step to achieve more sustainable health structures.

Lastly, more **effective collaboration between governments and the private sector** is consistently identified as a priority. The need to move this relationship beyond being purely symbolic seems clear, as does the need for greater focus on how this public-private collaboration can improve health delivery across the board. For example, the public sector can act as a facilitator designing, implementing and promoting large scale strategies alongside the private sector to promote more sustainable healthcare systems across the continent.



A. How can regional collaborations encourage innovation?

- What:** Regional collaboration was identified as the key to boosting regional healthcare capacity and establishing an innovative ecosystem in Africa.
- Why:** Index evidence shows African countries to have comparatively low average innovation scores against other health vital signs. Increased regional collaboration is seen to have a transformative effect by unleashing the innovative economy.
- Who:** International organisations and the private sector play a major role in facilitating interdisciplinary and cross-border collaboration that can foster collaborative regional relations. Governmental support to guide the upscaling of innovation is important to alleviate market pressures.
- How:** African countries should look to drive innovation through incentivising private sector involvement, increasing collaboration between academic institutions; and fostering continental transparency and accountability in governance which will encourage a more holistic approach to solving major problems.

About this topic and why it matters

Innovation is a fundamental driver in achieving Universal Health Coverage (UHC), but the Africa Sustainability Index shows that this is an area where Africa, as a continent, lags on the global scale. The “Innovation” Vital Sign, defined as the “advancement, access and application of novel technology” has the lowest average score of any of the six Vital Signs that make up the Africa Sustainability Index. While there are many great examples of countries adopting or even creating technologies to bring new solutions to life, there is still room for growth when it comes to the advancement, access and application of novel technology. For instance, measures related to the use of data for health purposes are relatively low. There is however a clear opportunity to create future-looking policies and legal environments targeted at adopting new technologies.

The strong indications are, therefore, that innovation needs to be improved in African health systems. The Index data shows that there are great disparities across Africa when it comes to healthcare personnel, with all countries in the Index indicating some serious capacity issues in areas such as medical doctors, nurses and midwives, dentists, anaesthesiologists, and pharmaceutical personnel. Training and education for the health force is key, and mLearning and eLearning programmes would fast track progress. Access to internet

and mobile connectivity within “Wider Factors” act as facilitators of innovation for instance, DRC, Sudan, Mozambique and Ethiopia score low in this factor, and would benefit from partnerships to support their infrastructure. Fostering innovation should be a priority among policymakers and there are already several best practices and success stories across the continent: from creating a future-looking policy and legal environment, to adopting new technologies, there are plenty of examples of excellence in innovation among African countries.

Dr. Saber Boutayeb, Professor of Medical Oncology at the University of Rabat, Morocco, believes that it is only through regional collaboration within Africa that a true innovation ecosystem can be established. He suggests that the creation of an ERASMUS-like programme for African students, and the indexation of African peer-reviewed scientific journals in international databases such as Scopus or Medline could go a long way in increasing regional collaboration. Moreover, solutions that have proven to effectively drive innovation in North Africa can be applied across the continent, i.e. building regional research clusters where countries can;

- i [Work together to provide assistance and financing to design innovative research projects](#)
- ii [Share data across national borders to allow better healthcare delivery](#)

Dr. Boutayeb emphasises that public-private partnerships are an underused but important method of spurring health experts across Africa to develop homegrown innovations. He suggests that governments should enact supportive policies to foster these types of collaborations.

Survey results: Actions to be taken

In light of the pandemic, survey respondents highlighted huge advancements being made across the region in recent months. Regional hubs for COVID-19 genomic testing were cited, for example, as evidence of local collaborative efforts that spurred innovation.

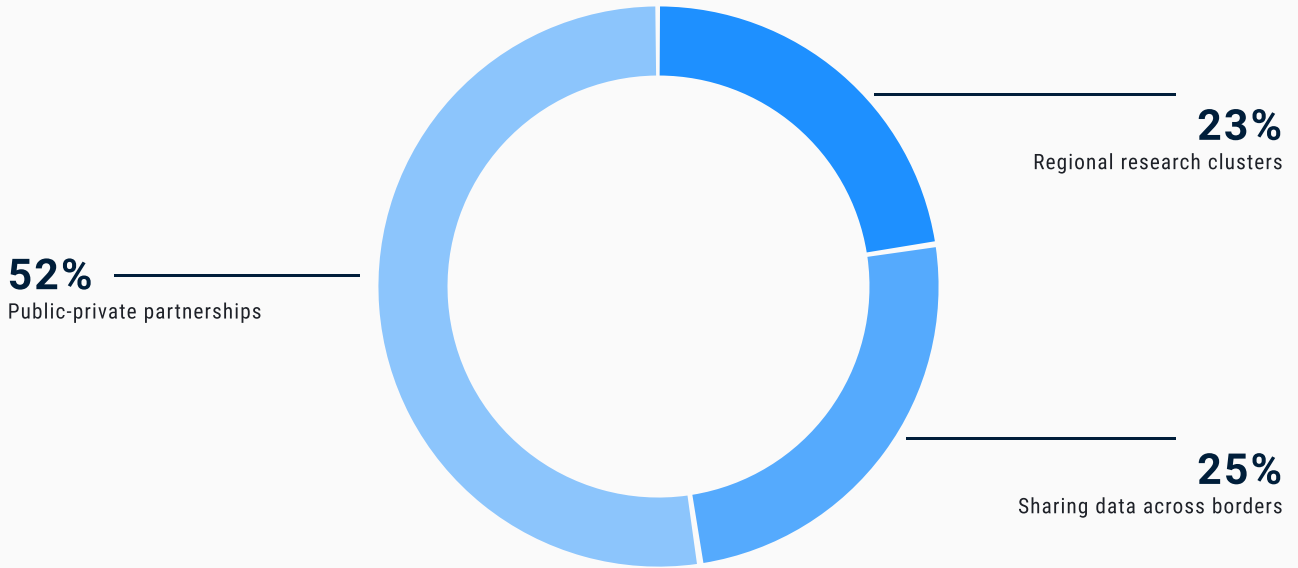
The pandemic has also shown that private sector connections need to be enhanced. Respondents acknowledged the public sector faces constraints in a constantly evolving health sector, particularly during a pandemic, and that the private sector is best placed to cope with competing demands while accelerating innovation. Over half (52%) agreed that public-private partnerships should be the biggest priority for the health sector. The importance of the private sector was further emphasised by over two thirds of respondents

(67%) highlighting this as an action area where private actors can make the most difference while the majority (52%) of respondents considered progress to have been particularly slow in this area so far.

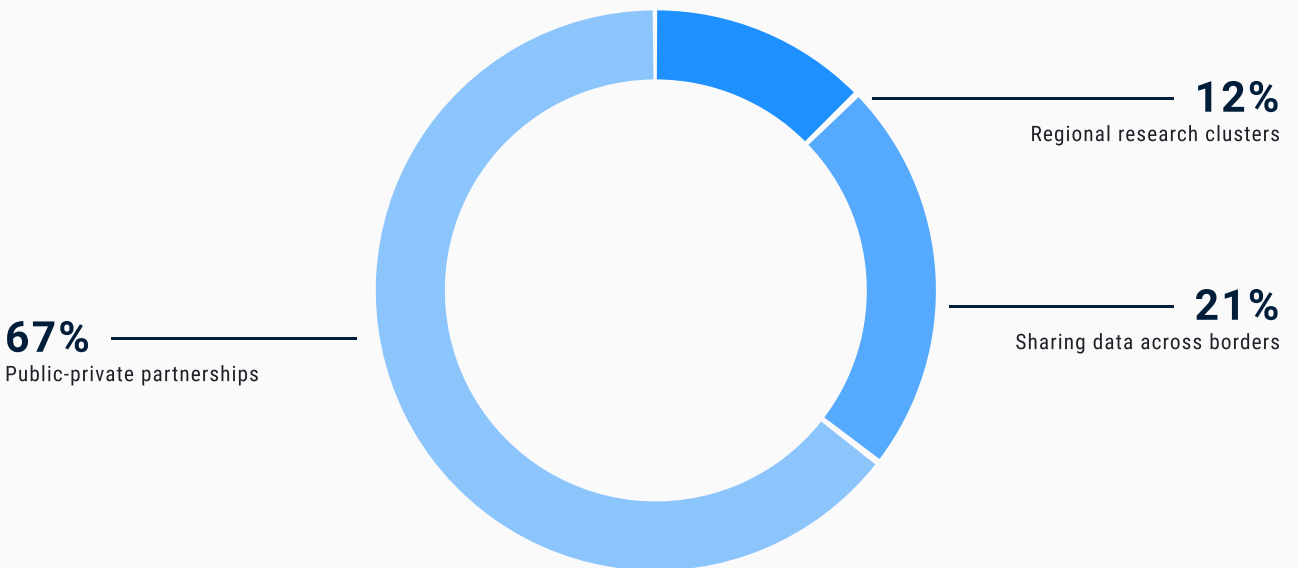
Public-private partnerships example - Coalition Against COVID, Nigeria

Private sector leaders in Nigeria created the Coalition Against Coronavirus (CACCOVID) with the support of the Nigerian Federal Government. The organisation was organised with the objective of raising public awareness for COVID-19, supporting healthcare workers and institutions, and by mobilising private sector leadership and resources. CACCOVID worked to orchestrate testing tents, and actively working alongside the Nigerian government on the response, alongside funding surveillance efforts to monitor the national spread of the pandemic.

Action areas respondents say should be the biggest priority



Action areas where respondents say the private sector can make the biggest difference



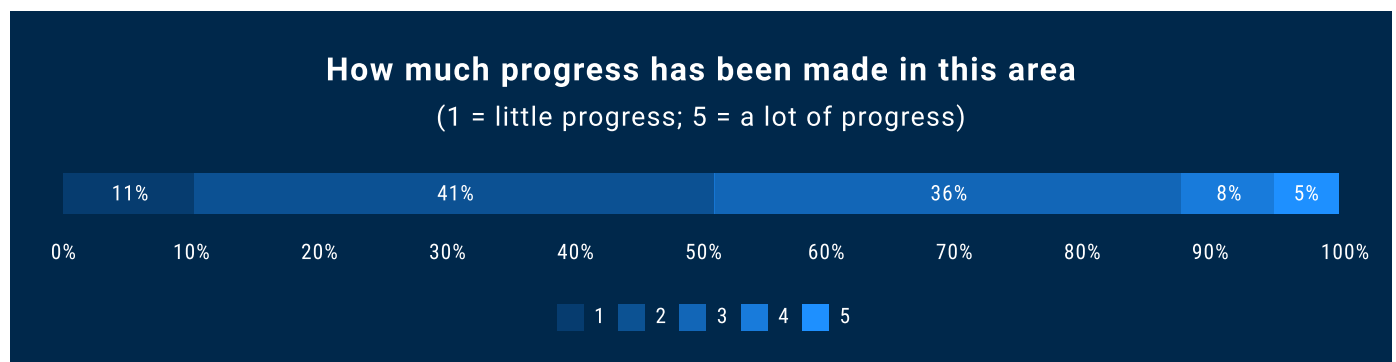
In addition, the Treaty for the Establishment of the African Medicines Agency, which was adopted by the African Union in February 2019, sets the basis of a more in-depth regional collaboration by aiming to harmonise medical regulatory efforts. It still requires 15 countries ratifications to enter into force, and should be at the forefront of a closer regulatory effort across the continent.

African Society for Laboratory Medicine and Africa Center for Disease Control & Prevention (Africa CDC) example

“We should choose one lab for each region in Africa, and [ensure] we are really capacitating that laboratory to become the centre of excellence for the region”

Mah-Sere Keita, Director of Programs for ASLM

In Southern Africa, significant strides have been made in strengthening the region’s disease detection and response through improving the regional network of laboratories. Through facilitation from the Africa Centre for Disease Control and Prevention (Africa CDC) and African Society for Laboratory Medicine (ASLM), regional laboratory experts developed an action plan for public, private, academic and individual laboratories to connect Southern Africa. Africa CDC was able to use its position as a trusted regional leader to establish a network of member country health institutions and utilise limited funds to capacitate a focal laboratory to service the region. With the rise of emerging diseases across the region and resource limitations present across Africa, this work is especially pertinent as it strengthens the critical components of disease surveillance, outbreak response and fundamental health care.



Organisations that will have the biggest impact

The World Health Organisation (WHO) is seen as the most impactful organisation in this space, as a major player in setting up health initiatives, facilitating regional clusters and cross-border data sharing. The WHO plays a multitude of roles, providing the technical backbone for working groups to identify associated health gaps that need addressing, helping solidify resources for understanding health challenges. It has also emerged as a leading facilitator in public private partnerships over the last decade, strengthening regulatory frameworks to incentivise the private sector’s involvement in the health sector.

Respondents also see academia as having a big part to play in collaborative efforts that encourage innovation by those with an active interest in Africa. Universities can elevate specific knowledge and positively affect the performance of lagging regions. Cross-continent collaborations are highlighted as having a beneficial impact on advancing healthcare in the region. Respondents point to the example of AMPATH, a Kenyan multi stakeholder partnership organisation which facilitates a medical partnership between North American academic health centres and those situated in Kenya, allowing for the bilateral exchange of ideas and experiences. Relational commitments such as this are of high value as they involve shared accountability, as opposed to a transactional focus or towards solving an issue.

About this topic and why it matters

Work in the Southern African Development Community (SADC) region was referenced as a case of best practice in regional collaboration. Here, the inter-governmental organisation came together to establish regional value chains to support industrialisation of the pharmaceutical industry. Since the treatment and prevention of infectious diseases depends largely on access to appropriate pharmaceuticals, the SADC aims to develop member states' capacity to treat diseases of major concern to public health.

The program focuses mainly on HIV/ AIDS, tuberculosis and malaria, ensuring that knowledge on diseases is shared across borders, thus levelling up health across the region. This partnership is based on an overall objective to ensure availability of essential medicines and reduce heavy disease burdens.

Some examples of the SADC's significant successes facilitating data sharing across borders include:

- a [A 2009 collaboration with WHO to collect and analyse data on pharmaceutical access, which was then used to provide a baseline for embarking on the regional Pharmaceutical Business Plan.](#)
- b [Ongoing identification of areas needing strengthening and support, comparison between countries, facilitation of sharing experiences and knowledge, and identification of common strategies.](#)

Countries currently seen as leaders & best practice examples

Respondents consistently emphasised that South Africa is a continental leader in this area, a view that aligns with South Africa's leading score in the Innovation Vital Sign of the Africa Sustainability Index. Kenya was also frequently identified as having a specialisation in sharing data across borders and in public-private partnerships, alongside Ghana. Such examples demonstrate porous healthcare systems where ideas come from a multitude of platforms and where data informs and drives evidence-based decisions.

How can regional collaborations encourage innovation?

Recommendations

Regional research clusters (Reference to OECD recommendations)

- Increase private sector involvement in research projects across Africa. As per OECD findings, the public sector's current role is excessive and public sector exit strategies are rarely in place.
- Finance regional R&D s across Africa. Increase collaboration between academic institutions via efficient external R&D funding support for the establishment of research clusters.
- Enhance African-led, cross-continental research and innovation capabilities to address unique societal challenges, leading to health and economic improvements regionally.

Public Private Partnerships (PPPs)

- Apply more scrutiny and challenge of public-private partnerships, notably their capacity to manage and pay for contracted services. Better legal frameworks to regulate partnerships are needed.
- Select PPPs that are lower-cost and have a higher development impact to maximise the cost-benefit.

Sharing data across borders (Reference to WEF recommendations)

- Enact more effective privacy laws to encourage and enable data sharing.
- Prioritise and focus on, e.g., ensure cybersecurity to position themselves as a trustworthy data transfer destination.
- Forbid governments from viewing data being transmitted across borders.
- Prioritise connectivity infrastructure, e.g., deployment of 4G networks.
- Foster accountability when it comes to data sharing between nations.
- Cross-border data sharing agreements between nations;
- Appointment of national authorities to oversee the handling of data by the private sector;
- Encouraging a transparent approach to increase trust between countries and with the private sector.





B. How can technology speed up system-level changes and improve health delivery?

- What:** Experts believe that putting technology at the heart of sustainable healthcare solutions will be a key remedy to national challenges. Africa has a growing market for technology which can be used as a tool for increasing access and quality of healthcare, both of which are priority areas in achieving UHC.
- Why:** Index data shows that countries that perform well access and quality of healthcare are leaders overall in the sustainability of their health system. There is a need for more patient data across Africa, this would be utilised to inform policy decisions and prioritise healthcare spending.
- Who:** Governments and the private sector have an important role in enabling these changes through broadening access routes to healthcare and encouraging the use of leapfrogging technologies to overcome challenges in healthcare delivery.
- How:** Leaders need to realise the potential of technology for empowering patients to manage their own health and wellbeing, and effect change in regional and national frameworks that enable and incentivise the uptake of the mHealth model. major problems.

About this topic and why it matters

Data from the Africa Sustainability Index revealed that there are currently strong variations throughout Africa in access to and quality of healthcare services. Data shows Quality and Access are two priority areas that need to be approached holistically by policymakers in order to make an impact in achieving Universal Health Coverage (UHC). For example, many Africans do not receive preventative treatment for reasons outside of their control, predominantly due to distance from healthcare facilities, or a lack of resources.

This reality is reflected in the Index results showing that countries with relatively good access to services do not necessarily come first on the quality of the health services provided, and vice-versa. On the one hand, South Africa and Morocco make it in the top 5 on both quality and access, and also top the overall Index, showing a positive correlation between good access to, quality of health services and the sustainability of a healthcare system. On the other hand, a country like Tanzania has high quality health services, but limited access, while Libya scores well on access but could improve on quality.

Seth Akumani of the United Nations Development Program in Ghana believes that, beyond developing appropriate policy solutions, a key remedy to national challenges will be putting technology at the heart of developing sustainable healthcare solutions. Taking advantage of Africa’s massive and still growing mobile accessibility could bring healthcare to people directly. There are already significant mobile initiatives that provide both medical advice and health awareness campaigns to millions of Africans, such as “Be He@lthy, Be Mobile” (BHBM) set up by the WHO and International Telecommunications Union (ITU), and Vodafone’s “Mum & Baby” program for expectant parents in South Africa. Limited infrastructure can also be circumvented through the clever use of digital solutions, such as the recent deliveries of COVID-19 tests across Ghana using drones.

Looking beyond digital solutions, Africa health experts believe there is a broader need to focus on the digitisation of medical records in Africa. Gathering more data on the health status of the population will help better inform policy decisions to prioritise investments in UHC across countries.

Survey results: Actions to be taken

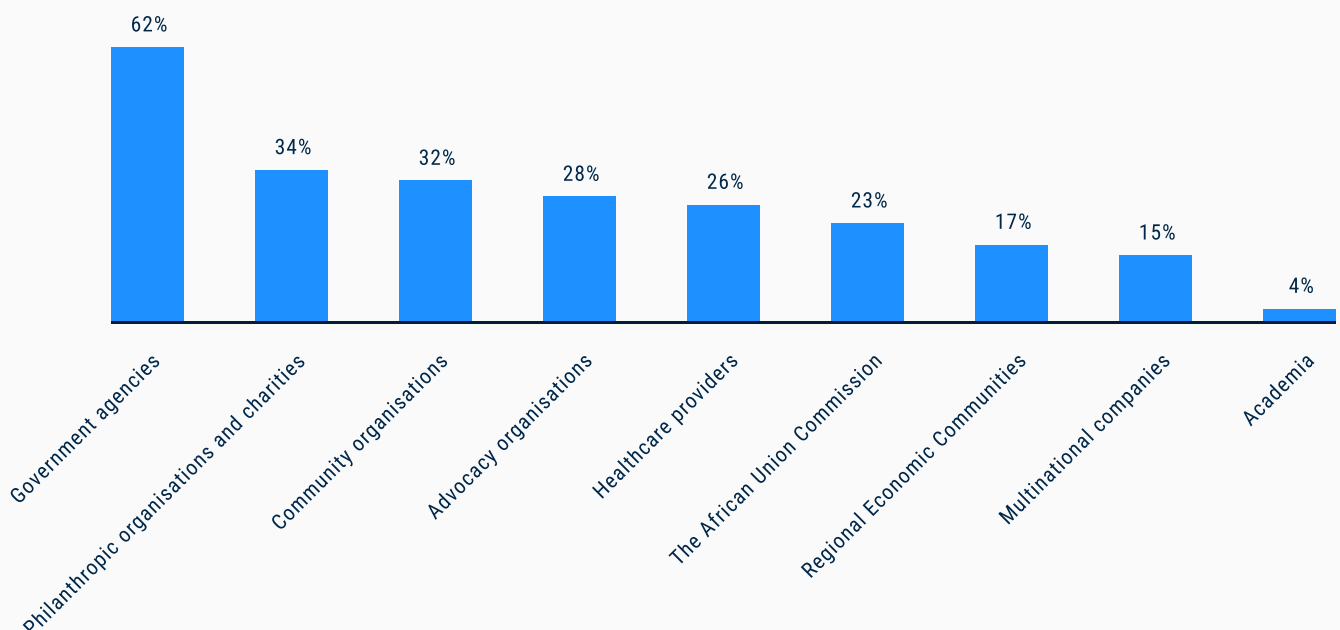
Mobile healthcare will allow broadscale access to a majority of the population, something aided by Africa’s young population who are major consumers in the mobile phone market now and for the foreseeable future. This is evident from our survey, where almost half (48%) agreed that **using mobile/ social networks to access healthcare should be the biggest priority for the health sector.**

“Geographical inequalities in Africa are stark. These often translate to inequality in access to health services. Digitalising health services can be of tremendous help to serve patients who live in hard to reach areas.”

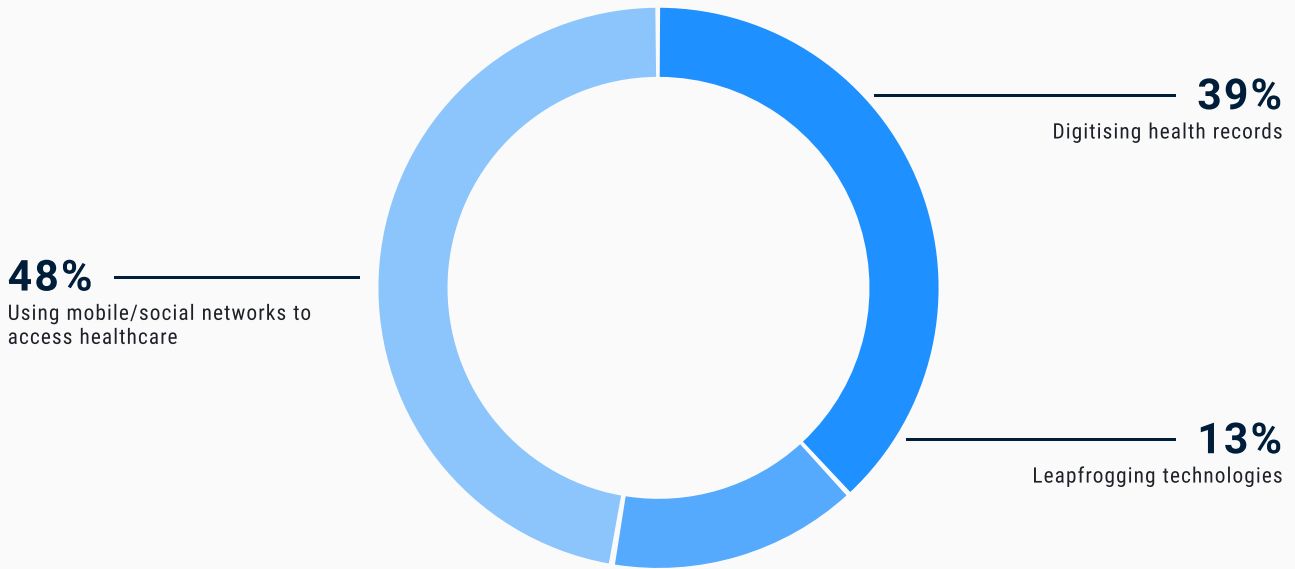
Amine Aissaoui, PhD - Research Associate at Paris Dauphine University

Furthermore, the results of our survey reinforce the importance of governments’ role in embracing and enabling digital innovations, as government agencies were perceived to be the most impactful organisation in this area by two thirds (62%) of respondents. Respondents point to Kenya’s adoption of digital health systems in public hospitals as improving hospital administration and patient care, as major improvement to hospital functions and more broadly, the country’s health system.

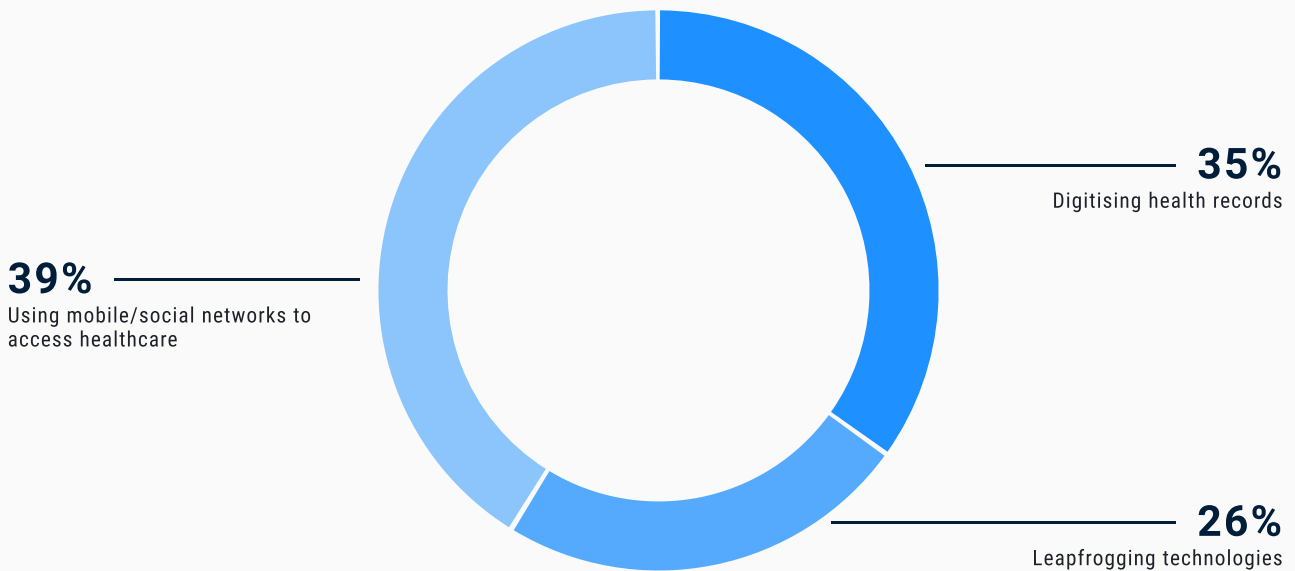
Organisations believed to be most impactful in this area



Action areas respondents say should be the biggest priority



Action areas where respondents say the private sector can make the biggest difference



Organisations that will have the biggest impact

The private sector plays an increasingly large role in boosting technological innovations that enable system-level change in healthcare across Africa. The largest portion of respondents (39%) identified using mobile/social networks to access healthcare as the area where public sector focus can make the biggest difference.

Using mobile/ social networks to access healthcare M-Pesa example, Kenya and Tanzania

When asked to think of successful examples of mobile networks being used to access healthcare, respondents suggested mobile payment system, M-Pesa, launched in Kenya and Tanzania in 2007. Access to mobile payments helped borrowers navigate uncertainties, brought on by adverse health and other unforeseen circumstances, significantly enabling better access to healthcare by reducing barriers such as payment for transportation to a medical centre and payment for medical bills. In both countries it was a huge success, with widespread adoption, and today M-Pesa has over 37 million users across 10 different countries, facilitating an entire mobile banking industry. Its widespread adoption has been especially important during the pandemic where it has been integral in the national COVID-19 response in many African markets, offering a secure and ready channel to disburse pandemic relief payments to the public.

Improving access to specialist care through virtual platform - Project ECHO® (Extension for Community Healthcare Outcomes)

Launched in 2017 in partnership with the University of New Mexico, the Extension for Community Healthcare Outcomes (ECHO) is a platform for sharing critical, timely, lifesaving information and data with healthcare workers at different geographical locations. It facilitates horizontal peer-to-peer and vertical interactions among national, regional and global experts using a combination of real time multipoint videoconferencing

and internet technologies to facilitate real-time virtual collaboration, engagement and experience-sharing among geographically dispersed multidisciplinary teams in and outside Africa. ECHO operates by linking centers of excellence, known as hubs, to healthcare workers at individual facilities, known as spokes. It links specialists at the hubs with practitioners at the spokes to create “communities of practice” in underserved areas. The platform is currently deployed in Eastern Africa, Southern Africa and Central Africa regions. The collaborations with Africa CDC and African Society of Laboratory Medicine have led to multi-country teleECHO programs connecting more than 30 countries altogether.

ECHO has been very useful for sharing information on public health events as they occur. Examples include the sharing of information about preparedness and response to the 10th Ebola outbreak in the Democratic Republic of Congo, response to Listeriosis outbreak in South Africa, monitoring the numerous cholera outbreaks that affected several African countries in 2017 and 2018, and more.

Countries currently seen as leaders & best practice examples

South Africa is seen as a regional leader in all areas, but is most frequently mentioned for ‘using mobile/ social networks to access healthcare’ and using ‘leapfrogging technologies’ to scale up the country’s health system. The Index reflects that South African policymakers have enabled a favourable regulatory environment that encourages innovation.

Another example in leapfrogging is Kenya, home to what is known as “Silicon Savannah” in Nairobi. Its growing digital ecosystem is recognised by respondents as a leader in Africa’s tech movement. The country has advanced quickly as a hotspot for technological ideas on the continent and embraced many innovative digital services, which have inspired further tech hubs to emerge across the continent.

How can technology speed up system-level changes and improve health delivery?

Recommendations

- Make the implementation of strategic innovation policies, sound infrastructure and strong technology standard-setting institutions an absolute priority.
- Allow mHealth to become a driver for change. Since it is focused on the citizen, mHealth empowers patients to manage their own health and wellbeing. Realising the potential of this innovation requires clear leadership and supportive policies.
- Restructure financial models from those which reward work being completed to those incentivising outcomes achieved. mHealth reduces costs and enables better patient outcomes, so reimbursement should reward the switch to this model and encourage uptake, e.g., through more online consultations.
- Appoint a regional- and national- level coordinator for eHealth and publish an action plan which includes the use of telemedicine.
- Introduce new legislation in the countries where e-health is still not the norm, to remove barriers to online health consultations.
- Improve the policy and regulatory landscape . In the short term such improvements can focus on improving clarity of mHealth regulations.



C. How can countries re-prioritise healthcare spending to address system gaps?

- What:** Health systems in the region face a large financing gap. As countries progress towards the Sustainable Development Goals, large sums of money are still needed to achieve these ambitious targets. Experts stress that it is not just about having more money flowing into health systems but rather using it wisely to address crucial gaps.
- Why:** Index score patterns indicate a relationship between economic strength and healthcare system sustainability as countries with progressive financing models perform well overall. As the disease burden evolves, there is ever greater importance for system gaps to be addressed.
- Who:** Governmental action to position the public sector as transparent with healthcare spending and a cohesive plan of action will be most able to raise funds through external donors. Support from international organisations can enable countries to utilise the strength of the public and philanthropic sources to scale up private investment.
- How:** Higher income African countries are regarded as having best practice cases, particularly in efforts to re-prioritise spending wisely, implementing health financing strategies that are effective for the whole population and compel wealthy groups to subsidise poor or vulnerable groups. Such best practices need to be shared across the region.

About this topic and why it matters

Financing is not everything and is not always directly correlated with a positive performance on access or quality. In fact, the Index suggests that there is sometimes little difference between the ways African countries finance their healthcare systems. However, similar approaches do not yield similar results in the sustainability of healthcare systems. Index score patterns are suggestive of a definite relationship between economic strength and healthcare system sustainability as we see most of the countries performing well in the “Financing” vital sign, doing well in the Index as a whole.

While there is a clear positive correlation between economic strength, political stability and the sustainability of a healthcare system, there are strong variations in the access to and quality of health services even among the strongest economies. This disparity suggests that, beyond financial reforms, targeted policies to address

access and quality indicators could go a long way in achieving UHC. An interesting example here is South Africa, which scores amongst the top three leaders in the “Financing” vital sign, but scores poorly (last together with Cote d’Ivoire) when it comes to “Status”, indicating persisting structural challenges for the population.

For **World Bank Nigeria Health Specialist, Olumide Okunola**, it is not simply about having more money flow into healthcare systems, but rather using it intelligently to improve quality overall. Ideally this would mean more health infrastructure, but even more importantly prioritising the poorest and most vulnerable in society – both in rural and urban settings – to ensure they have access to the best possible care.

An increase in spending should be the norm, but according to health experts, this can be boosted through forward-looking investments in preventative care across Africa. Countries will need to prepare for future epidemics involving non-communicable diseases including diabetes and cancer, which are poised to skyrocket due to behaviour changes and ageing populations. Prevention, through awareness campaigns, medical research and health education, would ultimately save countries billions with a relatively minor initial investment.

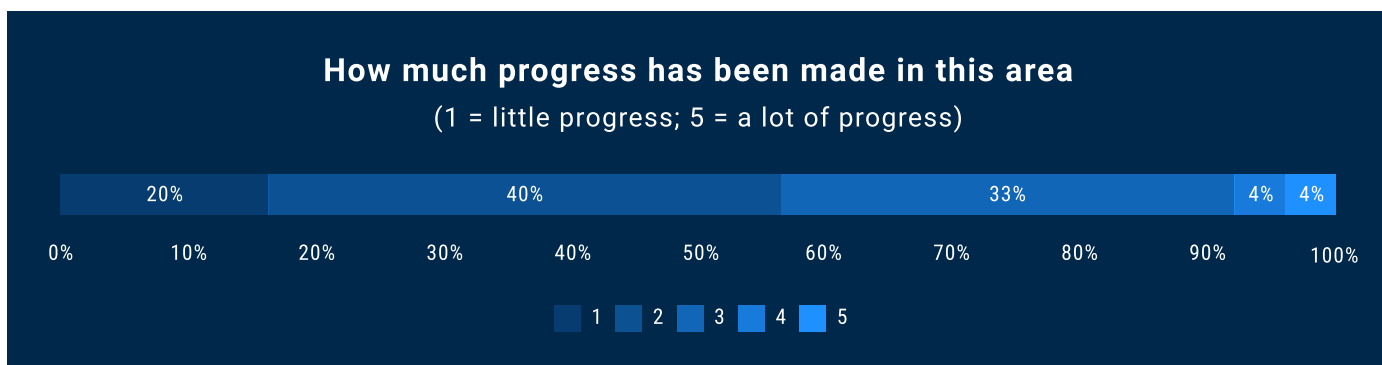
“When I think [about] how we prioritise healthcare, I think we need to go back to the basics. It should be evidence-based and we really need the capacity to monitor what happens at each community level”

- Medhin Tsehau, PhD - Country Director, UNAIDS Kenya

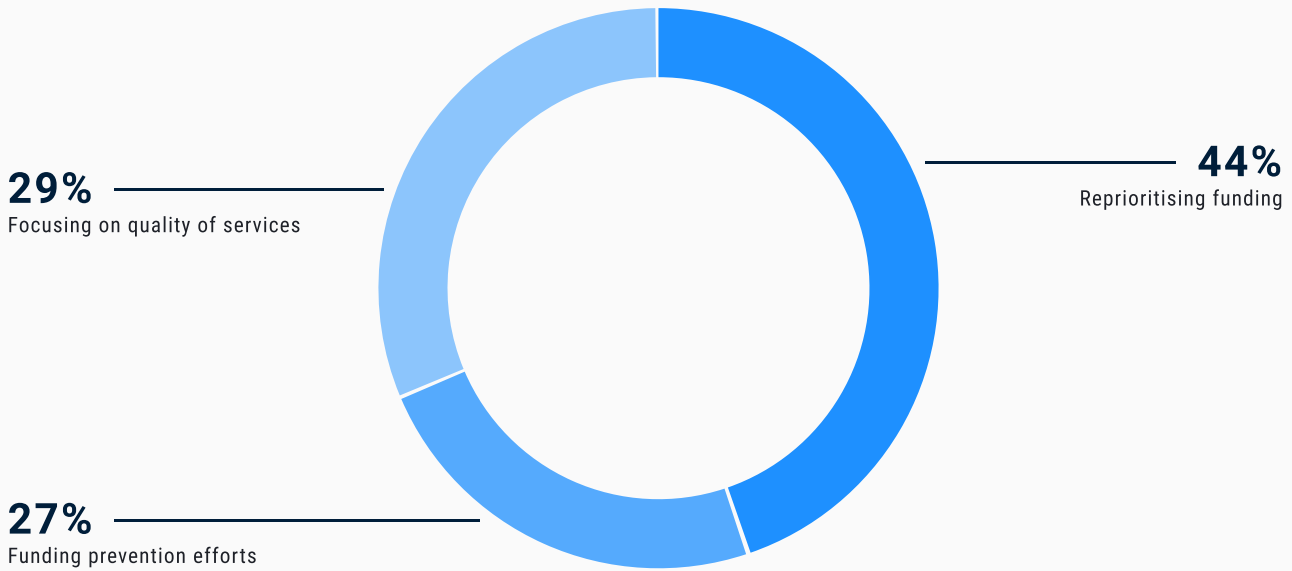
Survey results: Actions to be taken

National finance structures vary greatly across countries in Africa, with spending on health fluctuating in relation to national income, public resource prioritisation and spending allocation. Other factors such as low levels of corruption, democratisation and gender equality in public office can refocus budgetary targets to prioritise sustainable universal health services. Furthermore, the evolving health burden from communicable to non-communicable diseases requires a restructuring of financing across Africa to address system gaps. Failing this, health services will be stretched to cover the resources needed to treat large numbers of people, many of whom could have avoided illness through targeted programs to promote health and reduce the overall burden of disease.

The majority of respondents (60%) said that little progress has been made to date in this area. A plurality of respondents (44%) viewed **reprioritising funding as the biggest priority to address spending gaps**.



Action areas where respondents say the private sector can make the biggest difference

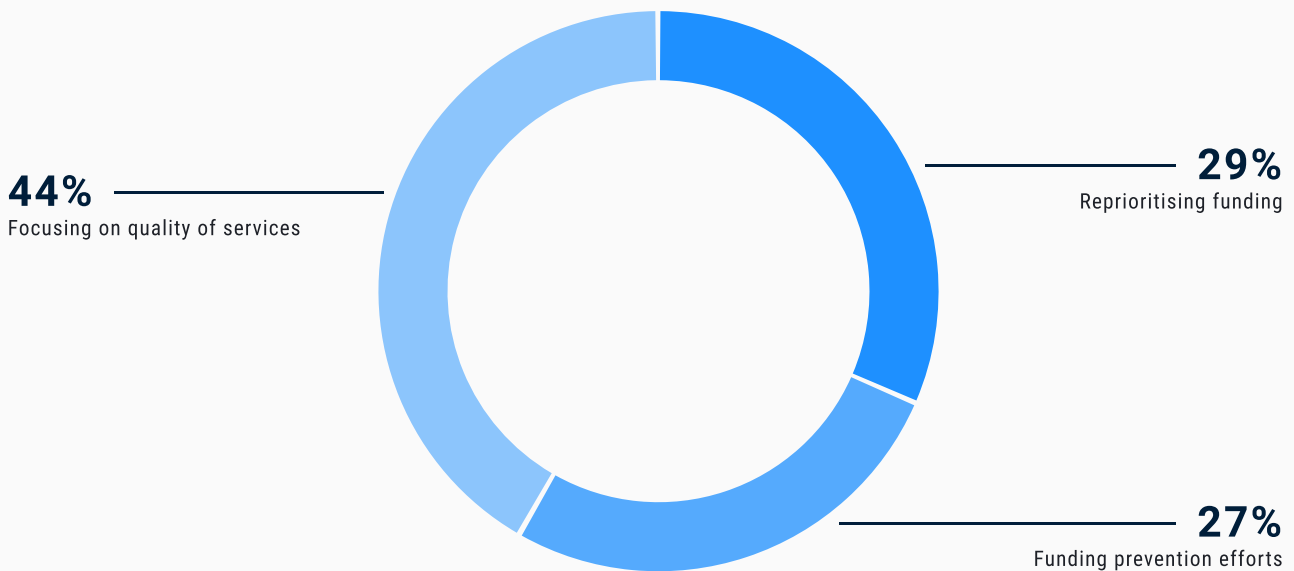


Organisations that will have the biggest impact

The private sector was perceived by respondents as a critical partner in achieving UHC through expanding access to and quality of specialised services, with the largest portion (44%) stating this is the area where private actors can make the biggest difference. Across Africa, many government-financed hospitals have benefited from contracting companies to provide management services, which has increased revenues and the availability of medicines thereby improving patient outcomes. Furthermore, financial risk protection mechanisms are being developed and implemented across Africa that are beneficial in strengthening equity of and access to services.

Many low-income African countries are expected to remain reliant on foreign development assistance for the near term. However, respondents suggested actions such as redirecting tax from industry towards the health sector and redistributing funds to facilitate greater investment in the future of healthcare.

Action areas where respondents say the private sector can make the biggest difference



Countries currently seen as leaders & best practice examples

“In Africa, there are as many different ways to seek health services as there are countries and communities. But the one essential principle is that of leaving no one behind. We need to make sure we maximise the information and the evidence used for health decisions everywhere across the continent.”

- Githinji Gitahi - Group Chief Executive Officer, Amref Health Africa

Higher income African countries are regarded as following best practice in adapting funding structures to address system gaps. South Africa was the top country referenced by respondents for its success in reprioritising funding and funding prevention efforts. South Africa has the highest GDP of those included in the African Sustainability Index, and so it is perhaps unsurprising that the country faces fewer barriers to financing healthcare, resulting in relatively high health expenditure and low out-of-pocket costs for the public.

Reprioritising funding example – Vision 2030, Kenya

In Kenya, the launching of the SDG Partnership Platform has seen particular success, aligning with the country’s Vision 2030 development strategy. The Platform brings together partners in Kenya and internationally, with support from the UN. The Vision is centred around four pillars known as “the Big Four Agenda”, which enumerate the country’s aims to: achieve food security; provide affordable housing for all; boost manufacturing; and provide universal healthcare coverage. This large-scale strategy requires a significant level of funding and resources, which has been supported by a blended financing approach, deployed with the goal of mobilising funding from public and philanthropic sources to scale up private investment in achieving the Sustainable Development Goals (SDGs).

How can countries re-prioritise healthcare spending to address system gaps?

Recommendations

- Increase funding towards disease prevention efforts within the national health budget.
- Establish national health commissions linked to national health insurance, to include relevant government departments, civil society and academics/ researchers.
- Prioritise health financing strategies that will increase access to quality health services across the full population.
- Apply financing structures which compel the wealthier population segments to subsidise poor and vulnerable groups in society.
- Sustain political commitment and accountability to deliver on financial reforms by stakeholders.





D. How can healthcare systems further gender equality?

- What:** Widespread issues of gender inequality and discrimination are putting women and girls at risk, and recent data shows a majority of African countries to be behind in these areas. Closing this gender gap is an integral component in achieving the 2030 agenda for the Sustainable Development Goals.
- Why:** The health and education of women and girls in Africa are often not prioritised. This is demonstrated in the Index where lower literacy rates have a strong link to a lower life expectancy, thus fuelling inequality and compromising Africa's long-term economic health.
- Who:** NGO-led initiatives have been successful in engaging with communities on challenges faced by women and girls and amplifying their voices to drive improvement within their local community and national system.
- How:** Inequalities are likely to be reduced when issues of access and quality in healthcare for women and girls are addressed at a local, national and regional level. Elevating women to leadership roles in the medical sector was also cited as a method to further gender equality.

About this topic and why it matters

The Index shows that there are differences across the continent on health status between men and women. One stark indicator is access to reproductive health services including family planning, antenatal care, and nursing and midwifery personnel. . While there is a positive correlation between access to these services and good maternal and neonatal mortality outcomes, the Index shows that access to reproductive healthcare and family planning is lagging in many African countries. This means that young African women are often the most affected by limited healthcare systems. South Africa scores highest in the "Access" vital sign, due in part performing well in measures assessing access to health services that impact women, whilst a need for improvement is most urgently needed in Sudan, Angola and DRC. Where access is restrained, women's health takes a toll.

Dr Glenda Gray, President and CEO of the South African Medical Research Council, explained that teenage pregnancy and poverty are inextricably linked, and that young African women are often not prioritised to receive even primary education. Index results show that adult literacy is generally higher among men than women. The link between a lack of literacy and a lower life expectancy should be at the forefront of policy-

makers' minds, as women in Africa remain less likely to be educated.

Health experts believe that elevating women to leadership roles in the medical sector could be a solution to close the gender gap in healthcare, as they will be more likely to make key policy and technical decisions that will benefit women. Of equal importance is the systematic gathering of data about women's issues such as teenage pregnancy, which would provide information for data-driven interventions.

Survey results: Actions to be taken

The standard approach to implementation of UHC usually side-lines or excludes gender issues when framing barriers, gathering data that will inform policies and implementing changes. Recent data shows that the majority of African countries are far from achieving gender equality, as outlined in the Sustainable Development Goals and 2030 Agenda for Sustainable Development which encourage reframing gender

equality as a human right. Some respondents' views reinforced what is seen in the literature, indicating that gender equality is a vital lens all health system elements should focus through.

The perception on progress made towards gender equity is polarised, indicating that it is seen as an issue that does not affect society as a whole, but mainly women who are hindered by entrenched power structures. This should be addressed by repositioning gender equity as an issue that impacts everyone and can advance countries economically and socially if both men and women are able to realise their potential.

Respondents emphasised awareness and education as areas to focus on that will help eliminate ignorance and myths which remain barriers for women's advancement. From a range of potential solutions, there was a lack of consensus on the highest priority for policy action, with two in five respondents saying that the primary focus for improving gender equity should be on **prioritising primary education** (40%), followed by almost a third who indicated **'improving reproductive health'** (32%) and **'elevating women in health system leadership'** (28%). Primary education is an important platform to empower girls through the development of independence and critical life skills, but it also can directly influence girls' health through instilling an understanding of personal health concepts - such as basic hygiene practices, nutrition and reproductive health. Respondents said governments should take responsibility for removing structural barriers that impede access to and quality of education for girls.

Survey results: Actions to be taken

"Blockades to career development for African women emerge already in childhood. Many who aspire to enter the health sector are often impeded due to a lack of education. Governments and educational institutions need to provide more for young women pursuing medical careers"

- Mah-Sere Keita, Director of Programs for ASLM

Many women in low- and middle-income countries in Africa are not diagnosed for breast, and other, cancers in a timely manner. Limited health resources and human capacity often impede women from accessing adequate health services. These resource constraints are further exacerbated by cultural stigmas attached to women-specific health conditions, which frequently act as a barrier to detection and treatment. The lingering challenges for women seeking gender-specific care underline the importance of community engagement, which can equip the public with the knowledge and skills to advocate for their own health and social issues. Our survey reflected this, as almost half of respondents said advocacy organisations (49%) and community organisations (43%), are most impactful in the area of gender equality. Therefore, as we advance towards UHC, it is critical for women to be included in every step of the decision-making process to ensure their needs are represented.

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There is also a need to achieve gender equality faster at the level of health system leadership, ensuring that women have equal opportunities to fulfil their potential. A plurality of respondents (45%) indicated 'elevating women in health system leadership' as an area where the private sector can make the biggest impact. Respondents also identified 'prioritising primary education' (30%) and 'improving reproductive health' (25%) as priorities for action. Numerous respondents felt there is a need to elevate recruitment efforts, particularly within marginalised areas, to provide opportunities for women in healthcare to participate in health policy decision making.

Prioritising primary education – UNESCO and Kano, Nigeria examples

Part of the mission of the United Nations Educational, Scientific and Cultural Organization UNESCO is to address gender disparities in education. It supports several initiatives which are focused on achieving SDG4 (ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and SDG5 (achieve gender equality and empower all women and girls) and eliminating forms of disparities. The UNESCO Dar es Salaam project empowers girls by improving access to WASH facilities, supporting 40

primary schools and 20 secondary schools in Tanzania to build toilets, handwashing facilities, changing rooms and water boreholes. Poor access to these types of facilities is a barrier to full participation in school for girls, especially for those of menstrual age, and leads to decreased performance and increased dropout rates. These activities are part of the UNESCO-UNFPRA-UN Women joint program to empower girls and young women through quality education in Tanzania.

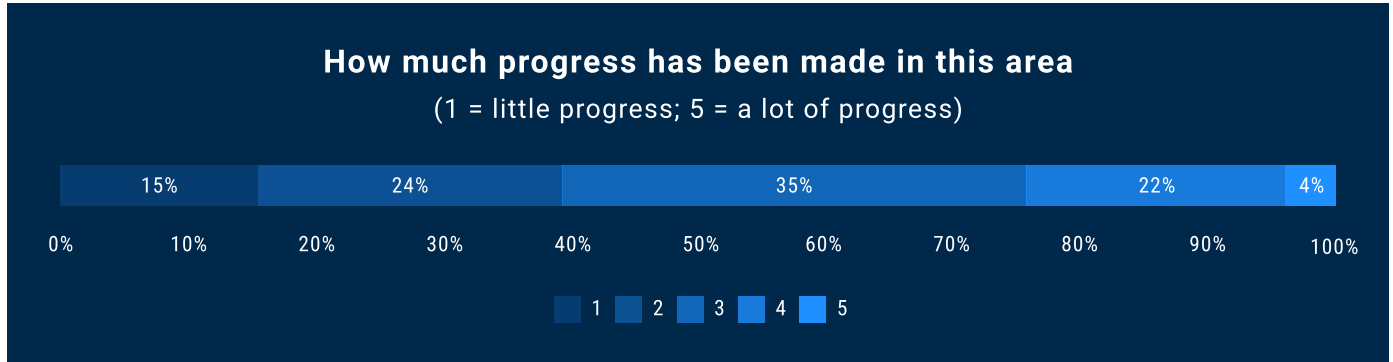
NGOs also play a crucial role in identifying challenges, driving innovative solutions and scaling up services. This is demonstrated in Kano, Nigeria which was recognised as an educationally disadvantaged area, characterised by inadequate classrooms, a lack of qualified teachers and low enrolment in rural schools and congested urban classrooms. In addition, girls faced considerable cultural and structural barriers to primary and secondary education. Strong measures were implemented through partnerships between NGOs and the Kano state government that improved the quality and access to education. Additionally, there was a drive to encourage entrepreneurship, creativity and innovation amongst girls who had failed in schools – this resulted in a boost in the educational completion rate and contributed to building resilience in the girls educational system.

Elevating women in leadership – Fund for Gender Equality and MILEAD examples

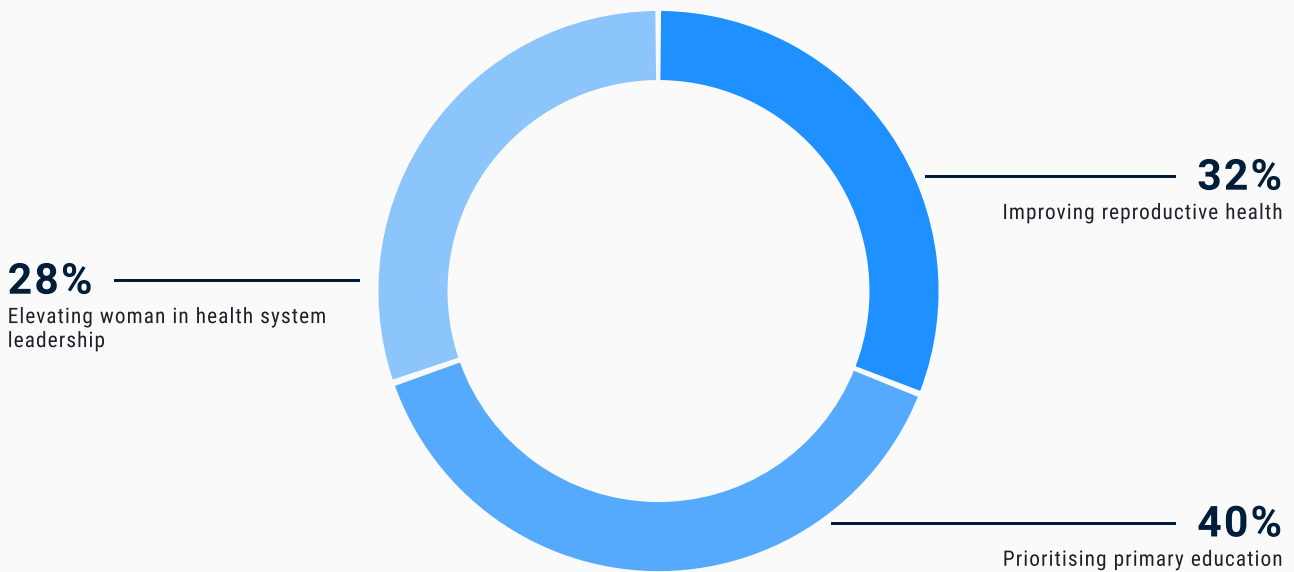
The Fund for Gender Equality is a UN Women grant making mechanism which aims to support national, women-led civil society organisations in achieving women's economic and political empowerment as well as achieving the SDGs. In Nigeria, the Alliance for Africa aims to increase the influence of women in elected or appointed positions for the purpose of increasing women's political participation ahead of the 2023 election. It also supports women politicians in demonstrating results to their constituencies, and has established a cross-party, cross-generational solidarity network of female politicians.

The Moremi Initiative Leadership Empowerment and Development (MILEAD) Program is a non-governmental organisation that operates throughout Africa. Its mission is to develop and empower young women and girls

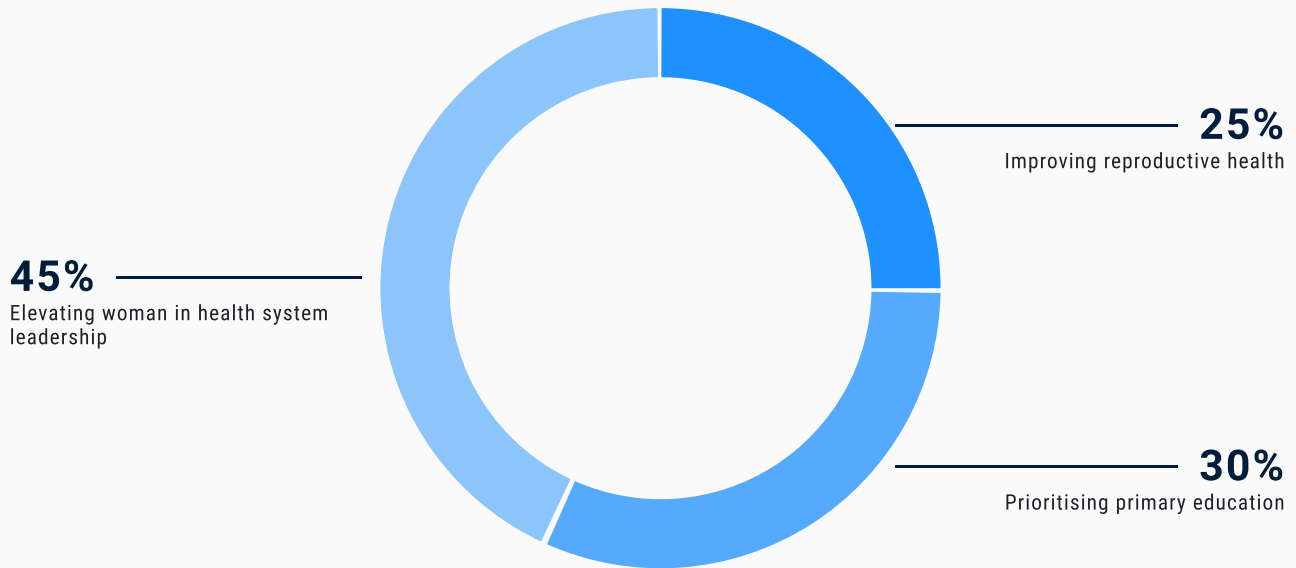
to take on leadership roles in their communities. Originally a Ghana-based leadership program it has grown to a pan-African program. The organisation’s activities emphasise identifying, engaging and equipping young African women and girls with skills and networks needed to advance the rights and interests of women and girls. The organisation runs the MILEAD Fellows Program a year-long leadership development program, that provides training to build skills, strengthen networks, and support women’s leadership on critical issues. They also link young women with women leaders facilitating mentor relationships and creating a diverse network of support that furthers gender equality.



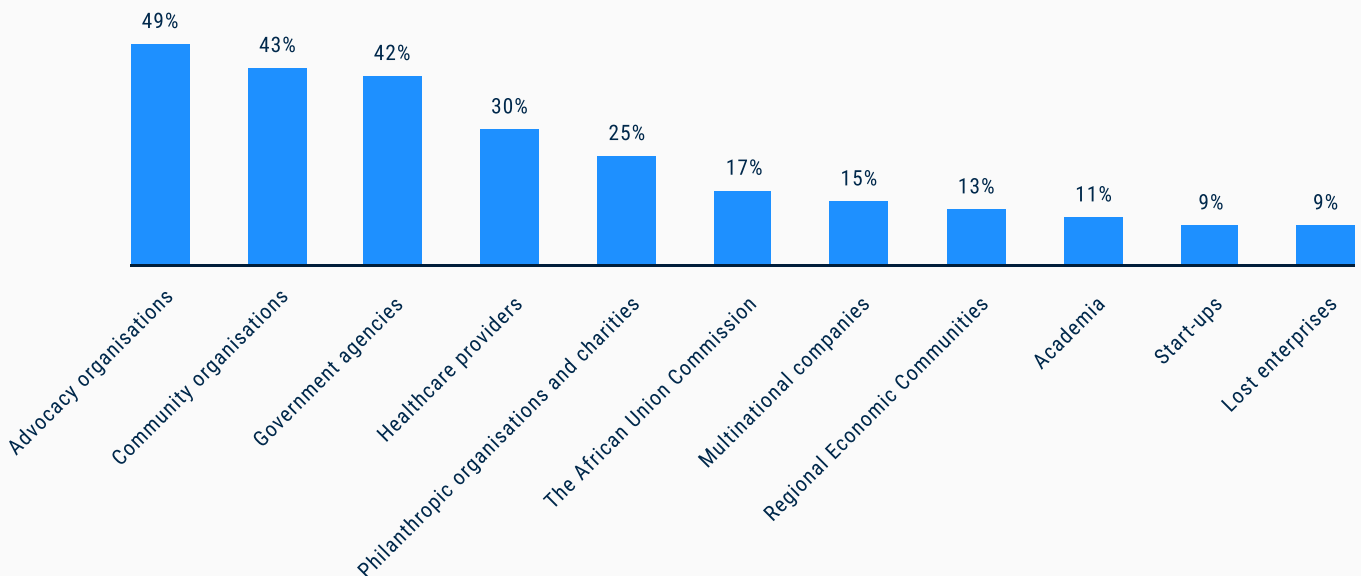
Action areas respondents say should be the biggest priority



Action areas where respondents say the private sector can make the biggest difference



Organisations believed to be most impactful in this area



Countries currently seen as leaders & best practice examples

Rwanda was frequently mentioned by respondents as an area of best practice. Here, women’s voices are being amplified through NGO-led initiatives such as NCD Alliance’s Our Views, Our Voice project which awards women in health services leadership roles who drive improvement within their local community and are critical to transforming a more equitable system.

South Africa was most frequently cited as an example when looking across gender equality action areas, this is also shown in the Index results. South Africa has the second lowest gender gap in adult literacy. The country also scores well across broader measures that have an impact on health outcomes for women, scoring top in family planning, demonstrating a relatively high level of antenatal care and percentage of births attended by skilled health staff, and a correspondingly low neonatal mortality rate.

How can healthcare systems further gender equality?

Recommendations

- Prioritise access to health services for girls and women, such as reproductive health and family planning.
- Create a system to easily report incidents of gender-based discrimination in healthcare delivery and services.
- Adopt policies that elevate women in health system leadership, including supporting enrolment of girls and women in STEM and management programs.
- Build gender equality in the workforce and remove restrictions to work. Affordable, good quality childcare and adequate maternity and paternity leave are essential to achieve this.
- Increase equitable access to schooling by addressing structural barriers to education and participation in society, including access to WASH (Water, Sanitation and Hygiene) facilities and safe transportation options. This can also be done through:
- Prioritising primary and secondary education for girls. Adopting policy that ensures that all girls remain in full-time education until at least year 16. Hiring and training female teachers across all levels of education. [Reference to [IMF recommendations](#)]
- Educate and include boys and men in discussions to addressing barriers to care for women and girls at a societal level (e.g., expand the pool of providers, provide information to women on how and where to access abortions, address stigmas and taboos, etc.



IV. Background: About the Africa Sustainability Index

What is FutureProofing Healthcare Index and why was it initiated?

FutureProofing Healthcare is an initiative that aims to accelerate and support the future evolution of healthcare by tracking and measuring progress towards more sustainable, personalised, integrated, and digital health systems. The initiative is supported by Roche and designed by leading, independent experts to drive discussion on the interventions needed now, to futureproof healthcare systems and ensure patients get the care they need in the coming decades.

Now in its third year, the FutureProofing Healthcare initiative is expanding outside of Europe, to include a new Sustainability Index for Africa. The Sustainability Index is a first-of-its-kind, online policy tool that provides a unique overview of the current status of 18 health systems across Africa, at a time when healthcare systems are under increasing pressure as life expectancy improves, the demand for healthcare services increases, and the rise in noncommunicable diseases doubles the burden already in place from communicable diseases.

The FutureProofing Healthcare initiative aims to facilitate policy discussions on these challenges by identifying and bringing together available data about health system inputs, outputs and outcomes to better understand health system sustainability across Africa. By sharing available data in an expertly curated, easy-to-navigate and digestible manner, the Index helps to facilitate critical changes in health system design and delivery now and in the future. All data can be consulted and explored directly on the FutureProofing Healthcare website: <https://futureproofinghealthcare.com/en>

Construction of Africa Sustainability Index

The Africa Sustainability Index was designed by a panel of experts from health systems, international organisations, think tanks and academia from across Africa. It includes data for the following 18 countries: Algeria, Angola, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Libya, Morocco, Mozambique, Nigeria, Rwanda, South Africa, Sudan, Tanzania, Tunisia and Zambia. It also allows comparison with an additional 8 countries: Egypt, India, Jordan, Lebanon, Saudi Arabia, Turkey and the United Arab Emirates.

As part of our rigorous methodology, we ensure that the data captured is recent, credible and publicly available for the countries included across our wide range of measures. As a result, we limit the number of

countries for which data could be missing in order to be included in the Index. The standard limit was no more than five countries with missing data. This meant that our team and expert panel supporting the development of the Index needed to balance as many countries as possible that had an availability of data related to the measures.

The role of expert panelists in the Index-development process

The Africa Sustainability Index was created in collaboration with independent experts from health systems, international organisations, think tanks and academia from across Africa. The independent experts were selected based on recommendations from Roche, for their expertise in a certain area, as well as their ability to bring a regional perspective to the panel's debates. The expert panel rigorously guided the building of the Africa Sustainability Index to ensure the final tool is as neutral, relevant, and wide-reaching as possible, and to drive a future-focused conversation.

Our expert panelists are:

- [Dr Githinji Gitahi, Global CEO and Director General, AMREF Health Africa Group](#)
- [Prof. Glenda Gray, President and CEO, South African Medical Research Council, South Africa](#)
- [Mah-Sere Keita, Director of Programs, African Society for Laboratory Medicine](#)
- [Olumide Okunola, Senior Health Specialist, World Bank Nigeria](#)
- [Dr Saber Boutayeb, Professor of Medical Oncology, University of Rabat, Morocco](#)
- [Seth Akumani, Head of Exploration Accelerator Lab, UNDP Ghana](#)
- [Medhin Tsehau, UN Resident Coordinator, Kenya](#)
- [Dr Yaw Asante Awuku, President of Ghana Association for the Study of Liver and Digestive Diseases, Ghana](#)
- [Dr Yenew Kebede Tebeja, Head of Division of Laboratory Systems and Networks, Africa CDC](#)

Description of Vital Signs and measures

The Africa Sustainability Index evaluates 76 measures across six Vital Signs, drawing over 550 data points from 17 sources to compare performance across 18 countries. Measures, Vital Signs, and Index score are all based on robust, credible, third-party data.

The Index assigns each country an overall score based on their performance across all dimensions. The six Vital Signs are:

- 1 [Access: Equitable access to and coverage of healthcare to those that need it](#)
- 2 [Financing: Funding levels that are adequate and sustainable](#)
- 3 [Innovation: Advancement, access and application of novel technology](#)
- 4 [Quality: Offering uninterrupted quality-assured services](#)
- 5 [Health Status: The overall health of a population](#)
- 6 [Wider Factors: Factors outside of the healthcare system that impact outcomes](#)

Methodology of retrieving publicly available data

Because all data included in the Index is secondary data, it reflects many different methods of data collection. Given the challenges in cataloguing data across more than 50 countries, there will undoubtedly be debates over the patterns shown in some measures. Naturally, questions may be raised about individual measures – whether they paint an accurate picture of the strength of a healthcare system, whether they can be trusted as they are reported, or if they are the most appropriate way to address a specific issue. Understanding that such debate is a positive development that could drive improvement in future data collection, our approach has been to include as many measures as possible, with the view that the comprehensive scale of the data repository will enable a more complete picture.

At the very start of the process, the FutureProofing Healthcare Expert Panel established several criteria that a measure should meet, before being considered for inclusion:

- I Coverage (all or most Member States included)
- II Convertibility (ability to be rescaled)
- III Trackability (time series, or likelihood of being measured again in future)
- IV Relevance (to a Vital Sign)
- V Credibility (source and method)

Many measures were considered, but not included, as they were judged by the expert panel not to have met the criteria above.

Topline results

The African region presents stark contrasts when it comes to the sustainability of healthcare systems.

As African countries determine how to accelerate Universal Health Coverage (UHC) goals and progress on the United Nations Sustainable Development Goals (SDGs) in the face of the COVID-19 pandemic, the results of the Index indicate that UHC can be achieved by looking not only to fix existing financial barriers to access, but at broader issues such as equity of access and wider societal and economic factors.

Overall, the results show that North and East African countries tend to perform better overall, while Sub-Saharan countries lag behind on many Vital Signs, in particular on Access and Wider Factors.

The results of the Financing Vital Sign suggest that there is little difference between some countries' health care financing models. However, this similar approach does not yield similar results across all Vital Signs. While there is a clear positive correlation between economic strength, political stability and the sustainability of a healthcare system, there are strong variations in Access and Quality Vital which suggests that, beyond financial reforms, targeted policies in these areas could go a long way in achieving UHC. Countries with relatively good access to services do not necessarily top the Index for the quality of the health services provided, and vice-versa. South Africa, Zambia and Morocco make it in the top 5 for both Vital Signs, showing good progress towards achieving UHC, but the Index tells us that a country like Tanzania has high quality health services, but limited access, while Libya on the other hand scores well on access but could improve on quality. These are two priority areas that need to be approached in a holistic way by policy-makers in order to make an impact in achieving UHC.

Another key insight centres on Innovation, which has the lowest mean score of the Vital Signs. Innovation was defined by the expert panel as 'advancement, access and application of novel technology.' While there are many great examples of countries adopting or even creating technologies to bring new solutions to bear like in South Africa, Rwanda, Ethiopia and Tanzania who scored well, there is still room for growth when it comes to the advancement, access and application of novel technology. Here, the opportunity is to create a future-looking policy and legal environment targeted at adopting new technologies, as some of these countries mentioned have. This is an area closely linked to achieving UHC, as powerful data and technologies can lead to better outcomes. Today, health facilities, even in rural areas, are increasingly equipped with mobile devices, health information systems, and other tools that not only collect health data but that target the right health worker with the right information for timely and effective action.

All countries, from the strongest performers to the weakest, have opportunities to improve based on the findings and best practice outlined in the Index. Cross-border data- and knowledge-sharing are essential to democratise data and access, reduce health inequities, and support the delivery of universal health coverage.

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