unicef
for every child

For Every Child, A Connected Health Worker

The Opportunity
Investing in HealthConnekt

The HealthConnekt initiative presents a unique investment opportunity for both the public and private sector to equitably enable the ongoing digital transformation of health services across the globe. While the last few years have demonstrated the unique opportunity to dramatically enhance reach and improve quality of health services in lower-and-middle income countries, there remains a significant risk that new barriers will contribute to marginalized and remote communities being left behind. Connectivity is quickly becoming recognized as a "super determinant" of health, playing an increasingly outsized role than more traditionally recognized social determinants such as education and employment.[1]

By 2030, HealthConnekt aims to map and analyze access to every health service delivery point in the world, including at Community and Primary Health Care level. This will include assessing access to reliable electricity and connectivity, identifying and quantifying under-served and unconnected populations, creating investment cases for financing, and offering tools for monitoring the provision of internet services.

By investing in equitable access to digitally enabled health services, HealthConnekt will contribute to ensuring that all populations benefit from digital tools that increase quality and efficiency of healthcare and public health delivery, improve data management and usage, strengthen pandemic preparedness including surveillance of communicable diseases and community reporting, make possible personalized health care including through telemedicine, and leverage new technologies such as AI-augmented platforms.

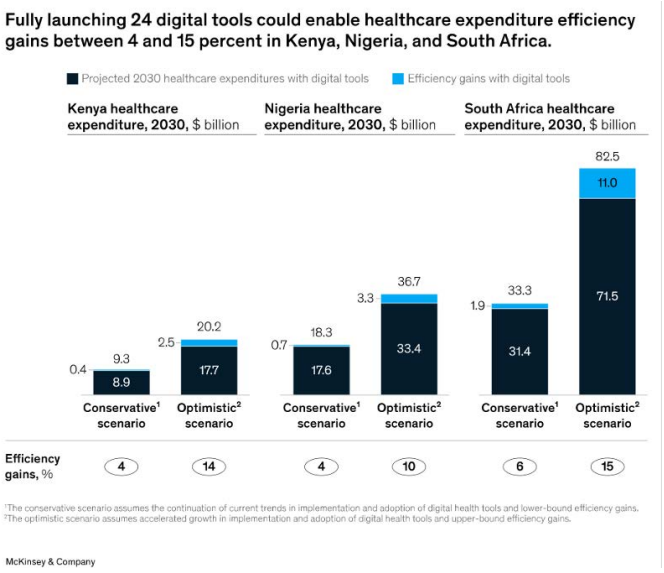
HealthConnekt 2030 goals

1 Million primary healthcare facilities
10 Million health workers

The Context
The Need for Sustainably Financed Internet Connectivity

The global response to COVID-19 catalyzed and accelerated the digital transformation of health services in all contexts, from high income, industrialized countries to fragile nations regularly dealing with acute emergencies. The global digital health market size is estimated to be over $262 billion by the end of 2022 and expected to grow to nearly $779 billion by 2030.[2] Some of the fastest growth is happening in LMICs. McKinsey, in a 2023 report, estimates that by expanding their use of digital health tools, African health systems could realize up to 15 percent efficiency gains by 2030 and reinvest the savings to improve access and outcomes.[3]

Fully launching 24 digital tools could enable healthcare expenditure efficiency gains between 4 and 15 percent in Kenya, Nigeria, and South Africa.



Quality-of-care improvements can also be expected. In 2018, a World Bank study found that only about 45 percent of clinical guidelines for many common conditions were followed in several African countries.[4] Adoption of digital platforms incorporating WHO SMART Guidelines will

[1] www.samhsa.gov/blog/digital-access-super-determinant-health
[2] www.precedenceresearch.com/digital-health-market
[3] www.mckinsey.com/industries/healthcare/our-insights/how-digital-tools-could-boost-efficiency-in-african-health-systems
[4] https://documents1.worldbank.org/curated/en/482771530290792652/pdf/127816-REVISED-quality-joint-publication-July2018-Complete-vignettes-ebook-L.pdf

systematize compliance with clinical guidelines, improving quality-of-care and patient safety.

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Yet as many of the promises of digital health are nearer to being realized, there is a growing risk that the digital divide – and corresponding access to digitally enabled health services – will create significant new access barriers for already marginalized communities. Nearly 45% of sub-Saharan African's live further than 10 kilometers away from network infrastructure essential for online services including healthcare[5], and the continent has the largest internet coverage gap (those living in areas without mobile broadband coverage) at 19%, which is more than three times the global average[6]. Furthermore, WHO estimates that only 23% of health-care facilities in sub-Saharan Africa have access to reliable, affordable electricity[7] which is often a prerequisite for connectivity.

Moreover, even when there is sufficient infrastructure in place, costs are still unaffordable for many governments and citizens, particularly recurrent expenditures. With digital systems increasingly being relied on for national health security, including infection prevention and control, as well pandemic preparedness and response, it is critical that governments establish domestic financing strategies or partnerships to address this.

"Connectivity and digital innovation are at the core of our digital transformation strategy. Access to the internet is a key enabler of our vision to extend universal quality care to all by 2030."

- Dr Ahmed Ogwell Ouma, Africa CDC Director ai.

In May 2023, the Africa CDC launched their Digital Transformation for Health Strategy. HealthConnekt Africa, co-led with UNICEF, is highlighted as one of their Flagship Initiatives. Complementing their Public Health Order, HealthConnekt Africa is expected to contribute to continental priorities including strengthening African institutions for public health, strengthening the public health workforce, and promoting action-oriented and respectful partnerships. The initiative will start with a small group of pioneer African Union member states and communities, which will see their health facilities connected to the internet and health workers equipped with smart devices, allowing them to improve the quality of care provided to their clients through access to vital online resources.

[5] www.pewresearch.org/global/2018/10/09/internet-use-is-growing-across-much-of-sub-saharan-africa-but-most-are-still-offline
[6] www.gsma.com/r/wp-content/uploads/2021/09/The-State-of-Mobile-Internet-Connectivity-Report-2021.pdf
[7] https://apps.who.int/iris/bitstream/handle/10665/156847/9789241507646_eng.pdf

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UNICEF's Response - HealthConnekt Global

To address the challenges posed by the lack of internet connectivity in the healthcare sector, UNICEF is launching the HealthConnekt Global initiative. HealthConnekt is powered by the UNICEF-ITU Giga partnership, which is now active in 19 countries, has mapped over 1M schools, mobilized over $22 million in direct funding, and supported governments in low- and middle-income countries to raise more than $600 million, including loans from development finance institutions and international financial institutions, as well as financing from the private sector. Key activities in these countries include the mapping and modeling of the school connectivity configurations with various connectivity technology options, and analyzing policy, regulatory, and innovative financing opportunities for sustainability and impact.

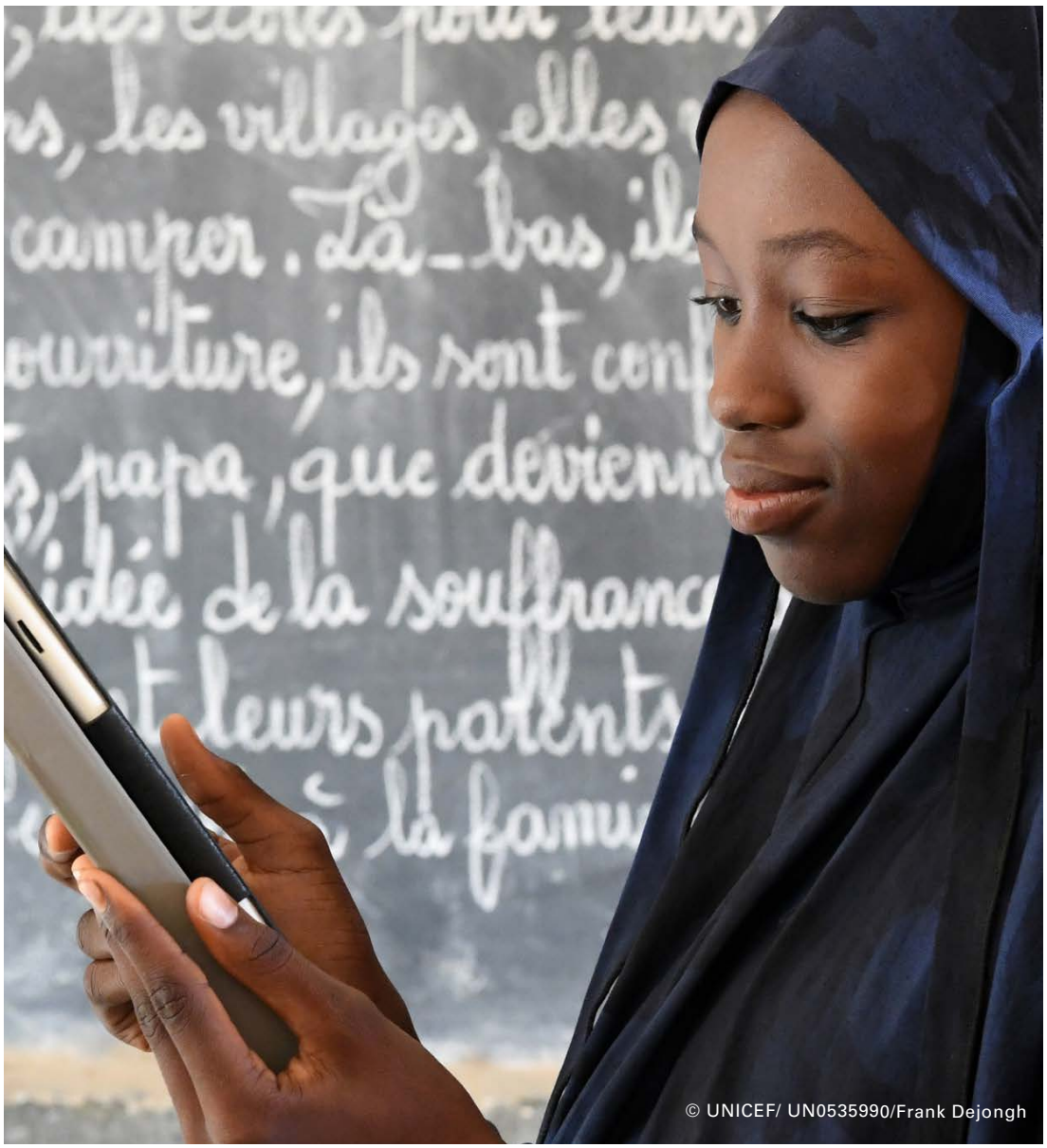
HealthConnekt will initially focus on Africa as a UNICEF supported Flagship Partnership with the Africa CDC under their Digital Transformation for Health Strategy. HealthConnekt's primary focus will include the following:

- Assessing and strengthening the quality of national Health Facility Master Lists (HFML), including strengthening institutional processes and mechanism to maintain quality HFML, and ensuring that the platforms utilized by countries to host, manage, updated, curate and share master lists are fit-for-purpose and align with agreed minimum requirements, and that data sharing agreements are in place.
- Analyzing, updating and mapping the data fields of countries HFML to include connectivity/electrification service levels, leveraging government official datasets and innovative methods such as Artificial Intelligence and big data
- Utilization of innovative technologies to enhance HFML records, such as AI-assisted automated image recognition applied to satellite imagery to complete and quality check for geo-location information and establish mechanisms and processes for such information to feed directly into HFML repositories for continuous update and curation of HMFL.
- Analyzing country infrastructure, equipment guidelines and budgets for health facilities and health workers (including CHWs), including electricity, ICT equipment (PCs, Tablets, Mobile Phones), connectivity, and support / maintenance / replacement plans.
- Conducting equity analysis and developing Investment Cases and Blended Financing Models. This will include expected Return on Investment (ROI) in terms of improvement in health outcomes by increasing access to health services by investing in connectivity at PHC level, based on an equity analysis.
- Acting as a financial catalyst and convener to provide Member States, development partners and private actors with an arena to design and finance relevant connectivity solutions, including end user smart devices.
- Offering tools to support monitoring connectivity service levels and contract implementation.

HealthConnekt is not intending to lead the actual deployment of connectivity infrastructure, from fiber to devices, but rather provide information, investment cases and tools to existing partners and initiatives already actively engaged in this space to strengthen and accelerate these efforts. This includes USAID's HETA and Digital Invest initiatives, as well as Africa CDC's PHC Digitalization Flagship. Furthermore, HealthConnekt is expected to work closely with and contribute to several other regional and global initiatives, including the WHO's Global Health Facilities Database (GHFD) and Digital Clearing House programmes, the Global Fund's Digital Health Impact Accelerator (DHIA) and Resilient and Sustainable Systems for Health (RSSH) programmes.

Why partner with UNICEF

Partnering with UNICEF on the HealthConnekt initiative provides an opportunity to make a significant impact on children's health and well-being worldwide. UNICEF has a strong track record of successfully implementing initiatives that improve children's lives, and the HealthConnekt initiative is no exception. By partnering with UNICEF, private and public sector entities can leverage UNICEF's expertise, resources, and networks to achieve their shared goals of improving healthcare services and outcomes for children and their families; ultimately contributing to achieving universal health coverage, one of the Sustainable Development Goals, and promoting health equity and social inclusion.



How the Private and Public Sector can Invest and Act

The private and public sectors can invest and act to support the HealthConnekt initiative by providing financial resources and technical expertise to contribute to the analysis and strengthening of HFMLs, applying innovative data science approaches to improving data quality and accessibility analysis, developing costing and blended financing models, offering low-cost connectivity solutions, supporting regulatory frameworks and competitive procurement processes, and sharing best practices. They can also act by participating in UNICEF-led convenings, sharing expertise and resources, and advocating for increased access to internet connectivity in health facilities and for health workers.

While the estimated costs to deploy HealthConnekt per country vary based on local capacities, availability of primary data, and size, for most countries – based on the experiences of Giga – costs are generally between $300k-$600k. As such, we approximate:

· For $4.5m to $6m, HealthConnekt can be deployed in 10 countries.

· For $30 to $48m, HealthConnekt can be scaled up to the target 80 countries.

Projected Results

By 2030, UNICEF aims to support at least 80 countries to have functional and well managed HFMLs with at least 95% of all Health Facility and Primary Health Care delivery points captured, with corresponding access and equity analysis, and investment cases. UNICEF also aims to contribute through HealthConnekt to the connectivity across 500,000 health facilities and 5,000,000 health workers.

Investing in the HealthConnekt initiative is expected to lead to significant improvements in health outcomes and service availability. By connecting health facilities and health workers, HealthConnekt will enable more efficient communication, improved data management, and better decision making in the healthcare sector. This will lead to better health outcomes for children and adults alike. Through the UNICEF-led initiative, National Governments will have access to financing strategies and partnerships to address the digital divide and provide better healthcare services to marginalized and vulnerable communities.

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