TECH-DRIVEN PRIMARY HEALTHCARE INNOVATION IN AFRICA – KEY ENABLERS AND CONSTRAINTS

19 May 2020 – Mainstream Press Release

In a series of five in-depth research reports released over the past few weeks, Percept – a trans-disciplinary consultancy providing data-driven technical and strategic advice, – put the spotlight on tech-enabled primary healthcare (PHC) innovations in Sub-Saharan Africa. Highlighting the immense potential of these innovations to improve efficiency, access, patient experience and health outcomes, the briefs also highlight key enablers and constraints within the region's resource-constrained healthcare setting.

Focusing on a diverse range of innovations that were rolled in countries like Rwanda, Uganda, Kenya and Mozambique, they investigate each application's value proposition, uptake and potential scalability – and the factors that promote or undercut its success.

"Across the board, clear themes emerged, and enabling factors that consistently contribute to innovations fulfilling the goal to expand access to primary healthcare include partnering with governments; sustainable sources of funding; consumer trust; and keeping tools simple while adapting them to meet specific technological and logistical challenges," says Shivani Ranchod, CEO of Percept.

There are primary constraints prevalent throughout the region, which require tech-enabled innovators to fine-tune the offerings they make to accommodate local limitations. It is important that these regional contexts are taken into consideration, such as limited network coverage, limited or costly mobile data, poor connectivity, limited access to electricity, low smartphone availability, low levels of general literacy and education, as well as a diverse range of languages and poor funding that is available.

"The success of tech-enabled innovations in the region largely depends on sustainability and scalability, building trust and transparency, and keeping the applications simple and seamless," says Ranchod.

The following innovations all offer valuable lessons that show how this translates to a level of client-centricity that's built on a deep understanding of each target market and healthcare landscape:

The Smart Health & upScale apps

 Both these apps address inequitable access to healthcare workers in low- and middle-income countries, which has been exacerbated by poor infrastructure, a lack of financial resources, administrative issues, and overburdened healthcare systems. They link community health workers (CHWs) to the broader health systems and empower them with tools that allow them to deliver quality health services, and were rolled out in Uganda and Kenya (Smart Health) and Mozambique (upScale).

The Smart Health app offers diagnostic recommendations based on digital data inputs by CHWs, while upScale is a remote patient-monitoring telehealth innovation. Enabling factors that contribute to their success and sustainability include their good relationships with local governments – which have strengthened over time. It also allows for closer integration with the health systems they operate in – and increasing the digitalisation of community health services in response to the Covid-19 pandemic.

Although the various countries experience challenges in varying degrees, primary constraints for these two apps are tech-related issues, attitudes towards health system structures and financing. Phone-related problems prove to be the biggest obstacle when it comes to using the innovation. Although all CHWs are provided with smartphones and trained to use the app, unstable data coverage, data costs and undependable battery power means that they can't always reliably use it to provide health services. To reduce such incidents, tech support teams have been established.

Tensions between different programmes have also been detrimental to the delivery of PHC services, which once again emphasises the need for meaningful integration.

babyl

babyl is a public sector primary healthcare initiative that offers digital triaging, treatment, referral and medication prescription services. It's categorised as a telehealth and digital therapeutics innovation and the service works using an Unstructured Supplementary Service Data (USSD) platform.

Introduced in partnership with the Ministry of Health in Rwanda, babyl has been well integrated into the local health system, and it's also covered by the National Health Insurance.

Encompassing the entire patient journey, this service offers a remarkable end-to-end service – it takes approximately 30 minutes for a patient to be contacted by a practitioner remotely and thereafter, a minimum of 2-3 hours to access care at a public sector facility or laboratory in person.

Enabling factors include practitioners working on a part-time basis – for both babyl and within

the public or private health sectors – which provides them with substantial insight into the health system and familiarity with clinical protocols. Referral systems between babyl and conventional health facilities are also well established. Additionally, babyl's online patient data system has been integrated with that of public health facilities – therefore patients' journeys and interactions with babyl can be captured on the public health data system.

In terms of constraints, further integration in the PHC space is still necessary, as incentives between babyl, healthcare workers and the Rwandan National Health Insurance aren't always aligned. Additionally, the cost of training HCWs in Rwanda is proving to be prohibitive to the model.

Triggerise (Kenya)

Reaching vulnerable teenagers in Kenya, Triggerise uses mobile technology to trigger positive behavioural change in teenagers and specifically improve their sexual and reproductive health. It promotes access to contraception. The programme has targeted areas with high rates of teenage pregnancy, and a high prevalence of HIV and sexually transmitted infections. Using a unique virtual currency rewards system – called Tiko – girls receive nudges, reminders and discounts – which all encourage increased access to healthcare services.

Enabling factors that contribute to its success include a strong network of existing service providers. It enables the platform to connect users to less costly care, while supporting the local economy. Furthermore, Triggerise has grown and reached scale through international partnerships and the implementation of data-driven tactics and tools.

The use of data to customise responses to local settings and challenges specific to its target group has allowed Triggerise to reach scale in several areas. A lack of sufficient infrastructure and private healthcare facilities in rural areas have proven to be constraining factors. While Triggerise leverages existing private healthcare services and vendors to reach adolescents in informal urban settlements and peri-urban areas, partnerships with public healthcare facilities are also needed to extend the reach of the programme to deeply rural areas – and to ensure that the service coheres with the public healthcare system.

WelTel (Kenya, Rwanda and Uganda)

This two-way messaging service connects patients and healthcare providers (HCPs) through weekly SMSs that simply read, "How are you?". Patients can respond with queries or issues that arise between follow-up appointments and this allows HCPs to address problems, triage patients and facilitate regular self-assessments – promoting treatment engagement among patients.

The programme focuses on the management of HIV, tuberculosis and immunisations, and also recently extended its reach to support Covid-19 initiatives.

The simplicity of this intervention has enabled it to be introduced in more remote areas, such as the rural northern parts of Kenya – and for engagement with patients who often lacked access to healthcare. In terms of constraints, as technological literacy and mobile phone access are prerequisites to use WelTel, it can be a challenge for those living in deeply rural areas. Furthermore, the system is not fully integrated with all national data health data repositories, and government support has been lacking in some countries.

Future-forward virtual care

"While Covid-19-linked recessions have highlighted the need for healthcare models that deliver PHC in more cost-effective ways, the lockdowns due to the pandemic have also created vast opportunities for the rapid growth and evolution of tech-enabled healthcare delivery models due to the need for virtual care," says Ranchod.

In time, technological solutions will increasingly ensure that healthcare systems run more efficiently and effectively, but because they focus on specific points of the patient journey, or specific parts of the system, their ability to ensure overall continuity of care and continued engagement with the PHC system is currently still limited.

Innovations such as the ones highlighted in these briefs could provide solutions across multiple settings, while a more connected health space would offer tangible economic benefits. "To unlock these benefits, it is however necessary to address tech-related challenges, and also relook at restrictive legislation and policies, as this will ease the implementation of virtual health services," she says.

FOR MEDIA ENQUIRIES CONTACT:

Martin Slabbert

Tel +27 21 421 0430

Mobile +27795001503

E-mail martin@hwb.co.za