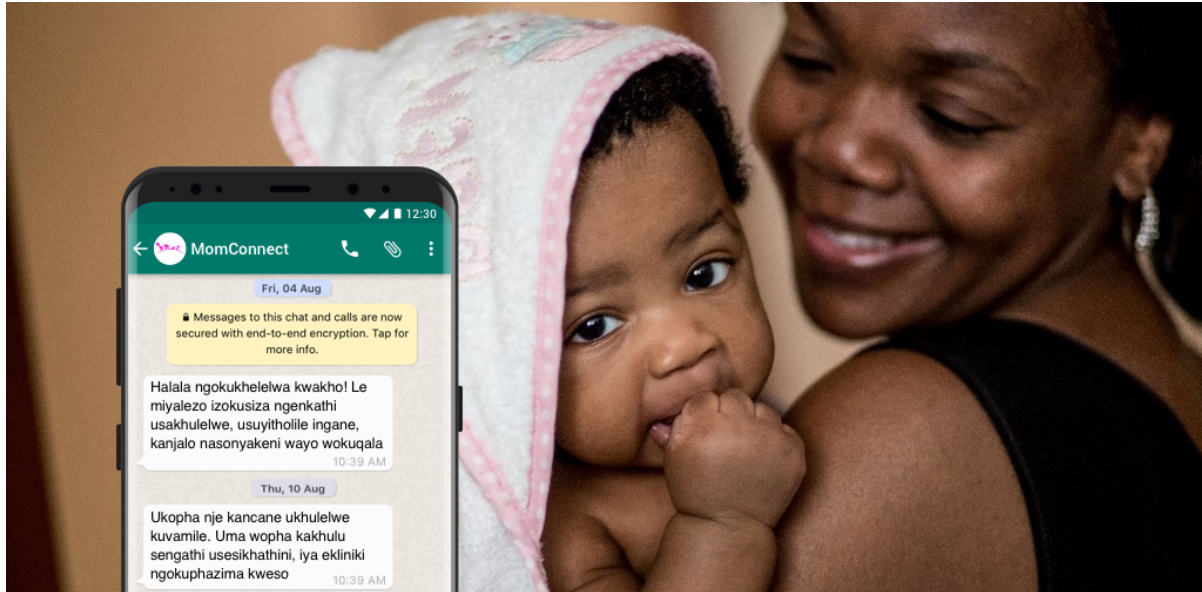# Case study

Better health for all South Africans enabled by person-centred digital health

Written by Marlon-Ralph Nyakabau
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Better health for all South Africans enabled by person-centred digital health

[Photo credit: MAMA/Karin Schebrucker]

In 2012, South Africa launched the National Development Plan 2030 (NDP) that aims for the country to eliminate poverty and reduce inequality. Similar to the Sustainable Development Goals, the NDP set a target to achieve Universal Health Coverage (UHC) by 2030. Through the national pooling of risk and funds, the National Health Insurance (NHI) scheme is aimed at provision of quality health services for all South Africans through application of the principles of social solidarity, cross-subsidisation and equity.

"The National Health Insurance will become a reality and we are committed to ensuring that our people get quality healthcare and are not discriminated on the basis of lack of affordability. We will fulfil our constitutional obligation to protect the right to health care for all."
- Dr ZL Mkhize. Former Minister of Health

In line with the transformation of the health care sector required for implementation of NHI, the National Digital Health Strategy for South Africa (2019 – 2024) sets out a vision of 'Better health for all South Africans enabled by person-centred digital health". **The strategy recognises digital health's potential to be a significant driver of the required health systems transformation and reengineering**.

The success of NHI in South Africa was identified to be underpinned on the functioning of the public health system. Thus, to strengthen the health system, the National Department of Health aims to establish an integrated digital health ecosystem of people, processes and

1

technology for efficient service delivery and effective patient care necessary for achieving UHC.

The digital health strategy prioritised the scaling up of high impact mHealth initiatives for community-based interventions. One of those initiatives is the MomConnect programme which was developed by the National Department of Health through a coalition of public and private partners.

MomConnect is a mobile phone-based service that is integrated into maternal and child health services with the objective of sending targeted health promotion messages to improve maternal and neonatal health. Pregnant women subscribe to the service via a USSD number. They then receive stage-based messages on antenatal care, labour, newborn care, breastfeeding and immunisation.

The service strengthens the maternal and child health programme by being a mechanism for a national universal pregnancy registry that collects information on pregnancy statuses and gestational age. It promotes utilisation of available antenatal and post-natal services during and after pregnancy. Its help desk feature allows pregnant women to send any complaints or compliments via SMS, thus becoming an interactive way to give feedback on the service they received. Ultimately, MomConnect is generating strategic information on how maternal and child health delivery could be improved in the country.

MomConnect has proven to be impactful due to its easy-to-use features and high accessibility as a free service providing useful information in all 11 official languages of South Africa. More than 2.5 million mothers have registered with MomConnect since its launch in 2014 with the service now expanding to using WhatsApp as a medium.

Another significant mHealth application scaled up to strengthen the health system is the Stock Visibility System (SVS). SVS is a mobile, phone-based stock monitoring and evaluation system. designed to increase access to accurate, timeous medicine availability information from health facilities. It provides a mechanism with which stock levels, expiry dates, stock received and projected stock requirements can be recorded, analysed and reported to the health managers. South Africa's Department of Health partnered with Vodacom Foundation for the roll out of SVS in provinces across the country.

South Africa recognised that several digital health building blocks need to be put in place in preparation for the NHI implementation. The department of health aims to create an integrated and enhanced national health information repository and data (NHIRD) system. This is coupled with a HPRS project aimed at creating a patient and service provider registration system and the implementation of a national electronic health record (EHR) system to register and track patients who visit different health care providers. The NHIRD is regarded as crucial as it will provide data and analytics needed by the National Health Insurance fund.

As another digital health foundation piece, the country developed a National Health Normative Standards framework for Interoperability in eHealth in South Africa. This is a framework used to conduct compliance assessments for patient information systems and hospital information systems towards digital health interoperability in South Africa.

To strengthen the enabling environment for digital health, laws such as the Protection of Personal Information (PoPI) Act, 2013 were introduced to help mature the regulatory environment. The digital health strategy also aims to establish a robust physical and network infrastructure and broadband connectivity for priority digital health applications and services. Regarding human resource capacity, the country aims to establish a digital health workforce plan that identifies and develops critical technical skills required to drive implementation of the digital health strategy in partnership with diverse learning institutions. South African-based universities have started developing digital health short courses, and supervising Masters and PhD students exploring digital health topics.

"South Africa has fully embraced the potential of digital health technologies to improve the quality and coverage of healthcare, increase access to services and skills, and promote positive changes in health behaviours to prevent the onset of acute and chronic diseases."
  - Dr PA Motsoaledi, former Minister of Health.

More investments will be required to consolidate and expand the current efforts to realise the benefits of digital health in improving service delivery and patient outcomes in support of NHI. In this endeavour, the Minister of Health is supported by a Ministerial Advisory Committee (MAC) on eHealth. The committee provides guidance on the path that South Africa should follow to benefit from digital health advancements.

Key lessons:
- Health systems require several mechanisms to improve their efficiency and control their costs for a country's ability to achieve UHC. Health system strengthening through the use of digital health interventions is a way to address challenges and remove bottlenecks as part of the transformation needed for achieving UHC.
- Effective collaboration between public and private sector stakeholders are needed to build and scale up cost- effective digital health solutions.
- Digital health foundation pieces required for UHC through NHI include a national electronic health record built on a substantial architecture and framework for digital health interoperability.

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