New Horizon for Health Care through Mobile Technology

Mobile solutions are reshaping various sectors in Kenya, and are taking root in the new age of communication. With the rapid advancement in mobile technology, the health care industry has not been left behind. Mobile technology is helping to enhance the delivery of health services and communication between public health systems, medical services providers, and patients.

In Kenya, where the doctor to patient ratio is 1:10,000, the need for innovation in the health sector is critical if hospitals and clinics are to offer quality services. Additionally, communication challenges among health care providers, patients and caregivers tends to be extremely frustrating. mHealth Kenya has been a local implementing partner for the CDC Foundation in the country, overseeing and managing mobile technology projects in the health sector. Its innovations seek to bridge the communication gap between doctors and patients and to put health services within the public’s reach.

In 2018, CDC—through PEPFAR funding and other laboratory stakeholders—collaborated with mHealth Kenya, an implementing partner, to develop an easy to use mobile application branded “mLab.” mLab offers access to real time viral load (VL) and early infant diagnosis (EID) results that are both secure and confidential. This enables facilities that lack proper infrastructure or internet to receive results through a secure short message system (SMS)-based platform.

The mLab Process
A summary of how the lab results are transmitted and used by health facilities.

The central reference laboratory (CRL) receives samples from facilities throughout Kenya for testing.

Stakeholders, partners and facility users are able to access de-identified patient data to view dashboards and reports for monitoring and evaluation.

Once the results are released by the CRL, facility clinical team members and patients using the mLab application receive results through SMS.

Through this innovation, health facilities in Kenya have experienced reduced turnaround time in receiving their patients’ VL and EID results from the central reference laboratory. Consequently, patient management has been improved because of the faster access to results, flagging of actionable results and ensuring that decisions for patient management are based on actual patient results. To date, mLab has been rolled out in over 65% of all Kenyan counties, is being used at 731 facilities, and has transmitted over 725,000 results to patients.

The mLab initiative has brought together a team of experts with a diversity of knowledge, experience, and a deep understanding of the health sector. The user-friendly format of the mLab app and the fact that it does not indicate personal identifying information offers a viable and sustainable solution for health communication across the country.