INNOVATIVE MOBILE SOLUTIONS THAT SUPPORT THE POOR & BRIDGE DIGITAL DIVIDE IN KENYA

By: Dr. Cathy Mwangi
Chief Executive Officer
mHealth Kenya
WHO IS MHEALTH KENYA?

• mHealth Kenya is an organization that provides a critical needed link between public and private entities to support, improve, optimize and sustain provision of ehealth services in Kenya.

• mHealth Kenya is a pioneer of mobile health technologies with a team of experts with a diversity of knowledge, experience, & deep understanding of the health sector.

• Our experience includes health information system projects design, systems development, implementation, analytics, monitoring and evaluation backed by strong experience in program funds management.

• Our primary partner is the Ministry of Health but we work closely with many developers, implementing partners and academia. We realize that technology and innovations cannot happen without collaboration with other partners.
Use of mHealth in Kenya Today

• 85% of mobile phone penetration in Kenya today
• Doctor to Patient Ratio in Kenya is 1:6,633 in **Urban Areas** and 1:8,500 in **Rural Areas**
• Mobile phone is popular, cost effective & most stable communication platform
• It is being used to improve care, treatment and health Policies
• Data collection
• Empowering patients by providing useful information
• Training health care workers
• Empowering community health workers get information that assists them make the right decisions
Why Occupational mPEP Care?

- Under-reporting of Needle Stick Injuries and other exposures
- Incongruence between injuries and uptake of ARV’s
- Poor compliance to ARV drugs, inadequate follow up
- Stigma
- Inefficient PEP protocols
- Lack of knowledge on ARV side effects leading to noncompliance
OBJECTIVES OF mPEP CARE

• Promote Post Exposure Prophylaxis (PEP) uptake
• Improve adherence to PEP ARV drugs
• Support side effect management
• Improve compliance to follow up visits for clinical and psychosocial review
• Improve on completion of laboratory monitoring
• Create a database of injury and other exposures
• Create real-time surveillance system on occupational exposures and PEP
CHALLENGES

• There were several partners/collaborations and not all had the same objectives and this affected the end results

• Cost of communication became astronomical and was not sustainable

• Limited capacity and transfers within the Ministry of Health partners and counties affect the implementation

• The scope of the project kept changing due to request from the Health Care Workers but could not be implemented due to budget limitations

• Project started before devolution and when the county system caught up changes in the system were done to fit the new devolved system and reporting requirements

• Some facilities are remote and outside GSM grid and some lack stable power supply
The Ministry of Health acknowledges the dwindling and serious shortfall in the availability of safe blood to meet transfusion needs in the country.

Bloodlink Foundation has put the current deficit of blood collection in Kenya at 70%.

Blood safety is a key consideration in blood donation because only safe blood can be transfused.

In partnership with the Kenya National Blood Transfusion Services under the Kenyan Ministry of Health and mHealth Kenya with CDC Funding Text for Life System was developed.
OBJECTIVES FOR THE TEXT FOR LIFE

- Increase the number of blood donors
- Increase the number of repeat donors
- Donors self recruitment via SMS or Web and increased communication with blood donors & potential donors
- Increase number of notifications of test results to blood donors
- Increase number of counselling and referral to care for blood donors found positive of Transfusion Transmitted Infections
We wish to notify you that the results are ready for collection at NBTS.

Dear XXX, your blood donation has been used to save a life.

Dear Donor, you are now eligible to donate blood once again.

Thank you message
Results ready message
Blood utilized message
Birthday message
Eligibility to donate message
Donation appeals message
Responses to specific queries sent by blood donors
Emergency appeals to eligible donors of a blood type urgently required.
SUCCESES

• The Kenya National Blood Transfusion Services has a database of over 130,000 blood donors in the system

• Blood donors are informed on where to go collect their blood test results and can be referred for care if need be

• Ministry of Health can now call upon blood donors or potential blood donors for emergency blood drives and by location/county

• The project can slowly sensitize the public into changing the culture and misconceptions of blood donations

• The Ministry taking ownership in the project and guiding the implementation and the enhancement has helped in the success of the project
The Kenya Medical Supplies Authority’s (KEMSA) mandate is to provide a secure source of drugs & other medical supplies to public health institutions.

The KEMSA eMobile System is a commodity tracking system that enables real-time ordering of drugs & medical supplies by mobile phone and via web.

There is improved supply chain management & reduced ordering turn around time from remote facilities from days/weeks to seconds/minutes.

Enable facilities to report stock levels & consumption levels in real time.

Improve reporting by utilizing eReporting on the mobile platform.

Increase drug availability in all public health facilities.

Create transparency by informing the facilities when orders are filled and dispatched, and receipt confirmation when orders are delivered.

Enable the public to report integrity issues through the web or eMobile.
Facilities order for commodity via Web

County approves the facilities orders based on their budget

User (both at facilities and counties) queries for order status

User (both at facilities and counties) checks at their customer balances

User (both at facilities and counties) checks order fill rates

User (both at facilities and counties) queries the turn around time for orders

Key:
- LMIS: Logistics Management Information System
- WMS: Warehouse Management System
WAY FORWARD FOR KENYA

• Development of mHealth Standards and Guidelines
• Development of eHealth Policy and eHealth Strategy
• Development of an Enterprise Architecture
• Need for more engagement between the Ministry of Health, system developers and academics to think through the gaps
• Encourage innovations and support for local developers
• Engage mobile network providers for reduced communication costs for public health initiatives
• With eHealth and mHealth there is improvement in the efficiency of reporting and it will only get better
• Need for implementing partners to give our innovators and students a chance
Acknowledgements

• The Ministry of Health Kenya
• The Kenya Medical Supplies Authority (KEMSA)
• The Kenya National Blood Transfusion Services (KNBTS)
• The National AIDS & STI Control Program (NASCOP)
• The President’s Emergency Plan for AIDS Relief (PEPFAR)
• The Centers of Disease Control and Prevention (CDC)
• The National Foundation for Centers of Disease Control and Prevention (CDC Foundation)
• mHealth Kenya Team
THANK YOU!

Dr Cathy Mwangi
drcmwangi@mhealthkenya.org
Phone: +254712636688

Images sourced at freeimages.com