

# Introduction



- This presentation is about the idea of New Product Development (NPD) which is being applied by AMREF Kenya and its partners to improve health outcomes in HIV, MNCH, and TB programmes
- The innovation uses mobile phone technology
- The project is in phase 2; steps in Phase I involved:
  - developing the SMS technology platform
  - Sending, triaging messages; managing patients
  - Conducting a random-control trial to determine the effects of the messages on health outcomes
- In 2<sup>nd</sup> phase, rolling out the SMS messages in HFs <sup>2</sup>

# The problem



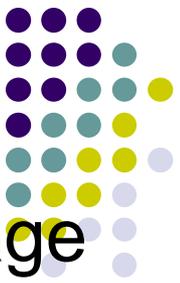
- Retention of patients in care, especially for HIV, has been identified as important in the success of health programmes in Kenya and rest of s/saharan Africa
- Nevertheless there is a problem since over 35% of patients are lost to follow-up by 36 months
- The WeTel messaging technology developed as a solution to address the problem of low adherence
- It serves as a medium for patient engagement in care
- Other advantages include confidentiality, can involve family members and social networks, simple and cost-effective hence ensures equitable access

# Proof of concept – Phase I



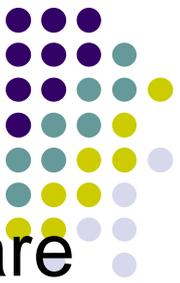
- In Phase I of the WelTel innovation, important health outcome benefits have been demonstrated in a random control trial study
- The results, published in the respected *Lancet* Journal, show a 24% improvement in adherence to antiretroviral therapy, and a 19% improvement in achieving viral load suppression among patients
- The challenge in phase I was to develop the automated technology required to bring this service to scale and initiate a sustainable business model

## Phase II: pre-commercialization

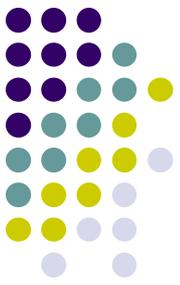


- As in phase I (concept stage), a short text message (SMS) will be sent by trained nurses to patients on ARVs, ANC mothers, and caretakers of immunizable children once a week to inquire how they or the children are doing and to determine if help is required
- The messages ask how they are doing (*mambo?*); they can respond that they are doing well (*sawa*) or that they are experiencing a health problem (*shida*).
- Clinician will follow up patients who report a problem
- To measure and document the success and effectiveness of the scale up, operations research study is being initiated, using quasi exp. design

# Not for profit business model



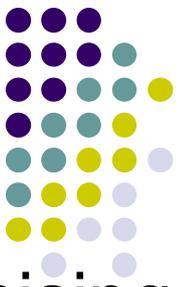
- In phase II the WelTel sms messaging services are being scaled up vertically for HIV care and treatment support among patients in Isiolo, Marsabit and Samburu counties in the health facilities that provide Antiretroviral Treatment (ART)
- The WelTel service will also be scaled horizontally to other aspects of primary health care including maternal new born and child health
- Not for profit business model will be based on franchise service where WelTel services will be replicated in multiple health facilities. This will serve as a model for scale up elsewhere; other diseases



# Lessons learnt

- Positive reception of the WeTel messaging platform by the Ministry, policy makers, programme management, and health facility managers in Isiolo
- Setting up and testing of the technological platform in Isiolo is involving the use of low band-width in some areas whereby messages are exchanged between cell phones and not necessarily internet/computers
- Ownership of the intervention by the service providers is necessary

# Conclusions



- The use of mobile phones to improve adherence among HIV patients; other health problems promising
- There is potential to scale up the technology at national, regional, and international levels
- WeTel technology platform also captures data from the patients; provides data outputs and analysis
- Mobile phones as mhealth promising compared to other technologies (telemedicine; ehealth)
- The limited use of mobile phones as a method for patient engagement; disruptions to adherence due to patient lifestyles will be overcome with time