

# CASE STUDY

## Zimbabwe National PMTCT Evaluation

### Overview

Prevention of mother-to-child transmission (PMTCT) programmes provide antiretroviral treatment to HIV-positive pregnant women to prevent the virus from being transmitted to their infants. This study aims to evaluate the effectiveness of the national HIV PMTCT programme in Zimbabwe to reduce mother-to-child transmission of HIV (MTCT) and to meet Zimbabwe's national strategic plans by comparing it to a similar study undertaken in Zimbabwe in 2013/14, which also leveraged the Mobenzi platforms.

### Mobenzi Implementation

The study takes place at 151 government clinics in Zimbabwe over a period of 26 months during which over 8,000 caregiver-infant pairs are screened electronically. Data collectors (DCs) are each assigned a cost-effective Android handset running the Mobenzi software which digitised all surveys, workflow and research protocols. Once a caregiver-infant pair is found to be eligible, they are randomised automatically into one of two cohorts. Follow-up visits are scheduled at regular intervals until the child reaches 18 months of age or diagnosed as HIV-infected. At each time-point, specific surveys are completed electronically and/or blood tests are collected.

The Mobenzi software coordinates all field-based activities and data collection. It triggers required actions within the context of each caregiver-infant pair, ensuring that relevant surveys are completed and that correct blood samples are collected and linked at each timepoint. Consent is captured for each participant via an electronic signature. The Mobenzi solution keeps track of lab results received and transcribed at health facilities, and notifies participants via SMS when their test results are available. DC's are also able to view their performance in real-time on their devices.

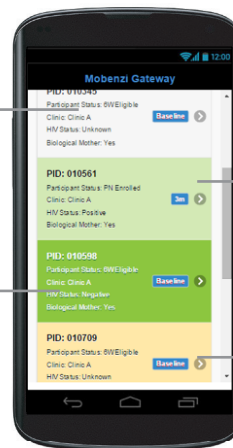
Via the Mobenzi Researcher mobile data collection plugin, sophisticated surveys are digitised which allow for complex

Grey: Indicates that the participant has not had any interactions for the current time point.  
**Status = Not started**

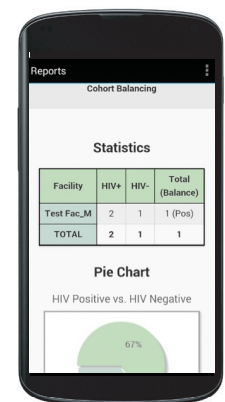
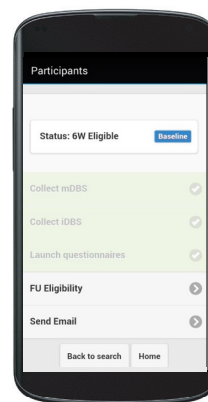
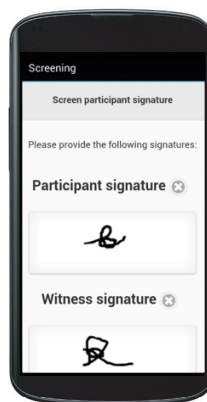
Dark green: Indicates that all participant interactions for the current time point is complete.  
**Status = Complete**

Light green: Indicates that the participant has had at least one interaction for the current time point (e.g. sample collection or questionnaire captured).  
**Status = In progress**

Light orange: Current time point is about to close (within 7 days) and there are outstanding tasks.  
**Status = Pending**



Fieldworkers can search for an enrolled participant using a unique participant identifier (PID). Records are colourcoded to indicate each participant's status and any outstanding tasks.



The Mobenzi software coordinates all field activities, data collection and reporting.

branching and skip logic, the scanning of lab sample barcodes, and the collection of information that determines the consequent workflow.

On the backend, web interfaces and reports assist in the monitoring of captured data and how enrolment is progressing per district and per facility. Various reports are created automatically, assisting data managers with any interim reporting requirements. Granular permissions management allows different users access to only the data relevant to their role.

### Impact and outcomes

Fieldworkers and participants can be closely monitored and managed using the Mobenzi platform. Benefits cited by key stakeholders include:

- Improves operational efficiency and data integrity
- Stores vast amounts of data over a period of time, keeping track of longitudinal workflow
- Assists data managers in generating interim reports, immediately informing field activities

Data from this study and subsequent iterations are used to track progress towards achieving the National PMTCT Programme goal to eliminate new paediatric HIV infections by 2020 and the Millennium Development Goal to halt and reverse the spread of HIV and AIDS by 2020.



- Real-time insight into what is happening in the field, allowing problem areas to be quickly identified for corrective action
- Minimises user error while dealing with a complex research protocol

### Other sources used:

<https://www.avert.org/professionals/hiv-programming/prevention/prevention-mother-child>



www.mobenzi.com