

Transitioning from Paper to Tablet-Based Interviewing for Health Service Provision Assessment in Rural Tanzania



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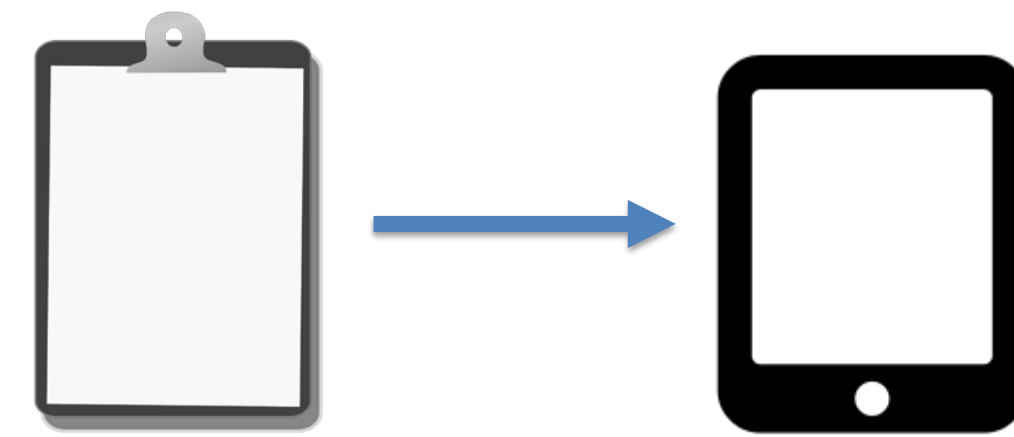
INTRODUCTION

- The Mama na Matoto initiative aims to reduce maternal and child mortality in rural districts of Tanzania through the provision of a long term maternal and newborn child health (MNCH) package.
- This initiative involves assessing the capacities of health facilities in rural Tanzania with regards to maternal and child health
- This project was involved in the development of a mobile survey tool to aid the transition from a paper-based to tablet-based data collection method.
- The objectives of this project were as follows:
 - Develop the Health Facility Survey for tablet-based interviewing.
 - Test the Health Facility Survey tablet Tool, evaluate its functionality, and make revisions.

METHODS

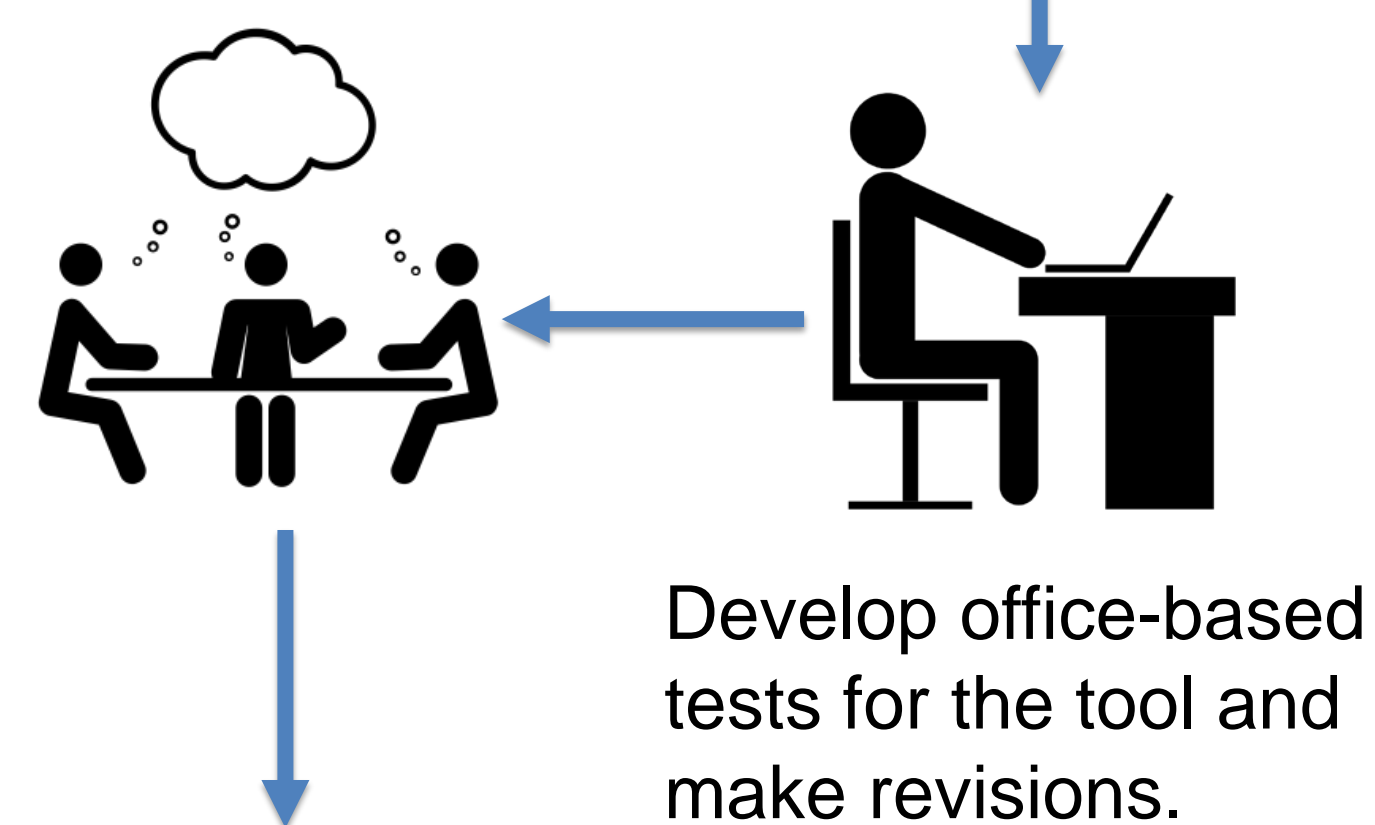
Objective 1:

Convert questions on paper based survey into fields on REDCap, a survey software.



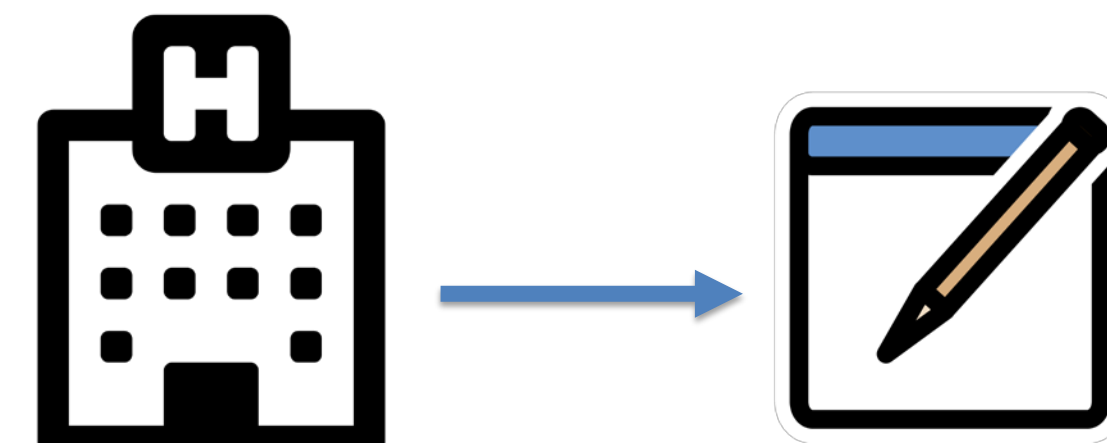
Objective 2:

Gather input from field team in Tanzania on the tool and make revisions.



Develop office-based tests for the tool and make revisions.

Conduct a facility trial with the tool in Tanzania.



Review incoming data and make revisions.

RESULTS

- The Health Facility Survey was revised based on feedback from the previous round of data collection in the Misungwi district.
- 1225 fields were created in REDCap forming the Health Facility Survey tool, and separated into sections
- Challenges with the survey tool was identified during the test. These challenges were as shown in Table 1.
- Once these challenges are resolved, a field test is scheduled for the revised survey in October 2017.

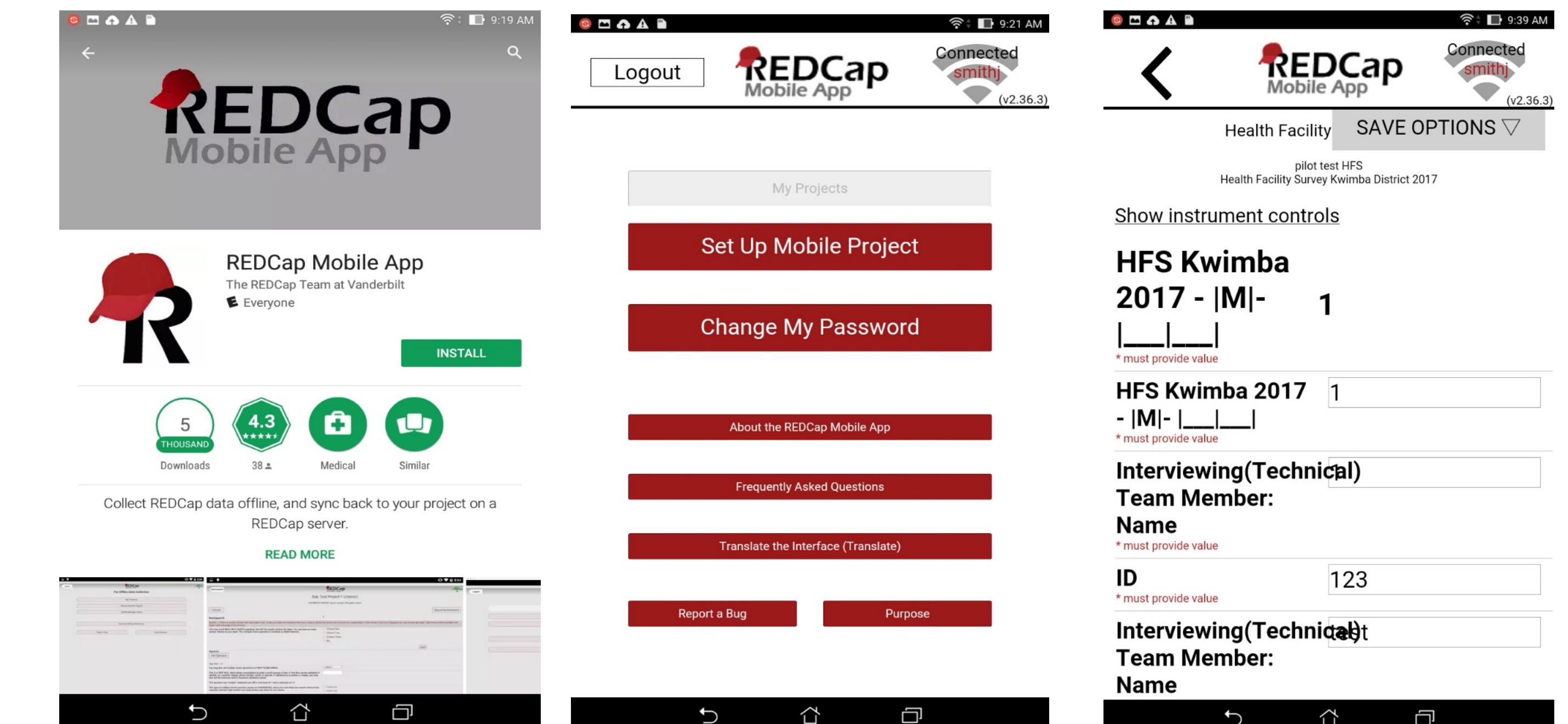
Figure 1. Health Facility in Rural Tanzania



Table 1. Challenges Encountered in Field Test and Potential Solutions

Challenges	Possible Solutions
REDCap currently does not allow questions to repeat indefinitely on the same form.	REDCap allows for infinitely repeating forms so it is possible to repeat questions if they are on separate forms.
The survey is organized as one long form on the tablet, making it difficult to save responses throughout the interview process.	The survey can be broken down from one long form into multiple forms by different sections.
The questions are not translated in Swahili for the respondents on the survey tool as it is on the paper based version of the survey.	The survey may be reformatted to allow the data collector to select a Swahili translation without cluttering the interface.

Figure 2. Health Facility Survey on REDCap (Mobile App)



CONCLUSION

- Tablet-based surveys are feasible for measuring health facility capacities in rural Tanzania.
- The main challenges identified during the field test were specific to rural Tanzania where wireless connection is not reliable, and English is a second language for most Tanzanians.
- Moving forward, these challenges will be addressed with the collaboration of the Clinical Research Unit in time for another pilot test planned for September 2017.
- Following this field test, further modifications will be made to the tool and a feedback survey will be used to gain information on the experience of the Tanzanian team in setting up, and collecting data using the tablet.

ACKNOWLEDGEMENTS

This project is undertaken with financial support of the Government of Canada provided through Global Affairs Canada (GAC). Research support is provided through an Innovating for Maternal and Child Health in Africa grant, administered through Canada's International Development Research Centre (IDRC).

Thanks to Markin USRP who provided studentship funding that made this summer research project possible.

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