

Evaluating the acceptability of implementing an HIV self-testing mHealth mobile delivery program in collaboration with trained delivery agents in Kabale, Uganda

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INTRODUCTION

iTest: a Novel HIV Self-Test Delivery Mobile Application

The proposed study aims to evaluate the acceptability of a novel mHealth platform, iTest, which connects individuals to delivery agents such as traditional healers and community health workers working with motorcycle taxi 'boda boda' drivers. We believe that this platform will be a viable means of increasing testing and status awareness in Kabale, Uganda. We propose a possible framework to enable distribution of HIV self-tests to persons requesting testing services using the mHealth platform application named iTest. We hypothesize that traditional healers can bridge the gap in HIV testing by delivering HIV self-tests to adults of unknown serostatus in rural communities.

HIV in Rural Uganda

Since its discovery in the 1980's, Human Immunodeficiency Virus (HIV) remains a significant public health problem in the world. Despite improvements in antiretroviral therapies over the past three decades, HIV remains a major cause of mortality in low-and-middle-income countries (LMICs).

Rural Uganda is particularly affected by HIV (prevalence 7.2% in adults aged 15-64), due to weak healthcare infrastructure and low education. Integral to lowering HIV incidence is testing, which allows individuals to know their status and thus reduce transmission. Current testing models require individuals to travel to local healthcare centers to receive tests, but due to recent COVID-related restrictions, prohibitive cost, and stigma that has discouraged travel to healthcare facilities, many people are unable to access testing.

Mobile Health (mHealth)

Mobile health has become increasingly popular around the world as a means of providing innovative healthcare. Previous research in Mbarara, Uganda, revealed high receptiveness towards receiving HIV test results via cellular messaging, citing increased awareness of their status and decreased transportation costs. However, literature shows that many mobile health initiatives lack sustainability due to an absence of planning stages. Thus, we seek to assess the need, feasibility, and acceptability of the service before starting implementation.

About the Global Livingstone Institute (GLI)

The mission of the GLI is to convene global communities to learn and advance best practices in community development and create equitable, sustainable, and culturally responsive solutions to challenges in the areas of health, economic development, and the environment. Since 2009, the GLI and partners have successfully produced music festivals in a campaign aimed at increasing HIV knowledge, status awareness, and adherence to treatment among rural and hard-to-reach communities in East Africa.



Figure 2. Current testing methods in Uganda require those who seek testing to travel to clinics or healthcare centers. The public nature of this model has barriers to access, including stigma and cost of transportation.

AIMS AND OBJECTIVES

Our study aims to evaluate the acceptability and feasibility of the iTest mHealth service. To achieve this, we have the following objectives:

1. Create a Theory of Change depicting how iTest HIVST would unfold in the local context of Kabale. This would later inform a draft implementation plan
2. Document perceptions about acceptability of iTest HIVST
3. Create an intervention proposal acceptable to the community, service providers and delivery agents, incorporating opinions from community members.
4. Gain evidence to tailor implementation of an intervention which could be tested on a larger scale

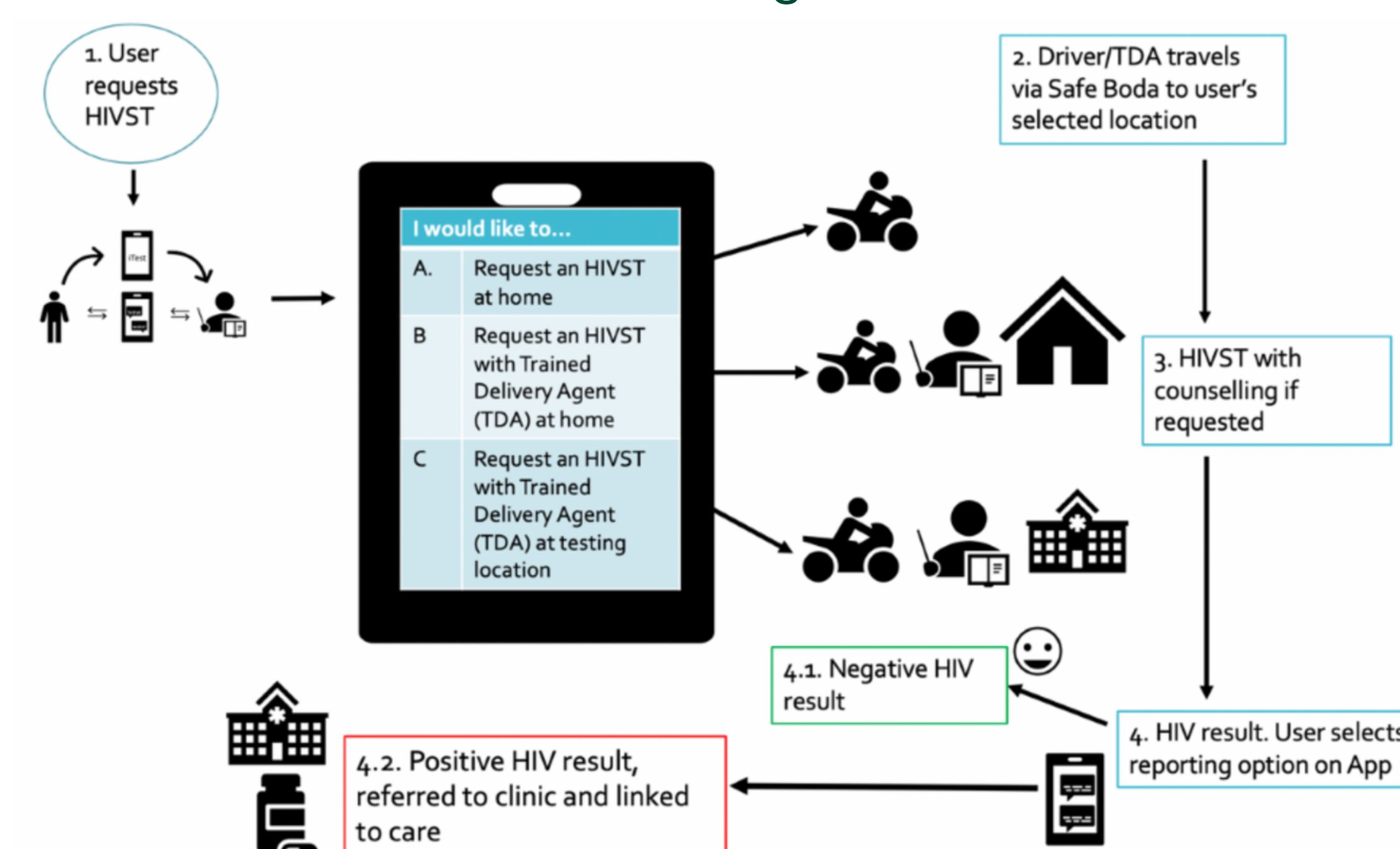


Figure 1: Theoretical framework of the iTest HIVST mHealth mobile program

METHODOLOGY

This study aims to evaluate the acceptability of a framework to enable distribution of HIV self-tests (HIV-ST) to persons requesting testing services using a novel mobile health (mHealth) application named iTest. iTest connects individuals to trained delivery agents such as traditional healers and community health workers working with motorcycle taxi 'boda boda' drivers. These delivery agents deliver HIV-STs to testers' homes, potentially reducing the stigma and transportation costs associated with current testing models. A total of 5 focus group discussions (FGDS) will be held to include community leaders, trained delivery agents (traditional healers, community health workers and motorcycle 'boda' drivers) and community members. Participants will be invited to a central location in a convenient and private setting where a member of the Research team will facilitate the discussion together with a notetaker. All focus groups will be digitally recorded, with permission.



Figure 3: The OraQuick HIV Self Test helps one perform an HIV test by themselves and interpret the results in private. The test takes 20 minutes and comes with clear instructions.

RESULTS

We hypothesize that this intervention will increase access to HIV-ST while removing barriers to testing. The results will inform the potential implementation of iTest by evaluating its acceptability and feasibility. Recommendations will be shared with key stakeholders in the communities.

DISCUSSION

Since HIV is highly stigmatized, the loss of confidentiality regarding an individual's status can be disastrous. To protect the privacy of all stakeholders, researchers will obtain consent of all participants and make clear that private information need not be discussed.

This platform could be a viable means of increasing testing and status awareness in rural Uganda. The pilot will investigate problems that may occur, avoid potential human and data optimization issues and get a sense of the technology and HIV-ST instructions that will be beneficial to peers who want to implement similar interventions.

