PrE(P)Conception: Creating and Implementing a Smartphone Application for Serodiscordant Couples to Support an HIV-free Future.

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Introduction

In the U.S., there are 1.1 million people living with HIV(PLWH) and 75% are in their reproductive years. Yet, there is no smartphone application specifically designed for PLWH in their preconception period. Using the literature, the primary investigator created and implemented a smartphone application for this population to see if they would find it useful and easy to use

Aim

- To develop and pilot a smartphone application for beta testing.
- Evaluate if participants found the application easy to use, felt as though they could incorporate it into their lives, and perceived it as useful.

Objective

•Development of a wireframe software for easy patient accessibility and usability.
•Have participants critique the layout, usability, and style of the application using the Health-ITUES, a tool used to measure user perceptions of technology.
•Analyze the results of Health-ITUES to determine the feasibility of creating the back end of the application.

Methods

- Demographics survey
- Health-ITUES: a 20 question, 5-point Likert survey assessing new technology's usefulness and ease of use to predict end-user actual use. Means above 3.0 indicate predictive actual use after app development.
- Open ended evaluation questions about the application and end user driven improvements to consider for the application prior to back end development.

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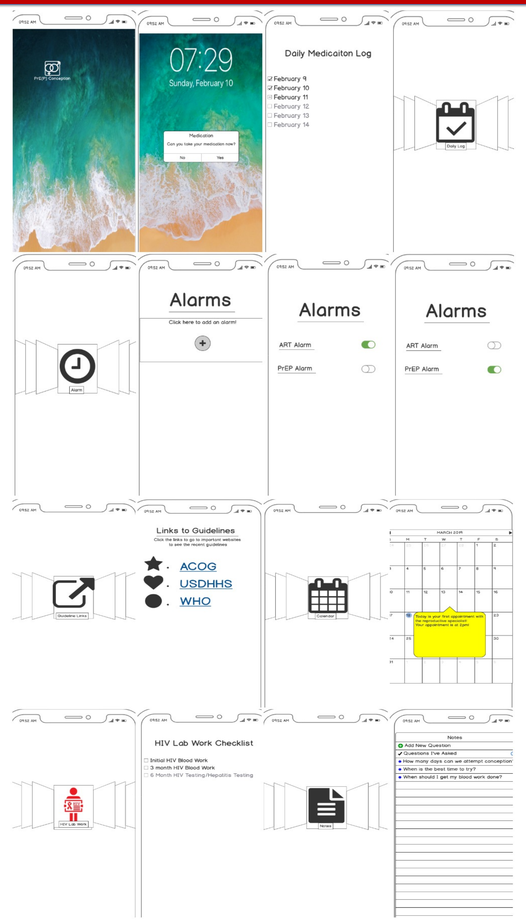

Table 1. Cumulative Health-ITUES Mean, Standard Deviation, and Median.

n	*Mean*	*SD*
13	4.42	0.68

Table 2. Mean, Standard Deviation (SD), and Median for Health-ITUES Subsets.

Health-ITUES Subset	*n*	*Mean*	*SD*
Impact	13	4.38	0.85
Usefulness	13	4.43	0.65
Ease of Use	13	4.46	0.56
Control	13	4.33	0.77

Table 2b. Cronbach's Alpha for Usefulness

Cronbach's Alpha	*n*
0.92	9

Table 2c. Cronbach's Alpha for Ease of Use

Cronbach's Alpha	*n*
0.95	5

Results

- Participants found the application useful, easy to use, and were likely to use it after development as indicated by mean score of 4.42 on Health-ITUES
- Most participants were women (77%), African American (100%), and single (92%).
- Women were more likely to use the application after development compared to men (Mean of 4.55 for women and 3.80 for men).
- Participants wanted to see more colors in the application and added security with a passcode prior to entrance.

Implications and Dissemination

- Decrease in reproductive costs to patients
- Decrease perinatal HIV costs to patients and healthcare system.
- Increase in education and self-management of medications, treatments, clinic visits.
- Providers can view medication logs and calendars of patients remotely prior to visits, improving practice.
- PrE(P)Conception complies with the WHO 90-90-90 initiative to end the HIV epidemic.
- Dissemination of findings at pertinent conferences.

References

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See attached for full reference list of project.

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