Feasibility and Acceptability of an Interactive Mobile Application to Improve the Sexual Health of Low-Income Minority Adolescents

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Introduction

- Touch-screen tablets, like the iPad, present exciting opportunities to extend mobile health technology to vulnerable populations.
- Mobile tablets have been piloted in a number of adult clinical-research settings. Studies show they are feasible and acceptable for collecting patient information and improving patient-provider communication, particularly around sensitive health topics.
- However, little is known about adolescent patient and provider perspectives on using health applications (apps) use in real-world clinical settings.

Objective

- To determine the feasibility and acceptability of using mobile health apps in two school-based health centers to promote responsible sexual health behaviors of low-income minority adolescents.

Methods

- Two sexual health apps were introduced at two school-based health centers (Wellness Centers) in Los Angeles.

Figure 1: Screen Shots of the Contraception App
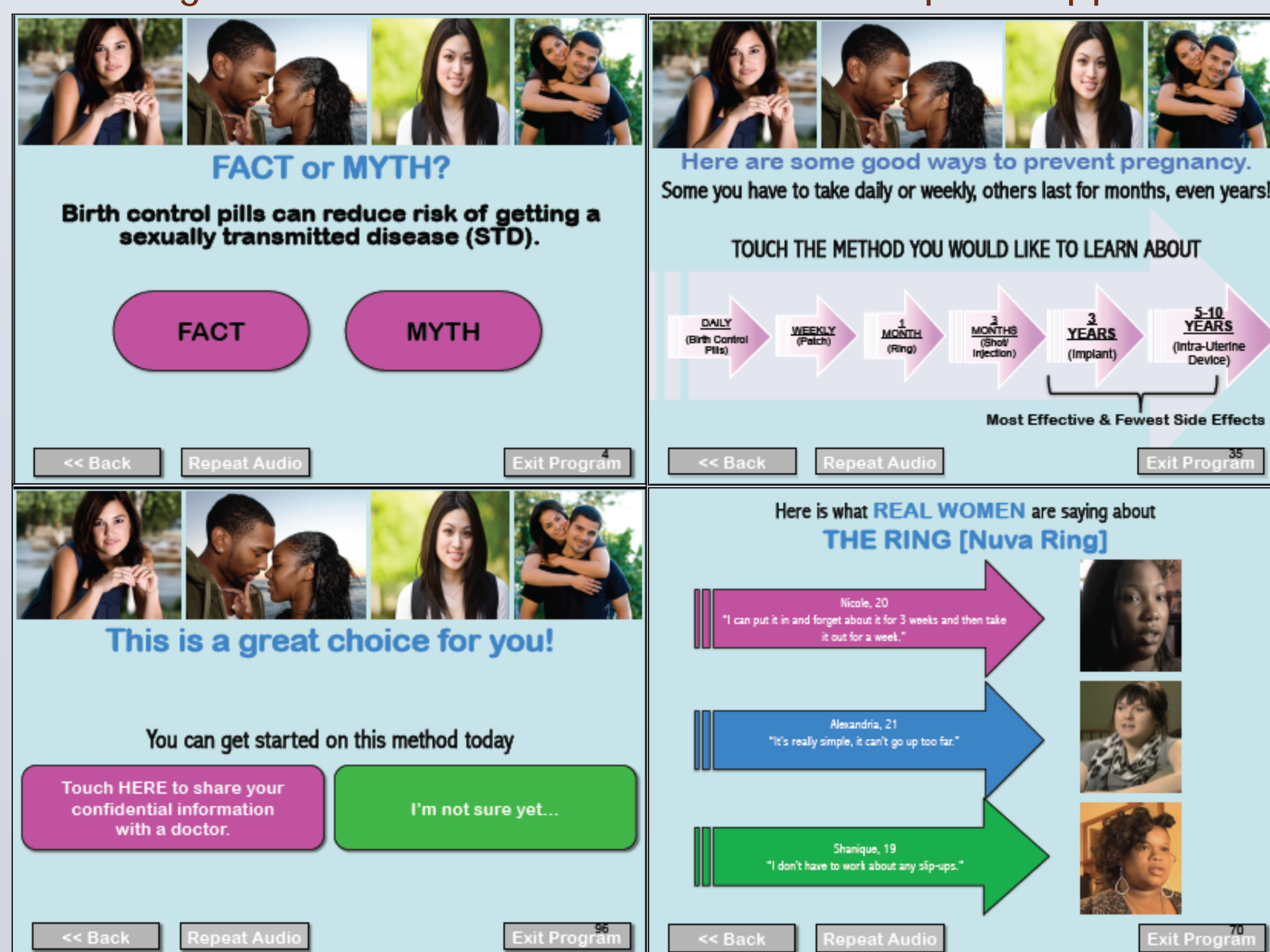
- Chlamydia and contraception apps were offered to adolescents immediately prior to the clinical encounter; risk assessment data from the app was e-mailed to the provider for discussion during the visit.

Methods Continued

- Patients completed items regarding acceptability of the apps at the end of each app. Scores on their pre- and post-app contraception knowledge assessments were compared. Data was analyzed in Excel.
- Two months after introduction of the apps, clinic staff completed a semi-structured interview. Interviews were digitally recorded, transcribed, and qualitatively analyzed to identify themes.

Results

- 143 total users (May-Oct 2013)
  - Contraception app=76
  - Chlamydia app=67

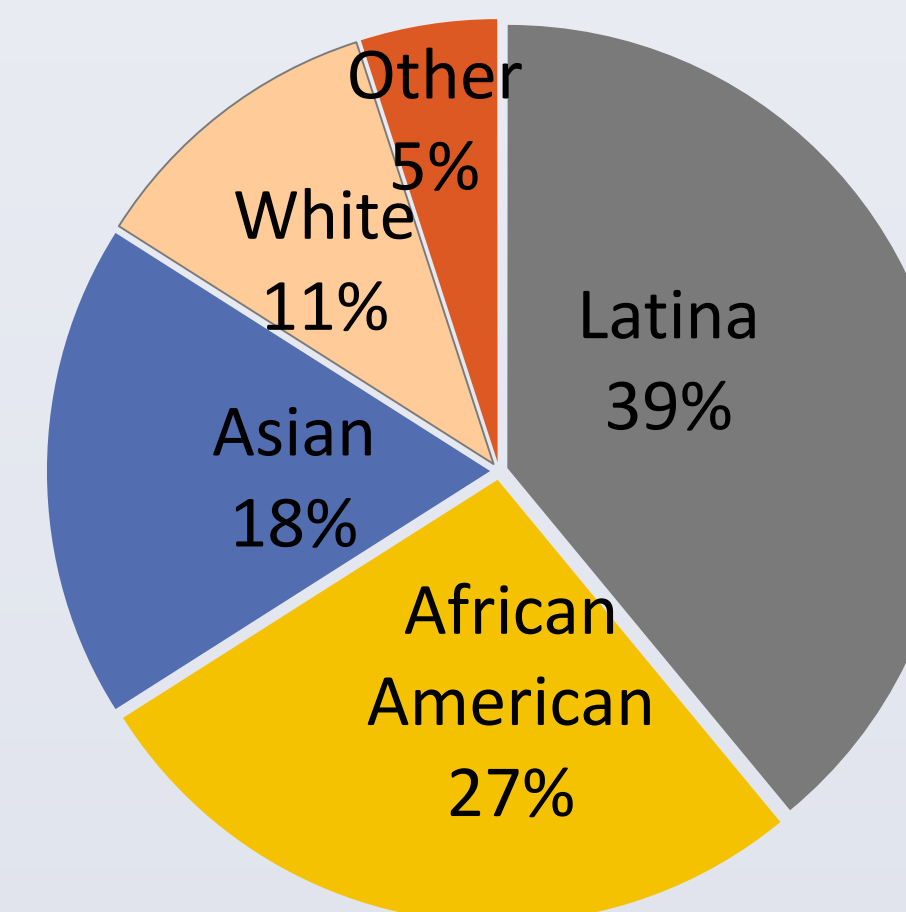Figure 2: Race/Ethnicity of Patient Participants

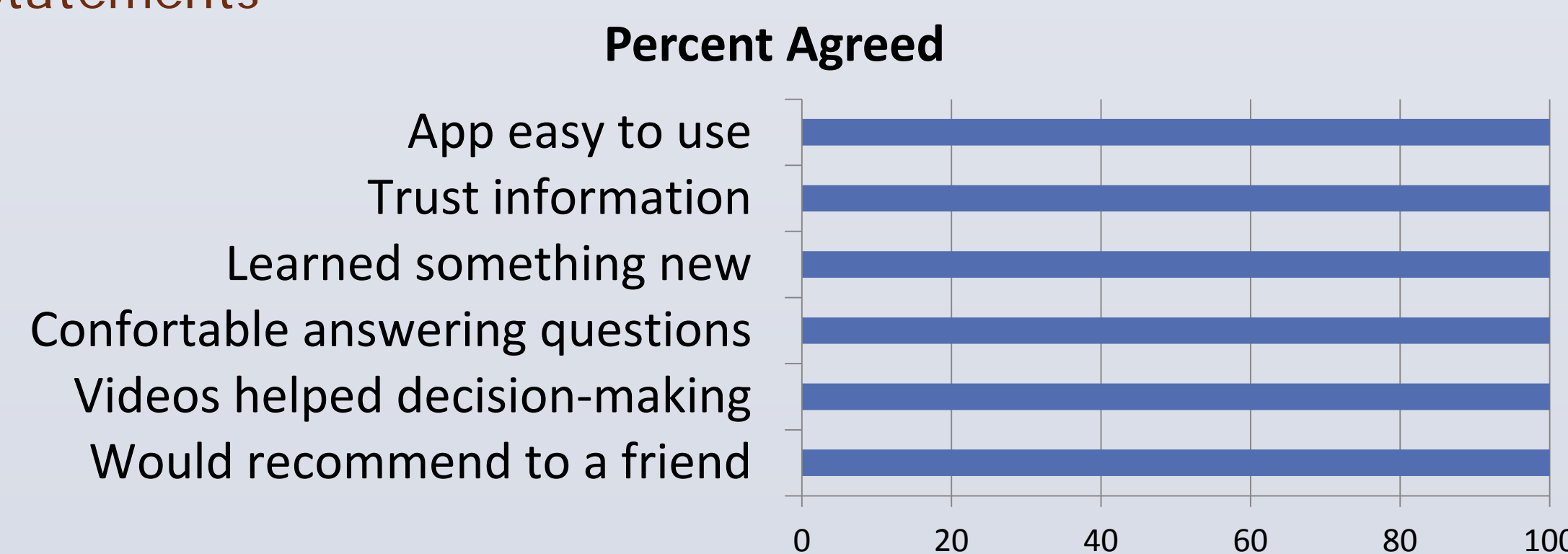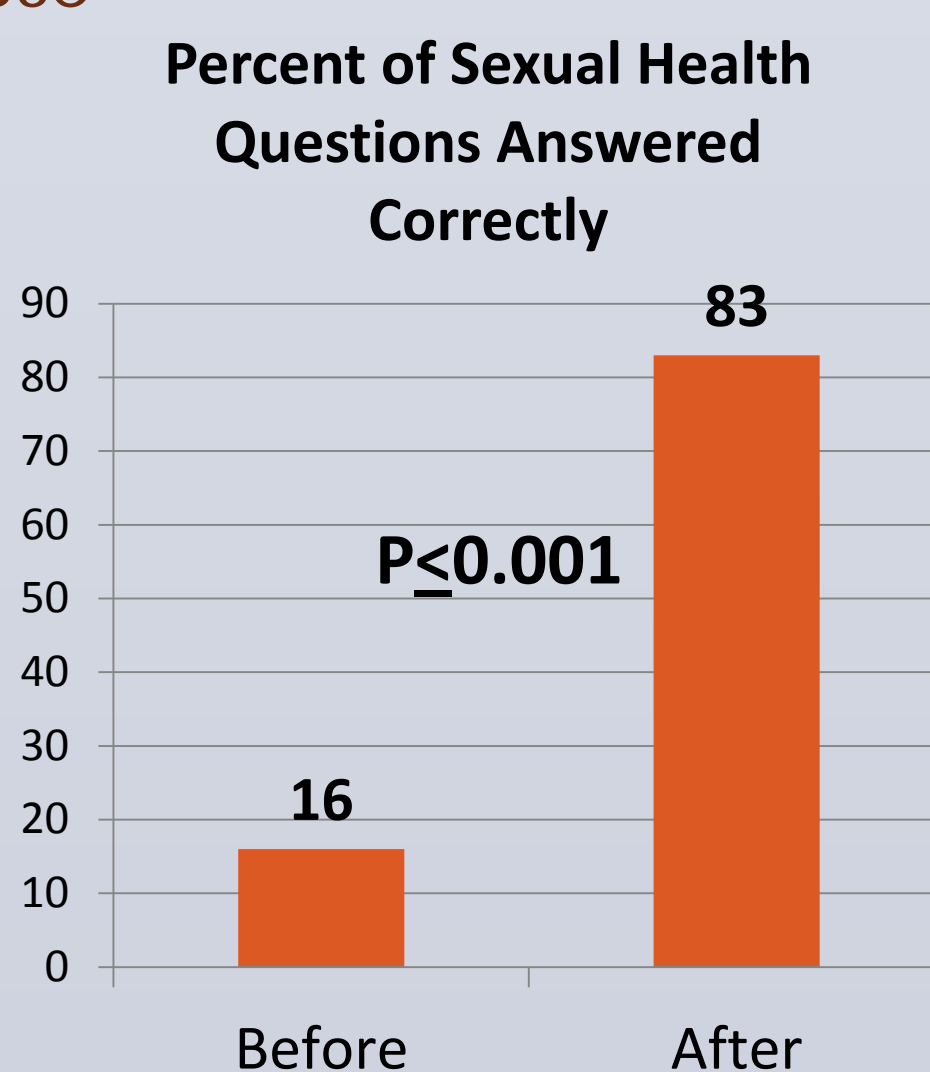Figure 3: Percent of Users who Agreed with Acceptability Statements

Figure 4: Change in Sexual Health Knowledge Before and After App Use

"I learned that condoms prevent STDs and that pills and the patch don't. I never thought to ask before I read the app."
~ Patient

Results Continued

Table 1: Interview Participant Demographics

	% (N)
Age	
16-25	16.7% (1)
26-35	50% (3)
36-45	33.3% (2)
Gender	
Female	100% (6)
Race/Ethnicity	
Black	16.7% (1)
Filipino	16.7% (1)
Latino	66.7% (4)

Acceptability

- Staff felt provider counseling was more effective; patients were more confident about their sexual health choices after using the app.

"It was easier because I don't have to ask as much. [My patients] know what they want when they come in [to my office] or they have an idea."
~ Provider

"[My patients] seemed more confident about what they want."
~ Provider

Feasibility was related to:
- Adequate space and staff to administer apps
- Comfort with technology
- Worry about theft, damage or misuse of devices
- Time to complete apps extending beyond wait-time
- Willingness to adjust work-flow
- Belief in benefit to patient care
- Both sites elected to continue using the apps after the project period

"[There were] glitches in the technology, [but] the app itself was really good."
~ Office Manager

Conclusions

- Using sexual health apps is feasible and acceptable for adolescent clinic providers and patients.
- Use of the apps improved sexual health knowledge, perceived efficiency and effectiveness of the clinical encounter.
- Clinics serving vulnerable populations may benefit from additional support to successfully adopt new health technology.

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