Health-E You/Salud iTu™
A Pre-visit App to Support Patient-Centered Contraceptive Choice & Use in SBHCs

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Background: Unintended Pregnancy (UP)

- Over 80% of adolescent pregnancies are unintended.
- Despite steady declines, U.S. remains higher than all other industrialized nations.
- Significant disparities remain based on income, race and geographic location (and the intersectionality of these factors).
- Adolescents’ knowledge of contraception is poor, options are overwhelming
- Stigma and discomfort with sexual health are barriers to care
- Teens often want to discuss sexual health with their provider but are reluctant to bring it up
Technology for Teen Health

Adolescents prefer computer-based interview tools and interventions compared to face-to-face

- More comfortable learning about sensitive health information.
- Greater disclosure of sexual health and other behaviors to computer.

Slack (1971); Fisher (1977); Millstein (1983); Ozer (2016)
Need for integration in health settings

- Drives user to App
- Offloads health education and assessments from provider
- Primes and supports patient & clinician prior to face-to-face encounter
- Support follow-up care (email and SMS mgs)
Health-E You/Salud iTu™

- An interactive, individually tailored, web-based mobile health application (app)
- Increases adolescents’ knowledge, self-efficacy & supports contraceptive decision-making
- For providers, it makes the visit more efficient and effective:
  - offloads contraceptive counseling to the computer
  - prepares provider for visit with patient summary from app use
  - supports a more individually-tailored visit with patient-centered contraceptive care
  - uses a social justice framework
Developed in partnership with adolescents, providers and CBOs

- Advisory Boards (Youth & Community)
- Focus groups
- Interviews
- Usability Testing
- Pilot Testing (N & S CA)

Efficacy testing (CRCT)

NOW Implementation & eval
Overview of Health-E You/Salud iTu™

- Youth selects language: English or Spanish
- Select clinic
- Answers a few questions to direct user to tailored content

Contraceptive Decision Support Pathway

- Assesses knowledge via MythBusters “game” & provides feedback
- Asks lifestyle & attitude questions that are important when selecting contraception (e.g. desire to avoid pregnancy, method efficacy, period regularity, privacy, contraceptive use hx, satisfaction, adherence)
- Potential contraindications (to further discuss with provider)
Health-E You/Salud iTu™

- Personalized recommendations starred
- Opportunity to learn about any method(s)
Intra-Uterine Device (IUD)

**What is an IUD?** It is a small t-shaped piece of plastic that makes it hard for sperm to attach to the egg. A trained provider places it in your uterus and you don’t have to do anything for several years.

**Why is the IUD a TOP choice for you:**

- It is one of the *most effective* contraceptives.
- It is *safe* and has *few side effects*.
- No one can *tell* you are using it.
- Can be *removed at any time* and you can get pregnant right away
- **DOES NOT** cause abortions or infections

Like most contraceptives, the IUD does not protect you from STDs or HIV. Be sure to use a condom every time you have sex.

There are two types of IUDs: hormonal or non-hormonal.
Video Development Youth-Led
Cluster Randomized Control Trial (CRCT)

CRCT of 18 SBHCs in LA

• 18 SBHCs randomized to use App or standard of Care
• Adolescents provided iPad at check-in (App or SRH Questionnaire)
• Completed online survey: 48 hour, 3- and 6-months post-visit
• Participants received up to $70 to complete all surveys
• Enrolled 1,360 sexually active Latinas (684 intervention; 676 control); Mean age = 16.4yrs

Tebb et al., Study Protocol. BMJ. 2018
Tebb et al., Implementation Evaluation. JMIR Mhealth Uhealth. 2019
Results

- **Knowledge**: Mean score on 7-item contraceptive knowledge scale increased from pre to post-App (3.3 vs. 4.9; \(t=16.40, p<.001\))
- **Self-Efficacy**: How confident are you...
  1) in talking with your doctor about birth control
  2) having the information to choose birth control
  3) using birth control correctly
- Self-efficacy increased significantly from baseline to 48-hour follow-up among app users (\(b = 1.64, 95\% \text{ CI } 1.01–2.27, p < 0.001\)).
- Increases for app users were sustained at the 6-month follow-up.
Results: Adolescent-Provider Communication

• Rates of discussing birth control with provider were higher for App users (89%) vs. Controls (69%), OR = 2.22, p=0.055

“Having the app really helps me out, especially when I’m busy...when the students finish, they already have a list of informed questions. This makes my counseling visit more productive and a lot shorter.” - provider

“It’s helpful because if you don’t now what you want, you’re gonna know what you want by the end of the video!” - adolescent
App Satisfaction (% Agree)

Providers’ Report:
83% App engages teens in the contraceptive decision-making process
75% App helps provide individually-tailored discussions on contraception

Adolescents’ Report:
93% understood information on App
87% App gave useful birth control info
85% would recommend App to a friend
70% App improved the quality of visit
Original Research Article

Improving contraceptive use among Latina adolescents: A cluster-randomized controlled trial evaluating an mHealth application, Health-E You/Salud iTu

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Current Implementation Study Objectives

1. Expand implementation of the app through SBHCs across U.S.
2. Evaluate effectiveness on a more diverse population of adolescents (race/ethnicity & geographic location).
3. Assessing improvements in knowledge, self-efficacy, visit quality and contraceptive use over 6-month follow-up period.
4. Added brief mental health measures to examine relationship between contraceptive use and mental health over time.
Implementation Activities

Adapted app for expanded implementation

+ Added content that is gender inclusive and not based on sexual risk
+ Linked app on-line survey and SMS gift card incentives
+ Revised method of sharing information with the provider
App data stored in Salesforce
Programmed to pull summary data and automatically generate secure e-mail to designated clinic staff/clinician e-mail
Teen user must consent to send summary e-mail to clinic
Implementation Steps

- Clinic staff sends out link/QR code to adolescent girls.
- Link directs them to on-line survey to assess eligibility & consent
  - Eligible adolescents immediately routed to app complete 3 surveys over 6 months for $50
  - Ineligible adolescents are still offered opportunity to use the app and immediately routed to app
  - UCSF IRB approved for adolescent consent to participate; waiver of parental consent since part of confidential SRH care offered through SBHCs
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28 SBHCs across 10 States

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