



JOHNS HOPKINS
MEDICINE

UCSF

Health-E You/Salud iTu™:



A Youth-Centered
App to Support
Sexual &
Reproductive
Health





We have nothing to disclose.

The views expressed in this presentation are those of the speakers and may not reflect the official policy of Moses/Weitzman Health System.



Meet our Team



**Kathleen
Tebb, PhD**

University of California,
San Francisco



**Maryjane Puffer,
BSN, MPA**

Los Angeles Trust for
Children's Health



**Morayo "Mo"
Akande,
PhD, MPH**

Johns Hopkins University



**Ketan
Tamirisa**

Youth Advisory Board
Member & Sophomore at
Washington University in
St. Louis, Missouri



Ice Melter

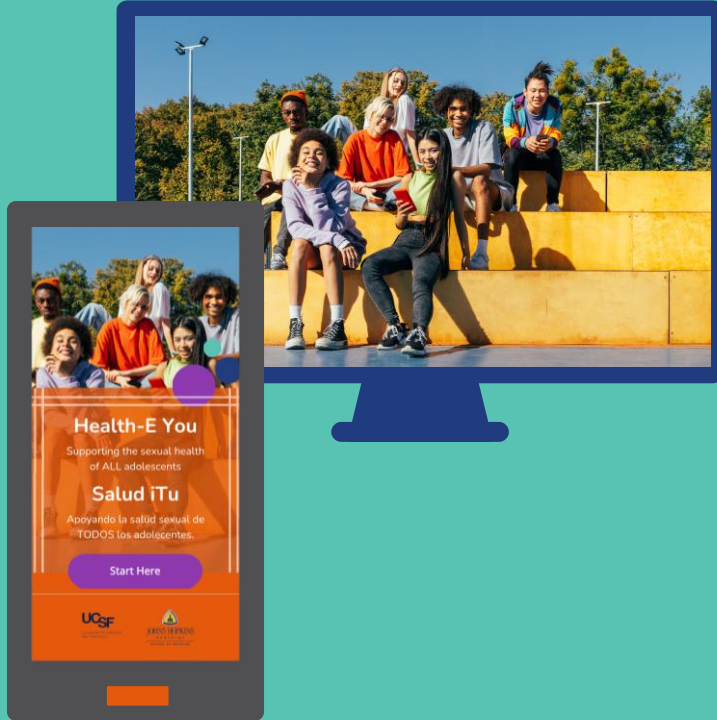
Poll:

Are you aware of any SRH apps?

What if any SRH apps have you used?



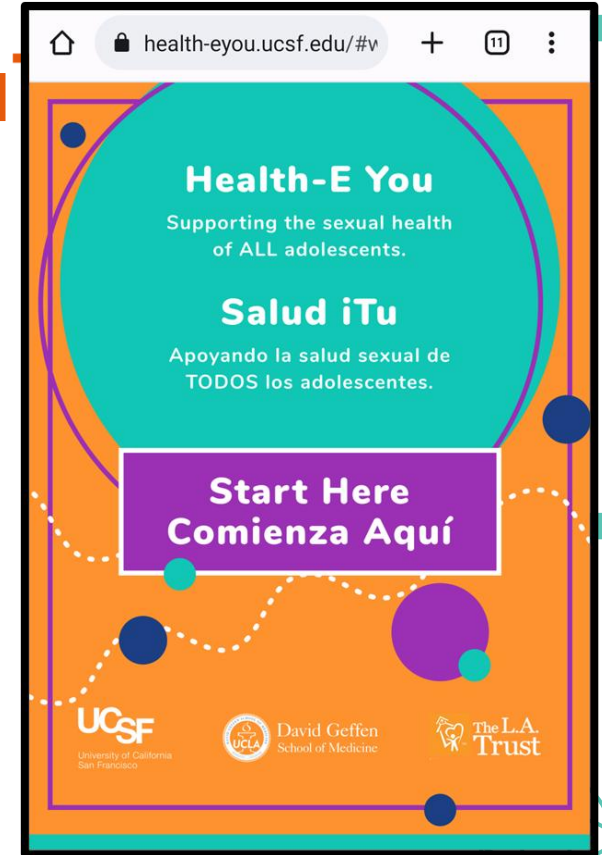
What is Health-E You / Salud iTu™?





Health-E You /Salud iTu

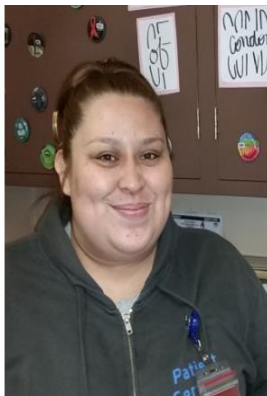
- Health-E You is an interactive, individually tailored, mobile health application (app) to support unmet sexual & reproductive health (SRH) & care needs for youth before their visit
- It preps youth & clinician for visit
- It shares confidential patient summary to clinician to increase visit efficiency & quality



Health-E You/Salud iTu™

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)
- D&I: Sustainability



Early Planning Efforts that Enhance Scalability & Sustainability

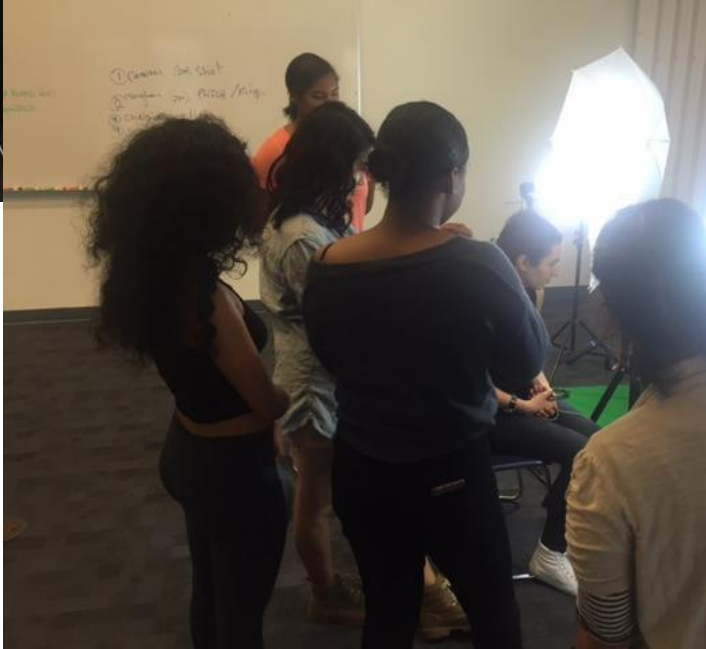
- Developing an intervention that is acceptable, feasible and meets the needs of target audience (clinicians and patients) is a critical first step in planning for scaling and sustainability
- Key partnerships are essential:

The L.A. Trust: Youth & Community Advisory Boards

A collaborative process of research – together defined goals,
developed intervention & evaluation

Involves *all* partners & recognizes indiv'l strengths &
validates local knowledge

Video Development Youth-Led



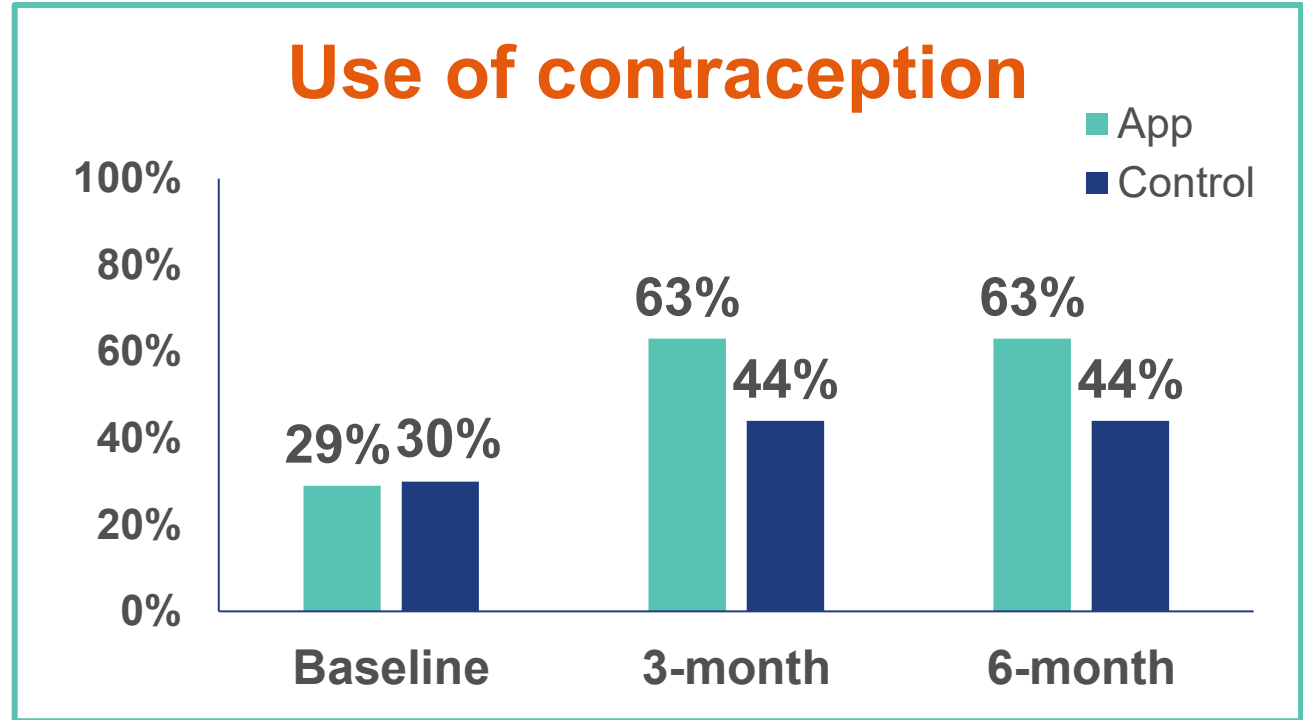
Celebrate Success



Evaluation Results for Female Youth

In a randomized controlled trial with female youth in SBHCS in LA County: Health-E You resulted in increased contraception knowledge, self-efficacy, & use

Tebb KP et al. Evaluating an mHealth Application, Health-E You/ Salud iTu. *Contraception*. 2021;104(3):219-326.



Efficacy trial conducted with N=1,360 sexually active Latina youth (mean age=16.4) at 18 school-based health clinics



A Mobile Health Contraception Decision Support Intervention for Latina Adolescents: Implementation Evaluation for Use in School-Based Health Centers

Kathleen P Tebb¹ ; Sang Leng Trieu² ; Rosario Rico² ; Robert Renteria² ; Felicia Rodriguez¹ ; Maryjane Puffer² 

Article	Authors	Cited by (28)	Tweetations (1)	Metrics
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Kathleen P Tebb¹, PhD; Sang Leng Trieu², DrPH; Rosario Rico², MPH; Robert Renteria²; Felicia Rodriguez¹, MA; Maryjane Puffer², BSN, MPA

¹ University of California, San Francisco, Department of Pediatrics, San Francisco, CA, United States

² The Los Angeles Trust for Children's Health, Los Angeles, California, CA, United States

Sexual health
Protocol

Assessing the effectiveness of a patient-centred computer-based clinic intervention, *Health-E You/Salud iTu*, to reduce health disparities in unintended pregnancies among Hispanic adolescents: study protocol for a cluster randomised control trial 

Kathleen P. Tebb¹, Felicia Rodriguez¹, Lance M. Pollack², Sang Leng Trieu³, Loris Hwang⁴, Maryjane Puffer³, Sally

Adams¹, Elizabeth M. Ozer¹, Claire D. Brindis⁵

Correspondence to Dr. Kathleen P. Tebb; kathleen.tebb@ucsf.edu



World Journal of
Methodology

► World J Methodol. 2023 Sep 20;13(4):210–222. doi: [10.5662/wjm.v13.i4.210](https://doi.org/10.5662/wjm.v13.i4.210) 

Utilization of online systems to promote youth participation in research: A methodological study

Marie Salem¹, Lance Pollack², Alex Zepeda³, Kathleen P Tebb⁴



Contents lists available at ScienceDirect

Contraception

journal homepage: www.elsevier.com/locate/contraception

Original Research Article

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

Kathleen P. Tebb^{a,*}, Felicia Rodriguez^a, Lance M. Pollack^f, Sally Adams^a, Rosario Rico^b, Robert Renteria^b, Sang Leng Trieu^b, Loris Hwang^c, Claire D. Brindis^d, Elizabeth Ozer^e, Maryjane Puffer^b

Open Access Article

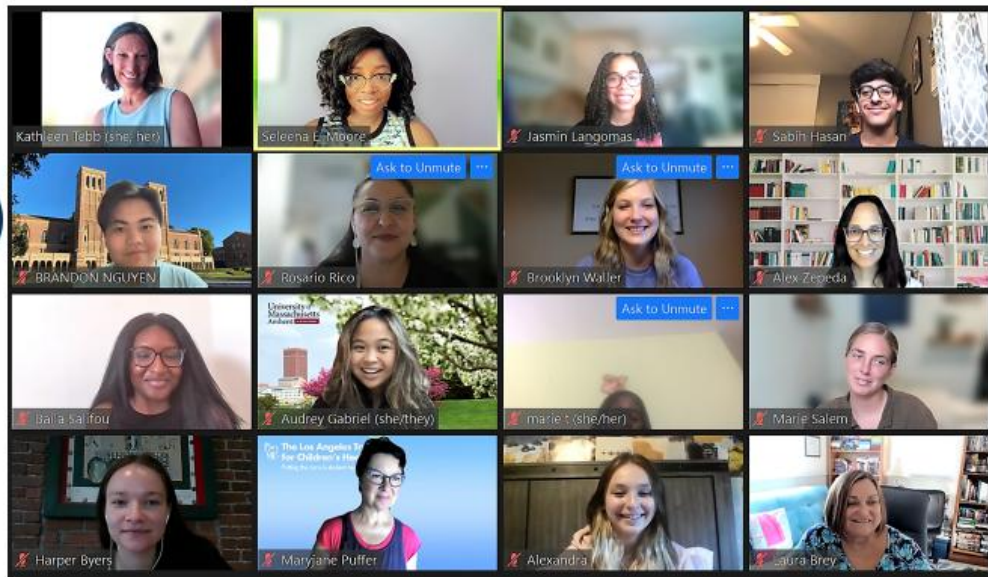
A Pilot Study of Integrated Digital Tools at a School-Based Health Center Using the RE-AIM Framework

by Steven Vu^{1,*} , Alex Zepeda² , Tai Metzger³  and Kathleen P. Tebb⁴ 

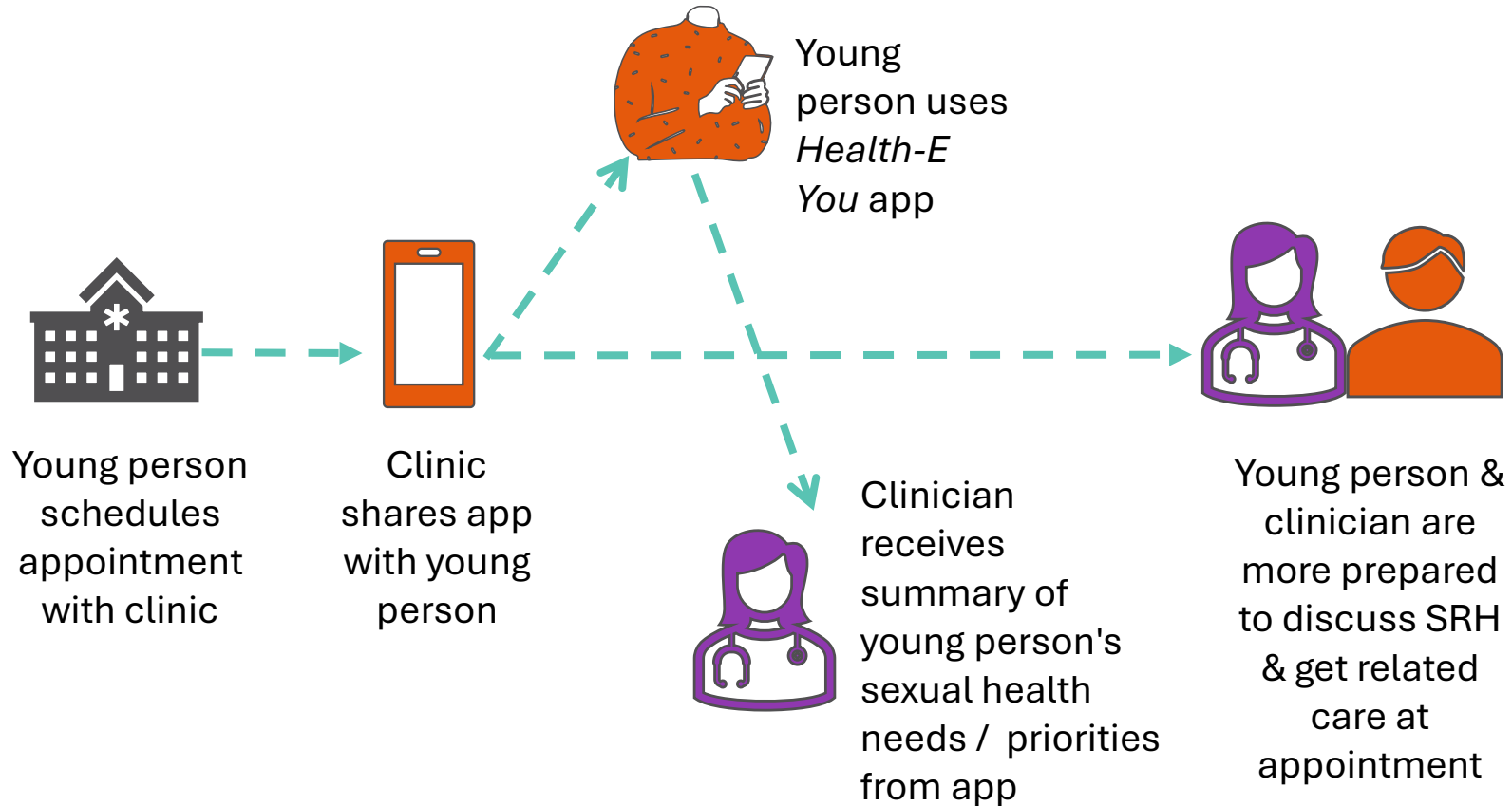
Adaptations to Expand Nationally

Flexibility

- Utilize a flexible & iterative process (repeated cycles of: research, reflection, & action)
- Adaptations
 - App adaptations
 - COVID adaptations

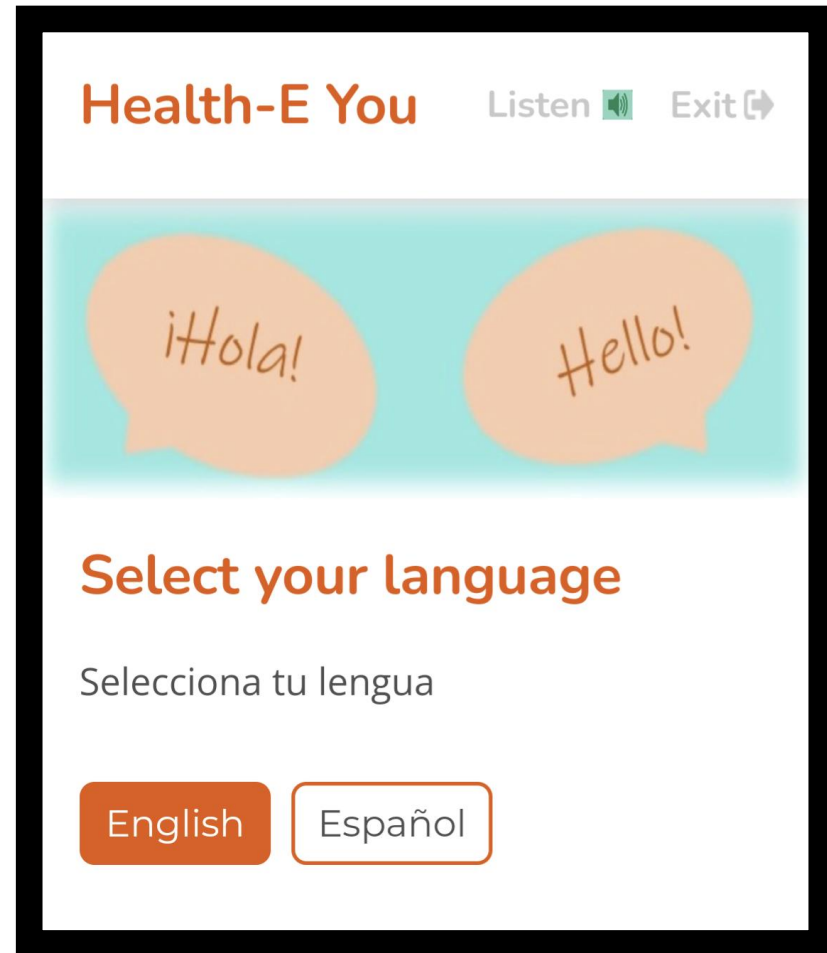


How **Health-E You** Works:



Health-E You/Salud iTu™

- Available in English and Spanish
- Audio & visual features to support ease of use/literacy



Health-E You/Salud iT

Customized for youth to select where they are at (directs where the patient summary is sent).

- Select State
- Select Site Name

Health-E You Listen Exit

Please select your state and site from the drop down list.

Select the site for your upcoming visit.

Select Your State

Florida

Select Site Name

Select an option

Back

Health-E You Listen Exit

Select an option

BCRI Adolescent Medicine

Jackson ACC Adolescent Medicine

Booker T. SBHC

Select Your State

Florida

Select Site Name

Select an option

Back

Health-E You/Salud iTu™

2-Pathways

Decision Support MythBusters

“game” with feedback

Lifestyle & attitude questions to guide
contraceptive choice

Potential contraindications (discuss



Not at Risk of Pregnancy (females or males)

Select from menu of SRH topics
(contraception, STI/condoms,
Prep & Pep, E.C., etc.)



Confidential e-mail sent to clinicians with patient summary from app

Contraception Support Pathway

**Sex at Birth Female
Ever Had Sex**

7- Myth Busters

1. Birth control pills reduce the risk of STDs.
2. Pulling out (photo)
3. Weight gain is a common side effect of most birth control methods, especially the IUD.
4. Birth control pills begin working as soon as you start taking them.
5. Decreased menstrual bleeding from IUDs does not cause health problems later on.
6. Long-acting contraception, like the IUD and implant, can make it more difficult to become pregnant in the future
7. The IUD is easy for a clinician to insert & remove.

Health-E You

Listen  Exit 



**Pulling out before
one ejaculates
(cums) will prevent
a pregnancy.**

Fact

Myth

Don't know

Myth Busters – Tailored feedback

Health-E You

Listen 

Exit 

CORRECT! You BUSTED this MYTH!

“Pulling-out” or the “withdrawal” method is NOT effective. Many people become pregnant because their partner releases pre-ejaculation fluid that contains sperm. A person with a penis cannot control the release of this fluid.

Next

Health-E You

Listen 

Exit 

BUSTED! The REAL TRUTH is...

“Pulling-out” or the “withdraw” method is NOT effective. Many people become pregnant because their partner releases pre-ejaculation fluid that contains sperm. A person with a penis cannot control the release of this fluid.

Next

Health-E You

Listen 

Exit 

“Pulling-out” or the “withdraw” method is NOT effective.

Many people become pregnant because their partner releases pre-ejaculation fluid that contains sperm. A person with a penis cannot control the release of this fluid.

Next

Questions to support contraceptive choice

1. Method efficacy
2. Method safety/side effects
3. Weight gain
4. Hormones
5. Desire for decreased pain/cramping
6. Desire for less bleeding and period regularity
7. Ease of getting to a clinic
8. Method confidentiality
9. Hx of contraceptive use and method satisfaction

Also asks about contraindications (flag for clinician to review further)

Health-E You

Listen  Exit 



**Now, let's help you decide
which birth control
method is best for you!**

Birth control gives you the ability to decide if and when you want to have children.

All of your answers are completely confidential. It is designed to help find the best method for you -- so you can have more control of your future!

Back

Next

Health-E You/Salud iTu™ Contraceptive Pathway

- Stars App recommendations
- Reproductive justice lens emphasizes choice
- Opportunity to learn about any method(s)

Health-E You

★ App recommendations, but the choice is yours! Touch any method to learn more.

Touch the starred methods to learn more about the options recommended for you:

★ Intra-Uterine Device		One time insertion. Nothing to do or remember for several years.
★ Implant		Quick and easy to insert. Nothing to do or remember for 3 years.
Shot/Depo		Private and effective as long as you get the shot on time - every 3 months.
Ring		Easy to insert. Keep in for 3 weeks, remove it, wait 1 week and re-insert.
Patch		Need to change patch once a week.
Pill		Effective if taken every single day.

99% effective
Less than 1 out of 100 women get pregnant each year

94% effective
About 6 out of 100 women get pregnant each year

91% effective
About 9 out of 100 women get pregnant each year



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.

[Learn more](#)[See other contraceptive options](#)[Continue](#)

Nurse Practitioner Le Flore Jacobs
facts about IUDs



Krissy,
17 years old
Krissy, 17, on the IUD
I use the IUD and love it!

Confidential Patient Report

App data stored in secure UCSF Salesforce system

User provides partial name and/or cell phone to share with clinician

Summary data automatically generated

Sent via secure e-mail to designated clinic staff/
clinician e-mail



Health-E You
Salud i Tu

Confidential App Use Report Harbor Wellness Center

Patient Info

Partial name
Kathleen
T

Cell Phone
111-123-3456

Gender
Female

Reason for Visit
Well visit / checkup / physical

Patient Hx

Ever Had Sex
Yes
Genital

Current Contraceptive Method (if any)
None

Method/s App Recommended
IUD
Implant

Method/s Patient Interested in Using
Shot

Potential Contraindications (to discuss)
Non

Topics Explored in App

DEMO TIME!

Here's a link to the app. You can use it on your Smartphone, PC, or tablet computer

<https://health-eyou.ucsf.edu/>

- Choose “TEST” From the select your state and site drop-down list to indicate you are testing the App.
- Select Female sex at birth, aged 12-19 and have had penile/vaginal sex to get routed to the contraceptive decision support pathway.

Health-E You is available FOR FREE!

- Contact Kathleen.Tebb@Ucsf.edu to schedule free orientation, training, and to set up linkages to share information with the clinician

Health-E You/ Salud iTu™ Team

UCSF

Kathleen Tebb PhD, PI
Claire Brindis DrPH, co-I
Elizabeth Ozer PhD, co-I
Lance Pollack PhD, Statistician
Felicia Rodriguez MA, Marie Salem, MPH
Veronika Mesheriakova MD
Brittany Badal MD, Chelsea Nelson MD
Michelle Odette MD
Lela Bacharach MD
UCLA: Loris Hwang, MD

SBHCs Clinicians & Staff across the country

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PCORI® Dissemination & Implementation Award (DI 2020C2-20372)
UCSF Hellman Fellowship (2012); Mt. Zion Research Fund (A115613); UCSF Research Evaluation and Allocation Committee

L.A. Trust for Children's Health

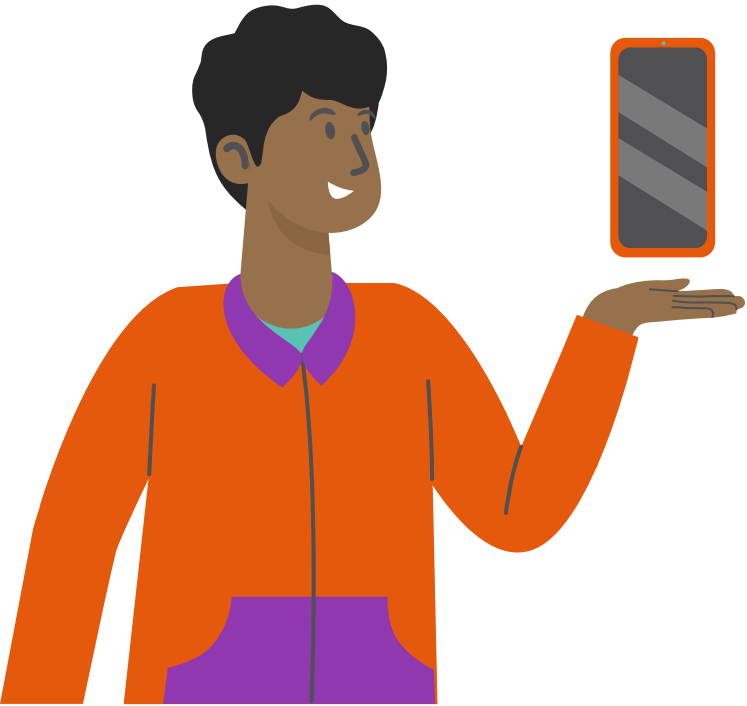
Maryjane Puffer BSN, MPA
Alex Zepeda MS, Rosario Rico MPH,
Robert Renteria, Kelly Shieh, Esther Ypez
Rosina Franco MD

National School-Based Health Alliance

Robert Boyd MCRP
Laura Brey MS , Seleena Moore MPH
Jacquelyn Christensen PhD
Katherine Cushing MPH, Harper Byers BA
National Youth Advisory Board Members

CA School-Base Health Alliance

Amy Ranger MPH



Need for **Health-E You** to be adapted for males and gender expansive youth with individually tailored and interactive content



Preventive care guidance recommend that clinicians deliver sexual & reproductive health (SRH) care to male adolescents (aged 12 & older), yet, SRH care receipt for this population is poor.



This population also experiences high rates of STIs & HIV & unintended partner pregnancy exacerbated by low levels of SRH knowledge & method use behaviors.

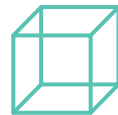


Interventions as part of clinic visits can be helpful SRH promotion tools for adolescents, yet, few include the diversity of males who present for care.



Use of technology as part of clinical interventions can make it easier to consistently provide evidence-based SRH by tailoring to the needs of diverse adolescents, including males, in multiple languages.

Adapting Health-E You for males and gender expansive youth



Study Aims

- Use Youth-Centered Health Design (YCHD) to develop the app design and content
- Test the acceptability, usability, and satisfaction of the final Health-E You app using YCHD
- Efficacy trial of the app at clinics across the U.S.

Study Goals

- Improve sexually active male adolescent patients' knowledge, self-efficacy, beliefs, and behaviors related to SRH care after the visit and method use at 2-month follow-up.

What is Youth-Centered Health Design (YCHD)?

Youth-Centered Health Design (YCHD)



- **What is it?** Partnering and engaging with youth in design process of a program/intervention that is meant for them.
- **Why?** YCHD gives youth a voice in the decisions that will affect their health ensuring more meaningful and impactful outcomes for the programs/interventions.



Youth Design Team Advisory Groups (DTAGs)



Who they are:

Total of seven key youth advisors:

- ✓ Diverse backgrounds
- ✓ Diverse genders
- ✓ Diverse ages



What they do:

- ✓ Brainstorm ideas
- ✓ Give feedback and testing prototypes
- ✓ Learn research skills





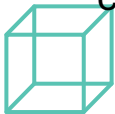
Youth Quotes

The mind of everybody doesn't work the same way, not with the same speed. So if possible, it is better to provide both text and videos in the sense that whoever can digest the information just by reading text, fine. If you need to go through video before you understand what everything mean, it's still okay. So if you ask me, I think it's good if you made both options possible...text and videos.



I think that cartoons would be easier to engage with, especially when it's an embarrassing topic. It's easier to stomach when it's not a picture of real life. At least that's what I think might be the case, but I don't know if that's how most people work.

It would just feel more professional with the images of real people. The cartoon art is more casual-leaning. Yeah. The real people would feel more professional.





Youth Quotes

I also think sexual education is starting to decrease. Many people don't realize the consequences of unprotected sex that much.

Another thing I would like to add is the fact that sometimes, young people can get hesitant about getting condoms because of lack of information about condoms in general. And even those who have the right information, condoms is not something you just go into the store to order for candy. So sometimes, most times, young people can be quite shy about getting them. The lucky ones are maybe some who get them for free in school. But going to get it in a store can be quite embarrassing.

Honestly, I didn't know you couldn't use your teeth to open the package. In the beginning, I didn't know which way to wear it. So that's kind of real helpful for somebody that never had sex before, needs to know how to use the condom, and to see it demonstrated it very well.



Youth Advisor Perspective

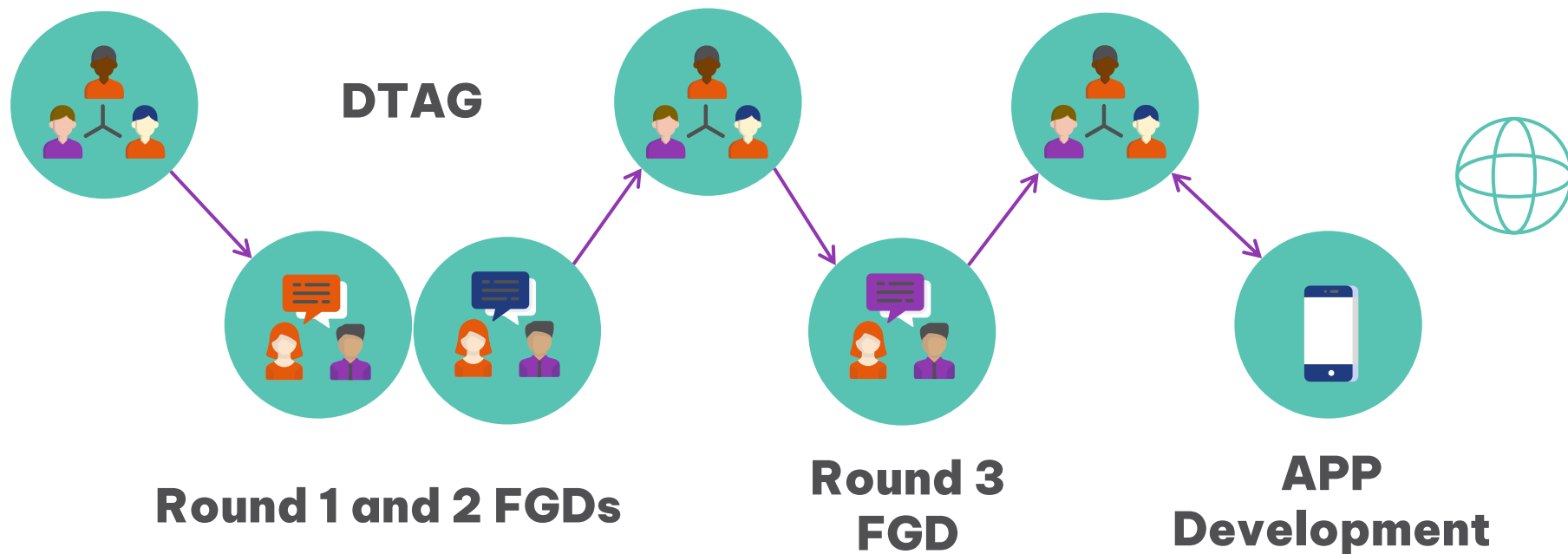
**What did the engagement
process mean to you?**

**What opportunities have
emerged for you?**

Any challenges?



Youth Engagement Strategy



Recruitment Strategies



Social Media

JH School of Medicine
Centro Sol



Community Partners

Youth serving community
partners in Baltimore, MD
advertised the study.



Youth Referrals

Youth received \$5 per
eligible person they
referred.



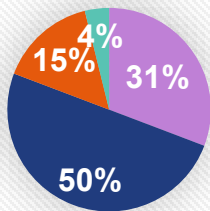
Youth Advisory Boards

Reached out to various YABs
across the U.S. to recruit from
their members.

Focus Group Demographics

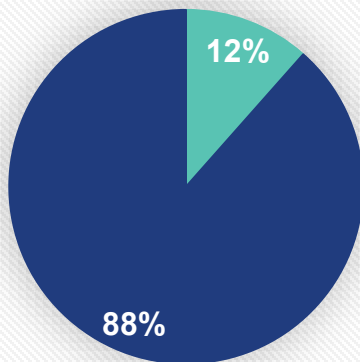
Total = 26 youth participants assigned male at birth

Race



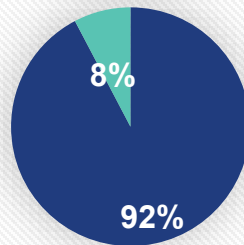
- Asian
- Black or African American
- White
- Unknown

Ethnicity



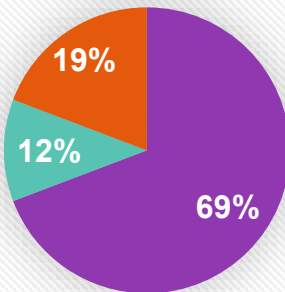
- Latino
- Not Latino

Gender Identity



- Man
- Transgender Woman

Sexual Orientation



- Straight
- Gay
- Bisexual

Why engage Youth-Serving Professionals?



*Understanding
clinicians' needs
helps us design a
product that can be
implemented and
scaled*





Clinician Engagement: **Interviews**



Profile:

- ✓ 12 Individual Interviews
- ✓ 33% MDs, 67% NPs
- ✓ From 6 different states
- ✓ Varying clinical focuses and clinical settings

Interviews covered topics such as:

- ✓ Their typical SRH care practices
- ✓ Barriers / facilitators to SRH care
- ✓ Perceived content needs for adolescents
- ✓ App's clinician report



Key Findings from Youth

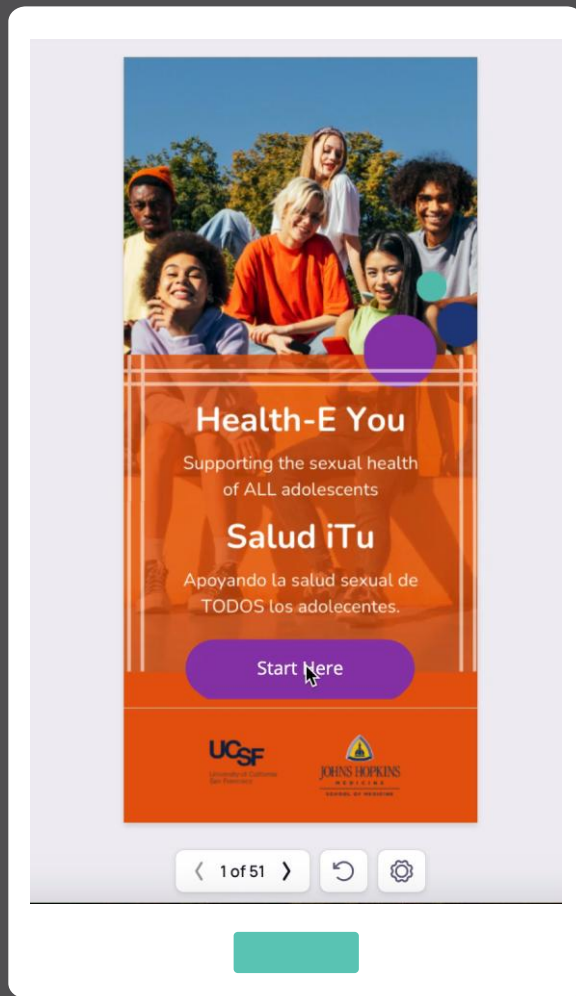
- App use would increase **confidence** and **empower** them to have conversations about SRH with partners/ clinicians
- **Features** that can help youth take action:
 - **widgets** to help them locate STI screening
 - ways to **submit questions** they still need answered
 - **activities** to help have conversations with a partner
- App design should be **engaging** and **straightforward**
 - Use vibrant colors and fun images
 - Content should be **clear** and **direct** – avoid jargon

Clinician vs. Youth Feedback

Topic Area	Youth Participants	Clinician Participants
Priority SRH topics for young people	• Preventing pregnancy • Preventing STIs/HIV • Healthy Relationships	• Sexual pleasure • Preventing pregnancy • Preventing STIs/HIV • Healthy Relationships
Barriers to discussing SRH with clinicians	• Discomfort • Privacy/confidentiality concerns	• Limited time • Competing health needs • Training
Helpful features	• Condom use quiz • STI/HIV testing finder • Condom finder	• Open-ended question box for young people • Clinician summary



Final App Design MO ADD LINK!



Acknowledgements Health-E You for Males

Study Team

- Shelby Rohlf (MSPH Student)
- Kathleen Tebb, PhD
- Arik V. Marcell, MD, MPH
- Youth Design Team Advisory Group (DTAG)
- Clinician Design Team Advisory Group

Partners

- AMAZE
- Centro Sol Youth Advisory Board
- Johns Hopkins Adolescent Medicine Youth Advisory Board
- Center for Adolescent Health Youth Advisory Board
- UChoose Baltimore Youth Advisory Council
- HeartSmiles
- MissionFit Baltimore
- Youth Advisory Council of Maricopa County
- Getting to Zero Young Adult Advisory Board

Funding Support

-Patient-Centered Outcomes Research Institute® (PCORI®) Dissemination & Implementation Award (DI 2020C2-20372).
-Eunice Kennedy Shriver National Institute of Child Health and Human Development of the National Institutes of Health (R01HD109141, PI: Arik V. Marcell).
-The UCSF Research Evaluation and Allocation Committee (REAC) with funding from the Springer Fund and Wikman Fund (2019) provided Drs. Tebb and Marcell with resources to support preliminary work for, "Health-E Males: The Development and Pilot Testing of an mHealth App to Promote Patient-Centered Sexual Health Information and Services for Adolescent Boys"

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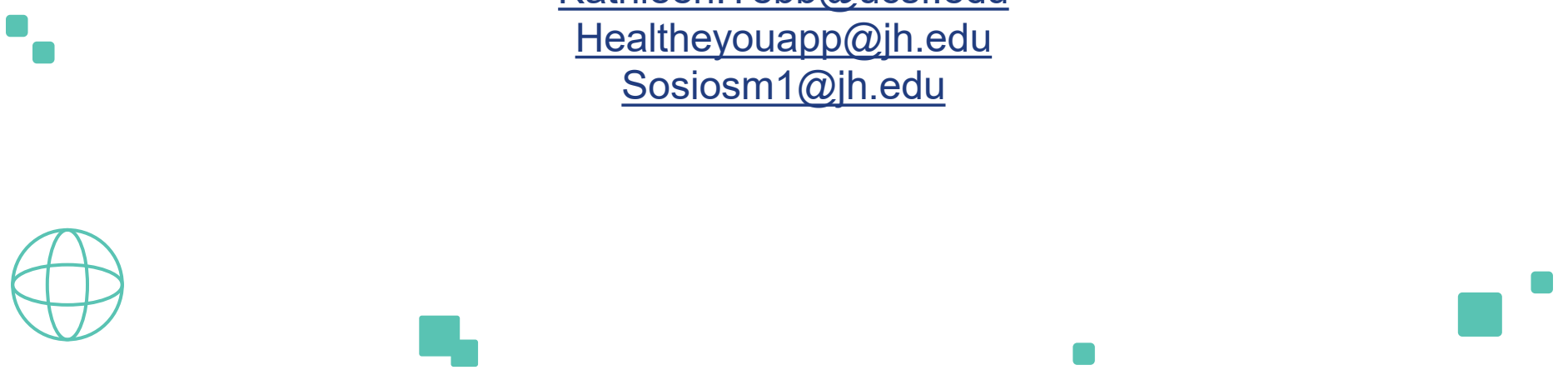
Thank YOU!

PLEASE REACH OUT!

Kathleen.Tebb@ucsf.edu

Healthyouapp@jh.edu

Sosiosm1@jh.edu

A decorative footer area featuring several teal squares of varying sizes and a teal wireframe globe icon in the bottom left corner.