Development of an iPad waiting room “app” for contraceptive counseling in Title X clinics

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Improving Intrauterine Device Service Provision in Title X clinics in Chicago
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Background

- Unintended pregnancy rates remain high in the U.S. particularly for young women
- Long-acting reversible contraception (LARC) methods have been suggested for first line use by ACOG
- Novel approaches are needed to increase uptake of LARC methods
Reducing Service Delivery Barriers to Effective Contraception in Title X Clinics on the South Side of Chicago (2010-2013)

• Uses a Failure Modes Effects Criticality Analysis (FMECA) to evaluate IUD service delivery in three Chicago Title X clinics

• Novel mixed-methods approach adapted from industry
  – Map processes to understand system failures
  – Design and test interventions to reduce failures
Phase I (2010-2012)

- Held FMECA sessions at each clinic with staff and patients to determine key steps in IUD service delivery process
- Created process maps
- Identified potential failure areas and ranked each as high, medium or low-risk for IUD delivery failure
- Selected high risk areas for intervention
Phase II (2012-2013)

• Intervention development and testing

• Two interventions:
  1. Formalized script for IUD scheduling at clinic call center
  2. Tablet-based “app” for waiting room contraceptive counseling
Intervention 2: Contraceptive Counseling “App”

Tablet-based “app” for use by patients in the waiting room prior to appointment to provide additional information and counseling regarding available contraceptive methods

Addresses high-risk failure areas:
1. Insufficient educational materials on LARC methods
2. Limited time for contraceptive counseling
3. Lack of awareness of LARC methods
Overview and Features

• Client-centered and theory-based design
• Video testimonials from IUD and implant users centered around the Theory of Planned Behavior
• Comprehensive overview of methods on a continuum of effectiveness
• Interactive informational pages for each method
  – “How does it work?”
  – “What can I expect?”
  – “What will he think?”

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Theory of Planned Behavior

- Behavioral Belief
- Normative Belief
- Control Belief
- Attitude Toward Behavior
- Subjective Norm
- Perceived Control
- Behavioral Intention
- Behavior
App User Images
Usability Testing

• Iterative human-centered process that allows designers to understand how real users interact with the product
  – Round 1: University of Chicago (n=7)
  – Round 2: Title X clinics (n=10)

• Findings suggest users found the app logical and informative and preferred the visual design of tablet-based media
There are many **safe and effective** birth control methods available. Some methods work better than others. Choosing a birth control method based on **how well it works** is important.

**Most Effective**

- **IUD, Implant**
  - Less than 1 pregnancy per 100 women

**Effective**

- **Shot, Pill, Patch, Ring**
  - 6-9 pregnancies per 100 women

**Least Effective**

- **Condom**
  - 18 pregnancies per 100 women

Effectiveness over 1 year of use
Intrauterine Device (IUD)

The IUD is a small, T-shaped piece of plastic inserted by a healthcare provider into your uterus. It is one of the most effective forms of birth control. IUDs work for a long time – between 5 and 12 years, depending on the type. There are two types of IUDs: hormonal and copper (hormone-free).

Brand names: Mirena, ParaGard

How does it work?  What can I expect?  What will he think?
Intervention Analysis

• Randomized controlled trial of 60 women in one Title X clinic
  • Inclusion: Ages 15-29, seeking birth control in the next 30 days, English speaking
  • Baseline survey (all participants): Demographics, sexual and contraceptive history, technological/social media usage, contraceptive knowledge, opinions and behaviors
  • Post-intervention survey (intervention group only): re-test of contraceptive knowledge, attitudes and opinions regarding the app
  • Chart review (all): Method choice and delivery at time of visit
Summary

• Initial feedback from staff at the test clinic:
  – The app is easy to integrate into patient wait time
  – Use of a waiting room app does not disrupt clinic flow

• Initial feedback from patients using the app:
  – Information on the app is relevant and applicable to their interests
  – Use of the app allows women to both confirm their own knowledge and gain new knowledge
  – The app is simple and easy to use (average use time is 5-7 minutes)
Next Steps: Scaling Up the Intervention

• Initial impressions: This intervention can be easily scaled up as an iPhone app available for individual download

• Further discussions and considerations are needed as to whether the app can stand alone or whether it should be used as part of a comprehensive counseling intervention

• Data collection and analysis remains ongoing at this time
Thank you and Questions

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