Preventing Postpartum Smoking Relapse: A Texting Messaging Intervention

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ISRII 6th Scientific Meeting – May 2013

Smoking and Pregnancy

- Cause of premature morbidity and mortality

- Adverse outcomes

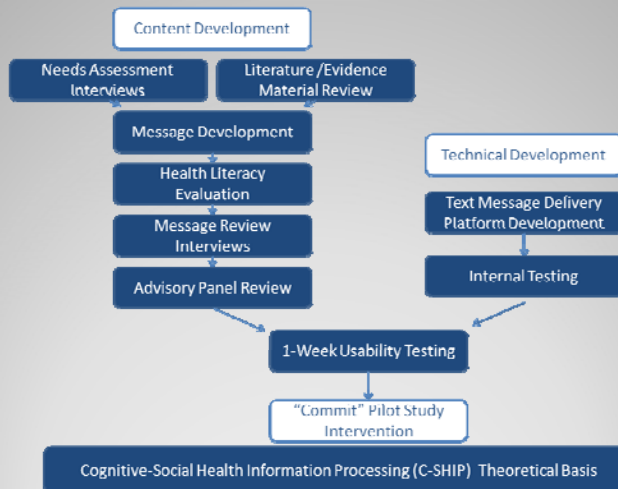- 50% quit during pregnancy
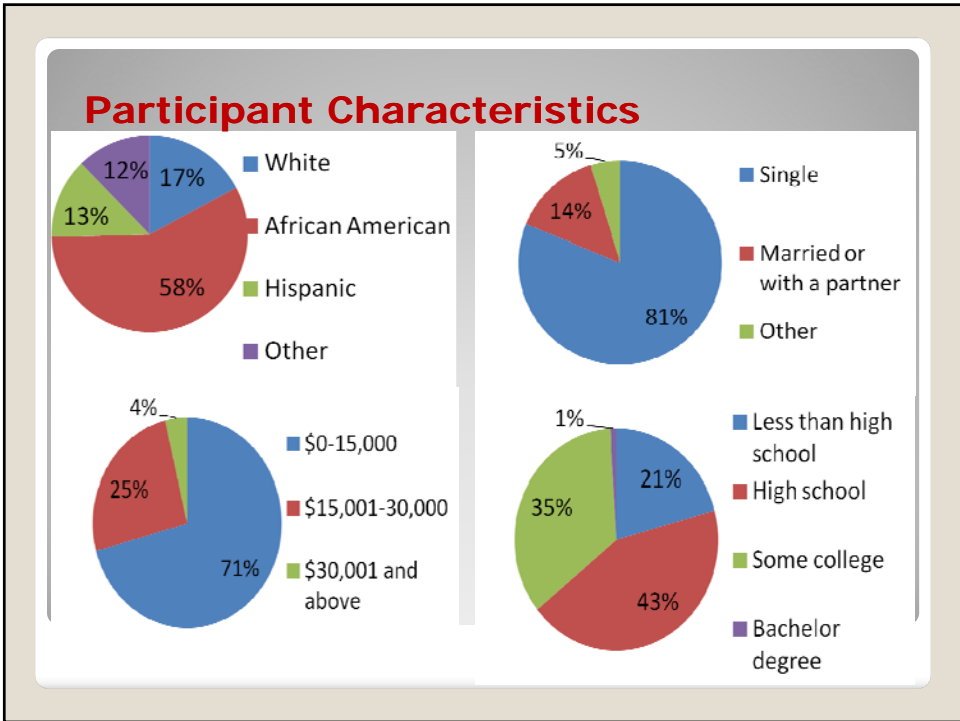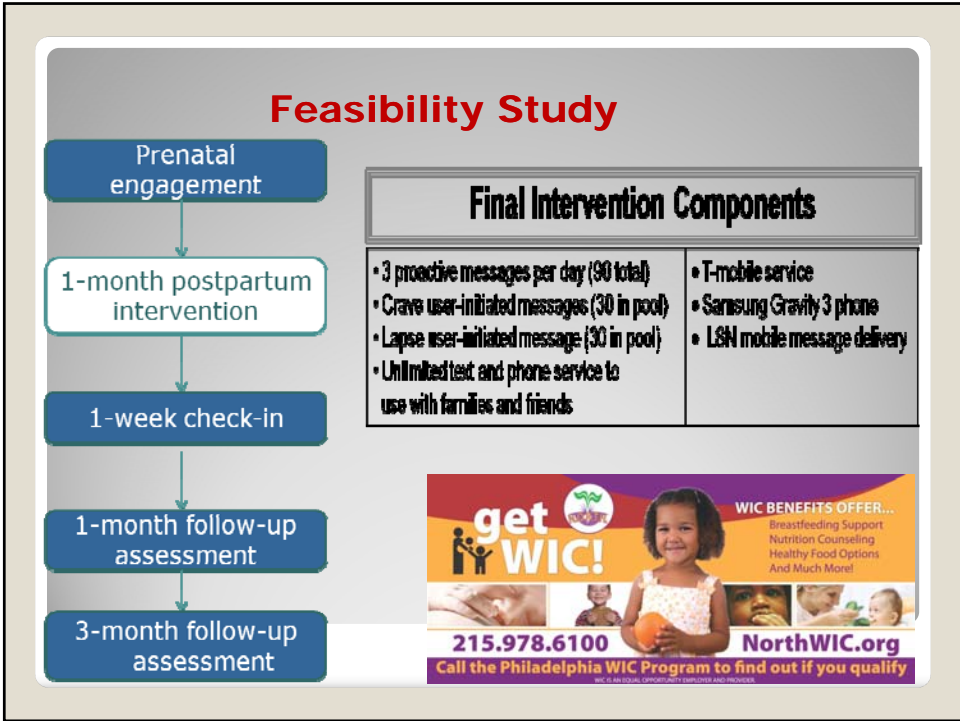
- Interventions show efficacy

High Postpartum Relapse

- 50-80% over the first year

- Child health problems and deaths

- Interventions show ineffective

"Commit" TM Intervention

- Content Development
- Needs Assessment Interviews
- Literature /Evidence Material Review
- Message Development
- Health Literacy Evaluation
- Message Review Interviews
- Advisory Panel Review
- Technical Development
- Text Message Delivery Platform Development
- Internal Testing
- 1-Week Usability Testing
- "Commit" Pilot Study Intervention
- Cognitive-Social Health Information Processing (C-SHIP) Theoretical Basis

Feasibility Study

Prenatal engagement → 1-month postpartum intervention → 1-week check-in → 1-month follow-up assessment → 3-month follow-up assessment

Final Intervention Components

- 3 proactive messages per day (90 total)
- Crave user-initiated messages (30 in pool)
- Lapse user-initiated message (30 in pool)
- Unlimited text and phone service to use with families and friends
- T-mobile service
- Samsung Gravity 3 phone
- LSN mobile message delivery

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Participant Characteristics

White 17%, African American 58%, Hispanic 13%, Other 12%

Single 81%, Married or with a partner 14%, Other 5%

$0-15,000 71%, $15,001-30,000 25%, $30,001 and above 4%

Less than high school 21%, High school 43%, Some college 35%, Bachelor degree 1%
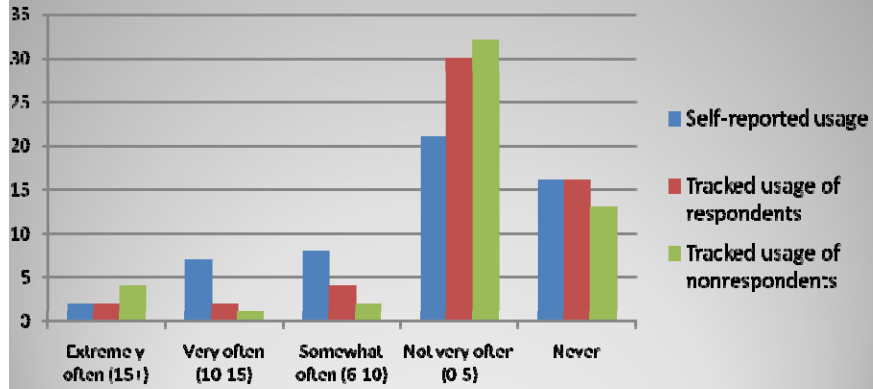
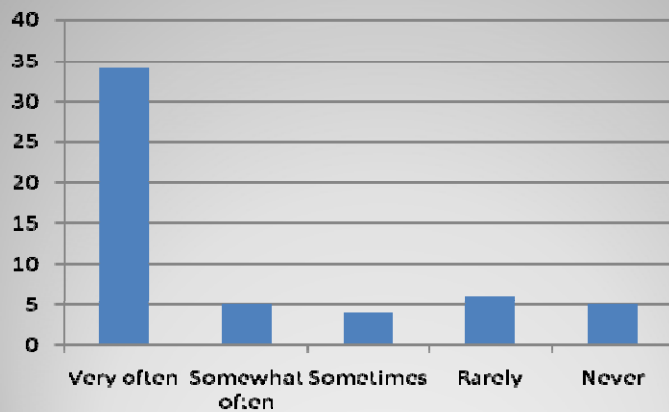## Self-Reported TM Read Usage at 1 Month Follow-up
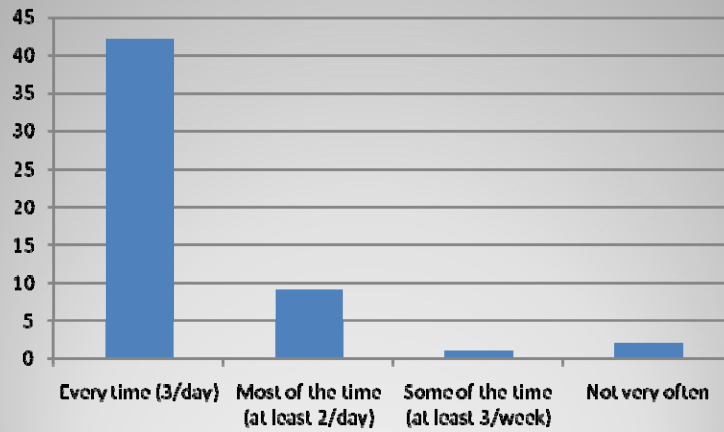
Crave function: Self-Reported vs. Tracked Usage
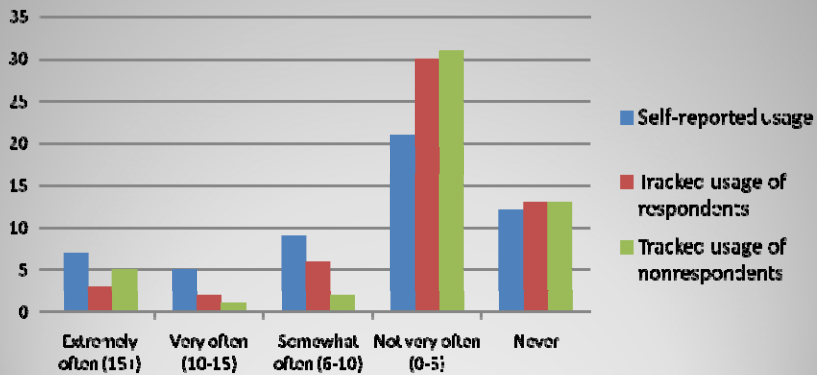
Lapse function: Self-Reported vs. Tracked Usage

Self-reported Usage for Social Support Phone Call

Challenges

- Hard to reach population

- High attrition rate: 50%

- Difficult to collect biochemical verification of smoking status

Increase Engagement: Future Direction

- Enhanced bidirectional text messages:
  - Tailored to ecological assessment via text messages

- Multimodel interventions:
  - Web portal
  - Email
  - Video

- Facilitated peer communication and support