USING MOBILE TO ENGAGE THE “MOST-AT-RISK” & VULNERABLE POPULATIONS

Nebeyou Abebe, MA, PMP
Associate Director, Health Systems
Louisiana Public Health Institute

August 2013
What is Txt4Health?

A SMS-based consumer engagement tool designed to help people understand their personal risk for type 2 diabetes and provide “high risk” individuals with the support they need to maintain a healthy lifestyle and prevent the onset of diabetes.
State of Diabetes in Louisiana

- 1.1 million pre-diabetics
- 60% of adult residents in New Orleans have at least one risk factor for diabetes
- Highest diabetes mortality rate in the U.S. (35.5/100,000 persons)
- In 2007, total cost of diabetes was $2.4B
Program Objectives

• Raise awareness about personal risk for type 2 diabetes

• Motivate participants to set weight loss and physical activity goals to support healthy living

• Link individuals to local care and resources
Target Population

- Adults between 18-44, emphasis on African Americans
- Undiagnosed, though at-risk for type 2 diabetes
- Live in Greater New Orleans
Why Text Messaging? | Engagement & Immediacy

Almost All Americans Are Texting

- 91% Own Cell Phone
- 56% Smart Phone
- 44% Other Cell Phone

80% of Cell Phone Users Text

Source: Pew Research Center Internet & American Life Project, May 2013

Texts Get Read…Immediately!

- 99% Texts Get Read
- 90% Read Within 3 Min

Source: Singlepoint

Text is Used by Every Segment

- 43% Medicare
- 63% No Insurance
- 65% Individual Policy
- 68% Employer Sponsored
- 74% Tricare
- 79% Medicaid

Source: PricewaterhouseCoopers HRI Consumer Survey 2010
Ownership & Usage

Overall Texting Capabilities in Household

A. Total (N=701)
- Don’t Have, No One Does: 24%
- Don’t Have but, Someone Does: 6%
- Have, Don’t Use: 12%
- Have, Use: 58%

G. 18-29 (N=103)
- Don’t Have, No One Does: 4%
- Don’t Have but, Someone Does: 9%
- Have, Don’t Use: 1%
- Have, Use: 95%

H. 30-34 (N=72)
- Don’t Have, No One Does: 9%
- Don’t Have but, Someone Does: 16%
- Have, Don’t Use: 4%
- Have, Use: 84%

I. 35-44 (N=126)
- Don’t Have, No One Does: 9%
- Don’t Have but, Someone Does: 2%
- Have, Don’t Use: 4%
- Have, Use: 86%

J. 45 and Older (N=393)
- Don’t Have, No One Does: 36%
- Don’t Have but, Someone Does: 9%
- Have, Don’t Use: 18%
- Have, Use: 36%

Source: Pre-Campaign Survey
Avg. Text Messages Per Week

A. Total (701) 126
G. 18-29 (103) 351
H. 30-34 (72) 119
I. 35-44 (126) 59
J. 45 and Older (393) 40
Logic Model

**Goal**

Raise awareness of personal risk of diabetes and actions that can be taken to address those risks

**Objectives**

Engage people in determining their risk of diabetes

Assess and communicate their personal risk of diabetes

Connect underserved individuals with care and other resources

Support risk reduction activities, i.e. diet, exercise, smoking cessation.

**Activities**

Promote enrollment of individuals in txt4Health

Assess individual’s risk of diabetes

Provide education about lifestyle changes to address risks

Provide information about care and resources to help address risk

Set and track exercise and weight goals

**Process Measures**

# Enrollees

# Participants assessing their personal risks

# Participants provided information about local resources & care

# Participants setting and tracking goals to reduce risk, i.e. exercise, weight tracking

**Outcomes**

Increased knowledge about personal risk of diabetes

Increased awareness of how to address risks

Increased number of at risk people connected to appropriate care (with a particular focus on the underserved population)

Increased number of individuals engaged in risk-reducing activities
Overview

System collects:
- HEIGHT
- WEIGHT (BMI)
- AGE
- GENDER
- FAMILY HISTORY
- DIABETES DIAGNOSIS
- SMOKING STATUS

System categorizes:
- HIGH RISK
- LOW RISK
- UNDERWEIGHT
- AT WEIGHT
- OVERWEIGHT
- OBSESE

Enrollment

Development of Profile (Risk Categorization)

Goal Setting/Tracking (Weight & Exercise)

Education/Motivation (According to Risk)

Local Connections (Care & Activities)
Engagement Strategy | 360° Surround Sound Approach

- Community Advisory Group – Public and Private Partnerships
- TV and Radio PSAs
- Outdoor billboards
- Co-branded posters
- Outreach at community events, neighborhood associations, conferences, universities, and faith based organizations
- Outreach with providers, including promotion through providers
- Outreach at businesses and through employee events
- Contests and incentive programs
Working Together

BlueCross BlueShield of Louisiana
An independent licensee of the Blue Cross and Blue Shield Association.

DEPARTMENT OF HEALTH AND HOSPITALS

CITY OF NEW ORLEANS
Mitchell J. Landrieu, Mayor

ULA

NEIGHBORHOODS PARTNERSHIP NETWORK

LPHI1
Louisiana Public Health Institute
Bringing People, Ideas and Resources Together
Data Generated

1. Programmatic data
   - Risk assessment questions
   - Demographic information
   - Physical activity
   - Weight goals

2. Population based surveys
   - Pre and Post campaign surveys

3. Participant satisfaction survey
Programmatic Data

Age distribution of participants who entered age (N=1060)
- 18-29: 30%
- 30-44: 41%
- 45+: 29%

BMI of participants who entered weight and height information (N=1395)
- BMI < 25 Normal or Underweight: 44%
- BMI 25-30 Overweight: 29%
- BMI > 30: 27%

Reported weight goal (N=1057)
- Reported weight goal: 61%
- Did not report weight goal: 39%

Race/Ethnicity of those reporting (N=639)
- African American/Black: 71%
- White: 19%
- Other: 10%

Age distribution of participants who entered age (N=1060)
- 18-29: 30%
- 30-44: 41%
- 45+: 29%

BMI of participants who entered weight and height information (N=1395)
- BMI < 25 Normal or Underweight: 44%
- BMI 25-30 Overweight: 29%
- BMI > 30: 27%

Reported weight goal (N=1057)
- Reported weight goal: 61%
- Did not report weight goal: 39%

Race/Ethnicity of those reporting (N=639)
- African American/Black: 71%
- White: 19%
- Other: 10%

Reported active for at least 30 minutes a day (N=1431)
- 0 days: 5%
- 1 day: 4%
- 2 days: 7%
- 3 days: 45%
- 4 days: 8%
- 5 days: 25%
- 6 days: 2%
- 7 days: 4%
### Impact of Social Marketing (Pre/Post Survey)

<table>
<thead>
<tr>
<th>N=701</th>
<th>Diabetes in Family</th>
<th>African American/Black</th>
<th>18-29 Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Awareness of “Txt4Health”</td>
<td>4</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Awareness of “Text ‘HEALTH’ to 300400”</td>
<td>5</td>
<td>16</td>
<td>5</td>
</tr>
</tbody>
</table>

= significantly greater than comparison group at 95% confidence level
Participant Satisfaction Survey

<table>
<thead>
<tr>
<th>N=77</th>
<th>Overall, how satisfied were you with the program?</th>
<th>Ttxt4health made me conscious of my risky behaviors.</th>
<th>I will recommend txt4health to my friends and family.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[Strongly Disagree] 1%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>[Disagree] 16%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>[Agree] 32%</td>
<td>34%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>[Strongly Agree] 51%</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td></td>
<td>[Total] 100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Online rolling bi-weekly satisfaction survey prompted by a consent text message followed by entry in the survey via URL.
Keys to Success

- Cultivate strategic public/private partnerships early-on
- Link (or integrate) mobile solutions to/into evidence-based programs at the community-level
- Design a rigorous evaluation plan to support sustainability efforts
Next Steps

• Scaling txt4health across Louisiana
• Partnering with YMCA’s Diabetes Prevention Program
  – Use mobile to identify pre-diabetics (from the community) and link them to Y-DPP (BMI >25)
  – Recruit providers to refer pre-diabetics to Y-DPP
  – Monitor and evaluate process and clinical health outcomes
    • Specific measures: A1c, blood pressure, cholesterol and BMI
Contact Information

Nebeyou Abebe, M.A., PMP
nabebe@lphi.org
504-872-0751
@NebeyouAbebe