National Health and Nutrition Examination Survey

Using Text Reminders to encourage fasting for medical exams

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Background

- Area Sampling – 15 counties/year
- HH screener
- Oversample Hispanic, African American, Asian American, Older Adults, White/other low income
- Home interview then 4.5 hour exam
- 5,000 examined participants/year
• Preselect subsample of persons for morning exams
• Morning exams require fasting of 12+ year olds
  o 2 additional blood tests – OGTT and cholesterol
• Instructions to fast are in appointment reminder:
  o Slip
  o Letter
  o Call script
  o Text messages (added May 2011)
Text Messages

• Home questionnaire – ask permission to text and cell number

• Reminder texts sent 1:00 pm and 7:00 pm local respondent time (English/Spanish)

Your health exam is at 8:30am tomorrow morning. Please do not eat or drink anything except water after 11:30 pm tonight.
Cell Number Provided

• May 2011 to December 2018

• 11,802 participants asked to fast overnight
  • 8,933 or 76% reported cell phone number
  • 2,869 or 24% did not report a cell phone number
Cell Number Provided by Year

% Cell Phone Number Provided

2012: 67
2013: 63
2014: 69
2015: 82
2016: 85
2017: 85
2018: 85

*Data from 2012 through 2018
Cell Number provided by Race/Ethnicity

Provided Cell Phone Number

- Hispanic: 74
- African American: 79
- Asian: 78
- White: 74
Cell Number Provided by Age

% Provided Cell Phone Number

- 12-15: 37%
- 16-19: 76%
- 20-39: 89%
- 40-59: 84%
- 60+: 68%
• 11,802 eligible
• 11,802 eligible
• 8,933 cell phone
• 11,802 eligible
• 8,933 cell phone
• 6,131 permission to text
Permission to Text

- 11,802 eligible
- 8,933 cell phone
- 6,131 permission to text
- 4,787 texted (40%)
Permission to Text by Year

Permission to Text

*Data from 2012 through 2018
Permission to Text by Age

- 12-15: 37 (Cell Provided), 46 (Permission to Text)
- 16-19: 76, 71
- 20-39: 89, 78
- 40-59: 84, 73
- 60+: 68, 55
Relationship between texts and fasting behavior

- **TEXTS SENT**: 98
- **NO TEXT SENT**: 90
*Data from 2012 through 2018*
Final Thoughts

- Inexpensive to set up
- Once set up, Automated
- Confidential
Thank you!

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