Lessons Learned From an NHIS Web-Followback Feasibility Study

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Presentation Goals

- Describe the 2013 National Health Care Interview Survey (NHCIS)
- Present methodological results
- Share key conclusions
Back to Basics: The NHIS

- Multi-purpose household health survey
  - ~40,000 households per year
  - Family, **Sample Adult**, Sample Child Sections
- In-person interview with some telephone follow-up
  - Computer-assisted personal interviewing (CAPI)
- Interviews performed by trained interviewers with the U.S. Census Bureau
- **Questions on email and internet usage**
Aims of the NHCIS

1. Assess the feasibility of
   • Creating a nationally-representative quick-turnaround web panel
     ▪ NHIS data as the baseline
   • Adding a web component to the NHIS

2. Monitor the early effects of the Patient Protection and Affordable Care Act (ACA)
Methodological Questions

1. What percentage of prior NHIS participants can we re-interview?

2. Does how we notify respondents about the followback survey affect the response rate?

3. Can we ‘push’ or encourage respondents to complete the followback survey by web?

4. How do incentives impact completion mode?
Logistics & Design

• Re-contact one year after NHIS interview
  • Interview period: May 2013 to February 2014
  • N = 12,006 Sample Adult respondents

• 3 embedded methodological experiments
  • Notification, Mode, Incentive
Experimental Design

Stratification into groups based on email and internet usage:
Necessary because not everyone has email and/or internet access, which impacts likelihood of responding by web
- Email users: gave an email address and checked it regularly
- Internet users: used the internet regularly but didn’t give email address or didn’t check email daily
- Phone users: did not use the internet or did not have email

Randomization into treatment groups along three factors:
- Notification: How we informed respondents about the follow-back survey (Email vs. Letter)
- Mode: How we assigned respondents to complete the survey (Web vs. Phone)
- Incentive: How much compensation we offered ($0 vs. $10 vs. $20)
  - Promised completion incentive – announced in advance email/letter

Resulting treatment groups:
- Email-Web Push group: received email encouraging response online; email contained the same information as the advance letter, along with a link to the survey and personalized login information. Assigned within the Email sample group only.
- Letter-Web Push group: received advance letter in the mail encouraging response online; link to the survey along with personalized login information included in the letter
- Letter-Phone Push group: received advance letter in the mail informing that interviewer would be calling
- Non-responders:
  - Received reminder email/letter after one week
  - Routed into telephone follow-up after two weeks, regardless of mode assignment
The NHCIS Questionnaire

2012 NHIS topics
*NHCIS-NHIS linkability*

- Financial burden of health care
- Health status
- Health care access and use
- Health insurance
- Use of preventive services
- Family food security
- Smoking

New NHCIS topics

- Health care satisfaction
- Receipt of advance email or letter
- Reason(s) for mode selection
- Device used
- **Mode preference for future surveys**

- Available in English and Spanish
- 15 minute administration time
Analyses

• **Descriptive and bivariate statistics**
  • Unadjusted for sociodemographic and other potential confounders
  • Nonresponse bias analysis and multivariate examinations underway

• **Examination of response rates and completion rates**
  • Overall
  • By experimental assignment
Response Results

Q1: What percentage of prior NHIS participants can we re-interview?

**Overall response rate: 46.7%**
Q2: Does how we notify respondents affect the response rate?

Difference between Email-Web and Letter-Phone Push groups statistically significant (p<0.05)
Completion Results

Q3: Can we ‘push’ respondents to complete the survey by web?

• 21.7% web completion in Web Push groups
  • No difference by Email vs. Letter notification

• 12.8% web completion overall
Completion Results, continued

Q4: How do incentives impact completion mode?

Web completion rates, by incentive amount and notification mode (%)

Phone completion rates, by incentive amount and notification mode (%)

- Combined Web push
- Email Web push
- Letter Web Push
- Letter Phone push
- Combined Web push
### Mode Preferences for Future Surveys

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<tr>
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<th>Web Completers</th>
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<th>Phone Completers</th>
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Lessons

• Giving a web option boosts overall response rates
  • Observed rate of web completion insufficient to support NHIS web option or standalone web panel

• Monetary incentives improve web completion rates

• Web completers have an expressed, clear preference for web mode