CE’s Gemini Redesign: Updates on Development, Implementation, and Evaluation

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Outline

1. Gemini Project to Redesign CE
   a. Overview of the Redesign
   b. User Impact Findings
   c. Proof of Concept Test Development
   d. A Look Ahead
Redesign Objectives

- Verifiable reduction in measurement error, with a particular focus on underreporting
- No harmful effect on response rates
- Neutral impact on budget
- Secondary objective: Reduction in burden
Wave 1
- Advancemailing
- Visit 1: Recall Interview
- Diary Week & Records Collection
- Visit 2: Records Interview

12 months between waves

Wave 2
- Advancemailing
- Visit 1: Recall Interview
- Diary Week & Records Collection
- Visit 2: Records Interview

Respondent engagement mailings
Post Wave Non-monetary Incentive: CE Experience Package
Data User’s Impact
Data User’s Impact

Main Objectives:

- Obtain feedback from users on any serious issues
- Educate users on the structure and content of the new CE redesign proposal
- Educate users on the implementation timeline
Data User’s Impact

Outreach activities:

- Redesign of the Gemini Website
  > 5400 site visits since update
- Presentations at conferences, meetings, and webinars
  ~200 attendees in total
- Federal Data users Meetings
  5 agencies
- Notice in the Federal Register
  No responses
- User’s Impact Survey
  22 respondents
Data User’s Impact

What we wanted to know:

► What are the positive impacts on users’ research?
► What are the negative impacts on users’ research?
► Concerns about these specific design changes, such as:
  – 12-month change instead of 12 months consecutive data (assuming no attrition)
  – Fewer, more aggregated expenditure categories
  – Diary reference period not aligned with Visit 1 and Visit 2 reference periods
► What information/training is needed prior to implementation and how much lead time?
Data User’s Impact

- General findings:
  - Generally positive feedback
  - Pleased with focus on improved data quality

- Concerns of select users:
  - Limiting the detail collected in the survey
  - Inability to capture of expenditures with longer transaction time and one-time vs regular expenses (e.g., health care and reimbursements, car purchases)
  - Seasonality issues at micro level since respondents reporting for same time of year at each wave
  - Inability to use 4 consecutive quarters
Data User’s Impact

- Resources needed for users:
  - Details on the break in the series/Crosswalk between current design and new design
  - Information on new file structure and variables
  - Guidance on creating a synthetic panel
  - At least a month lead time for changes
Proof Of Concept Test (POC)
POC Overview

- Ensure that the basic underlying structure and components of the new design are feasible.
- Designed to mirror the proposed design to the fullest extent possible
POC Goals

- Methodological issues
  - R willingness to complete all components
  - R ability & willingness to provide recall information
  - Ability & willingness to for eligible HH members to complete diary
POC Goals

- Operational factors
  - # contact attempts needed to complete case
  - Length of visits
  - Technical issues with individual diaries
  - Logistical issues with incentives
POC Goals

- Experiential factors
  - R interview experience:
    - Perceptions of burden
    - Task difficulty
    - Level of effort
    - Reactions to materials/incentives
  - FR experience
    - Causes for difficulties completing interview
    - Non-interview time spent on each case
POC – Details
POC - Details

- Incentive use for diary keeping, how do you determine a “complete” diary?
- Increased incentive for records interview – how do you define “records used”? 
- What will constitute a “complete” interview (for response rates)?
- Do we need visits spaced throughout the month (as in current diaries)?
POC – Details

- How to train respondents to keep diaries?
- What’s the best diary follow up procedures for FRs mid-week → logistics of getting FRs needed information
- How to train respondent to collect records?
- How to conduct the records visit?
POC Design
POC Design – Advanced Mailing

- Advanced letter sent via priority mail
  - Contains $2 bill (token cash incentive)
  - Contains CE advance mailing language modified to describe the POC Visit 1/Ind. Diary/Visit 2 design
  - Includes description of the incentive structure for each piece of the completed interview
VISIT 1
POC Design – Visit 1 Recall

- Visit 1 (V1) interview very similar to current CE Quarterly Interview
- V1 conducted with a modified production CAPI instrument

<table>
<thead>
<tr>
<th>Test Order</th>
<th>Production Section #</th>
<th>Section Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>Home Furnishings and Related Household Items</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>Appliances, Household Equipment, and Other Selected Items</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>Subscriptions, Memberships, Books and Entertainment Expenses</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>Trips and Vacations</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>Miscellaneous Expenses</td>
</tr>
</tbody>
</table>

- Allow V1 to be completed during Visit 2 (V2) to allow time for Diary placement/Records training (if necessary)
POC Design – V1 Diary Placement

- Gather all available HH members
- Discuss Diary keeping tasks
- Identify eligibility and mode for each participant, provide user IDs/passwords or paper diary
  - Main respondent decides on mode for absent members
  - Collect email and phone number of each individuals, asking permission to contact mid-week
- Leave materials for respondents
- Leave back-up paper diary
The FR will describe the records interview and request the respondent to collect relevant records from the reference period (3 months prior to the V1 interview).

The respondent will be provided with a detailed checklist identifying which records to collect.
DIARY WEEK
POC Design – Diary Week: Respondents

- Respondents keep open-ended diary
- Diary kept online (accessible either via web or mobile device) OR fill out paper diary.
- Main respondent will record expenditures for ineligible respondents, HH expenses, and for any HH member not participating.

Categories:
- Food and Drink Away From Home
- Food and Drink For Home Consumption
- Clothing, Shoes Jewelry, & Accessories
- All Other Products & Services

- Web diary not yet developed but will be designed to be similar to the mobile diary with minor modifications for ease of use on PC
- Help available via a call-center help desk and email
POC Design – Diary Week: FRs

- FRs will have access to a summary screen of Diaries for their cases

<table>
<thead>
<tr>
<th>Contact Flag</th>
<th>Diary Mode</th>
<th># Successful Log Ins</th>
<th># Unsuccessful Log-ins</th>
<th># Expenditure reports</th>
<th>Date of last successful Login</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member 1</td>
<td>Web/Mobile</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>July 9</td>
</tr>
<tr>
<td>Member 2</td>
<td>Web/Mobile</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>July 10</td>
</tr>
<tr>
<td>Member 3</td>
<td>Paper</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>July 13</td>
</tr>
<tr>
<td>Member 4</td>
<td>Web/Mobile</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>July 13</td>
</tr>
</tbody>
</table>

- FRs will call the main respondent within 2 days of placement if a R hasn’t logged in OR if R hasn’t made entries
  - Phone calls are made to the reference person (main respondent)
  - FR can use their discretion to follow up with individuals that provided contact information

- FRs will call the household mid-week regardless of entries, to see if there are any questions and remind them to collect records for V2
VISIT 2
POC Design – V2 Diary Pick Up

- Conduct diary recall process with main R and any available HH members
- For each present respondent:

  - **Diary Entries?**
    - **Yes**
      - Review of Diary Entries
      - Any additional expenditures missed/Receipts collected?
        - Enter missed expenditures in CAPI
    - **No**
      - Within 2 Days – Total Recall
      - Between 2-5 days–Total Recall with receipts
      - After 5 days – no recall
POC Design – V2 Records Interview

- Exact protocol TBD
  - Who handles the records, the FR or Respondent?
  - What order should the interview occur in – based on record order or predetermined order (such as CAPI order)

- CAPI will default to earliest uncompleted question (incl. V1 questions) and follow main path for records sections

- FR will be able to move between sections by using tabs, as currently done in production
**Visit 2 – Records Interview**

- Conduct records interview with respondent

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<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>General Housing Characteristics</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Rented Living Quarters</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Owned Living Quarters and Other Owned Real Estate</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Utilities and Fuels</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>Rented and Leased Vehicles</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>Owned Vehicles</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>Insurance Other than Health</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>Health Insurance</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>Medical and Health Expenses</td>
</tr>
<tr>
<td>15</td>
<td>21</td>
<td>Occupations, Work Experience and Income</td>
</tr>
<tr>
<td>16</td>
<td>22</td>
<td>Assets and Liabilities</td>
</tr>
</tbody>
</table>
Visit 2 – Respondent Debriefing

- A series of questions related to V1 interview, diary keeping, recording collection, and V2 interview

EX:
- Reactions to the incentives
- General feedback
- Any technical difficulties with diaries
- Where diary was completed
- Amount of time spent collecting records
- Willingness to share records
FR Debriefings

- FR debriefing questions will be programmed in the instrument after each visit with questions about each part of the test
  - After V1: recall, diary placement, and records training
  - After V2: diary week contacts, diary recall, and records.
Looking Ahead
Looking ahead

- Individual and Web Diaries (2012-14)
- Proof-of-Concept Test (2015)
- Question development (2015-16)
- Protocol development (2015-16)
- Incentives test (2016)
- Large-Scale Feasibility Test (2018)
- Dress Rehearsal (2021)
- Implementation date depending on availability of funding and resources throughout process
Contact Information

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