Workshop on Developing a Methodological Research Program for Longitudinal Studies

Cost Considerations and Cost Effectiveness Measures Specific to Longitudinal Studies

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June 6, 2017
Focus

- Experience from ongoing cost-related projects
- What are some cost considerations that are unique to longitudinal studies and would deserve more attention than they are currently afforded?
- What types of cost information would be useful to track that is currently not typically tracked?
- What cost data could be shared with the sponsor and others while respecting the proprietary nature of some of this information?
- What research is needed about the cost implications of various methods and tradeoffs in longitudinal studies?
National Social Life Health and Aging Project (NSHAP)

- Nationally representative community-residing sample
- Three Waves of Field Work Completed
  - 2005-2006; n = 3,005 completed interviews
  - 2010-2011; n = 3,377 (added partners)
  - 2015-2016; n = 4,777 (added new cohort)
- Inperson Interview
  - ~2 Hour CAPI Interview
  - Extensive biomeasure collection
  - Leave Behind Questionnaire
- In Progress
  - Medicare linkage (using MedRIC)
  - National Death Index
Revisiting the Budget Each Wave/Round (1)

- Always looking for efficiencies/budget savings
- Is the sample design remaining constant? (e.g., any reduction in the sample size, subsampling of specific groups, etc.)
- Mode(s) – same as before? New modes?
- Changes to the questionnaire and other data (e.g., biomeasures, health records, utility bills, financial records, transcripts, etc.)
- Pre-field locating
- Following movers – how far?
- Field duration vs. number of interviewers
- Remote vs. inperson training (not all costs/benefits are easily quantifiable)
Revisiting the Budget Each Wave/Round (2)

- Specimen collection and assay costs
- Fixed vs. variable costs
  - Development and testing costs (mostly fixed)
  - Research/survey staff (mostly fixed, relatively inelastic)
Looking for Efficiencies (1)

- Mode – can some/all of the sample be moved to a cheaper mode?
- Can the questionnaire/interview be shortened
  - Demographics and other static data items
  - Dropping unused or rarely used variables
  - Preloading information from prior interviews to speed the interview
- Technology
  - New possibilities (e.g., passive measurement [timestamps, CARI], GPS, Skype/Facetime, scanning)
- Staff – seeking optimal blend
  - Project experience
  - Mix (switch senior for junior?)
- Recycling training materials/forms/programs/processes
Looking for Efficiencies (2)

- Sharing, avoid reinventing
  - Sharing data (e.g., HRS → NSHAP sample)
  - Sharing (expensive) equipment
  - Sharing protocols and other materials (NSHAP ↔ HRS)
  - Sharing experience

- Alternative/cheaper sources of data (e.g., administrative data, EHRs)
What Deserves More Attention (1)

- Exploring different periodicity, possibly mixed with different modes
  - Continuous data collection?
- Real cost implications of ‘cheaper’ modes
  - System development and testing
  - Questionnaire development and testing
  - Training
  - Staff and resources for back-end processing (e.g., data file cleaning, merging)
- Chasing high response rates
  - Cost of those last few cases
  - Adaptive design
- Cost vs. quality of data collection via the mail
  - Leave behind questionnaires (LBQ)
  - Specimen collection (e.g., saliva)
  - Actigraphy
What Deserves More Attention (2)

- Training
  - Remote vs. inperson
  - Experienced vs. new interviewers

- Staying connected with respondents
  - Between round outreach to respondents – what works best?

- Leveraging new methods for staying connected/communicating/interviewing
  - Email, text, instant messenger
  - Skype, Facetime, WhatsApp
  - What do the respondents want?
What Deserves More Attention (3)

- Incentives
  - Appropriate incentive level for the burden
  - Respondent expectations from prior interviews
  - Interviewer flexibility to adjust incentives
  - ‘Early bird’ respondents
  - Non-monetary incentives

- Bulk purchasing power across studies
  - Specimen equipment
  - Assays
Sharing Cost Data

- Competitive environment
- Different metrics used across organizations
  - Hours per Case (HPC), Cost per Case (CPC)
  - Cost code structure and reliability
  - What’s included/excluded?
- Scope and methods vary enormously across surveys
  - Apples-to-apples?
  - National Children’s Study experience