From Data Collection to Estimation: Highlights of Survey Lifecycle Issues from FoodAPS

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FoodAPS Overview

- FoodAPS (1) conducted in 2012-2013

- Now exploring a new data collection implementing a web-based tool

- Pilot test (ACDM) implemented to examine modernization of study to transition from food diaries to web-based data collection

  - Adam Kaderabek – likelihood respondents will provide useful receipts
  - Lin Wang – app usability
  - Clare Milburn – quality of databases for food item details
  - Katherine Li – improving SAE estimates to enable more local estimates
Is “Proof of Purchase” Really Proof? - Kaderabek

- Examined relationship between respondent characteristics and likelihood of submitting itemized receipt

- Model used event level, respondent level, and household level variables

- How is this model actionable?
  - Can receipts replace manual entry for some class of respondents/events?
  - Can messaging be modified to encourage more to submit receipts when possible?

- How does receipt data compare to manually entered data? Future area to research
App Usability Evaluation – Wang

- Replacing handwritten diaries with computerized collection

- Usability test examined effectiveness, efficiency and satisfaction

- Usability test group includes seniors and those receiving SNAP overwhelmingly

- Test went very well. These were eager participants (not randomly sampled). How will general population differ?

- Connecting food acquisitions to stops.
  - How did pandemic impact this? Some people are home ALL the time
  - Recalling a delivery purchase isn’t tied to a “stop” mentally
Data Quality of Databases with Food Item Information - Milburn

- Attempt to improve data quality of food quantity and nutrition by having FoodLogger link to databases to find food products

- Databases for food items – IRI, FoodData Central, and Nutritionix
  - Only IRI included total package size but isn’t timely
  - FoodData Central is timely but not accurate sometimes
  - Can you combine sources?

- Databases for places -
  - None are good at food banks – wouldn’t food bank items still have UPCs though?
  - No source is ideal otherwise, so place type will be entered manually
  - How are food items entered at these places?
SAE for Food Insecurity - Li

- Method 1: Weighted analysis with jacknife replication

- Method 2: Synthetic population generation analysis (weighted finite population Bayesian bootstrap [WFPBB])

- Compared results to each other and CPS
  - Point estimates are similar but SEs larger for Method 2
  - CPS has its own sampling error, is this considered?

- MRP considered in future to incorporate more variables.
  - What about area-level models?