Video 2 of 3: CATI Software Testing

Computer-Assisted Telephone Interviewing
CATI Testing

• Before survey operations begin, comprehensive testing should be conducted on all aspects of the survey
• Can be iterative: test -> design -> revise -> test…
• Important components
  – Evaluation of survey questions, with a focus on question wording (covered in Module 3 of this course)
  – Test of computerized survey instrument
  – Survey pilot
CATI Instrument Testing

• Testing the computerized instrument is essential in CATI
• Can be completed by survey managers and/or interviewers
• Types of problems that may be encountered include
  – Text, text fills, and skip logic
  – Formatting
  – Recording of data
Text, Text Fills, and Skip Logic

- Is the wording of instructions, questions and response options correct?
- Are text fills implemented correctly?
- If the response options for a particular question should be adjusted based on a prior response, does this occur?
- Is the text written word-for-word as specified?
- Are respondents routed to the correct later questions based on the answers they give to earlier questions?
Formatting

• Are instructions, questions and answer options easy to read on the screen (font, size, color)?
• Are the input tools (radio buttons, drop boxes) used as specified?
• In text areas, is the box size appropriate for the amount of information being requested?
• Are questions and other information intended to be viewed together displayed on the same page?
• Do the forward and back buttons function properly?
Recording of Data and Paradata

• Are quality control (edit checks) working properly if the interviewer enters an invalid answer?
• Are answers recorded properly in a data files?
• Are times that the interviewer starts and stops the interview captured properly?
  – Survey designer must decide whether to collect timing information and, if so, what information will be collected
Example Instrument Testing Protocol

- Question-by-question testing: Test each question or screen in the survey before moving on to the next
  - Look primarily for issues with text and formatting
- Scenario testing: Construct scenarios of responses that test all of the different text fills and skips, then enter accordingly
  - Include missing values and out-of-range values
- Test on different devices (e.g., laptops and tablets) using different Internet browsers
  - Look primarily for issues with formatting
- Test in multiple languages (if the instrument switches between languages)
Piloting a CATI Survey

- As was discussed in Module 4 of this course, a survey pilot is a field test that focuses on all aspect of data collection
- In CATI, pilot should test full workflow:
  - Managers create assignments; distribute assignments to interviewers
  - Interviewers work in decentralized way to make and record call attempts; conduct interviews; return assignments when completed
  - Managers evaluate data
- Special areas of focus:
  - Sample management
  - Flow of programmed questionnaire
  - Monitoring tools
  - Data files

Adapted from Amankwah et al. (2020)
Evaluation of Sample Management

• Are methods of distributing assignments to interviewers working as intended?
• Are interviewers following the prescribed calling rules?
• Is it easy for interviewers to record call outcomes and notes?
Evaluation of Flow of Programmed Questionnaire

• Is it easy for interviewers to use the computerized instrument?
  – Are there areas where they need more instructions?
• Could the order of questions be improved?
• Are any questions problematic? For example:
  – Interviewers did not read the question as worded
  – Respondents requested clarification
  – Answer options are not comprehensive
• Is the interview taking more/less time than expected?
Evaluation of Monitoring Tools

- Do the monitoring tools work correctly from a strictly mechanical perspective?
- Do the monitoring tools provide adequate information for tracking survey progress and data quality?
- Do any monitoring tools need to be changed or streamlined?
- Do interviewers have adequate connectivity to sync both interview data and audio recordings?

Adapted from Amankwah et al. (2020)
Evaluation of Data Files

- Is the dataset structured properly?
- Is the dataset complete?
- Are answers recorded properly in a data file?
- Are there unexpectedly high missing data rates?
- Are there any unusual response distributions?
Survey Pilot – General Tips

• Typically done before survey training if anticipate large changes to survey design
• Be mindful of (and learn about) cultural requirements
• Evaluate infrastructure (electricity, phone network coverage, Internet access)
• Try to determine the particular time of day when respondents are more / less likely to be available? Try to determined effective ways to communicate with respondents about the survey and encourage them to participate?
• Evaluate payment systems (mobile airtime transfers)
• Debrief with all staff involved in field tests

Adapted from DIME Analytics-Survey Guidelines
END OF VIDEO 2