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CARI: A Tool for Improving Data Quality Now and the Next Time

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CARI: A Tool for Improving Data Quality Now and the Next Time

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Abstract

The use of Computer Audio-Recorded Interviewing (CARI) as a tool to identify interview falsification is quickly growing in survey research (Biemer, 2000, 2003; Thissen, 2007). Similarly, survey researchers are starting to expand the usefulness of CARI by combining recordings with coding to address data quality (Herget, 2001; Hansen, 2005; McGee, 2007). This paper presents results from a study included as part of the establishment-based National Center for Health Statistics' National Home and Hospice Care Survey (NHHCS) which used CARI behavior coding and CARI-specific paradata to: 1) identify and correct problematic interviewer behavior or question issues early in the data collection period before either negatively impact data quality, and; 2) identify ways to diminish measurement error in future implementations of the NHHCS. During the first 9 weeks of the 30-week field period, CARI recorded a subset of questions from the NHHCS application for all interviewers. Recordings were linked with the interview application and output and then coded in one of two modes: Code by Interviewer or Code by Question. The Code by Interviewer method provided visibility into problems specific to an interviewer as well as more generalized problems potentially applicable to all interviewers. The Code by Question method yielded data that spoke to understandability of the questions and other response problems. In this mode, coders coded multiple implementations of the same question across multiple interviewers. Using the Code by Question approach, researchers identified issues with three key survey questions in the first few weeks of data collection and provided guidance to interviewers in how to handle those questions as data collection continued. Results from coding the audio recordings (which were linked with the survey application and output) will inform question wording and interviewer training in the next implementation of the NHHCS, and guide future enhancement of CARI and the coding system.

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