

Abstract Form

Abstract author/s	<i>Khoi Do</i>
Presenting author	<i>Khoi Do</i>
Organisation	<i>Health Promotion Service, South Western Sydney Local Health District</i>

Title of abstract: Experiences in the development and implementation of a CATI survey in a health promotion project with a multicultural community

Authors: Khoi Do, Health Promotion Service, South Western Sydney Local Health District

Background:

Paper-based or web/computer/mobile data collection without a strong built-in data quality assurance component is prone to numerous data quality issues. It can also be challenging and time-consuming for interviewers to implement complex question routing instructions. To address this concern, we designed a computer-assisted telephone interviewing (CATI) program to ensure quality data and time efficiency in surveys targeting a multicultural community.

Aims:

To measure the extent of achievement of inbuilt CATI program in terms of quality and efficiency of data collection.

Method:

The questionnaire included questions to determine a participant's eligibility, elicit a participant's consent, negotiate an interview time, determine exposure to second-hand smoke, and gain insight into smoking/quitting behaviours and related factors.

To guide the CATI programming, potential data quality issues were predicted, including missing values, out of range data, and discrepancies between questions or within multiple-choice question values. In addition to prompting corrective actions, the program enabled interviewers to respond adaptively to participant answers and implement survey protocol. Flowcharts were developed to visualise and determine question routing logic.

CATI program was developed internally using Epi Info 7 software for question routing, live data entry, and live data quality control. The program was tested extensively to ensure that it effectively performed the required functions.

Interviewers received two days of training in how to conduct a survey using the CATI program. Their competency was then assessed using a checklist, and further training provided to those with identified issues.

Results:

CATI was programmed to instantaneously perform 285 sets of actions, consisting of 1,175 individual actions across a range of functions, including question routing, interviewer prompts, data value range, required or provisionally required fields, discrepancies between questions or within multiple-choice question values, and automatic field completion.

11,373 call attempts were made to 4,346 participants, resulting in 849 interviews. All call attempts and interviews were assisted and recorded by the CATI tool. The survey yielded high-quality data, such that over 98% of variables had less than 1% of cases with a missing value.

Sample management was done manually using Microsoft Excel and Google Docs. This is the drawback of this CATI program.

Implications that impact on your project:

The CATI program improves data quality and time efficiency. In-house CATI development allows more extensive and timely customisation/adaptation and provides a cost saving.

Lessons learnt from the successful development and application of the CATI program, as well as the potential for further improvement/ investment, will also be discussed.