

Cognitive Tested Question Database

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The Cognitive Methods Staff (CMS) at the National Center for Health Statistics (NCHS) is in the process of developing a database of questions for national health-related surveys tested in their Questionnaire Development Research Laboratory (QDRL). The QDRL database catalogues and provides descriptive characteristics of tested questions. Additionally, the database links each question to cognitive testing findings. A graphical user interface designed specifically for data entry allows for rapid and accurate data entry through the use of default entries and integrity verification via foreign key constraints.

Furthermore, because of its unique search capabilities, the database will serve as an invaluable tool for research into questionnaire design. Questions are searchable not only by content or subject matter (e.g. asthma questions, cancer questions, demographics), but also by question type (e.g. objective characteristics, behavioral reports, attitudes) response category type (e.g. textual responses, scaling questions, allocation questions), and response error type (e.g. problems with terms, recall problems). Planned improvements to the database include the addition of multiple search criteria (e.g. multiple combinations of response error types) and some basic statistical capabilities.

While much of the information captured in this database is straightforward and self-explanatory, several fields were ambiguous enough to need a coding scheme. Fields requiring coding rules included question type, response categories, and response options. CMS staff developed coding schemes and guidelines in order to assure consistency and accuracy of the process of coding each question entered into the database. The process of refining the codes will be on-going throughout the life of the database. Another effort to improve data quality involves a random check of new questions, which first will be coded by the primary investigator and by another CMS staff member.

The QDRL database has received a great deal of interest among other federal agencies. An Interagency Response Error Group subgroup has been formed by NCHS and several other federal agencies who want to collaborate on this database project. By centralizing cognitive testing reports with links to specific questions and topic areas, the database will help to avoid repeat testing of similar questions and provide an invaluable resource to CMS staff, NCHS, and other federal agencies in generating new questions. It also will provide an invaluable resource in generating new questions and serve as a research tool investigating response error.