

Developing and Testing the CAHPS® Clinician and Group Health Literacy Item Set



Beverly Weidmer, RAND Corporation
Chuck Darby, AHRQ
Cindy Brach, AHRQ
Ron D. Hays, RAND Corporation

3MC Conference
Berlin, Germany
June 26, 2008



3mc2008 – Proceedings ©



Background

- ***CAHPS: Consumer Assessment of Health Providers and Systems***
- ***Program funded by the Agency for Healthcare Research and Quality (AHRQ)***
- ***Aim is to produce a set of standardized, evidence-based surveys for assessing patients' experiences with the health care system***

CAHPS Family of Surveys



Facility Level-

- *Hospitals*
- *Dialysis Facilities*
- *Nursing Homes*

Ambulatory Level-

- *Health Plan*
- *Clinician and Group*
- *ECHO Survey*
- *Dental Plan*
- *American Indian*

CAHPS Supplemental Item Sets-



Supplemental item sets-

- *Children w/Chronic Conditions*
- *People w/mobility impairment*
- *Health Literacy (in development)*
- *Health Information Technology (in development)*

CAHPS Instrument Design Principles



- *Emphasis on Consumers and Patients*
- *Reporting on Actual Experiences*
- *Reports and ratings on experiences, not just patient satisfaction*
- *Standardization Across the Board*
- *Input from stakeholders*
- *Extensive testing and validation*
- *Publicly available (www.ahrq.gov)*

CAHPS Health Literacy Item Set



- **Purpose: develop a set of items that can be used to measure patients' perspective on how well health information is communicated to them by healthcare professionals**
- **Supplemental item set for the CAHPS Clinician and Group Item Set**
- **Data gathered using this tool can help physicians and their practices to improve their communications skills**
- **Developed by CAHPS grantees under the leadership of RAND**

Instrument development process

- *Environmental scan*
- *Call for measures through Federal Register*
- *Identified health literacy domains and sub domains of interest*
- *Adapted existing measures in public domain and wrote new ones*
- *Interviews with key informants*
- *Stakeholder meeting*
- *Translation*
- *Two rounds of cognitive testing in both*
- *Field test (currently ongoing)*

Environmental scan

- *Reviewed published and unpublished literature to try to identify surveys or scales that assess health literacy from a patients' perspective*
- *Reviewed bibliographies/references to identify other relevant articles*
- *Did not find a survey or measure focused specifically on health literacy from the patients' perspective*
- *Received few submissions from call for measures*

Health Literacy Domains/Sub domains



- *Communication with doctors*
- *Communication about health problems or concerns*
- *Disease self-management*
- *Communication about medications*
- *Communication about tests*
- *Communication about forms*

29 items total!

Interviews w/key informants

- *Conducted 11 interviews with key informants in the field of health literacy*
- *Interviews conducted by phone*
- *Informants included health literacy researchers, clinicians, health literacy advocates (including consumer advocate)*
- *Informants asked to provide feedback on domains/items, identify gaps, recommend existing measures, make suggestions for dissemination*

Translation into Spanish

Used modified “translation by committee approach”

- *Conducted 2 forward translations using ATA certified, professional translators*
- *Provided translators background info (purpose, characteristics of target audience, mode of data collection)*
- Reviewed and reconciled translation differences and corrected errors by committee

Cognitive testing

- *Assess patients' understanding of draft survey items*
- *Assess whether patients' understand key concepts as intended*
- *Assess appropriateness of Spanish language translation/identify problems w/translation*
- *Identify terms, items, response options that are problematic*
- *Findings used to revise and refine survey items*

Cognitive Testing

- *Conducted two rounds (20 interviews in 1st round and 10 in 2nd round)*
- *First round conducted by all 3 grantees (RAND, Harvard/Umass, AIR),*
- *R1 interviews conducted in Los Angeles, Boston, Washington DC area*
- *Tested concurrently in Spanish and English*
- *Aimed to get a mix of respondents in terms of age, race/ethnicity, gender*
- *Set targets for level of education (half of respondents had less than HS education)*
- *Set targets for Hispanic subgroups (aim for mix, no more than 4 of Mexican origin)*
- *Set targets for # of interviews in Spanish (8 1st round, and 5 second round)*

Cognitive Testing Methods

To facilitate training of cognitive interviewers across sites and ensure comparability of information collected across sites and across languages, we used:

- ***Semi-structured interview with scripted probes***
 - All 3 grantees used same recruitment and interview protocol (developed collaboratively)
- ***Defined measurement goal for each survey item***
- ***Defined cognitive interview goal for each item***

Cognitive Testing Methods

- ***Used interviewer administered and self - administered protocols***
- ***Used concurrent, think aloud method to interview***
 - Respondents encouraged but not required to think out loud
 - Interviewer administered--probes asked after every item
 - Self-administered--probes asked every 2-4 items
- ***Interviewer coded R responses to survey items, recorded verbatim responses, and took notes using paper/pencil form***
- ***Cognitive interviews were audio recorded***

Data Processing/Data Analysis of Cognitive Interview Data



- *Each interviewer reviewed detailed notes from each interview, summarized findings across interviews*
- *Each grantee conducted interviewer debriefing*
- *Reviewed interview form, interviewer notes, summary findings from interviews, and if necessary, listened to tapes*
- *Each grantee wrote summary report presenting findings by site*
- *Grantees reviewed overall and item by item findings via conference call*
- *RAND took lead in writing integrated report and making recommendations for modifying survey items*
- *Recommendations reviewed/approved by all grantees*

Cognitive Interview Findings

- ***Respondents generally understood the survey items and were able to provide meaningful responses;***
- ***Respondents generally had little difficulty in selecting an answer from the response choices given;***
- ***With few exceptions, the response options provided seemed to capture the range of responses the respondents wanted to give;***
- ***Overall the survey covers issues and experiences that are relevant and important to the respondents;***
- ***Respondents were able to confine responses to the appropriate reference period;***

Cognitive Interview Findings

- ***Minor translation issues***
- ***Double negatives problematic***
- ***Some response options were problematic***
- ***Need for simple syntax***
- ***Problems reading***

- ***Other than translation problems, did not find issues that were language specific***
- ***Most issues identified related to other factors (literacy/education)***
- ***Testing concurrently in English and Spanish allowed findings to inform revisions in both languages and facilitates “de-centering” of the English***

Stakeholder meeting

- ***Invited key stakeholders to one day meeting***
 - Researchers
 - Clinicians
 - Health Plans
 - Health Literacy Advocates (including consumer)
 - Representatives from government agencies, NCQA
- ***Purpose: present item set, review cognitive interview findings, obtain feedback on domains/item wording, how to prioritize items, how to disseminate***

2nd round of cognitive testing

- ***Revised items based on first round of testing***
- ***Incorporated suggestions by Stakeholders***
- ***2nd round conducted by RAND only***
 - Used same procedures as in round 1
 - Interviews conducted in LA only
- ***Used findings from 2nd round to further refine survey items***

Field test (in process)

- ***Conducted by RAND***
- ***Two field test partners***
 - Health plan in The Bronx
 - Medical Center in Mississippi
- ***Sample of 1200 (600 randomly selected from each field test partner)***
- ***Fielded in English and Spanish***
- ***Mail with phone follow-up***

Analysis of Field Test Data

- *Psychometric analysis focusing on the reliability and construct validity of the items included in the analyses (including by race/ethnicity)*
- *Items will be assessed for their ability to discriminate among clinicians and plans on their CAHPS performance*
- *Examination of item missing data,*
- *Item distribution (including ceiling and floor effects),*
- *Internal consistency reliability of composites,*
- *Reliability of global rating items and composites at the clinician level*
- *Correlations of composites with global rating items*

Next steps...

- *Complete field test*
- *Conduct analyses*
- *Revise item set based on findings from field test*
- *Submit survey items/documentation to AHRQ*
- *Make items publicly available (www.ahrq.gov)*
- *Disseminate!*