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
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- Reviewed published and unpublished literature to try to identify surveys or scales that assess health literacy from a patients’ perspective.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/Subdomains

- 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!