



Putting Health Literacy Questions on the Nation's Public Health Report Card

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8th Annual Health Literacy Research Conference

October 13, 2016

Need for Population-based Health Literacy Data

- Clinical studies of patient groups, health literacy “levels,” and health outcomes different than population studies
- Stand-alone health literacy surveys expensive and infrequent
- National Assessment of Adult Literacy (NAAL) only U.S. population study with health literacy measures and some preventive behaviors but not chronic disease prevalence
- Public health interventions benefit from information on health literacy as a predictor of prevention and disease management behaviors

Behavioral Risk Factor Surveillance System (BRFSS)

- State and territory-based population survey of chronic disease and healthcare access
 - Weighted sample with more than 400,000 people
 - Self-reported data
 - Core and optional questions
 - Key source of health disparities data



Health Literacy Questions in BRFSS

- Prior to 2016, several states pilot tested questions
 - Variations on Chew, et al (2008) 3 question screener
- Limitations
 - Responses difficult to compare across states
 - Questions originally developed for providers to screen patients in clinical context
- Example: Kansas 2012 results show associations among health literacy, demographic factors, health status, and activity limitations
 - See Chesser, Melhado, Hines & Woods, 2016

Our Research Question

- Considering BRFSS space and time limits, which questions
 - reflect health literacy research literature
 - fit well with a state and population-based questionnaire on chronic diseases and health disparities
 - earn at least 80% support from states and territories to become a BRFSS module

Candidate Question Sources

- California Health Interview Survey (NHIS) 2007-2009
- Commonwealth Fund Health Care Quality Survey 2006
- Consumer Assessment of Healthcare Providers and Systems (CAHPS)
- Expert nominations
- Health Information National Trends Survey (HINTS)
- National Assessment of Adult Literacy (NAAL)
- Program for the International Assessment of Adult Competencies (PIAAC)
- State BRFSS pilot studies (Chew et al questions & variations)
- Veterans Administration electronic health records (FL & GA)

Cognitive Testing of Draft Questions

- Tested 7 questions with 18 people
 - Candidate questions selected to reflect public health information seeking and use
 - In-person and telephone interviews
 - Diverse demographics: gender, race/ethnicity, age, education and language spoken at home

Cognitive Testing Method and Result

- Probed meaning of questions and key phrasing
 - Asked respondents to explain in their own words
 - Open-ended probe for comments not covered by interviewer
 - Asked about framing questions as “easy” or “difficult”
 - “How difficult...” is conventional phrasing but may negatively frame abilities
 - Rejected “how easy” as asking different question
- Three questions selected because they were most easily understood and respondents found them easy to answer.

Three Questions Adopted for BRFSS

1. How difficult is it for you to get advice or information about health or medical topics if you needed it?
 - “Find information”
2. How difficult is it for you to understand information that doctors, nurses and other health professionals tell you?
 - “Understand oral information”
3. You can find written information about health on the Internet, in newspapers and magazines, and in brochures in the doctor’s office and clinic. In general, how difficult is it for you to understand written health information?
 - “Understand written information”

How BRFSS Population Data Contribute to Research and Interventions

- Identify
 - geographic locales and demographic groups most in need of interventions
 - health disparities most attributable to health literacy differences
 - chronic diseases most strongly associated with health literacy, even after controlling for social determinants

CDC Provided 2016 Seed Money

- Grant to National Association of Chronic Disease Directors
 - Helping 9 states and District of Columbia collect data for BRFSS questions
 - Alabama, Alaska, District of Columbia, Georgia, Kansas, Minnesota, Nebraska, North Carolina, Oklahoma, and Pennsylvania
 - Results in mid-2017
- Other states using same questions and self-funding

Call to action

- Educate your BRFSS coordinators and other researchers in your state
- Show how health literacy data collected in BRFSS will help address priority health issues in your state
- Use geographically identified findings to show the effects of community-based health literacy interventions

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