SUPPORTING STATEMENT

Part B

Assessing Organizational Responses to AHRQ's Health Literacy Pharmacy Tools

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Agency of Healthcare Research and Quality (AHRQ)

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B. Collections of Information Employing Statistical Methods

1. Respondent universe and sampling methods

The study will include qualitative case study data collection and web-based quantitative data collection via an on-line survey which is described below.

For the web-based data collection, the respondent universe will consist of representatives of almost all 60,000 pharmacies nationwide. E-mail and U.S. postal service mail will be used to contact all members of the respondent universe, and to invite them to visit AHRQ's health literacy website. Site utilization data will be collected automatically. Additionally, site visitors will be invited to complete a voluntary web survey.

2. Information Collection Procedures

Methodology for stratification and sample selection

Web-based data collection

Pharmacists on the distribution lists of the National Association of Chain Drugstores (approximately 140,000 persons), the American Pharmacists Association (approximately 140,000 persons), the National Community Pharmacists' Association (representatives of approximately 23,000 independent pharmacies), and the American Association of Colleges of Pharmacy (approximately 4,300 faculty and 48,500 students) will receive announcements through these associations' usual modes of communication (e-mail, newsletters). Additionally, approximately 300 pharmacy chain executives listed on a commercial mailing list will receive announcements and hard copies of the tools through the mail.

The announcements will invite pharmacists to visit AHRQ's pharmacy health literacy website. The website will explain what health literacy is, why it is an important problem, and how to use AHRQ's tools to better meet the needs of pharmacy patients with low health literacy.

The website will track the number of visitors to the site, site usage statistics, utilization by geography, traffic sources (how visitors got to the website), and content usage.

Additionally, all visitors to the website will be invited to complete a survey. Since this is a voluntary survey, selection bias will likely affect study results. Persons who take the survey are likely to be more motivated or to have more time available than persons who do not. However, we will be unable to assess the extent of selection bias, because we will not have access to baseline data about the population. Furthermore, it is likely that some pharmacists will belong to more than one list. For those pharmacists, sampling probabilities will be higher than for pharmacists who belong to only one list. This source of bias could be corrected through the use of sampling weights if we had access to the mailing lists that constitute the sampling frame. However, while the professional associations will use their mailing lists to communicate with their members on our behalf, we will not have direct access to the mailing lists. Thus, it will not be possible for us to assign sampling weights to correct for listing on multiple frames.

Estimation Procedure

Web-based survey

Descriptive statistics will be calculated for all survey items. For the responses to our categorical survey questions, we will use statistical tools to summarize and analyze the data for notable patterns. Survey responses will be aggregated and frequency distributions for each survey item will be compiled. Cross-tabulations will be prepared that display any differences on the survey items among the groups, for example, the difference in item response between pharmacists working for an independent pharmacy versus a chain pharmacy.

Responses to open-ended questions will be coded using content analytic techniques. This will require coding the text into manageable categories on a variety of levels – word, word sense, phrase, sentence, or theme – and then examining the coded text using one of the basic methods of content analysis (i.e. conceptual analysis or relational analysis). We will devise a list of discrete codes representing the various open-ended question responses to further facilitate analysis.

It is difficult to estimate the number of individuals who will visit the pharmacy health literacy website, and complete the survey. We expect it to be difficult to achieve a high number of completions for this voluntary, uncompensated survey.

A key limitation for the survey is the possibility of selection bias. Respondents decide whether to participate or not in the survey, and respondents' decisions to participate in the survey may be correlated with traits that are important to the study (e.g., stage of innovation, perceived need to address health literacy, perceived benefits of the tools). Additionally, individuals that visit the website and are willing to complete the survey may be different from the pharmacist population.

3. Methods to Maximize Response Rates

We will maximize response to the web survey by designing the website's and survey's invitation so that they are "friendly" and encouraging. We will also use proven techniques to encourage survey participants to complete the survey. Techniques will include keeping the survey short (12 minutes), and giving the viewer a visual representation of their % completion of the survey. Even with these strategies, however, the survey will likely have a small sample. We estimate that distribution lists would reach approximately 150,000 persons. Assuming that 2% of persons who received the invitation (3,000) would visit the website, and 5% of website visitors would complete the survey, we would receive 150 complete surveys. While this is a small sample size, we expect to gain useful insights into pharmacists' perceived needs to address health literacy and as well as of their perceptions of benefits of AHRQ's health literacy tools for pharmacy. This type of information can be very valuable in shaping further dissemination efforts, regardless of the number of respondents.

4. Tests of Procedures

The Web survey will undergo expert review by members of the Abt Associates cognitive testing team. The survey will also be reviewed by a senior pharmacist/researcher, Dr. Lawrence Brown,

and by an expert in health literacy, Dr. Rima Rudd.

5. Statistical Consultants

Abt Associates is the contractor who will conduct the data collection and analysis for AHRQ. Abt Associates specializes in public policy and opinion surveys, banking and finance, telecommunications, media, energy, transportation, insurance and health care. The professionals from Abt and Abt Associates have over 40 years of experience providing high quality, timely and cost effective surveys for federal, state, local, and private clients. They conduct over 400 surveys each year, which involve meeting a wide variety of data entry, editing and transfer specifications. The key contact at Abt Associates is Sarah Shoemaker.

Contact information for Dr. Shoemaker is provided below.

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