SUPPORTING STATEMENT

Part A

Study of Factors Influencing Consumer Choices Among Health Plans and Clinicians

Version: December 18, 2009

Agency for Healthcare Research and Quality (AHRQ)

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A. Justification

1. Circumstances that Make the Collection of Information Necessary

The Healthcare Research and Quality Act of 1999 (see Attachment A) states that the mission of the Agency for Healthcare Research and Quality (AHRQ) is to enhance the quality, appropriateness, and effectiveness of health services, and access to such services, through the establishment of a broad base of scientific research and through the promotion of improvements in clinical and health systems practices, including the prevention of diseases and other health conditions. AHRQ shall promote health care quality improvement by conducting and supporting:

1. research that develops and presents scientific evidence regarding all aspects of health care; and

2. the synthesis and dissemination of available scientific evidence for use by patients, consumers, practitioners, providers, purchasers, policy makers, and educators; and

3. initiatives to advance private and public efforts to improve health care quality.

Also, AHRQ shall conduct and support research and evaluations, and support demonstration projects, with respect to (A) the delivery of health care in inner-city areas, and in rural areas (including frontier areas); and (B) health care for priority populations, which shall include (1) low-income groups, (2) minority groups, (3) women, (4) children, (5) the elderly, and (6) individuals with special health care needs, including individuals with disabilities and individuals who need chronic care or end-of-life health care.

The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) program is a multi-year initiative of AHRQ. AHRQ first launched the program in October 1995 in response to concerns about the lack of good information about the quality of health plans from the enrollees' perspective. Numerous public and private organizations collected information on enrollee and patient satisfaction, but the surveys varied from sponsor to sponsor and often changed from year to year. The CAHPS® program was designed to:

- Make it possible to compare survey results across sponsors and over time; and
- Generate tools and resources that sponsors can use to produce understandable and usable comparative information for consumers.

Performance reports on health plans and individual providers have become increasingly available in recent years, but there is little evidence regarding how consumers understand and use different types of performance information to make choices.

This study will use an experimental design to determine factors that influence consumer understanding and use of performance information to select among health plans and clinicians. It will include two parallel experiments, one designed to assess factors

influencing choice of health plans and one designed to assess factors influencing choice of individual doctors. Respondents will be randomly assigned to one of six arms that vary according to the type and complexity of performance information and the size of the choice set (number of plans or doctors) included in the Web report.

For the clinician choice experiment study participants will see a web page labeled "Performance Overview" that presents performance information for a set of primary care doctors in a way that allows them to compare doctor ratings. Performance is summarized by assigning one to five stars to show how each doctor compares with others in the same geographic area. Participants can click on hyperlinks or a tab to see more detailed results. The experimental arms differ in two respects: the type and amount of performance information presented and the number of doctors listed.

The goals of the experiment are to assess the process of consumer choice and the extent to which CAHPS-type measures are consulted, and to examine how consumers respond to different types of information about doctor quality, including quantitative patient experience measures, anecdotal reports from individual patients, and clinical performance indicators. The post-test questionnaire will elicit participants' understanding and impressions of the material they saw on the Web site and inquire about how they made their choice. Therefore, the post-test questions will differ across experimental arms.

The six arms of the clinician choice experiment are summarized below (see Attachments B, C and E to K):

(1) *Baseline/Control Arm:* participants see only ''Service Quality'' for each of 12 doctors in this arm. This includes a summary measure on the Performance Overview page and more detailed measures corresponding to CAHPS composites and an overall doctor rating on the single drill-down page. (n = 125)

(2) *Experimental Arm #1: Augmented Quantified Performance Measures:* In this arm participants will also see ''Service Quality'' on 12 doctors. In addition, they will see a summary clinical performance measure labeled ''Treatment Quality.'' A second drilldown page shows that this is based on clinical indicators for prevention and screening, care for asthma, care for diabetes, and care for heart disease. (n = 125)

(3) *Experimental Arm #2: CAHPS plus Anecdotes:* In this arm, participants will be presented with ''Service Quality'' on 12 doctors. In addition, for each doctor, they will see a tab labeled ''Patient Reviews.'' By clicking on this tab, they can see (drill down to) from four to six patient comments describing patients' experiences with each doctor. Participants in this arm will not see clinical performance scores. (n = 125)

(4) *Experimental Arm #3: Augmented Quantified Performance Measures Plus Anecdotes:* In this arm participants will be presented with all three types of information on 12 doctors: ''Service Quality,'' ''Treatment Quality,'' and ''Patient

Reviews,'' and therefore have a total of three drilldown pages from which they can acquire more detailed information (n = 125)

(5) *Experimental Arm #4: CAHPS plus Anecdotes and Larger Choice Set:* In this arm participants will be presented with ''Service Quality'' and ''Patient Reviews'' on 24 doctors. (n = 125)

(6) *Experimental Arm #5: Maximum Cognitive Load: Large Choice Set and Three Measures of Performance:* In this arm, participants are presented with all three types of information on 24 doctors: ''Service Quality,'' ''Treatment Quality,'' and ''Patient Reviews.'' (n = 125)

The basic design of the health plan choice experiment is similar to that used for the clinician choice experiment. The key difference in the choice set is that – as is true in real-world choices – health plan choice is made complex in the experiment by introducing a larger number of measures of performance, compared to those available to inform clinician choice. Even the simplest CAHPS-only arm has twice as many component measures for health plans as for clinicians; the HEDIS scores also have double the number of component measures. Reports from consumers include ***both*** anecdotes and a count of aggregate complaints that have been filed against the plan. Potentially offsetting the cognitive burdens caused by additional measures, health plan choices typically involve fewer options than do clinician choices; in this choice experiment participants will face choice sets involving either 4 or 8 health plans.
A second substantial difference exists between the health plan and clinician choice experiments: the former assesses in an explicit manner the ways in which emotionality affect how consumers make use of information. It will do so in two ways. First, the counts of complaints mentioned above as an additional measure of plan performance represent a quantitative score with a stronger emotional valence than either the CAHPS or HEDIS measures. Second, two of the experimental arms will "prime" respondents to think about health outcomes in a more emotionally laden manner, to see if this alters the way in which they process this information, and – in particular, the role of information with higher emotional valence (anecdotes and complaints) particularly in the most information-dense choice sets.

Because we anticipate that the introduction of emotional priming will increase the variance of consumer choices (some respondents will respond more powerfully to the emotional priming than will others) we have increased the size of each experimental arm from 125 to 150 subjects. The six arms of the plan choice experiment are summarized below (see Attachments D and L to S):

(1) *Baseline/Control Arm***:** participants see only "Service Quality" for each of 4 plans in this arm. This includes a summary measure on the Performance Overview page and more detailed measures corresponding to two CAHPS domains (customer service and accessibility of care) composites and corresponding plan ratings on the two drill-down pages. (n=150)

(2) *Experimental Arm #1: Augmented Quantified Performance Measures***:** In this arm participants will also see "Service Quality" on 4 plans. In addition, they will see two summary clinical performance measure labeled "Treatment Quality, " (HEDIS -- The Healthcare Effectiveness Data and Information Set -- measures) one for preventive care, the other for treatment of chronic conditions The drill-down page for prevention will show preventive care scores of regular physical exams, and screening for three common medical conditions. The drill down page for treatment will include summary measures for heart problems, asthma, diabetes, and arthritis. All told, respondents in this arm will have four drilldown pages with of detailed performance measures (n = 150)

(3) *Experimental Arm #2: Augmented Quantified Performance Measures Plus Consumer Reports***:** In this arm participants will be presented with CAHPS and HEDIS scores (four aggregate measures, a total of 16 detailed measures on the four drilldown pages) as well as two types of consumer reports: "Enrollee Complaint Rates" and "Specific Enrollee Comments." The actual wording of specific enrollee comments will be accessed through a fifth drilldown page. This information will be presented for 4 health plans. (n = 150)

(4) *Experimental Arm #3: Augmented Quantified Performance Measures and Consumer Reports Plus Emotional Priming***:** In this arm participants will be presented with same measures as in Experimental Arm #2 (a total of five drilldown pages) for 4 health plans These respondents will be exposed to an emotional priming exercise (see below) to heighten their emotional reactivity to health risks, before being asked to evaluate their health plan options. (n = 150)

(5) *Experimental Arm #4: Maximum Cognitive Load: Large Choice Set and Full Set of Performance Measures***:** In this arm, participants will be presented with all types of information: "Service Quality," "Treatment Quality" (both prevention and treatment), "Patient Complaint Rates" and "Patient Reviews" on a total of 8 health plans, doubling the information processing load from Experimental Arm #2. (n = 150)

(6) *Experimental Arm #5: Maximum Cognitive Load Plus Emotional Priming:* In this arm participants will be presented with same measures as in Experimental Arm #4 (a total of five drilldown pages) for 8 health plans These respondents will also be exposed to an emotional priming exercise (see below) to heighten their emotional reactivity to health risks, before being asked to evaluate their health plan options. (n = 150)

Emotional Priming Protocol (Presented on Knowledge Networks site)

Now we'd like you to imagine that something has gone badly wrong with your medical care. You haven't been feeling right for months, but each time you go to see some doctors, none of them can tell you what's wrong. You can't figure out whether your doctors just aren't very good, whether your health insurer won't pay for some test that's needed, or if you just have a really complicated medical condition that's hard to understand. Whatever the cause, this has been going on for a while and you've run up some hefty bills on a growing list of tests and treatments, none of which seem to help much. It seems like this might go on for a long time.

If this were you, what would you be thinking? What sorts of emotions would you feel? As you write about this, try to do so in a way that would help a reader envision what it might be like to actually experience these sorts of problems.

Attachment W describes the methodology we will use to distribute CAHPS and HEDIS scores in the experimental arms for both the clinician and health plan studies, and how anecdotes will be assigned to clinicians and health plans based on their CAHPS scores. Attachment X explains the process we followed in constructing the anecdotes for both studies. Attachment Y provides a list of outcome and process variables for both studies.

2. Purpose and Use of Information

The results of this study will be used to develop recommendations for helping consumers to better understand and more effectively use complex information to select health plans and providers, with the aim of making performance information less burdensome and more accessible, useful, and transparent to the public. In particular, the study findings will inform the design and content of the growing number of Web-based reports on health plan and provider performance. By adding to the evidence base on the types and combination of information that are most salient and useful to consumers in choosing among health plan and provider options, the study will make a significant contribution to improving current reporting initiatives. In addition, the simulated Web-based reports will be made available as examples for other report developers to use. This study is being conducted pursuant to AHRQ's statutory mandate to promote health care quality improvement by conducting and supporting research that develops and presents scientific evidence regarding all aspects of health care, 42 U.S.C. 299(b)(1), and to conduct research on health care and on systems for the delivery of such health care, 42 U.S.C. 299a.

3. Use of Improved Information Technology

Participants will complete the experiment through a secure online connection from their homes. Survey data are collected by a web-based survey system (internally referred to as "Dimensions"). This application runs on top of a secured Windows environment that

has been hardened through various network and hosted-based security techniques. Participants take online surveys by using a web-browser to access a unique, secured web URL that is both emailed to them and made available through a secured web-portal. The URL provides access to click through to a highly-available load-balanced farm of web servers that hosts the online survey. This survey URL can be exposed via either standard http or over SSL and TLS encrypted https, depending on the client requirements. Throughout the interview process, questionnaire data are copied to a secured, centralized database for data processing

4. Efforts to Identify Duplication

Work carried out under this clearance will be designed to reflect specific customer population needs for which the work is being conducted and will not duplicate any other work being done by AHRQ or other Federal agencies.

5. Involvement of Small Entities

Respondents are consumers of health care services offered by clinicians, practitioners, and health plans. The study was designed to minimize burden on all respondents and will not have a significant impact on small businesses or other small entities.

6. Consequences if Information Collected Less Frequently

This is a one-time data collection.

7. Special Circumstances

This request is consistent with the general information collection guidelines of 5 CFR 1320.5(d)(2). No special circumstances apply.

8. Federal Register Notice and Outside Consultations

8.a. Federal Register Notice

As required by 5 CFR 1320.8(d), notice was published in the Federal Register on September 3rd, 2008 for 60 days (see Attachment T). Two comments were received and are contained in Attachment U. AHRQ's response to these comments are in Attachment V.

9. Payments/Gifts to Respondents

No payments or gifts will be given to respondents.

10. Assurance of Confidentiality

Individuals and organizations will be assured of the confidentiality of their replies under Section 934(c) of the Public Health Service Act, 42 USC 299c-3(c). They will be told the purposes for which the information is collected and that, in accordance with this statute, any identifiable information about them will not be used or disclosed for any other purpose.

Individuals and organizations contacted will be further assured of the confidentiality of their replies under 42 U.S.C. 1306, and 20 CFR 401 and 4225 U.S.C.552a (Privacy Act of 1974), and OMB Circular No.A-130. In instances where respondent identity is needed, the information collection will fully comply with all respects of the Privacy Act.

11. Questions of a Sensitive Nature

There are no questions of a sensitive nature on this survey.

12. Estimates of Annualized Burden Hours and Costs

Exhibit 1 shows the estimated annualized burden hours for the respondents' time to participate in this experiment. The entire experiment (including the design phase) will not exceed two years. All participants will complete the pre-test, which is estimated to require 5 minutes. As explained above, the experimental website varies by experimental arm; however, based on preliminary testing, each participant will require about 10 minutes to review the information on the site. Exhibit 1 provides an average time required to complete the post-test questionnaires. The total burden hours are estimated to be 709 hours.

Exhibit 2 shows the respondents' cost burden for their time to participate in this experiment. The total cost burden is estimated to be $13,887.

Exhibit 1. Estimated annualized burden hours

Experimental Group	Number of Responses	Number of responses per respondent	Hours per response	Total Burden hours
Clinician Choice Experiment:				
Pre-exposure questionnaire	750	1	5/60	63
Experimental Website	750	1	10/60	125
Baseline/Control Arm Post-test	125	1	7/60	15
Experimental Arm #1 Post-test	125	1	8/60	17
Experimental Arm #2 Post-test	125	1	8/60	17
Experimental Arm #3 Post-test	125	1	12/60	25
Experimental Arm #4 Post-test	125	1	12/60	25
Experimental Arm #5 Post-test	125	1	14/60	29
Health Plan Choice Experiment:				

Pre-exposure questionnaire	900	1	5/60	75
Experimental Website	900	1	10/60	150
Baseline/Control Arm Post-test	150	1	7/60	18
Experimental Arm #1 Post-test	150	1	8/60	20
Experimental Arm #2 Post-test	150	1	12/60	30
Experimental Arm #3 Post-test	150	1	12/60	30
Experimental Arm #4 Post-test	150	1	14/60	35
Experimental Arm #5 Post-test	150	1	14/60	35
Total	**4950**	**na**	**na**	**709**

Exhibit 2. Estimated annualized cost burden

Experimental Group	Number of respondents	Total burden hours	Average hourly wage rate*	Total cost burden
Clinician Choice Experiment:				
Pre-exposure questionnaire	750	63	$19.56	$1,232
Experimental Website	750	125	$19.56	$2,445
Baseline/Control Arm Post-test	125	15	$19.56	$293
Experimental Arm #1 Post-test	125	17	$19.56	$333
Experimental Arm #2 Post-test	125	17	$19.56	$333
Experimental Arm #3 Post-test	125	25	$19.56	$489
Experimental Arm #4 Post-test	125	25	$19.56	$489
Experimental Arm #5 Post-test	125	29	$19.56	$567
Health Plan Choice Experiment:				
Pre-exposure questionnaire	900	75	$19.56	$1,467
Experimental Website	900	150	$19.56	$2,934
Baseline/Control Arm Post-test	150	18	$19.56	$352
Experimental Arm #1 Post-test	150	20	$19.56	$391
Experimental Arm #2 Post-test	150	30	$19.56	$587
Experimental Arm #3 Post-test	150	30	$19.56	$587
Experimental Arm #4 Post-test	150	35	$19.56	$685
Experimental Arm #5 Post-test	150	35	$19.56	$685
Total	**4950**	**709**	**na**	$13,887

*Based upon the mean of the average wages, , "National Compensation Survey: Occupational Wages in the United States, May 2007," U.S. Department of Labor, Bureau of Labor Statistics.

13. Estimates of Annualized Respondent Capital and Maintenance Costs

Capital and maintenance costs include the purchase of equipment, computers or computer software or services, or storage facilities for records, as a result of complying with this

data collection. There are no direct costs to respondents other than their time to participate in the study.

14. Estimates of Annualized Cost to the Government

Estimated Annual Costs to the Federal Government

Exhibit 3 shows the total and annualized cost for developing and conducting both the health plan and clinician choice components of this study, including the cost of designing the experiments, developing the simulated Web-based reports, conducting usability testing of the Web-reports, pilot testing the experiment, collecting the data, analyzing the data, preparing reports and papers for journal submission, and the cost for AHRQ staff to oversee the project. The total and annual costs are identical since data collection will not exceed one year. The total cost is estimated to be $844,000.

Exhibit 3. Total and Annualized Costs

Cost Components	Total Cost	Annual Cost
Experimental design	$168,900	$168,900
Development of simulated Web-based reports	$157,900	$157,900
Pilot testing	$56,000	$56,000
Usability testing of Web-based reports	$56,300	$56,300
Data collection via Knowledge Networks	$126,000	$126,000
Data analysis	$56,300	$56,300
Preparation of reports and journal papers	$112,600	$112,600
AHRQ project management	$110,000	$110,000
Total	**$844,000**	**$844,000**

15. Changes in Hour Burden

This is a new collection of information.

16. Time Schedule, Publication and Analysis Plans

The results of this study will be used to develop recommendations for helping consumers to better understand and more effectively use complex information to select health plans and providers, with the aim of making performance information less burdensome and

more accessible, useful, and transparent to the public. The simulated Web-based reports will be made available as examples for other report developers to use.

The forecasted timeline is as follow:

Recruit sample – 30 days from the date of OMB Clearance
Obtain experimental data – 40 days from the recruitment completion date
Analyze data – 25 days from the experimental data collection completion date
Publication summarizing the results – 250 days from the analysis completion date

17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

List of Attachments:
Attachment A – The Healthcare Research and Quality Act of 1999
Attachment B – Clinician Choice Experiment Overview & Example Screenshots
Attachment B2 – Health Plan Experiment Overview & Example Screenshots.doc
Attachment C – Clinician Choice Experiment Invitation
Attachment D – Health Plan Experiment Invitation
Attachment E – Clinician Experiment – Pre-Test Questionnaire
Attachment F – Clinician Experiment – Post-Test Baseline
Attachment G - Clinician Experiment – Post-Test Experimental Arm 1
Attachment H – Clinician Experiment – Post-Test Experimental Arm 2
Attachment I – Clinician Experiment – Post-Test Experimental Arm 3
Attachment J - Clinician Experiment – Post-Test Experimental Arm 4
Attachment K – Clinician Experiment – Post-Test Experimental Arm 5
Attachment L - Health Plan Experiment – Post-Test Baseline
Attachment M – Health Plan Experiment – Post-Test Experimental Arm 1
Attachment N – Health Plan Experiment – Post-Test Experimental Arm 2
Attachment O - Health Plan Experiment – Post-Test Experimental Arm 3
Attachment P - Health Plan Experiment – Post-Test Experimental Arm 4
Attachment R - Health Plan Experiment – Post-Test Experimental Arm 5
Attachment S – Health Plan Experiment – Pre-Test Questionnaire
Attachment T – Federal Register Notice
Attachment U -- Public Comments from the ANA and HPNA
Attachment V -- Response to Public Comments from the ANA and HPNA
Attachment W – Distribution of CAHPS and HEDIS Scores and Assignment of Anecdotes
Attachment X – Construction of Anecdotes
Attachment Y – Outcome and Process Variables