

Supporting Statement

Part A

Synthesis Reports for Grants and Cooperative Agreements for Transforming
Healthcare Quality through Information Technology (THQIT)

Version: October 12, 2010

Agency of Healthcare Research and Quality (AHRQ)

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A. JUSTIFICATION

1. Circumstances that Make the Collection of Information Necessary

The mission of the Agency for Healthcare Research and Quality (AHRQ) set out in its authorizing legislation, The Healthcare Research and Quality Act of 1999 (see Attachment A), 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.

AHRQ's health information technology initiative is part of the Nation's strategy to put information technology to work in health care. By developing secure and private electronic health records and making health information available electronically when and where it is needed, health IT can improve the quality of care, even as it makes health care more cost-effective. This proposed information collection will help AHRQ enhance the evidence base to support effective information technology (IT) implementation and add to knowledge about health IT by synthesizing and drawing lessons from its Transforming Healthcare Quality through Information Technology (THQIT) program.

From 2004-2010, the THQIT program has supported the adoption of health IT through 118 grants and cooperative agreements. These grants fall into three main categories: planning grants, implementation grants and value demonstration grants. Planning grants are intended to develop health IT

infrastructure and data-sharing capacity among clinical provider organizations in their communities by 1) creating multidisciplinary collaboratives and coalitions of health care providers, 2) conducting needs assessments and feasibility studies, and 3) developing plans to implement electronic health records. Implementation grants support community-wide and regional health IT systems by 1) developing shared registries, electronic health record systems, and telemedicine networks, 2) integrating clinical data from a variety of health IT systems, including pharmacy, laboratory, and public health organizations, 3) redesigning clinical workflow to improve patient care and provider access to information and 4) creating novel methods for delivering information to providers. Value demonstration grants evaluate how the adoption of health IT will 1) impact quality, safety, and resource use in large, integrated delivery systems, 2) advance the effectiveness of Web-based, patient education tools and 3) improve patient transitions between health care facilities and their homes. The program places an emphasis on grants to rural health organizations.

AHRQ does not currently have a system in place for assessing the overall outcomes and lessons learned from these health IT grants. This project seeks to create such a system and has the following goals:

- 1) Further the state of knowledge of health IT planning, implementation, and effects by synthesizing the experiences of THQIT grantees and the reported effects of the grants;
- 2) Translate this knowledge into a practical tool to assist rural hospitals with electronic health record implementations; and
- 3) Translate this knowledge into recommendations for AHRQ activities.

To achieve the goals of this project the following data collections will be implemented:

- 1) Planning Grant Survey for all grantees that received a planning grant (see Attachment B);
- 2) Implementation Grant Survey for all grantees that received an implementation grant (see Attachment C);
- 3) Value Grant Survey for all grantees that received a value grant (see Attachment D); and
- 4) In-Depth Interviews will be conducted via telephone with a sample of grantees from each of the three types of grants (see Attachment E). Given the complex nature of many of the projects conducted under these grants, from each selected grantee organization 1 to 3 persons with

different areas of expertise will participate in the interview with the most knowledgeable person responding to a give question. Questions vary by grant type.

These proposed data collections will gather information from grantee principal investigators on topics including: 1) partnerships, which were required of all the grantees—what types are most effective and long-lasting and how partnerships can be made more effective; 2) planning for health IT—information that can help identify successful pathways; 3) implementation of health IT—including common and unique barriers and facilitators to implementation across types of health IT and care settings; 4) the outcomes, benefits, and drawbacks of the grant projects; and 5) the sustainability and expansion of implemented health IT. See Attachment F for the email invitations and follow-up email reminders.

Collecting this information will assist AHRQ in its mission of supporting the synthesis and dissemination of available evidence for the planning, implementation, and use of health IT by patients, practitioners, providers, purchasers, policymakers, and educators.

The proposed data collection is also designed to assist AHRQ in improving the effectiveness with which it supports future research, synthesis, and initiatives on health IT topics. The grantees' experiences with the THQIT grant process and features is an important topic covered—including feedback on whether the funding and time period were sufficient, how effective the grant was in furthering health IT in grantee organizations, and whether planning grants are a useful mechanism to prepare health care organizations and researchers to participate in future large-scale research. This research also supports AHRQ's mission, 42 U.S.C. 299(c), to specifically focus on rural populations and priority populations by collecting information on special factors affecting rural health care grantees, and the outcomes of the grant projects for AHRQ priority populations.

This study is being conducted by AHRQ through its contractor, Mathematica Policy Research, Inc. (Mathematica), pursuant to AHRQ's statutory authority to conduct and support research (1) on healthcare and on systems for the delivery of such care, 42 U.S.C. 299a, and (2) on information systems for health care improvement. 42 U.S.C. 299b-3.

2. Purpose and Use of Information

The data from this research will complement information already available on AHRQ-funded health IT planning, implementation, and value grant projects generated through a comprehensive review of the literature and of grantee final reports, or syntheses thereof. This new information will enhance AHRQ's ability to learn from grantee experiences and share lessons

learned with other health care organizations pursuing similar goals. AHRQ plans to disseminate the practical information and lessons learned for the field through its National Resource Center for Health IT. In addition, AHRQ plans to use the information to better structure future grant awards.

3. Use of Improved Information Technology

The data collection plan is designed to obtain reliable information in an efficient way that minimizes respondent burden. A web-based survey of AHRQ grantees will be used to obtain much of the pertinent information. The web mode was selected to allow respondents to complete the survey at their convenience, at a time and place of their choosing. However, if a respondent prefers or requires an alternative means (phone or hard copy), we will accommodate that request. The in-depth interviews will be done via telephone at a time and day convenient for the grantee.

4. Efforts to Identify Duplication

No other formal data collection effort has been conducted nor has any effort to collect similar information from THQIT grantees been planned. This data collection is being conducted because AHRQ currently has no way to gather information from grantees about the processes related to grant project planning and implementation, and whether and how the projects were sustained and expanded after the grant period.

Final grantee reports to AHRQ and all grantee publications for the planning and implementation grantees were thoroughly reviewed by the research team and a literature review report was submitted to AHRQ; for the value grantees, the research team reviewed a report developed by another contractor who had reviewed the value grantees' final reports to AHRQ and publications. The survey and in-depth interviews are designed to complement the available information without duplication. Attachment G shows the topics of interest to AHRQ, what the available information and literature reveals on those topics, and how the grantee surveys and interviews will be used to complement that information to allow AHRQ's questions to be addressed.

5. Involvement of Small Entities

Some lead grantees may be small rural hospitals, and the principal investigators may be asked to complete the survey and/or participate in the in-depth interview since one focus of the project is to develop a practical tool to assist small rural hospitals. Also, it is possible, though unlikely, that a lead grantee contacted for survey and/or interviews could be from a small physician organization. The information being requested or required has been held to the absolute minimum required for the intended use.

6. Consequences If Information Collected Less Frequently

This is a one-time data collection. If the collection is not conducted, AHRQ will not be able to synthesize the experiences and reported effects of THQIT grantees to further the state of knowledge about health IT planning, implementation, and effects nor will AHRQ be able to translate this knowledge into recommendations for rural hospitals.

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

a. Federal Register Notice

As required by 5 CFR 1320.8(d), notice was published in the Federal Register on November 2nd, 2010 for 60 days (see Attachment H). No comments were received.

b. Outside Consultations

AHRQ convened an expert panel to provide guidance on data collection content and format. The panel consisted of a balanced set of leaders in the health IT field that are knowledgeable about the planning and implementation of health IT and the potential intended and unintended consequences of health IT utilization. Panel members are shown in the table below. Panel members met in person on December 2, 2009 to provide guidance for the work plan; the meeting included discussion of the appropriate topics and plan for data collection through surveys and grantee interviews. The research team also emailed the draft survey instruments to the panel for review and incorporated the resulting comments prior to pre-testing the instruments. In addition, the survey drafts were reviewed by Dr. Joy Grossman, a health IT expert and internal consultant to the team who was not involved in their development.

Expert Panel Participants

Participants	Affiliation	Perspective
Thomas Fritz, MA, MPA	Inland Northwest Health Services	Rural health

Participants	Affiliation	Perspective
C. Andrew Brown, M.D.	The University of Mississippi Medical Center	Rural health, hospital
Joel Weissman, Ph.D.	Massachusetts General Hospital Institute for Health Policy	Academic HIT
Patty Abbott, Ph.D., RN, FAAN, FACI	Johns Hopkins University	Nursing
Pascale Carayon, Ph.D.	University of Wisconsin	Human factors engineer
Michael Lardiere, LCSW	National Association of Community Health Centers	Community health centers, Ambulatory care management, behavioral Health care
Matt Handley, M.D.	Group Health Cooperative	HIT professional
Alexander H. Krist, M.D., MPH	Virginia Commonwealth University	Primary care physician with HIT experience
Robert J Lamberts, M.D.	Evans Medical Group	Small practice primary care Physician with HIT experience
Michael H. Zaroukian, M.D., Ph.D., FACP, FHIMSS	Michigan State University, Sparrow Health System	HIT professional, hospital and ambulatory care

9. Payments/Gifts to Respondents

Each person who submits a completed survey will receive \$25, an amount appropriate for the length of the surveys and one that should decrease the effort required for follow-up to achieve a high response rate. For grantee organizations participating in the in-depth telephone interviews, each PI will receive \$50. AHRQ is seeking the funding to support these payments from its FY2011 budget. Payment will be in the form of a gift card to a major retailer such as Amazon.com or Barnes and Noble.¹

Incentives in the \$25 to \$50 range successfully have been used successfully in past surveys of similar populations conducted by our contractor, Mathematica. For example, response rates exceeding 90 percent were achieved in two rounds of surveys with health plan executives and medical directors in an NIH-funded study that included a \$50 incentive. Further, in a survey of physicians regarding treatment of patients with chronic conditions, a \$25 dollar incentive for a 15-minute survey yielded a 71 percent response rate.

¹ Literature on incentive payments with physicians indicates that higher incentive payments lead to higher response rates (Halpern et al. 2002; Kasprzyk et al. 2001; Asch et al. 1981; Mizes et al.1984; Gunn and Rhodes 1981).

10. Assurance of Confidentiality

Individuals and organizations participating in the web survey and/or the in-depth telephone interviews 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.

a. Surveys

At the conclusion of the survey, AHRQ will receive a data file with grantee organization-level survey results for potential future analyses related to health IT. This data file will not include respondent names. The fact that survey responses will be provided to AHRQ is made clear in the email invitation requesting survey participation (Attachment F). It is also made clear that publicly available reports resulting from the evaluation will not name individual grantees or individual respondents, but will synthesize the responses across grantees.

b. In-Depth Interviews

Respondents will be informed that their interview responses will be kept confidential to the extent provided by law and will be reported to AHRQ only in summary form. This information is presented to respondents in an email with the request for an interview (see Attachment F).

11. Questions of a Sensitive Nature

None of the survey instruments used in the data collection contains items considered to be of a sensitive nature. Respondents are informed about the nature of the study; that their participation is voluntary; and that there are no known benefits, risks, or other consequences to participation.

12. Estimates of Annualized Burden Hours and Costs

Exhibit 1 shows the estimated annualized burden hours associated with the respondents' time to participate in this research. The Value Grant Survey will be completed by the 24 grantees that received a value grant and takes 30 minutes to complete. The Planning Grant Survey will be completed by all 38 recipients of a planning grant and requires 30 minutes to complete. The Implementation Grant Survey will be completed by the 56 grantees that received an implementation grant and takes 45 minutes to complete. In-depth interviews will be conducted with 1 to 3 persons (2 on average) from

each of 30 different grantee organizations and is estimated to average 1.8 hours; actual burden will vary since some sections apply to specific grant types. The total annualized burden is estimated to be 181 hours.

Exhibit 2 shows the estimated annualized cost burden associated with the respondents' time to participate in this research. The total annualized cost burden is estimated to be \$7,917.

Exhibit 1. Estimated annualized burden hours

Form Name	Number of Respondents	Number of Response per Respondent	Hours per Response	Total Burden Hours
Value Grant Survey	24	1	30/60	12
Planning Grant Survey	38	1	30/60	19
Implementation Grant Survey	56	1	45/60	42
In-Depth Interviews	30	2	1.8	108
Total	148	n/a	n/a	181

Exhibit 2, Estimated annualized cost burden

Form Name	Number of Respondents	Total Burden Hours	Average Hourly Wage Rate*	Total Cost Burden
Value Grant Survey	24	12	43.74	\$525
Planning Grant Survey	38	19	43.74	\$831
Implementation Grant Survey	56	42	43.74	\$1,837
In-Depth Interviews	30	108	43.74	\$4,724
Total	148	181	na	\$7,917

*Based upon the mean of the average wages for medical and health services managers, Department of Labor, Bureau of Labor Statistics, Occupational and Employment Wages. May 2009. Accessed at: <http://www.bls.gov/news.release/pdf/ocwage.pdf>

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

Exhibit 3 shows the estimated total and annualized cost for this project. Although data collection activities will last for one year, the entire project will span 2.25 years; therefore, the annualized costs cover two and a quarter years. The total project cost is estimated to be \$600,055.

Exhibit 3. Estimated Total and Annualized Cost

Cost Component	Total Cost	Annualized Cost
Project Development	\$80,584	\$35,815
Data Collection Activities	\$72,198	\$32,088
Data Processing and Analysis	\$52,389	\$23,284
Publication of Results	\$149,476	\$66,434
Project Management	\$70,313	\$31,250
Overhead	\$175,095	\$77,820
Total	\$600,055	\$266,691

15. Changes in Hour Burden

This is a new collection of information.

16. Time Schedule, Publication and Analysis Plans

The anticipated conclusion date for the project is December 7, 2011. Mathematica will draft and finalize several reports for AHRQ staff—one report for each type of grantee (planning, implementation, and value grantees), and one high-level overview report for policymakers. The reports will present the survey results and knowledge gained from the in-depth interviews, as well as results from the previously completed literature review, in order to highlight the experiences of THQIT grantees and the reported effects of their projects. Recommendations for AHRQ regarding future activities in HIT will also be provided as part of the reports. A distinct tool for rural hospitals will also be developed which will be tested under a separate OMB clearance before being widely disseminated.

To develop findings for these reports, we will use quantitative and qualitative analytic techniques and will synthesize the findings to present a single story based on the project's literature review, surveys, and grantee interviews. Quantitative analysis will be descriptive tabular analysis, as analyses must consider each type of grantee separately, and the number of grantees of each type does not allow for more rigorous methods to be applied. Where appropriate, t-tests and chi-square tests will be used to explore differences among groups using the survey responses. Qualitative analysis involves review of grantee interview notes and discussion of among the team to identify key themes, followed by coding of the detailed notes on key attributes to explain the identified themes.

17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

Attachments:

Attachment A: AHRQ's Authorizing Legislation

Attachment B: Planning Grant Questionnaire

Attachment C: Implementation Grant Questionnaire

Attachment D: Value Grant Questionnaire

Attachment E: In-Depth Interview Guide

Attachment F: Communication with Grantees

Attachment G: Research Topics and Sources

Attachment H: Federal Register Notice