SUPPORTING STATEMENT

Part A

Improving Patient Flow and Reducing Emergency Department Crowding

Version ~~March 3, 2009~~~~May XX~~June 3, 2009

Agency of Healthcare Research and Quality (AHRQ)

Table of contents

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.

It has been well established that emergency department (ED) crowding represents one of the key problems facing America's health care systems. Nearly half of EDs are operating at or above capacity, and 9 in 10 hospitals report "boarding" admitted patients in the ED while they await inpatient beds. Approximately 500,000 ambulances are diverted each year, and evidence is mounting that ED crowding contributes to poor quality care.

Urgent Matters (UM), a Robert Wood Johnson Foundation (RWJF) funded program, began as a 10-hospital collaborative Learning Network through which hospitals developed and implemented strategies to improve patient flow and reduce ED crowding. Outcomes from the original Learning Network, which involved only urban, level 1 urban trauma systems, showed reductions in ED overcrowding without the investment of significant financial resources. However, implementation of these strategies has not been widespread, and questions remain about how readily the strategies could be implemented in a more diverse group of hospitals, and the associated costs and outcomes of implementation. This is because successful implementation of such innovations will ultimately rest not merely on the design of the innovations themselves, but also on the structures and resources of the settings into which they must be integrated. This project, which is funded by a grant from RWJF to AHRQ, thus seeks to extend the learning that

was achieved by the last UM collaborative to a broader set of hospital ED settings than those in which the tools were first developed.

~~More specifically, this project consists of six case studies which will document the experiences of six diverse hospital EDs as they identify and implement patient flow improvement strategies.~~Findings from this study will help refine three hypotheses generated under the first Urgent Matters Learning Network:

(1) Strategies designed to improve patient flow and reduce ED crowding can be successfully adopted by a diverse group of hospitals;
(2) The adoption of the strategies is associated with reduced ED crowding and improved patient flow, clinical performance, and patient and staff satisfaction; and
(3) The monetary costs of adopting patient flow improvement strategies are relatively low.

Six hospitals were selected to participate in this study. They were selected from a group of approximately 40 hospitals that expressed an interest in participating. Although it is a convenience sample, the six hospitals represent diversity of size, ownership, teaching status, geographic location, safety net status/payer mix, and experience working to improve patient flow. As a consequence, they face different challenges regarding patient flow and will implement different interventions. For example, Thomas Jefferson University Medical Center is a large safety net hospital in Philadelphia and receives a large number of walk-in, uninsured patients to its fast track (i.e. urgent care) unit within the ED. Staff from Thomas Jefferson will focus their intervention on improving the efficiency of the fast track unit. Stony Brook University Medical Center is nationally recognized for its previous efforts to improve patient flow, including implementation of a progressive strategy to "board" admitted ED patients on inpatient units. Stony Brook is at the forefront of efforts to improve patient flow, and will undertake a strategy to improve the timeliness of specialty consultations, a problem that many hospitals struggle with but have not attempted to address. The diversity of the hospitals in the collaborative will also allow us to consider the different contextual factors (e.g. size, teaching status, safety net status) that may facilitate or hinder the adoption of the interventions.

~~-- tilted the Urgent Matters Learning Network II--~~

Hospitals Participating in the Urgent Matters Collaborative

Hospital	Location	Teaching Hospital	Ownership	Urban/Rural/ Suburban	Size (beds)	Patient Demographics	Payer Mix
Stony Brook University Medical Center	Stony Brook, NY	Yes	Public (State)	Suburban	540	75% Caucasian 8% African American 12% Hispanic 6% Other	Medicare Medicaid Private Pa Self Pay/
Good Samaritan Hospital	West Islip, NY	Yes	Not-for-Profit	Suburban	437	70% Caucasian and Hispanic 15% African American 15% Other	Medicare Medicaid Private Pa Self Pay/C
Hahnemann University Medical Center	Philadelphia, PA	Yes	For-Profit	Urban	640	34% Caucasian 55% African American 4% Hispanic 27% Other	Medicare Medicaid Private Pa Self Pay/C
Thomas Jefferson University Hospital	Philadelphia, PA	Yes	Not-for-Profit	Urban	765	35% Caucasian 49% African American 2% Hispanic 13% Other	Medicare Medicaid Private Pa Self Pay/C
St. Francis Hospital	Indianapolis, IN	No (Family Practice Residency Only)	Not-for-Profit	Suburban	230	95% Caucasian 5% African American, Hispanic, and Other	Medicare Private Pa Self Pay/C
Westmorland Hospital	Greensburg, PA	No	Not-for-Profit	Rural	301	97% Caucasian 2% African American 1% Hispanic and Other	Medicare Private Pa Self Pay/C

Source: Data provided by the hospitals.
Note: Caucasian = Caucasian, non-Hispanic; Hispanic = Caucasian, Hispanic

The six hospitals also agreed to participate in a separately funded collaborative run by the UM National Program Office (NPO) to facilitate the sharing of data and experiences while the project is underway. The UM collaborative – titled the Urgent Matters Learning Network II-- is funded by grant from the RWJF to the George Washington University School of Public Health and Health Policy, where it is housed.

This project poses a common outcome goal across all six sites of improving patient flow/reducing ED crowding, but allows each hospital to adopt practices that fit its own needs and context. This approach rests on innovation research showing that organizational innovations are more successful when they are aligned with features of the adopting hospital. Participating hospitals selected interventions~~(s)~~ that fall~~(s)~~ into one of two categories: (1) interventions that have shown to improve patient flow/reduce ED crowding in at least one other hospital or (2) strategies that are theory-based, meaning that the interventions are designed to reduce or eliminate bottlenecks identified in the conceptual model of patient flow. All interventions were reviewed by the ~~UM staff~~NPO staff to ensure that they fit into at least one of the categories, and to ensure that the interventions could be fully implemented in a relatively short timeframe (3 months). Dates by which the interventions will be fully implemented vary across the hospitals, ranging from May to August 2009.

This project consists of six case studies which will document the experiences of six diverse hospital EDs as they identify and implement patient flow improvement strategies. Primary research questions guiding this project are:

1. What factors (e.g. resources, leadership, experience with other quality improvement efforts) motivated, supported, and ~~/~~impeded the implementation and maintenance of the patient flow improvement interventions ~~and how do these factors vary across the sites~~?
2. What types of resources were required for ~~identification/ adoption /implementation~~planning, implementing, and maintaining the interventions, and what were their associated costs?
3. ~~What were the costs associated with the adoption and maintenance of the interventions?~~ What changes in patient flow, ED crowding, care quality, patient satisfaction, and staff satisfaction occurred after the implementation of the interventions?

~~This study poses a common outcome goal across all six sites of improving patient flow/reducing ED crowding, but allows each hospital to adopt practices that fit its own needs and context. This approach rests on innovation research showing that organizational innovations are more successful when they are aligned with features of the adopting hospital. The six case study sites were selected to reflect diversity of size, ownership, teaching status, safety net status, and types of challenges with ED crowding. Participating hospitals will select interventions from the previously developed UM Toolkit that they believe will work best to address the particular problems they face.~~

~~The six hospitals participating in this study have also agreed to participate in a separately funded collaborative run by the UM National Program Office (NPO) to facilitate the sharing of data and experiences while the project is underway. The UM collaborative is funded by grant from the RWJF to the George Washington University School of Public Health and Health Policy, where it is housed.~~

~~The six case studies will: (1) explore contextual (organizational/structural/resource/staffing/cost) issues affecting implementation and maintenance of patient flow strategies (2) generate estimates of costs associated with implementation and maintenance of strategies in these different settings (3) document changes in patient flow, ED crowding, and clinical care associated with those strategies, (4) document and identify facilitators and barriers to the collection of ED performance measures, and (5) develop lessons for hospitals considering the adoption of patient flow improvement strategies in the future.~~

The case studies will involve the analysis of both qualitative and quantitative data. Qualitative interview data will capture information at two points in time. The first interviews will occur shortly after the implementation of the patient flow improvement strategies. The interviews will provide insight on the process through which hospitals identified and implemented the strategies, resources used, facilitators and barriers to implementation of strategies and reporting of data~~, and the spread and sustainability of the intervention~~. The second round of interviews will focus on hospitals' experience ~~maintaining the~~operating and supporting the intervention during the first few months after implementation and respondents' perceptions of impact on patient flow, quality of care, and patient and staff satisfaction. Perceptions of impact will supplement our analysis of outcome measures, described below.

Importantly, both rounds of interviews will include questions on the resources used to plan, implement, and maintain strategies, for example staff time, purchases made (e.g. computers, supplies), items borrowed from other units (e.g. beds). To the extent possible, we will collect or generate an estimate of the costs associated with these resources. Our interview protocols include questions about the amount of time the respondents have spent and are spending to support the interventions. One of the challenges associated with collecting this information is that respondents will have to recall the amount of time that they spent on the project months prior to the interviews. Because it may be difficult for respondents to give immediate, thoughtful answers to questions about time spent on the interventions, we will send the section of the interview protocol ~~on~~concerning time and expenses in advance of the interviews, requesting that potential interviewees consider answers in advance. To estimate labor costs, we will multiply the number of hours reported by the national average hourly compensation for a specific job category obtained from the Bureau of Labor Statistics. Our intention is not to develop a business case for implementing patient flow improvement strategies, but rather generate information on the types of costs that hospitals are likely to experience when implementing these interventions and present a range of costs. Additionally, we will interview hospital CFOs to explore the extent to which the hospitals are tracking – or have the ability to track – the financial impact of the interventions.

The project also includes the analysis of ~~performance~~ outcome measures ~~that will be developed~~ using ~~selected~~ de-identified patient-level data elements that are already part of the hospital's

electronic medical records and/or management information systems ~~(i.e arrival time; departure time; time of administration of pain management for long bone fracture; time of chest x-ray; time of ED departure for admitted patients)~~. Many of the measures (e.g. left without being seen, ED arrival to ED departure time) have been endorsed by the National Quality Forum, and CMS listed ED arrival to ED departure time as a measure under consideration under the Reporting Hospital Quality Data for Annual Payment Update program. In addition to those measures listed in the table above, the participating hospitals will also provide us with data on patient satisfaction that they collect (e.g. Press Ganey scores). These data will allow us to examine changes in of patient flow and patient satisfaction after the introduction of the interventions. While the analysis will enable us to identify significant changes in indicators of patient flow – the ultimate goal of the interventions ~~--~~, we will not be able to attribute those changes solely to the interventions adopted. (This and other ~~The~~ limitations are discussed below.~~–~~) The following table provides an overview of the problems faced at the six study sites, the elements of the interventions that they will implement to address those problems, and the associated outcome measures that will be examined. ~~The hospitals will be sharing these with the NPO* over the course of their participation n the above-mentioned UM collaborative, and will be made available to HRET for use in this study.~~

* the NPO has received private funding for field testing of the reporting of these data elements – all of which are already part of hospitals' electronic records and/or management information systems.

Overview of Strategies & Related Outcome Measures Implemented under the Urgent Matters Learning Network II

Hospital	Nature of the Problem	Primary Causes/Sources of Patient Flow Problem	Intervention
Stony Brook University Medical Center	Long lengths of stay for patients	• Long waits for specialty consults • Boarding of admitted patients in the ED • Limited availability of physicians to see all patients.	• Implement a protocol for initiating completing specialty consults. Prov feedback re: specialists' compliance the new protocol. • Patients with chest pain will receive coronary angiogram; those ruled ou arterial blockage will be discharged ED. • Implement an advanced protocol fo patients presenting with abdominal including initiation of treatment by clinical assistant.
Good Samaritan Hospital	ESI IIIs have the highest rates of patients who leave without being seen.	Inadequate/Flawed triage system for ESI III patients	• Utilize a physician in triage to expe evaluation and initiate treatment • Use unoccupied space in the Ambu Surgery to provide post-triage care non-physician provider.
Hahnemann University Medical Center	High rates of left without being seen among fast track patients	• Flawed/Inadequate triage system • Inefficient fast track unit.	• Implement the nationally-recognize level ESI triage system. • Hire a full-time nurse practitioner f track. • Implement an "open bed" system.
Thomas Jefferson University Hospital	Fast track patients have long lengths of stay (~200 minutes)	• Fast track staff are often pulled to work in the ED • Inefficient fast track unit.	• Identify a dedicated team to staff fa • Make supplies more accessible to t staff • Easier access to patient charts and discharge instructions.
St. Francis Hospital	Long lengths of stay lead to high rates of patients leaving without being seen.	• Some nurses are slower in triage than others, • registration process is inefficient.	• Standardize the triage process. • Initiate bedside registration.
Westmoreland Hospital	Long waits for an inpatient bed for admitted ED patients	Ineffective communication between ED and inpatient unit staff.	• Implement a Fax Sheet Report that standardizes communication betwe ED and inpatient units. • Establish "Meet Me" Line for daily communication and a Transfer Line expedite hospital-to-hospital transfe patients.

This study also supports AHRQ's special interest in minority populations. Two of the hospitals are located in inner city areas, two serve predominantly minority groups, and three have relatively high percentages of self-pay (i.e. uninsured) patients. Further, emergency departments are key safety net providers, delivering care to individuals who experience difficulty accessing care elsewhere.

Profile of hospitals participating in the collaborative

Hospital	Location	Number of Beds	Patient Demographics	Payer Mix
Thomas Jefferson University Hospital	Philadelphia, PA	765	49% African American 35% Caucasian 7% Asian 6 % Other 2% Hispanic	Medicaid 25.5% HMO 23.3% Medicare 15.2% PPO 9.2% Workers comp 1.7 Self 19.9% Other 5%
Hahnemann University Medical Center	Philadelphia, PA	640	55% African American 34% Caucasian 4% Hispanic 2% Asian 5% Other	Medicare = 25.3% Medicaid = 6.8% Managed Care = 63.8% Other = 5.2%
Stony Brook University Medical Center	Long Island, NY	540	75% white 12% Hispanic 8% black 2% Asian 4% other or unknown.	Medicare-27% Medicaid HMO-10.5% Self Pay/ other-9% Medicare HMO-5% Blue Cross-20% Workers Comp/No fault-2.5% Medicaid-6% Commercial(inc HMO)-20%
Good Samaritan Hospital	Long Island, NY	437	70% White and Hispanic 15% Black 15% Other	Commercial HMO/PPO = 39% Medicare/Medicare HMO = 21% Self pay= 15% Blue Shield = 11% Workers Comp = 7% Medicaid/Medicaid HMO = 5% Global = 2%
St. Francis Hospital	Indianapolis, IN	230	Primarily Caucasian	Government = 29.6% Commercial = 46.9% Self Pay = 13% HMO = 7.8%
Westmorland Hospital	Greensburg, PA	301	97% White 2% Black 1% Other	Medicare Managed Care 29% Medicare Traditional 24% Highmark 23% Medical Assistance Medicare 8% Managed Care Traditional 6% Other 5% Commercial 3% Regular Medical Assistance 2%

~~Source: All information provided by the hospitals.~~

2. Purpose and Use of Information

Research suggests that that merely raising awareness of tools such as those found in the UM toolkit is not likely to result in their widespread adoption, or in their certain success where they are implemented. This is because the ability of these types of organizational change strategies to actually improve flow will depend not only on the design or attributes of the strategies themselves, but also on contextual factors that vary greatly across the universe of hospitals that share the common problem of ED crowding.

We anticipate that the information gleaned from these case studies will enhance understanding of contextual facilitators or barriers that other hospitals might encounter in trying to implement tools to improve patient flow. The cases studies will yield important insights regarding organizational, structural, resource, staffing, and cost factors that may affect the adoption, implementation and results of patient flow improvement strategies across diverse ED settings. Awareness and understanding of these factors can be of value to hospitals as they:

- assess their own readiness to adopt such strategies;
- seek to identify strategies that are appropriate to their needs, constraints and resources
- prepare their staffs/organizations to implement change
- develop mechanisms for assessing the impacts of their endeavors.

In sum, this project will expand the number and diversity of hospitals within which these tools are tested and increase the likelihood of broader and more successful implementation of these tools in the future by enhancing hospitals' understanding of the contextual factors that may underpin success.

Limitations

Since this study includes six hospitals that ~~are likely to~~selected different interventions ~~implement differing strategies~~, we make no claim that our results will be generalizable in the statistical sense. Further, we recognize that the technical assistance the six hospitals receive from the NPO during the course of this project (technical review of proposed strategies, data analysis) may further limit the generalizability of our results. However, ~~This~~the purpose of this project is not to make determinations about causality or degrees of effectiveness (e.g to what degree can a change in patient flow be attributed to a given intervention?). Rather, the project seeks to expand and enhance understanding of factors that facilitate or impede planning, decision-making, and adoption of improvement strategies and associated changes in patient flow across diverse ED settings. Nonetheless, ~~I~~in our reporting of findings, we will note as a limitation that the hospitals participating in this project received considerable guidance and followed a schedule for planning and implementation developed by the NPO.

Another limitation is that we will not be able to specifically attribute the change in outcome measures (e.g. ED arrival to ED departure time) solely to the interventions adopted under the UM Learning Network II. The hospitals may already have ~~implement~~ additional patient flow improvement efforts or general quality improvement activities planned or underway in the ED or other parts of the hospital that could impact the measures. As a result, we will be cautious in our

interpretation and dissemination of the data we obtain from the hospitals. We believe ~~that the data provide important contextual information, but we will not seek to attribute causality.~~it is important to make efforts to measure the effects or impacts of the interventions, but to recognize and acknowledge the limitations of conclusions that can be drawn form this analysis.

There is also a limitation regarding the collection of information on resources and costs associated with implementation of the interventions. As noted above, we will use interviews to obtain this information, and the interviews will occur months after the start of the project. Respondents may experience some difficulty recalling expenses and time spent on the intervention. We will send questions on time and expenses in advance of our interviews to allow respondents time to think about their responses. Also, to the extent they are available, we will supplement the information from interviews with additional materials that may be available that document expenses (e.g. invoices, time sheets). Using these methods, we are confident that we will obtain information on the types of costs associated with the interventions and whether the hospitals are tracking the financial impact of the intervention. Self-reporting of costs and benefits by the subjects of the case studies is currently the predominant mode of examining "business impacts" utilized in the field, and thus the type of analysis that industry is used to seeing. Given the complete absence of information in the current literature on costs associated with patient flow improvement strategies, we believe this exercise will be provide valuable information for other hospitals that may adopt similar strategies in the future. Nonetheless, in reporting findings on the financial costs associated with the interventions we will acknowledge the limitations arising from the data collection methods and clearly explain how the findings would best be interpreted and utilized.

~~Although we are confident that we will obtain information on the types of costs associated with the interventions and whether the hospitals are tracking the financial impact of the intervention, we are not certain that we will be able to generate an estimate of the costs associated with planning, implementing, and operating the interventions. Still, given the complete absence of information in the current literature on costs associated with patient flow improvement strategies, we believe this exercise will be a first step toward generating information for other hospitals that may adopt similar strategies in the future.~~

~~In sum, this project will expand the number and diversity of hospitals within which these tools are tested and increase the likelihood of broader and more successful implementation of these tools in the future by enhancing hospitals' understanding of the contextual factors that may underpin success.~~

3. Use of Improved Information Technology

4. Efforts to Identify Duplication

No similar information currently exists. The previous Urgent Matters collaborative ~~included only urban, Level I trauma centers. An objective of this project is to examine the adoption and implementation of these interventions in more diverse group of hospitals. Also, the original~~

~~learning network~~ did not include in-depth interviews with the participating hospitals or collection of costs associated with implementation and maintenance of strategies. We conducted a review of the health services research and clinical emergency care literature and found no similar data collected in a standardized way across hospitals.

Further, the purpose of the original UM collaborative was to ~~promote~~field-test patient flow improvement strategies at large, Level I trauma centers. This effort is unique in terms of its efforts to ~~generate lessons for a more~~test the identification and implementation of interventions at more diverse group of hospitals, and to systematically study and report on contextual factors that may serve as facilitators and barriers to the implementation of strategies in these diverse settings. . This collaborative includes three Level I trauma centers, but also smaller, non-teaching hospitals and hospitals in more remote (i.e. suburban and rural) areas~~. The diversity of hospitals participating will allow us to document a greater variety of contextual factors that may serve as facilitators and barriers to the implementation of strategies. .~~

5. Involvement of Small Entities

The smallest hospital included in the study is a 230 bed hospital. The interview instrument will be honed to a set of only critical questions and we will be diligent in respecting the 60 minute time limit scheduled with each participant.

6. Consequences if Information Collected Less Frequently

Interviews will be conducted at two points in time. The first round of interviews will be conducted shortly after the implementation of the patient flow improvement strategies. We believe it is critical to capture information regarding the implementation in a timely manner as the interview protocols will ask for specific details surrounding the implementation. Delaying the interviews may result in recall difficulties for respondents.

The second round of interviews will be conducted several months after implementation to gauge perceptions of the ~~sustainability and~~ impact of the strategies and ~~ability~~to explore the barriers and facilitators associated with ~~to~~ maintaining the strategies. Due to the relatively short timeline of the project, we will not be able to assess long-term sustainability of the interventions; however, we will gather information on whether, several months after implementation, the interventions were maintained or changed. That information would not be available for collection during the first round of interviews. Since information on ~~the sustainability~~the impact and maintenance of strategies is central to the purpose of this project, we believe that this second data collection effort is essential.

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 January 15, 2009 for 60 days (see Attachment B) on page 2596.

The following comment was received in response to the 60 Day Federal Register Notice. No changes were made in the project as a result of this comment.

From: jean public [mailto:jeanpublic@yahoo.com]
Sent: Thursday, January 15, 2009 8:08 AM
To: Lefkowitz, Doris C. (AHRQ); americanvoices@mail.house.gov; info@taxpayer.net; media@cagw.org
Subject:

i do not think taxpayer dollars should be used for this study. this division does endless "studies" which are not necessary on taxpayer dollars. let hospitals pay for this or let it go undone. the taxpayers are sick and tired of the skanky washington dc bureaucracy doing stupid studies like this. we simply dont have enough taxpayer dollars for all of these people in ahq to sit at desks in washington dc and shuffle paper. shut down this alleged "study" which is wasteful and not necessary. hospitals should be doing what is best. and the taxpayers do not need to fund this at all.
[Federal Register: January 15, 2009 (Volume 74, Number 10)]
[Notices]
[Page 2596-2598]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr15ja09-108]

8.b. Outside Consultations

The methodology planned for this data collection was developed by members of our multidisciplinary study team. The team has no unresolved issues and is in agreement regarding the data collection and the content to be covered in the interviews, their timing, and frequency.

9. Payments/Gifts to Respondents

In the Solicitation for Contract for this project, AHRQ required that offerers identify 6 hospital sites which would agree to participate in testing strategies and in the activities of *UM Learning Network II* Collaborative.* More specifically, in the Solicitation for Contract AHRQ identified a number of requirements for the participating sites, including the commitment of each hospital to send 5 people to each of 3 overnight, out of town, Collaborative Meetings. Under the RFTO, the contractor was required to have the sites "on board" at contract award. AHRQ agreed to

* The ""*UM Learning Network II*" is the formal name for the collaborative that is being run by the National Program Office (NPO) at George Washington University (GWU), under a separately funded contract between GWU and the Robert Wood Johnson Foundation (RWJF). Collaborative members share data and lessons learned over the course of this project and receive technical support from the NPO.

reimburse each site $10,000 to cover a portion of the travel expenses associated with these travel requirements. We are noting this payment in this section of the supporting statement, but do not believe it constitutes a respondent incentive or payment to induce participation. It is a partial reimbursement for required expenses.

~~Each hospital will receive a $10,000 stipend to offset a portion of the costs associated with participation in the collaborative. Participation requires that each hospital send a team of five individuals to three in-person meetings (requiring travel) as well as attend monthly technical advisory web conference calls. The stipend will help offset these costs.~~

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~~).)~~. Thus they will be advised as follows: "Your responses will be kept confidential to the extent permitted by law, including AHRQ's confidentiality statute, (42 USC 299c-3(c)). This law requires that information collected for research conducted or supported by AHRQ that identifies individuals or establishments be used only for the purpose for which it was supplied unless you consent to the use of the information for another purpose."

In instances where respondent identity is needed, the information collection will fully comply with all respects of the Privacy Act.

- While the identity of the interviewees will be known, all individuals will be assured of the confidentiality of their responses and various safeguards will be put in place to protect the privacy of the data.
- All collected interview questionnaire data will be labeled with only the study identifier, and will be kept confidentially secure in locked files with access limited to designated personnel.
- All electronic files will be password protected, and will be accessible only from computers of the research team. The files will not be accessible via the Internet.
- No persons outside the study team will have access to the data.
- Audiotapes and transcripts of interview sessions will remain in the possession of the study investigators at all times, and will be reviewed in seclusion. These will all be secured in a locked office at all times.
- Upon completion of the study, the data and audiotapes will reside with the qualitative study investigator. After three years, all audiotapes and data will be destroyed.

11. Questions of a Sensitive Nature

No questions of a sensitive nature will be asked in the interviews.

12. Estimates of Annualized Burden Hours and Costs

Exhibit 1 shows the estimated annualized burden hours for the hospitals' time to participate in these case studies. In-person interviews (see Attachment C) will be conducted within three months of implementation with 12 administrative and clinical personnel from each of the six participating hospitals and will require about one hour. Telephone interviews (see Attachment D) will be conducted approximately six months thereafter with 12 individuals (administrative and clinical) from each hospital and will take about 45 minutes. The total estimated burden for participation in this study is 126 hours.

Exhibit 2 shows the estimated annualized cost burden for the respondents' time to provide the requested data. The total cost burden is approximately $4509

Exhibit 1. Estimated annualized burden hours

Data Collection	Number of Hospitals	Number of Responses per Hospital	Hours per Response	Total Burden Hours
In-person interviews	**6**	**12**	**1.0**	**72**
Telephone interviews	**6**	**12**	**45/60**	**54**
Total	**12**	**na**	**na**	**126**

Exhibit 2. Estimated annualized cost burden

Data Collection	Total Burden Hours	Average Hourly Wage Rate*	Total Cost Burden
In-person interviews	**72**	**$35.07**	**$2,525**
Telephone interviews	**54**	**$35.07**	**$1,984**

Total	**126**	**na**	**$4509**

* For the interviews, the hourly rate of $35.07 is an average of the administrative personnel hourly wage of $14.53, the physician rate of $62.52, and the registered nurse rate of $28.15. National Compensation Survey: Occupational Wages in the United States 2005, U.S. Department of Labor, Bureau of Labor Statistics.

13. Estimates of Annualized Respondent Capital and Maintenance Costs

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 total and annualized cost to the government for this eighteen-month study.

Exhibit 3. Estimated Annualized Cost

Cost Component	**Total Cost**	**Annualized Cost**
Project Development	52,446	34,964
Data Collection Activities	90, 298	60,199
Data Processing and Analysis	70,569	47,046
Publication of Results	41,420	27,613
Project Management	68,908	45,939
Overhead	76,320	50,880
Total	**$399,961**	**266,641**

15. Changes in Hour Burden

This is a new collection of information.

16. Time Schedule, Publication and Analysis Plans

Qualitative data analyses will use the constant comparative method of qualitative data analysis, and common techniques to code the data. Using a grounded theory approach, we will read interview transcripts, and discuss findings among investigators as the study progresses. This

iterative process will enable us to explore new themes that emerge in subsequent interviews and case studies, and help us to ensure that we reach saturation in our data collection. We will use the Atlas.ti software package to facilitate coding and data analyses, and the formal exploration of patterns and themes within the data.

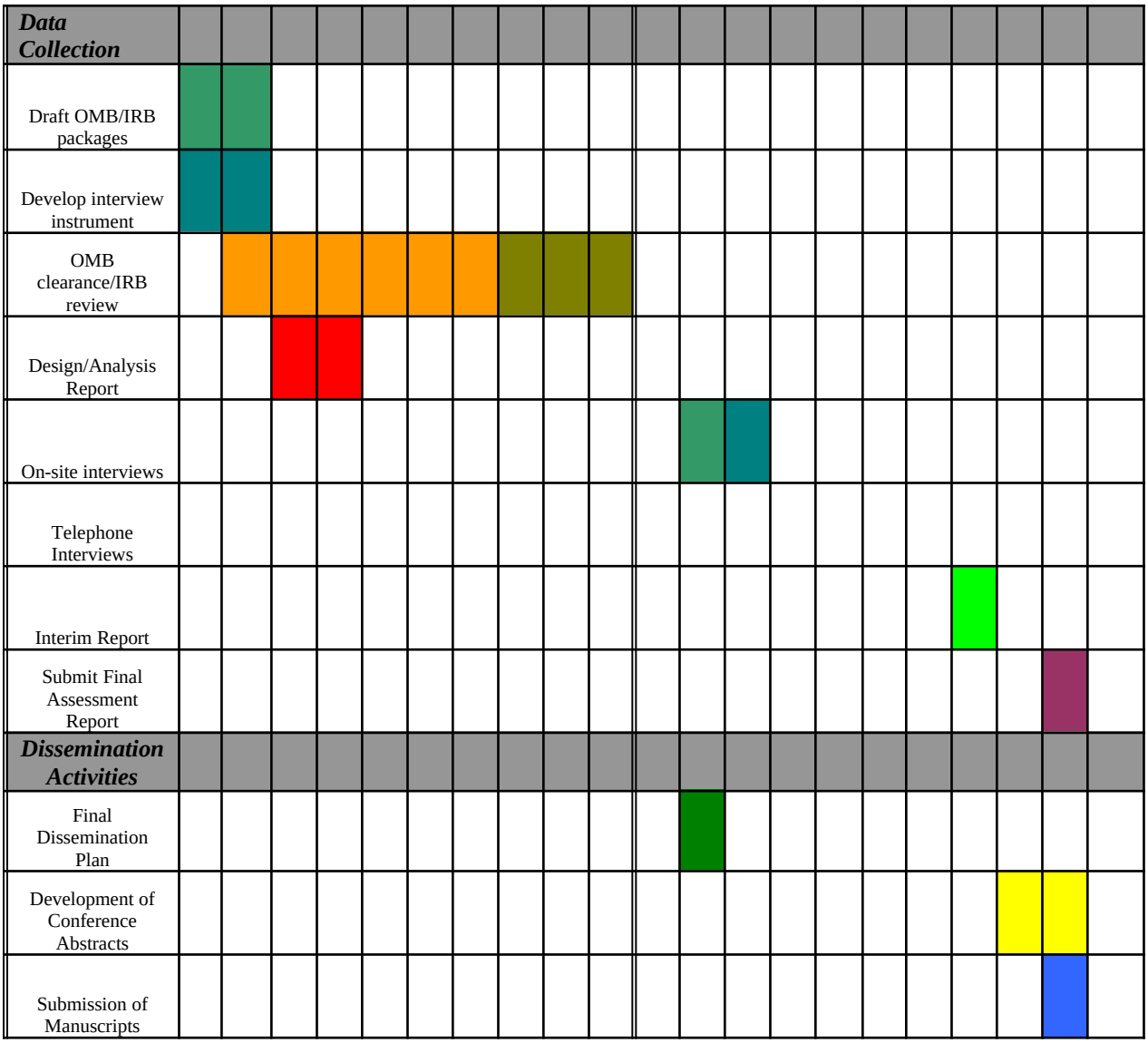
Information on time and expenses associated with planning, implementing and maintaining the strategies will be obtained through the interviews. The data will allow us to develop total cost estimates per strategy per hospital. We will use information from the Department of Labor to generate costs associated with staff time. Data will not be aggregated across hospitals.

The results of the analyses will be published in various forms. We will seek to disseminate results via peer-reviewed journals such as *Annals of Emergency Medicine,* or the *Joint Commission Journal on Quality and Patient Safety*, as well as via presentations at professional and academic conferences, and at American Hospital Association, American College of Emergency Medicine, and Emergency Nurses Association meetings. Additionally, we will develop two targeted issue briefs on lessons learned and will tailor them to specific audiences, for example, administrators of community hospitals or academic medical centers, chief quality officers, emergency physicians/nurses, or CEOs. We have established a partnership with the American Hospital Association's (AHA) Quality Center and the American College of Emergency Physicians (ACEP) to disseminate our results. Mailing lists and publications by the AHA and ACEP will help the project team reach the target audiences.

The timeline for data collection, analysis and dissemination for the entire project is provided below.

Project Timeline

	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10



Note: The project timeline assumes 6 months for the OMB process. Dates may shift if the process exceeds 6 months.

17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

List of Attachments:

Attachment A: AHRQ's Authorizing Legislation

Attachment B: Federal Register notice

Attachment C: In-person interview guide

Attachment D: Telephone interview guide