# **SUPPORTING STATEMENT**

# Part A

**Nursing Home Survey on Patient Safety Culture Comparative Database** 

September 30, 2011

Agency of Healthcare Research and Quality (AHRQ)

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### A. Justification

# 1. Circumstances that make the collection of information necessary

**AHRQ's mission.** 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 <a href="http://www.ahrq.gov/hrqa99.pdf">http://www.ahrq.gov/hrqa99.pdf</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.

Request for information collection approval. The Agency for Healthcare Research and Quality (AHRQ) requests that the Office of Management and Budget (OMB) approve, under the Paperwork Reduction Act of 1995, AHRQ's collection of information for the AHRQ Nursing Home Survey on Patient Safety Culture (Nursing Home SOPS) Comparative Database. The Nursing Home SOPS Comparative Database consists of data from the AHRQ Nursing Home Survey on Patient Safety Culture. Nursing homes in the U.S. are asked to voluntarily submit data from the survey to AHRQ through its contractor, Westat. The Nursing Home SOPS Database is modeled after the Hospital SOPS Database [OMB NO. 0935-0162, approved 05/04/2010] that was originally developed by AHRQ in 2006 in response to requests from hospitals interested in knowing how their patient safety culture survey results compare to those of other hospitals.

This information collection is part of a larger program of comparative databases that AHRQ supports for the CAHPS program, which includes a comparative database for the CAHPS Health Plan Survey and the Clinician and Group Survey. AHRQ also supports comparative databases on the Surveys on Patient Safety Culture, with comparative databases for the hospital, nursing home, and medical office surveys. All of these databases report similar types of statistics with the overall goal of making comparative information on these surveys available to survey users to facilitate quality and patient safety improvement.

**Background on the Nursing Home SOPS**. In 1999, the Institute of Medicine called for health care organizations to develop a "culture of safety" such that their workforce and processes focus on improving the reliability and safety of care for patients (IOM, 1999; *To Err is Human: Building a Safer Health System*). To respond to the need for tools to assess patient safety culture in nursing homes, AHRQ developed and pilot tested the Nursing Home Survey on Patient Safety Culture with OMB approval (OMB NO.0935-0132; Approved July 5, 2007). The Nursing Home Survey on Patient Safety Culture questionnaire is included as Attachment A. The survey is designed to enable nursing homes to assess provider and staff opinions about patient safety issues, medical error, and error reporting and includes 42 items that measure 12 dimensions of patient safety culture. AHRQ released the survey into the public domain along with a Survey User's Guide and other toolkit materials in November 2008 on the AHRQ Web site (located at http://www.ahrq.gov/qual/patientsafetyculture/nhsurvindex.htm). Since its release, the survey has been voluntarily used by hundreds of nursing homes in the U.S.

Rationale for the information collection. The Nursing Home SOPS and the Comparative Database are supported by AHRQ to meet its goals of promoting improvements in the quality and safety of health care in nursing home settings. The survey, toolkit materials, and preliminary comparative database results are all made available in the public domain along with technical assistance provided by AHRQ through its contractor at no charge to nursing homes, to facilitate the use of these materials for nursing home patient safety and quality improvement.

The goal of this project is to create the Nursing Home SOPS Comparative Database. This database will 1) allow nursing homes to compare their patient safety culture survey results with those of other nursing homes; 2) provide data to nursing homes to facilitate internal assessment and learning in the patient safety improvement process; and 3) provide supplemental information to help nursing homes identify their strengths and areas with potential for improvement in patient safety culture. De-identified data files will also be available to researchers conducting patient safety analysis. The database will include 42 items that measure 12 areas, or composites, of patient safety culture:

- 1. Communication openness.
- 2. Compliance with procedures.
- 3. Feedback and communication about incidents.
- 4. Handoffs.
- 5. Management support for resident safety.
- 6. Nonpunitive response to mistakes.
- 7. Organizational learning.
- 8. Overall perceptions of resident safety.
- 9. Staffing.
- 10. Supervisor expectations and actions promoting resident safety.
- 11. Teamwork.
- 12. Training and skills.

The database will also include two items that measure whether the nursing home staff would tell friends that this is a safe nursing home for their family (also called —"willingness to recommend") and an overall rating on resident safety for their nursing home.

Nursing homes that submit to the database receive reports that display their results compared to aggregate-level database results. The database does not provide the capability for them to compare their results to specific other individual nursing homes. The report presents aggregate-level frequencies, means, standard deviations, minimum and maximum scores, and percentile scores.

To achieve the goal of this project the following activities and data collections will be implemented:

- 1) Nursing Home Eligibility and Registration Form The purpose of this form is to determine the eligibility status and initiate the registration process for nursing homes seeking to voluntarily submit their NH SOPS data to the NH SOPS Comparative Database. The nursing home (or parent organization) point of contact (POC) will complete the form (see Attachment B). The POC is either a corporate level health care manager for a Quality Improvement Organization (QIO), a survey vendor who contracts with a nursing home to collect their data, or a nursing home Director of Nursing or nurse manager. Many nursing homes are part of a QIO or larger nursing home or health system that includes many nursing home sites
- 2) Data Use Agreement The purpose of this form is to obtain authorization from nursing homes to use their voluntarily submitted NH SOPS data for analysis and reporting according to the terms specified in the Data Use Agreement (DUA). The nursing home POC will complete the form (see Attachment C).
- 3) Nursing Home Site Information Form The purpose of this form is to obtain basic information about the characteristics of the nursing homes submitting their NH SOPS data to the NH SOPS Comparative Database (e.g., bed size, urbanicity, ownership, and geographic region). The nursing home POC will complete the form (see Attachment D).
- 4) Data Submission After the nursing home POC has completed the Nursing Home Eligibility and Registration Form, the Data Use Agreement and the Nursing Home Site Information Form they will submit their data from the NH SOPS to the NH SOPS Comparative Database (see Attachments I to M).

This study is being conducted by AHRQ through its contractor, Westat, pursuant to AHRQ's statutory authority to conduct and support research on healthcare and on systems for the delivery of such care, including activities with respect to the quality, effectiveness, efficiency, appropriateness and value of healthcare services and with respect to quality measurement and improvement. 42 U.S.C. 299a(a)(1) and (2).

# 2. Purpose and Use of Information

Data from the AHRQ Nursing Home Survey on Patient Safety Culture are used to produce three types of products: 1) A Nursing Home SOPS Comparative Database Report that is produced periodically and made available in the public domain on the AHRQ Web site (see <a href="http://www.ahrq.gov/qual/nhsurvey11/nhsurv111.pdf">http://www.ahrq.gov/qual/nhsurvey11/nhsurv111.pdf</a> for the 2011 report); 2) Nursing Home Survey Feedback Reports that are confidential, customized reports produced for each nursing

home that submits data to the database; and 3) Research data sets of staff-level and nursing home-level de-identified data that enable researchers to conduct additional analyses.

Nursing homes are asked to voluntarily submit their Nursing Home SOPS data to the comparative database. The data are then edited to detect and correct errors and aggregated and used to produce a Comparative Database Report that displays averages, standard deviations, and percentile scores on the survey's 42 items and 12 patient safety culture dimensions, as well as displaying these results by nursing home characteristics (bed size, urbanicity, ownership, and Census Bureau Region, etc.) and staff characteristics (work area/unit, staff position, and interaction with patients).

Because nursing homes do not necessarily administer the Nursing Home Survey on Patient Safety Culture every single year, but may administer it on an 18-month, 24-month, or other administration cycle, the comparative database is a "rolling" database that retains data from prior years when a nursing home does not have new data to submit, replaces older data with more recent data when it is available, and adds new data from nursing homes submitting for the first time.

Data submitted by nursing homes are also used to give each nursing home its own customized survey feedback report comparing its results to the latest database. In future years, if a nursing home submits data more than once, its survey feedback report may also present trending data comparing its previous and most recent data submissions. A sample Individual Nursing Home Survey Feedback Report is shown in Attachment E.

Nursing homes use the Nursing Home SOPS, Comparative Database Reports and Individual Nursing Home Survey Feedback Reports for a number of purposes:

- Raise staff awareness about patient safety.
- Diagnose and assess the current status of patient safety culture in their nursing home.
- Identify strengths and areas for patient safety culture improvement.
- Examine trends in patient safety culture change over time.
- Evaluate the cultural impact of patient safety initiatives and interventions.
- Compare patient safety culture survey results with other nursing homes in their efforts to improve patient safety and health care quality.

# 3. Use of Improved Information Technology

All information collected for the Nursing Home SOPS Comparative Database is done electronically, except the Data Use Agreement (DUA) that nursing homes sign in hard copy and fax or mail back. Registration, submission of nursing home information, and data upload are handled online through a secure Web site. Delivery of confidential nursing home survey feedback reports is also done electronically by having submitters enter a username and password and downloading their reports from a secure Web site. In the future, AHRQ may produce the Nursing Home SOPS Comparative Database Report as an online, interactive tool similar to the online interactive reporting system that the Consumer Assessment of Healthcare Providers and Systems (CAHPS) has recently developed for the CAHPS Database.

# 4. Efforts to Identify Duplication

While there are survey vendors that administer the AHRQ Nursing Home Survey on Patient Safety Culture and nursing home systems that may maintain a small database of data on the survey, AHRQ is the only entity that serves as a central U.S. repository for data on the survey and AHRQ houses the largest database of the survey's results.

#### 5. Involvement of Small Entities

The collection of information associated with data submission does not unduly burden small businesses or small nursing homes. The information that is requested is held to the absolute minimum required for the intended uses. In addition, AHRQ has produced toolkit materials to make it easy for small and large nursing homes to administer the survey and analyze and report their results.

# 6. Consequences if Information Collected Less Frequently

Data submission is currently accepted each year from January 15<sup>th</sup> to February 15<sup>th</sup>. We ask OMB to approve continuous data collection, that is, throughout the year or quarterly. Continuous acceptance of data is more convenient for nursing homes because it enables them to submit data right after data collection rather than waiting to submit once per year. Nursing home feedback reports could be provided in a more timely manner with more frequent data submission as well. However, because nursing homes administer the AHRQ Nursing Home SOPS voluntarily, on their own schedule, most nursing homes would still only submit their data once in any given calendar year (depending on their survey administration schedule), and greater frequency may not be immediately feasible.

The main consequence of less frequent data collection is the less timely delivery of individual nursing home feedback reports to nursing homes participating in the NH SOPS Comparative Database. The Comparative Database Report would still only be produced periodically (once per year initially) if and when continuous submission of data is instituted.

### 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), a notice was published in the Federal Register on November 2<sup>nd</sup>, 2011 for 60 days, and again on January 26<sup>th</sup>, 2012 for 30 days (see Attachment F). No comments were received.

#### 8.b. Outside Consultations

AHRQ consulted experts to develop the Nursing Home Survey on Patient Safety Culture. A list of the survey expert review panel that contributed to the development of the survey instrument is in Attachment G.

AHRQ has convened three external Technical Expert Panels (TEPs) to provide expertise and guidance to the development, functioning, and expansion of the SOPS Comparative Databases (see Attachment H for a list of experts who participated in each TEP). The first TEP convened on

January 27, 2006 in Rockville, MD, and comprised 13 individuals who provided guidance on the strategy and plan for the initial Hospital comparative database, including all its key components: data submission process; data submission eligibility criteria; data submission timeline; calculation of comparative data; and access to and reporting format of comparative data.

The second TEP convened on December 3, 2008 in Scottsdale, AZ, and comprised 14 individuals. The third TEP convened in Baltimore, MD on April 19, 2010 and comprised 11 individuals. These two TEPs provided guidance on issues such as 1) number of years to include in the rolling comparative database; 2) minimum number of facilities to produce overall comparative data; 3) minimum number of respondents to produce facility-level comparative data; 4) trending criteria; 5) the content and structure of the comparative database reports for submitters to the database; and 6) international user issues. These TEPs also provided input on the development of databases for the nursing home and medical office surveys on patient safety culture developed by AHRQ.

# 9. Payments/Gifts to Respondents

No payment or remuneration is provided to nursing homes for submitting data to the comparative database.

# 10. Assurance of Confidentiality

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

**Confidentiality of the Point of Contact for a Nursing Home.** The nursing home POC, who submits data on behalf of a nursing home, is asked to provide their name, phone number and email address during the data submission process to ensure that the nursing home's individual survey feedback report is delivered appropriately. In addition, the POC's contact information is important when any clarifications or corrections of the submitted data set are required or followup is needed. However, the name of the POC and name of the nursing home are kept confidential and not reported. Only aggregated, de-identified results are displayed in any reports.

Confidentiality of the Survey Data Submitted by a Nursing Home. Nursing homes are assured of the confidentiality of the Nursing Home Survey on Patient Safety Culture data they submit to the database through a Data Use Agreement (DUA) that they must sign and that has been approved by AHRQ's general counsel (see Attachment C). The DUA states that their data are handled in a secure manner using necessary administrative, technical and physical safeguards to limit access to it and maintain its confidentiality. In addition, the DUA states the data are used for the purposes of the database, that only aggregated results are reported, and that the nursing home is not identified by name.

### 11. Questions of a Sensitive Nature

There are no questions of a sensitive nature.

#### 12. Estimates of Annualized Burden Hours and Costs

Exhibit 1 shows the estimated annualized burden hours for the nursing home to participate in the Nursing Home SOPS Comparative Database. The POC completes a number of data submission steps and forms, beginning with completion of the online Nursing Home SOPS Database Eligibility and Registration form and Data Use Agreement, which will be completed for 85 nursing homes or groups of affiliated nursing homes annually. The Nursing Home Site Information Form will be completed for each individual nursing home; since each POC represents an average of 5 nursing homes a total of 425 Information Forms will be completed annually and requires about 5 minutes to complete. The POC will submit data for all of the nursing homes they represent which will take about 5 and ½ hours, including the amount of time POCs typically spend deciding whether to participate in the database and preparing their materials and data set for submission to the database, and performing the submission. The total annual burden hours are estimated to be 511.

Nursing homes administer the AHRQ Nursing Home Survey on Patient Safety Culture on a periodic basis. Hospitals submitting to the Hospital SOPS Comparative Database administer the survey every 16 months on average. Similarly, the number of nursing home submissions to the database is likely to vary each year because nursing homes do not administer the survey and submit data every year. The 85 respondents/POCs shown in Exhibit 1 are based on an estimate of nursing homes submitting data in the coming years, with the following assumptions:

- 30 POCs for QIOs submitting on behalf of 10 nursing homes each
- 5 POCs for vendors outside of QIOs submitting on behalf of 10 nursing homes each
- 50 independent nursing homes submitting on their own behalf

**Exhibit 1. Estimated annualized burden hours** 

Form Name	Number of respondents/POCs	Number of responses per POC	Hours per response	Total burden hours
Eligibility/Registration Forms	85	1	3/60	4
Data Use Agreement	85	1	3/60	4
Nursing Home Site Information Form	85	5	5/60	35
Data Submission	85	1	5.5	468
Total	340	NA	NA	511

Exhibit 2 shows the estimated annualized cost burden based on the respondents' time to submit their data. The cost burden is estimated to be \$21,152 annually.

Exhibit 2. Estimated annualized cost burden

Form Name	Number of respondents/ POCs	Total burden hours	Average hourly wage rate*	Total cost burden
Eligibility/Registration Forms	85	4	\$41.39	\$166
Data Use Agreement	85	4	\$41.39	\$166

Nursing Home Site Information Form	85	35	\$41.39	\$1,449
Data Submission	85	468	\$41.39	\$19,371
Total	340	511	NA	\$21,152

<sup>\*</sup>The wage rate in Exhibit 2 is based on May 2009 National Industry-Specific Occupational Employment and Wage Estimates, Bureau of Labor Statistics, U.S. Dept of Labor. Mean hourly wages for nursing home POCs are located at <a href="http://www.bls.gov/oes/2009/may/naics4">http://www.bls.gov/oes/2009/may/naics4</a> 623100.htm and <a href="http://www.bls.gov/oes/2009/may/naics2">http://www.bls.gov/oes/2009/may/naics2</a> 62.htm. The hourly wage of \$41.39 is the weighted mean of \$41.94 (General and Operations Managers; N = 25), \$37.29 (Medical and Health Services Managers; N = 25), \$42.89 (General and Operations Managers; N = 30) and \$50.00 (Computer and Information Systems Managers; N = 5).

# 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

The estimated annualized cost to the government for developing, maintaining, and managing the database and analyzing the data and producing reports is shown below. The cost is estimated to be \$310,000 annually.

#### **Estimated Annualized Cost**

Cost Component	Total Cost	<b>Annualized Cost</b>
Project Development	\$59,715	\$19,905
Data Collection Activities	\$82,107	\$27,369
Data Processing and Analysis	\$111,963	\$37,321
Publication of Results	\$111,966	\$37,322
Project Management	\$7,464	\$2,488
Overhead	\$556,785	\$185,595
Total	\$930,000	\$310,000

### 15. Changes in Hour Burden

This is a new collection of information.

#### 16. Time Schedule, Publication and Analysis Plans

The estimated time to conduct data collection, data analysis, and report production activities is shown below:

- 1. Data submission (1 month)
- 2. Data cleaning, data analysis, and individual NH feedback report production (2.5 months)
- 3. NH SOPS Comparative Database Report production (1.5 months)
- 4. Publication of Comparative Database Report on AHRQ Web site (2 months)

Because the steps above for the NH SOPS Comparative Database are the same as for the already-established Hospital SOPS Comparative Database, detailed information on these steps is available in the most recent Hospital SOPS Comparative Database Report located on the AHRQ Web site at <a href="http://www.ahrq.gov/qual/hospsurvey11/hospsurv111.pdf">http://www.ahrq.gov/qual/hospsurvey11/hospsurv111.pdf</a>. Specific information on data cleaning and calculations is on pages 77-81 of this document.

# 17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

### **List of Attachments:**

Attachment A: Nursing Home Survey on Patient Safety Culture questionnaire

Attachment B: Nursing Home Eligibility and Registration Forms

Attachment C: Data Use Agreement

Attachment D: Nursing Home Site Information Form

Attachment E: Sample Individual Nursing Home Survey Feedback Report

Attachment F: Federal Register Notice

Attachment G: Expert Reviewers

Attachment H: Participant Lists for 2006, 2008, and 2010 Technical Expert Panel (TEP)

Meetings for the AHRQ Surveys on Patient Safety Culture Comparative

**Databases** 

Attachment I: Emails for NH SOPS Data Submission

Attachment J: NH Welcome and Login Pages

Attachment K: NH Submission Home Page

Attachment L: NH Questionnaire Upload Page

Attachment M: NH SOPS Data Submission Specs