The Home Health Care CAHPS Survey

Part A

Justification and Supporting Statement

CMS-10275, OCN 0938-1066

BACKGROUND

In 2001, the Quality Initiative was implemented in HHS to ensure the quality of health care for all Americans through accountability and public disclosure. The goals of the initiative are to empower consumers with quality-of-care information so they can make more informed decisions about their health care and to stimulate and support providers and clinicians to improve the quality of health care. The Quality Initiative was launched nationally in November 2002 for nursing homes and was expanded to home health agencies (the Home Health Quality Initiative) in 2003. A major gap in the information currently available regarding the quality of home health care is the lack of information from the patient perspective.

As part of the DHHS Transparency Initiative on Quality Reporting, CMS plans to implement a process to measure and publicly report patients' experiences with home health care they receive from Medicare-certified home health agencies through the data collection effort described in this request: the Consumer Assessment of Healthcare Providers and Systems (CAHPS?) Home Health Care Survey. The Home Health Care CAHPS Survey, which was developed and tested by the Agency for Healthcare Research and Quality (AHRQ) and is part of the family of CAHPS surveys, is a standardized survey for home health patients to assess their home health care providers and the quality of the home health care they receive. Prior to the Home Health Care CAHPS survey, there was no national standard for collecting data about home health care patients' experience with their home health care. This is a revision to the original PRA package which covered the voluntary implementation of the survey among Medicare-certified agencies and a randomized mode experiment to test the impact of different modes of data collection on survey responses.

A. JUSTIFICATION

A.1 Circumstances Making the Collection of Information Necessary

As part of the DHHS Transparency Initiative on Quality Reporting, CMS implements a process to measure and publicly report patients' experiences with home health care they receive from Medicare-certified home health agencies through the data collection effort described in this request: the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Home Health Care Survey. The Home Health Care CAHPS Survey, which was developed and tested by the DHHS Agency for Healthcare Research and Quality (AHRQ) and is part of the family of CAHPS® surveys, is a standardized survey for home health patients to assess their home health care providers and the quality of the home health care they receive. Prior to the Home Health Care CAHPS® survey, there was no national standard for collecting data about home health care patients' experience with their home health care.

In the first half of 2008, AHRQ conducted a field test of the Home Health Care CAHPS Survey to determine its length and contents and to test the reliability and validity of the survey items. After reviewing field test results with a technical expert panel consisting of home health industry experts, patient advocates, and researchers, the Home Health Care CAHPS Survey was finalized as a 34-item survey instrument. The survey contains questions about the patient's interactions with the home health agency, interactions with the agency's providers, provider care and communications, and patient characteristics. Patients are asked to provide an overall rating of the home health care they receive. CMS submitted the final Home Health Care CAHPS Survey to the National Quality Forum (NQF) for endorsement. The survey was first endorsed March 31, 2009, under Number 0517. The NQF endorsement represents the consensus opinion of many healthcare providers, consumer groups, professional organizations, purchasers, federal agencies, and research and quality organizations. As a result of the endorsement process, a few minor changes were made to the survey. The words "over the counter" were added to Questions 4 and 5. In Question 14, the word "important" was removed since a respondent may have difficulty determining which side effects are important. Questions regarding age and gender were removed from the survey since they are available from home health administrative data. HHCAHPS survey is 34 questions long. Since the submission of the last PRA package, we have the HHCAHPS survey is several languages, and we have included the HHCAHPS survey in this PRA package in English, Spanish, Chinese, Russian, and Vietnamese. These surveys are available from the HHCAHPS website, https://homehealthcahps.org.

Questions 1-25 on the instrument are the core survey items, and questions 26-36 are the "About You" questions. Five measures from this survey are used for public reporting – 3 composite measures and 2 global ratings. The 3 composites cover "Care of Patients," "Communication between Providers and Patients" and "Specific Care Issues." The global items include the overall rating of agency care, and would you recommend this agency to friends and family? These 5 measures have been reported on Home Health Compare on www.medicare.gov, since April 2012.

Initially, confirmatory factor analysis (CFA) based on structural equation modeling (SEM) was conducted to see whether the field test data were consistent with the hypothesized composite structure. The CFA of the field test questionnaire revealed that the observed data did

not fit this model. Following the poor CFA results, exploratory analyses were conducted to identify the structure underlying the observed responses. Analyses were conducted upon a random sample of 50% of the single-imputation data set. This enabled us to evaluate the generalizability of the final model in the other 50% of the data, as well as the data sets comprised of each of the other four imputations. An exploratory factor analysis (EFA) was conducted on the correlation matrix using the principle factor method with squared multiple correlations as initial communality estimates and oblique rotation (promax) with Kaiser normalization. The number of factors was determined by the eigenvalues, and the interpretability of the rotated factor pattern matrix.

The internal consistency reliability (alpha) (a measure of how well the items in a composite hang together) was .75 for Care of Patients, .73 for Communication between Providers and Patients and .84 for Specific Care Issues. The scaling success (a measure that summarizes the discriminant validity of the composites, that is, the degree to which each item correlates more highly with its own scale than it does with competing scales) is 88% for Care of Patients, 90% for Communication between Providers and Patients and 100% for Specific Care Issues.

The Care of Patients composite is produced by combining responses to four questions that ask:

- "In the last 2 months of care, how often did home health providers from the agency seem informed and up-to-date about all the care or treatment you got at home?"
- "In the last 2 months of care, how often did home health providers from this agency treat you as gently as possible?"
- "In the last 2 months of care, how often did home health providers from this agency treat you with courtesy and respect?"
- "In the last 2 months of care, did you have any problems with the care you got through this agency?"

The Communication between Providers and Patients composite is produced by combining responses to six questions that ask:

- "When you first started getting home health care from this agency, did someone from the agency tell you what care and services you would get? "
- "In the last 2 months of care, how often did home health providers from this agency keep you informed about when they would arrive at your home?"
- "In the last 2 months of care, how often did home health providers from this agency explain things in a way that was easy to understand? "
- "In the last 2 months of care, how often did home health providers from this agency listen carefully to you?"
- "In the last 2 months of care, when you contacted this agency's office did you get the help or advice you needed?"
- "When you contacted this agency's office, how long did it take for you to get the help or advice you needed?" {It is converted into a measure of whether the patient got help on the same day – yes/no}

The Specific Care Issues composite is produced by combining responses to seven questions that ask:

- "When you first started getting home health care from this agency, did someone from the agency talk with you about how to set up your home so you can move around safely?"
- "When you started getting home health care from this agency, did someone from the agency ask to see all the prescription and over-the-counter medicines you were taking?"
- "When you started getting home health care from this agency, did someone from the agency ask to see all the prescription and over-the-counter medicines you were taking?"
- "In the last 2 months of care, did you and a home health provider from this agency talk about pain?"

- "In the last 2 months of care, did home health providers from this agency talk with you about the purpose for taking your new or changed prescription medicines?"
- "In the last 2 months of care, did home health providers from the agency talk with you about when to take these medicines?"
- "In the last 2 months of care, did home health providers from this agency talk with you about the side effects of these medicines?"

HHCAHPS survey implementation is conducted by multiple independent survey vendors working under contract with home health agencies. In 2008, CMS, with assistance from its contractor RTI International, developed standardized data collection and data submission tools and procedures for survey vendors when implementing Home Health Care CAHPS on behalf of their home health agency clients, and published it in the HHCAHPS Protocols and Guidelines Manual that is annually updated every January. Currently, the manual is in its fifth version, and can be downloaded from https://homehealthcahps.org. RTI also conducted a survey mode experiment in the summer of 2009, to determine the impact of survey mode on the data results. RTI found that survey mode did not impact survey results, but most demographic characteristics of the respondent did impact survey results, including self-reported health status, self-reported mental health status, and whether the patient lived alone. Recruitment and training of survey vendors that apply to become approved Home Health Care CAHPS vendors began in spring 2009. From July 2009 through June 2010, home health agencies could voluntarily conduct the Home Health Care CAHPS Survey using an approved Home Health Care CAHPS survey vendor starting in summer 2009. Data from the voluntary period was not publicly reported. Data collection for the Home Health Care CAHPS Survey is conducted on a monthly ongoing basis. Comparative results from the national Home Health Care CAHPS Survey are publicly reported on Home Health Compare, located on www.Medicare.gov, , and the HHCAHPS data is updated on a quarterly basis.

A.2 Purpose and Use of Information

The national implementation of the Home Health Care CAHPS Survey is designed to collect ongoing data from samples of home health care patients who receive skilled services from

Medicare-certified home health agencies. The data collected from the national implementation of the Home Health Care CAHPS Survey is used for the following purposes:

- to produce comparable data on the patients' perspectives of the care they receive from home health agencies,
- to create incentives for agencies to improve the quality of care they provide through public reporting of survey results, and
- to enhance public accountability in health care by increasing the transparency of the quality of care provided in return for the public investment.

Sampling and data collection is conducted on a monthly basis. Survey results are analyzed and reported on a quarterly basis, with publicly reported results based on one year's worth of data.

A.3 Use of Improved Information Technology

The national implementation is designed to allow independent survey vendors to administer the Home Health Care CAHPS Survey using mail-only, telephone-only, or mixed (mail with telephone follow-up) modes of survey administration. Experience with previous CAHPS surveys, including the field test of the Home Health Care CAHPS instrument, shows that mail, telephone, and mail with telephone follow-up data collection modes work well for respondents, vendors, and health care organizations. Any additional forms of information technology, such as web surveys, are not be feasible with this population, many of whom are ill, elderly, and lack access to the Internet.

A.4 Efforts to Identify Duplication

Making comparative performance information available to the public helps consumers make more informed choices when selecting a home health care agency and can create incentives for home health care agencies to improve the care they provide. Vendors/home health care agencies have the option to add their own questions to the Home Health Care CAHPS core questionnaire. If a home health agency/vendor plans to add their own questions, they need to add them after the core questions (questions 1 - 25). The "About You" section can be placed after the core items or following the home health agency-specific items. If a home health agency/vendor decides to add their own questions, they must pay attention to the length of the questionnaire. The longer the questionnaire, the greater the burden is on respondents.

A.5 Involvement of Small Entities

National Implementation

All Medicare-certified home health agencies (HHAs) must contract with a HHCAHPS survey vendor that has been approved by CMS. These approved survey vendors include small survey firms. Survey respondents are adult home health care patients who receive skilled home health care regardless of payer (i.e., including Medicare, Medicaid, and private payers). Each month, each HHA sponsoring a Home Health Care CAHPS Survey must prepare and submit to its survey vendor a file containing patient data on patients served the preceding month that will be used by the survey vendor to select the sample and field the survey. This file (essentially the sampling frame) for most home health agencies can be generated from existing databases with minimal effort. For some small HHAs, preparation of a monthly sample frame may require more time. However, data elements needed on the sample frame will be kept at a minimum to reduce the burden on all home health agencies.

The survey instrument and procedures for completing the instrument are designed to minimize burden on all respondents. No significant burden is expected for small agencies beyond providing their contracted vendor with a monthly file of patients served.

A.6 Consequences If Information is Collected Less Frequently

So that home health patients can assess the home health care they receive as soon as possible after a home health care visit, CMS requires that participating home health agencies provide a sample frame consisting of patients who received at least one home health visit during the sample month to their survey vendor on a monthly basis. Vendors will, in turn, be required to initiate the data collection from patients within 3 weeks after the sample month closes. Respondent burden is increased and the recall factor becomes a problem if patients are asked to recall their care experiences after longer lapses of time. Monthly sampling and continuous data collection (surveying the sample within 3 weeks after the sample window closes) reduces the amount of time between when patients receive home health care and when they are surveyed. Respondent recall, especially with home health patients, is enhanced, thus improving the quality of survey data and results. For this reason, CMS does not believe that a less frequent data collection period results in the most accurate and complete data for public reporting and quality

monitoring purposes. While data collection is completed by vendors on a monthly basis, data is submitted on a quarterly basis.

A.7 Special Circumstances

Some home health patients have chronic conditions which require long-term home health care. To reduce respondent burden, CMS states in their survey implementation process that home health care patients are not be eligible for the survey more than once during a 6-month period.

A.8 Federal Register and Outside Consultations

Federal Register

The July 3, 2013 (78 FR 40272), proposed rule provided a 60-day comment period. No PRA-related comments were received.

Outside Consultations

AHRQ was responsible for the development and testing of the Home Health Care CAHPS Survey. As the lead agency, AHRQ worked with three grantee organizations to develop and test the survey instrument: the American Institutes for Research, the Yale/Harvard team, and RAND. An additional contractor, Westat, also participated in a supporting role. During the survey instrument development phase, AHRQ also consulted with a range of outside organizations and individuals representing state and federal government agencies and non-profit and private sector organizations. AHRQ convened technical expert panels on February 8, 2007, and July 15, 2008. Panel members for the instrument development included representatives from the following organizations:

- AARP (American Association of Retired Persons)
- Abt Associates Inc.
- American Academy of Home Health Care Physicians
- American Association for Homecare
- American Association of Homes and Services for the Aging

- American Hospital Association
- American Occupational Therapy Association
- American Physical Therapy Association
- American Speech-Language-Hearing Association
- Maryland Health Care Commission
- National Association for Home Care & Hospice
- National Center for Health Statistics, Centers for Disease Control and Prevention (CDC)
- National Quality Forum
- Paraprofessional Healthcare Institute
- Professional Healthcare Resources, Inc.
- Quality Insights of Pennsylvania
- Quality Partners of Rhode Island
- Veterans Health Administration
- Visiting Nurse Associations of America (VNAA)

For the national implementation, CMS has worked with RTI International, a contractor operating in the role of the HHCAHPS survey implementation coordinator. RTI, with CMS is responsible for developing the protocols and survey guidelines required to ensure the standardized administration of the Home Health Care CAHPS Survey, the review of survey vendor applicants, working with CMS to train multiple independent survey vendors, providing oversight of the approved vendors, and receiving and processing Home Health Care CAHPS Survey data collected and submitted by the approved HHCAHPS survey vendors. RTI was responsible for analyzing data from the mode experiment to determine the mode adjustment and the patient-mix adjustment model. During the national implementation, RTI adjusts the data for patient mix and nonresponse and provides comparative results for public reporting.

In addition, RTI convened a technical expert panel composed of representatives from the home health industry, consumer advocacy organizations, the government, and research organizations. Members of the committee provided guidance to RTI on the development of the design for the mode experiment and the plans for the national implementation. RTI, CMS, and members of the technical expert panel met on February 21, April 15, and June 19, 2008.

The technical expert panel members who provided input and guidance to RTI for the national implementation represented the following organizations:

- AARP (American Association of Retired Persons)
- American Association of Homes and Services for the Aged
- Center for Medicare Advocacy, Inc.
- Consumer Coalition for Quality Health Care
- Health Services Advisory Group
- Independent Consultant, formerly of AHRQ
- National Association for Home Health Care and Hospice
- RAND
- Service Employees International Union
- Visiting Nurse Service of New York

A.9 Payments/Gifts to Respondents

No payments or gifts are provided to HHCAHPS survey respondents.

A.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 will not be used or disclosed for any other purpose.

Individuals and organizations contacted are further assured of the confidentiality of their replies under 42 U.S.C. 1306, 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 fully complies with all respects of the Privacy Act.

RTI understands the privacy and confidentiality concerns regarding access to Home Health Care CAHPS Survey data. RTI has redundant security protocols to protect data and computer systems. Servers are maintained in climate-controlled environments, with restricted access. A firewall stands between the internal systems and the Internet, requiring authentication of all users requesting access. User identification and passwords are unique and changed on a regular basis. Full backups are conducted on a weekly basis, with incremental backups performed nightly. Copies of backup materials are stored offsite in a secure location in case of system failure.

RTI received a Defense Security Service rating of "Superior" for the physical security of its research center. As data are collected and assembled into databases for analysis and interpretation, RTI incorporates a number of database security safeguards to protect data from accidental or intentional access and disclosure threats. RTI's data collection and storage security measures include the following:

- Maintenance of all servers in RTI's environmentally controlled Computer Center, where computers are located in a center constructed of masonry with an automatically locking steel door that is locked at all times; fire protection is provided by a halon system with all servers having an Uninterruptible Power Supply.
- User ID and password authentication to access all systems. Where appropriate, systems are configured to support the use of Digital Security Certificates for additional user authentication.
- Encrypted transmission of data.
- Use of Transport Layer Security, the successor technology to Secure Socket Layer for encryption of data across the Internet.
- Connection to the Internet by an Internet firewall via a high-speed T2 (6.2 MBs) line. In the event of a failure, a T1 (1.544 MBs) backup will automatically provide uninterrupted Internet connectivity. Subscription to virus-protection services from McAfee VirusScan with automated update of virus signature files on all computers.
- Redundant servers with automatic switchover to ensure 24/7 availability.
- Daily incremental backups of all data files, with full backups created weekly.

- Offsite storage of data backups.

For the national implementation, survey vendors have submitted only de-identified survey data to RTI for analysis.

Survey vendors approved to conduct a Home Health Care CAHPS survey for HHAs participating in the national implementation are required to have systems and methods in place to protect the identity of sampled patients and the confidential nature of the data that they provide. CMS and its contractor (RTI) review each approved Home Health Care CAHPS Survey vendor's data security systems during periodic site visits during the national implementation.

A.11 Questions of a Sensitive Nature

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

A.12 Estimates of Annualized Burden Hours and Costs

The length of the survey estimate of .20 hours (12 minutes) is based on the written length of the survey and AHRQ's experience conducting the field test, and RTI's experiences with the mode experiment, with a sample of home health patients. It is also based on RTI's experience conducting other surveys of similar length and complexity.

Estimated annualized burden hours and costs for the national implementation of the Home Health Care CAHPS Survey are shown in **Exhibits 1 and 2**. These estimates assume that 9,890 home health agencies (the universe of Medicare-certified agencies) will sponsor a Home Health Care CAHPS Survey and that 300 patients sampled from each agency will complete the survey. Not all 12,000 agencies participate in national implementation so we have estimated the maximum burden possible. If we use the number of 9,890 agencies times 300 patients, we have a total of 2,967,000 patients. This represents the maximum number of patients surveyed in a 12-month period.

EXHIBIT 1. ESTIMATED ANNUALIZED BURDEN HOURS: NATIONAL IMPLEMENTATION OF THE HOME HEALTH CARE CAHPS SURVEY

Form name	Number of respondents	Number of responses per respondent	Hours per response	Total burden hours
Home Health Care CAHPS Survey (mail only, telephone only and mail with telephone follow-up data collection modes)	2,967,000	1	.20	593,400
Total	2,967,000	1	.20	593,400

EXHIBIT 2. ESTIMATED ANNUALIZED COST BURDEN: NATIONAL IMPLEMENTATION

Form name	Number of respondents	Total burden hours	Average hourly wage rate*	Total cost burden
Home Health Care CAHPS Survey (mail only, telephone only and mail with telephone follow-up data collection modes)	2,967,000	593,400	$25.00	$14,835,000
Total	2,967,000	593,400	$25.00	$14,835,000

In 2010, CMS submitted a revised package to reflect the following additional burden in the HHCAHPS. In the 2011 Home Health Prospective Payment System Rule, Section 484.250, Patient Assessment Data, required an HHA to submit to CMS, HHCAHPS data in order for CMS to administer the payment rate methodologies described in §§ 484.215, 484.230, and 484.235. The burden associated with this is the time and effort put forth by the HHA to submit the HHCAHPS patient files to their approved HHCAHPS survey vendor. Section 484.255(i) requires the submission of quality measures as specified by the Secretary. As part of this requirement, each HHA sponsoring a Home Health Care CAHPS (HHCAHPS) Survey must prepare and submit to its survey vendor a file containing patient data on patients served the preceding month that will be used by the survey vendor to select the sample and field the survey. This file (essentially the sampling frame) for most home health agencies can be generated from existing databases with minimal effort. For some small HHAs, preparation of a monthly sample frame

may require more time. However, data elements needed on the sample frame will be kept at a minimum to reduce the burden on all HHAs. The burden associated with this requirement is the time and effort put forth by the HHA to prepare and submit the file containing patient data on patients. The survey instrument and procedures for completing the instrument are designed to minimize burden on all respondents. No significant burden is anticipated for small agencies beyond providing their contracted vendor with a monthly file of patients served. We reported in 2010 in the PRA package for HHCAHPS that, "For very small HHAs serving less than 60 eligible patients in an annual period, these agencies have been informed to file an exemption form on the website (www.homehealthcahps.org)." However, we did not inform OMB of the burden associated with completing that exemption form on the website. In this package, we are informing OMB of the burden and costs associated in completing the HHCAHPS Participation Exemption Request Form (see **Exhibit 4)**.

In the 2010 PRA package, we determined that the provision of the monthly file will take 16.0 hours for each HHA. Therefore, if eligible HHAs (9,890) conducted HHCAHPS, the burden would be 9,890 times 16 hours, equaling a total of 158,240 hours (see **Exhibit 3)**. The reasons for the additional burden to the HHAs are because the HHAs must do the following: (1) Contract with an approved HHCAHPS survey vendor to administer the HHCAHPS survey and to submit the HHCAHPS survey data to the Data Center on the HHAs' behalf; (2) Register for credentials to access the private secure links on the HHCAHPS website, www.homehealthcahps.org; (3) When registering for credentials to access the private links on the HHCAHPS website, the system will automatically generate a customized Consent Form for the HHAs. Each HHA must print this Consent Form and mail the completed signed and notarized Consent Form to the HHCAHPS Coordination Team; (4) Authorize an HHCAHPS survey vendor to collect and submit the HHCAHPS survey data to the Data Center; (5) Stay informed about HHCAHPS by checking www.homehealthcahps.org at least twice a week; (6) Prepare a monthly patient information file containing information that the survey vendor needs for sampling and fielding the survey; and (7) Submit the monthly patient information file to the survey vendor by the date specified or agreed to by your contracted survey vendor.

CMS believes that the 16 hours of labor that the HHA will need to do annually can be conducted by a Medical Records Reviewer. The U.S. Bureau of Labor Statistics has determined

that the hourly wage of a Medical Records Reviewer is $24.94. Therefore, the annual cost of the wage labor would be 16 hours times $24.94 equals $399.04 per HHA. The total cost for all HHAs would therefore be 9,890 HHAs times $399.04 equals $3,946,505.60.

EXHIBIT 3. ESTIMATED COST BURDEN TO THE HHAS

Form name	Number of respondents	Total burden hours	Average Cost to Contract	Total cost burden
Home Health Agencies Medical Records Reviewer on Staff	1	16	$24.94	$399.04
Total	9,890	158,240	$24.94	3,946,505.60

And, the same Medical Records Reviewer would need to prepare the count of patients for an annual period cited in the Participation Exemption Request Form. The completion of that form would take 20 minutes. Only 2,000 HHAs at most, would qualify to complete the participation exemption request form. HHAs would need to serve only 59 or fewer HHCHAPS eligible patients in an annual period to be eligible to complete the Participation Exemption Request Form. We always post the current form on our website, https:homehealthcahps.org. Currently, the HHCAHPS Participation Exemption Request Form for the CY 2015 Annual Payment Update is posted on the website. All HHAs with 59 or fewer patients in the period of April 2012 through March 2013 are eligible to complete the form, and be exempt from HHCAHPS participation for the period of April 2013 through March 2014, and they will still get their full annual payment update. HHAs that are eligible to fill out the form must do so every year, since the count period of April to March changes every year.

EXHIBIT 4. ESTIMATED COST BURDEN TO THE HHAS COMPLETING THE PARTICIPATION EXEMPTION REQUEST FORM FOR THE CY ANNUAL PAYMENT UPDATE

Form name	Number of respondents	Total burden hours	Average Cost to Contract	Total cost burden
Home Health Agencies Medical Records Reviewer on Staff	1	.58	$18.20.	$10.56
Total	2,000	1,160	$18.20	$21,112

In deriving these figures, we used the following hourly labor rates and time to complete each task: $36.27/hr and 20 min (.33 hr) for a home health care agency director to check the work on the Participation Exemption Request Form and $24.92/hr and 15 min (.25 hr) for an executive assistant to perform the patient count and to complete the form. This amounts to $18.20 per respondent ($11.97 + $6.23) or $21,112 ($18.20 x 1,160 hours) total.

A.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. We have determined that there is an annual-time cost to the HHAs to secure the services of approved HHCAHPS survey vendors to conduct the HHCAHPS on their behalf. In

Exhibit 6, we have summarized the estimated cost burden to the HHAS. If all 9,890 HHAs participate in the HHCAHPS, at the estimated cost of $4,000 for contract costs, then the total cost is estimated to be $39,560,000.

EXHIBIT 5. ESTIMATED COST BURDEN TO THE HHAS

Form name	Number of respondents	Total burden hours	Average Cost to Contract	Total cost burden
Home Health Agencies contracting with approved HHCAHPS Survey Vendors	1	16	$4,000	$4,000
Total	9,890	158,240	$4,000	$39,560,000

A.14 Estimates of Annualized Cost to the Government

The total cost for the survey costs is $1,854,800 for labor hours, materials and supplies, overhead, and general and administrative costs and fees, in addition to the training, the vendor oversight, technical assistance, and data processing and data analysis. The cost for CMS staff to oversee the project is $112,700, including benefits.

A.15 Changes in Hour Burden

The number of individuals completing the survey has been adjusted from 2,706,000 to 2,967,000. The program change consists of an additional 1,160 hours and $21,112 for the 2,000 HHAs completing the Participation Exemption form. Finally, while reported in Supporting Statement part A, $39,560,000 has been removed from the burden table since those costs are labor-specific.

We are additionally attaching the current version of the HHCAHPS in all languages that it is approved for use. In the prior OMB package, we only included the English version of the HHCAHPS survey.

A.16 Time Schedule, Publication, and Analysis Plans

A.16.1 National Implementation of Home Health Care CAHPS

Data collection for the national implementation of Home Health Care CAHPS survey begin in summer 2009 by vendors sponsored by home health agencies that wish to voluntarily

participate in the survey. Sampling and data collection was conducted on an ongoing basis by survey vendors working under contract with the sponsoring home health agencies beginning October 2010. CMS began publishing results from the national implementation of Home Health Care CAHPS survey on Home Health Compare located on when HHAs had four quarters of data available for reporting, starting April 2012. Survey vendors submit data to CMS' Home Health Care CAHPS Data Center (maintained and operated by RTI) on a monthly or quarterly basis; however, results that are posted reflect one year's worth of data. In each quarter, RTI adjusts the data for patient mix, and non-response.

A.16.1a National Implementation Analysis

Analysis for the national implementation focuses on making appropriate adjustments for patient mix.The data collected each month during the national implementation phase are transmitted to RTI. Four quarters of data are aggregated and analyzed for these adjustment purposes. Each quarter, the oldest data is dropped and the newest quarter is added. For each item to be reported, a mean or percentage of patients choosing a particular response is computed. The following describes how is applied in adjusting the raw observed national survey data to remove the influences of factors not related to the care provided (and, hence, need to be adjusted prior to public reporting of comparative results from individual home health agencies).

A model, estimated using a linear or linear probability approach, can be conceptualized as having the predictive form for a specific $HHA_{i,}$ as shown in Equations 1a and 1b below.

Equation 1a

$$Mean\ response_i = a*patient\ characteristics_i + b*mode_i + c*HHA_i$$

or

Equation 1b

$$\%\ with\ response\ of\ interest_i = a*patient\ characteristics_i + b*mode_i + c*HHA_i$$

Although the model will be estimated on individuals, it will be applied at the HHA level, where $a*patient\ characteristics_i$ represents the list of estimated coefficients multiplied by the

percentage of patients in HHA_i with each of the characteristics or the mean of each characteristic; $b*mode_i$ is the list of coefficients for each mode multiplied by the percentage of patients with that mode; and $c*HHA_i$ is list of coefficients multiplied by the percentage of patients in that HHA (i.e., agency fixed effects).

To transform the estimation equation to an adjustment equation, all the HHA fixed-effects terms will be dropped. For each HHA, Equation 1b, for example, becomes

Equation 2

$$Adjustment\ for\ \%\ with\ response\ of\ interest_i = -a*patient\ characteristics_i - b*mode_i$$

The estimated coefficients in the *a* and *b* lists may be positive or negative in the estimation; positive coefficients become negative adjustments and negative coefficients become positive adjustments.

The value of the coefficients for the patient characteristics will be determined quarterly using all of the data collected for the particular reporting period. In the next step, the adjustment in Equation 2 will be normalized so that it is relative to a patient whose characteristics are at the means of those characteristics in the national implementation using one year of data. When the equations are estimated, each patient characteristic factor with a 1/0 value has a coefficient magnitude representing an impact of having the characteristic (variable = 1) compared to a reference group indicated by a variable that has been intentionally omitted from the equation during estimation. The omitted group is one of convenience for interpretation. In normalization, the adjustments are converted so that they are relative to the mean of the patient characteristics of the sample. To do this, the percentages (or means) for each characteristic for the entire Home Health Care CAHPS Survey are subtracted from the percentages or means for each of the patient characteristics specific to each HHA; the normalized patient characteristic in Equation 3 is the difference: HHA mean (or percentage) of the characteristic minus the national mean (or percentage) of the characteristic.

Equation 3

$$\textit{Normalized Adjustment for \% with response of interest}_i = -a*\textit{normalized patient characteristics}_i - b*\textit{mode}_i$$

Since Equation 3 is an adjustment and not a final value for the percentage with the response of interest, one more step is needed to arrive at the adjusted response, as shown in Equation 4.

Equation 4

$$\textit{Adjusted \% with response} = \textit{raw \% with response} - a*\textit{normalized patient characteristics}_i - b*\textit{mode}_i$$

The form of the adjustment is similar when the dependent variable is treated as a continuous variable from 1 to 10 or from 1 to 4.

A.16.1b Individual-Level Estimation and Adjustment

The formulations for the equations above assume that linear models are being used in the model estimation phase. If the linear approximation is not deemed satisfactory, nonlinear probability models such as logit will be needed.

A.17 Exemption for Display of Expiration Date

CMS does not seek this exemption.