

**March 2010** 

# Aide Survey: 2007-2008

Design and Operation of the National Home Health

Series 1, Number 49



### Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

## Suggested citation

Bercovitz A, Moss AJ, et al. Design and operation of the National Home Health Aide Survey: 2007–2008. National Center for Health Statistics. Vital Health Stat 1(49). 2010.

For sale by the U.S. Government Printing Office Superintendent of Documents Mail Stop: SSOP Washington, DC 20402-9328 Printed on acid-free paper.

# Vital and Health Statistics

Series 1, Number 49

Design and Operation of the National Home Health Aide Survey: 2007–2008

**Program and Collection Procedures** 

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Center for Health Statistics

Hyattsville, Maryland March 2010 DHHS Publication No. (PHS) 2010–1325

# **National Center for Health Statistics**

Edward J. Sondik, Ph.D., *Director*Jennifer H. Madans, Ph.D., *Associate Director for Science* 

# **Division of Health Care Statistics**

Jane E. Sisk, Ph.D., Director for Health Care Statistics

# Contents

Acknowledgments	111
Abstract	1
Introduction	1
Design Process.  Initial Modifications to National Nursing Assistant Survey (NNAS).  Pilot Test .  Pretest.  Modifications between Pretest and National Survey.	2 2 3 4 5
National Survey Methods Sample Design and Selection Data Collection Procedures	6 6 7
Survey Instrument	9
Data Processing	9
Response Rates Overall National Home Health Aide Survey (NHHAS) Response Rate	11 11 11 11 11
Public-Use File Data Set	12
Standard Errors	12
Reliability of Survey Estimates	13
Confidentiality	13
Data Dissemination	13
References	13
Appendix I List of Acronyms and Terms Used in This Report	14 14
11	15 15
	16 16
Appendix IV	17 17

Appendix V	28 28
Appendix VI	. 59
Appendix VII. Text of Informed Consent.	
Appendix VIII	
Appendix IX	
Text Figure	
1. Number of calls per completed interview, 2007 National Home Health Aide Survey	. 8
Text Table	
A. Key subject areas on the 2007 National Home Health Aide Survey questionnaire	10

# Acknowledgments

The National Home Health Aide Survey (NHHAS) was sponsored by the Office of the Assistant Secretary for Planning and Evaluation (ASPE). The survey was conducted by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). The ASPE Federal Project Officer was Marie Squillace. The NCHS Federal Project Officers were Lauren Harris-Kojetin and Robin Remsburg. Design, production, and analysis assistance for this project was provided by: Emily Rosenoff, Anita Bercovitz, Abigail Moss, Frederic Decker, Sarah Gousen, Adrienne Jones, Iris Shimizu, Arlene Siller, Genevieve Strahan, Roberto Valverde, Lisa Dwyer, and William Pearson.

The questionnaire was developed with the assistance of Mathematica Policy Research, Inc. All interviews for this project were conducted by Westat.

We are indebted to our national advisory group members who were most giving of their time and expertise: Mark Heaney, Chris Murtaugh, Mary St. Pierre, Vera Salter, Jean Scott, Peter Kemper, D.E.B. Potter, Edward Salsberg, Michael Sinclair, Robyn Stone, and Kenneth Wessel.

Most importantly, we gratefully acknowledge the home health and hospice aides who were willing to participate in the interviews.

# **Abstract**

# **Objectives**

This report provides an overview of the National Home Health Aide Survey (NHHAS), the first national probability survey of home health aides. NHHAS was designed to provide national estimates of home health aides who provided assistance in activities of daily living (ADLs) and were directly employed by agencies that provide home health and/or hospice care.

This report discusses the need for and objectives of the survey, the design process, the survey methods, and data availability.

#### Methods

NHHAS, a multistage probability sample survey, was conducted as a supplement to the 2007 National Home and Hospice Care Survey (NHHCS). Agencies providing home health and/or hospice care were sampled, and then aides employed by these agencies were sampled and interviewed by telephone. Survey topics included recruitment, training, job history, family life, client relations, work-related injuries, and demographics. NHHAS was virtually identical to the 2004 National Nursing Assistant Survey of certified nursing assistants employed in sampled nursing homes with minor changes to account for differences in workplace environment and responsibilities.

#### **Results**

From September 2007 to April 2008, interviews were completed with 3,416 aides. A public-use data file that contains the interview responses, sampling weights, and design variables is available. The NHHAS overall response rate weighted by the inverse of the probability of selection was 41 percent. This rate is the product of the weighted first-stage agency response rate of 57 percent (i.e., weighted response rate of 59 percent for agency participation in NHHCS times the weighted response rate of 97 percent for agencies participating in NHHCS that also participated in NHHAS) and the weighted second-stage aide response rate of 72 percent to NHHAS.

**Keywords:** National Home Health Aide Survey • home health aide • hospice aide • direct care worker

# Design and Operation of the National Home Health Aide Survey: 2007–2008

By Anita Bercovitz, M.P.H., Ph.D.; Abigail J. Moss; Manisha Sengupta, Ph.D.; and Lauren D. Harris-Kojetin, Ph.D., National Center for Health Statistics; Marie R. Squillace, Ph.D.; and Emily Rosenoff, M.P.A., Office of the Assistant Secretary for Planning and Evaluation; and Laura Branden, Westat

# Introduction

By 2050 an estimated 27 million persons will need some type of long-term care (1). Of those, the majority will receive long-term care in the community rather than in institutions. Some of the focus on homeand community-based care is the result of the Olmstead decision, which encouraged provision of communitybased care when desired and possible (1). In 1999, the United States Supreme Court ruled in Olmstead v. LC that the unnecessary segregation of individuals with disabilities in institutions may constitute discrimination based on disability. The court ruled that the Americans with Disabilities Act may require states to provide community-based services rather than institutional placements for individuals with disabilities.

Demographic changes are a major driving force in the need and demand for home- and community-based formal long-term care. The number of people aged 65 and older has increased dramatically from 3.1 million in 1900 to 37 million in 2006. As the first baby boomers reach age 65 in 2011, the growth of the older population is expected to boom, almost doubling from 37 million to over 70 million in 2030 (2). With increased life expectancy, a relative decrease in the vounger population, and aging of the baby boomers, older Americans will increasingly comprise a larger

proportion of the population: from 12.4 percent in 2006 to about 20 percent in 2030. Although the health of older Americans has improved through the decades and many of them live longer in good health, the surge in the older population has generally meant an increased need for medical and long-term care. Many older Americans experience one or more chronic conditions as well as geriatric syndromes that can lead to debilitating disabilities and depression. In 2005–2006, about 50 percent of the older population reported having hypertension and arthritis, over 30 percent had heart conditions, and about 20 percent had cancer or diabetes. Both institutionalized as well as community-dwelling elders experienced activity limitations, at varying levels of severity. In 2005, over 80 percent of those living in long-term care facilities, 45 percent of those living in community housing with services, and over 25 percent of those living in the community experienced limitations with at least one ADL (3). (Appendix I lists this and other acronyms used in this report.) Chronic conditions and functional limitations have increased the collective need for care and management of diseases and provision of long-term services and supports.

Currently, the majority of homeand community-based long-term care is provided informally—by unpaid caregivers, such as family members, neighbors, or friends. While informal care provision is expected to remain as

the primary source of community-based long-term care, the demand for formal (paid) caregivers is expected to increase as the population needing care increases (1). The bulk of formal long-term care is provided by direct care workers, such as nursing assistants, home health aides, and personal aides. Direct care workers provide basic care and essential help with daily activities, enabling younger and older people with functional and activity limitations to live independently in their homes. A major challenge in the long-term care industry is the retention of direct care workers. A low pay structure, lack of or limited fringe benefits, a heavy workload, poor working conditions, lack of appropriate training, little opportunity for professional advancement, and a lack of respect from management are some of the reasons cited for high turnover and vacancy rates (4-7). As a result of multiple factors, including aging of the baby boomers, shrinking of the pool of informal caregivers due to the decreasing size of families, the geographic mobility of adult children, and increased participation of women in the labor market, the dependence on the direct care workforce is likely to grow. In 2006, about 3 million people were employed in the direct care industry, including nursing, psychiatric, and home health aides. Direct care jobs are projected to be among the fastest growing occupations in the near future, with the greatest increases among home health aides. Projected employment of home health aides is expected to increase 49 percent from 2006 to 2016-from 787,000 to 1,171,000 (8).

National data on direct care workers are limited, as most of the few existing studies are restricted to smaller geographic areas. The Bureau of Labor Statistics (BLS) provides estimates of employment in the home health aide industry to monitor labor force participation. However, no nationally representative data are collected from home health aides that could provide their perspectives on what motivates individuals to choose careers as home health aides and what contributes to the likelihood that they will continue in these positions based on their job

satisfaction, work environment, training and advancement opportunities. Given high turnover and vacancy rates, these data could help policy makers understand the needs of and challenges faced by home health aides and identify strategies that may improve the quality and stability of the workforce.

Recognizing the need to fill the gap in data about factors related to recruitment and retention of home health aides, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) sponsored the first NHHAS. The NHHAS was conducted as a partnership between ASPE and the National Center for Health Statistics (NCHS). ASPE led a national advisory committee to inform the survey design process. Under contract with NCHS, Westat conducted the pilot, pretest, and national surveys.

One objective of the NHHAS was to provide a baseline of nationally representative information about home health aides who work in home health and/or hospice settings, their training, motivations, job environment, job limitations, relationship with management, job satisfaction, and intention to stay in the job. Another objective was to collect data that would be comparable to the data collected in the 2004 National Nursing Assistant Survey (NNAS) (9) so that information about direct care workers could be compared across settings.

# Design Process

The design of the NHHAS interview and data collection procedures involved four steps:

- Initial modification of NNAS to reflect differences in work environment and responsibilities between home health and/or hospice aides and certified nursing assistants (CNAs) working in nursing homes
- 2. A pilot test
- 3. A pretest to test and refine the survey protocol
- 4. Modifications to the survey as a result of findings from the pretest

# Initial Modifications to National Nursing Assistant Survey (NNAS)

Because one of the objectives of the NHHAS was to obtain information comparable to NNAS, the NHHAS instrument was modeled very closely on the NNAS (9). Differences between the NNAS and the NHHAS instruments reflect differences in the work environment and training requirements between home health aides and CNAs working in nursing homes. Changes were based on recommendations from a national advisory committee. The advisory committee included representatives from home health organizations and agencies and government analysts with expertise in home health care. The suggested modifications were made and tested by Mathematica Policy Research (MPR), under contract with ASPE (10).

The major changes included modifying questions on work settings, workload, and travel. The pattern of work for home health aides is different from CNAs, since home health aides may work in multiple settings, including both homes and institutions. Thus, questions were added to the NHHAS on where the home health aides worked. The advisory committee also noted that an important issue to home health aides is whether they are assigned the number of hours of work that they want. These questions were already in the NNAS, but additional questions on frequency of staying past the shift worked were added to the NHHAS. Since many home health aides work in private homes and have to travel to various work sites, questions on the extent of travel and reimbursement for time and travel were also added to the NHHAS.

There were further changes in the NHHAS instrument in response to results from the pilot and pretest (11).

### **Pilot Test**

A pilot test of the NHHAS was conducted in May and June of 2006 as part of the pilot test for the NHHCS (12). The primary objective of the pilot test was to test the procedures for selecting the sample and contacting home health aides. Specifically, the objectives of the pilot test were to:

- Gain experience in requesting home health and/or hospice agencies to provide a list of their currently employed home health aides to be used as a sampling frame for NHHAS.
- Test acquiring and cleaning the lists of home health aides.
- Test procedures for collecting contact information for the home health aides.
- Test the quality of the contact information for the home health aides.

Because the computer-assisted telephone interviewing (CATI) questionnaire in many ways resembled the one that was used previously in the NNAS, identifying issues of instrument length and appropriateness of the questions were of lesser importance.

A convenience sample of 47 home health and/or hospice agencies in selected geographic areas was compiled from the lists maintained by the Centers for Medicare & Medicaid Services (CMS) and available on that website. Interviews were to be scheduled with nine agencies, representing home health only, hospice only, and mixed agencies (agencies that provide both home health and hospice care), with the goal of completing interviews in at least six agencies, two of each type. Up to eight home health aides were to be sampled from each agency.

In-person interviews were scheduled and conducted in eight agencies from May 24 to June 5. A total of 36 aides was sampled, averaging 4.5 aides per agency. To fulfill the primary objective of testing the procedures for selecting the sample and contacting home health aides, the subset of CATI questions to establish eligibility for the survey was administered to all of the sampled home health aides. However, the complete

CATI interview was given to only one home health aide from each of the pilot test agencies.

After each NHHCS agency appointment was scheduled, an appointment confirmation package was mailed to the agency director. Among its contents were two documents pertaining to the NHHAS:

- A flyer announcing the survey to be posted at the agency for all home health aides to see.
- Copies of the NHHAS announcement letter to be distributed by the agency to every home health aide employed by the agency in advance of the NHHCS interview.

The protocol also called for all sampled home health aides to receive a package of promotional materials prior to being contacted by telephone. The advance package included:

- A welcome letter
- \$5 bill clipped to the letter
- NHHAS fact sheet
- Postcard to indicate willingness to participate
- Postage-paid return envelope to return the postcard
- NHHAS gift pen

Interviewers mailed these packages to the home health aides when contact information for the sampled aides was provided by the agency. All but one of the agencies provided contact information for the sampled aides. When contact information was not provided by the agency, the interviewer gave the package directly to the agency representative to distribute to the sampled aides either in person or by mail. Altogether, 33 aides were mailed advance packages by the interviewer and 3 aides received their advance packages via their agencies.

Full CATI interviews were completed with eight home health aides from June 1 through 30, 2006 (one aide per agency); interview length ranged from 60 to 83 minutes, with an average of 67 minutes. Screeners or full interviews were completed for all but 5 of the 36 aides sampled (86 percent). On average, it took three calls to reach the aides to complete the screener or the full interview, with a range of one to

nine calls. All aides were reached in the evenings or on weekends. All but one of the aides contacted were eligible for the NHHAS, based on responses to the screener questions. All but one of the agencies provided contact information for the sampled aides at the time of the NHHCS interview. The contact information provided by the sampled agencies for the aides was generally good.

There were three major findings from the pilot study:

- 1. Both the percentage of agencies providing contact information for home health aides and the quality of the contact information provided far exceeded expectations.
- 2. The CATI questionnaire took longer to administer than anticipated, well over 1 hour on average to complete. This exceeded the desired goal of 40 minutes per interview.
- 3. The CATI questionnaire included several field-coded questions that required interviewers to choose from long lists of response categories. (Field-coded items are open-ended questions. The interviewer codes each response either into a predefined category, or, if a response does not appear to fit into a predefined category, the interviewer enters the text verbatim. and the text is coded by NCHS staff during data processing. See the section describing the data processing for further description of field-coded questions.)

These questions turned out to be more problematic than expected for telephone interviewers to record aides' responses both accurately and in a timely way.

These findings—as well as recommendations for specific instrument item changes based on input from observers' notes, CATI frequencies and comments, and director debriefing notes—provided guidance for necessary changes that were subsequently made for the pretest. Changes made between the pilot study and the pretest included the following:

 Improvements were made to the NHHAS contact materials. A NHHAS video promoting the survey was developed and included in the NHHAS advance package. A NHHAS pen and NHHAS letterhead with the names of the four endorsing national organizations were produced. Modifications to the welcome and advance letters were also made.

- The process for distributing the advance packages to sampled home health aides was modified. In the pilot study, the NHHCS field interviewers were responsible for customizing "generic" advance packages for all sampled aides by entering names and addresses on welcome letters and envelopes, and either mailing the packages themselves or providing the advance materials to agencies that did not provide contact information for them to disseminate. This approach was adapted from procedures used for the 2004 NNAS. However, in the NHHCS pilot study, agencies provided contact information for 92 percent of the aides sampled. Because of this high cooperation rate, instead of the field interviewers distributing the packets, a centralized distribution approach was used by the contractor to distribute the packets through the contractor's home office. This approach provided more standardization and control in administration and greater time efficiency for the interviewers while at the agency.
- Changes to reduce interview length and improve overall data quality included shortening extensive lists of response options and modifying the patient relations questions to ask specifically about the number of patients and the number of patient visits for the most recent week worked instead of for an "average" week.
- The Education and Training sections of the questionnaire turned out to be the most time consuming to administer and contained the most difficult questions for respondents to answer, since there is little standardization in training requirements for home health aides.

As a result, more than a dozen questions were deleted and the series of questions that asked aides to rate their training was shortened. Although the NNAS contained two separate series of questions about initial and continuing education, these were combined in the NHHAS and the questions referred to all training the home health aides received. Also, the series of questions in the NNAS on what topics the CNAs felt should have been included in their initial and continuing education was eliminated. Several questions on the extent to which home health aides ask for help from other home health aides and agency employees were deleted from the questionnaire since these were less relevant in the home health setting than for CNAs working in a nursing home.

#### **Pretest**

The primary goals of the NHHAS pretest were to address specific problems identified during the pilot study with the procedures for contacting home health aides and administering the questionnaire and to conduct a dry run for the national survey (13). In addition, greater emphasis was placed on reducing the interview length, refining the protocol for contacting aides, and focusing on the quality of the question items themselves. Like the pilot study, the pretest was not intended to evaluate approaches for building response rates.

The pretest goal was to complete 25 NHHCS agency interviews. Pretest agencies were obtained from an initial sample of 60 home health and/or hospice agencies located in selected states, with an array of home health only, hospice only, and mixed agencies in each state. Aides were selected from all of the agencies interviewed during the NHHCS pretest. A total of 172 home health aides were sampled from the 27 home health and/or hospice agencies that actually participated in the NHHCS pretest.

Each agency was notified in advance of the NHHCS agency visit that up to eight home health aides employed directly by the agency would be selected for the NHHAS. As with the pilot study, the home health aides sampling was completed during NHHCS agencies' appointments by the field interviewers using lists provided by the agencies. Interviewers used the CAPI instrument to select sampled aides and a hard copy contact form to record sampled aides' addresses and telephone information.

As with the pilot study, agencies agreeing to participate in the NHHCS in advance of the agency visit received copies of the NHHAS announcement letters to distribute to each of the agencies' home health aides and NHHAS flyers for the agencies to post in prominent locations.

Based on the pilot study experience, the contractor's home office staff mailed the advance packages. These packages were mailed to the home health aides in late December 2006, approximately 1 month after the fielding of the NHHCS pretest began. For the aides for whom contact information was provided, the advance packages were mailed to the home addresses provided by the agencies. For aides for whom the agencies did not provide contact information, the advance packages were sent by FedEx directly to the agencies for them to distribute to their sampled aides. A follow-up package with reminder letters was also sent to these agencies 1 week after the initial mailing of the advance packages.

The home health aide advance package included the following items:

- Welcome letter
- \$5 bill clipped to the letter
- Letter signed by the Director of NCHS
- NHHAS fact sheet
- Postcard to indicate willingness to participate
- Postage-paid envelope to return the postcard
- NHHAS gift pen
- NHHAS DVD with a 5-minute explanation of the survey and importance of participation

In the advance packages, home health aides were invited to call a toll-free number or return a postcard to participate in the survey. They were also informed that they would receive an additional \$30 to compensate them for

their time for participating in the survey.

Seven telephone interviewers received 16 hours of training. Two of the interviewers had previous experience with the 2004 NNAS. On the last day of training, interviewers conducted "live" interviews with aides, followed by a short debriefing session to discuss problematic areas encountered. Problem areas discussed included the long response category lists and the recording of travel times between patient visits, the number of patient visits per week, and the highest grade completed in school.

Between January 11 and 28, 2007, telephone interviewers contacted the home health aides. Interviewers were able to call cases whose contact information was available from the agency, from an aide's returned postcard, or from an aide's call to the toll-free number. The NHHAS postcards also provided space for home health aides to record the best times to contact them. The shift that a home health aide worked was also available to interviewers if it was collected during the agency visit. Interviewers used this information to target the date and time that a contact was attempted. With respondents' permission, most of the telephone interviews were audio recorded. This was done to allow review and evaluation of the interviewer-coded responses for the CATI instrument items that contained more than 10 response categories.

During the NHHAS pretest, a total of 80 telephone interviews was completed with sampled home health aides. The median time to complete the CATI questionnaire was about 45 minutes.

Of the 26 sampled agencies that participated in the NHHCS and had at least 1 employed home health aide, 22 (85 percent) provided contact information for the sampled aides. (One of the 27 sampled agencies that participated in the NHHCS had no home health aides employed.) Of the 172 aides sampled for the NHHAS, contact information was collected for 148 aides (86 percent). Among those aides with contact information provided, five had only a telephone number (3 percent).

Cell phone numbers were provided for 34 aides (23 percent).

Between December 27, 2006, and January 22, 2007, 53 home health aides returned the NHHAS postcards and 40 calls were received on the NHHAS toll-free number. When unduplicated, postcard responses or toll-free calls were made by 31 percent of the sampled home health aides. Five aides (9 percent) who returned a postcard indicated that they did not want to participate in the survey. Only one home health aide when reached by telephone declined to participate. Eleven advance packages (from nine agencies) were returned by the U.S. Post Office, although for two of these, an updated address was provided.

An average of three calls was made to complete a case in the NHHAS pretest. No refusal conversion or follow-up was attempted with the agencies and limited follow-up or tracing was conducted with home health aides.

# Modifications between Pretest and National Survey

A number of strategies and activities were used to evaluate the NHHAS pretest and provide guidance for the national survey. These included interviewer debriefings, monitoring of telephone interviews, review of module timings, item nonresponse analysis, data review, interview audio recordings, comments entered in CATI by interviewers, and cognitive testing that occurred following the pretest. The purpose of cognitive testing is to examine the ways in which people go about answering survey questions. Cognitive testing, or cognitive interviewing, is a pretesting technique used to ascertain whether or not a question is working as intended and to help identify problems in question wording or response categories needing revision.

The following concerns were identified:

Challenges with the interview questions about workload as

- measured by number of patient visits made and number of patients seen
- The number of response categories for field-coded items
- Areas where more training for the interviewers was needed
- The start of fielding of the NHHAS in relation to the NHHCS
- Alteration in the home health aide sample design in NHHCS facilities to ensure an adequate number of home health aides was sampled to meet the analytic goals of the NHHAS
- Strategies to obtain optimum response rates among sampled home health aides

With the exception of two questions, telephone interviewers noted few problems administering the CATI instrument. The most problematic questions pertained to workload. These questions asked about the average number of patients seen and the average number of patient visits per week. As scripted, they required interviewers to probe extensively and perform arithmetic to help respondents derive accurate answers to the questions. To address this problem, a hard copy weekly grid was developed for interviewers to record this information for the final few pretest telephone interviews that were conducted. As a result of the early pretest results and revisions, cognitive testing was conducted with several of the pretest home health aides to develop and refine the patient visit data collection using the grid.

Another recommendation that affected a number of question items was to limit the number of response categories for field-coded items to fewer than 10. Other suggestions made by interviewers related to their training. They would have liked more practice breaking off the interview and restarting partially completed interviews. They also recommended having more practice in field coding realistic responses for open-ended questions.

A major outcome resulting from the pretest was a change to the sampling strategy to ensure sampling enough aides for a target sample size of

between 3,400 and 3,800 aides for the national survey. The initial sampling plan for the NHHAS was to sample up to eight aides in a random subsample of one-half of the agencies in the NHHCS. Through the pretest, NCHS determined that up to one-third of agencies had fewer than eight aides employed. Thus, in order to ensure an adequate sample size, the sampling design was modified to sample aides from all agencies participating in the NHHCS, and to avoid over-sampling, the number of aides sampled per agency was decreased to six. This was a departure from the sampling strategy used in the NNAS, which sampled nursing assistants from approximately one-half of the nursing homes participating in the National Nursing Home Survey.

# National Survey Methods

# Sample Design and Selection

The NHHAS is a linked establishment and worker survey, similar to the design of the NNAS. The NHHAS is based on a two-stage probability sample design, with the agency sampled first and then, from within each of the eligible participating sampled agencies, selection of a random sample of aides.

Linked establishment and worker surveys have multiple advantages, with the main advantage being that the sample frame of workers is drawn from the employees of the establishment, obviating the need to construct a separate sample frame for workers. Using this built-in sample frame facilitates reaching employees who may otherwise be hard to identify. Costs are reduced since efforts to identify and obtain contact information for the aides can be included in the process of contacting and interviewing the establishment. Linking the survey with the establishment where the employee works may provide additional legitimacy for the aides about the employee survey. In addition, linkage of the establishment

and worker surveys increases the analytic potential of both the NHHCS and the NHHAS. Linking information on employer characteristics with worker characteristics and perceptions permits analysis of the interrelationships between these two types of variables.

# **Agency sampling**

At the first stage of sampling, agencies providing home health and/or hospice care were selected from a sampling frame of over 15,000 agencies, representing the universe of agencies providing home health and/or hospice care in the United States. These agencies included free-standing agencies as well as those affiliated with hospitals. government entities, retirement centers, or similar institutions where the agencies maintained financial and patient records separate from those of the larger institution. For the purposes of the NHHCS, an eligible home health and/or hospice agency was one that:

- Provided home health, hospice, or both types of services
- Provided more services than only homemaker or housekeeping services, or only durable medical equipment and supplies
- For agencies providing only home health care, had one or more current patients
- For agencies providing only hospice care, had one or more current patients or had one or more hospice discharges during the 3-month period prior to the month of interview
- For agencies providing both home health and/or hospice care, had one or more current home health and/or hospice patients, or had one or more hospice discharges during the 3-month period prior to the month of interview

The sample frame was stratified by type of services the agency provided (home health only, hospice only, or mixed) and metropolitan statistical area (MSA) (metropolitan, micropolitan, other). Within these primary strata, facilities were sorted by census region, ownership, certification status, state, county, and ZIP Code. A total

of 1,545 agencies was systematically randomly selected with probability proportional to size. Further information on the NHHCS is available from: http://www.cdc.gov/nchs/nhhcs.htm.

# Home health aide sampling

In the second stage of sampling, a random sample of aides was selected from each agency eligible for and participating in the NHHCS. Aides were eligible for the survey if they were: directly employed by the agency and provided assistance with ADLs including eating, toileting, bathing, dressing, and transferring.

The rationale for including only aides who were directly employed by the sampled agency was so that an aide's responses to questions about supervision and agency policies and characteristics would refer to the sampled agency. The rationale for including only aides who provided assistance with ADLs was to ensure the work environment and responsibilities among sampled aides were as similar as possible. Some home health aides provide only transportation, companionship, or assistance with shopping or medication management; their work environment and experience may be substantially different from aides who provide assistance with ADLs.

Up to six aides were chosen in all participating agencies. An average of 4.3 aides was sampled per agency. Five percent of the selected agencies had no aides to sample.

The sampling procedure started with the NHHCS in-person agency interview. During the NHHCS in-person interview with the agency respondent, the agency was asked to provide a list of aides who met eligibility criteria as of midnight of the day before the interview. The interviewer reviewed the list with the agency representative to remove duplicates and to ensure that the list included only aides who were directly employed by the agency and provided assistance with ADLs. The interviewer then numbered the list and entered the total number of aides into the CAPI system used for the NHHCS survey and sampling. The CAPI program, through

systematic randomization procedures, selected up to six aides. The NHHCS interviewer entered the names of the aides into CAPI and on a hard copy sampling form. For each sampled aide, a unique nine-digit number was generated by CAPI to serve as identification and was used for all subsequent materials for that aide. The NHHCS interviewer obtained contact information for the sampled aides and which shifts the aides worked for the agency. This information was then entered on the hard copy sampling form (see Appendix II). These hard copies were express mailed to the contractor's central office for distribution of survey recruitment materials as described in the next section.

Data collection for the NHHAS began September 19, 2007, and ended April 1, 2008. The NHHAS data collection began about 1 month after the NHHCS to allow a sufficient sample size to accrue so that the contractor could efficiently conduct interviews. Appendix III consists of a flow chart summarizing the data collection process.

# **Data Collection Procedures**

# Contacting and recruiting aides

The initial step in data collection for the NHHAS was to provide advance packages to the sampled home health aides. The mode of providing the packages to the home health aides depended on whether the agency provided contact information for the sampled home health aides. As described in the sampling section, the NHHCS field interviewers asked the agency respondent for contact information for the selected home health aides. Ninety percent of agencies participating in the NHHAS provided some contact information, and 89 percent of the cases had contact information. Not all of the contact information included a mailing address; for some home health aides only a phone number was provided. If the agency provided contact information, it was entered on the hard copy sampling form and in the CAPI system and transmitted to the contractor. If address

information was provided for the aide, the contractor mailed advance packages to the home health aides. If no address information was provided, the contractor mailed advance packages to the agency to be distributed to the sampled aides (see Appendix IV, Exhibit A for the text of the letter sent to the agency asking the agency to distribute the advance package to the sampled aides).

Advance package contents were enclosed in a large envelope with the NHHAS logo and labeled with the NHHAS ID number. Each package distributed by the agency was labeled with the home health aide's name or other unique identifier. The package contents included:

- Welcome letter (see Appendix IV, Exhibit B)
- \$5 bill clipped to the letter
- Letter signed by the Director of NCHS (see Appendix IV, Exhibits C1 and C2)
- NHHAS fact sheet (see Appendix IV, Exhibit D)
- Postcard to indicate willingness to participate, (see Appendix IV, Exhibit E)
- Postage-paid envelope to return the postcard
- NHHAS gift pen
- NHHAS DVD (see Appendix V for a PDF of the DVD)

All of the information materials, except the postcard, listed the toll-free number the home health aides could call for information or to indicate whether they wanted to participate in the survey. The letter from the Director of NCHS, the pen, and the fact sheet also included a link to the NHHCS website: <a href="http://www.cdc.gov/nchs/nhhcs.htm">http://www.cdc.gov/nchs/nhhcs.htm</a>. Visitors to the site could get further information on the NHHCS and the NHHAS, which has its own website: <a href="http://www.cdc.gov/nchs/nhhas.htm">http://www.cdc.gov/nchs/nhhas.htm</a>. Visitors could also watch the NHHCS or NHHAS information video or look at

One week after the advance packages were distributed, a reminder letter was distributed to all home health aides. Sampled aides for whom agencies provided home address information were mailed the reminder letter directly to their homes (see Appendix IV,

the PDF file of the video.

Exhibit F). Among sampled aides for whom agencies did not provide home address information, two reminder letters were sent 1-week apart to the agencies to distribute to each sampled home health aide. (See Appendix IV, Exhibit G for the reminder letter for the agency to distribute to the home health aides and Exhibit H for text of the letter sent to the agency asking them to distribute the reminder letters to the selected aides.) Cases were made available to the interviewers in the contractor's Telephone Research Center about 1 week after the cases were fielded to that center. Delayed release of cases to the interviewers allowed enough time for the home health aides to receive their advance package mailings before being contacted.

#### **Data collection**

Home health aides could indicate interest in participating by returning the postcard, calling the toll-free number listed on the information materials, or by agreeing to participate when an interviewer contacted them. Similarly, home health aides could indicate they did not want to participate by checking the box on the postcard labeled "NO, I don't want to be part of the NHHAS," calling the toll-free number, or refusing to participate when contacted or at any point in the survey.

Calls to the toll-free number came into the contractor's Telephone Research Center. If the callers asked to participate in the survey, their calls were either sent to an available interviewer for an immediate interview, or an appointment was set for a later interview.

Home health aides who sent in postcards indicating they wished to participate in the survey and home health aides who did not reply either through the toll-free number or postcard were contacted by the contractor's telephone interviewers to arrange an interview time. The interviewers used the shift information provided in the initial contact information and the best times to call indicated by the home health aide on the return postcard to identify the best times to call for an interview. Interviews started with an initial (paper) contact script to ascertain

whether the respondent was reached and whether the respondent received the advance package. The initial contact script had multiple paths depending on whether the respondent agreed to participate (see Appendix VI).

If the home health aide agreed to participate, the interviewer moved to the interview. The telephone interviewers read a consent statement prior to starting the interview. The consent statement was written at an eighth-grade reading level (see Appendix VII for the text). Home health aides had to respond affirmatively before the interview could continue. The consent statement was reviewed and approved by the NCHS Ethics Review Board (ERB) as part of the ERB's review and approval of the NHHAS. Aides who participated in the interview were sent a \$30 check to compensate them for their time in participating in the survey.

Data collection was conducted using CATI. The average number of calls per completed eligible case was 4.7 (median 3); the average number of calls per ineligible case that completed the CATI screener was 6.6 (median 3). The range of call attempts was 1 to 59 calls for eligible completed cases and 1 to 40 for ineligible cases. Figure 1 displays the distribution of the number of calls per completed interview. Although over three-quarters of cases were completed with five or fewer calls, 10 percent were completed after more than 10 calls.

The average duration of the CATI completed interviews, including ineligibles, was 53 minutes, and 54 minutes for eligible aides working at the NHHCS agency at the time of the NHHAS interview. This time included the interview as well as the introduction script, informed consent, and contact time. The average interview duration, excluding introduction, consent, and contact time, was 44 minutes including ineligibles, and 45 minutes for eligible aides working at the NHHCS agency at the time of the NHHAS interview.

A total of 1,340 postcards was completed and returned by the home health aides. Of these, 97 percent (1,300) were from home health aides for whom the agency had provided contact information. The average length of time from NHHAS sampling to NHHAS

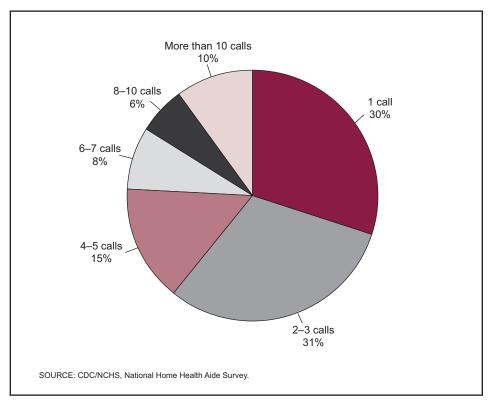


Figure 1. Number of calls per completed interview, 2007 National Home Health Aide Survey

postcard receipt was 24 days. For 97 percent of the postcards returned, the home health aide agreed to participate.

# Follow-up

Two types of follow-up were conducted depending on whether or not the agency provided contact information for the home health aides.

If the agency did not provide contact information for the home health aides and if there were no completed cases or postcards received from sampled aides at the agency 3 weeks after the advance packages were mailed, the contractor followed up with the agency by telephone. The agency was contacted using a structured script (see Appendix VIII, Exhibit A). Thirteen agencies fit these criteria. Of these, there were nine agencies where no contact information was provided for the home health aides and no aides ever participated, representing 1 percent of agencies where home health aides were sampled. At the remaining 4 agencies, 16 aides eventually were interviewed.

If the agency did provide contact information and the Telephone Research Center staff could not locate the sampled home health aide, the agency was contacted to obtain additional contact information (see Appendix VIII, Exhibit B). If no additional information was available, then Telephone Research Center staff used telephone tracing through the internet and directory assistance. Of the 588 cases ever in tracing, 383 (65 percent) were located and 282 (48 percent) completed an interview.

Letters were sent to difficult to reach home health aides for whom there was no tracing or address problem. After eight or more telephone calls were attempted, the letters were sent to the 610 home health aides for whom addresses were available (see Appendix VIII, Exhibit C for text of letter).

Home health aides who returned the postcard indicating they did not want to participate in the survey were not contacted further. Home health aides who were called by the interviewers to schedule an interview and refused were sent a refusal letter (see Appendix VIII, Exhibit D), and received a follow-up

telephone call from an interviewer experienced in refusal conversion. Of the cases ever coded a refusal, 18 percent ended up having a completed interview.

# **Telephone Research Center interviewers and training**

The NHHAS interviews were conducted by experienced telephone interviewers, who worked daytime, evening, and weekend hours in order to reach home health aides during nonworking hours. Interviewers received 16 hours of training over a 3-day period. The training included an overview of the NHHAS; practice contacting home health aides, responding to FAQs, and setting appointments; practice conducting interviews using the NHHAS CATI questionnaire; and practice completing call records and other administrative procedures. Nineteen interviewers attended and successfully completed training; 14 interviewers continued on the project until data collection ended on April 1, 2008.

# **Quality assurance**

All of the NHHAS interviewers were monitored by NHHAS-trained Telephone Research Center team leaders on an ongoing basis throughout the data collection period. During monitoring, team leaders followed a standard protocol of listening to the call on a silent monitor (blind to the interviewer) and viewing the CATI instrument entries as the interviewer conducted the interview. The goal for monitoring was 10 percent of the air time for all interviewers. Team leaders completed a monitoring report documenting the results of the monitoring session, and discussed the results with interviewers via instant messaging. If there were any issues of concern observed during the monitoring session, the team leader spoke directly with the telephone interviewer. The contractor and NCHS project staff also monitored the NHHAS interviews during the first month of data collection. Areas of concern that were frequently detected were clarified in memos distributed to the telephone interviewers and team leaders.

The rate of survey completions was tracked through weekly reports and weekly conference calls between the contractor and NCHS staff. Weekly reports summarized information for the current week as well as cumulatively for the field period. The reports summarized receipt of postcards and the numbers of home health aides who were eligible, refused, in tracing, and had contact information.

# Survey Instrument

The survey instrument was based on the NNAS, with modifications to reflect differences in working conditions and requirements between nursing assistants working in nursing homes and home health aides, as discussed in the Design Process section mentioned previously (10).

The NHHAS questionnaire contained 12 discrete sections of question items, each focusing on a specific topic. Table A shows the sections of the questionnaire, the main topic areas, and selected topics included in the sections. Home health aides sampled during the NHHCS interview who no longer worked at the NHHCS agency when contacted for the NHHAS interview were asked only a subset of NHHAS questions (Sections A, L, and selected questions from Sections D and K in Appendix IX). A complete set of NHHAS questionnaire items is provided in Appendix IX.

# **Data Processing**

Data processing and editing occurred both during data collection, as a result of the CATI programming, and after data collection, during post-CATI editing. CATI included hard and soft range checks, skip patterns, and hard and soft consistency checks among question items. Hard edits required the interviewer to fix the discrepant data before the interview could continue. Soft edits resulted in a prompt for the

interviewer to either correct the data or suppress the edit. Post-CATI editing included coding of self-reported industry and occupation, coding text strings from open-ended questions or "other specify" responses, and reviewing responses for logic and consistency.

The contractor coded home health aides' description of their industry and occupation. Occupation was coded according to the Bureau of Labor Statistics (BLS) Standard Occupational Classification, October 2000 ISBN 0–934213–77–1. (See http://www.bls.gov/soc/home.htm for further description.) Industry was coded according to the North American Industry Classification System, which was developed and published by the Bureau of Labor Statistics. (See http://stats.bls.gov/bls/naics.htm for further information.)

NCHS staff edited or recoded responses to open-ended questions that were entered verbatim when the interviewers did not believe the home health aide's response fit one of the preset categories. For some questions, these verbatim responses were then coded by NCHS staff into newly created categories or back-coded into existing categories. For other questions, the responses were edited to protect confidentiality and left as text. A similar procedure was followed for coding of text strings from "other specify" responses.

The files intended for public use and posting on the website went through extensive disclosure review analysis. The purpose of this analysis was to ensure that a home health aide could not be identified. A few variables from the NHHCS were added to the NHHAS public-use file to increase analytic capabilities. These variables included agency type (whether the agency provided home health services only, hospice services only, or both), whether the agency was part of a chain, agency ownership (for-profit, other), and MSA.

Table A: Key subject areas on the 2007 National Home Health Aide Survey questionnaire

Section	Main topic	Contents				
A	Current employment	Eligibility Location (in-patient facility, home, or combination) Single or multiple patients Live with patient				
В	Recruitment	Initial reasons for becoming a home health aide How learned about becoming a home health aide Tenure as a home health aide Previous work				
С	Education and training	Any initial or continuing education Where training received Adequacy of training in preparing for job as a home health aide				
D	Job history	Number of jobs in past 2 and 5 years Characteristics of current and previous jobs including salary How learned about current job Travel requirements and reimbursement Benefits including health insurance				
E	Family life	Travel time Family composition Family care requirements Public benefits use				
F	Management and supervision	Supervisor characteristics				
G	Patient relations	Number of patients and patient visits per week Adequacy of time to perform tasks Supervisor and patient feedback				
Н	Job satisfaction	Overall satisfaction with job and specific aspects Reason continue to work in current job Attributes dislike about job Commitment to field and agency Current job search activity Intent to leave and reasons				
I	Job rating	Opinions about job Perceived appreciation by supervisor, society, and agency Self-perceived importance of work Discrimination				
J	Work-related injuries	Number and nature of injuries How injuries occurred Presence and use of safety devices				
К	Demographics	Age Sex Hispanic ethnicity Race Marital status Education Income Flu vaccination Citizenship Self-rated health Languages spoken				
L	Agency leavers	Why separated from agency Current working arrangements Commitment to being a home health aide Commitment to agency Discrimination				

# Response Rates

# Overall National Home Health Aide Survey (NHHAS) Response Rate

The overall unweighted NHHAS response rate was 55 percent: (71 percent unweighted response rate for overall agency participation in the NHHCS × 97 percent unweighted response rate for agencies participating in the NHHCS that also participated in the NHHAS by providing lists of home health aides employed by their agencies × 80 percent unweighted response rate for home health aides). The overall NHHAS response rate weighted by the inverse of the probability of selection was 41 percent, using weighted rates of the same components used to calculate the unweighted response rate: (59 percent  $\times$  97 percent  $\times$  72 percent).

Guideline 1.3.4 of Standard 1.3 Survey Response Rates in the Office of Management and Budget's Standards and Guidelines for Statistical Surveys (14) indicates that nonresponse bias analysis be conducted if the unit response rate is below 80 percent. The OMB guidance notes that for a multistage survey to focus the nonresponse bias analysis on each stage, with particular attention to the "problem" stages. NCHS plans to evaluate potential nonresponse bias for the NHHAS, with particular attention to the agency-level nonresponse, which has a 59 percent weighted response rate. Results from this nonresponse bias assessment will be posted at NHHCS website in the future (http://www.cdc.gov/nchs/nhhcs.htm). For information on nonresponse bias analyses at the NHHCS agency level, see "The Redesign and Operation of the National Home and Hospice Care Survey: 2007."

# **Agency Response Rate**

In the 2007 NHHCS, a total of 1,461 sampled agencies providing home health and/or hospice care were eligible for the survey. Of these, 1,036 agencies

participated in the NHHCS, for a first-stage agency unweighted response rate of 71 percent (1,036/1,461) and response rate weighted by the inverse of the probability of selection of 59 percent. (Further information on the NHHCS is available from: http://www.cdc.gov/nchs/nhhcs.htm.) Of the 1,036 agencies that participated in the NHHCS, 52 agencies had no aides to sample, resulting in 984 agencies eligible to participate in the NHHAS. Of these 984 agencies eligible for the NHHAS, 22 refused to participate, and no aides were sampled at 7 additional agencies because the interviewer ran out of time or was otherwise unable to complete the aide sampling. As a result, aides were sampled from 955 of the 984 eligible agencies for an unweighted response rate of 97 percent and response rate weighted by the inverse of the probability of selection of 97 percent. The unweighted NHHAS agency response rate was 69 percent (71 percent × 97 percent), and the NHHAS agency response rate weighted by the inverse of the probability of selection was 57 percent (59 percent  $\times$  97 percent).

# Home Health Aide Response Rate

Of the 4,416 home health aide cases sampled from the 955 agencies and sent to the contractor's Telephone Research Center for interviews, 137 (3 percent) were ineligible: of these, 41 were not employed on the sampling date, 31 did not provide assistance with ADLs, 61 were contract employees, 3 were unspecified errors in sample selection, and 1 was identified as ineligible during the aide interview because the respondent did not know whether she was an employee of the sampled agency. A total of 4,279 of the sampled cases were eligible and 3,416 aides completed the NHHAS interview. The unweighted response rate at the second sampling stage was 80 percent (3,416/4,279). The response rate at the second sampling stage weighted by the inverse of the probability of selection was 72 percent.

# **Nonresponse**

The largest component of nonresponse was the inability to reach the aides. There were 233 aides (5 percent of eligible aides) who were unable to be located after multiple efforts, which included asking the NHHCS agency for additional contact information for the aide and using the internet and directory assistance. An additional 240 cases (6 percent of eligible aides) were coded as "maximum calls," cases where the telephone number was functional, but the interviewer was not successful in reaching the home health aide after repeated attempts. An average of 30 calls was made prior to a case being coded as a maximum call. A total of 166 cases (4 percent of eligible aides) were classified as no-contact, meaning no contact information was provided by the agency and the home health aide did not return a postcard or call the toll-free number. Some agencies did not have contact information and other agencies chose not to provide this information. In 79 cases (2 percent of eligible aides) the telephone number was functional, but after repeated attempts (29 calls on average), the interviewer reached only an answering machine. In 10 cases (less than 1 percent of eligible aides) the telephone call always resulted in a ring with no answer or a busy signal. Unlike the questionnaire used for the NNAS, the NHHAS questionnaire was not translated into Spanish. However, only 14 NHHAS cases (less than 1 percent of eligible aides) could not be completed because of a language problem; all but one spoke only Spanish. Four cases (less than 1 percent of eligible aides) had some other type of nonresponse.

The final unweighted refusal rate was 3 percent (117 home health aides). Of these, 84 refused when contacted by interviewers, and 33 refused by postcard. Eighteen percent of initial refusals (119 aides) converted to completed interviews (22 cases).

# Public-Use File Data Set

Of the 3,416 completed NHHAS interviews, 39 aides were no longer working at the NHHCS agency from which they had been sampled when contacted for the NHHAS interview. These 39 aides, considered "leavers," were asked only a subset of the NHHAS questions (see Section L of the NHHAS survey in Appendix IX) that were asked of the 3,377 aides who were still employed at the NHHCS agency from which they were sampled when contacted for the NHHAS interview. To minimize disclosure risk, these 39 cases are excluded from the NHHAS public-use file. The NHHAS public-use file contains only the 3,377 aides who were still employed at the NHHCS agency from which they were sampled when contacted for the NHHAS interview. On the public-use file the weights used for the 3,377 aides are adjusted to incorporate the "leavers" for national estimates.

# **Estimation Procedures**

### Standard Errors

Because the statistics from the NHHAS are based on a sample, they will differ somewhat from the data that would have been obtained if a complete census had been taken using the same definitions, instructions, and procedures. However, the probability design of the NHHAS permits the calculation of sampling errors. The standard error of a statistic is primarily a measure of sampling variability that occurs by chance because only a sample, rather than the entire population, is surveyed. The standard error also reflects part of the variation that arises in the measurement process but does not include any systematic bias that may be in the data. The chances are about 95 in 100 that an estimate from the sample differs from the value that would be obtained from a complete census by less than twice the standard error.

Standard errors can be calculated for aide estimates using any statistical software package as long as clustering within agencies and other aspects of the complex design are taken into account. Software products such as SAS (15), STATA (16), SPSS (17), and SUDAAN (18) all have these capabilities. Statistics presented in NCHS publications are computed using software that produces error estimates for statistics from complex sample surveys. The software employs a first-order Taylor Series approximation of the deviation of estimates from their expected values. The NHHAS public-use file includes design variables that designate each record's stratum marker and the first-stage unit (or cluster) to which the record belongs.

# **Survey Weights**

Since the NHHAS was a sample survey and is designed to produce national estimates for home health aides, data analyses must include sampling weights to inflate the sample numbers to national estimates. Each record on the data file has a weight for this purpose. By aggregating these weights, national counts of home health aides can be estimated. NHHAS estimators take into account the selection procedures of the complete survey design to develop the final sample weight for each sample agency and each sample aide.

An estimator  $\hat{X}$  for any given population total X can be expressed as a weighted sum over all sample units, defined as:

$$\hat{X} = \sum_{u} x(u) W(u)$$

where u represents a sampled unit, x(u) is the characteristics or response of interest for unit u, and W(u) is the final survey weight for sample unit u. The final weight W(u) for each sampled unit is the product of two components: inverse of the probability of selection and adjustment for nonresponse.

The first component of the weight for each sampled unit is the inverse of the unit's selection probability. The probability of selection of a home health aide is a product of two selection probabilities: the probability of selecting an agency to the NHHCS sample and the probability the home health aide was selected within the sample NHHCS agency. The inverse of the product of these probabilities is used for weighting. Further information on the NHHCS is available from: http://www.cdc.gov/nchs/nhhcs.htm.

The first component was modified for sampled agencies found to have multiple listings in the sampling frame after the agency sample was selected. For each agency found duplicated in the sampling frame, the weights of all sampled listings for the agency were summed and divided by the total number of times the agency was found in the sampling frame. To the extent that all listings of each sampled agency are identified in the sampling frame, the resulting weights produce unbiased estimates (that is, estimates that would be obtained if there were no duplicates in the sampling frame).

The second component for calculating the weight is adjustment for nonresponse and omission of cases to minimize disclosure risk. There are three levels of these adjustments. The first two are agency level and the third is person level. At the first level, adjustments were made when in-scope agencies did not respond to the NHHCS. At the second level, adjustments were made when an in-scope agency did not permit survey of its home health aides. At the third level, adjustments were made when a sampled home health aide failed to respond or a home health aide was purposefully omitted from the public-use file to minimize disclosure risk (i.e., for the 39 aides no longer employed by their NHHCS-sampled agency when contacted for the NHHAS interview).

The weights as described previously were smoothed within groups defined by region and agency type, if there were outlier sample units whose survey weights were somewhat larger than those for the remaining sample in the same group. In smoothing, total estimates for each group were preserved.

# Reliability of Survey Estimates

Generally, NCHS decides which estimates to publish based on the relative standard error (RSE, or the coefficient of variation) of the estimate and the number of sample records on which the estimate is based. The RSE is a measure of variability and is calculated by dividing the standard error (SE) of an estimate by the estimate itself. The result is then converted into a percent by multiplying it by 100. Guidelines used by NCHS to determine if estimates should be presented are:

- If the estimate is based on fewer than 30 sample cases, then the value of the estimate is not reported.
   This is usually indicated with an asterisk (\*).
- If the estimate is based on a sample of 30 to 59 cases regardless of RSE value, or on 60 or more cases and the RSE is 30 percent or more, then the estimate is reported but should not be assumed reliable. This is usually indicated with an asterisk (\*) preceding the figure in the tables.
- If the estimate is based on 60 or more sample cases and the RSE is less than 30 percent, then the estimate is reported and is considered reliable.

# Confidentiality

Participation in surveys conducted by NCHS is voluntary, and information collected on individuals or agencies is confidential. Strict procedures are utilized to prevent disclosure of confidential data in survey operations and data dissemination. In accordance with NCHS's confidentiality mandate (Section 308(d) of the Public Health Service Act (42 USC 242m)), no information collected in the NHHAS may be used for any purpose other than the purpose for which it was collected. Such information may not be published or released in any form if the individual or establishment is identifiable unless the individual or establishment has

consented to such release. The information provided by home health aides is used solely for statistical research and reporting purposes.

# **Data Dissemination**

Data from the NHHAS are available through public-use files on the NHHCS website. (http://www.cdc.gov/nchs/nhhcs.htm). The files contain information from the NHHAS edited to ensure protection of confidentiality, and include some variables on the agencies for which the aides worked. Additional information available through the website includes a data dictionary and summary descriptions of the NHHAS and NHHCS.

Researchers who wish to link data from the NHHAS to the agency or patient questionnaires of the 2007 NHHCS will need to work through the NCHS Research Data Center (RDC). RDC allows researchers under RDC supervision to access confidential statistical microdata files. Researchers must submit a proposal for review and approval prior to using the RDC. Additional information on the NCHS RDC and procedures for access to linked data files is available from: http://www.cdc.gov/rdc/.

# References

- Department of Health and Human Services and Department of Labor. The future supply of long-term care workers in relation to the aging baby boom generation: Report to Congress. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy (DALTCP). 2003. Retrieved on May 1, 2009 Available from: http:// aspe.hhs.gov/daltcp/reports/ltcwork.htm.
- 2. He W, Sengupta M, Velkoff VA, DeBarros KA. 65+ in the United States: 2005. Washington DC: U.S. Government Printing Office. 2005.
- Federal Interagency Forum on Aging Related Statistics. Older americans 2008: Key indicators of well-being. 2008.

- Institute of Medicine. Retooling for an aging America: Building the health care workforce. Washington DC: National Academies Press. 2008.
- Newcomer R, Scherzer T. Who counts?
   On (not) counting occupational injuries in homecare. Presented at: Annual Meeting of the American Public Health Association: Boston, MA. 2006.
- Stone RI. The direct care worker: The third rail of home care policy. Annual Rev Public Health 25:521–37. 2004.
- Castle NG, Engberg J, Anderson R, Men A. Job satisfaction of nurse aides in nursing homes: Intent to leave and turnover. Gerontologist 47(2):193–204. 2007.
- Bureau of Labor Statistics. Fastest growing occupations, 2006–16: November 2007 Monthly Employment Review. Washington DC. 2007.
- Squillace MR, Remsburg RE, Bercovitz A, Rosenoff E, Branden L. An introduction to the National Nursing Assistant Survey. Vital Health Stat 1(44):1–54. 2007.
- Mathematica Policy Research.
   Summary of Technical Assistance
   Group Recommendations and
   Comments on Questionnaire Design.
   2006
- Branden L, Dulaney R, Edwards B, Novik J, Vincent C. 2007 National Home and Hospice Care Survey (NHHCS): Final report. Westat. 2008.
- 12. Westat. National Home and Hospice Care Survey: Pilot test report. 2006.
- Branden L, Edwards B, Hall A, Harper T, Jones R, Novik J. National Home Health Aide Survey (NHHAS): Pretest evaluation report. Westat. 2007.
- Office of Management and Budget. Standards and guidelines for statistical surveys. Washington, DC. 2006. Accessed on June 22, 2009 at: http://www.whitehouse.gov/omb/assets/ omb/inforeg/statpolicy/standards\_stat\_ surveys.pdf.
- SAS Institute. SAS/STAT Software: Release 9.1.3. Cary, NC: SAS Institute. 2003
- StataCorp. Stata Statistical Software: Release 9. College Station, TX: StataCorp LP. 2005.
- 17. SPSS for Windows, Release 15.0. Chicago: SPSS Inc. 2006.
- SUDAAN (Release 10.1). Research Triangle Institute: Research Triangle Park, NC. 2008.

# Appendix I: List of Acronyms and Terms Used in This Report

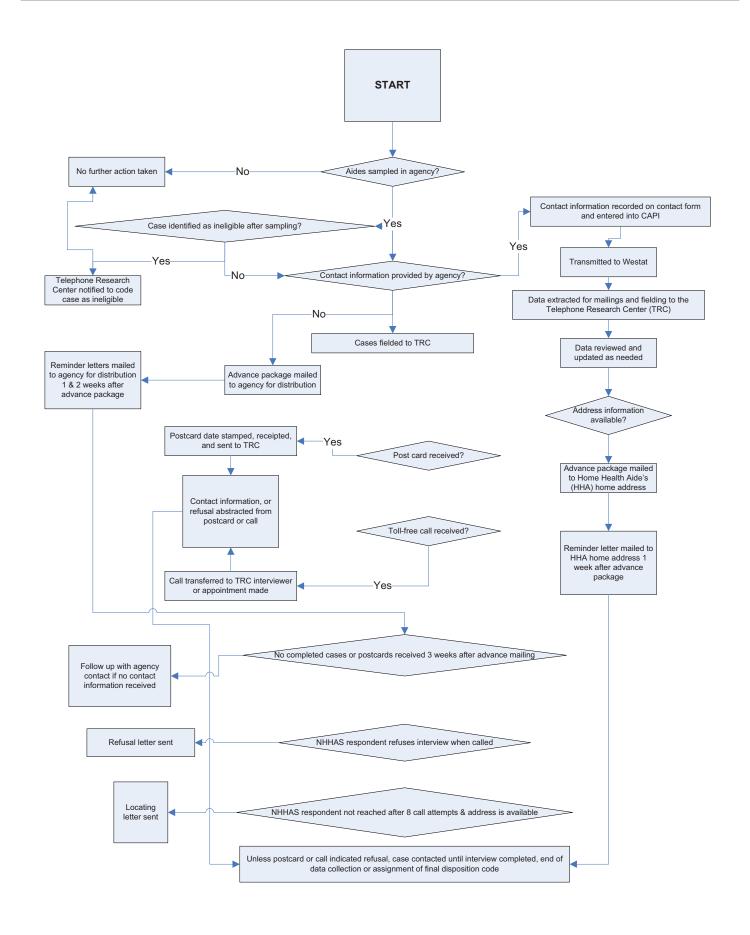
ADL	Activities of Daily Living			
ASPE	Office of the Assistant Secretary for Planning and Evaluation, United States Department of Health and Human Services			
CAPI	Computer Assisted Personal Interviewing			
CATI	Computer Assisted Telephone Interviewing			
CMS	Centers for Medicare & Medicaid Services			
CNA	Certified Nursing Assistant			
ERB	Ethics Review Board			
FAQ	Frequently Asked Questions			
ННА	Home Health Aide			
MSA	Metropolitan Statistical Area			
NCHS	National Center for Health Statistics			
NHHAS	2007 National Home Health Aide Survey			
NHHCS	2007 National Home and Hospice Care Survey			
NNAS	2004 National Nursing Assistant Survey			
NNHS	2004 National Nursing Home Survey			

# Appendix II: Sampling Form

Agency Name:	
Agency Address:	
NT NAME:	INT ID:
	INTERVIEW DATE:/

NHHAS ID NUMBER	HOME HEALTH AIDES, HOME ADDRESSES, PHONE NUMBERS, SHIFT					
001	FIRST NAME:			STATE: _		ZIP:
002	FIRST NAME:ADDRESS:		LAST NAME: _			
	PHONE Home:			_		
003	FIRST NAME:ADDRESS:					
	PHONE Home:	Cell:			SHIFT:	
004	FIRST NAME:			STATE: _		ZIP:
005	FIRST NAME:			STATE: _		ZIP:
006	FIRST NAME:			STATE: _		ZIP:

# Appendix III: Flow Chart of Data Collection Procedures



# Appendix IV. Contact Materials

### Exhibit A: Text of letter sent to agency to request agency to distribute the information packets

<<Address Line 1>>
<<Address Line 2>>
<<City>>, <<State>> <<ZIP>>>

Dear <<NHHASNAME>>:

We would like to thank you for your recent participation in the National Home and Hospice Care Survey (NHHCS).

During our visit for the NHHCS, we selected up to six home health aides from your agency to be part of the National Home Health Aide Survey (NHHAS). We are enclosing the advance packets for you to distribute to the selected home health aides about the NHHAS.

We appreciate your help in distributing the enclosed advance packages to the home health aides selected in your agency for the NHHAS so that they may contact us directly to participate in the survey. Each advance packet is personalized for the home health aides selected for the NHHAS and includes a \$5 bill. Please make sure the advance packets get to them as soon as possible. We have provided postage so that the packets may be mailed to the selected aides if you choose to address and mail the packages.

Thank you again for your support and help in this important survey.

If you have any questions about this, please call me at 1-800-937-8281, extension 3552, or email me at laurabranden@westat.com.

Sincerely,

/Laura Branden/

Laura Branden Westat Associate Project Director

Enclosures OVER

Below is a list of home health aides sampled for the National Home Health Aide Survey (NHHAS) from <<AGENCYNAME>> on <<DT>>.

Please distribute the enclosed advance packages to each of the home health aides listed below selected for the National Home Health Aide Survey (NHHAS). Each advance package is personalized.

Thank you, again, for distributing these advance packages.

- <<FullName1>>
- <<FullName2>>
- <<FullName3>>
- <<FullName4>>
- <<FullName5>>
- <<FullName6>>



#### Sponsored by

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention National Center for Health Statistics

# Endorsing Organizations

National Association for Home Care and Hospice

National Association of Health Care Assistants

> National Hospice and Palliative Care Organization

Paraprofessional Healthcare Institute Mary Jones 15 Elm Street

Stuckeyville, MD 15432

Dear Mary Jones:

Welcome to the National Home Health Aide Survey (NHHAS). You are one of about 6,000 home health aides selected to participate in this important new survey. NHHAS is the first national survey of home health aides working in home health and hospice agencies, and your participation is vital to the success of this survey.

You were selected because your agency is part of the National Home and Hospice Care Survey conducted by the U.S. Department of Health and Human Services (DHHS) Centers for Disease Control and Prevention's National Center for Health Statistics.

The purpose of this survey is to hear – *directly from you* – ways that can help us learn about your field of work. Because you were chosen as part of a small group of home health aides for this survey, everyone that participates will make the information more accurate. Help us include your experiences in this important project.

We need your help to make this survey a success. Please return the enclosed postcard today or call 1-888-290-1125 to schedule a convenient time to do the telephone interview. You will receive \$30 as a token of appreciation for participating in the NHHAS.

Thank you, in advance, for your help in this important survey.

Sincerely,

/Lauren Harris-Kojetin/

Lauren Harris-Kojetin Chief, Long-term Care Statistics Branch, Division of Health Care Statistics National Center for Health Statistics 3311 Toledo Road, Room 3431 Hyattsville, Maryland 20782

Be part of the National Home Health Aide Survey!

90002001

#### Exhibit C1. Letter signed by National Center for Health Statistics Director



#### U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention

National Center for Health Statistics 3311 Toledo Road Hyattsville, Maryland 20782

90002001

Dear Mary Jones:

The need for home health aides is growing. Many home health and hospice agencies have a hard time filling these important positions. I am writing to ask for your help with an important new survey, *The National Home Health Aide Survey (NHHAS)*. Please share your experiences and ideas so we can learn how to keep qualified people like you working in this important field. This research is authorized by the U.S. Public Health Service Act, Volume 42 of the United States Code, Section 242k. This survey is sponsored by the Department of Health and Human Services. It is part of the National Home and Hospice Care Survey that is being conducted by the National Center for Health Statistics all across the country.

You have been selected from a list of home health aides at your agency to take part in this survey along with thousands of home health aides working in home health and hospice care agencies throughout the United States. Westat, a social science research firm, has been hired to collect the data in the survey. Included with this letter is \$5, and you will receive \$30 as a token of appreciation for participating in the NHHAS. Your participation in this survey is voluntary. You may take part in the survey or not, but we want your experiences included so public leaders can learn what it is like to be a home health aide. No penalties or loss of benefits will come from refusing to participate. You may choose not to answer any question and can stop at any time. The survey will take about 40 minutes, but the amount of time is likely to vary from person to person.

The confidentiality of your responses is assured by Section 308(d) of the Public health Service Act [42 United States Code 242m(d)] and the Confidential Information and Statistical Efficiency Act (PL 107–347). Everything you tell us will be kept strictly private. Nothing about you personally will be reported, including your name and the agency where you work. Nothing you tell us will be given to your agency or supervisor. *Taking part will not affect your job in any way*. Your name will not be given to any other organization outside of those collaborating on this survey. Your data will be combined with data from other home health aides and used for statistical research and reporting purposes only. Unless you agree, Federal law does not allow us to release information that could identify you or the agency where you work.

Please help us by agreeing to participate when you are called or by filling out and returning the enclosed postcard in the postage-paid return envelope or calling the toll free number listed below. You can call us to conduct the interview now or to set up an appointment for a later time. The survey is done over the phone with a trained interviewer. Please ask us any questions you have about the survey. **The toll-free number at Westat is 1-888-290-1125.** Please refer to the NHHAS ID number on the postcard when you call the toll-free number.

Sincerely,

/Edward J. Sondik/

Edward J. Sondik, Ph.D. Director, National Center for Health Statistics

If you would like to take part in this survey, return the enclosed postcard or call 1-888-290-1125.

You may want to ask about your rights as a participant in this survey. If so, please call the office set up to oversee research, toll-free, at 1-800-223-8118. Please leave a brief message with your name and phone number. Say you are calling about Protocol # 2006-05. Your call will be returned promptly. You can learn more about the National Home Health Aide Survey at our website: www.cdc.gov/nchs/nhhcs.htm

#### Exhibit C2. Back of letter from National Center for Health Statistics Director

## **National Home Health Aide Survey**

#### **Frequently Asked Questions**

#### WHY ARE YOU DOING THIS SURVEY?

The Department of Health and Human Services is doing this survey to help us learn more about your field of work. Every home health aide that takes part in the survey will make the information more accurate. Help us include your experiences in this important project.

#### DO I HAVE TO TAKE THE SURVEY?

No. Taking the survey is up to you and will not affect your job in any way. But this research is an important way for people to understand what being a home health aide is like. We want your experiences to be included and will provide a total of \$35 to thank you for your help.

#### WHAT KINDS OF QUESTIONS WILL YOU ASK?

We will ask you about different topics like your past schooling, your career path, jobs you have had, training and the management and supervision at your agency.

#### WILL THE DATA BE CONFIDENTIAL?

Your name and the agency where you work will be kept private. None of your answers will be reported in any way that identifies you personally.

The NHHAS is authorized by Congress in Section 306 of the Public Health Service Act (42 United States Code 242K). All information collected in this survey will be held in strict confidence according to law [Section 308 (d) of the Public Health Service Act (42 United States Code 242m(d) and the Confidential Information Protection and Statistical Efficiency Act (PL 107–347)]. Aside from NCHS employees, the only parties that can receive your personal information are Westat, our data collection contractor, and our collaborators. These persons have worked as our full partners from the earliest stages of this survey. These parties who will use your information for statistical research only and to carry out this survey, are bound by strong restrictions designed to guarantee your privacy. In assisting us, the information collected is handled with strict NCHS requirements to protect your confidentiality. We remove names and agency locations and never reveal other facts that could directly identify you. By law we cannot release information that could identify you to anyone else without your consent. If any federal employee or contractor gives out confidential information not authorized by law, he or she can be fired and fined and/or imprisoned.

# WILL MY ANSWERS BE SHARED WITH MY EMPLOYER? WILL THIS AFFECT MY JOB?

No. Your answers will not be given to your employer or anyone else at the agency. Whether or not you decide to take part in the survey will not affect your employment in any way.

#### WHY CAN'T YOU CALL SOMEONE ELSE? I DON'T HAVE TIME TO DO THIS.

We can only speak with a small number of home health aides at different types of home health and hospice agencies. Since you were selected for this survey, it is important that we speak with you to make sure the experiences at your type of agency are represented. We understand your time is important. We can do the survey in more than one call if we need to. We can begin and do as much as we can. Then, if you need to stop, we can call you back at another time to finish.

#### I'M NOT A HOME HEALTH AIDE ANYMORE. I'M NOT WORKING RIGHT NOW.

We are speaking with current and former home health aides. It is important that our research include everyone's experiences, including people who are no longer working as home health aides.

#### WHEN WILL I GET MY CHECK?

After the interview your name will be given to our Accounting Department. You should receive your check in about 2 weeks.

#### Exhibit D. NHHAS fact sheet



### What is the National Home Health Aide Survey?

The National Home Health Aide Survey (NHHAS) is the first national survey of home health aides working in home health and hospice agencies in the United States. The U.S. Department of Health and Human Services is sporsoring the survey. About 6,000 home health aides will be chosen for the NHHAS from 1,500 home health and hospice agencies across the country. The NHHAS will look at the critical role of home health aides in providing home and hospice care services for the growing elderly, disabled, and chronically ill population.

#### What is the purpose of the NHHAS?

- To describe home health aides' work experiences and reasons for entering the field.
- To find out what changes in working conditions, wages, benefits, and career growth for home health aides will make the job more attractive.
- To provide a better understanding of why home health aides leave the field.

### Why was I chosen for this survey?

You were chosen at random as one of the home health aides who work in a home health or hospice agency.

You are one of about 600,000 home health aides who provide care to the 2.2 million home health and hospice patients at more than 10,000 home and hospice care agencies in the United States.

# What do I have to do if I agree to be part of the NHHAS?

Fill out and return the enclosed postcard. Keep the enclosed \$5. A trained interviewer will call you and ask some questions at a time that is best for you.

The telephone interview will include questions about your

- Training
- Supervision
- Job history
- Work setting
- Wages
- Education
- Benefits
- Family life

After the interview, you will be mailed a \$30 check.



# How confidential is the information I give you?

The information you give is kept private by Federal law. No information will be given to your supervisor or agency. Your answers will be grouped with answers given by other home health aides who work for other home health and hospice agencies in the United States. The survey results will be released in summary form in tables and reports only.

# Be part of the National Home Health Aide Survey!

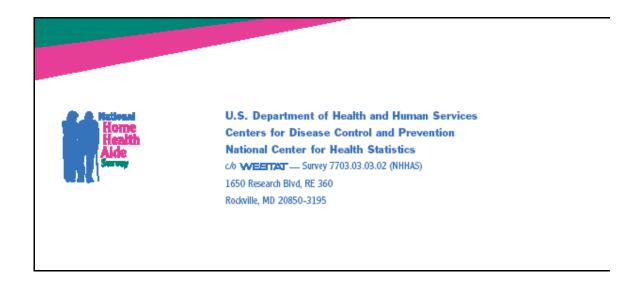


U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Center for Health Statistics Conducted by Westat



For more information: NHHCS web site: www.cdc.gov/nchs/nhhcs.htm NHHAS toll-free number: 1-888-290-1125

# Exhibit E. Postcard to indicate willingness to participate and provide contact information



		Best time and day to reach you:			
(N to	be part of the National Home Health Aide Survey HHAS), check the "Yes" box, fill in information the right, and return this card in the enclosed stage-paid envelope. If you don't want to be	TIME AM / PM HOME PHONE NUMBER	DAY OF WEEK		
	rt of the survey, check the "No" box and return s card in the enclosed postage-paid envelope.	CELL PHONE NUMBER		OTHER PHONE NUMBER	
	YES, I want to be part of the NHHAS and receive \$30.	Please print:			
	NO, I don't want to be part of the NHHAS.				
	Send me the NHHAS report when it's available.	YOUR NAME			
	NHHAS ID #	STREET ADDRESS		APARTMENT NUMBER	
		ary	STATE	ZIP CODE	

#### Exhibit F. Reminder letter



## Sponsored by

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention National Center for Health Statistics

## Endorsing Organizations

National Association for Home Care and Hospice

National Association of Health Care Assistants

National Hospice and Palliative Care Organization

Paraprofessional Healthcare Institute {NHHAS RESPONDENT} {STREET ADDRESS} {CITY}, {ST} {ZIP}

Dear HHA {FIRST NAME} {LAST NAME}:

We recently visited the home health or hospice agency where you work and sent a packet for you about the National Home Health Aide Survey (NHHAS).

The survey is the first of its kind to ask a group of home health aides across the United States about their work. You were chosen as part of a small group of home health aides at your agency to take part in this important survey. You have a chance to help us learn about what it is like to be a home health aide. Every home health aide taking part in this survey—and that includes you—will make the study more accurate.

To take part in this important project, you can contact us by returning the postcard from the information packet you received or you can call our contractor, Westat, **toll free at 1-888-290-1125.** There is no charge for calling this phone number. Trained interviewers are available to speak with you 7 days a week during the day and evening. Our interviewers will be happy to answer any questions you have about this survey.

If you complete the survey, you will receive a check for \$30 to thank you for being part of the survey.

I hope you'll help public health leaders and home health agencies and hospices learn how to keep experience people like you working in this important field by taking part in this survey.

Please let us hear what you have to say by taking part in this important survey.

If you have already sent in the postcard, thank you very much. We really appreciate your help.

We look forward to hearing from you soon.

Sincerely,

/Lauren Harris-Kojetin/

Lauren Harris-Kojetin Chief, Long-term Care Statistics Branch, Division of Health Care Statistics

PLEASE SEND IN YOUR POSTCARD OR CALL 1-888-290-1125 AND ASK FOR THE NATIONAL HOME HEALTH AIDE SURVEY.
YOU WILL RECEIVE \$30 FOR TAKING PART IN THE SURVEY.

{CASE ID}

# Exhibit G. Second reminder letter to be distributed by agency to home health aides for whom no contact information was provided

Shirley Jones

Dear HHA Shirley Jones:

We recently visited the home health or hospice agency where you work and sent a packet to the agency for you about the National Home Health Aide Survey (NHHAS).

If you have already sent in the postcard or called the toll-free number, thank you very much. We really appreciate your time and your help.

If not, we want you to know how important it is for you to take part in this survey. You were chosen for this survey along with a small group of home health aides at your agency. You are one of only 6,000 home health aides in the U.S. who has a chance to help us learn about what it is like to be a home health aide. Your participation will make this survey more accurate.

#### You will receive a check for \$30 to thank you for being a part of the survey.

Please contact us today to be part of this survey. You can call our contractor, Westat, **toll free at 1-888-290-1125**. There is no charge for calling this phone number. Trained interviewers are available to speak with you 7 days a week during the day and evening. Our interviewers will be happy to answer any questions you have about this survey. If you prefer, you can contact us by returning the postcard from the information packet you received.

We need your help for public health leaders and home health agencies and hospices to learn how to keep experienced people like you working in this important, growing field.

Please let us hear what you have to say by taking part in this important survey.

If you have any questions about this survey, please call 1-888-290-1125. We look forward to hearing from you soon.

Sincerely,

/Lauren Harris-Kojetin/

Lauren Harris-Kojetin Chief, Long-term Care Statistics Branch, Division of Health Care Statistics National Center for Health Statistics 3311 Toledo Road, Room 3431 Hyattsville, Maryland 20782

#### Exhibit H. Letter sent to agency to request agency to distribute the reminder letter

<<NHHASNAME>>
<<NHHASTITLE>>
<<AGENCYNAME>>
<<ADDRESSLINE1>>
<<ADDRESSLINE2>>
<<CITY>>, <<STATE>> <<ZIP>>>

Dear <<NHHASNAME>>;

We would like to thank you for your recent participation in the National Home and Hospice Care Survey (NHHCS).

During our visit for the NHHCS, we selected up to six home health aides from your agency to be part of the National Home Health Aide Survey (NHHAS). We recently sent the advance packets for you to distribute to the selected home health aides about the NHHAS.

We would appreciate your help in distributing the enclosed reminder letters to the home health aides selected in your agency for the NHHAS. Each letter is personalized for the home for the home health aides selected for the NHHAS. Research has shown that people are more likely to responde by mail if they receive a reminder shortly after the request. So, please make sure the letter gets to them as soon as possible—it's important.

Thank you again for your support and help in this important survey.

If you have any questions about this, please call me at 1-800-937-8281, extension 3552, or email me at laurabranden@westat.com.

Sincerely,

/Laura Branden/

Laura Branden Westat Associate Project Director

**OVER** 

**Enclosures** 

# Exhibit H. Continuance of letter sent to agency to request agency to distribute the reminder letter

Below is a list of home health aides sampled for the National Home Health Aide Survey (NHHAS) from <<AGENCYNAME>> on <<DT>>.

Please distribute the enclosed letters to each of the home health aides listed below selected for the National Home Health Aide Survey (NHHAS). Each letter is personalized.

Thank you, again, for distributing these letters.

- <<FullName1>>
- <<FullName2>>
- <<FullName3>>
- <<FullName4>>
- <<FullName5>>
- <<FullName6>>

# Appendix V. DVD Storyboard

This appendix includes the pictures and text of the voiceover in the DVD about the National Home and Hospice Health Aide Survey. The DVD was included in the advance package to the aides and available on the National Home and Hospice Health Aide Survey website.



Music Plays. Photo montage of home health aides appears. National Home Health Aide Survey logo appears.



Welcome to the National Home Health Aide Survey, an important new survey sponsored by the Department of Health and Human Services.



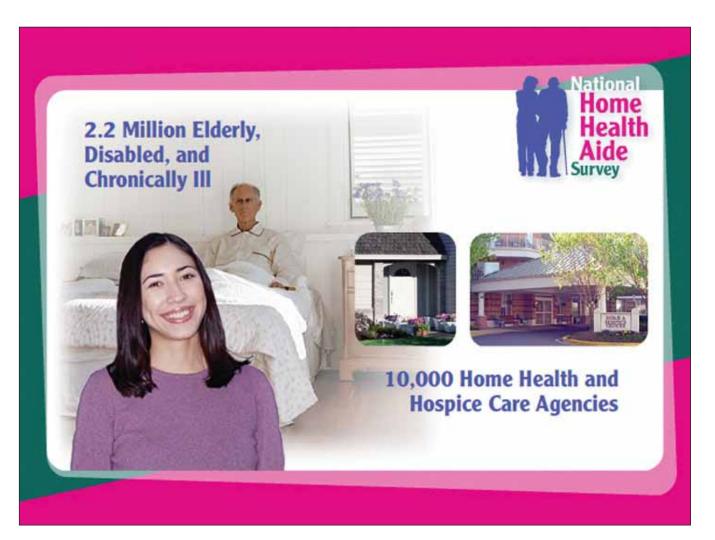
This is the first national survey of home health aides in this country and is part of the National Home and Hospice Care Survey, conducted by the Centers for Disease Control and Prevention's National Center for Health Statistics.



You were selected for this survey because your agency is one of the 1,500 home health and hospice agencies participating in the National Home and Hospice Care Survey.



You and seven other home health aides from your agency were selected at random along with 6,000 other home health aides around the country to be part of the National Home Health Aide Survey.



Home health aides provide care and support to more than 2.2 million elderly, disabled, and chronically ill people receiving care from about 10,000 home and hospice care agencies across the U.S.



Together, these two surveys will provide critical information on the country's home health aides.



The work of a home health aide is physically demanding and at times it can be difficult and stressful for other reasons.



Today, there is a growing shortage of home health aides to care for the increasing number of home health and hospice patients.



We need to keep experienced, dedicated home health aides, like you, and attract new home health aides for the future.



This is why we need your help. . . By taking part in this survey and sharing your experiences with us, you and other home health aides that participate will help provide a better understanding of:



- What it's like to be a home health aide,
- Ways to improve how your work is done,
- How to keep experienced people working in this important health care field, and
- Ways to encourage others to become home health aides.

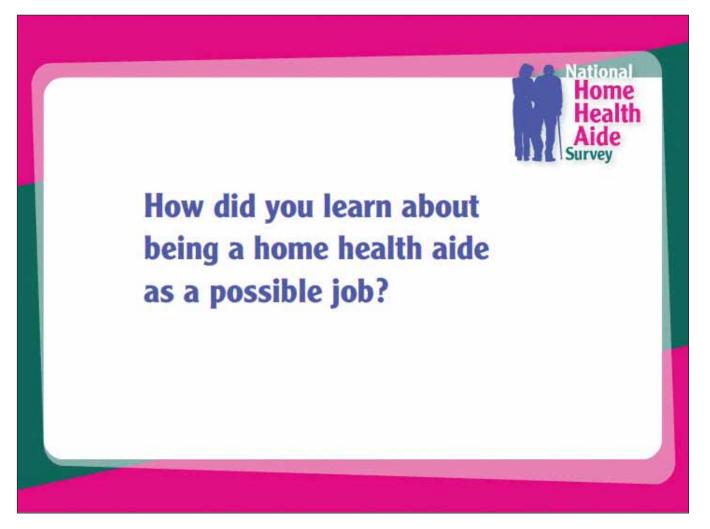
- · What it's like to be a home health aide,
- · Ways to improve how your work is done,
- How to keep experienced people working in this important health care field, and
- · Ways to encourage others to become home health aides.



The interview will be done by telephone. You can do it before or after work and at a time that is convenient for you. The interview will include questions about your:



- · Training,
- · Supervision,
- · Job history,
- · Work setting,
- · Wages,
- · Education
- · Benefits, and
- · Family life.



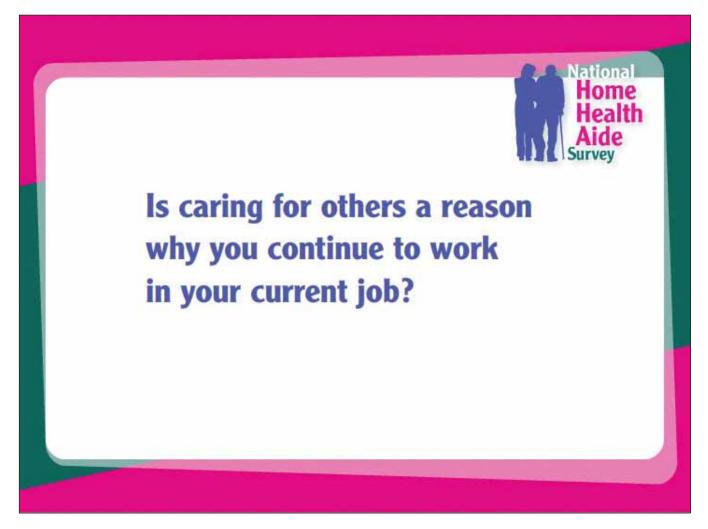
You will be asked questions like:

"How did you learn about being a home health aide as a possible job?"



Would you prefer to work more or fewer hours on this job or is the amount of hours you work about right?

"Would you prefer to work more or fewer hours on this job, or is the amount of hours you work about right?"



"Is caring for others a reason why you continue to work in your current job?"



"Does your current employer offer you paid sick leave?"



By answering questions like these, we can hear - directly from you - about your field of work and your experiences in this field.



Home health aides are the only reliable source of this information so your participation is very important to the success of this survey.



To participate in this important new survey, please complete the enclosed postcard and return it in the postage-paid return envelope today.



After we hear from you, an interviewer will call you to conduct the telephone interview.

You can also call us toll-free at 1-888-290-1125 to schedule a convenient time to do the interview.



When you call this number, give the telephone interviewer the ID number on your postcard. We use that number instead of your name to help maintain your privacy.



Because we cannot interview every home health aide throughout the country, your views represent not only your experiences, but those of other home health aides like you.



Federal law and the Public Health Service Act guarantee that all of the information that you tell us will be kept private.

No information will be given to your supervisor or the agency where you work.



Your answers will be combined with those of many other home health aides and will only be released in summary form in tables and reports. . . These tables and reports will not contain any personal information that identifies you or the agency where you work.



Let us know if you would like to receive a copy of the survey report by checking the box on the postcard.



Your time and what you have to tell us is very important. . . As a thank you for taking the time to review the information about the survey in this packet, we enclosed \$5.



After you complete the telephone interview, we will mail you a \$30 check as a token of appreciation for your time and for the valuable information you provided.



Please call us toll-free if you have any questions about the survey. One of our telephone interviewers will answer your questions. The toll-free number is 1-888-290-1125.



Thank you for taking the time to learn about this important survey.

Help us include your experiences in this project.

Please call us or return your postcard today and be part of the National Home Health Aide Survey!

## NATIONAL HOME HEALTH AIDE SURVEY (NHHAS) INTRODUCTORY CONTACT SCRIPT

Q1.	May I please	speak to [NHHAS RESPONDENT]?		
	Hello, my na Human Servi		ling for the U.S. Department of Heal	th and
		AVAILABLE SPEAKING  NOT AVAILABLE/NOT HOME  DOES NOT LIVE HERE  OTHER (SPECIFY)	. 2 (GO TO Q2) . 3 (GO TO Q3)	
	IF YO	BOX 1 U HAVE NOT DIALED THE CORREC	CT NUMBER, END INTERVIEW.	
Q2.	What day and		call back so that I can speak to [N	NHHAS
	BEST DAY	BEST TIME	AM/PM (END INTERV	IEW)
	CATING Do you have a	new phone number or address for (	(NHHAS RESPONDENT)?	
		YES NO DON'T KNOW		ID
	ADDRESS	:		
	PHONE:			
Q4.	Do you know a	nybody else I could call that may kr	now how to reach (him/her)?	
		YES	<ul> <li> 1→ (RECORD CONTACT INFO AND CALL)</li> <li>. 2 (END INTERVIEW)</li> </ul>	END
	NAME:			
	ADDRESS	:		
	PHONE: _			

You should have rece	ived a letter recently that explain National Home and Hospice	conducting a survey of home health aid lained the study. The letter said we wo e Care Survey. You will receive \$30 as	uld			
	home health aides is growin I stay working in the field.	ng, we hope to learn why people become	me			
	I would like to go over information about the survey so you can decide if you would like to take part. Is now a convenient time?					
NO DID N	OT RECEIVE ADVANCE LETTE	1 (GO TO CATI) 2 (GO TO Q7) ER 3 (GO TO Q6) r				
IF RESPONDENT REFUSES AND SAY:	S TO PARTICIPATE, CHECK BO	SOX 🗆				
		ve had additional time to think about to you later decide to participate?	the			
. =		1 (GIVE R # - 888-290-1125) 2				
May I ask why you do	on't want to participate?					
	END INTERVIEV	<i>W</i>				
aides. It also explai	ned that your participation in	d be calling to do a survey of home hea n this survey is voluntary. A \$5 bill w e envelope. The envelope also included e contents of the envelope?	/as			
NO		2				
Q6a. Shall I go over the i you back after you I	nformation about the survey w nave received the letter?(I'll re	with you now or would you prefer that I c re-send it to you today.)	all			
			S)			
Q7. What time and day wo	ould be best for me to call you	back (next week)?				
BEST DAY	BEST TIME	AM/PM (END INTERVIEW	')			

## Appendix VII: Text of Informed Consent

Before we get to questions about home health aides, I'd like you to know that your answers will be kept strictly private, as authorized by the Public Health Service Act. Your participation in this research is voluntary. You may choose not to answer any question you don't want to answer or stop at any time without penalty. Whether or not you decide to take part in the survey will not affect your employment in any way.

The answers you provide will be combined with answers from other home health aides and used for statistical research and reporting purposes only. Although the estimated time to complete the survey is about 40 minutes, time varies from person to person. You should have received \$5 cash already and a check for \$30 will be mailed to you as a token of appreciation after you participate in the survey.

If you have any questions about the survey, you can contact Brad Edwards, the project director at Westat for this survey, at **1-800-937-8281**. I'd like to continue now unless you have any questions.

## Appendix VIII: Follow-up Scripts

Exhibit A. Contact script for follow up with agencies where no contact information was provided and therefore agencies were requested to distribute the information packets, but no completed interviews or postcards were received in the 3 weeks since mailing of information packets to agency.

## **NHHAS Agency Contact Followup Script**

Hello, (Mr./Ms.) [AGENCY CONTACT FOR NHHAS].

This is [YOUR NAME] from Westat in Rockville, Maryland.

Recently [AGENCY NAME] participated in the National Home and Hospice Care Survey for the Centers for Disease Control and Prevention's National Center for Health Statistics. One of our field representatives met with you to select home health aides from [AGENCY NAME] to take part in the National Home Health Aide Survey. Again, let me thank you for your help.

I am calling today about the consent packets that were sent to your agency after [DATE OF NHHCS INTERVIEW] for the home health aides selected for the survey. So far, we have not received a response from any of the home health aides selected for the survey.

Q1.	Do you know if the NHHAS advance packets were distributed to the home health aides?	
	YES, DISTRIBUTED	
Q2.	Do you know when the advance packets were distributed?	
	Yes	
Q3.	When was that?	
	PROBE: Your best estimate about when the packets were distributed is fine.	
	Day	_

Q4.	Can you think of any reason why none of the selected home health aides would participated in the National Home Health Aide Survey?				
	Yes				
Q5.	What are those reasons?				
	GO TO Q10.				
Q6.	Do you know why they weren't distributed?				
	Yes				
Q6a.	Why weren't they distributed?				
6b.	The advance packets contained information for the home health aides about the survey along with a postcard to return to indicate whether they wanted to participate in the survey, a gift pen, and a \$5 bill for the home health aides. Can you arrange to have the packets distributed to the selected home health aides?  Yes				
	No				

	So we will know about wh health aides from your agon NHHAS advance packets	ency, can you to	ell me about when		
	PROBE: Your best estima distributed is fine.	te about when t	he packets will be		
	Day		Date		
		GO TO Q10.			
Q8.	Can you give me the name, ti NAME] who I can contact abo			person at [/	\GENCY
	RECORD PERSON TO CONTACT ABOUT THE NHHAS ADVANCE PACKETS:				
	NAME				
	TITLE				
	PHONE				
	EXTENSION				
Q9.	Do you know the best time to	call [CONTACT	NAME GIVEN IN	Q8]?	
	BEST CALL BACK TIME:			:	_ AM/PM
		DAY	DATE	TIME	
	RECORD THE NAME OF THE NEW AGENCY NHHAS CONTACT ON THE CALL RECORD AND CALL BACK DATE AND TIME.				
	CHECK IF RESPONDENT INDICATES THAT NHHAS ADVANCE PACKETS NEED TO BE REMAILED				
	CONFIRM AGENCY NAME A ON THE AGENCY SHEET.	ND MAILING AI	DDRESS AND REG	CORD CHA	NGES
Q10.	Thank you very much for your Aide Survey.	r time and your	support of the Nati	onal Home	Health

RECORD OTHER C	OMMENTS:		
		·	·

## Exhibit B. Contact script to obtain better contact information for home health aides

## NHHAS Agency Followup Script for Tracing Home Health Aides

Agency ID	

Hello, (Mr./Ms.) [NHHAS AGENCY CONTACT]. This is [YOUR NAME] from Westat in Rockville, Maryland.

Recently [AGENCY NAME] participated in the National Home and Hospice Care Survey [for the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NHCS)]. One of our field representatives [FI NAME] met with you on [AGENCY INTERVIEW DATE] to select home health aides from [AGENCY NAME] to take part in the National Home Health Aide Survey. Again, let me thank you for your help.

I am calling today about the address and telephone number that we have for [NAME/NAMES] who (was/were) selected to participate in this survey.

We have been unable to contact (her/him/them) and would like to see if you would have a more recent phone number or address for us to reach (her/him/them).

DETERMINE IF THIS IS A GOOD TIME TO COLELCT THIS ADDITIONAL INFORMATION. IF NOT, SCHEDULE A TIME TO CALL BACK.

### RECORD AGENCY CONTACT:

NAME				
				AM/PM
	DAY	DATE	TIME	

REVIEW CONTACT INFORMATION CURRENTLY AVAILABLE. RECORD THE NEW CONTACT INFORMATION FOR EACH HOME HEALTH AIDE ON A CONTACTING FORM. RECORD CONTACT INFORMATION AND CALL RESULT ON CALL RECORD.

## PROBE FOR:

- New phone number
- New address
- Emergency contact name, address, phone number
- Next of kin
- Co-Worker
- New or other employer

IF NO ADDITIONAL CONTACT INFORMATION AVAILABLE, REQUEST NHHAS CONTACT TO GIVE THE NHHAS TOLLFREE NUMBER (888-290-1125) TO HOME HEALTH AIDE TO CALL ABOUT PARTICIPATING IN THE SURVEY. IF POSSIBLE, REQUEST NHHAS CONTACT TO GET UPDATED CONTACT INFORMATION DIRECTLY FROM HOME HEALTH AIDE.

IF AGENCY WANTS TO FAX THE INFO, FAX TO LAURA BRANDEN, FAX # 301-294-2038, Office # 800-937-8281, EXT 3552. IF EMAIL RESPONSE REQUESTED, EMAIL LAURABRANDEN@WESTAT.COM.

## Exhibit C. Letter sent to hard to reach home health aides

9990012001

Mary Jones 15 Elm Street Stuckeyville, MD 15432

Dear Mary Jones:

We have been trying to reach you so that you can take part in the National Home Health Aide Survey (NHHAS). You will receive \$30 as a token of appreciation for participating in the NHHAS.

Here are a few important things we'd like you to know.

- The telephone survey takes about 40 minutes to complete.
- The survey is confidential. Your name and agency where you work will be kept private. None of your answers will be reported in any way that identifies you personally.
- The survey is voluntary. Whether or not you decide to take part will not affect your job in any way.
- The survey is sponsored by the U.S. Department of Health and Human Services (DHHS).
- Westat, a research firm located in Rockville, MD, is doing the survey.

You were chosen as part of a small group of home health aides to help us learn more about your field of work. Every home health aide that takes part in the survey will make the information more accurate. Help us include your experiences in this important project.

Trained interviewers are available to speak with you 7 days a week during the day and evening. Call our contractor, Westat, toll free at 1-888-290-1125. There is no charge for calling this phone number. Our interviewers will be happy to answer any questions you have about this survey. We respect your right to not answer any part of the survey that makes you uncomfortable.

I hope you'll help public health leaders and home health and hospice agencies learn how to keep qualified people like you working in this important field by taking part in this survey.

We look forward to hearing from you soon.

Sincerely,

/Lauren Harris-Kojetin/

Lauren Harris-Kojetin Chief, Long-term Care Statistics Branch, Division of Health Care Statistics National Center for Health Statistics 3311 Toledo Road, Room 3431 Hyattsville, Maryland 20782

PLEASE CALL 1-888-290-1125 AND ASK FOR THE NATIONAL HOME HEALTH AIDE SURVEY. YOU WILL RECEIVE \$30 FOR TAKING PART IN THE SURVEY.

## Exhibit D: Letter sent to home health aides who refused to participate in the NHHAS

9990012001

Mary Jones 15 Elm Street Stuckeyville, MD 15432

## Dear Mary Jones:

We called you a few weeks ago about the National Home Health Aide Survey (NHHAS). You expressed some concerns about doing the survey. Here are a few important things we'd like you to know.

- The telephone survey takes about 40 minutes.
- You will receive \$30 as a token of appreciation for participating in the NHHAS in addition to the \$5 cash given to you previously.
- The survey is confidential. Your name and the agency where you work will be kept private. None of your answers will be reported in any way that identifies you personally.
- The survey is voluntary. Whether or not you decide to take part will not affect your job in any way.
- The survey is sponsored by the U.S. Department of Health and Human Services (DHHS).

You were chosen as a part of a small group of home health aides to help us learn more about your field of work. Every home health aide that takes part in the survey will make the information more accurate. Help us include your experiences in this important survey.

Trained interviewers are available to speak with you 7 days a week during the day and evening. Call our contractor, Westat, toll free at 1-888-290-1125. There is no charge for calling this phone number. Our interviewers would be happy to answer any questions you have about survey. We respect your right to not answer any part of the survey that makes you uncomfortable.

I hope you'll help public health leaders and home health and hospice agencies learn how to keep qualified people like you working in this important field by taking part in this survey.

We look forward to hearing from you soon.

Sincerely,

/Lauren Harris-Kojetin/

Lauren Harris-Kojetin Chief, Long-term Care Statistics Branch, Division of Health Care Statistics National Center for Health Statistics 3311 Toledo Road, Room 3431 Hyattsville, Maryland 20782

## Appendix IX: 2007 National Home Health Aide Survey Questionnaire (NHHAS)

## All questionnaires and forms associated with the NHHAS included the following statements

Form Approved OMB No. 0920-0298 Exp. Date 07/31/2009

**NOTICE**—Public reporting burden of this collection of information is estimated to average 40 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road, MS E-11, Atlanta, GA 30333, ATTN: PRA (0920–0298).

Assurance of Confidentiality—All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section A Cu	urrent Employment			
A1	Are you currently employed by {AGENCY}?	1 Yes 2 No	All HHAs	
A2	Were you working there or available for work on {SAMPLE DATE}? IF NEEDED: Even if you were not scheduled to work that day, we are interested in whether or not you were employed at this agency at that time.	1 Yes 2 No	If A1=2	HHAs who responded "No" to this question were ineligible for the NHHAS.
A3	{Are/Were} you working as STOP READING WHEN RESPONDENT ANSWERS. a home health aide, a home care aide, a hospice aide, a personal care attendant, a CNA, or something else?	Home health aide     Home care aide     Hospice aide     A personal care attendant     A CNA     Something else	All HHAs	
АЗа	[What {are/were} you working as?]	SPECIFY	If A3=91	
A4	In your job with {AGENCY}, {do/did} you provide assistance with ADLs, or activities of daily living? By ADLs, we mean eating, dressing, bathing, transferring and toileting.	1 Yes 2 No	All HHAs	HHAs who responded "No" to this question were ineligible for the NHHAS.
A4a	{Are/Were} you an employee of {AGENCY} or {are/were} you a contract worker?	1 Agency employee 2 Contract worker	All HHAs	HHAs who responded "Contract worker" to this question were ineligible for the NHHAS.
A4b	{Do/Did} you work at an in-patient facility at your job with {AGENCY} or {do/did} you care for patients in their homes?	One inpatient facility     Two or more inpatient facilities	All HHAs	
	IF ONLY AT AN INPATIENT FACILITY, PROBE: {Is/Was} it at one facility or more than one facility?	3 Patient homes only 4 Both home and inpatient facility		
A5	During the last month you worked for {AGENCY}, did you work with a single patient, or multiple patients?	1 Single patient 2 Multiple patients	If A4b=3	
A6	{Do/Did} you live with this patient?	1 Yes 2 No	If A5=1	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section B R	ecruitment			
B1a_m	The first section is about why you initially decided to become a home health aide.  For each item I read, please tell me whether this is a reason you chose this type of work. Was it because a. Relative or friend was receiving care b. Provided care to a friend or relative c. Like helping people d. Thought it would give you time to interact with patients or the elderly e. Prefer home care setting to facility f. Family member or friend was also a home health aide g. Wanted to work in health care h. Job was steady and secure i. Home health aide jobs available j Home health aide jobs close to home k. Work hours fit schedule I. Want to eventually become a nurse m. Is there any other reason you chose this type of work?	FOR EACH REASON (a-m): 1 Yes 2 No	Current HHAs	Questions in Section B were asked of home health aide who were <u>still</u> <u>employed</u> at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
B1n	Is there any other reason you chose this type of work? PROBE: Any others?	SPECIFY REASON Reason OS1	If B1m=1	
		Reason OS2		
B2	Which of the reasons you gave me was the most important reason for becoming a home health aide?	MOST IMPORTANT REASON  1 Relative or friend was receiving care 2 Provided care to a friend or relative 3 Like helping people 4 Would give you time to interact with patients or elderly 5 Prefer home care setting to facility 6 Family member or friend was a home health aide 7 Wanted to work in health care 8 Job was steady and secure 9 Home health aide jobs available 10 Home health aide jobs close to home 11 Work hours fit schedule 12 Want to become a nurse 13 Reason OS1 14 Reason OS2	If B1a-m=1 for 2+ reasons	
B3	How did you learn about being a home health aide as a possible job? PROBE: Anything else?	SELECT ALL THAT APPLY 1 Family member or friend was one, recommended it 2 Providing care to a relative/friend and became interested 3 Relative/friend receiving care 4 Worked in other health care setting, e.g., nursing home 5 Newspaper 6 TV 7 Radio 8 School/job training program 9 Unemployment/employment agency 91 Other (SPECIFY)	Current HHAs	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
B3a	How did you learn about being a home health aide as a possible job?	SPECIFY	If B3=91	
B4	Since you first became a home health aide, how long have you been doing this kind of work, including the time at your current job?  Do not count the time between jobs or time spent on a leave of absence.  READ CATEGORIES IF NECESSARY	1 6 months or less 2 > 6 months to less than 1 year 3 1 to < 2 years 4 2–5 years 5 6–10 years 6 11–20 years 7 > 20 years	Current HHAs	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
B5	What were you doing before you first became a home health aide?  Were you mainly  working as a certified nursing assistant, working at some other type of job, going to school, staying home with children, were you unemployed, or were you doing something else?	Working as a certified nursing assistant     Working at some other type of job     Going to school     Staying home with children     Unemployed     Something else	Current HHAs	
B5a1	Were you working in long-term care, such as a nursing home, acute care, ambulatory care, or home care?	1 Long-term care 2 Acute care 3 Ambulatory care 4 Home care	If B5=1	
B5a2	What kind of work were you doing?	SPECIFY	If B5=2	
	IF MORE THAN ONE JOB, ASK: Which one did you consider your main job?			
B5b	What were your most important activities or duties?	SPECIFY	If B5=2	
B5c	What were you doing before you became a home health aide?	SPECIFY	If B5=91	
B6	What kind of business or industry did you work for? PROBE: What did they make, sell, or do? IF SELF-EMPLOYED: What kind of business was it?	SPECIFY	If B5=2	
B7	If you had to decide whether to become a home health aide again, would you definitely become one, probably become one, probably not become one, or would you definitely not become one?	Definitely become one     Probably become one     Probably not become one     Definitely not become one	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section C Ed	ducation and Training			
C1a	Did you receive any classroom or formal training to become a home health aide?	1 Yes 2 No	Current HHAs	Questions in Section C were asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
C1b	Where did you receive your training to become a home health aide? IF RESPONDENT RECEIVED TRAINING IN ANOTHER COUNTRY, PROBE: Where did you receive training in the U.S. to become a home health aide?	1 Agency where currently working 2 Agency other than where currently working 3 Nursing facility 4 Community college, vocational, technical school program 5 Red Cross 6 High school 7 Not received in the U.S. 91 Somewhere else	If C1a=1	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
C1c	Where did you receive training in the U.S. to become a home health aide?	PLACE WHERE TRAINING WAS RECEIVED SPECIFY	If C1b= 91	
C2	How well did your home health aide training prepare you for what it is actually like to work in a home health setting?  Did you feel  well prepared, somewhat prepared, or not at all prepared?	Well prepared,     Somewhat prepared     Not at all prepared	If C1a=1	
C3	Was your home health aide training mostly spent doing or observing hands-on work with patients, mostly spent in classroom study, or evenly split between hands-on work and classroom study?	Mostly spent doing or observing hands-on work with patients     Mostly spent in classroom study     Evenly split between hands-on work and classroom study	If C1a=1	
C4	Next, I'd like you to think about all the home health aide training you have had, including training to become a home health aide and any training you received since you started working in the field.  For each area, please tell me whether the training you received was excellent, good, fair, or poor.  If you haven't received training in an area, just tell me.  a. Patient care skills such as helping with eating, bathing, dressing, and walking  b. Talking with patients  c. Discussing patient care with patients' families  d. Organizing your work tasks so that everything gets done on time  e. Dementia care  f. Working with patients that act out or are abusive  g. Preventing personal injuries at work  h. Assisting with duties that don't directly involve patients, such as meal planning, or care of the home  i. End of life issues and coping with grief  j. Abuse and neglect issues  k. Relating to patients of different cultures or ethnicities, or with different values or beliefs	FOR EACH AREA (a–k): 1 Excellent 2 Good 3 Fair 4 Poor 5 Not received	Current HHAs	
C5	Have you taken any home health continuing education classes, including in-service training, in the past two years?	1 Yes 2 No	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
C6	In general, how useful have these home health aide continuing education classes been in helping you do your job? Would you say very useful, somewhat useful, or not at all useful?	Very useful,     Somewhat useful     Not at all useful	If C5=1	
Section D Jo	ob History			
D1	About how many full-time or part-time jobs have you had during the past five years?  Please include your current job and include military duty, self-employment or your own business.	1 One 2 Two 3 Three 4 Four	All HHAs	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
	READ IF NECESSARY: Consider all private duty patients as one job.	5 5–7 6 8–10 7 More than 10		
D2	About how many full-time or part-time jobs have you had during the past two years? That would be since (MONTH, YEAR TWO YEARS PRIOR TO INTERVIEW DATE). Please include your current job.	NUMBER OF JOBS SPECIFY	If D1 ≠1	
D2 (con't)	I have some more questions about the job(s) you have had during the past 2 years.	ENTER MONTH AND YEAR STARTED JOB SPECIFY	All HHAs	
	Let's start with your job at {AGENCY} When did you start working for {AGENCY/EMPLOYER}? When did you stop working there?	ENTER MONTH AND YEAR ENDED JOB {IF STILL AT JOB, ENTER 96.} SPECIFY		
D2 (con't)	Where else have you worked since {MONTH/YEAR TWO YEARS AGO}? Again, include full-time and part-time work and any other current jobs.	JOB,COMPANY	HHAs with 2 to 5 jobs in past 2 years; asked for each job	
D3a1, D3a2	When did you start working for {AGENCY/EMPLOYER}?	ENTER MONTH AND YEAR STARTED JOB SPECIFY	For each job, 2 to 5	
D3b1, D3b2	When did you stop working there?	ENTER MONTH AND YEAR ENDED JOB {IF STILL AT JOB, ENTER 96.} SPECIFY	For each job, 2 to 5	
D4a-4a2	The next few questions are about your job at {AGENCY/ EMPLOYER [2–5]}.	FOR JOBS 2-5 SPECIFY	If D2 ≠1	
	What kind of work {are/were} you doing there?	IF RESPONDENT INDICATES HOME HEALTH AIDE, CODE 999.		
D4a4	{Are/Were} you providing assistance with ADLs (Activities of Daily Living)?	1 Yes 2 No	If D4a2=999	
D4b	What {are/were} your most important activities or duties?	FOR JOBS 2–5 SPECIFY	If D4a4 ≠1	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
D5	What kind of business or industry {is/was} this? PROBE: What {do/did} (they/you) make, sell, or do?	FOR JOBS 2–5 SPECIFY	If D2=2-5	
D5a	INTERVIEWER: DID RESPONDENT INDICATE JOB WAS AS AN EMPLOYEE OF A HOME HEALTH OR HOSPICE AGENCY?  PROBE: We are interested only in home health or hospice agency employment, not employment as a contract worker or private duty care.	1 Yes 2 No	If D2=2-5	
D5b	Just to confirm, were you working or available for work with {EMPLOYER} on {SAMPLE DATE}?	1 Yes 2 No		Asked if D5a=1 and D4a4=1 and start and stop dates for job span the date of employment with the sampled agency.
D5c-g	What is the address of {EMPLOYER}?	SPECIFY	If D5b=1	
D6	How many hours {do/did} you usually work in an average week for {AGENCY/EMPLOYER}? PROBE: Your best estimate is fine.	FOR EACH JOB ENTER NUMBER OF HOURS PER WEEK. IF MORE THAN 99 HOURS PER WEEK, ENTER 99. SPECIFY HOURS		This question is not asked if A6=1.
D6a	{Are/Were} you paid by the hour while working at {AGENCY/ EMPLOYER}?	FOR EACH JOB 1 Yes 2 No IF GET DIFFERENTIAL CODE 'NO'.		This question is not asked if A6=1.
D6a2	What {is/was} your hourly rate of pay, {just before you left that job} before taxes and deductions?	FOR EACH JOB ENTER HOURLY RATE \$	If D6a=1	
D6b1,D6b2	How much {do/did} you earn, before taxes and other deductions at {AGENCY/EMPLOYER} {just before you left that job}?  Please include tips, commissions, and regular overtime pay.	FOR EACH JOB ENTER DOLLARS \$ ENTER UNIT 1 Per day 2 Per week 3 Once every two weeks 4 Twice a month 5 Per month 6 Per year 91 Other	If D6a=2	Also asked for Job 1 if A6=1.
D6b2a	[How much {do/did} you earn, before taxes and other deductions at {AGENCY/EMPLOYER} {just before you left that job}?]	SPECIFY OTHER UNIT	If D6b2=91	
D6d	Why did you stop working at {AGENCY/EMPLOYER}? Did the job end or were you laid off, did you quit, or were you fired?	Laid off or job ended     Quit     Fired     Medical disability     Retired		Asked about Job 1 if home health aide no longer works at sampled agency or for Jobs 2–5, if no longer works there (i.e. D3b1 ≠ 96). Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
D7	I just need to confirm this information.  On {SAMPLE DATE}, you were working as a home health aide for {NUMBER OF AGENCIES CODED "YES" AT D5A+1 AND STILL WORKING ON SAMPLE DATE} agency(ies).  Is that correct?	1 Yes 2 No		Asked if A1=1 AND if one or more jobs with D4a4 and D5a=1 AND stop date is no earlier than SAMPLE DATE or still working.
D8	I'd like to ask you some more questions about your current job.  How did you find your current job at {AGENCY}?  PROBE: How did you hear about it? Anything else?	SELECT ALL THAT APPLY  1 Family member or friend was one, recommended it  2 Relative or friend received care  3 Prior home health or nursing assistant job  4 Newspaper ad, article  5 TV  6 Radio  7 Home health or hospice agency  8 School or job training program  9 Recruiter  10 Self-initiated job search  11 Unemployment or employment agency  91 Other	Current HHAs	All remaining questions in Section D (i.e. D8–D32a) apply to home health aides that were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).  Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
D8a	[How did you find your current job?]	HOW FOUND JOB SPECIFY	If D8=91	
D10	Over the past month, have you primarily been traveling around to different locations for your assignments, or working at one location?	1 Traveling around to different locations 2 Working at one location	Current HHAs	
D11	Are you reimbursed for your mileage or travel expenses or provided with an agency car?	1 Yes 2 No 91 Depends	Current HHAs	
D11a	[Are you reimbursed for your mileage or travel expenses?]	SPECIFY	If D11=91	
D12	Are you paid for your travel time a. from home to your (first patient/agency) and from your (last patient/agency) back home? b. between (your agency and) patients? c. anywhere else?	FOR EACH LOCATION (a-c): 1 Yes 2 No	Current HHAs	
D12d	Where else (are you paid for your travel time]?	SPECIFY	If D12c=1	
D13	I have a few questions specifically about health insurance. Is there health insurance coverage available to you at {AGENCY}?  PROBE: This would include insurance that is offered after a certain number of months on the job.  PROBE: Whether you use the benefit or not, is it available to you?	1 Yes 2 No	Current HHAs	
D14	Does {AGENCY} offer health insurance coverage for other family members?	1 Yes 2 No	If D13=1	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
D15	Are you currently participating in this health insurance plan?  IF PARTIALLY PARTICIPATING, FOR EXAMPLE, ONLY DENTAL OR VISION, CODE "NO."	1 Yes 2 No	If D13=1	
D15a	Who is covered under this health insurance plan? PROBE: Anyone else?	SELECT ALL THAT APPLY 1 Self 2 Spouse/partner 3 Children 91 Other (SPECIFY)	lf D15=1	Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
D15aa	[Who is covered under this health insurance plan?]	WHO ELSE COVERED SPECIFY	If D15a=91	
D16	Why aren't you participating in the health insurance plan at your job?	SELECT ALL THAT APPLY 1 Can't afford it; too expensive 2 Already covered by another plan 3 Covered by Medicare, Medicaid 4 Not worked long enough to be eligible 5 Don't need health insurance 6 Plan offered not a good value; not a good plan 7 Plan not offered to home health aides 91 Other	If D15=2	Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
D16a	[Why aren't you participating in the health insurance plan at your job?]	REASON NOT COVERED SPECIFY	If D16= 91	
D18	Are you enrolled or do you participate in any government programs that pay for medical care such as Medicare or Medicaid {or STATE SPECIFIC MEDICAID NAME}?  PROBE: Medicaid is a public-assistance program that pays for medical care.	1 Yes 2 No	If D16 ≠ 3	
D18a	Have you ever participated in any government programs that pay for medical care such as Medicare or Medicaid (or STATE SPECIFIC MEDICAID NAME)?	1 Yes 2 No	If D18=2	
D19	{Not including any health insurance you get through {AGENCY}, do you also/Do you} have health insurance coverage either through your spouse or partner's job or employer, or (other) health insurance that you have purchased on your own?	1 Yes 2 No	If D16 ≠2	
	PROBE: Include any coverage on a parent's plan.			

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
D19a	The next questions are about benefits that are available at {AGENCY}. This would include benefits that are offered after a certain number of months on the job, and includes benefits offered to you whether you use it or not.	FOR EACH BENEFIT (a-m): 1 Yes 2 No	Current HHAs	
	Does {AGENCY} offer you a. paid sick leave? b. paid holidays off? c. any other paid time off, such as vacation or personal days? d. extra pay for working on holidays? e. a retirement or pension plan?			
	PROBE: This would <u>not</u> include social security or railroad retirement benefits.  f. paid child care or child care subsidies or assistance? g. dental/vision or drug benefits? h. disability and/or life insurance? i. bonuses? j. time off for good work? k tuition reimbursement or subsidy? l. a cell phone for work? m. any other benefits?			
D19b	[Does your company offer any other benefits?]	OTHER BENEFIT SPECIFY	If D19a (m)=1	
D20	The next questions are about the hours you work on your current job at {AGENCY}.  Would you prefer to work more or fewer hours on this job, or is the amount of hours you work about right?	1 More hours 2 Fewer hours 3 About right	Current HHAs	
D21	What are the reasons you cannot work more hours on this job? PROBE: Anything else?	SELECT ALL THAT APPLY 1 Agency has enough employees, does not require more hours, no overtime 2 Child care, family issues prevent working more hours 3 Going to school 4 Another job 91 Other (SPECIFY)	If D20=1	Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
D21a	[What are the reasons you cannot work more hours on this job?]	OTHER REASON SPECIFY	If D21= 91	
D22	Does your agency pay overtime to home health aides that work more than 8 hours in a day, or over 40 hours in a week?	1 Yes 2 No	Current HHAs	
	PROBE: Does not apply to live-ins.			
D25	If you are caring for a patient who needs continuous care, are you required to stay with the patient until the next aide arrives?	1 Yes 2 No		This question is not asked if A6=1 or A4b=1 or 2.
	READ IF NECESSARY: Continuous care is provided around the clock (24/7) to the patient.	3 Not applicable-don't provide care to patients needing continuous care		
D26	About how often do you have to stay past your shift? Would you say never, rarely, sometimes, or often?	1 Never 2 Rarely 3 Sometimes 4 Often	If D25=1	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
D28	Are you paid for that time?	1 Yes 2 No	If D26=2,3, or 4	
D29	{Since you started your job at {AGENCY} have you been given a pay increase/During the past year, were you given a pay increase while working at {AGENCY}}?	1 Yes 2 No	Current HHAs	
D30	If you had to decide whether to take your current job as a home health aide again at {AGENCY}, would you definitely take it, probably take it, probably not take it, or would you definitely not take it?	Definitely take it     Probably take it     Probably not take it     Definitely not take it	Current HHAs	
D31	If you change jobs in the future, do you think your next job will be as a home health aide or doing something else?	1 Home health aide 2 CNA	Current HHAs	Interviewer assigned home health aide's response to one of the
	IF 'SOMETHING ELSE' ASK: What else would you do?	3 Medical assistant 4 LPN 5 LVN 6 RN 7 Other type of health care worker 8 Something else 9 Don't plan on having another job		pre-coded categories provided for this question.
D31a	[If you change jobs in the future, do you think your next job will be as a home health aide or doing something else?]	OTHER JOB SPECIFY	If D31=8	
D32	In addition to your job at {AGENCY}, you told me you also have {one/two/three/four} other job{s}. Why do you have more than one job currently?	SELECT ALL THAT APPLY 1 Need the money		Asked if A1=1 and still working at least one other job (D3b1=96).
	PROBE: Anything else?	2 Like the variety of jobs 3 Cannot get enough hours on any one job 4 Like to work 91 Other (SPECIFY)		Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
D32a	[Why do you have more than one job?]	OTHER REASON SPECIFY	If D32 =91	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section E Fa	amily Life			
E1	Over the past month, how have you been traveling from home to (your first patient/the agency) and from (your last patient/the agency) back to your home? Do not include transportation between patients.	Drive by yourself     Get a ride from others     Public transportation	Current HHAs	Questions in Section E are asked of home health aides who were still employed at the sampled agency at
	IF MORE THAN ONE MODE, PROBE: Which is your main form of transportation that you use most often?	4 Walk, bicycle 5 Taxi, van, or car service 6 Carpool 91 Other (SPECIFY)		the time of the National Home Health Aide Survey (NHHAS) (A1=1). This question is not asked if A6=1.
	IF RESPONDENT SAYS "CAR" or "DRIVE" PROBE: Do you drive yourself, carpool, or get a ride from someone?			Interviewer assigned home health aide's response to one of the pre-coded categories provided for this
	IF MODE HAS CHANGED OVER TIME, PROBE: What have you used most recently?			question.
E1a	[Over the past month, how have you been traveling from home to your first patient and from your last patient home? Do not include transportation between patients.]	METHOD OF TRAVEL SPECIFY	If E1=91	
E1a1	You said you worked {HOURS FROM D6 JOB 1} hours a week for {AGENCY}. Does that include any traveling time?	1 Yes 2 No	Current HHAs	This question is not asked if A6=1.
E1a2	Do the {HOURS FROM D6 JOB 1} hours include travel time a. from home to your (first patient/agency) and from your (last patient/agency) back home? b. between (your agency and) patients? c. anywhere else?	FOR EACH LOCATION (a-c): 1 Yes 2 No	If E1a1=1	
E1a3	[Does this travel time include any other time.]	OTHER TRAVEL SPECIFY	If E1a2 (c) =1	
E1b1	On the last day you worked, how much time did you spend traveling to {the (first place where you saw your patients/your first patient}/ agency)?	UNIT 1 Hours 2 Hours and minutes 3 Minutes	Current HHAs	This question is not asked if A6=1.
E1b2	[On the last day you worked how much time did you spend traveling to {the (first place where you saw your patients/your first patient}/ agency)?]	SPECIFY HOURS	If E1b1=1 or 2	
E1b3	[On the last day you worked how much time did you spend traveling to {the (first place where you saw your patients/your first patient}/ agency)?]	SPECIFY MINUTES	If E1b1=2 or 3	
E1c1	On the last day you worked, (after leaving the agency) how much total time did you spend traveling between {facilities to see patients/patient homes and in-patient facilities/patients}?	UNIT 1 Hours 2 Hours and minutes 3 Minutes		This question is not asked if A6=1 or A4b=1.
E1c2	[On the last day you worked, (after leaving the agency) how much total time did you spend traveling between {facilities to see patients/patient homes and in-patient facilities/patients}?]	SPECIFY HOURS	If E1c1=1 or 2	
E1c3	[On the last day you worked, (after leaving the agency) how much total time did you spend traveling between {facilities to see patients/patient homes and in-patient facilities/patients}?]	SPECIFY MINUTES	If E1c1=2 or 3	
E1d1	On the last day you worked, how much time did you spend traveling from {your last patient/the last place where you saw your patients/ agency} to your home?	UNIT 1 Hours 2 Hours and minutes 3 Minutes	Current HHAs	This question is not asked if A6=1.

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
E1d2	[On the last day you worked, how much time did you spend traveling from {your last patient/the last place where you saw your patients}/agency) to your home?]	SPECIFY HOURS	If E1d1=1 or 2	
E1d3	[On the last day you worked, how much time did you spend traveling from {your last patient/the last place where you saw your patients}/agency) to your home?]	SPECIFY MINUTES	If E1d1=2 or 3	
E2	During the past month, did you miss any time from work because of problems with transportation?	1 Yes 2 No	Current HHAs	This question is not asked if A6=1.
E3a	How much time from work did you miss because of transportation problems?  PROBE: During the past month.  PROBE: Your best estimate is fine.	TIME MISSED FROM WORK SPECIFY NUMBER	If E2=1	
E3b	[How much time from work did you miss because of transportation problems?]	UNIT: 1 Days 2 Hours	If E2=1	
E3d	Do you have another place to live when you are not providing care?	1 Yes 2 No	If A6=1	
E4	The next questions are about you and the people living with you in your household.  Again, I'd like to remind you that all of your answers will be kept confidential.	NUMBER OF ADULTS SPECIFY	Current HHAs	
	(IF NEEDED: EMPHASIZE TO LIVE-INS THE HOUSEHOLD IS NOT THE PATIENT'S.)			
	How many people in your household are adults, age 18 or older, not including yourself? Please count people who normally stay with you for at least 2 nights per week.			
E5	{Are any of the people/Is the person} in your household that {are/is} over age 18 currently working full-time or part-time?	1 Yes 2 No	If E4≠0	
E6	And how many people in your household are children age 17 or younger?	NUMBER OF CHILDREN SPECIFY	Current HHAs	
E6a	Of those {NUMBER OF CHILDREN FROM E6}, how many are your own children or children you are responsible for?	NUMBER OF CHILDREN SPECIFY	If E6= 2–19	
E6b	Of those {NUMBER OF CHILDREN FROM E6a} children, how many of them require child care while you are working at {AGENCY}?	NUMBER OF CHILDREN SPECIFY	If E6a=2-19	
E6c	Is that your own child or a child you are responsible for?	Yes, respondent's own child or responsible for child     No, not respondent's child or not responsible for child	If E6=1	
E6d	Does this child require child care while you are working at {AGENCY}?	1 Yes 2 No	If E6a=1 or E6c =1	
E7	During the past month, did you miss any time from work because of problems with child care arrangements?	1 Yes 2 No	If E6d=1 or E6b=2-19	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
E8a	How much time from work did you miss because of problems with child care?	TIME MISSED WORK SPECIFY NUMBER	If E7=1	
	PROBE: During the past month. PROBE: Your best estimate is fine.			
E8b	[How much time from work did you miss because of problems with child care?]	UNIT 1 Days	If E7=1	
		2 Hours		
E9	Not counting care you get paid for, are you currently taking care of a family member, relative, or friend who has a disability or health problem?	1 Yes 2 No	Current HHAs	
E10	During the past month, did you miss any time from work because of having to take care of a family member, relative, or friend?	1 Yes 2 No	If E9=1	
E11a	How much time did you miss?	TIME MISSED WORK	If E10=1	
	PROBE: During the past month. PROBE: Your best estimate is fine.	SPECIFY NUMBER	II 210-1	
E11b	[How much time did you miss?]	UNIT 1 Days	If E10=1	
		1 Days 2 Hours		
E12	Now I would like to ask you about sources of income and support you may have received.  Have you ever received cash welfare for families and children, which is also known as TANF or Temporary Assistance for Needy Families? TANF used to be called AFDC, or Aid to Families with Dependent Children. Again, everything you tell me is confidential.	1 Yes 2 No	Current HHAs	
	PROBE: Please include electronically transferred benefits.			
	INTERVIEWER: TANF GRANT MAY BE SHARED WITH WORKER'S SPOUSE/BOYFRIEND/GIRLFRIEND.			
E13	Are you <u>currently</u> receiving cash welfare or TANF?	1 Yes 2 No	If E12=1	
E14	Have you ever received Food Vouchers or food items from WIC which is the Women, Infants, and Children Program?	1 Yes 2 No	Current HHAs	
E14b	Are you <u>currently</u> receiving Food Vouchers or food items from WIC?	1 Yes 2 No	If E14=1	
≣15a	Have you <u>ever</u> received benefits from the program called SSI or Supplemental Security Income?	1 Yes 2 No	Current HHAs	
	PROBE: Please include electronically transferred benefits.			
E15b	Are you <u>currently</u> receiving SSI or Supplemental Security Income?	1 Yes 2 No	If E15a=1	
E16a	Have you ever received food stamp benefits?	1 Yes	Current HHAs	
	PROBE: Please include electronically transferred benefits.	2 No		
E16b	Are you <u>currently</u> receiving food stamps?	1 Yes 2 No	If E16a=1	
E17	Do you currently live in public housing, receive a rent subsidy such as Section Eight, or pay a lower rent because the government pays part of the cost?	1 Yes 2 No	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section F Ma	anagement & Supervision			
F1PRE, F1	The next questions are about your supervisor at {AGENCY}. This is the person to whom you report about your day-to-day activities. Please remember this survey is confidential.  I'm going to read you some statements about your supervisor. Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each statement.  a. (My supervisor) provides clear instructions when assigning work b. (My supervisor) is supportive of progress in my career, such as further training  c. (My supervisor) listens to me when I am worried about a patient's care  d. (My supervisor) tells me when I am doing a good job	FOR EACH STATEMENT (a–d): 1 Strongly agree 2 Somewhat agree 3 Somewhat disagree 4 Strongly disagree	Current HHAs	Questions in Section F are asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
Section G Pa	atient Relations			
G1	The next questions are about the time you spend with and how you relate to the patients on your current job at {AGENCY}.		Current HHAs	Questions in Section G are asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1). This statement is not read if A6=1.
G1a	First, I'll ask about your patient caseload and schedule. How many visits did you make to your patients during the week of Sunday, {WEEKSTART}, through {today/Saturday},{WEEKEND}?	1 Knows total visits 2 Does not know total visits	Current HHAs	This question is not asked if A6=1. WEEKSTART and WEEKEND were date filled, beginning with Sunday's date, the full week preceding the interview.
G1a1	KNOWS NUMBER OF VISITS.	NUMBER OF VISITS SPECIFY	If G1a=1	
G1a2	We can talk about your patient workload by patient or by day. Which is easier for you?	1 Per patient 2 Per day	If G1a=2	
G1b	Still thinking about that week, [Sunday, {WEEKSTART through {today/Saturday} {WEEKEND}], how many patients did you see once that week? twice that week? three times that week? four times that week? five times that week? six times that week? six times that week? seven times that week?	FOR EACH TIME NUMBER OF PATIENTS	If G1a2 =1	
G1c	How many visits did you make on Sunday Monday Tuesday Wednesday Thursday Friday Saturday	FOR EACH DAY NUMBER OF VISITS	If G1a2 =2	
G1d	During those visits, how many patients did you care for?	NUMBER OF PATIENTS SPECIFY	If G1a=1 or G1a2=2	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
G2	Are you assigned to care for the same patients on most weeks you work, or do the patients you are assigned to change each week you work?  PROBE: Other than new patients or discharges due to deaths or	1 Same patients 2 Patients change 3 Combination	Current HHAs	This question is not asked if A6=1. Interviewer assigned home health aide's response to one of the pre-coded categories provided for this
	insurance changes.			question.
G3	{First/Now}, I'd like to ask you about things you do directly with patients such as helping them dress, bathe, get in and out of bed, or use the toilet.  During the last week worked, how much time do you have to give individual attention to patients who need this type of assistance? Would you say you have  more than enough time, enough time, or not enough time?	More than enough time     Enough time     Not enough time	Current HHAs	
G4	Again, during the last week worked, how much time do you have to complete other duties that don't directly involve the patients? This would be things like meal or food preparation, laundry, or record keeping  Would you say you have  more than enough time, enough time, or not enough time?	More than enough time     Enough time     Not enough time     Doesn't do these types of tasks	Current HHAs	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
G5	To what degree do you feel patients respect you, as part of their health care team?  Would you say a great deal, somewhat, or not at all?	1 A great deal 2 Somewhat 3 Not at all	Current HHAs	
G6	In general, how often do the patients you care for let you know when you are doing a good job? Would you say always or most of the time, sometimes, or that never happens?	1 Always or most times 2 Sometimes 3 That never happens	Current HHAs	
G7	In general, are you encouraged by {AGENCY} to discuss the care and well being of patients with their families?	1 Yes 2 No	Current HHAs	
	IF RESPONDENT INDICATES AT LEAST ONE FAMILY MEMBER, CODE "YES".			
G9	To what degree do you feel your supervisor respects you, as part of the health care team?  Would you say a great deal, somewhat, or not at all?	1 A great deal 2 Somewhat 3 Not at all	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section H Jo	ob Satisfaction			
H1	Now, I'd like to ask you a few questions about how satisfied you are with your current job as a home health aide at {AGENCY}. Again, your answers are confidential.  Overall, how satisfied are you with your job?  Are you	Extremely satisfied     Somewhat satisfied     Somewhat dissatisfied     Extremely dissatisfied	Current HHAs	Questions in Section H are asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
	extremely satisfied, somewhat satisfied, somewhat dissatisfied, or extremely dissatisfied?			
H2	I'm going to read you a list of job characteristics and I would like you to tell me if it is a reason why you continue to work in your current job.	FOR EACH REASON (a-k): 1 Yes 2 No	Current HHAs	
	Do you continue to work in your current job because a. you enjoy caring for others? b. flexible schedule or hours? c. you are able to work independently? d. the salary or pay is good? e. the benefits? f. you enjoy working with the other members of the care team? g. you enjoy working with your supervisor? h. the opportunity for overtime? i. you feel good about the work you do? j. career advancement? k. any other reasons?			
H2I	For what reasons do you continue to work in your current job?	OTHER REASON SPECIFY	If H2 (k)=1	
H3	Of the reasons you just mentioned, what is the most important reason why you continue to work at your job?	MOST IMPORTANT REASON 1 Enjoy caring for others		Asked if more than one item at H2a-k= 1.
	READ LIST OF RESPONSES IF NECESSARY	2 Flexible schedule or hours 3 Able to work independently 4 The salary or pay is good 5 The benefits 6 Enjoy working with the other members of the care team 7 Enjoy working with your supervisor 8 The opportunity for overtime 9 Feel good about the work you do 10 Career advancement 11 Other reason		
H4	Are you extremely satisfied, somewhat satisfied, somewhat dissatisfied, or extremely dissatisfied with the following aspects of your current job?  a. doing challenging work? b. the benefits? c. the salary or wages? d. learning new skills?	FOR EACH JOB ASPECT (a-d): 1 Extremely satisfied 2 Somewhat satisfied 3 Somewhat dissatisfied 4 Extremely dissatisfied	Current HHAs	
H5	There are usually things that people like and dislike about their jobs. Please tell me the types of problems or incidents that make your job with {AGENCY} difficult or cause you to dislike your job. PROBE: Anything else?	SELECT ALL THAT APPLY 1 HHA communication problems with agency staff 2 Misinformation about patient's health 3 Patient communication problems with agency	Current HHAs	Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
H5 (con't)		4 Travel problems (distance, bad directions) 5 Problem patients 6 Clients families 7 Coworkers 8 Supervisor 9 Pay 10 Benefits 11 Workload; too little, too much 12 Nothing, no complaints 91 Other (SPECIFY)		
Н5а	[There are usually things that people like and dislike about their jobs. Please tell me the types of problems or incidents at work that make it difficult for you to work there or cause you to dislike your job.]	TYPE OF PROBLEM SPECIFY		
H6	If a friend or family member needed care and asked your advice about receiving home health care from {AGENCY}, would you definitely recommend it, probably recommend it, probably not recommend it, or would you definitely not recommend it?	Definitely recommend     Probably recommend     Probably not recommend     Definitely not recommend	Current HHAs	
Н6а	If a friend or family member asked your advice about taking a home health aide job at {AGENCY}, would you definitely recommend it, probably recommend it, probably not recommend it, or would you definitely not recommend it?	Definitely recommend     Probably recommend     Probably not recommend     Definitely not recommend	Current HHAs	
H7	Are you currently looking for a different job either as a home health aide or doing something else? Please remember, this survey is confidential.	1 Yes 2 No 3 No, but thinking about it	Current HHAs	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
H8	How likely is it that you will leave this job at {AGENCY} in the next year? Would you say very likely, somewhat likely, or not at all likely?	1 Very likely 2 Somewhat likely 3 Not at all likely	Current HHAs	
Н9	What are the reasons you think you would leave? PROBE: Any other reasons?	SELECT ALL THAT APPLY 1 Different job or opportunity 2 Schedule 3 Retirement 4 Travel problems 5 Pay 6 Moving to a different area 7 Workload; too little, too much 8 Lack of respect or appreciation 9 Supervisor 10 Job too physically demanding 11 Nothing, no complaints 91 Other (SPECIFY)	H8=1,2	Interviewer assigned home health aide's response to one or more of the pre-coded categories provided for this question.
Н9а	[What are the reasons why you think you would leave?]	OTHER REASON SPECIFY	lf H9=91	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section I Job	Rating			
11	I'd like you to continue thinking about {AGENCY}. I'm going to read you a few statements and for each one, tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.  {The first statement is} a. I am respected by my agency for my work b. I am involved in challenging work c. I am trusted to make patient care decisions d. I am confident in my ability to do my job	FOR EACH STATEMENT (a-d): 1 Strongly agree 2 Somewhat agree 3 Somewhat disagree 4. Strongly disagree	Current HHAs	Questions in Section I are asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
12	Now, I'd like to ask you a few questions about how you think people view the work you do as a home health aide.  How much do you think society values or appreciates your work as a home health aide?  Would you say very much, somewhat, or not at all?	1 Very much 2 Somewhat 3 Not at all	Current HHAs	
13	How much do you think your supervisor values or appreciates the work you do as a home health aide? Would you say very much, somewhat, or not at all?	1 Very much 2 Somewhat 3 Not at all	Current HHAs	
14	How much do you think the organization at {AGENCY} values or appreciates the work you do as a home health aide? Would you say very much, somewhat, or not at all?	1 Very much 2 Somewhat 3 Not at all	Current HHAs	
15	How important do you think your work is? Would you say very important, somewhat important, or not important at all?	Very important     Somewhat important     Not important at all	Current HHAs	
18	On your current job, have you ever been discriminated against because of your race or ethnic origin? This could be from your employer, client or client's family.	1 Yes 2 No	Current HHAs	
	Please remember all your answers are confidential.			
110	Have you experienced discrimination from (ITEMS a-e) at your current job? a. patients b. patient's family members or friends c. agency management d. members of the care team e. any other sources (SPECIFY)	FOR EACH SOURCE (a-e): 1 Yes 2 No	If I8=1	
I10f	[Who did you experience discrimination from?]	OTHER SOURCE SPECIFY	If I10e=1	

Page 86 
Series 1, No. 49

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section J W	ork-related Injuries			
J1	The next questions are about any times you may have been hurt or injured while working at your job as a home health aide. Include only work-related injuries that you reported to the agency, that required medical attention, or that caused you to miss work.		Current HHAs	Questions in Section J are asked of home health aides who were still employed at the sampled agency at the time of the National Home Health Aide Survey (NHHAS) (A1=1).
J2	[Since you started your job with {AGENCY}, have you had any/During the last 12 months that you have been working for {AGENCY}, have you had any] a. back injuries including pulled back muscles? b. other strains or pulled muscles? c. human bites? d. animal bites? e. scratches, open wounds, or cuts? f. black eyes or other types of bruising? g. burns? h. other injuries from your job?	FOR EACH INJURY (a-h): 1 Yes 2 No	Current HHAs	
J2h1	[Since you started your job with {AGENCY}, have you had any/ During the past 12 months working for {AGENCY}, did you have any other injuries from your job?]	OTHER INJURY SPECIFY	If J2(h)=1	
J3	{Since you started your job/During the past 12 months}, how many different times were you hurt or injured while working for {AGENCY}?	NUMBER OF TIMES SPECIFY	If J2=1	
	READ IF NECESSARY: Include only work-related injuries that you reported to the agency, that required medical attention or that caused you to miss work.			
J4	How did these injuries happen? PROBE: Anything else?	SELECT ALL THAT APPLY 1 Lifting, repositioning, bathing or handling patients 2 Slips, trips, falls 3 Aggression, violence, abuse by patients 4 Bumping into, hitting, or using equipment 5 Performing household chores 91 Other (SPECIFY)	If J2=1	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
J4a	[How did these injuries happen?]	HOW INJURY HAPPENED SPECIFY	If J4=91	
J5	{Since you started your job/During the past 12 months}, in total, how many days were you unable to work because of the injuries?  PROBE FOR PARTIAL DAYS: Count a missed day if you were out for one half day or more.	NUMBER OF DAYS SPECIFY	If J2=1	
J7	Since you started your job at {AGENCY}, have you ever used lifting devices when moving or lifting patients who cannot move around on their own?	1 Yes 2 No	Current HHAs	
J8	How often are lifts present in patients' homes when they are needed? Would you say always, sometimes, or never?	1 Always 2 Sometimes 3 Never	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
J9	Aside from lifts, are there any other devices or equipment that you need to make your job safer that is typically missing in patients' homes?	1 Yes 2 No	Current HHAs	
J10	What types of equipment or devices?	SELECT ALL THAT APPLY  1 Bathing aids (shower chairs, adapted shower stalls, other bathing systems)  2 Bedrails  3 Belts-back  4 Belts-walking, gait belts (with handles)  5 Electric beds  6 Lifts, lifting aides or equipment  7 Sheets (slip or roller)  8 Sliding boards (to move patient from bed to chair)  9 Toilet seat risers  10 Trapeze bars  11 Walker, canes  12 Wheelchairs  91 Other (SPECIFY)	If J9=1	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
J10a	[What types of equipment or devices?]	OTHER EQUIPMENT SPECIFY	If J10= 91	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section K Do	emographics			
K1 PRE	The remaining questions are about your background. Again, everything you tell me is confidential.		All HHAs	
K1aa-K1ac	What is your date of birth?	SPECIFY MONTH  SPECIFY DAY  SPECIFY YEAR	All HHAs	
K1a	Approximately, how old are you?	SPECIFY AGE		Asked if K1aa-ac (month, day, or year of birth) is unknown.
K1b	INTERVIEWER, CODE SEX, OR ASK IF NOT KNOWN Are you female or male?	1 Female 2 Male	All HHAs	
K2	Are you Hispanic or {Latina/Latino}?	1 Yes 2 No	All HHAs	
КЗ	I'm going to read you a list of five race categories. Please choose one or more races that you consider yourself to be. Do you consider yourself White, African American or Black, American Indian or Alaska Native, Asian, or Native Hawaiian or Pacific Islander?	SELECT ALL THAT APPLY  1 White  2 African American, Black  3 American Indian, Alaska Native  4 Asian  5 Native Hawaiian, Pacific Islander  91 Other	All HHAs	
КЗа	[I'm going to read you a list of five race categories. Please choose one or more races that you consider yourself to be.]	OTHER RACE SPECIFY	lf K3=91	
K4	Are you currently married, living with a partner in a marriage-like relationship, separated, divorced, widowed, or have you never been married?	Married     Living with partner     Separated     Divorced     Widowed     Never married	All HHAs	
K5	What is the highest grade or year you completed in school?  IF EDUCATED IN ANOTHER COUNTRY: And what is the highest equivalent year of school you completed?	0 None 1 1st grade 2 2nd grade 3 3rd grade 4 4th grade 5 5th grade 6 6th grade 7 7th grade 8 8th grade 9 9th grade 10 10th grade 11 11th grade 12 12th grade 13 1 year college, trade school 14 2 years college, trade school 15 3 years college, trade school 16 College graduate 17 Post college	All HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
K6	Did you {get your high school diploma or did you} {receive your G.E.D.}? PROBE FOR WHICH ONE.	1 High school diploma 2 GED 3 Neither, no	If K5= <13	If K5=1–11, 'receive your G.E.D.' is displayed. If K5=12, 'get your high school diploma or did you receive your G.E.D.' is displayed.
K6a	Are you a certified nursing assistant or CNA?	1 Yes 2 No	If A3 ≠5	
K7	Which of the following categories best describes your total household income last year, before taxes? Please include any income you and other family members may have received from jobs, public assistance, interest, or any other sources. Please stop me when I get to the right category  PROBE: Your best estimate is fine.  Less than \$10,000, \$10,000 to under \$20,000, \$20,000 to under \$30,000, \$30,000 to under \$40,000, \$40,000 to under \$50,000, \$50,000 to under \$60,000, \$60,000 to under \$70,000, \$70,000 to under \$80,000, or \$80,000 or more?	1 Less than \$10,000 2 \$10,000 to under \$20,000 3 \$20,000 to under \$30,000 4 \$30,000 to under \$40,000 5 \$40,000 to under \$50,000 6 \$50,000 to under \$60,000 7 \$60,000 to under \$70,000 8 \$70,000 to under \$80,000 9 \$80,000 or more	All HHAs	
К7а	During the past 12 months (that is, since {12 MONTHS BEFORE INTERVIEW DATE}), did you receive a flu shot?	1 Yes 2 No	All HHAs	
K7b	In general would you say that your health is excellent, very good, good, fair, or poor?	1 Excellent 2 Very good 3 Good 4 Fair 5 Poor	All HHAs	
K8	Are you a citizen of the United States?  PROBE: Please remember this survey is confidential.	1 Yes 2 No	All HHAs	
K8a	Were you born a citizen of the United States, or did you become a citizen of the US through naturalization?	1 Born 2 Naturalized	If K8=1	
K9, K9aa	Where are you currently a citizen? What country?	SPECIFY COUNTRY	If K8=2	
K9a	Were you trained as a home health aide or as some other type of health professional outside of the United States?  IF YES, PROBE: What were you trained as?	1 Yes, trained as MD (medical doctor) 2 Yes, trained as RN/LPN (nurse) 3 Yes, trained as paramedic 4 Yes, trained as home health aide 5 Yes, trained as nurse aide or certified nursing assistant 6 No 91 Yes, Other	If K8=2 or K8a=2	Interviewer assigned home health aide's response(s) to one of the pre-coded categories provided for this question.
K9a1	[Were you trained as a home health aide or as some other type of health professional outside of the United States?]	SPECIFY JOB TITLE	If K9a=91	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
K9b	What languages do you speak? PROBE: Any others?	SELECT ALL THAT APPLY 1 American sign language 2 Cantonese/Mandarin 3 Creole 4 Czech 5 English 6 French 7 German 8 Hindi 9 Polish 10 Portuguese 11 Russian 12 Spanish 13 Swahili 14 Tagalog 91 Other (SPECIFY)	Current HHAs	All remaining questions in Section K apply to home health aides that were still employed at the sampled agency at the time of the National Home Health Aide Survey (A1=1).  Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
K9b1	[What languages do you speak?]	SPECIFY LANGUAGE	If K9b =91	
K9c	What do you consider to be your primary language?	1 American sign language 2 Cantonese/Mandarin 3 Creole 4 Czech 5 English 6 French 7 German 8 Hindi 9 Polish 10 Portuguese 11 Russian 12 Spanish 13 Swahili 14 Tagalog 91 Other (SPECIFY)		Asked if more than one language reported in K9b. Interviewer assigned home health aide's response(s) to one of the pre-coded categories provided for this question.
K9cc	[What do you consider to be your primary language?]	SPECIFY LANGUAGE	If K9c =91	
K9d	How often do you use {K9b LANGUAGE(S) OTHER THAN ENGLISH} on your home health aide job at {AGENCY}? Would you say always, sometimes, or never?	1 Always 2 Sometimes 3 Never		Asked if more than one language reported in K9b and K9c is 1–91.
K10	How often do you have difficulty communicating with patients because they speak a different language than you? Would you say always, sometimes, or never?	1 Always 2 Sometimes 3 Never	Current HHAs	
K10a	How often do you have difficulty communicating with patients because they have a different background, different values, or beliefs than you? Would you say always, sometimes, or never?	1 Always 2 Sometimes 3 Never	Current HHAs	
K10b	How often do you have difficulty communicating with other members of the health care team because they have a different background, different values, or beliefs than you? Would you say always, sometimes, or never?	1 Always 2 Sometimes 3 Never	Current HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
Section L A	gency Leavers			
L1 PRE	Now, I have some questions about being a home health aide.		Leaver HHAs	Section L questions were asked of home health aides who were no longer working at the sampled Agency at the time of the National Home Health Aide Survey (A2=1).
L1	First, are you still working as a home health aide?	1 Yes 2 No	Leaver HHAs	
L1a	How likely is it that you will work as a home health aide again some day? Would you say very likely, somewhat likely, somewhat unlikely, or extremely unlikely?	Very likely     Somewhat likely     Somewhat unlikely     Extremely unlikely	If L1=2	
L1b	Are you working in home care? long-term care, such as a nursing home? hospice care? acute care? ambulatory care?	SELECT ALL THAT APPLY.  1 Home care 2 Long-term care 3 Hospice care 4 Acute care 5 Ambulatory care	lf L1=1	
L2	Since you first became a home health aide, how long have you been doing this kind of work? Do not count time between jobs or time spent on a leave of absence.  READ CATEGORIES IF NECESSARY. 6 MONTHS OR LESS MORE THAN 6 MONTHS BUT LESS THAN ONE YEAR 1 YEAR BUT LESS THAN 2 YEARS 2-5 YEARS 6-10 YEARS 11-20 YEARS MORE THAN 20 YEARS	1 6 months or less 2 More than 6 months but less than one year 3 One year but less than 2 years 4 2–5 Years 5 6–10 Years 6 11–20 Years 7 More than 20 Years	Leaver HHAs	Interviewer assigned home health aide's response to one of the pre-coded categories provided for this question.
L3	If you had to decide whether to become a home health aide again, would you definitely become one, probably become one, probably not become one, or would you definitely not become one?	Definitely become one     Probably become one     Probably not become one     Definitely not become one	Leaver HHAs	
L4	If a friend or family member asked your advice, in general, about becoming a home health aide, would you definitely recommend it, probably recommend it, probably not recommend it, or would you definitely not recommend it?	Definitely recommend it     Probably recommend it     Probably not recommend it     Definitely not recommend it	Leaver HHAs	
L7 PRE	Next, I'd like to ask you some questions about your home health aide job at {AGENCY}.		Leaver HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
L7	For what reasons did you {quit/get fired at/leave} {AGENCY}? PROBE: Any other reasons?	SELECT ALL THAT APPLY 1 Problems with supervisor 2 Problems with other members of the care team 3 Low pay 4 Poor benefits (health insurance, vacation days, etc.) 5 Problems with agency working conditions, policies or procedures 6 Discrimination 7 Sexual harassment 8 Problems dealing with difficult/abusive patients 9 Problems dealing with dying patients 10 Problems dealing with dying patients 11 Too high a caseload 12 Too many responsibilities per patient 13 Job too physically demanding 14 Too few hours 15 Travel distances to and from assignments too great, transportation issues 16 Child care issues 17 Care for an elderly or disabled family member 18 Missed too many days of work 19 No opportunity for advancement 20 Health or personal issues 21 Injured on the job 22 You, your family moved 23 Found a new, better job 24 To go back to school 91 Other (SPECIFY)	If D6D (Job 1) =2,3	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
L7a	[For what reasons did you {quit/get fired at/leave} {AGENCY}?]	OTHER REASON SPECIFY	If L7=91	
L8a	What would have made you stay working as a home health aide at {AGENCY}? PROBE: Any other kinds of benefits or incentives?	SELECT ALL THAT APPLY  1 Different supervisor, management 2 Different or better co-workers 3 Better working conditions, lighter workload 4 Better pay, benefits 5 Better hours (more, less, regular) 6 Help with child, elder care 7 Transportation assistance, subsidy 8 Opportunities for advancement 9 More staff appreciation activities 10 More training, education offered 11 Different assignment 12 Nothing would make me stay 91 Other (SPECIFY)	If D6d for Job 1 ≠3	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
L8a1	[What would have made you stay working as a home health aide at {AGENCY}?}	IF DONE THIS, WOULD STAY SPECIFY	If L8a =91	
L9	On this job, were you ever discriminated against because of your race or ethnic origin? Please remember that all your answers are confidential.	1 Yes 2 No	Leaver HHAs	

Question number	Question item	Code categories	Home Health Aides asked and skip patterns	Notes
L10	How were you discriminated against? What form did the discrimination take?	SELECT ALL THAT APPLY  1 Hostile or racist treatment or ridicule  2 Threats  3 Physical assault  4 Assigned more difficult patients  5 Assigned less difficult patients  6 Assigned more hours  7 Assigned fewer hours  8 Unequal pay  9 Fewer opportunities for promotion  10 Assigned cases hard to reach because of transportation limitations  91 Other (SPECIFY)	If L9=1	Interviewer assigned home health aide's response(s) to one or more of the pre-coded categories provided for this question.
L10a	[How were you discriminated against?]	FORM OF DISCRIMINATION SPECIFY	If L10 =91	
L11	Did you experience discrimination from (ITEMS a-e) at your job at {AGENCY}? a. patients b. patient's family members or friends c. agency management d. members of the care team e. any other sources (SPECIFY)	FOR EACH SOURCE (a-e): 1 Yes 2 No	If L9=1	
L11f	[Who did you experience discrimination from?]	SOURCE OF DISCRIMINATION SPECIFY	If L11(e)=1	
L12	To what degree did this discrimination contribute to why you left this job? Would you say it was the main reason, it was one of a number of different reasons, or it was not a reason at all?	It was the main reason     It was one of a number of different reasons     It was not a reason at all	If L9=1	
L3	Finally, if a friend or family member asked your advice about taking a job as a home health aide at {AGENCY}, would you definitely recommend it, probably recommend it, probably not recommend it, or definitely not recommend it?	Definitely recommend it     Probably recommend it     Probably not recommend it     Definitely not recommend it?	Leaver HHAs	

# Vital and Health Statistics Series Descriptions

#### **ACTIVE SERIES**

- Series 1. Programs and Collection Procedures—This type of report describes the data collection programs of the National Center for Health Statistics. Series 1 includes descriptions of the methods used to collect and process the data, definitions, and other material necessary for understanding the data.
- Series 2. Data Evaluation and Methods Research—This type of report concerns statistical methods and includes analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. Also included are experimental tests of new survey methods, comparisons of U.S. methodologies with those of other countries, and as of 2009, studies of cognition and survey measurement, and final reports of major committees concerning vital and health statistics measurement and methods.
- Series 3. Analytical and Epidemiological Studies—This type of report presents analytical or interpretive studies based on vital and health statistics. As of 2009, Series 3 also includes studies based on surveys that are not part of continuing data systems of the National Center for Health Statistics and international vital and health statistics reports.
- Series 10. Data From the National Health Interview Survey—This type of report contains statistics on illness; unintentional injuries; disability; use of hospital, medical, and other health services; and a wide range of special current health topics covering many aspects of health behaviors, health status, and health care utilization. Series 10 is based on data collected in this continuing national household interview survey.
- Series 11. Data From the National Health Examination Survey, the National Health and Nutrition Examination Survey—
  In this type of report, data from direct examination, testing, and measurement on representative samples of the civilian noninstitutionalized population provide the basis for (1) medically defined total prevalence of specific diseases or conditions in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics, and (2) analyses of trends and relationships among various measurements and between survey periods.
- Series 13. Data From the National Health Care Survey—This type of report contains statistics on health resources and the public's use of health care resources including ambulatory, hospital, and long-term care services based on data collected directly from health care providers and provider records.
- Series 20. Data on Mortality—This type of report contains statistics on mortality that are not included in regular, annual, or monthly reports. Special analyses by cause of death, age, other demographic variables, and geographic and trend analyses are included.
- Series 21. **Data on Natality, Marriage, and Divorce**—This type of report contains statistics on natality, marriage, and divorce that are not included in regular, annual, or monthly reports. Special analyses by health and demographic variables and geographic and trend analyses are included.
- Series 23. Data From the National Survey of Family Growth—These reports contain statistics on factors that affect birth rates, including contraception and infertility; factors affecting the formation and dissolution of families, including cohabitation, marriage, divorce, and remarriage; and behavior related to the risk of HIV and other sexually transmitted diseases. These statistics are based on national surveys of women and men of childbearing age.

#### **DISCONTINUED SERIES**

- Series 4. **Documents and Committee Reports**—These are final reports of major committees concerned with vital and health statistics and documents. The last Series 4 report was published in 2002. As of 2009, this type of report is included in Series 2 or another appropriate series, depending on the report topic
- Series 5. International Vital and Health Statistics Reports—This type of report compares U.S. vital and health statistics with those of other countries or presents other international data of relevance to the health statistics system of the United States. The last Series 5 report was published in 2003. As of 2009, this type of report is included in Series 3 or another series, depending on the report topic.
- Series 6. Cognition and Survey Measurement—This type of report uses methods of cognitive science to design, evaluate, and test survey instruments. The last Series 6 report was published in 1999. As of 2009, this type of report is included in Series 2.
- Series 12. **Data From the Institutionalized Population Surveys** The last Series 12 report was published in 1974. Reports from these surveys are included in Series 13.
- Series 14. **Data on Health Resources: Manpower and Facilities**—
  The last Series 14 report was published in 1989. Reports on health resources are included in Series 13.
- Series 15. Data From Special Surveys— This type of report contains statistics on health and health-related topics collected in special surveys that are not part of the continuing data systems of the National Center for Health Statistics. The last Series 15 report was published in 2002. As of 2009, reports based on these surveys are included in Series 3.
- Series 16. Compilations of Advance Data From Vital and Health
  Statistics— The last Series 16 report was published in 1996.
  All reports are available online, and so compilations of
  Advance Data reports are no longer needed.
- Series 22. **Data From the National Mortality and Natality Surveys**—
  The last Series 22 report was published in 1973. Reports from these sample surveys, based on vital records, are published in Series 20 or 21.
- Series 24. Compilations of Data on Natality, Mortality, Marriage, and Divorce—The last Series 24 report was published in 1996.
  All reports are available online, and so compilations of reports are no longer needed.

For answers to questions about this report or for a list of reports published in these series, contact:

Information Dissemination Staff National Center for Health Statistics Centers for Disease Control and Prevention 3311 Toledo Road, Room 5412 Hyattsville, MD 20782

1-800-232-4636 E-mail: cdcinfo@cdc.gov Internet: http://www.cdc.gov/nchs

## U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention National Center for Health Statistics 3311 Toledo Road Hyattsville, Maryland 20782

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300 MEDIA MAIL
POSTAGE & FEES PAID
CDC/NCHS
PERMIT NO. G-284