IV. HOME HEALTH CARE CAHPS SURVEY SAMPLING PROCEDURES

Overview

This chapter describes the procedures survey vendors should use to request a file of patients from the home health agency (HHA), identify patients eligible for the survey, construct a sampling frame, and select a patient sample each month. The sampling procedures described in this chapter were developed to ensure standardized administration of the Home Health Care CAHPS (HHCAHPS) Survey by all survey vendors and to ensure comparability of the data and survey results that are publicly reported. These sections are organized in the general chronological order in which the corresponding tasks will take place.

Step 1: Obtain a monthly patient information file each month from each client HHA.

Step 2: Examine the HHA file for completeness and work with the HHA to obtain missing data elements. Process and check the file for duplicate information.

Step 3: Identify eligible patients and construct a sample frame.

Step 4: Determine sample size and select the sample for each HHA.

Step 5: Verify or update patient contact information.

Step 6: Assign a unique sample identification number to each selected sample member.

Step 7: Finalize the monthly sample file and initiate data collection activities.

Documenting Sampling Processes for Vendor Oversight

Vendors should document all of their sampling processes for survey oversight purposes, since the HHCAHPS Coordination Team will check each vendor's sampling procedures and documentation during oversight telephone calls or visits, including documentation of all sampling quality control checks conducted by vendor staff.

Step 1: Obtain a Monthly Patient Information File From Each Home Health Agency Client

Monthly Patient Information Files

HHAs administering the HHCAHPS Survey must submit a monthly patient information file to their contracted HHCAHPS Survey vendor each month. Survey vendors must work with each client HHA to (1) obtain all required data elements for every eligible patient served during the sample month and (2) ensure that their client HHA provides these data by an agreed-upon date each month. Survey vendors should request from each of their client HHAs a file, referred to as a monthly patient information file, containing specific information about all patients served at any time during the sample month, including those who were discharged during the sample month. The monthly HHA files must contain information that is at both the *agency* level and the *patient* level. And, this file should include patients served by all branches in all states falling under the same HHA CMS Certification Number (CCN).

Patient Eligibility Requirements

HHAs should **include** in the files submitted to survey vendors all patients who meet the HHCAHPS Survey eligibility criteria: (asterisked criteria are explained more fully in paragraphs that follow):

- Patients who are at least 18 years of age by the end of the sample month;
- Patients whose home care was paid for by Medicare or Medicaid. This includes patients who are enrolled in Medicare fee-for-service plans and those enrolled in Medicare Advantage (MA) plans or Medicaid managed care health plans.
- Patients who had at least one home health visit for skilled nursing care, physical therapy, occupational therapy, or speech therapy during the sample month*;
- Patients who had at least two home health visits for skilled nursing care, physical therapy, occupational therapy, or speech therapy during the lookback period (includes the sample month and the preceding month)*;
- Patients who are not deceased;
- Patients who are not currently receiving hospice care; and
- Patients who received home visits for services other than routine maternity care in the sample month*.

HHAs should **exclude** from the file any patient who meets one of these criteria:

- Patients who received home visits ONLY for routine maternity care in the sample month*.
- Patients who have harmed or endangered the health or well-being of a home health provider or *attempted* to harm or endanger the health or well-being of a home health provider*;
- State-regulated patients*; and
- Patients who requested that the HHA not release their name and contact information to anyone other than agency personnel, hereafter referred to in this manual as "no publicity" patients*.

The next few paragraphs provide more information about selected eligibility criteria.

Skilled Visits. For purposes of this survey, the basis for determination of a skilled visit is the classification of the agency employee who visited the patient and not the reason for the home health visit, with the exception of patients who are receiving only routine maternity care or those who are discharged to hospice care. For a visit to be considered a "skilled visit" the agency employee must be classified as one of the following: registered nurse (RN), licensed practical nurse (LPN), physical therapist, physical therapist assistant, occupational therapist, occupational therapist assistant, speech therapist, or speech therapist assistant. Skilled visits do not include visits made by any category of social worker, home health or personal care aide, or nursing aide.

Lookback Period. Patients must have had at least one skilled home care visit during the sample month and at least two skilled visits during the "lookback" period. The lookback period is defined as the sample month and the month immediately preceding the sample month.

Routine Maternity Care. Note that patients who receive home health care only for routine maternity care are not eligible to be included in the survey. For purposes of this survey, routine maternity care is receiving a few visits for a normal delivery and would include, but is not limited to, assistance in breastfeeding and other educational services.

Endangering Home Health Providers. CMS will permit HHAs to exclude from the monthly patient information files information about patients who have harmed or endangered the health or well-being of a home health provider or attempted to harm or endanger the health or well-being of a home health provider. For an HHA to use this exclusion criterion, the agency must document the reason for the exclusion and provide the reason to the HHCAHPS Survey vendor when the monthly patient information file is submitted to the vendor. The vendor will be requested to provide the reason for the exclusion during HHCAHPS oversight visits.

State-Regulated Patients. Some states have regulations and laws governing the release of patient information for patients with specific illnesses or conditions, and for other special patient

populations, including patients with HIV/AIDS. It is the HHA's responsibility to identify any applicable state laws and regulations and exclude state-regulated patients from the survey as required by law or regulation.

No Publicity Patients. HHAs should also exclude information about no publicity patients from the monthly patient information files. These are patients who have requested that their agency not release their identity to anyone outside the agency, which typically occurs at the start of care.

Removing Non-eligible Patients From Monthly Files

Some HHAs may want to provide their contracted vendor with a monthly patient information file that contains information only about patients who meet the survey eligibility criteria. If the HHA is making the exclusions, it is the vendor's responsibility to make sure that the HHA understands and correctly applies the patient eligibility criteria. And, the survey vendor must still examine the file for completeness and to make sure that all patients on the file meet all of the eligibility criteria.

Other HHAs may opt to provide a file containing information about all patients served during the sample month so that the vendor can make the exclusions. If the survey vendor is making the exclusions, it is the survey vendor's responsibility to stress to its HHA clients that **all patients** must be represented in the file the HHA submits. The HHA **must** provide the vendor with sufficient information for the vendor to identify and exclude patients who do not meet eligibility requirements. And, even if the survey vendor is making the exclusions, the HHA must still exclude from the file information about harmful/dangerous, state-regulated, or no publicity patients.

Information Needed From Each HHA at the Agency Level

HHAs are required to submit several Agency-level data elements, including the HHA's "Provider Name," "Provider Number" (CCN), National Provider Number (NPI), the "Sample Month," "Sample Year," and the "Number of Patients Served." The "No. of Patients Served" is the total number of patients the HHA served during the sample month. This total should include patients who had at least one visit for skilled care at any point during the sample month, regardless of whether they are eligible for the HHCAHPS Survey. In other words, this number should include both patients who are eligible for the survey and those who are not.

Information Needed From HHAs for Each Patient Served

HHAs are required to provide all of the information shown in ***Table 4.1*** for each patient they served during the sample month *except* for the exclusions. The information that the HHA provides will be used by the survey vendor to survey sampled patients and will be used by the HHCAHPS Survey Coordination Team for data analysis. Further explanation of some of the elements listed in the table is provided in ***Table 4.1***.

Table 4.1
Information Needed From HHAs for Each Medicare or Medicaid Patient Served During Sample Month

Data Element Required	Reason Needed
Patient's full name (First Name, Middle Initial, and Last Name as separate fields)	Survey administration
Gender	Survey administration and analysis
Patient's date of birth (MMDDYYYY)	Survey eligibility and quality assurance
Mailing address (Patient Mailing Address 1, Patient Mailing Address 2, Address City, Address State, and Address Zip Code as separate data fields)	Survey administration
Patient's telephone number including area code	Survey administration
Medical Record Number (Patient's HHA medical record number)	Survey quality assurance
Number of skilled home health visits in sample month	Survey eligibility and quality assurance
Number of home health visits in lookback period	Survey eligibility and quality assurance
Payer(s) (Medicare, Medicaid, private health insurance, other)	Survey eligibility and analysis
Source of admission (prior inpatient or community setting)	Survey analysis
HMO indicator	Survey analysis
Whether dually eligible for Medicare and Medicaid	Survey analysis
Primary diagnosis (ICD-10-CM for underlying condition)	Survey analysis
Other diagnosis	Survey analysis
Care related to surgical discharge indicator	Survey analysis
Whether patient has end-stage renal disease (ESRD)	Survey analysis
ADL levels (5-items) OR	Survey analysis
Number of ADLs for which patient is not independent (0–5)	Survey analysis

Many of the data elements from ***Table 4.1*** that the HHA will include on the monthly patient files are on the patient's Outcome and Assessment Information Set (OASIS) Assessment. The data elements needed may be found on the OASIS Start of Care (SOC) assessment, in the Resumption of Care (ROC) assessment, the Follow-up (FU) assessment, or the Discharge (DC) assessment. The HHA should provide the data for the activities of daily living (ADLs) from the most recent OASIS assessment.

Definition and Explanation of Some of the Data Elements Required From HHAs

- Patient's date of birth. Patients must be 18 years of age by the end of the sample month in which they are sampled to be eligible for participation in the HHCAHPS Survey.

- Vendors should ensure that their client HHAs include each patient's mailing address, even if a telephone survey is planned for that HHA. For client HHAs planning telephone surveys, the mailing address for each patient is needed so that the vendor can obtain or verify the sample patient's telephone number. The HHA provides the initial contact information; however, survey vendors are strongly encouraged to use address verification or telephone number look-up services to obtain updated contact information.

- The patient's medical record number is the unique identifier that the HHA assigns to the patient that allows the HHA to track and document the care provided to the patient. This number, along with other data elements, will allow the vendor to keep track of whether each patient has been recently sampled.

- Number of skilled home health visits in the sample month should include only visits for skilled nursing care, physical therapy, occupational therapy, and speech therapy. The patient must have had at least one skilled care visit during the sample month.

- Number of skilled visits in the lookback period. The lookback period is the sample month and the month immediately preceding the sample month. The patient must have had at least one skilled care visit during the sample month and two such visits during the lookback period.

  For example, if a patient had only one skilled visit for the sample month of February, he or she must have at least one skilled visit in January to meet the two-visit requirement. If the patient had two skilled visits in the sample month or one in each month, the requirement of having two such visits during the lookback period has been met. If the patient did not have any skilled visits during the sample month but two during the lookback period, the patient is not eligible to be included in the survey because he or she did not have at least one skilled visit during the sample month.

  Vendors should make sure that they are defining the lookback period correctly in all communications with their HHA clients, including in written specifications for providing the monthly patient information files and in marketing materials. The lookback period must be defined in terms of months, not days. Use of terms such as "previous 60 days" or "60-day lookback period" is not correct because some lookback periods contain more than 60 days while the lookback period for the March sample month will contain fewer than 60 days.

  Note that HHCAHPS Survey vendors must include on the file submitted to the HHCAHPS Survey Data Center the number of skilled visits the patient had in the lookback period that is provided on the monthly patient information file submitted by the HHA. This means that the survey vendor cannot calculate the number of visits in the lookback period for a patient by adding the number of skilled visits reported for the current sample month with the number of visits included on the monthly patient information file submitted by the HHA for the

preceding sample month. However, if an HHA or its IT vendor provides the dates of all visits in the lookback period instead of the total number of visits, it is acceptable for the vendor to calculate the total number of visits in the lookback period. Note that this is the only reason that a vendor should calculate the number of lookback visits.

If the HHA does not include the number of lookback period visits on the monthly patient information file, the survey vendor should contact the HHA to obtain the number of visits in the lookback period. If the HHA cannot provide the number of skilled visits the patient had in the lookback period, the vendor should include the patient on the sample frame if the patient had at least one skilled visit in the sample month. If the HHA cannot provide the number of visits in the lookback period, the vendor should enter "M" (for Missing) for the lookback data element for this patient on the data file submitted to the HHCAHPS Survey Data Center.

- Source of admission is the place of residence or medical care setting from which the patient was admitted. The equivalent data element in OASIS may be used as the response. The OASIS data element has a 14-day lookback period for inpatient care settings. This item is M1000 on the OASIS Start of Care and the Resumption of Care.

  If the HHA did not receive any information about the source of admission or regarding an inpatient stay prior to the patient being admitted for home health care, the HHA should indicate that the patient was admitted from the "community." The term "community setting" refers to facilities that do not provide medical care, thus facilities such as hospitals, skilled nursing facilities, and nursing homes are not considered "community." The code "community" is used if the patient was admitted from a private residence, an independent living facility, or an assisted living facility. Also, the HHA should report the source of admission as "community" if the patient was referred for home health care by a physician but lives in a private residence, an independent living facility, or an assisted living facility.

  Also note that the HHA can provide multiple sources of admission; the survey vendor will include all sources of admission on the data files submitted to the HHCAHPS Survey Data Center. If the admission source is missing from the HHA's monthly file, the vendor should enter the missing code on the data file that will be submitted to the HHCAHPS Survey Data Center.

- Payment source. Enter the source(s) of payment for the patient's home health care. Note that multiple sources may apply. The HHA should provide the vendor with all applicable sources of payment for the care. The survey vendor, in turn, will include all sources of payment for the patient's care on the HHCAHPS Survey data files that are submitted to the Data Center.

  The source of payment is Item M0150 on the OASIS Start of Care assessment. If the payment source is missing for a patient, the survey vendor must enter the missing code for this data element for the patient on the file submitted to the Data Center.

If the HHA does not include the source of payment on the monthly patient information file, the vendor should contact the HHA to obtain the source of payment. If the HHA cannot provide the source of payment, the vendor should assume that the patient's care is covered by Medicare or Medicaid and include the patient on the sampling frame if the patient meets all other survey eligibility criteria.

- The HMO Indicator is an indication of whether the patient is enrolled in a health maintenance organization (HMO), which coordinates patient care and has a network of providers to which patients can go for care. This indicator should be coded "yes" if the patient is enrolled in a Medicare Advantage plan or a Medicaid managed care plan.

- Primary Diagnosis is the ICD-10-CM code for the underlying reason for the home health care such as the principal diagnosis if the patient was admitted from a hospital. The source of diagnosis codes may be the plan of care, OASIS assessment, record of hospital stay, or other record documenting the patient admission. The primary diagnosis may come from OASIS-C1 for recently hospitalized patients, Item M1011 (SOC and ROC) or Item M1021, M1023, or M1025 from the SOC, ROC, and FU assessments.

  HHAs should provide ICD-10 codes as the primary diagnosis. Z-codes as the primary diagnosis, while not preferred, are allowed and will be accepted. External cause codes (ICD-10-CM codes beginning with V, W, X, or Y) are not allowed as the primary diagnosis but are allowed for the other diagnoses.

- Other Diagnoses are comorbid conditions that are relevant for the care of the patient. The relevant comorbidities are ICD-10-CM diagnosis codes. The sources may be the same as for the primary diagnosis. HHAs can provide up to five other diagnoses for each patient included on the file. ICD-10-CM codes beginning with V, W, X, or Y will be accepted, but they are not accepted for the Primary Diagnosis data element.

- ESRD indicator. ESRD is an indicator of whether the patient has End Stage Rental Disease. This indicator should be coded "yes" if any of the following diagnosis codes are present: I12.0, I13.11, I13.2, N18.6, Z91.15, or Z99.2.

- Activities of Daily Living. Note that HHAs can provide on the monthly patient information file that they submit to the survey vendor **either** the *code* for each of the five individual ADL data elements **or** the *total count of ADLs* for which the patient is not fully independent, the "ADL Deficits" XML data element. The HHA should report the five individual ADL codes as taken from the list in the patient's OASIS assessment. They are Ability to Dress Upper Body (M1810), Ability to Dress Lower Body (M1820), Bathing (M1830), Toilet Transferring (M1840), and Transferring (M1850). When reporting these ADL codes, the HHA must use the most current code on file for those data elements.

HHAs can provide ADL information in one of two ways: the value for each individual ADL data element, or the total count of ADLs for which the sample member is NOT fully independent.

If the HHA provides the OASIS values for the five individual ADL data elements on its file, the vendor should enter the code provided for each of the five ADLs that were assessed for that patient on the XML file it submits to the HHCAHPS Survey Data Center. The only acceptable range of codes for each of the five ADL Deficits is 0-5 and M (missing).

If the HHA provides the total count of ADL data elements ("ADL Deficits"), that count would be the total number of the five ADL data elements **not** coded as a "0" as taken from OASIS. Note that if an HHA submits a value for the ADL deficits total count data element that exceeds 5, vendors should recode this data element to 5.

HHCAHPS Survey vendors must enter on the XML file that they submit to the HHCAHPS Survey Data Center the same information that is provided by the HHA. That is, the vendor should provide in its XML file the five individual ADL counts, or the total count of ADL deficits, or both if provided by the HHA. HHCAHPS Survey vendors are not allowed to calculate the total count of ADLs for which the sample patient is not fully independent.

Option to Submit Separate Files to Vendor

If an HHA cannot provide all of the patient information needed in time for the vendor to select the sample and field the survey within 21 days after the sample month ends, the HHA should submit two separate files. The first file should be submitted as soon as possible after the sample month ends, and should include all data elements that the vendor will need to determine whether patients on the file are eligible for the survey and for fielding the survey. This includes the following data elements:

- Patient contact information (name, address, and phone number);
- The patient's date of birth and gender;
- The number of skilled visits the patient had in the sample month;
- The number of skilled visits the patient had during the lookback period; and
- The payer source data element, which is needed both to determine patient eligibility for the survey and for patient mix analysis.

The HHA should submit all of the other data elements (Medical Record Number, HMO indicator, diagnoses, admission source, ADLs, surgical discharge, end-stage renal disease, and Medicare/Medicaid dual eligibility indicators) in a second or appended file, which should be submitted to the vendor no later than 6 weeks after the sample month ends.

Although HHCAHPS Survey vendors are urged to make a good faith effort to obtain accurate payer source information for each patient from their client HHAs, in some instances the HHA may not provide all data elements needed for the survey. If the HHA cannot provide the missing information when the vendor follows up with the HHA or cannot provide it in time for the sample to be selected and the survey initiated within 21 days after the sample month ends, the vendor should consider the patient eligible, include him or her on the sampling frame, and include that patient in the survey if he or she is sampled. More information about the data elements that the survey vendor should include on data files submitted to the HHCAHPS Survey Data Center and how those data elements should be coded is provided in ***Chapters IX*** and ***X***.

Note that vendors must select the sample for each HHA at one point in time; that is, vendors cannot select two separate samples for the same month. If an HHA submits a second file with additional patients, and data collection has already begun for that sample month, the vendor must not select a second sample but should report this situation via a DNR, with a count of the number of additional eligible patients that were not included.

Surveying Non-Medicare/Medicaid Patients

Only patients whose care is paid for by either Medicare or Medicaid are eligible to be included in the HHCAHPS Survey. However, HHAs may want to survey their non-Medicare and non-Medicaid patients. If this is the case, the HHA should include information about non-Medicare and non-Medicaid patients on the patient information files that are submitted to the survey vendor. Survey vendors, however, should not include data collected from non-Medicare and non-Medicaid patients on the data files submitted to the HHCAHPS Survey Data Center.

Sampling More Frequently Than Monthly

Note that HHAs and their vendors may choose to sample patients more frequently than monthly (e.g., weekly, biweekly); however, survey vendors must complete and submit an Exceptions Request Form and receive approval from CMS for more frequent sampling. Information about the Exceptions Request Form and process is provided in ***Chapter XIV*** of this manual.

Protocol for No Eligible Patients Served in the Sample Month

If the HHA did not provide home care to *any* patients or did not serve any patients who met survey eligibility criteria during the sample month, the HHA must still submit a monthly patient information file or an e-mail notification to its HHCAHPS vendor indicating that no survey-eligible patients were served during that sample month. HHCAHPS Survey vendors must retain the monthly patient information file or e-mail notification provided for a minimum of 18 months, as this information is subject to review during the site visits. If a vendor has to request this information from its client HHA, the vendor should make sure to request the information for **all** of the patients from the HHA's original file, not just for those patients who were sampled that month.

If none of the patients on the monthly patient information file are eligible for the HHCAHPS Survey or the HHA sent an e-mail notification that no survey eligible patients were served during a particular sample month, the vendor must still prepare and submit an XML file for that sample month. The vendor must indicate on the file that there were 0 eligible cases in the number eligible data element ("Eligible Patients") and enter all other information required in the Header Record Section of the XML file (refer to ***Chapter X*** in this manual for more information about data file preparation and submission). If the vendor does not submit a 0 eligible file in this case, CMS and the Coordination Team will view the HHA as having "missed" a sample month. HHAs for which an HHCAHPS Survey data file is not submitted for each month in the reporting period may be considered as being noncompliant with HHCAHPS Survey participation requirements.

Protocol for Administering Other Surveys in Conjunction With the HHCAHPS Survey

Some HHAs may wish to administer other surveys of their patients. Because of the promise of confidentiality stated in the HHCAHPS Survey cover letters, and the nature of care that this population receives (ongoing from their provider), HHCAHPS Survey vendors are not permitted to share with their HHA clients the identities of patients who are sampled for HHCAHPS. The following guidelines should be used if the HHA is planning to administer other surveys in conjunction with the HHCAHPS Survey and will be using its HHCAHPS Survey vendor to conduct the other survey(s).

- If an HHA will be fielding other survey(s) of its patients, it must provide a file of all eligible patients to its survey vendor The HHCAHPS vendor will select the sample for HHCAHPS for the sample month first, prior to selecting a sample for any other survey(s).

- Patients who were not randomly selected into the HHCAHPS Survey sample for the sample month may be included in a sample for a separate survey that the HHA conducts in that month.

For HHAs that are self-administering other surveys in addition to participating in HHCAHPS, the HHA will need to select a sample of patients for the other surveys with the understanding that some patients may be sampled for both the HHCAHPS and the other surveys.

It is up to the HHA to evaluate—based on the size, frequency, and purpose of the other survey(s) it conducts—whether to potentially sample its patients more than once or engage the services of their HHCAHPS Survey vendor to ensure that patients sampled for the HHCAHPS are not also sampled for their other surveys. HHAs should also note that conducting additional surveys with the same patient population as HHCAHPS may lower HHCAHPS survey response rates because of respondent survey fatigue.

Step 2: Examine the Monthly Patient Information File for Completeness

Survey vendors should examine each monthly patient information file provided by their client HHAs to ensure that information they need for determining survey eligibility for all patients on the file has been provided. If patient information needed for sample selection is missing, the vendor should work with the HHA to obtain the missing data.

Survey vendors should also check each monthly patient information file received to make sure that it does not include "duplicate" information—that is, to make sure that a patient does not appear more than once on the file. Note that vendors are required to retain the original monthly patient information files submitted by their client HHAs for possible audits by CMS and the HHCAHPS Coordination Team; therefore, if the monthly patient information file is used as the basis for constructing the sampling frame, the vendor should make a copy of the monthly patient information file and "de-duplicate" the file using the copy of the monthly patient information file.

When checking the monthly patient information files to identify duplicate patients or patients who may have been listed on the file more than once, it is important for vendors to note that HHAs do NOT always assign the same MRN to a patient if a patient is discharged from home care and receives home care at some later point in time, For this reason, vendors should use the MRN and other patient information data elements to identify patients for whom the HHA listed information about the patient more than once on the monthly patient information file. Using the MRN in conjunction with other patient data elements will help ensure that patients identified as duplicate patients on the file are indeed "duplicate" patients.

After receiving a list or file with information needed for sampling, the survey vendor will then identify all patients eligible for participation in the HHCAHPS Survey from the file of patients served or discharged, creating the sample frame, making certain to have a different staff member conduct a QC check for this process.

Step 3: Identify Eligible Patients and Construct a Sampling Frame

After receiving the file of all patients served or discharged from their HHA, vendors must identify all patients eligible for participation in the HHCAHPS Survey

The sample frame that the vendor constructs for each HHA must include all patients the HHA served during the sample month who meet all of the eligibility criteria provided previously in Step 1, and who also have not been included in the sample during any month in the current quarter or during the 5 months prior to the sample month.

To reduce respondent burden, home health patients who meet survey eligibility criteria can only be sampled once in a 6-month period. Therefore, the survey vendor must also exclude from the sample frame patients who were included in the HHCAHPS Survey sample during the 5 months prior to the sample month.

An example of a vendor sample frame file layout is included in ***Appendix B***. For purposes of audit and quality assurance, survey vendors must keep the monthly patient information files submitted by all HHAs for 18 months. The survey vendor must also keep the sampling frame created for each sample month for 18 months. Vendors must also record and retain documentation showing the reasons patients were *excluded from the sample frame created for each HHA for each sample month, and provide documentation of all staff quality control checks that were completed during the sampling process.* This documentation will be subject to review by the HHCAHPS Survey Coordination Team during site visits.

Step 4: Determine a Sampling Rate and Select a Sample for Each HHA

Survey vendors must determine a sampling rate and use that rate to ensure that an even distribution of patients is sampled over a 12-month period. Vendors will need to have a good estimate of the size of the sample frame before they can determine a sampling rate. The typical frame size will depend on the number of patients served by the client HHA, the proportion of short- and long-stay patients, and the rate at which the sample exclusions (listed above) apply to the list of patients the HHA provides to the survey vendor.

For HHAs with patients having a relatively short period of home health care service (such as a month or less), there will be a proportionally large sample frame from month to month as new patients are accepted by the HHA. Vendors should expect that there will be variability in the number of patients the HHA serves and the number eligible for the survey because these characteristics vary over time. In some cases there could be seasonality to admissions, depending on the mix of patients served by different HHAs.

The first month that an HHA participates in the HHCAHPS Survey, the agency will have a larger number of patients eligible for the survey because none of the patients will have been sampled in the preceding sample months. Therefore, no patients will be ineligible to be sampled because they were sampled in a prior month. A sampling rate should, therefore, not be based on the frame for the first month that the HHA conducts the HHCAHPS Survey. Instead, the survey vendor should estimate a sampling rate as described below.

Estimating an Initial Sampling Rate

To develop a sampling rate for an HHA, the vendor should work with the HHA prior to the first sample month that the HHA begins its participation in the HHCAHPS Survey to estimate the sample frame size for each of the preceding 3 to 6 months. The more months the survey vendor

includes in this sampling rate analysis, the better the estimate of the sample frame size and its variability; any single month can be nonrepresentative of an HHA's patient size and mix, so considering a range of months will guard against estimating sampling rates that will yield a sampling frame that is either too large or too small. For each of the 3 to 6 months prior to the first sample month the HHA implements the HHCAHPS Survey, the HHA should provide the survey vendor with a file of potentially eligible patients who received home health care, including current and discharged patients. In addition, the HHA should provide all of the required data elements for every patient in the file, just as the HHA will be required to provide after it begins its participation in the HHCAHPS Survey implementation.

In looking at the sample frame information for the 3 to 6 months that precede the first sample month the HHA participates in the HHCAHPS Survey, the vendor should apply the same sample frame construction criteria for each month that it would apply for the first sample month. Note that in the first month's sample file, the rule that a patient cannot be sampled more than once in the current or the following quarter will not be a constraint. In the second month of the 3- to 6-month test period, all patients sampled in the first month will be excluded from the frame. Only new admissions and patients not sampled the previous sample month can be included on the sample frame for the second (and subsequent) month(s). Some very long-stay patients may reenter the frame in the sixth month. This number will be significant only if long-stay patients, such as many Medicaid patients, are a significant proportion of the HHA's patient mix. The proportion of short-stay patients—that is, those who receive care for 30 days or fewer—will be an important driver of the sample frame size.

Estimating an Appropriate Sampling Rate Each Month

The target for the statistical precision of HHCAHPS Survey results that will be publicly reported is based on a reliability criterion. The reliability criterion target for the HHCAHPS Survey ratings and most of the composites is 0.8 or higher. For reasons of statistical precision, a target minimum of 300 completed HHCAHPS Surveys has been set for each HHA over each 12-month reporting period. This is equivalent to an average of 25 completed surveys per HHA per month.

The number of patients to be selected each month to yield a minimum of 300 completed surveys will ultimately be determined by trial and error by the vendor and will differ by HHA. The value of the sampling rate or fraction applied to a sample frame is not itself a target; it may be varied over time to achieve the target number of usable returned surveys. The sampling rate must be kept approximately the same for each month in each quarter. The sample for an HHA during the first sample month that the HHA participates in the HHCAHPS Survey will likely have an atypically high number of eligible patients; therefore, the vendor should adjust the rate for the first sample month to make the sample for that month about equal to subsequent sample months. The rate may be increased in subsequent months to achieve the target of 300 completed surveys, but should not be decreased simply to avoid exceeding 300 completed surveys for a particular

year. A sample must be selected for each sample month. The rate may be adjusted if there is a sustained change in the size of the typical sample frame.

The mode of administration of the survey will be an important factor in determining sample size and response rates. ***Table 4.2*** shows response rates by mode from the HHCAHPS Survey for all sample months from Quarter 2 2015 through Q1 2016.

Table 4.2
Response Rates Obtained by Mode During the HHCAHPS Participation Period for the 2017 Annual Payment Update

Mode	Response Rate	Sample Size for 25 Responses/Month
Mail only	28.5%	88
Phone only	29.2%	86
Mixed	35.9%	70

Note: The sample sizes shown in the table above are for illustrative purposes only. Vendors should work with their HHAs to take into account expected response rates, eligibility, and number of patients served to determine an appropriate sampling rate.

The sample size estimates above were derived using the following formula:

Sample size = (number of responses needed) / (response rate) = 25 / (response rate)

where the value used for the number of responses needed is 25. These sample size estimates have been rounded up to the nearest integer. Each vendor should use its experience on the HHCAHPS and other surveys with home health patients or similar populations and work with its client HHA to determine the appropriate data collection mode and expected response rate to use as a guide for calculating quarterly sampling rates.

Developing and using a sampling rate based on the number of survey-eligible patients an HHA serves over a 3- to 6-month period and with an expected response rate works well for an HHA that serves more than 650 survey-eligible patients over a given 12-month period. Consider, for example, to obtain the sample sizes in ***Table 4.2*** above, during a 12-month period an HHA would need to have provided home care to 1,056 survey-eligible patients for the mail-only mode, 1,032 patients for the phone-only mode, and 840 survey-eligible patients for the mixed mode. Some very small HHAs will not have a sufficient number of patients to yield 300 completed surveys over a 12-month period. In this case the “full census” of eligible patients should be surveyed. Surveying a full census means that the sampling rate would be such that over the course of a 12-month period the vendor would have sampled the same **number** of patients as the HHA would have served during a 12-month period. It does not mean that the vendor selects and samples all patients the HHA served during the sample month who meet survey-eligibility criteria.

The survey vendor should determine a sampling rate for all agencies, including small agencies, and select the sample so that there is an even distribution of patients over a 12-month period. For some very small HHAs, in some sample months the number of survey-eligible patients served may be less than the number required by the sampling rate. In this case, it is acceptable to survey a census of the total number of survey-eligible patients served during that sample month.

Although the targeted number of completed surveys is 300 over a 12-month period, some HHAs may want to survey more of their patients. There is no upper limit to the number of patients who may be surveyed. However, for large HHAs, the vendor should still use a sampling rate and select a sample (rather than surveying all eligible patients each month) so that the sample is evenly distributed across a 12-month period.

Selecting the HHA Sample

To select the sample for each HHA, survey vendors should use a random number generator that is generally accepted as having satisfied the criterion of randomness. The random numbers should be generated from the uniform distribution—each number having an equal probability of selection. Unacceptable random number generators are those that use pseudo-random number generators that repeat numbers after some specified period. An acceptable random number generator will repeat only after many billions of numbers are produced.

An important feature of the random number generator is the "seed" number used to start the cycle. The selection of the seed number should be such that it cannot be manipulated. An appropriate seed often used is the clock time as measured by the computer. This seed varies each fraction of a second but the value used is documented by the program and is part of the output that can be retained. The seed number must be known and retained as part of the documentation vendors keep so that the sampling process can be reproduced for HHCAHPS Coordination Team site visits.

Survey vendors should use a reputable statistical program like SAS v9 either to select a sample from a frame using its procedures for survey sample selection or to generate random numbers that can be correctly applied.

Another reputable program, which runs under Windows, is RAT-STATS, developed by the Department of Health and Human Service (DHHS) Inspector General's Office. Survey vendors can download this program and its comprehensive manual at no cost from https://oig.hhs.gov/compliance/rat-stats/index.asp. There are many sampling tools in the program. One module can simply produce a sample size, *n*, random integers between 1 and the frame size, and uses the computer clock to generate the seed, which is retained and reported.

Both SAS and RAT-STATS are examples of readily available, high-quality, rigorously tested tools for selecting samples randomly. Commonly available spreadsheet programs also have

random number generators; however, do not use these random number generators when selecting monthly samples for the HHCAHPS Survey because they do not generate a report of the seed used. Note, however, that a spreadsheet is an acceptable way to present and manipulate the sample frame.

It is also critical that vendors document how the random start number was generated and how the sample frame was sorted during the sampling process.

The following are examples of ways to sort the sample frame for the HHCAHPS Survey.

Method 1

Sort the sample frame of *N* eligible patients by any documented method.

- Generate the *N* random numbers.
- Assign the random numbers in the order generated to each element in the frame.
- Re-sort the elements as ordered by the random numbers (either ascending or descending, but document which is used).
- Select the first *n*, the sample size required for the mode used.

In this way, the initial sort of the data does not affect the result, although a standard sort order should always be used so that it does not appear that a frame has been altered. This method requires generating as many random numbers as there are patients on the frame.

Method 2

If the random number generator is able to produce integers from a range of values, given that *N* is the size of the sample frame of eligible patients, we can use the following steps to select our sample.

- Generate *n* distinct random integers whose values range from 1 to *N*, where *n* is the sample size required for the mode used.
- Select the element of the frame that corresponds to the random number generated. For example, if the random number 10 is generated then select the 10th element on the frame for the sample.
- Continue selection of elements according to the random numbers generated until all *n* distinct elements have been selected.

The steps for selecting the sample can be summarized as follows:

1. Using 300 as the target number of responses and an estimate of a final response rate, calculate the target sample for a year and 1/12 of that per month. An effective response rate of 30 percent, for example, would yield an annual sample of 1,000 (300/.3), which is a target of 84 per month.

2. Acquire from each HHA a test frame for at least 3 months prior to the start of the actual survey. This should be a census of patients each month and should contain the information about each patient to determine whether he or she meets survey eligibility requirements.

3. Apply exclusions for each month—that is, remove from the sample frame all patients who do not meet the survey eligibility criteria. Because the first month will not have any people excluded for reasons of prior sampling, the frame for that month will be larger than that for the subsequent months.

4. Using the second and third months as typical of what the frame size will be, determine whether the sample required in Step 1 above will require sampling the entire frame each month or what the typical sampling rate would be. Remember that the first month may be different from subsequent months.

5. Simulate creation of random numbers to reach the target number of completed surveys over the 12-month period, that is, 300 surveys. The proportion sampled from quarter 1 to quarter 2 to quarter 3 may vary to meet the target number. We recommend that the sampling rate not be varied within a quarter to accommodate short-term random variation. The first month will generally be sampled at a lower rate than subsequent months. In practice, adjustments may be needed over time to reach the annual goal of the lesser of (a) 300 over each of the rolling four quarters, yielding about 300 completed surveys over 12 months; or (b) a full census of eligible patients. Remember in this case a "**full census**" does not mean surveying every eligible patient each sample month, but using a sampling rate that, during a 12-month period, would yield the same number of sampled patients as the expected number of survey-eligible patients the HHA would serve over a 12-month period.

Sampling With Other Than Simple Random Sampling

The method of sampling we described above is simple random sampling (SRS), which is a standard method of sampling. Two other sampling methods may be used to sample patients for the HHCAHPS Survey—proportionate stratified random sampling (PSRS) and disproportionate stratified random sampling (DSRS). HHAs may opt to use PSRS and DSRS sampling methods if there is a way to divide their patient population into logical units (referred to as strata), the units

are large enough, and there is a logical reason for doing so. The strata created may represent patients cared for by different branches of an HHA or geographic divisions, for example. **For each month that stratification is used, the minimum number of eligible patients allowable in a stratum frame is 10, and the same stratification must be used for all months in a quarter.**

Proportionate Stratified Random Sampling

In PSRS, the same sampling rate must be applied to each stratum included in the sample. A stratum is defined as a subset of the total sample frame. For the HHCAHPS Survey, an HHA with multiple branches may want to select a sample for each branch. In this example, each branch location would be considered a stratum.

HHAs may want to use PSRS for the following reasons:

- The HHA would like to keep track of samples and results from the HHCAHPS Survey for each stratum; or
- The HHA may want to designate other aggregates of operating units for tracking, while using the same sampling rate for each.

When using PSRS for units of an HHA (under the same CCN), the strata created must be large enough to support the same sampling rate in each stratum. All the patients in the HHA may be sampled as one unit, or a separate sample may be made of each branch. Under PSRS the sampling rate would be the same for each branch and the samples combined.

For example, if an HHA had 200 patients to sample, divided into 3 strata consisting of 100, 50, and 50 patients, respectively, a sample of 90 would be drawn at about a 45 percent rate (90/200). A sample of 45 would be drawn from the large stratum because the large stratum used in this example should have half of the sampled patients. The selection would be $.45 \times 50 = 23$ for the other strata. With a lower limit of 10 for a stratum size, small strata might have to be combined for a PSRS to be used in practice. The statistical precision of survey results at the stratum level may not be very good unless the stratum sample size is about the size of the overall sample requirements. The total sample size must also be taken into account when considering stratification options.

Disproportionate Stratified Random Sampling

DSRS is another appropriate sampling option if an HHA wishes to achieve statistically precise numbers for operating subunits (e.g., branches). To achieve as good a level of precision for the separate units as required for the HHA as a whole, each unit would have to have a sample size as large as if it were a separate HHA. In this case, the sampling rate may be different for each stratum. To allow the separate strata to be recombined to represent the HHA as a whole the

sampling rate for each stratum must be reported in the data submitted to the HHCAHPS Survey Coordination Team. This will permit appropriate weighting of the respondents in computing results. Different sampling rates in strata with particularly high or low ratings could otherwise distort the ratings.

If an HHA chooses to use DSRS, its survey vendor must do the following:

- Complete and submit an Exceptions Request Form—the process for identifying the different strata must be provided on the Exceptions Request Form;
- Use the same name for each stratum in each month in the quarter;
- Make sure that each stratum has a minimum of 10 patients eligible to be included in the survey during the sample month; and
- Provide to the HHCAHPS Survey Data Center additional information about each stratum, including the following:
    - The name of the stratum;
    - The total number of patients sampled in each stratum during the sample month;
    - The total number of patients on the file submitted by the HHA for that stratum;
    - The number of patients in the stratum who were eligible for the survey during the sample month; and
    - The total number of patients sampled during each sample month.

An example of the use of DSRS is as follows. The ABC Best Care Agency selects a sample each month, creating three distinct strata—one each for Branch A, Branch B, and Branch C.

- The survey vendor first uses data from 3 or more preceding months prior to the HHA beginning its participation in the HHCAHPS Survey to determine a sampling rate for each of the three strata.
- Assume that the target for each stratum is the same as for the HHA as a whole, that 25 is the target number of responses, and that the expected response rate is 50 percent. The sample size required is 50 for the HHA as a whole. Therefore, to get the same precision for each stratum the sample size would be 50 for each of the three strata in this example.
- Assume that Branch A has 120 eligible patients, Branch B has 100, and Branch C has 40 (these are the numbers that would be reported on the XML template for DSRS sampling).

- Based on these numbers, the number sampled is 50 for Branch A, 50 for Branch B, and 40 for Branch C. Because Branch C only had 40 patients, the sample for it would be a census.
- When analyzing the data, the HHCAHPS Survey analysts will use the sampling rates in the weighting calculation when the strata are combined at the HHA level as follows:
  - Branch A, 50/120 = 41.6%.
  - Branch B, 50/100 = 50.0%.
  - Branch C, 40/40 = 100.0%.

Note that the survey vendor will report the number of patients eligible for the survey and the number sampled to the HHCAHPS Survey Data Center for use in computing weights for the HHA when the data are combined. Patients in Branch A had a lower probability of selection than those in Branch B and C, and that will be accounted for when the data from sample members in the strata are combined. Survey vendors should keep in mind that a minimum of 10 eligible patients must be in each stratum for DSRS sampling to be used.

Step 5: Verify or Update Sample Contact Information

We strongly recommend that survey vendors send all HHA-provided patient mailing addresses through an outside address service, such as the National Change of Address (NCOA) or a similar provider, to confirm or update patient contact information. In addition, vendors conducting either a telephone-only or mixed-mode data collection are urged to send the most updated mailing addresses through a telephone number–provider service to attempt to obtain an updated telephone number. Performing these quality control activities prior to the start of data collection will result in fewer surveys returned as undeliverable and fewer unproductive telephone call attempts.

Note that vendors may not share the identities of sampled patients with their HHA clients, so if a vendor asks for updated information, it must ask for **all** of the patients in the file for the relevant sample month. Asking for missing information on all patients preserves the anonymity of patients who were selected for the sample. Because patients received skilled care in their homes, the HHA should have an address at which that care is provided. Similarly, for surveys being administered by telephone or mixed mode, in most cases an HHA will have the patient's telephone number to schedule or confirm the provider's home care visits.

Vendors should also note that even if an address or telephone number cannot be obtained for a patient, the patient is still eligible for inclusion on the sample frame (and in the survey if sampled) if he or she meets all other survey eligibility criteria. And, patients with missing or foreign mailing addresses are also considered eligible for the survey.

Step 6: Assign Unique Sample Identification Numbers

Survey vendors are responsible for assigning a unique **alphanumeric** sample identification (SID) number to every patient sample member selected into each monthly sample. Vendors should use the SID to track efforts to complete the survey with each sample member throughout the data collection period. When creating and assigning SID numbers to sampled cases, follow the guidelines listed below.

- The SID number assigned to a sample member cannot contain any combination of letters or numbers that could link the SID with a particular sample member or a particular HHA. For example, no part of the sample member's name, address, date of birth, telephone number, Social Security number, or dates of home health care visits or an HHA CMS Certification Number (CCN) can be included in the unique SID created and assigned to the sample member.

- The SID can be a numeric or alphanumeric data element; however, it must have a minimum length of 6 and a maximum length of 16 characters.

- Vendors must not reuse the same SID numbers—that is, once a SID number is assigned, it should never be assigned again for any sampled patient. Vendors must assign new SID numbers to the new set of patients sampled each month.

- If the same patient is sampled more than once in a calendar year or across multiple calendar years, the vendor must assign a new SID number to that patient each time he or she is sampled.

Step 7: Finalize the Monthly Sample File and Initiate Data Collection Activities

Although HHCAHPS Survey data will be analyzed on a quarterly basis, sample frame construction, sample selection, and data collection are conducted monthly. Survey vendors must initiate the survey for each monthly sample within 3 weeks (21 days) after the end of the sample month. As soon as the sampling activities described above have been completed, data collection for the sample month should begin.

All data collection for each monthly sample must be completed within 6 weeks (42 days) after data collection begins. For mail-only and mixed-mode surveys, data collection for a monthly sample must end 6 weeks after the first questionnaire is mailed. For telephone-only surveys, data collection must end 6 weeks following the first telephone attempt.

CMS recognizes that on rare occasions an HHA may have a situation that may prevent it from providing the monthly patient information in time for the vendor to initiate the survey within 21 days after the sample month ends; therefore, the vendor can initiate the survey within 26 days

after the sample month ends. However, the survey vendor must submit a Discrepancy Notification Report, described in ***Chapter XIV*** of this manual, for each HHA for which the survey is initiated from the 22nd through the 26th day after the sample month ends.

If the survey cannot be initiated within 26 days after the sample month ends because of a natural disaster (earthquake, tornado, etc.), snow or severe weather emergencies, fires, extreme computer problems, or for some other reason, CMS may allow a survey vendor to initiate the survey more than 26 days after the sample month ends. The HHA's survey vendor, however, must request (via e-mail to hhcahps@rti.org) and obtain approval from CMS before initiating the survey more than 26 days after the sample month ends.

As noted earlier in this chapter, HHAs must provide the patient information file for each sample month in time for the survey vendor to initiate the survey within 21 days after the sample month closes. The HHA can choose to submit the data needed on two separate files. The first file should contain patient information that the vendor will need to determine the patients' eligibility for the survey and for fielding the survey (contact information). The second file, which will include the data needed for analysis, must be submitted to the vendor no later than the end of the second month after the sample month ends. The survey vendor must receive the second file in time to add the data needed for analysis to the data file that will be submitted to the HHCAHPS Data Center.

Sampling Issues and Errors

Since the national implementation of the HHCAHPS Survey began in October 2009, CMS and the HHCAHPS Coordination Team have observed some common misconceptions and problems with the sampling process. The following is a list of some of these common misconceptions, paired with the proper implementation method that survey vendors should use to avoid these issues during the sampling process.

Patient Eligibility Criteria

1. **Misconception:** Patients with missing or incomplete mailing addresses or telephone numbers were considered as ineligible for the HHCAHPS Survey.

   Correct Implementation: Patients with missing or incomplete mailing addresses or telephone numbers *are eligible* to be included in the HHCAHPS Survey if they meet all other survey eligibility criteria. HHCAHPS Survey vendors should keep in mind that home health care patients receive care in their homes; therefore, the HHA must have an address at which the home care is provided. HHCAHPS Survey vendors should follow up with the HHA to obtain an address if the address is missing or incomplete. We also recommend that HHCAHPS Survey vendors use address or telephone-lookup services to confirm or obtain sample patients' mailing address or telephone number.

2. **Misconception:** It is acceptable for vendors to share the identities of sampled patients with their HHA client(s).

   Correct Implementation: Vendors may not share the identities of sampled patients with their HHA clients. Patients' identities must be protected because of the promise of confidentiality made to patients in the HHCAHPS cover letter, and the fact that patients who received care from an HHA may still be receiving care from that agency. However, if patients indicate via their response to the "Consent to Share Responses" question in the survey that it is acceptable for the vendor to link their responses with their name, the vendor may share that patient's identity with the HHA.

3. **Misconception:** If two or more home health patients are in the same household, only one patient in the household or at the same address is eligible to participate in the HHCAHPS Survey.

   Correct Implementation: This is not an eligibility criterion for HHCAHPS.

4. **Misconception:** If the HHA did not serve any patients who met survey eligibility criteria, the HHA does not need to submit a sample file to its HHCAHPS Survey vendor for that sample month or notify them in any way.

   Correct Implementation: To be compliant with HHCAHPS Survey participation requirements, all Medicare-certified HHAs participating in the HHCAHPS Survey must submit a monthly patient information file to their survey vendors for each sample month or send an e-mail notification if no survey eligible patients were served in a particular sample month. The HHCAHPS Survey vendor must, in turn, submit an HHCAHPS data file to the HHCAHPS Survey Data Center for each sample month. Otherwise the HHA will be considered to have "missed" a month of survey participation and may be deemed noncompliant with HHCAHPS Survey participation requirements.

5. **Misconception:** The HHCAHPS Survey vendor should treat patients as ineligible for the survey if the source of payment is missing.

   Correct Implementation: If the source of payment is missing on the monthly patient information file, the vendor should recontact the HHA to obtain the source of payment. If the HHA cannot provide the source of payment, the vendor should consider the patient as eligible for the survey if he or she meets all other survey eligibility criteria.

6. **Misconception:** Vendors should remove patients from the number of eligible patients entered on the XML file if those patients were identified as deceased or reported during the survey that they did not receive care from the HHA.

   Correct Implementation: The number of eligible patients data element on the XML file must reflect the number of eligible patients who were included on the monthly patient

information file and must include patients who were later identified as ineligible for the survey during the data collection period. Do not take these ineligible patients out of the total number eligible count.

Skilled Visits and Lookback Period

7. **Misconception:** The lookback period is defined as a 60-day lookback period.

   Correct Implementation: The lookback period is the sample month and the month that immediately precedes the sample month. The lookback period is defined in terms of months, not days. HHCAHPS Survey vendors should make sure that their HHA clients understand the definition of the lookback period, and not refer to it as a "60-day" lookback period.

8. **Misconception:** An HHCAHPS Survey vendor can calculate and use the total number of skilled visits a patient had in the lookback period, rather than use the number of skilled visits reported by the HHA.

   Correct Implementation: It is not acceptable for a vendor to calculate the number of skilled visits in the lookback period. HHCAHPS Survey vendors are required to use the number of skilled visits included on the monthly patient information file submitted by the HHA. However, if an HHA or its IT vendor provides the dates of all visits in the lookback period instead of the total number of visits, it is acceptable for the vendor to calculate the total number of visits in the lookback period. If the number of skilled visits the patient had during the lookback period is missing, the vendor should follow up with the HHA to retrieve the missing information. If the HHA cannot provide the total number of visits in the lookback period, then the vendor should consider the patient as eligible if he or she meets all other survey eligibility criteria.

Sampling Procedures and Documentation Requirements

9. **Misconception:** It is acceptable for a survey vendor to use only the patient's medical record number to identify patients who may have been listed more than once on a monthly patient information file or to identify patients who have been sampled in the last 5 months.

   Correct Implementation: HHCAHPS Survey vendors are urged to use more than one data element to identify patients for whom duplicate information is provided on the monthly patient information file and to identify patients who have been sampled in the last 5 months. Using the medical record number together with another data element, including patient name, date of birth, telephone number, or address will ensure that the correct patient is identified. Vendors may choose to perform the de-duplication process in multiple steps. However, the MRN should never be applied as the sole data element in any of the steps; that is, it should always be combined with another patient data element.

10. **Misconception:** SID number can be assigned more than once.

    Correct Implementation: Once a SID number is assigned, it must never be used again. If a patient is sampled more than once, a new SID number must be assigned to that patient each time he or she is sampled. During the sampling process, all vendors should check the sample file to make sure that the same SID number is not assigned to two different patients and that the SID has not been assigned in a preceding sample month.

11. **Misconception:** An HHCAHPS Survey vendor can conduct a census survey of all eligible patients during the first sample month that an HHA administers the HHCAHPS Survey; therefore, the survey vendor does not have to conduct the survey for the next 5 months unless the HHA has served new patients in those 5 months.

    Correct Implementation: As described in this chapter, HHCAHPS Survey vendors must select and survey a sample of patients each sample month, including for very small HHAs. Using a sampling rate and selecting a sample of patients each sample month will ensure that an even distribution of patients is surveyed across a 12-month period.

12. **Misconception:** The sampling rate should be adjusted each month.

    Correct Implementation: The sampling rate should remain constant during a quarter. If there is a huge difference in the number of patients served in a month within a quarter, the HHCAHPS Survey vendor should follow up with the HHA to make sure that the information on the file is correct and determine the reason for the difference.

13. **Misconception:** Vendors are not retaining documentation of seed number (or random numbers used).

    Correct Implementation: Documentation of the seed number and the random number generation and application process is a critical component of the HHCAHPS sampling protocols, as samples must be replicable for HHCAHPS site visit team review.

14. **Misconception:** Vendors are not retaining documentation of ineligible sample members.

    Correct Implementation: Vendors should retain a separate file or list of each patient deemed ineligible and the reason that the patient did not meet the eligibility criteria. This information allows someone other than the person who selected the sample to conduct quality control of the sample, as a second person can easily check to make sure that the right patients were excluded. This information is also subject to review during site visits.

Processing Patient Administrative Data

15. **Misconception:** HHCAHPS Survey vendors can use the ADL deficit count for individual ADLs to calculate and include on the XML file the total ADL deficit count.

Correct Implementation: It is not acceptable for HHCAHPS Survey vendors to calculate and include on the XML file the total number of ADL deficits. An HHCAHPS Survey vendor must report the same ADL information that the HHA provides on the monthly patient information file. If the HHA provides both a total ADL deficit count and the number of deficits for each individual ADL, the vendor must include both on the XML file.

16. **Misconception:** Vendors should enter a value of 0 (zero) on the XML file for the ADL deficit count if the HHA does not provide either the total ADL count or the number of deficits for each individual ADL.

    Correct Implementation: If an HHA does not provide the number of ADL deficits in the monthly patient information file, vendors must code the value on the XML as "M" for missing, rather than zero. If the ADL for which the value is missing is incorrectly coded as 0, it will incorrectly indicate that the sample patient was fully independent for that ADL.

17. **Misconception:** Vendors are not calculating age as of the end of the sample month.

    Correct Implementation: Vendors need to compute the patient's age as of the end of the sample month in which the patient is being considered for eligibility. Some vendors were using other variations in how age was being computed (such as the date the sample was being processed, or date patient received the home health visit). Vendors should check their age algorithm to ensure that the patient's age is being computed properly.

18. **Misconception:** If an HHA changes/switches vendors, the current HHCAHPS Survey vendor must provide a file containing patient information about all patients sampled in the preceding sample months so that the new vendor can exclude those patients from the sample frame.

    Correct Implementation: HHCAHPS vendors are not required to provide the new vendor with a file containing information about patients sampled in the last 5 months.

Sampling Quality Control Procedures

19. **Misconception:** It is acceptable for HHAs not to provide all of the patient information required for administering the survey and for data analysis.

    Correct Implementation: HHAs vary in the completeness of the patient information that they include on the monthly patient information files they submit to their HHCAHPS Survey vendor. HHAs are encouraged to provide complete information for all patients included on each monthly patient information file. Providing as much patient data as possible will increase the potential for an HHA's patients' characteristics to contribute to

the calculation of the patient-mix adjustment factors that will be used in calculating an HHA's adjusted HHCAHPS Survey scores that will be publicly reported.

20. **Misconception:** HHCAHPS Survey vendors who have automated the receipt and processing of monthly patient information files and the sample selection process do not need to implement any quality control procedures, since the programs and algorithms used for these processes were fully tested after they were developed.

    Correct Implementation: All HHCAHPS vendors must have in place and implement quality control procedures on the entire sampling process, including receipt and processing of the monthly patient information files and sample selection for each sample month for each HHA client, including vendors who use automated systems/procedures for sampling.

    Misconception: HHCAHPS Survey vendors are using the same staff who conduct the sampling process to conduct quality control checks of the sample.

    Correct Implementation: The quality control of each sample file should be performed by someone other than the person who performed each task associated with the sample selection process. Vendors are also encouraged to apply appropriate quality control checks on and test all of the computer programs/systems the vendor uses to receive and process monthly files.

PATIENT ADMINISTRATIVE DATA RECORD

The following section defines the format of the patient level data record.

Note: *Data element names do not contain any spaces, underscores, or capital letters. Each element must have a closing tag that is the same as the opening tag but with a forward slash.*

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Provider ID **<provider-id>** This administration element also occurs in the previous header record. **Example: <provider-id>123456</provider-id>**	CMS Certification Number (CCN, formerly known as the Medicare Provider ID Number)	No Dashes or spaces. Valid 6 digit CMS Certification Number	Alphanumer character
NPI **<npi>** This administration element also occurs in the previous header record. **Example: <npi>1234567890</npi>**	National Provider Identifier	No Dashes or spaces. Valid 10 digit National Provider Identifier	Alphanumer character
Sample Month **<sample-month>** This administration element also occurs in the previous header record. **Example: <sample-month>12</sample-month>**	Home Health Care CAHPS Survey sampling month	MM (1 – 12 = January – December)	Numeric
Sample Year **<sample-yr>** **Example: <sample-yr>2009</sample-yr>**	Year of sample month	YYYY (2009 or greater)	Numeric
Sample ID No. **<sample-id>** **Example: <sample-id>12345</sample-id>**	Survey vendors will assign a unique de-identified sample identification number (SID) to each patient. The SID number will be used to track the survey status of the patient throughout the survey administration process and to designate sample patients on the data file submitted to the Data Center.	Maximum of 16 characters	Alphanumer character

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Age **<patient-age>** **Example: <patient-age>07</patient-age>**	Patient's age as of sample month	18–24.....01 25-29.....02 30-34.....03 35-39.....04 40-44.....05 45-49.....06 50-54.....07 55-59.....08 60-64.....09 65-69.....10 70-74.....11 75-79.....12 80-84.....13 85-89.....14 90 or older.....15 Unknown/Missing…M (Patients must be 18 or older to be eligible for the survey)	Alphanumer character
Gender **<gender>** **Example: <gender>1</gender>**	Patient's gender	1 = Male 2 = Female M = Unknown/Missing	Alphanumer character
Number of Skilled Visits **<number-visits>** **Example: <number-visits>4</number-visits>**	Number of skilled home health visits patient had in sample month – nurses, PT, OT, SP visits; not nursing aides. Include visits made by PT, OT, and SP assistants. Used by survey vendor to confirm patient meets survey eligibility requirements	1 – 999 M = Unknown/Missing	Alphanumer character
Lookback Period Visits **<lb-visits>** **Example: <lb-visits>11</lb-visits>**	Total number of skilled home health care visits patient had in the lookback period. Used by survey vendor to confirm patient meets survey eligibility criteria.	2 – 999 M = Missing/Unknown Patient must have had at least 2 visits in lookback period	Alphanumer character

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Admission Source **<admission-source-1>** **Example: <admission-source-1>1< /admission-source-1>**	Source of patient admission for home health care	Inpatient setting: 1 = Hospital (acute or long-term) M = Unknown/Missing	Alphanumer character
Admission Source **<admission-source-2>** **Example: <admission-source-2>1< /admission-source-2>**	Source of patient admission for home health care	Inpatient setting: 1 = Rehabilitation facility (hospital) M = Unknown/Missing	Alphanumer character
Admission Source **<admission-source-3>** **Example: <admission-source-3>1< /admission-source-3>**	Source of patient admission for home health care	Inpatient setting: 1 = Skilled Nursing Facility (or swing bed in hospital) M = Unknown/Missing	Alphanumer character
Admission Source **<admission-source-4>** **Example: <admission-source-4>1 </admission-source-4>**	Source of patient admission for home health care	Inpatient setting: 1 = Other nursing home (long-term care) M = Unknown/Missing	Alphanumer character
Admission Source **<admission-source-5>** **Example: <admission-source-5>1 </admission-source-5>**	Source of patient admission for home health care	Inpatient setting: 1 = Other inpatient facility M = Unknown/Missing	Alphanumer character
Admission Source **<admission-source-6>** **Example: <admission-source-6>1 </admission-source-6>**	Source of patient admission for home health care	Non-inpatient setting: 1 = Directly from community (e.g., private home, assisted living, group home, adult foster care) M = Unknown/Missing	Alphanumer character
Payer (e.g., Medicare) **<payer-medicare>** **Example: <payer-medicare>1</payer-medicare>**	Source of payment for home health care	1 = Medicare A = Assumed M = Missing	Alphanumer character
Payer (e.g., Medicaid) **<payer-medicaid>** **Example: <payer-medicaid>1</payer-medicaid>**	Source of payment for home health care	1 = Medicaid A = Assumed M = Missing	Alphanumer character

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Payer (e.g., private insurance) **<payer-private>** **Example: <payer-private>1</payer-private>**	Source of payment for home health care	1 = Private Health Insurance A = Assumed M = Missing	Alphanumer character
Payer (e.g., Other) **<payer-other>** **Example: <payer-other>1</payer-other>**	Source of payment for home health care	1 = Other A = Assumed M = Missing	Alphanumer character
HMO Indicator **<hmo-enrollee>** **Example: <hmo-enrollee>1</hmo-enrollee>**	Is patient in an HMO?	1 = Yes 2 = No M = Unknown/Missing	Alphanumer character
Dually eligible for Medicare and Medicaid? **<dual-eligible>** **Example: <dual-eligible>1</dual-eligible>**	Is patient dually eligible for Medicare and Medicaid coverage?	1 = Yes 2 = No 3 = Not Applicable M = Unknown/Missing	Alphanumer character
Primary Diagnosis **<primary-diagnosis>** **Example: <primarydiagnosis>A6921< /primarydiagnosis>**	Underlying condition/procedure requiring home health care (ICD-10-CM diagnosis code for underlying condition) External cause codes (ICD-10-CM codes beginning with V, W, X, or Y) are not allowed as the primary diagnosis but are allowed for the other diagnoses.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character
Other diagnosis1 **<other-diagnosis-1>** **Example: <other-diagnosis-1> A6921< /other-diagnosis-1>**	Other conditions/diagnosis requiring home health care. The relevant comorbidities should be ICD-10-CM diagnosis codes.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character
Other diagnosis2 **<other-diagnosis-2>** **Example: <other-diagnosis-2> A6921< /other-diagnosis-2>**	Other conditions/diagnosis requiring home health care. The relevant comorbidities should be ICD-10-CM diagnosis codes.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Other diagnosis3 **<other-diagnosis-3>** **Example: <other-diagnosis-3> A6921< /other-diagnosis-3>**	Other conditions/diagnosis requiring home health care. The relevant comorbidities should be ICD-10-CM diagnosis codes.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character
Other diagnosis4 **<other-diagnosis-4>** **Example: <other-diagnosis-4> A6921< /other-diagnosis-4>**	Other conditions/diagnosis requiring home health care. The relevant comorbidities should be ICD-10-CM diagnosis codes.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character
Other diagnosis5 **<other-diagnosis-5>** **Example: <other-diagnosis-5> A6921< /other-diagnosis-5>**	Other conditions/diagnosis requiring home health care. The relevant comorbidities should be ICD-10-CM diagnosis codes.	Left justify and retain all leading zeros and no decimal M = Missing	Alphanumer character
Surgical Discharge **<surgical-discharge>** **Example: <surgical-discharge>1</surgical-discharge>**	Is care related to surgical discharge?	1 = Yes 2 = No M = Missing	Alphanumer character
ESRD **<esrd>** **Example: <esrd>2</esrd>**	Does patient have end-stage renal disease?	1 = Yes 2 = No M = Missing	Alphanumer character
You must EITHER enter the total number of ADL Deficits for which the patient is not fully independent OR enter of the 5 ADL Levels specified below. You do not need to provide both.			
ADL Deficits **<adl-deficits>** **Example: <adl-deficits>2</adl-deficits>**	Number of activities of daily living (ADLs) for which patient is not independent (0-5). Enter the number of OASIS ADL items listed below for which the patient has, or would have, a response code greater than 0.	0 – 5 M = Missing	Alphanumer character
ADL Dress Upper **<adl-du>** **Example: <adl-du>0</adl-du>**	**Ability to Dress Upper Body** (with or without dressing aids) including undergarments, pullovers, front-opening shirts and blouses, managing zippers, buttons, and snaps	0, 1, 2, 3 M = Missing 0 = fully independent	Alphanumer character
ADL Dress Lower **<adl-dl>** **Example: <adl-dl>0</adl-dl>**	**Ability to Dress Lower Body** (with or without dressing aids) including undergarments, slacks, socks or nylons, shoes	0, 1, 2, 3 M = Missing 0 = fully independent	Alphanumer character

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
ADL Bathing **<adl-bathing>** **Example: <adl-bathing>0</adl-bathing>**	**Bathing:** Ability to wash entire body, **Excludes grooming (washing face and hands only)**	0, 1, 2, 3, 4, 5, 6 M = Missing 0 = fully independent	Alphanumer character
ADL Toilet Transferring **<adl-toilet-transferring>** **Example: <adl-toilet-transferring>0</adl-toilet-transferring>**	**Toileting:** Ability to get to and from the toilet or bedside commode	0, 1, 2, 3, 4 M = Missing 0 = fully independent	Alphanumer character
ADL Transferring **<adl-transfer>** **Example: <adl-transfer>0</adl-transfer>**	**Transferring:** Ability to move from bed to chair, on and off toilet or commode, into and out of tub or shower, and ability to turn and position self in bed if patient is bedfast.	0, 1, 2, 3, 4, 5 M = Missing 0 = fully independent	Alphanumer character
Final Survey Status **<final-status>** **Example: <final-status>110</final-status>**	Final disposition of survey	110 = Completed Mail Survey 120 = Completed Phone Survey 210 = Ineligible: Deceased 220 = Ineligible: Does not Meet Eligibility criteria (See Section IV in this manual) 230 = Ineligible: Language Barrier 240 = Ineligible: Mentally or Physically Incapacitated, No proxy Respondent available 310 = Breakoff 320 = Refusal 330 = Bad Address/ Undeliverable Mail 340 = Wrong/Disc/No Telephone Number 350 = No response after Maximum attempts	Numeric

PATIENT ADMINISTRATIVE DATA RECORD			
XML Element	**Description**	**Valid Values**	**Data Typ**
Survey Language **<language>** This administration data element should only occur once per patient. **Example: <language>1</language>**	Identify language in which survey completed	1 = English 2 = Spanish 3 = Chinese 4 = Russian 5 = Vietnamese M = Missing	Alphanumer character
Proxy Flag **<proxy>** This administration data element should only occur once per patient. **Example: <proxy>1</proxy>**	Did a proxy complete the interview for the sample member?	1 = Yes 2 = No M = Missing	Alphanumer character

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