CMS 2010 Basic Stand Alone (BSA)

Home Health Agency (HHA) Beneficiary Public Use File (PUF)

Frequently Asked Questions (FAQ)

1. What is the CMS 2010 BSA HHA Beneficiary PUF?

The CMS 2010 BSA HHA Beneficiary PUF is a free downloadable file containing a subset of the information contained on home health agency claims provided to a 5% sample of 2010 Medicare beneficiaries. There are 10,539 records in the file with a total is 136,269 beneficiaries. Each record includes:

- 1. Gender of the beneficiary;
- 2. Age of the beneficiary at the end of 2010, reported as (1) under 65 years of age; (2) 65 to 69; (3) 70 to 74; (4) 75 to 79; (5) 80 to 84; and (6) 85 and older;
- 3. Total number of admissions;
- 4. Count of therapy visits;
- 5. Count of skilled nursing care visits;
- 6. Count of home health aide visits;
- 7. Rounded Medicare payment for the HHA claims of the beneficiary; and
- 8. Number of beneficiaries for each combination of values for the seven variables above.

2. How was this PUF created?

The *CMS 2010 BSA HHA Beneficiary PUF* originates from a disjoint 5% random sample of beneficiaries from the 100% Beneficiary Summary File for 2010. To exclude any overlap with the beneficiaries in the existing 5% CMS research sample, ¹ the beneficiaries in that other sample were excluded, and a 5-in-95 random draw was made of the remaining 95% of beneficiaries. All home health agency claims for the selected 5% of beneficiaries were then included in the sample from which the *CMS 2010 BSA HHA Beneficiary PUF* was developed.

The selected beneficiaries were subjected to a thorough de-identification process. The methods used to protect the identity of beneficiaries are described in the answer to the next question.

3. What has been done to protect the privacy of Medicare beneficiaries?

Of paramount importance in the release of the PUF is the protection of beneficiary confidentiality. To that end, all directly identifiable information has been removed in accordance with the HIPAA Privacy Rules.

¹ http://www.resdac.org/tools/TBs/TN-011_How5percentMedicarefilescreated_508.pdf

Other important steps were taken:

- Only a small subset of possible variables was selected for inclusion in the file. This
 reduced the possible information that could be used to identify the beneficiaries
 included in the new 5% sample.
- For the variables selected for inclusion, categorization was used to protect identities. For example, in place of date of birth or current age in years, the file was created with age categorized into seven intervals: (1) under 65 years of age; (2) 65 to 69; (3) 70 to 74; (4) 75 to 79; (5) 80 to 84; and (6) 85 and older. This categorization allows researchers to differentiate patterns in other data (e.g., counts of therapy visits) between younger and older beneficiaries but not to use age or date of birth as a highly identifying variable.
- The final protection was provided by excluding some records from the final PUF, those for which the combination of values for all seven variables in the file was extremely uncommon in the Medicare population. No combination that occurred for fewer than 11 beneficiaries in the full Medicare population was allowed into the final PUF. This criterion tended to exclude beneficiaries with uncommon values in variables such as count of different types of visits and Medicare payment.

4. How was provider confidentiality protected?

There is no risk of provider identification in the CMS 2010 BSA HHA Beneficiary PUF as the PUF does not contain any information about individual providers.

5. Why is there no diagnosis information in the CMS 2010 BSA HHA Beneficiary PUF?

Information on diagnosis at admission is not included in the *CMS 2010 BSA HHA Beneficiary PUF* to protect the privacy and confidentiality of Medicare beneficiaries. The distribution of beneficiaries across diagnosis codes in the initial 5% sample is highly dispersed, leaving very few beneficiaries per each 5-digit ICD-9-CM code. Even after coarsening these codes to 3-digit ICD-9-CM or to Major Diagnostic Classification (MDC), the distribution was considered unsafe to be released in a PUF.

6. Why are the HIPPS (Health Insurance Prospective Payment System) codes not included in the CMS 2010 BSA HHA Beneficiary PUF?

Similar to the issue with diagnosis codes, the distribution of the HIPPS codes was very sparse increasing the risk of the PUF significantly. Hence, they were not included in the PUF.

7. How are the number of visits categorized in the CMS 2010 BSA HHA Beneficiary PUF?

Each of the three count of visit (Therapy, Skilled Nursing Care and Home Health Aide) variables is categorized into four: (0) 0 visit, (1) 1 - 13 visits, (2) 14 - 19 visits, and (3) 20 or more visits.

8. How is the HHA_PMT_AMT calculated?

This variable is the sum of all the payments made by Medicare for a beneficiary's home health agency claims ending in 2010. It is also the sum over all the admissions if a beneficiary has multiple home health agency admissions in 2010.

9. How is the *CMS 2010 BSA HHA Beneficiary PUF* different from the 5% CMS standard research sample?

There is no overlap in terms of beneficiaries between the 5% CMS standard research sample and the CMS 2010 BSA HHA Beneficiary PUF. These two 5% samples are disjoint.

10. What are the limitations of the CMS 2010 BSA HHA Beneficiary PUF?

The CMS 2010 BSA HHA Beneficiary PUF is intended to give researchers a convenient initial look at data drawn from CMS home health agency claims. In order to preserve confidentiality, suppression criteria have been applied to variables and beneficiaries on the initial file. Some variables are rounded or categorized. Researchers should read the General Documentation and the Data Dictionary and Codebook to determine the appropriateness of the PUF for addressing specific research questions.

11. How may I request additional data?

See the Files for Order section of the CMS Web site http://www.cms.gov/home/rsds.asp. This site lists available CMS data files, data file properties, information about data-use agreements, as well as ordering and payment information.

12. How may I provide feedback on the CMS 2010 BSA HHA Beneficiary PUF?

Questions and comments can be submitted to Research Data Assistance Center (http://www.resdac.org/) via resdac@umn.edu or 1-888-9RESDAC.