Load Guide: Downloading and Applying the Clinical Classifications Software (CCS) for the ICD-10-PCS

Overview of HCUP ICD-10-CM/PCS Tools

ICD-10-CM/PCS tools can be used with data containing hospital discharges beginning October 1, 2015. HCUP Tools are updated periodically to accommodate new or revised ICD-10-CM/PCS codes and to add corrections or modifications based on new guidance for the use of ICD-10-CM/PCS codes. You are advised to apply the most recent version of the HCUP Tools for your data throughout your research process.

The information included in this document is specific to the Clinical Classifications Software (CCS) for ICD-10-PCS and is meant to complement the "HCUP Tools Loading Tutorial," part of the HCUP On-line Tutorial Series, which contains detailed steps for applying the HCUP Tools for ICD-10-CM/PCS to administrative data. Specific guidance documents for each ICD-10-CM/PCS HCUP Tool are available on the HCUP-US webpage:

- Clinical Classifications Software Refined (CCSR) for ICD-10-CM: www.hcup-us.ahrq.gov/toolssoftware/ccsr/ccs_refined.jsp
- Clinical Classifications Software (CCS) for ICD-10-PCS: www.hcup-us.ahrq.gov/toolssoftware/ccs10/ccs10.jsp
- Chronic Condition Indicator (CCI): www.hcup-us.ahrq.gov/toolssoftware/chronic_icd10/chronic_icd10.jsp
- Elixhauser Comorbidity Software: www.hcup-us.ahrq.gov/toolssoftware/comorbidityicd10/comorbidity_icd10.jsp
- Procedure Classes: www.hcup-us.ahrq.gov/toolssoftware/procedureicd10/procedure_icd10.jsp
- Utilization Flags: www.hcup-us.ahrq.gov/toolssoftware/utilflagsicd10/utilflag_icd10.jsp.

Timing and Versioning of Software Tool Releases

New or revised ICD-10-CM/PCS codes are released annually and valid for a Federal fiscal year, which runs from October 1 to September 30. Fiscal years are identified by the year the codes end. For example, FY2018 codes are valid from October 1, 2017 through September 30, 2018.

HCUP Tools are updated annually and released in October; however, the HCUP Tools are occasionally re-released during a Federal fiscal year to apply changes to the Tools' assignments of specific ICD-10-CM/PCS codes. Thus, the HCUP ICD-10-CM/PCS Tools incorporate a versioning system that acknowledge both the Federal fiscal year and an incremented release number.

Version 2020.1 of the CCS for ICD-10-PCS was released in October 2019. The codes contained in version 2020.1 are valid for use with data containing discharges from October 1, 2015 through September 30, 2020.

Downloading and Installing CCS for ICD-10-PCS

The instructions below are specific to downloading and installing the CCS for ICD-10-PCS.

If you are downloading the Tool for the first time:

1. Navigate to "Downloading Information of CCS for ICD-10-PCS Tool" on the CCS for ICD-10-PCS Tools webpage.
2. The CCS tool is available for download:
   - CCS for ICD-10-PCS (procedures)

   Click on the file names of the CSS components you need to automatically download the file(s). Alternately, click on the file name(s) with the right mouse button and select "Save Link As" (Google Chrome) or "Save Target As" (Internet Explorer) to download the ZIP file(s) to your computer.

3. After downloading the file(s), extract the ZIP file contents to a location on your computer where you can access them in the future. You will need to specify this location in the SAS Load programs.[1]
   - The ZIP file for the CCS for ICD-10-PCS contains three files:
     i. Translation file in text (ASCII) format that can be used with SAS, SPSS, Stata, or other analytic software. These are Comma Separated Value (.csv) text files.
     ii. SAS Load Program.
     iii. This Load Guide.
4. Modify and/or adapt the SAS Load Program, depending on your statistical software program.
   a. If using SAS, modify the SAS Load Program as indicated in the file. This includes specifying the full paths for all input and output files, including the location of your database or directly inputting your dataset, under the program header (i.e., 'FILENAME INRAW1', 'LIBNAME IN1', 'LIBNAME IN2'), the SAS data file name (i.e., 'CORE'), and the number and names of variables in your dataset.
   b. If using an alternate statistical program, adapt the SAS files as appropriate to work with the formatting requirements of that program.
     i. For SPSS: Use the SPSS Value Labels statement to apply the CCS labels. If you have questions on how to apply the labels, contact SPSS directly for technical assistance.
     ii. For Stata: Use the dictionary command to apply the CCS labels. If you have questions on how to apply the labels, use the Stata "help" function for more instructions or contact Stata directly for technical assistance.
5. Run the SAS (or other) Load Program to import the raw data files and apply the CCS tool to the discharge records in your dataset.
   - Load the translation .csv file into SAS so that it becomes a SAS dataset.
   - Convert the SAS dataset into a SAS format. The format can be applied to the diagnoses and/or the procedures in your dataset to create a corresponding set of variables reflecting the HCUP Tool.
6. Verify that the Tool was loaded properly.
   - Validate that CCS categories were created for each procedure field (data element I10_PRCCS1 for the CCS category for procedures).
   - Confirm that the I10_PRCCS1 columns are populated with numeric values.

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[1] The load program was developed using SAS statistical software; however, the program can be adapted for use with other analytic statistical software, such as SPSS or Stata.

- Verify that the frequency of I10_PR1 is equal to the frequency of I10_PRCCS1. Because each ICD-10- PCS code is mapped to the CCS individually, the number of records with I10_PR1 should be equal to the number of records with I10_PRCCS1.

If you have already downloaded the Tool and need to check for version updates:

1. Check if your existing Software version is the most recent version of the Tool by navigating to "Downloading Information of CCS for ICD-10-PCS Tool" on the CCS for ICD-10-PCS Tool webpage.
2. The current version of the CCS Tool is displayed on the webpage as "Version YYYY.N". Because the CCS for ICD-10-PCS Tool is valid for all ICD-10-PCS codes, it is recommended that the most up-to-date version always be applied to your data. Note that older (archived) versions are retained on this page for informational purposes only.
3. If you have not applied the most current version of the Tool, follow the steps in "*If you are downloading the Tool for the first time*" to download and apply the latest version to your data and ensure that the Tool was loaded properly.

Additional Information and Technical Support

For more information about the CCS for ICD-10-PCS and other HCUP tools, visit the Tools section of the HCUP-US webpage: www.hcup-us.ahrq.gov/tools_software.jsp.

If you have questions about using the HCUP databases, software tools, supplemental files, and other products, or about data use restrictions and publishing with the data, please contact HCUP User Support:

- E-mail: hcup@ahrq.gov
- Phone: 866-290-HCUP (4287) (toll free)
- International users, please contact HCUP User Support by e-mail.