Quick Start Guide
The 2014 Nationwide Readmissions Database (NRD)

The HCUP Nationwide Readmissions Database (NRD) is distributed as comma-separated value (CSV) files delivered via secure digital download from the [Online HCUP Central Distributor](#). The files are compressed and encrypted with SecureZIP® from PKWARE.

The NRD product is downloaded in a single zipped file for each year which contains several data-related files and accompanying documentation. The four data-related files include the following compressed files:

1) Core File (NRD_2014_Core.zip)

2) Hospital Weights File (NRD_2014_Hospital.zip)

3) Diagnosis and Procedure Groups File (NRD_2014_DX_PR_GRPS.zip)

4) Severity Measures File (NRDS_2014_Severity.zip).

In order to load and analyze the NRD data on a computer, you will need the following:

- The password provided by the HCUP Central Distributor

- A hard drive with at least 50 gigabytes of space available

- A third-party zip utility such as ZIP Reader, SecureZIP®, WinZip®, or Stuffit Expander®

- SAS®, SPSS®, Stata® or similar analysis software.

The total size of the CSV version of the NRD is 12 GB. The NRD files loaded into SAS are about 14 GB. In SAS, the largest use of space typically occurs during a sort, which requires work space about three times the size of the file. Thus, the NRD files would require at least 42 GB of available workspace to perform a sort. Most SAS data steps will require twice the storage of the file, so that both the input and output files can coexist. The NRD files loaded into SPSS are under 27 GB. Because Stata loads the entire file into memory, it may not be possible to load every data element in the NRD Core file into Stata. Stata users will need to maximize memory and use the "_skip" option to select a subset of variables. More details are provided in the Stata load programs. With a file of this size and without careful planning, space could easily become a problem in a multi-step program. It is not unusual to have several versions of a file marking different steps while preparing it for analysis, and there may be more versions for the actual analyses. Therefore, the amount of space required could escalate rapidly.

Decompressing the NRD Files

To extract the data files from the compressed download file, follow these steps:

1) Create a directory for the NRD on your hard drive.

2) Unzip the compressed NRD product file into the new directory using a third-party zip utility. This will create four compressed, encrypted data-related files in the new directory. You will be prompted to enter the encryption password (sent separately by email) to decrypt the file.

   Please note that attempts to unzip encrypted files using the built-in zip utility in Windows® (Windows Explorer) or Macintosh® (Archive Utility) will produce an error message warning of incorrect password and/or file or folder errors. The solution is to use a third-party zip utility.

   Third-party zip utilities are available from the following reputable vendors on their official Web sites.

- ZIP Reader (Windows) (free download offered by the PKWARE corporation)
- SecureZIP® for Mac or Windows (free evaluation and licensed/fee software offered by the PKWARE corporation)
- WinZip (Windows) (evaluation and fee versions offered by the WinZip corporation)
- Stuffit Expander® (Mac) (free evaluation and licensed/fee software offered by Smith Micro corporation).

3) Unzip each of the compressed, encrypted data-related files using the same password and third-party zip utility method. This will place the data-related ASCII files in this same directory by default.

Downloading and Running the Load Programs

Programs to load the data into SAS, SPSS, or Stata, are available on the HCUP User Support Web site (HCUP-US). To download and run the load programs, follow these steps:

1) Go to the NRD Database Documentation page on HCUP-US at http://www.hcup-us.ahrq.gov/db/nation/nrd/nrddbdocumentation.jsp.

2) Go to the "File Specifications and Load Programs" section on this page.

3) Click on "Nationwide SAS Load Programs", "Nationwide SPSS Load Programs", or "Nationwide Stata Load Programs" to go to the corresponding Load Programs page.

4) Select the data year and the database ("NRD") from the drop down lists on this page. Or you may select "NRD Load All Years" to obtain a zipped file with all load programs for multiple years at once.

5) Select and save the load programs you need. The **load programs are specific to the data year and data-related file**. For example, the load program for the 2014 NRD Core file is found under the link "SAS NRD 2014 Core File" in the list generated by selecting "2014" and "NRD." Save the load programs into the same directory as the NRD CSV files on your computer.

6) Edit and run the load programs as appropriate for your computing environment to create the analysis files. For example, modify the directory paths to point to the location of your input and output files.

NRD Documentation

Comprehensive documentation for the NRD files is available on the HCUP-US Web site (http://www.hcup-us.ahrq.gov/db/nation/nrd/nrddbdocumentation.jsp). Users of the NRD can access complete file documentation, including variable notes, file layouts, load programs, and summary statistics. Refer to these resources to understand the structure and content of the NRD and to aid in using the database. In addition, the Introduction to the NRD includes information on how to use the NRD data and discharge weights for analysis.

HCUP On-Line Tutorials

For additional assistance, AHRQ has created the HCUP Online Tutorial Series, a series of free, interactive courses that provide information on using HCUP data and tools and training on technical methods for conducting research with HCUP data. Topics include an HCUP Overview Course and other tutorials to help the researcher begin using the NRD:

- The Nationwide Readmissions Database Tutorial provides a description of the NRD database design and a detailed example on how to use the NRD to estimate national readmission rates with standard errors.

- The Load and Check HCUP Data tutorial provides instructions on how to unzip (decompress) HCUP data, save it on your computer, and load the data into a standard statistical software package. This tutorial also describes how to verify that the data have loaded correctly.

New tutorials are added periodically. The Online Tutorial Series is located on the HCUP-US Web site at http://hcup-us.ahrq.gov/tech_assist/tutorials.jsp.

HCUP Methods Series Reports on Readmission Methodology

HCUP has created two Methods Series reports that provide additional information on readmissions:

- *Overview of Key Readmission Measures and Methods* (Report #2012-04). This report describes12 key measures of hospital readmissions from different agencies or companies. The 12 measures were selected for inclusion because they are: (1) endorsed by the National Quality Forum (NQF), (2) currently used by AHRQ in various initiatives, or (3) otherwise well-known and used by researchers.

- *Methodological Issues when Studying Readmissions and Revisits using Hospital Administrative Data* (Report #2011-01). This report discusses the decisions that need to be addressed as an analyst designs a study of patients with sequential acute care hospital visits based on hospital administrative data. Topics include considerations in preparing the administrative database for the analysis, defining repeat hospital visits, and reporting results.

A third report specific to calculating variances when using the NRD is under development and is expected to be available in December 2016 on the HCUP Methods Series Web page (http://www.hcup-us.ahrq.gov/reports/methods/methods.jsp).

Technical Assistance

For issues related to unzipping, loading, and reading the files, including questions about passwords, contact the **HCUP Central Distributor**:

- E-mail: HCUPDistributor@ahrq.gov
- Phone: 866-556-HCUP (4287) (toll free)

For questions about using the HCUP databases, software tools, supplemental files, and other HCUP products, or about data use restrictions and publishing with the data, please review the HCUP Frequently Asked Questions or contact HCUP User Support:

HCUP FAQs: http://www.hcup-us.ahrq.gov/tech_assist/faq.jsp

- E-mail: hcup@ahrq.gov
- Phone: 866-290-HCUP (4287) (toll free)

For an overview of Requirements for Publishing with HCUP Data, for HCUP FAQs, and for general information about HCUP data, tools, and products visit the HCUP-US Web site at http://www.hcup-us.ahrq.gov.