What is the Healthcare Cost and Utilization Project (HCUP)?

HCUP is a family of health care databases, related software tools, supplemental files, reports, and other products developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality (AHRQ). The project builds on the data collection efforts of State data organizations, hospital associations, and private data organizations (known as “HCUP Partners”). Without HCUP Partners’ voluntary data contributions, this national resource for research and public health analysis would not be possible.

Why is HCUP important?

HCUP provides reliable, comprehensive information that can be used to answer questions about health care use, access, outcomes, and costs related to hospital inpatient stays, ambulatory surgery and services, and emergency department visits. HCUP databases, software tools, and reports enable research on a broad range of current health care issues and trends that are useful to policymakers, health services researchers, administrators, and consumers.

HCUP includes the largest collection of all-payer, encounter-level hospital care data in the United States. Currently, HCUP has health care data from 47 States, representing 97 percent of all inpatient hospital discharges. Collection began with 1988 data and currently extends through the 2013 data year.

How are the HCUP databases developed?

AHRQ transforms administrative health care data acquired from HCUP Partners into research-ready, uniform databases with a common set of data elements.

What databases are available from HCUP?

- **The National (Nationwide) Inpatient Sample (NIS)** is the largest publicly available all-payer inpatient care database in the United States, yielding national estimates of hospital inpatient stays. Sampled from the State Inpatient Databases (SID), the NIS approximates 20 percent of the discharges from all U.S. community hospitals. The NIS contains data from more than 7 million hospital stays each year. Researchers and policymakers use the NIS to identify, track, and analyze national trends in health care utilization, access, charges, quality, and outcomes.
- **The Kids’ Inpatient Database (KID)** is the only database for hospital use, outcomes, and charges that is designed to study children’s use of hospital services in the U.S. The KID contains two to three million hospital discharges for children and adolescents per year. This sample database is available for 1997, 2000, 2003, 2006, 2009, and 2012.
- **The Nationwide Emergency Department Sample (NEDS)** is a unique and powerful database that yields national estimates of emergency department (ED) visits. The NEDS was specifically designed to permit researchers to study a broad range of conditions and procedures related to ED use. The 2012 NEDS database includes approximately 30 million emergency department visits each year.
- **HCUP Partner States**

  47 provide statewide inpatient data
  34 provide ambulatory surgery and services data
  32 provide emergency department data
million records for patients who were either treated in the ED and released or treated in the ED and admitted to the same hospital.

- **The State Inpatient Databases (SID)** contain a powerful collection of inpatient hospital information. The SID can be used to investigate questions that are unique to one State or to compare data from two or more States.

- **The State Ambulatory Surgery and Services Databases (SASD)** include encounter-level data for ambulatory surgery and other outpatient services from hospital-owned facilities. In addition, some States provide data for ambulatory surgery and outpatient services from nonhospital-owned facilities.

- **The State Emergency Department Databases (SEDD)** contain discharge information on all ED visits that do not result in a hospital admission.

More information is available at [https://www.hcup-us.ahrq.gov/databases.jsp](https://www.hcup-us.ahrq.gov/databases.jsp).

### How do researchers obtain HCUP databases?

**Restricted-Access Public Release Databases** with nationwide data and State data may be purchased through the HCUP Central Distributor located at [https://www.hcup-us.ahrq.gov/tech Assist/centdist.jsp](https://www.hcup-us.ahrq.gov/tech Assist/centdist.jsp). The State-specific databases include data elements approved by each participating State while excluding data that might directly or indirectly identify a person. All purchasers and users of HCUP data must complete an online Data Use Agreement (DUA) training course and sign a DUA.

### What software tools and supplemental files are available from HCUP?

- **Software Tools and Supplemental Files** are developed and maintained by AHRQ to enhance the value of the HCUP databases. HCUP tools can also be used with other administrative databases. HCUP tools include Clinical Classifications Software (CCS), the Chronic Condition Indicator (CCI), Comorbidity Software, Procedure Classes, Surgery Flags, and Utilization Flags. All are free of charge and available for download from the HCUP-US Web site. HCUP also offers several supplemental files that are designed to use with and add value to HCUP databases, including the Revisit Analysis Variables, Cost-to-Charge Ratio Files (CCR Files), Hospital Market Structure Files (HMS Files), American Hospital Association (AHA) Linkage Files, NIS Hospital Ownership Files, and NIS- and KID-Trends Weights Files. More information is available at [http://www.hcup-us.ahrq.gov/tools_software.jsp](http://www.hcup-us.ahrq.gov/tools_software.jsp).

- **HCUPnet** is a free, online query system based on data from HCUP that provides quick access to statistical information from the project. HCUPnet can be used (1) to identify, track, analyze, and compare statistics on hospital inpatient and emergency care; (2) for trend analysis from 1993 and forward; and (3) to obtain measures of quality based on the AHRQ Quality Indicators. HCUPnet provides statistics at the national and regional levels, and for States that have agreed to participate, at the State- and community-levels. Users can generate tables and graphs with HCUPnet's easy, step-by-step query system. This interactive tool can be accessed at [http://hcupnet.ahrq.gov](http://hcupnet.ahrq.gov).

- **AHRQ Quality Indicators (QIs)** are measures of health care quality associated with processes of care that occur in the inpatient setting. The AHRQ QIs consist of four modules measuring various aspects of quality: Prevention Quality Indicators (PQIs), Inpatient Quality Indicators (IQIs), Patient Safety Indicators (PSIs), and Pediatric Quality Indicators (PDIs). More information is available at [http://qualityindicators.ahrq.gov](http://qualityindicators.ahrq.gov).

### What reports does HCUP produce?

- **HCUP Statistical Briefs** are short focused reports that present descriptive statistics on topics related to hospital use and costs for specific conditions or populations.

- **HCUP Projections Reports** use longitudinal HCUP data to project national and regional estimates on health care priorities.

- **HCUP Methods Series Reports** address methodological issues regarding use of HCUP databases, software tools and supplemental files.

- **HCUP Infographics** provide a visual representation of Statistical Brief data.

More information is available at [http://www.hcup-us.ahrq.gov/reports.jsp](http://www.hcup-us.ahrq.gov/reports.jsp).

### What support services are offered to HCUP users?

**Technical Support** is available to facilitate use of HCUP. The user-friendly HCUP User Support (HCUP-US) Web site, located at [http://www.hcup-us.ahrq.gov](http://www.hcup-us.ahrq.gov), contains extensive documentation of the project and its products. Users with questions can reach experienced technical support staff through a toll-free telephone number, 1-866-290-HCUP, or by email at [hcup@ahrq.gov](mailto:hcup@ahrq.gov). The Frequently Asked Questions (FAQs) and online tutorials provide additional information. AHRQ presents the HCUP project at professional conferences and offers training workshops. More information is available at [http://www.hcup-us.ahrq.gov/techassist.jsp](http://www.hcup-us.ahrq.gov/techassist.jsp) and [http://www.hcup-us.ahrq.gov/news/events.jsp](http://www.hcup-us.ahrq.gov/news/events.jsp), respectively.