

H·CUP
HEALTHCARE COST AND UTILIZATION PROJECT

HCUP FACT SHEET

2021



The Healthcare Cost and Utilization Project Fact Sheet

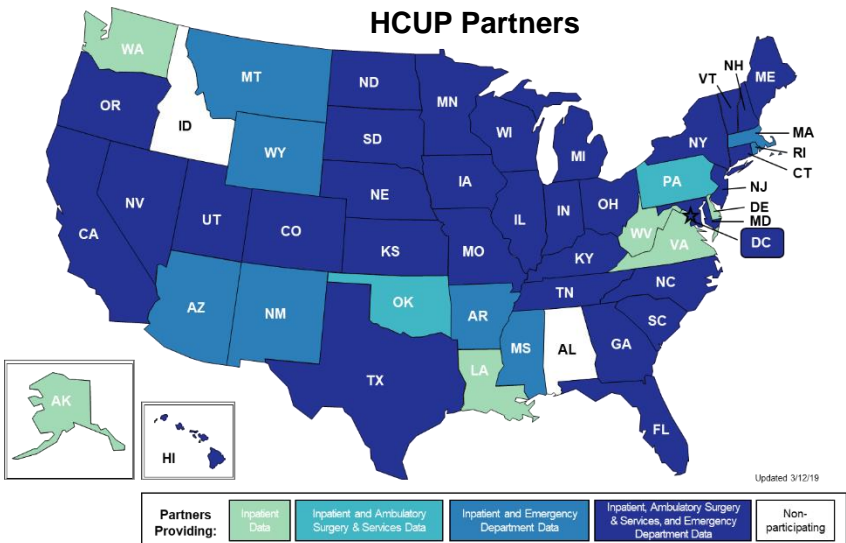
What is the Healthcare Cost and Utilization Project (HCUP)?

HCUP is a family of healthcare databases and related software tools and 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 supporting health services research and policy would not be possible.

Why is HCUP important?

HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level. HCUP provides reliable, comprehensive information that can be used to answer questions about healthcare use, access, outcomes, and costs related to hospital inpatient stays, ambulatory surgery and services, emergency department visits, and readmissions. HCUP databases, software tools, and products enable research on a broad range of current healthcare issues and trends that are useful to policymakers, researchers, administrators, and consumers.

How are the HCUP databases developed?



- AHRQ transforms administrative healthcare data acquired from HCUP Partners into research-ready, uniform databases with a common set of data elements.
- Currently, 49 Partners (48 States and the District of Columbia) provide HCUP with statewide inpatient data, 35 Partners provide ambulatory surgery and services data, and 41 Partners provide emergency department data.

What databases are available from HCUP?

- **The National (Nationwide) Inpatient Sample (NIS)** is the largest publicly available all-payer inpatient database in the United States, yielding national estimates of hospital inpatient stays. Released annually, the NIS approximates a 20 percent stratified sample of discharges from all U.S. community hospitals and currently contains data from more than seven million hospital stays each year. Researchers and policymakers use the NIS to identify, track, and analyze national trends in healthcare utilization, access, charges, quality, and outcomes. The inpatient

data contained in the NIS represent more than 97 percent of inpatient discharges from community hospitals in the United States.

- **The Kids' Inpatient Database (KID)** is the largest publicly available, all-payer, national pediatric inpatient care database in the United States, and was designed to facilitate study of hospital services, outcomes and charges for children and adolescents. It contains a sample of two to three million hospital pediatric discharges per year. The KID database is available every three years from 1997-2012. The KID was released in 2016 and is comprised of ICD-10-CM/PCS data only. The next KID is planned to be released in 2021.
- **The Nationwide Ambulatory Surgery Sample (NASS)** is the largest all-payer ambulatory surgery database in the United States. Released annually starting with the 2016 data year, the NASS produces national estimates of major ambulatory surgery encounters in hospital-owned facilities.
- **The Nationwide Emergency Department Sample (NEDS)** is a database that yields national estimates of hospital-owned emergency department (ED) visits in the United States. Released annually and available from 2006 through 2017, the NEDS database enables researchers to study a broad range of conditions and procedures related to ED use. It includes over 30 million records each year for patients who were either treated in the ED and released or treated in the ED and admitted to the same hospital.
- **The Nationwide Readmissions Database (NRD)** supports analyses of repeat hospital visits in a year, addressing the need for nationally representative information on hospital readmissions for all ages and payers, including the uninsured. The NRD is released annually starting with data year 2016.
- **The State Inpatient Databases (SID)** contain a powerful collection of hospital inpatient discharge 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 (AS) and other outpatient services from hospital-owned facilities. 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.

Additional information about these databases is available at www.hcup-us.ahrq.gov/databases.jsp.

How do researchers obtain HCUP databases?

Restricted-Access Public Release Nationwide Databases and Select State Databases (when permitted by HCUP Partners) may be purchased through the HCUP Central Distributor at www.hcup-us.ahrq.gov/tech_assist/centdist.jsp. The State-specific databases include data elements approved by each participating HCUP Partner while excluding data that might directly or indirectly identify a person. All purchasers and users of HCUP data must complete a brief 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 by AHRQ to enhance the value of the HCUP databases. HCUP tools can be used with HCUP data as well as with non-HCUP hospital administrative databases. HCUP tools are free of charge and include Clinical Classifications Software Refined (CCSR), Elixhauser Comorbidity Software Refined, Chronic Condition Indicator (CCI), Procedure Classes, Surgery Flags, and Utilization Flags. HCUP also

offers supplemental files that can create new data elements for the HCUP databases, including HCUP Supplemental Variables for Revisit Analyses, Cost-to-Charge Ratio (CCR) Files, Hospital Market Structure (HMS) Files, American Hospital Association (AHA) Linkage Files, and NIS and KID Trend Weights Files. Additional information is available at www.hcup-us.ahrq.gov/tools_software.jsp.

- **HCUPnet** is a free, on-line query system that uses precalculated HCUP data to provide quick-access statistical information about hospital inpatient, ambulatory surgery, and emergency department utilization. HCUPnet delivers statistics at the national level, and for Partners that agree to participate, at the State, region, and community-levels. Users generate tables and graphs via this easy-to-use interactive tool, accessed at www.hcupnet.ahrq.gov/.
- **AHRQ Quality Indicators (QIs)** are measures of healthcare 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). The QIs are analyzed with free software available from AHRQ that is designed to be used with HCUP and other administrative data. Additional information is available at www.qualityindicators.ahrq.gov/.
- **HCUP Fast Stats** is an online query tool that uses visual displays to compare national or State statistics on a range of healthcare topics. HCUP Fast Stats uses visual statistical displays in stand-alone graphs, trend figures, or simple tables and maps to convey complex information at a glance. National and State-level information is updated regularly (quarterly or annually, as newer data become available) and is available at www.hcup-us.ahrq.gov/faststats/landing.jsp.

What other products does HCUP produce?

- **HCUP Statistical Briefs** are short, focused reports with descriptive statistics on hospital use and cost topics
- **HCUP Infographics/Data Visualizations** provide graphic representations of HCUP data
- **HCUP Findings-At-A-Glance** are snapshots of health policy issues related to hospital use and costs
- **HCUP Methods Series Reports** address methodological issues in HCUP databases, tools, and supplemental files
- **HCUP Peer Reviewed Research and Analyses** are regularly produced to facilitate more focused data use

Additional information is available at www.hcup-us.ahrq.gov/reports.jsp.

What support services are offered to HCUP users?

Technical Assistance is available to facilitate use of HCUP. The user-friendly HCUP-US website, www.hcup-us.ahrq.gov, contains extensive documentation about the project. HCUP [FAQs](#) answer commonly asked questions. [HCUP's Online Tutorial Series](#) offer on-demand, interactive training on conducting research with HCUP data and tools. HCUP training webinars and workshops educate users in both online and in-person settings. HCUP presentations at conferences keep researchers up to date on current research with HCUP data. User questions are responded to by experienced technical staff at 866-290-HCUP or hcup@ahrq.gov. More information is available at www.hcup-us.ahrq.gov/techassist.jsp.