HCUP FACT SHEET

2022

The Healthcare Cost and Utilization Project Fact Sheet

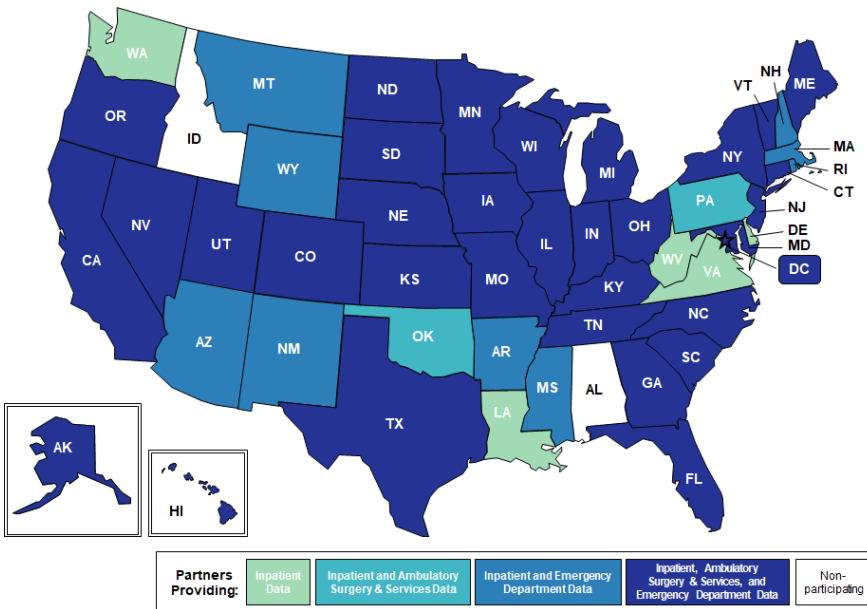## What is the Healthcare Cost and Utilization Project (HCUP)?

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?

HCUP Partners

- 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, 36 Partners provide ambulatory surgery and services data, and 42 Partners provide emergency department data.

Partners Providing:	Inpatient Data	Inpatient and Ambulatory Surgery & Services Data	Inpatient and Emergency Department Data	Inpatient, Ambulatory Surgery & Services, and Emergency Department Data	Non-participating

What databases are available from HCUP?

The National (Nationwide) Inpatient Sample (NIS) is the largest publicly available all-payer inpatient healthcare database in the United States. The NIS database consists of a sample of discharges equal to approximately 20 percent of the total discharges from U.S. community hospitals (excluding rehabilitation and long-term acute care hospitals). The NIS is produced

annually, and the sample is designed to be nationally representative. The NIS may be used 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 only all-payer inpatient care database for children in the United States. Researchers and policymakers can use the KID to identify, track, and analyze national trends in healthcare utilization, access, charges, quality, and outcomes. The KID's large sample size enables analyses of both common and rare conditions such as congenital anomalies, uncommon treatments, and organ transplantation. The KID is released every three years and the most recent KID was released in 2021 for the 2019 data year.

The Nationwide Ambulatory Surgery Sample (NASS) is the largest all-payer ambulatory surgery database in the United States, yielding national estimates of major ambulatory surgery encounters performed in hospital-owned facilities. Major ambulatory surgeries are defined as selected invasive, therapeutic surgical procedures that typically require the use of an operating room and require regional anesthesia, general anesthesia, or sedation. Procedures intended primarily for diagnostic purposes are excluded.

The Nationwide Emergency Department Sample (NEDS) contains emergency department encounters for patients that are treated and released from the Emergency Department (ED), as well as patients admitted to the hospital through the ED. The NEDS was created to enable analyses of ED utilization patterns and support public health professionals, administrators, policymakers, and clinicians in their decision making regarding this critical source of care.

The Nationwide Readmissions Database (NRD) combines the State Inpatient Databases (SID) with verified patient linkage numbers to create estimates of national readmission rates. States, counties, and hospitals are not identifiable in the NRD. The database includes patients with and without repeat hospital visits during a year and those who have died in the hospital.

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 AS 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 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.

HCUP Data Visualizations display summary tables and infographics. The summary tables are based on State-specific monthly trends in inpatient stays related to COVID-19 and other conditions. The HCUP Infographics are based on data found in the HCUP Statistical Brief series and HCUP Findings-At-A-Glance.

What other products does HCUP produce?

HCUP Statistical Briefs are short, focused reports with descriptive statistics on hospital use and cost topics.

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 currently educate users in an online setting; in-person education activities are expected to resume once conditions permit. HCUP presentations at virtual 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.