



U.S. Department of Health and Human Services



Agency for Healthcare Research and Quality

Advancing Excellence in Health Care • [www.ahrq.gov](http://www.ahrq.gov)

# The Healthcare Cost and Utilization Project (HCUP)

## Overview of the HCUP Databases

Agency for Healthcare Research and Quality  
Webinar ♦ May 21, 2014

- **Project Overview**
- **HCUP Partners**
- **The Making of HCUP Data**
- **HCUP State Databases**
- **HCUP Nationwide Databases**
- **How to Obtain HCUP Data & Access HCUP Resources**

<b>Costs of care</b>	<b>Septicemia was the most expensive reason for hospitalization in 2011—totaling over \$20 billion in aggregate hospital costs (NIS)</b>
<b>Access to care</b>	Americans in low-income areas visit EDs at rates 90 percent higher compared to those in the highest income areas (NEDS)
<b>Quality of care</b>	From 2004 to 2009, the overall inpatient mortality rate for hospital admissions with heart attack decreased significantly overall and for both genders and all expected payment sources (NIS)
<b>Readmissions</b>	For CHF, schizophrenia, and renal failure, at least 1 in 5 patients were readmitted within 30 days (SID with readmissions link)
<b>Patient Safety</b>	In 2009, postoperative sepsis occurred in 15 of 1,000 elective-surgery admissions of length 4 or more days, age 18 and over United States (NIS and PSI)
<b>Geographic variation</b>	ED visits were higher in counties with fewer primary care MDs per capita (SEDD)

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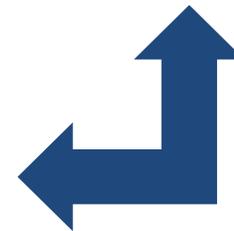
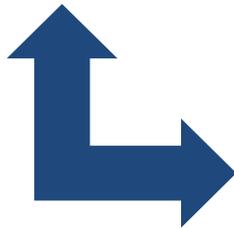
State



Federal



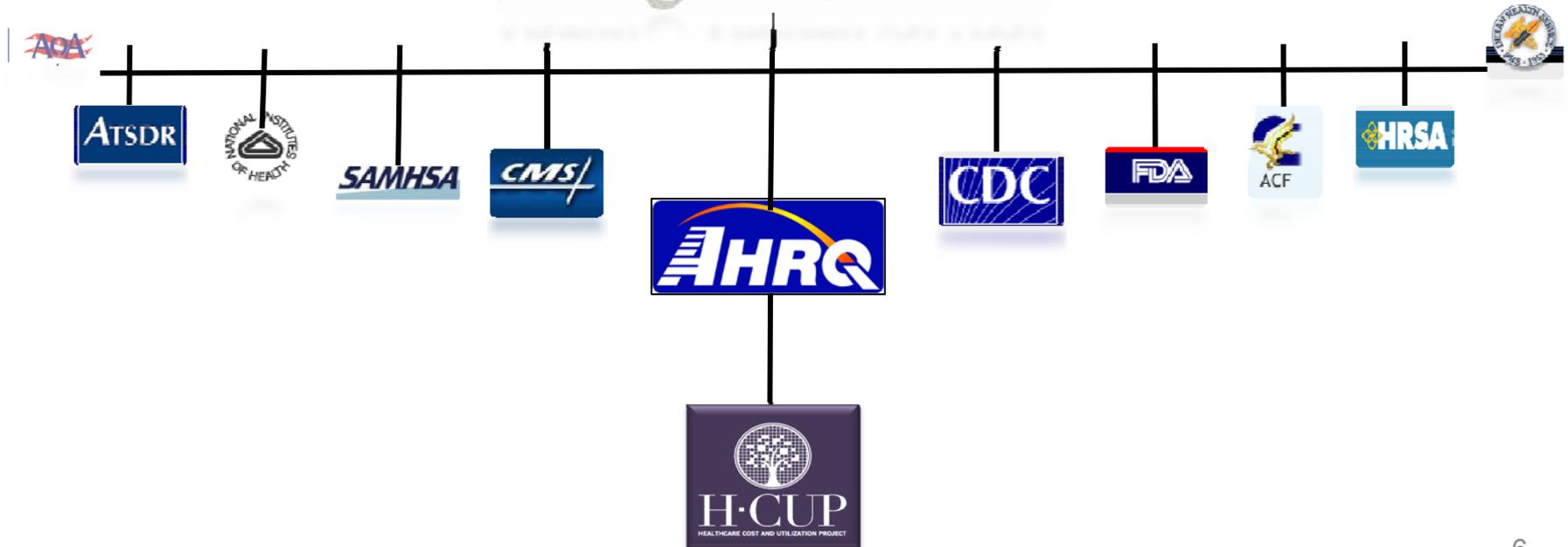
Industry



# What is the Agency for Healthcare Research and Quality (AHRQ)?

The Agency for Healthcare Research and Quality (AHRQ) is a federal agency under the Department of Health and Human Services.

United States Department of  
Health & Human Services





# Current HCUP State Partners



**Alaska** State Hospital and Nursing Home Association

**Arizona** Department of Health Services

**Arkansas** Department of Health

**California** Office of Statewide Health Planning & Development

**Colorado** Hospital Association

**Connecticut** Hospital Association

**Florida** Agency for Health Care Administration

**Georgia** Hospital Association

**Hawaii** Health Information Corporation

**Illinois** Department of Public Health

**Indiana** Hospital Association

**Iowa** Hospital Association



# Current HCUP State Partners



**Kansas** Hospital Association

**Kentucky** Cabinet for Health and Family Services

**Louisiana** Department of Health and Hospitals

**Maine** Health Data Organization

**Maryland** Health Services Cost Review Commission

**Massachusetts** Center for Health Information and Analysis

**Michigan** Health & Hospital Association

**Minnesota** Hospital Association

**Mississippi** Department of Health

**Missouri** Hospital Industry Data Institute

**Montana** MHA – An Association of Montana Health Care  
Providers

**Nebraska** Hospital Association



# Current HCUP State Partners



**Nevada** Department of Health and Human Services  
**New Hampshire** Department of Health & Human Services  
**New Jersey** Department of Health  
**New Mexico** Department of Health  
**New York** State Department of Health  
**North Carolina** Department of Health and Human Services  
**North Dakota** Data Provided by Minnesota Hospital Association  
**Ohio** Hospital Association  
**Oklahoma** State Department of Health  
**Oregon** Association of Hospitals and Health Systems  
**Oregon** Health Authority  
**Pennsylvania** Health Care Cost Containment Council  
**Rhode Island** Department of Health  
**South Carolina** State Budget & Control Board



# Current HCUP State Partners



**South Dakota** Association of Health Care Organizations

**Tennessee** Hospital Association

**Texas** Department of State Health Services

**Utah** Department of Health

**Vermont** Association of Hospitals and Health Systems

**Virginia** Health Information

**Washington** State Department of Health

**West Virginia** Health Care Authority

**Wisconsin** Department of Health Services

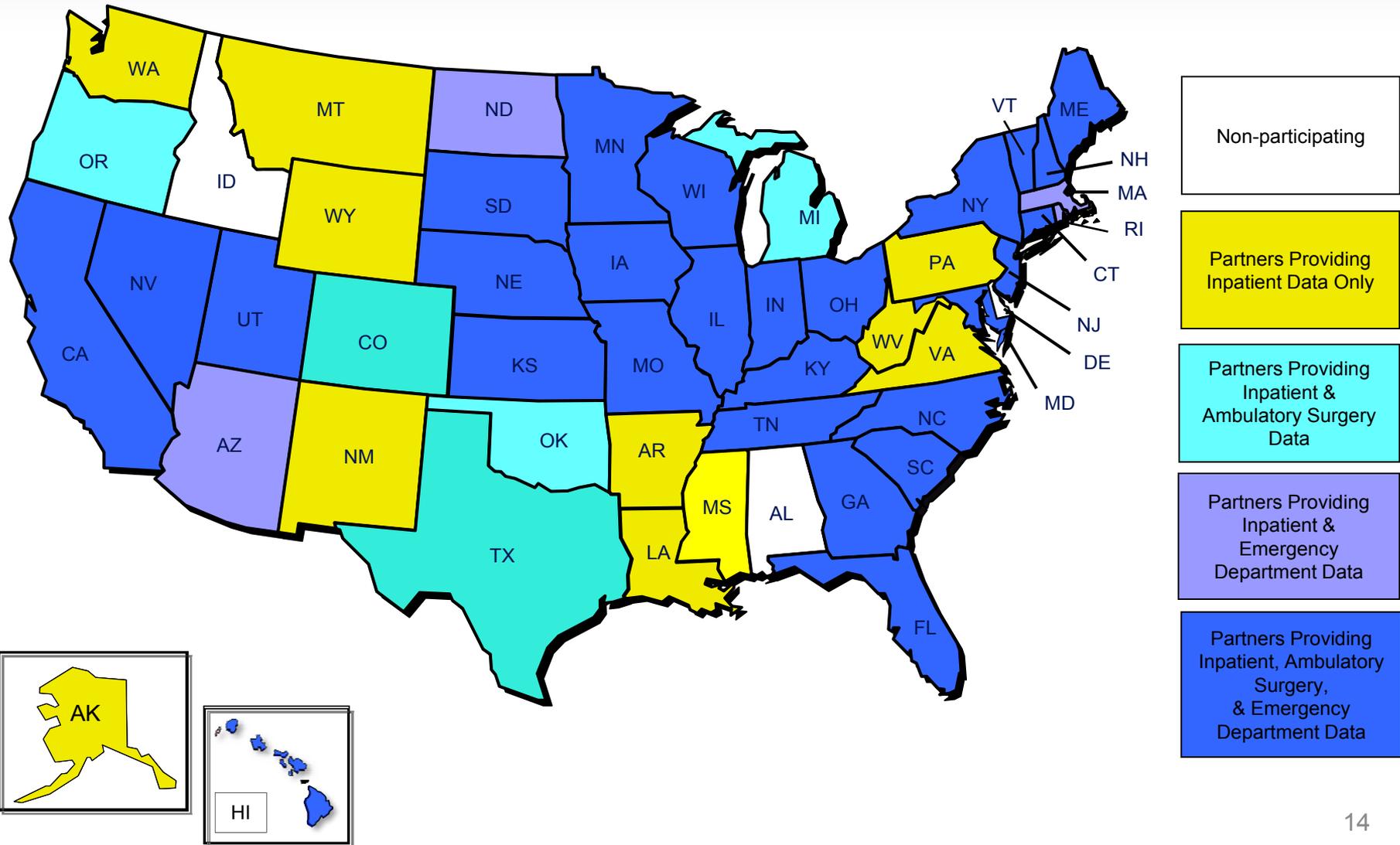
**Wyoming** Hospital Association





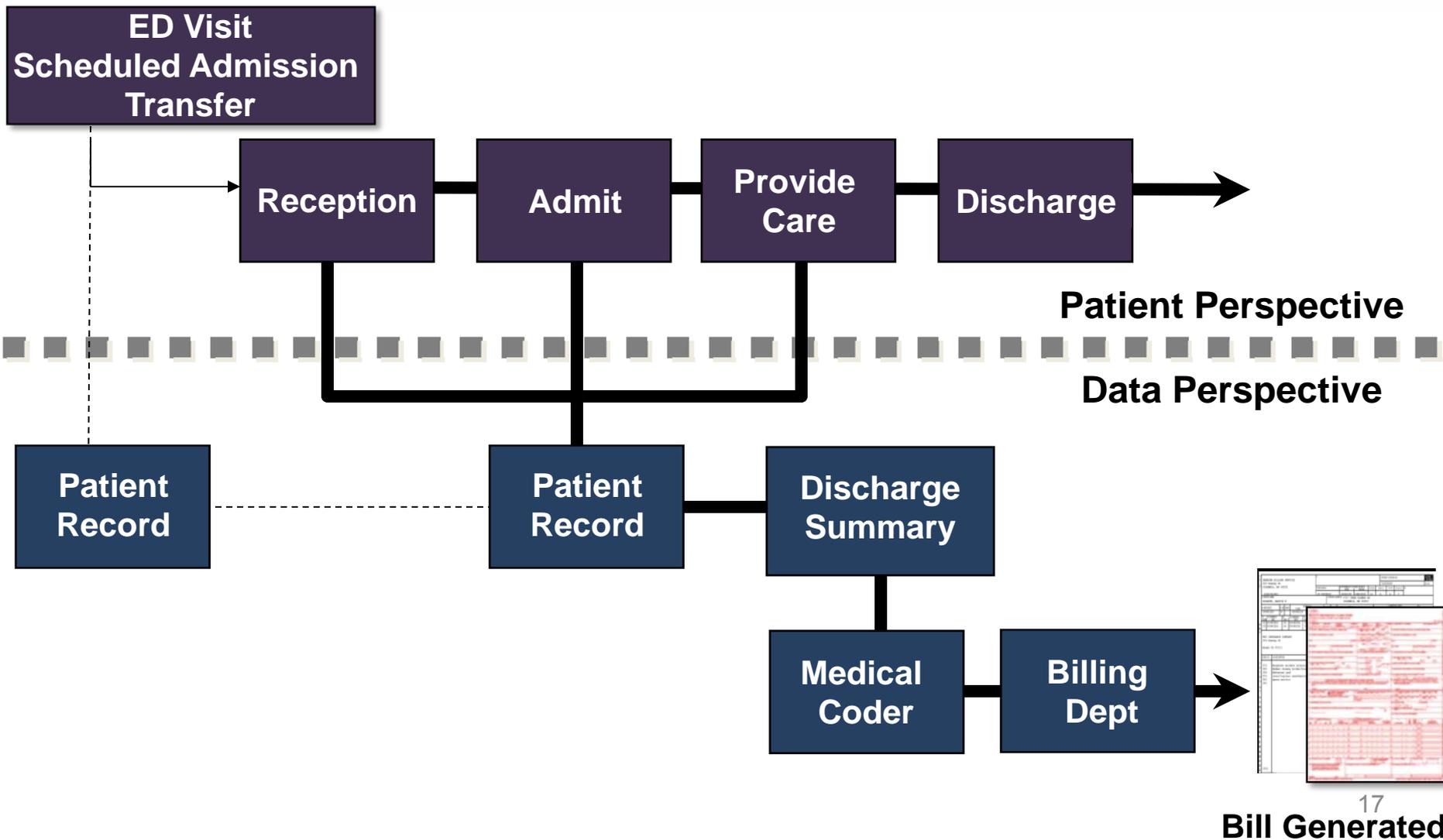


# Partnership: HCUP Database Participation By State



- **Project Overview**
- **HCUP Partners**
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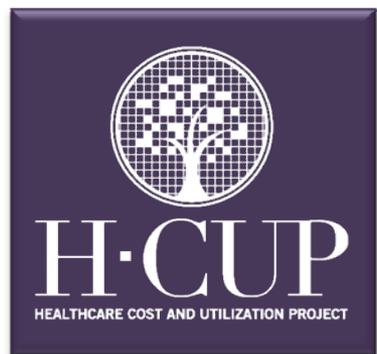




Patient enters hospital



Billing record created



AHRQ standardizes data to create uniform HCUP databases



Hospital sends billing data and any additional data elements to data organizations

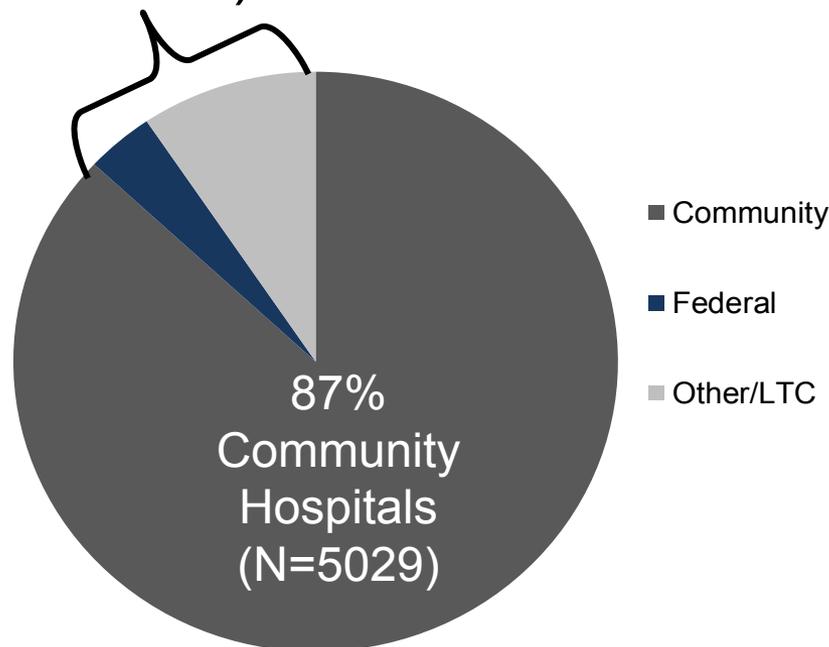
744	98	749	2	70	257	5	200
745	25	614	4	84	541	4	549
746	68	195	1	78	669	3	523
747	43	728	1	48	233	4	970
748	61	533	6	98	63	8	40
749	21	418	4	69	496	1	613
750	10	374	2	77	371	1	905
751	2	326	4	44	638	2	958
752	63	521	4	18	217	8	721
753	38	907	4	44	446	2	71
754	50	418	0	59	216	4	799
755	22	806	3	46	573	2	994
756	94	740	6	55	247	1	216
757	30	652	6	8	289	3	559
758	63	386	1	94	838	5	613
759	17	766	8	92	709	5	612
760	54	735	3	29	556	6	503
761	5	263	4	78	125	8	997
762	48	1003	1	94	484	8	206
763	23	916	6	15	596	9	327
764	11	251	4	17	142	6	194
765	20	976	1	9	561	6	29

States store data in varying formats

- State data is mapped to a standardized HCUP format which allows for consistent data elements and values across States for comparison
- Additional data elements are added:
  - ▶ Value-added variables – injury indicators, chronic condition indicators, procedure class
  - ▶ Hospital characteristics – teaching status, ownership/control, bed size
  - ▶ Diagnostic related groups and severity measures –
    - AHRQ’s Clinical Classification Software (CCS)
    - 3M’s All Patient Refined DRGs (APR-DRGs)
- Quality checks are performed

- 87% of hospitals in the U.S. are community hospitals

13% Noncommunity hospitals (Federal (DOD/VA/IHS), psychiatric, non-federal long term care, etc.)



# What Are Community Hospitals?

## American Hospital Association Definition:

Non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of other institutions (e.g., prisons)

Included	Excluded
Multi-specialty general hospitals	Long-term care
OB-GYN	Psychiatric
ENT	Alcoholism/Chemical dependency
Orthopedic	Rehabilitation
Pediatric	DoD / VA / IHS
Public	
Academic medical centers	

# What are Community Hospitals?

- HCUP generally does not receive data from non-community hospitals.
- However, if a patient is treated in a community hospital, their information is included.

Most Frequent Principal Diagnosis	Number of Discharges (thousands)
1. Newborns	3,817
2. Pneumonia	1,113
3. Septicemia	1,093
4. Congestive heart failure	970
5. Osteoarthritis	964
6. Mood disorders	895
7. Cardiac dysrhythmias	795

# HCUP Has 6 Types of Databases

- Three state-level databases



State Inpatient Databases  
(SID)



State Ambulatory Surgery & Services Databases  
(SASD)



State Emergency Department Databases  
(SEDD)

- Three nationwide databases



Nationwide Inpatient Sample  
(NIS)



Nationwide Emergency Department Sample  
(NEDS)



Kids' Inpatient Database  
(KID)

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State Inpatient  
Databases  
(SID)

All inpatient hospital discharge data (including those admissions that started in the ED) from participating HCUP States

State Ambulatory  
Surgery & Services Databases  
(SASD)

Ambulatory surgery data (hospital based and some freestanding) from participating HCUP States

State Emergency  
Department Databases  
(SEDD)

Emergency department data (treat and release) from participating HCUP States

# What Data Elements are included in the HCUP databases?

## Data Elements:

- Patient demographics (age, sex)
- Diagnoses & procedures
- Expected payer
- Length of stay
- Patient disposition
- Admission source & type
- Admission month
- Weekend admission



# Some Data Elements Vary by State

- Race/Ethnicity
- Patient county
- Patient ZIP Code
- Severity of illness
- Birthweight
- Procedure date (days from admission)
- Health plan details
- Additional expected payers
- Detailed charges
- Patient identifiers encrypted
- Physician identifiers encrypted
- Physician specialty
- Hospital identifier unencrypted





# Example: Payer Detail Varies by State



PAY1_X		PAY1 (Standardized)	
Value	Description	Value	Description
010	Medicare	1	Medicare
011	Medicare (HMO)		
012	Medicare (Managed care - Other)		
013	Medicare (fee for service)		
020	Medi-Cal	2	Medi-Cal
021	Medi-Cal (HMO)		
022	Medi-Cal (Managed care - Other)		
023	Medi-Cal (fee for service)		
030	Private Coverage	3	Private insurance
031	Private Coverage (HMO)		
032	Private Coverage (Managed care - Other)		
033	Private Coverage (fee for service)		
08n, where n=0-3	Self-pay	4	Self-pay
--		5	No charge



# Example: Race Detail Varies by State



RACE_X		RACE (Standardized)	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
3	Hispanic	3	Hispanic
4	Hawaiian	4	Asian or Pacific Islander
5	Chinese		
6	Filipino		
7	Japanese		
8	Other Asian		
9	Other Pacific Islander	5	Native American
10	Native American		
11	Mixed or Other	6	Other

# Partner State Files vs. HCUP State Files

- HCUP State Files vs. Data Files received directly from the State

<b>HCUP State Files</b>	<b>Partner State Files</b>
Subset of data elements	All data elements
Value-added data elements	May not have same value-added elements
Uniformly coded across the states	Not uniformly coded across states
Standard data quality checks	Variability in quality checks by state
Lag time	More timely



# States Releasing Databases through HCUP Central Distributor



**H·CUP**  
HEALTHCARE COST AND UTILIZATION PROJECT

- Arizona
- Arkansas
- California
- Colorado
- Florida
- Hawaii
- Iowa
- Kentucky
- Maine
- Maryland
- Massachusetts
- Michigan
- Mississippi
- Nebraska
- Nevada
- New Jersey
- New Mexico
- New York
- North Carolina
- Oregon
- Rhode Island
- South Carolina
- South Dakota
- Utah
- Vermont
- Washington
- West Virginia
- Wisconsin

## Remember:

**Not all states  
participate in all  
years and for all  
databases**

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# HCUP Nationwide Databases



<p>Nationwide Inpatient Sample (NIS)</p>  A yellow starburst graphic with the text 'NIS Redesign' inside.	<p>Inpatient hospital discharge data from a sample of hospitals in SID</p>
<p>Kids' Inpatient Database (KID)</p>	<p>Pediatric inpatient hospital discharge data from a <b>sample of pediatric discharges</b> in SID</p>
<p>Nationwide Emergency Department Sample (NEDS)</p>	<p>Emergency department data (treat and release &amp; admitted) from a sample of hospitals in SID and SEDD</p>



# NIS is a Stratified Sample of Hospitals from the SID



## 2011 State Inpatient Databases (SID)

N = ~ 4,400 hospitals  
~ 35M records

### Strata

- U.S. Region
- Urban/Rural Location
- Teaching Status
- Ownership/Control
- Bed Size

## Stratified Sample of Hospitals

\*State not included as stratum



## 2011 Nationwide Inpatient Sample (NIS)

N = ~ 1K hospitals  
~ 8M records

- The current NIS is comprised of *all discharges from a 20% sample of U.S. community hospitals* drawn from the HCUP State Inpatient Databases and includes 100% of discharges from those hospitals
- The new design to be implemented with the 2012 data will be a *sample of discharges from all hospitals* in HCUP equal to approximately 20% of all discharges in U.S. community hospitals

# KID is a Stratified Sample of Hospitals from the SID

## 2009 State Inpatient Databases (SID)

N = ~ 4K hospital  
~ 32M records

### Strata

- Uncomplicated Births
- Complicated Births
- Pediatric Non-Births

## Stratified Sample of Discharges

\*State not included

• 10% uncomplicated births

• 80% pediatric discharges



## 2009 Kids' Inpatient Database (KID)

N = ~ 4K hospitals  
~ 3M records

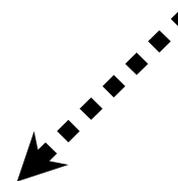
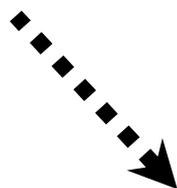
- Age in days (**AGEDAY**)
- Birth weight in grams (**BWT**)
- Birth diagnosis (**HOSPBIRTH**)
- National Association of Children's Hospitals and Related Institutions (**NACHRI**) hospital type (**NACHTYPE**)
- Normal, uncomplicated birth in hospital (**UNCBIRTH**)



Treat-and-Release ED Visits



Admitted ED Visits



**About 84% of ED visits are treat-and-release**

**About 16% of ED visits result in a hospital stay**



# NEDS is a Stratified Sample of Hospitals from the SEDD and SID



H-CUP  
HEALTHCARE COST AND UTILIZATION PROJECT

2011  
State  
Inpatient  
Databases  
(SID)  
State  
Emergency  
Department  
Databases  
(SEDD)

Strata

- U.S. Region
- Urban/Rural Location
- Teaching Status
- Ownership/Control
- Trauma center

Stratified Sample  
of Hospitals

\*State not included as stratum

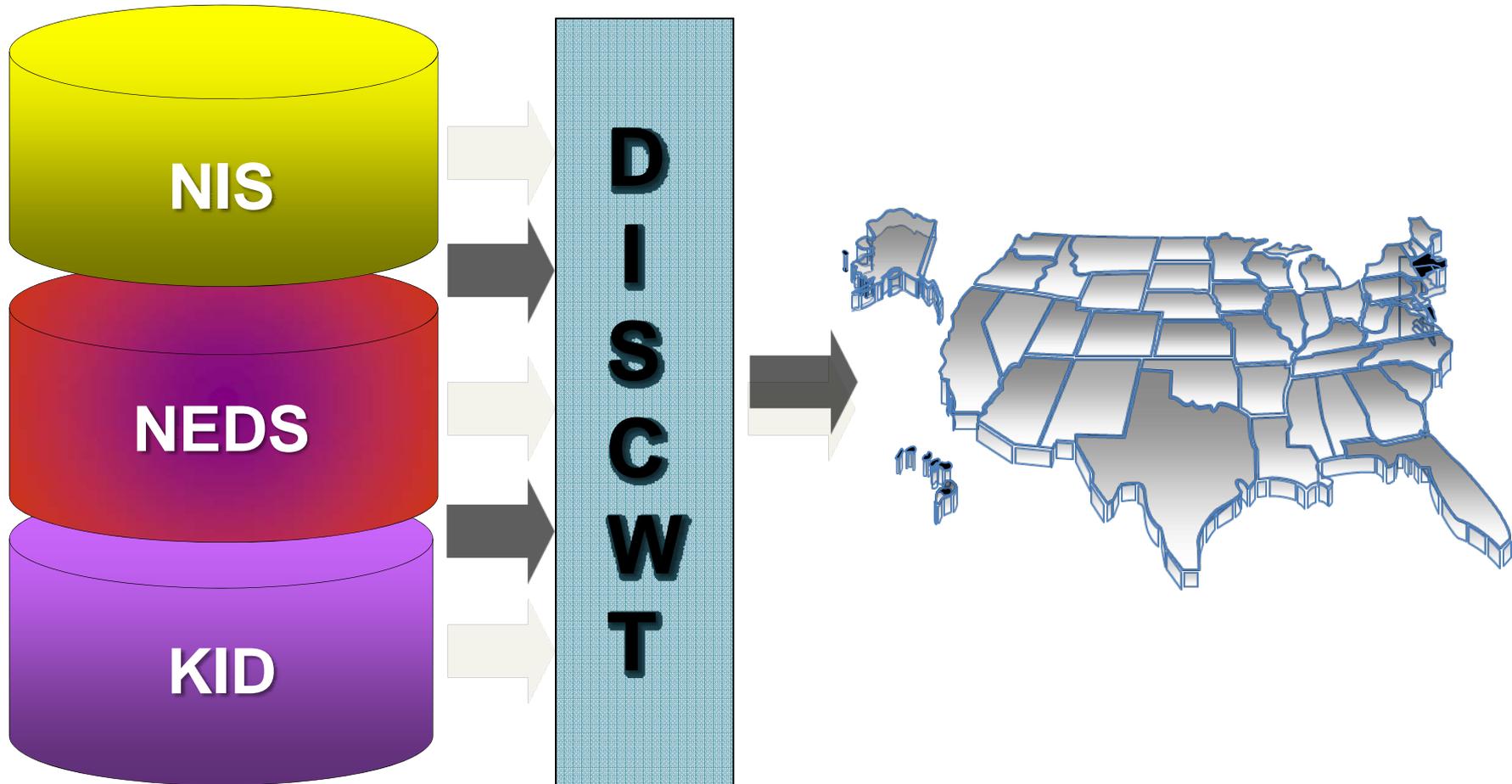


2011  
Nationwide  
Emergency  
Department  
Database  
(NEDS)

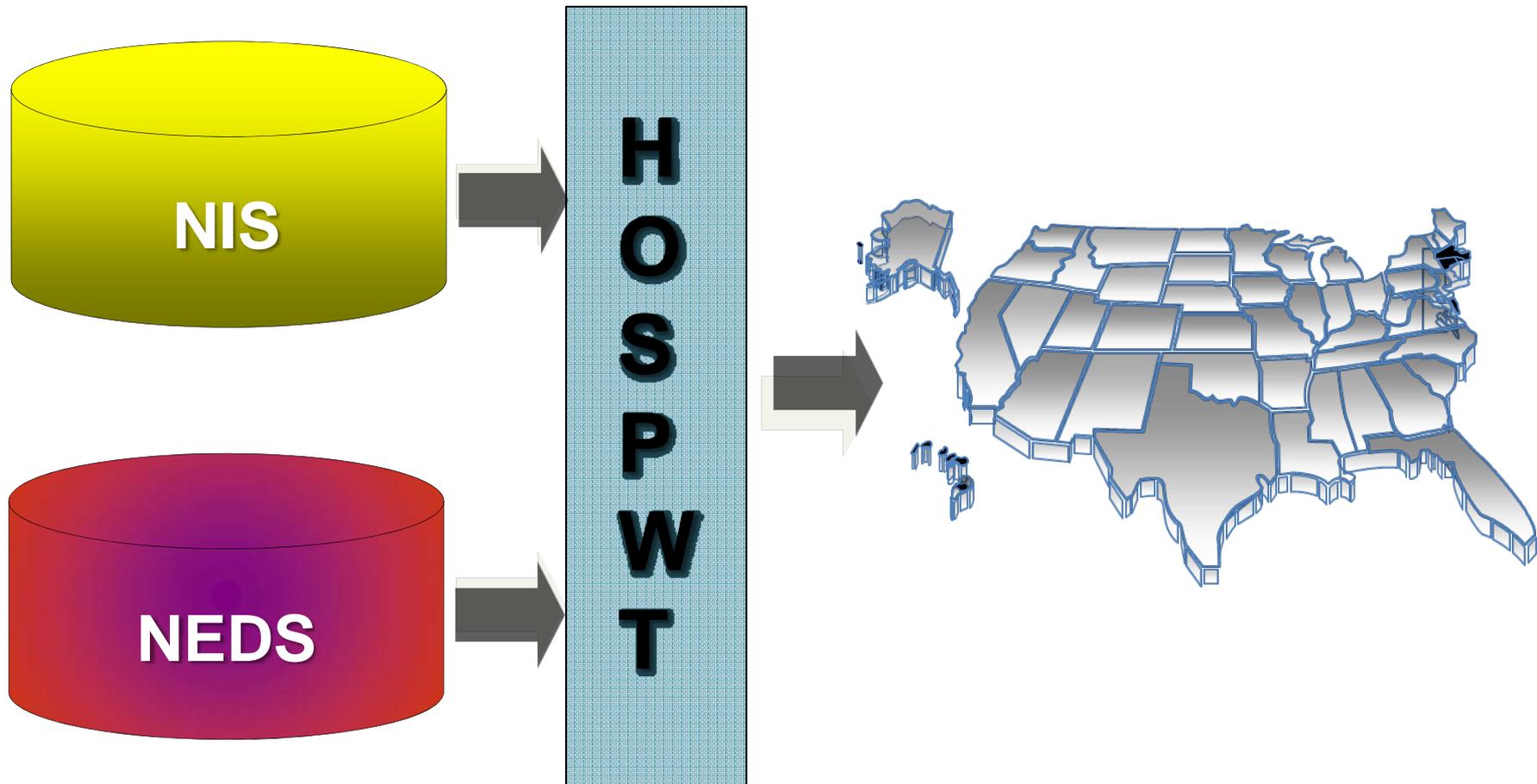
N = ~ 1K hospitals  
~ 29M records

- Type of ED event: treated and released, admitted to the same hospital, transferred, died (**EDEVENT**)
- Disposition of patient from ED (**DISP\_ED**)
- Died in the ED: died in the ED, died in the hospital, did not die (**DIED\_VISIT**)
- Diagnosis reported on record indicates self harm (**INTENT\_SELF\_HARM**)
- Trauma center level I, II, or III (**HOSP\_TRAUMA**)
- HCUP ED hospital identifier (**HOSP\_ED**)

# NIS, NEDS, KID: Must be Weighted to Produce National and Regional Estimates



# NIS, NEDS, KID: Must be Weighted to Produce National and Regional Estimates



# What Types of Care Are and Are Not Captured by HCUP?

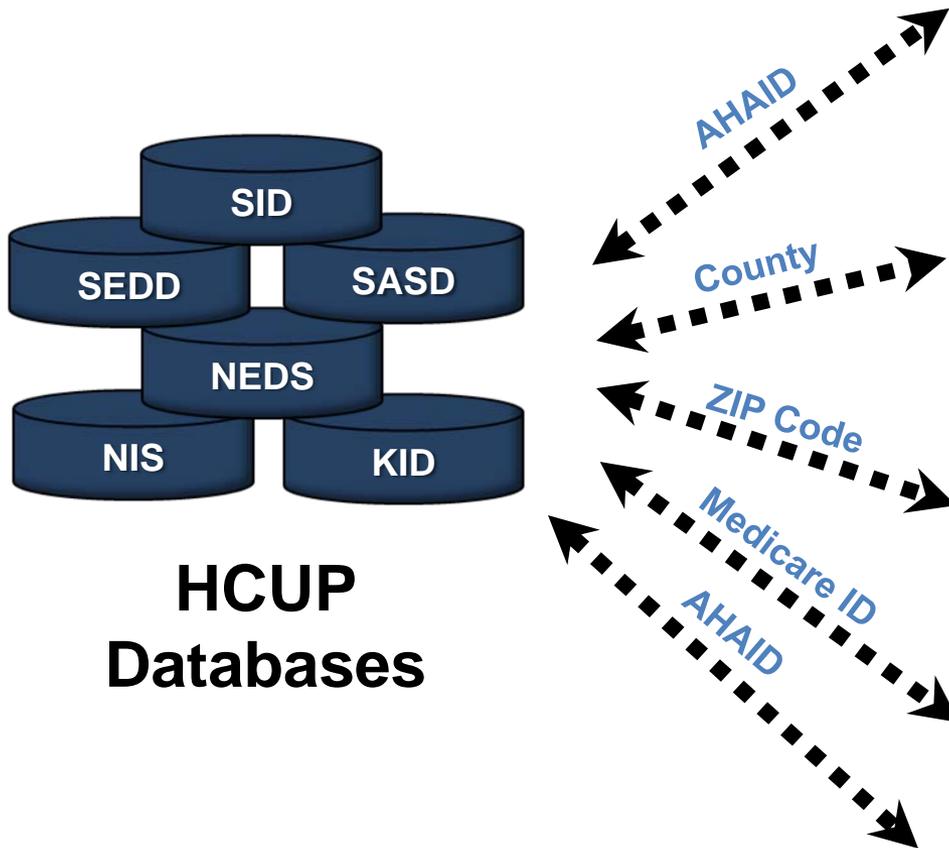


Included in HCUP	
Inpatient Care	State Inpatient Databases (SID) Nationwide Inpatient Sample (NIS) Kids' Inpatient Database (KID)
Emergency Department	State Emergency Department Databases (SEDD) Nationwide Emergency Department Sample (NEDS)
Ambulatory Surgery & Services	State Ambulatory Surgery & Services Databases (SASD)

Not Included in HCUP
Physician office visits
Pharmacy
Labs/Radiology



# Some Limitations Can be Addressed by Linking to Other Databases



American Hospital Association (AHA) Annual Survey

Health Resources and Services Administration's (HRSA) Area Health Resource File (AHRF)

Zip Code Files from Census or Vendor

Medicare Cost Reports

Trauma Information Exchange Program (TIEP)



# What is HCUP and What Is It Not?



## HCUP is...

Discharge database for health care encounters

All payer, including the uninsured

Hospital, ambulatory surgery, emergency department data

All hospital discharges

Accessible multiple ways: raw data, regular reports, online

## HCUP is NOT...

A survey

Specific to a single payer, e.g. Medicare

Office visits, pharmacy, laboratory, radiology

Only a sample

Just another database



# Hospital Billing Data Have Benefits and Limitations



## Benefits

Large number of visit records

Uniformity of coding

Routine, regular collection

Ease of access

All-payer

Available at local, state, regional and national level

Supplemental files available to facilitate research

## Limitations

Differences in coding across hospitals

Limited clinical details

Lack revenue information

May not include all hospitals

May not show complete experience of care

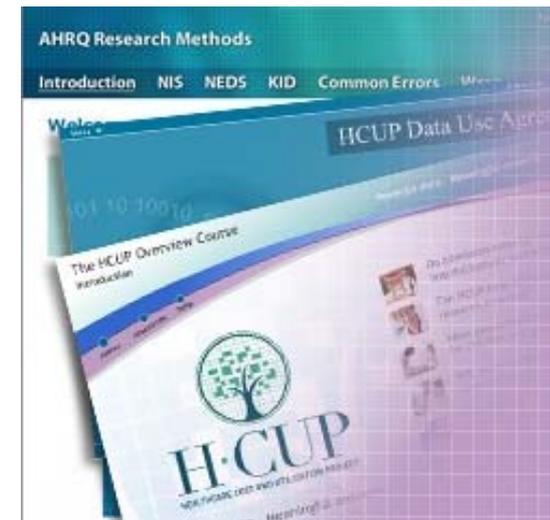
No data on individuals outside of hospital system

- Six types of HCUP databases
- Databases are based on administrative hospital data: inpatient, ED, and ambulatory surgery and services
- Available for multiple years
  - ▶ National
    - NIS (1988-2011)
    - NEDS (2006-2011)
    - KID (1997, 2000, 2003, 2006, 2009)
  - ▶ State
    - SID (1990-2012)
    - SASD (1997-2012)
    - SEDD (1999-2012)
- Can look at breadth of health care issues
- Can be linked to external files

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# The HCUP Database Process

- Processed data sent to HCUP Partners
- State databases may become available to public through:
  - ▶ State Data Organization
  - OR*
  - ▶ HCUP Central Distributor



# To Purchase HCUP Data Two Methods



**Method 1**  
**HCUP Central Distributor**  
[www.hcup-us.ahrq.gov/tech\\_assist/centdist.jsp](http://www.hcup-us.ahrq.gov/tech_assist/centdist.jsp)

**Method 2**  
**HCUP Partner States**  
[www.hcup-us.ahrq.gov/partners.jsp](http://www.hcup-us.ahrq.gov/partners.jsp)

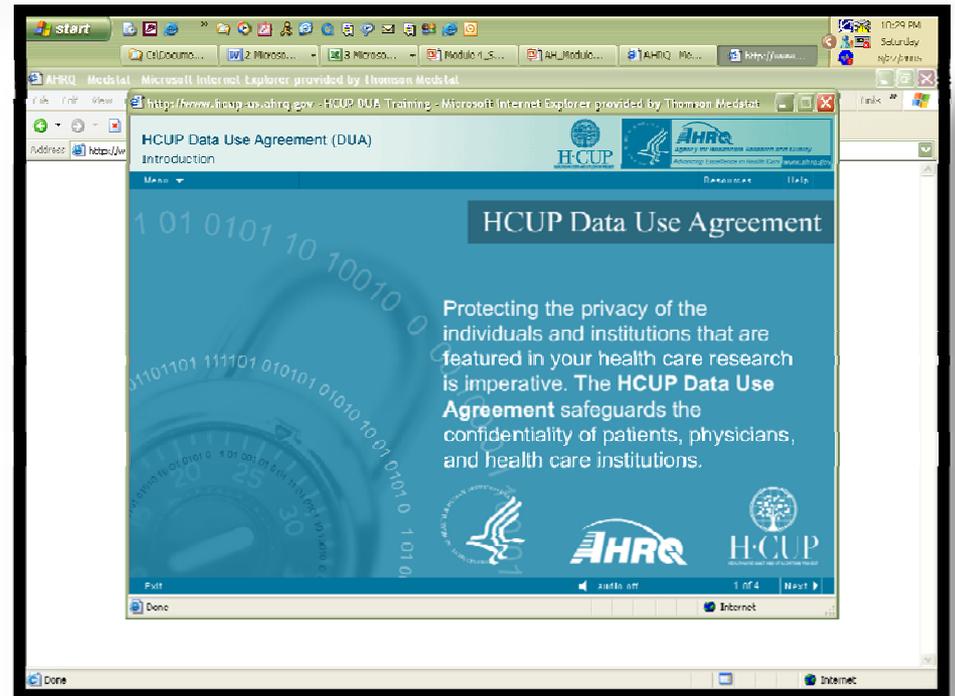


# Purchase Data Through the HCUP Central Distributor



- **Step 1: Download and complete application kit:**  
[http://www.hcup-us.ahrq.gov/tech\\_assist/centdist.jsp](http://www.hcup-us.ahrq.gov/tech_assist/centdist.jsp)
- **Step 2: Obtain more information (if needed):**  
Phone: 866-556-HCUP (4287) toll free  
E-mail: [HCUPDistributor@ahrq.gov](mailto:HCUPDistributor@ahrq.gov)
- **Step 3: Take Data Use Agreement (DUA) on-line training and sign DUA**
- **Step 4: Send order form, signed DUA, and payment to HCUP Central Distributor**

- **Purpose of the Course:**
  - ▶ Emphasize the importance of **data protection**
  - ▶ Reduce the risk of **inadvertent violations**
  - ▶ Describe your **individual responsibility** when using HCUP data



**Takes 15 minutes to Complete**

**<http://www.hcup-us.ahrq.gov/DUA/new2013/index.htm>**

# Pricing Information Per Data Year

## Nationwide Databases (NIS, KID, NEDS)

- ▶ **NIS**: \$350 (CY 2010-2011; student price \$50)  
\$160-200 (earlier years; student price \$20)
- ▶ **KID**: \$350 (CY 2009; student price \$50)  
\$200 (earlier years; student price \$20)
- ▶ **NEDS**: \$500 (student price \$75)

## State Databases (SID, SASD, SEDD)

- ▶ Varies by state, database, year, and type of applicant
- ▶ \$35 - \$3,185

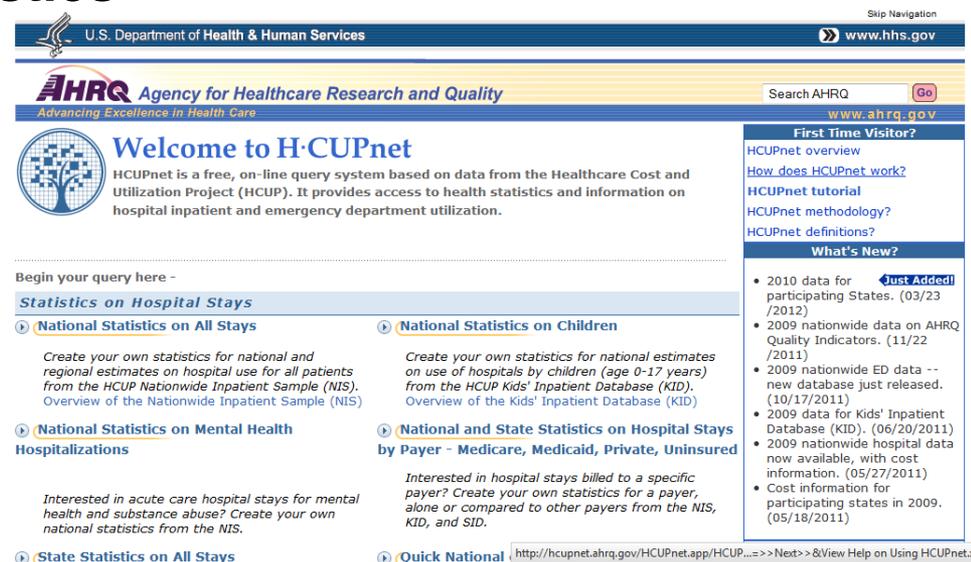
# Software Requirements of Working with the Full HCUP Files

Software Package	Load Programs	Format Programs	Example Statistical Coding	HCUP Tools Programs
	X	X	X	X
	X		X	X
	X			X
			X	

**MS Excel and Access are NOT GOOD Options!**

# HCUPnet: Quick, Free Access to HCUP Data

- Free online query system
- Users generate tables of outcomes by diagnoses and procedures
- Data can be cross-classified by patient and hospital characteristics



The screenshot shows the HCUPnet website interface. At the top, there is a navigation bar with the U.S. Department of Health & Human Services logo and the AHRQ logo. Below this is a search bar and a "Go" button. The main content area features a "Welcome to H-CUPnet" section with a brief description of the system. To the right, there is a "First Time Visitor?" section with links to "HCUPnet overview", "How does HCUPnet work?", "HCUPnet tutorial", "HCUPnet methodology?", and "HCUPnet definitions?". Below this is a "What's New?" section with a list of updates, including "2010 data for participating States" and "2009 nationwide data on AHRQ Quality Indicators". At the bottom, there is a "Begin your query here -" section with links to "Statistics on Hospital Stays", "National Statistics on All Stays", "National Statistics on Children", "National Statistics on Mental Health Hospitalizations", "National and State Statistics on Hospital Stays by Payer - Medicare, Medicaid, Private, Uninsured", and "State Statistics on All Stays".

<http://hcupnet.ahrq.gov>



# HCUP User Support Web Site



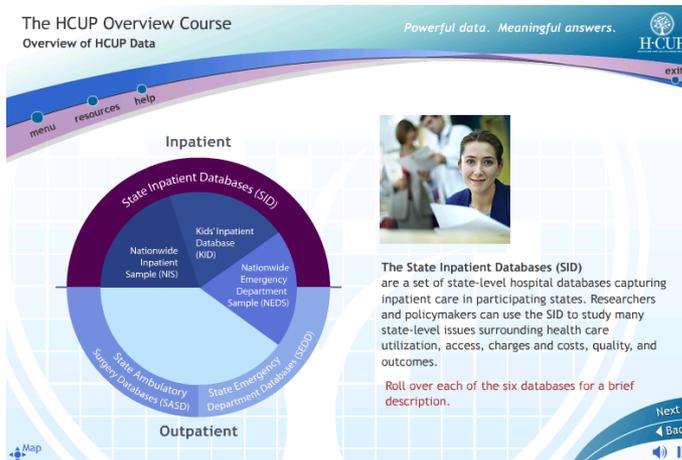
- Find detailed information on HCUP databases, tools, and products
- Access HCUPnet
- Find comprehensive list of HCUP-related publications, database reports, and fact books
- Access technical assistance

The screenshot shows the homepage of the HCUP User Support website. The header includes the H-CUP logo and the title "Healthcare Cost and Utilization Project (HCUP)". Below the header is a navigation menu with links for Home, Databases, Tools & Software, Reports, News & Events, and Technical Assistance. The main content area is titled "Welcome to the HCUP User Support (HCUP-US) Web site!" and provides an overview of the site's purpose. It includes sections for "What is HCUP?", "HCUP Products", and "HCUP Services". A "What's New" sidebar on the right lists recent updates, such as "AHRQ Hands-On Workshop with the HCUP Databases" and "New HCUP Webinar Series".

<http://www.hcup-us.ahrq.gov>

# Interactive On-line HCUP Overview Course Available

- Provides information about HCUP data, software tools, and products
- Length 90 min



The HCUP Overview Course  
Overview of HCUP Data

Powerful data. Meaningful answers.

HCUP

menu resources help exit

Inpatient

State Inpatient Databases (SID)

Nationwide Inpatient Sample (NIS)

Kids' Inpatient Database (KID)

Nationwide Emergency Department Sample (NEDS)

State Ambulatory Surgery Databases (SASD)

State Emergency Department Databases (SEDD)

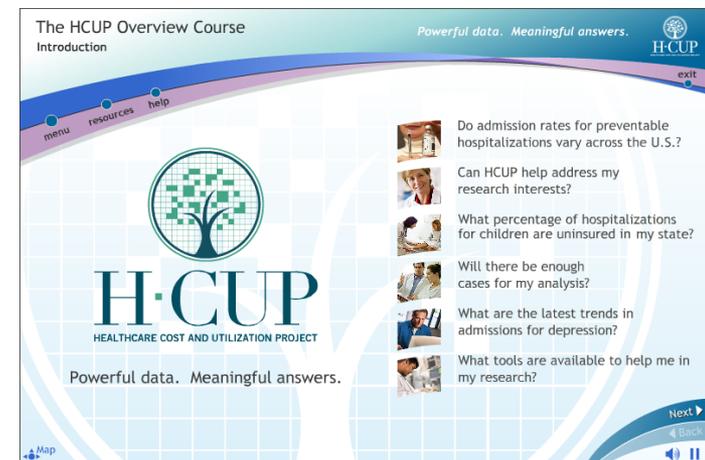
Outpatient

The State Inpatient Databases (SID) are a set of state-level hospital databases capturing inpatient care in participating states. Researchers and policymakers can use the SID to study many state-level issues surrounding health care utilization, access, charges and costs, quality, and outcomes.

Roll over each of the six databases for a brief description.

Map

Next ▶  
◀ Back  
🔊



The HCUP Overview Course  
Introduction

Powerful data. Meaningful answers.

HCUP

menu resources help exit

HCUP  
HEALTHCARE COST AND UTILIZATION PROJECT

Powerful data. Meaningful answers.

Do admission rates for preventable hospitalizations vary across the U.S.?

Can HCUP help address my research interests?

What percentage of hospitalizations for children are uninsured in my state?

Will there be enough cases for my analysis?

What are the latest trends in admissions for depression?

What tools are available to help me in my research?

Map

Next ▶  
◀ Back  
🔊

<http://www.hcup-us.ahrq.gov/overviewcourse.jsp>

- Tutorial explains the sampling strategy of the three nationwide databases – the NIS, KID, and NEDS
- Length 30 min

HCUP Sample Design: National Databases

Introduction NIS NEDS KID Common Errors Wrap-Up



Healthcare Cost and Utilization Project

Sample Design: National Databases

HCUP Sample Design: National Databases

Introduction NIS NEDS KID Common Errors Wrap-Up

### Nationwide Emergency Department Sample (NEDS)



A unique and powerful database of emergency department visits. Researchers and policymakers use the NEDS to identify, track, and analyze national and regional hospital emergency department:

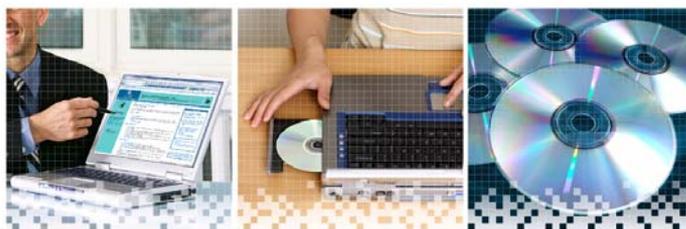
- Care
- Utilization
- Access
- Charges
- Quality

[http://www.hcup-us.ahrq.gov/tech\\_assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)

- Provides instructions on how to unzip HCUP data, save it on your computer, and load data into a statistical software package
- Length 20 min

Load and Check HCUP Data

Introduction Load Check Wrap-Up



Healthcare Cost and Utilization Project

Load and Check

exit resources hear it play back 1/16 next

Load and Check HCUP Data

Introduction Load Check Wrap-Up

Running Check Programs

My NIS Data Means and Frequencies:

AIC User	Frequency	Percent of Total
0	LOS (Length of Stay)	Frequency Percent of Total
1	Facts (Expected Primary Payer)	Frequency Percent of Total
2	1: Medicare	
3	2: Medicaid	

HCUP-US Summary Statistics Means and Frequencies:

AIC User	Frequency	Percent of Total
0	LOS (Length of Stay)	Frequency Percent of Total
1	Facts (Expected Primary Payer)	Frequency Percent of Total
2	1: Medicare	
3	2: Medicaid	

Create tables of means and of frequency distributions from the data on your computer.

Compare those statistics to the summary statistics available on HCUP-US.

exit resources hear it pause II back 13/16 next

[http://www.hcup-us.ahrq.gov/tech\\_assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)

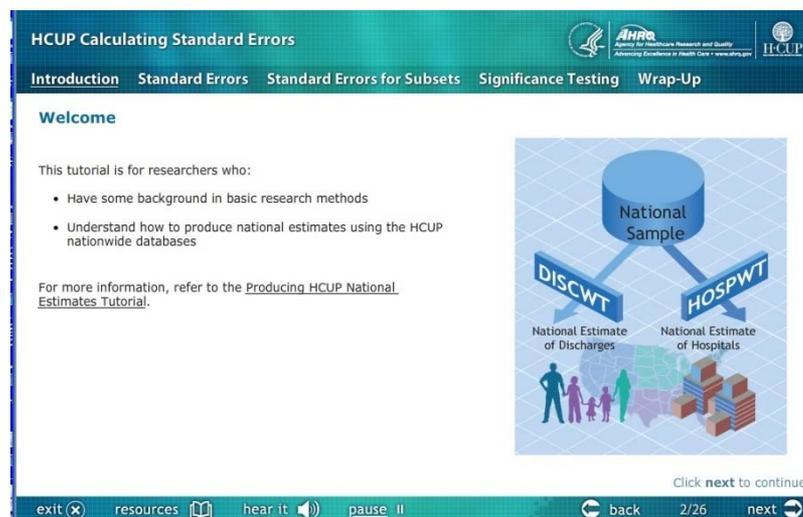
# Producing National HCUP Estimates

- Explains how to produce national estimates from the three nationwide databases (NIS, NEDS, KID)
- Length 45 min



[http://www.hcup-us.ahrq.gov/tech\\_assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)

- Explains how to accurately determine the precision of the estimates produced from the HCUP nationwide databases
- Length 30 min

[http://www.hcup-us.ahrq.gov/tech\\_assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)

- Describe problems that may arise when using multiple years of HCUP data and provides solutions for addressing these issues
- Length 30 min



Healthcare Cost and Utilization Project  
Trend Analysis

HCUP Using Multiple Years of Data

menu resources

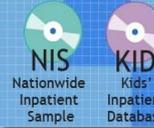


## Introduction

This course presents solutions that may be necessary when conducting analyses that span multiple years.

The availability of HCUP data over multiple years allows for the study of trends over time.





Errors in study results may occur when two or more years of data are combined.

This course focuses on the NIS and KID, but the information can be applied to other HCUP databases.

[http://www.hcup-us.ahrq.gov/tech\\_assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)

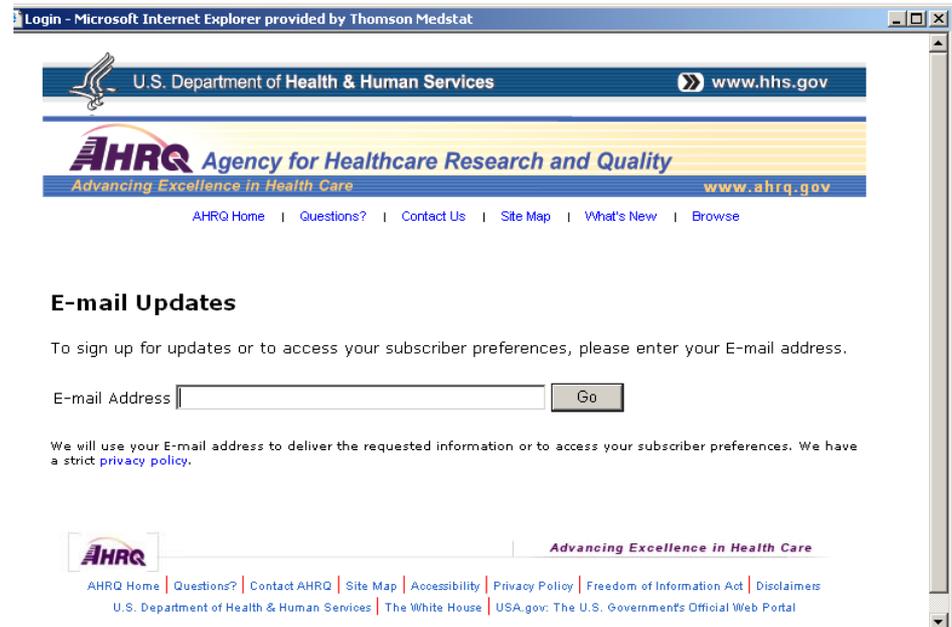
## Active Technical Assistance

- Responds to inquiries about HCUP data, products, and tools
- Collects user feedback and suggestions for improvement

E-mail: [hcup@ahrq.gov](mailto:hcup@ahrq.gov)

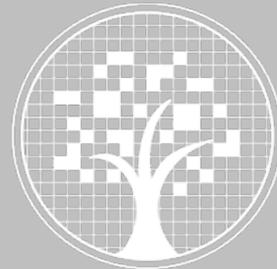


- HCUP Newsletter, published quarterly
  - ▶ User Tech Tips
  - ▶ Upcoming Events
- New Data Releases
- New Reports



<http://www.ahrq.gov/data/hcup/hcuplist.htm>

# HealthCare Cost and Utilization Project (HCUP)



# H·CUP

HEALTHCARE COST AND UTILIZATION PROJECT



**Time for Questions  
and/or Comments.**

