Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
What is HCUP?

- HCUP is the largest collection of multi-year, all-payer data that includes inpatient and selected outpatient data that is based on the hospital billing record.
Why Do We Need Another Hospital Data Source?

<table>
<thead>
<tr>
<th>Hospital Data Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Hospital Discharge Survey (NHDS)</td>
<td>( \Rightarrow ) Samples</td>
</tr>
<tr>
<td>National Hospital Ambulatory Care Survey (NHAMCS)</td>
<td></td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention (CDC)</td>
<td></td>
</tr>
<tr>
<td>Medical Expenditure Panel Survey (MEPS)</td>
<td>( \Rightarrow ) Survey</td>
</tr>
<tr>
<td>Agency for Healthcare Research and Quality (AHRQ)</td>
<td></td>
</tr>
<tr>
<td>Medicare Provider Analysis and Review (MedPAR)</td>
<td>( \Rightarrow ) Medicare Claims</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS)</td>
<td></td>
</tr>
</tbody>
</table>

What can you get from HCUP?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Specific Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Septicemia was the most expensive reason for hospitalization in 2009—totaling nearly $15.4 billion in aggregate hospital costs (NIS)</td>
</tr>
<tr>
<td>Access</td>
<td>Americans in low-income areas visit EDs at rates 90 percent higher compared to those in the highest income areas (NEDS)</td>
</tr>
<tr>
<td>Quality</td>
<td>Oregon and Vermont had the Nation's lowest rates of avoidable hospitalizations for asthma in children ages 2 to 17 (PQI software, SID)</td>
</tr>
<tr>
<td>Utilization</td>
<td>Patients in rural hospitals were older (42 percent were 65 plus) than those in urban public hospitals (23 percent were 65 plus). (NIS)</td>
</tr>
</tbody>
</table>
Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
The HCUP Partnership

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.
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

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 Division of Health Care Finance and Policy
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
Ohio Hospital Association
Oklahoma State Department of Health
Oregon Association of Hospitals and Health Systems
Oregon Office for Oregon Health Policy & Research
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

46 States
and continuing to recruit additional
States to the HCUP Partnership
Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
  - Where does data come from?
  - HCUP State Databases
  - HCUP Nationwide Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources

HCUP Has Six Types of Databases

- Three state-level databases

  - State Inpatient Databases (SID)
  - State Ambulatory Surgery Databases (SASD)
  - State Emergency Department Databases (SEDD)
HCUP Has Six Types of Databases

- Three nationwide databases
  - Nationwide Inpatient Sample (NIS)
  - Kids’ Inpatient Database (KID)
  - Nationwide Emergency Department Sample (NEDS)

Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
  - Where do the data come from?
    - HCUP State Databases
    - HCUP Nationwide Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
The Foundation of HCUP Data is Hospital Billing Data

Demographic Data

Diagnoses

Procedures

Charges

The Making of HCUP Data

Patient enters hospital

Billing record created

AHRQ standardizes data to create uniform HCUP databases

States store data in varying formats

Hospital sends billing data and any additional data elements to data organizations
### The HCUP Process

- Standardized file formats and variable values
- Value-added variables
  - Hospital characteristics
    - Region, Urban/rural, Teaching status, Ownership/control, Bed size
  - Severity Measures
    - APR-DRGs, APS-DRGs, Disease Staging, Comorbidity Measures
- Basic quality checks

### Where Do We Get HCUP Data?

HCUP data is mostly from community hospitals

- 86% (N=5,008) Included in HCUP data
- 14% (N=787) Typically not included in HCUP data

Source: American Hospital Association (AHA), 2009
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)

<table>
<thead>
<tr>
<th>Included</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-specialty general hospitals</td>
<td>Long-term care</td>
</tr>
<tr>
<td>OB-GYN</td>
<td>Psychiatric</td>
</tr>
<tr>
<td>ENT</td>
<td>Alcoholism/Chemical dependency</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>Pediatric</td>
<td>DoD / VA / IHS</td>
</tr>
<tr>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Academic medical centers</td>
<td></td>
</tr>
</tbody>
</table>

Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
  - Where does data come from?
    - HCUP State Databases
    - HCUP Nationwide Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
HCUP State Databases

State Inpatient Databases (SID)

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

State Ambulatory Surgery 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)
- Primary payer details
- Secondary payer
- Detailed charges
- Patient identifiers encrypted
- Physician identifiers encrypted
- Physician specialty
- Hospital identifier unencrypted

### Example: Payer Detail Varies by State

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

31
### Example: Race Detail Varies by State

<table>
<thead>
<tr>
<th>RACE_X</th>
<th>RACE (Standardized)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>1</td>
<td>White</td>
</tr>
<tr>
<td>2</td>
<td>Black</td>
</tr>
<tr>
<td>3</td>
<td>Hispanic</td>
</tr>
<tr>
<td>4</td>
<td>Hawaiian</td>
</tr>
<tr>
<td>5</td>
<td>Chinese</td>
</tr>
<tr>
<td>6</td>
<td>Filipino</td>
</tr>
<tr>
<td>7</td>
<td>Japanese</td>
</tr>
<tr>
<td>8</td>
<td>Other Asian</td>
</tr>
<tr>
<td>9</td>
<td>Other Pacific Islander</td>
</tr>
<tr>
<td>10</td>
<td>Native American</td>
</tr>
<tr>
<td>11</td>
<td>Mixed or Other</td>
</tr>
</tbody>
</table>

### Partner State Files vs. HCUP State Files

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

<table>
<thead>
<tr>
<th>HCUP State Files</th>
<th>Partner State Files</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Both files include all data that states provide</strong></td>
<td></td>
</tr>
<tr>
<td>Subset of data elements</td>
<td>All data elements</td>
</tr>
<tr>
<td>Value-added data elements</td>
<td>May not have same value-added elements</td>
</tr>
<tr>
<td>Uniformly coded across the states</td>
<td>Not uniformly coded across states</td>
</tr>
<tr>
<td>Standard data quality checks</td>
<td>Variability in quality checks by state</td>
</tr>
<tr>
<td>Lag time</td>
<td>More timely</td>
</tr>
</tbody>
</table>
States Releasing Databases through HCUP Central Distributor

- Arizona
- Arkansas
- California
- Colorado
- Florida
- Hawaii
- Iowa
- Kentucky
- Maine
- Maryland
- Massachusetts
- Michigan
- 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

Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
  - Where does data come from?
  - HCUP State Databases
  - HCUP Nationwide Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
**HCUP National Databases**

- **Nationwide Inpatient Sample (NIS)**
  - Inpatient hospital discharge data (including those admissions that started in the ED) from a sample of hospitals in participating HCUP States.

- **Kids’ Inpatient Database (KID)**
  - Pediatric inpatient hospital discharge data (including those admissions that started in the ED) from a sample of pediatric discharges in participating HCUP States.

- **Nationwide Emergency Department Sample (NEDS)**
  - Emergency department data (treat and release & admitted) from a sample of hospitals in participating HCUP States.

---

**NIS is a Stratified Sample of Hospitals from the SID**

- **State Inpatient Databases (SID)**
  - N = ~ 5K hospitals
  - ~ 36M records
  
  - 5 NIS Strata:
    1. U.S. Region
    2. Urban/Rural
    3. Teaching Status
    4. Ownership/Control
    5. Bed Size

- **Nationwide Impatient Sample (NIS)**
  - N = ~ 1K hospitals
  - ~ 8M records
  
  - 100% of all discharges from each hospital

- **State is NOT included as a stratum**

**Stratified Sample of HOSPITALS**
KID is a Stratified Sample of Discharges from the SID

State Inpatient Databases (SID)
N = ~ 4K hospitals
~ 32M records

3 Strata
1. Uncomplicated Births
2. Complicated Births
3. Pediatric Non-Births

State is NOT included as a stratum

Kids’ Inpatient Database (KID)
N = ~ 4K hospitals
~ 3M records

10% stratified sample of uncomplicated BIRTHS
80% stratified sample of other pediatric DISCHARGES

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

State Inpatient Databases (SID)

State Emergency Department Databases (SEDD)

5 NEDS Strata
1. U.S. Region
2. Urban/Rural
3. Teaching Status
4. Ownership/Control
5. Trauma

State is NOT included as a stratum

Nationwide Emergency Department Sample (NEDS)
N = ~ 1K hospitals
~ 28M records

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

<table>
<thead>
<tr>
<th>Included in HCUP</th>
<th>Not Included in HCUP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient care</strong></td>
<td>Physician office visits</td>
</tr>
<tr>
<td>State Inpatient Databases (SID)</td>
<td></td>
</tr>
<tr>
<td>Nationwide Inpatient Sample (NIS)</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Kids’ Inpatient Database (KID)</td>
<td>Labs/Radiology</td>
</tr>
<tr>
<td><strong>Emergency Department</strong></td>
<td></td>
</tr>
<tr>
<td>State Emergency Department Databases (SEDD)</td>
<td></td>
</tr>
<tr>
<td>Nationwide Emergency Department Sample (NEDS)</td>
<td></td>
</tr>
<tr>
<td><strong>Ambulatory Surgery</strong></td>
<td></td>
</tr>
<tr>
<td>State Ambulatory Surgery Databases (SASD)</td>
<td></td>
</tr>
</tbody>
</table>

## What is HCUP and What Is It Not?

| HCUP is…                                        | HCUP is NOT…                             |
| Discharge database for health care encounters   | A survey                                 |
| All payer, including the uninsured             | Specific to a single payer, e.g. Medicare|
| Hospital, ambulatory surgery, emergency department data | Office visits, pharmacy, laboratory, radiology |
| All hospital discharges                        | Only a sample                            |
| Accessible multiple ways: raw data, regular reports, online | Just another database |
Hospital Billing Data Have Benefits and Limitations

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large number of visit records</td>
<td>Differences in coding across hospitals</td>
</tr>
<tr>
<td>Uniformity of coding</td>
<td>Limited clinical details</td>
</tr>
<tr>
<td>Routine, regular collection</td>
<td>Lack revenue information</td>
</tr>
<tr>
<td>Ease of access</td>
<td>May not include all hospitals</td>
</tr>
<tr>
<td>All-payer</td>
<td>May not show complete experience of care</td>
</tr>
<tr>
<td>Available at local, state, regional and national level</td>
<td>No data on individuals outside of hospital system</td>
</tr>
<tr>
<td>Supplemental files available to facilitate research</td>
<td></td>
</tr>
</tbody>
</table>

Some Limitations Can be Addressed by Linking to Other Databases

**HCUP Databases**

- SID
- SEDD
- SASD
- NEDS
- NIS
- KID

**Linking to Other Databases**

- American Hospital Association (AHA) Annual Survey
- Health Resources and Services Administration’s (HRSA) Area Resource File (ARF)
- Zip Code Files from Census or Vendor
- Medicare Cost Reports
- Trauma Information Exchange Program (TIEP)
Summary

- Six types of HCUP databases
- Databases are based on administrative hospital data
- Available for multiple years
  - NIS (1988-2010)
  - SID (1990-2010)
  - SASD (1997-2010)
  - SEDD (1999-2010)
- Can look at breadth of health care issues
- Can be linked to external files

Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
  - Where does data come from?
  - HCUP State Databases
  - HCUP Nationwide Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
- Additional HCUP Resources
**The HCUP Database Process**

- Processed data sent to HCUP Partners

- State databases may become available to public through:
  - State Data Organization
  - HCUP Central Distributor

**Purchase Data through HCUP Central Distributor**

- **Step 1:** Download and complete application kit:
  
  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

- **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
Pricing Information per Data Year

Nationwide Databases (NIS, KID, NEDS)
- **NIS**: $350 (CY 2010; 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

<table>
<thead>
<tr>
<th>Software Package</th>
<th>Load Programs</th>
<th>Format Programs</th>
<th>Example Statistical Coding</th>
<th>HCUP Tools Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sas</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stata</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Spss</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Excel Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MS Excel and Access are NOT GOOD Options!
Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
  - Software Tools
  - Supplemental Files
  - Online Tools
  - Methods Reports
- Additional HCUP Resources

ICD and CPT: The Clinical Backbone of Claims Data

- ICD-9-CM Diagnosis and Procedures Codes
  - Included in both inpatient and outpatient databases
- Common Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS)
  - Procedure coding for outpatient data
Clinical Classifications Software (CCS)

- Clusters diagnosis and procedure codes into categories
  - >12,000 diagnosis codes \( \Rightarrow \) ~260 categories
  - > 4,000 procedure codes \( \Rightarrow \) ~230 categories
- Useful for presenting descriptive statistics, understanding patterns

ICD-9-CM Codes

CCS Categories

CCS 2: Septicemia

CCS 6: Hepatitis

Procedure Classes

- Groups ICD-9-CM procedure codes into one of four categories
- Major procedures defined as OR procedures (DRGs)

ICD-9-CM Procedure Codes

1. **Minor Diagnostic**
   - Ex: Electrocardiogram

2. **Major Diagnostic**
   - Ex: Pericardial Biopsy

3. **Minor Therapeutic**
   - Ex: Pacemaker

4. **Major Therapeutic**
   - Ex: CABG
Chronic Condition Indicator (CCI)

- Groups ICD-9-CM diagnosis codes in Chronic or Non-Chronic Categories

1. **Chronic**
   - Ex: Diabetes

2. **Non-Chronic**
   - Ex: Food Poisoning

Comorbidity Software

- Creates and appends indicator flags to each record for 29 major comorbidities

ICD-9-CM Codes, DRGs on Administrative Data

Comorbidity Software

29 Comorbidity Groups

- CHF
- Valvular disease
- Pulm circ disorders
- Peripheral vascular dx
- Hypertension
- Paralysis
- Other neuro disorders
- Chronic pulmonary dx
- DM w/o complications
- DM w/ complications
- Hypothyroidism
- Renal failure
- Liver disease ...
**Supplemental Files**

- Supplemental Variables for Revisit Analyses
- Cost-to-Charge Ratio Files
- Hospital Market Structure Files
- Trends Files (NIS & KID)
- NIS Hospital Ownership File
- AHA Linkage Files

http://www.hcup-us.ahrq.gov/tools_software.jsp

---

**Online Tools**

- **MONAHRQ**
  - A desktop software tool that enables organizations to input their own hospital administrative data and/or the CMS Hospital Compare data to generate a data-driven Website

- **HCUPnet**
  - Free, interactive online query system
  - [http://hcup.ahrq.gov/hcupnet](http://hcup.ahrq.gov/hcupnet)
HCUPnet Overview

What's New

- 2006 national ED data -- new data released, Oct 30, 2010
- 2009 data for CO, SC, ID, MO, NE, ND (09/10/2010)
- 2009 data for AL, MA, NJ, NY, SC, VT

- Quick National or State Statistics
  - Ready-to-use tables on commonly requested information from the HCUP Nationwide Sample Datasets (NIS), the HCUP Kids' Inpatient Databases (KID), the HCUP State Inpatient Databases (SID), and the HCUP State Emergency Department Databases (SEDE). For more information on SEDE: http://hcup.ahrq.gov/hcup.net

- Methodological information on the HCUP databases and software tools

http://hcup.ahrq.gov/hcup.net
HCUP Publications

- Statistical Briefs
- Annual Reports
- Special Analysis Reports
- Fact Books

Today’s Objectives

- Project Overview
- The HCUP Partnership
- The HCUP Databases
- Obtaining HCUP Databases
- The HCUP Tools and Products
  - Software Tools
  - Supplemental Files
  - Online Tools
  - Methods Reports
- Additional HCUP Resources
HCUP User Support Website

- 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

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

Interactive On-line HCUP Tutorial Series

- Overview Course
  - Provides information about HCUP data, software tools, and products
- Technical Tutorials
  - HCUP Sample Design
  - Load and Check HCUP Data
  - Producing National HCUP Estimates
  - Calculating Standard Errors

http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp
Using HCUP Technical Assistance

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

E-mail: hcup@ahrq.gov

Join the HCUP Email List

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

http://www.ahrq.gov/data/hcup/hcuplist.htm
HCUP’s Outstanding Article of the Year Award

- Honoring articles published in peer-reviewed journals in 2011 that used HCUP databases to explore and address health care research topics and issues.

- Work honored will demonstrate how HCUP has contributed to the health care services field.

- Deadline for applications: June 29, 2012

- Additional information available on the HCUP-US Website:

  [http://www.hcup-us.ahrq.gov/awards.jsp](http://www.hcup-us.ahrq.gov/awards.jsp)
Time for Questions and/or Comments.