

**MAINTAIN AND EXPAND  
THE HEALTHCARE COST AND UTILIZATION PROJECT (HCUP)  
Contract No. HHS-290-2006-00009-C**



**H·CUP**

HEALTHCARE COST AND UTILIZATION PROJECT

*Celebrating 20 Years of Powerful Data*

**STATE SELECTION REPORT –  
QUARTERLY DATA  
DELIVERABLE #1325.04H**

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**September 22, 2011**

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## EXECUTIVE SUMMARY

In an effort to provide more timely information as part of the Healthcare Cost and Utilization Project (HCUP), the Agency for Healthcare Research and Quality (AHRQ) is working with HCUP Partners to provide early (e.g., quarterly) State data. Beginning in 2010, five HCUP Partners (CA, GA, HI, MN, and NY) began submitting quarterly data files to HCUP. These data have been used in a number of research studies to project and compare trends in 2010 and 2011 for a variety of inpatient outcomes. AHRQ intends to continue this initiative by increasing the number of HCUP Partners that contribute early State data. This report summarizes the results of a recent quarterly data assessment of Partners and provides recommendations for AHRQ to consider in selecting the next States to begin contributing early data for HCUP.

In July and August, 2011, Thomson Reuters conducted an online assessment of the availability, timeliness, and completeness/quality of early State data among the 39 Partners that are not currently participating in this initiative. A total of 35 of 39 Partners (90%) completed the quarterly data assessment (non-responding States were CT, IL, ME, and VT). A subset of information regarding quarterly data is available from the four non-responding States, based on a similar assessment completed by Partners in 2008. Of the 39 Partners, 35 (90%) reported that they collect early data. The vast majority of these States (77%) collect data quarterly, although a few collect data on a monthly or semi-annual basis. All 35 States collect early inpatient (IP) data, while three fourths of the States also collect early ambulatory surgery (AS) and/or emergency department (ED) data.

Of the 35 States reporting that they collect early data, 14 (40%) indicated that they are willing to provide these data to HCUP:

- Arizona
- Iowa
- Indiana
- Kentucky
- Maryland
- Missouri
- New Jersey
- Nevada
- Oregon
- Rhode Island
- South Carolina
- Texas
- Virginia
- Wisconsin

Among the 14 Partners reporting that they are willing to provide quarterly data for HCUP, all but one State (TX) reported that they can provide the data within six months after the end of the quarter. Half of the States reported some type of issue with the quarterly data. The most frequently reported concerns were that the quarterly data may not include all hospitals, that hospitals can subsequently resubmit their data, and that the quarterly data quality checks are not as rigorous as the annual data quality checks. None of the potential data problems that were reported are currently known to be at a level that would preclude these States' participation in the quarterly data initiative.

Thomson Reuters identified five key criteria to evaluate States for this initiative: geographic distribution, timeliness of data, data completeness/quality issues, fee, and data release issues. Among the 14 States, only two were not considered good candidates at this time: Texas (data timeliness issue) and Indiana (fee issue). The remaining 12 States were prioritized based on the five criteria, with first choice and alternate choices identified for each Census region. The following five States were identified as the leading candidates to begin contributing quarterly data for HCUP: Arizona, Kentucky, Missouri, New Jersey, and Virginia.

## INTRODUCTION

In an effort to create more timely healthcare information, the Agency for Healthcare Research and Quality (AHRQ) is leveraging its relationships with State Partners on the Healthcare Cost and Utilization Project (HCUP) to obtain quarterly data that becomes available shortly after a quarter's end, rather than wait to obtain data only after year end. In mid to late 2010, the HCUP team began collecting quarterly data files from five HCUP Partner organizations. To continue to assess the feasibility of collecting and using quarterly data, AHRQ intends to begin obtaining 2011 quarterly data from additional HCUP Partners. This report presents information about the availability of quarterly data among the remaining 39 HCUP Partners, along with Thomson Reuters recommendations for an additional five Partners to begin contributing quarterly data to HCUP.

In 2008, Thomson Reuters conducted an initial assessment of the 44 HCUP Partners with regard to the availability and completeness of quarterly data. The methods and results of this assessment are described in two reports: *State Quarterly Data Evaluation Report* (Deliverable #825.21A, January 8, 2009) and *Initial State Selection Report – Quarterly Data* (Deliverable #1325.04D, November 13, 2009). Based on the findings of this initial quarterly data assessment, AHRQ selected five Partners (CA, GA, HI, MN, NY) to begin contributing quarterly data in 2010.

As of September 1, 2011, the initial five States had all provided complete 2010 quarterly data, and four of the five Partners had submitted data for the first quarter of 2011. In contrast, only three of the five States had provided their 2010 annual data files. The lag between when these States are able to provide their first quarterly data file and when they can submit their annual data file can be a year or more. These early State data are being used by HCUP to provide more timely information than is possible with the annual data. HCUP is currently using the early State quarterly data for two major analytic activities:

- to project trends in hospitalizations (e.g., trends in discharges, outcomes, costs, and mortality for healthcare acquired infections (HAIs) and cardiac conditions and procedures)
- to highlight expected and realized trend changes in inpatient outcomes for a range of clinical diagnoses and procedures (defined by AHRQ Clinical Classifications Software (CCS))

As part of the assessment of the value of these early State data, Thomson Reuters is performing an assessment of the timeliness, completeness, and quality of the quarterly data relative to the annual data, with results to be presented in a future report. These assessments will provide insight into the usefulness of quarterly data for projections and other similar tasks (e.g., monitoring outbreak, responses, and interventions), and whether the more timely quarterly data could ultimately be considered as a replacement for the traditional annual data collected for HCUP.

## METHODS

To evaluate which States to approach as new contributors of quarterly data for HCUP, Thomson Reuters conducted an assessment of all of the HCUP Partner organizations (excluding the five States initially selected to participate). The purpose of the assessment was to obtain information about the availability, timeliness, and completeness of each State's quarterly data,

as well as information regarding the Partner's willingness to submit quarterly data files (in addition to annual files) and any associated fees to provide the data. An initial assessment of State quarterly data was conducted in 2008. The current assessment was intended to capture more current information regarding quarterly data.

The State Quarterly Data Assessment instrument was developed based on the original 2008 instrument (described in *State Quarterly Data Evaluation Report, Deliverable #825.21A*, January 8, 2009), with additional and re-phrased questions created through review of the HCUP Annual Data Assessment and discussions with AHRQ. The final instrument used for the current quarterly data assessment of States is presented in Appendix A and consists of the following sections:

- |                        |                        |
|------------------------|------------------------|
| 1.                     | Contact Information    |
| 2.                     | Quarterly/Monthly Data |
| Collection             |                        |
| 3.                     | Quarterly/Monthly Data |
| Assessment             |                        |
| 4.                     | Interest in Submitting |
| Quarterly/Monthly Data |                        |
| 5.                     | Data Availability      |
| 6.                     | Data Release           |

The assessment focused on three data types of primary significance for HCUP: inpatient (IP), ambulatory surgery (AS), and emergency department (ED). Additionally, because AHRQ is interested in more timely data receipt overall, the assessment was not limited to quarterly data (although this is the most frequent timeframe for early State data), but encompassed monthly and semi-annual data as well.

Consistent with administration of the HCUP Annual Data Assessment, Thomson Reuters utilized the online survey tool, SurveyMonkey, for administration of the quarterly data assessment to the State Partners. SurveyMonkey allows a variety of survey customizations, such as "skip logic," and provides an automated source of data collection. Further, HCUP Partners are familiar with this tool through the annual data assessment.

The State Quarterly Data Assessment was initially distributed to HCUP Partners on July 5, 2011. The HCUP Liaisons sent an e-mail to their Partners describing the intent and purpose of the assessment as well as providing the online link and a target date for completion (August 5, 2011). A sample of this e-mail is provided in Appendix B. The assessment was distributed to the 39 HCUP Partners that do not currently contribute quarterly data for HCUP. A complete list of these Partners is provided in Appendix C. A reminder e-mail was sent to non-responding Partners approximately three weeks later, in late July, 2011. As of the target date of completion (August 5, 2011), a total of 35 of 39 Partners had completed the survey. The HCUP Liaisons initiated e-mail and phone follow-up with the remaining four non-responding Partners. Despite these efforts, none of the remaining four Partners completed the assessment at the time of writing of this report. Finally, one Partner (AZ) that initiated the online assessment indicated that they collect data semi-annually. Because the online assessment was written specifying a quarterly/monthly data collection timeframe, the HCUP Liaison followed up with the Partner to complete a form-based Microsoft Word version of the survey customized for semi-annual data collection.

## RESULTS

A total of 35 of 39 Partners (90%) completed the Quarterly Data Assessment. Non-responding Partners were: Connecticut, Maine, Illinois, and Vermont. In order to provide the most complete information possible for all HCUP Partners, responses from the 2008 State Quarterly Data Assessment were used to supplement the current assessment results for these four Partners that did not complete the 2011 assessment. It should be noted that the 2008 version of the assessment instrument did not include all of the same questions as were utilized in the 2011 instrument. In particular, the 2008 instrument did not include questions about Partners' interest in submitting quarterly/monthly data or about their data fee. Additionally, the 2008 instrument did not ask about the time interval (e.g., quarterly, monthly, semi-annual) of the data collection (the survey was simply worded to ask whether States collect "quarterly/monthly" data).

Results of the State Quarterly Data Assessment are presented below, in the following sections:

1. Availability of Quarterly Data
2. Timeliness of Quarterly Data
3. Completeness & Quality of Quarterly Data

### Availability of Quarterly Data

A total of 35 of 39 States (90%) reported that they collect data at more frequent intervals than annually:

- 27 States (77%) collect quarterly data<sup>1</sup> (AR, CT, FL, IA, IL, IN, KY, MA, MD, ME, MI, MO, MT, NC, NE, NM, OH, OR, PA, RI, TN, TX, UT, VA, VT, WI & WY)
- 4 States (11%) collect monthly data (NJ, SC, WA & WV)
- 3 States (9%) collect both quarterly and monthly data (CO, NH & NV)
- 1 State (3%) collects semi-annual data (AZ)

Four of the 39 States (10%) do not collect data more frequently than annually: Kansas, Louisiana, Oklahoma, and South Dakota.

Of the 35 States with early data collection, the number of States collecting each data type is:

- 35 States (100%) collect inpatient (IP) data (AR, AZ, CO, CT, FL, IA, IL, IN, KY, MA, MD, ME, MI, MO, MT, NC, NE, NH, NJ, NM, NV, OH, OR, PA, RI, SC, TN, TX, UT, VA, VT, WA, WI, WV & WY)
- 28 States (80%) collect ambulatory surgery (AS) data (CO, CT, FL, IA, IL, IN, KY, MD, ME, MI, MO, MT, NC, NE, NH, NJ, NV, OH, OR, PA, SC, TN, TX, UT, VA, VT, WI & WY)
- 27 States (77%) collect emergency department (ED) data (AZ, CO, CT, FL, IA, IL, IN, KY, MA, MD, ME, MO, MT, NC, NE, NH, NJ, NM, NV, OH, RI, SC, TN, UT, VT, WI & WY)

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<sup>1</sup> The 2008 assessment instrument did not ask about the interval of data collection. For the purpose of reporting these results, it is assumed that the four non-responding Partners (CT, IL, ME, and VT) collect data on a quarterly basis.



A total of 14 of the 35 States (40%) that collect quarterly (or monthly or semi-annual) data indicated that they are willing to provide their early data for HCUP, as listed in Table 1 below<sup>2</sup>:

**Table 1. States Willing to Supply Quarterly Data to HCUP**

State	IP	AS	ED
AZ	√		√
IA	√	√	√
IN	√	√	√
KY	√	√	√
MD	√	√	√
MO	√	√	√
NJ	√	√	√
NV	√	√	√
OR	√	√	
RI	√		√
SC	√	√	√
TX	√	√	
VA	√	√	
WI	√	√	√

### Timeliness of Quarterly Data

Of the 14 State Partners that have early data available and are willing to provide it for HCUP, 13 (93%) reported that they can provide the data within six months after the end of the quarter. The shortest lag times reported were for New Jersey and Rhode Island, while the longest lag time reported was for Texas.

- 2 States (14%) reported that they can consistently provide data within three months after the end of each quarter (NJ & RI)
- 11 States (79%) reported that they can typically provide data within three to six months after the end of each quarter (AZ, IA, IN, KY, MD, MO, NV, OR, SC, VA & WI)
- 1 State (7%) reported that they can provide data within six to 12 months after the end of each quarter (TX)

The estimated lag times in data submission reported by the 14 States are illustrated in Figure 1 below.

<sup>2</sup> The 2008 assessment instrument did not ask about interest in submitting quarterly data. For the purposes of reporting these results, it is assumed that the four non-responding Partners (CT, IL, ME, and VT) are not able or willing to submit their quarterly data at this time.

**Figure 1. Estimated Lag Time Reported Between End of Quarter and Data Submission**

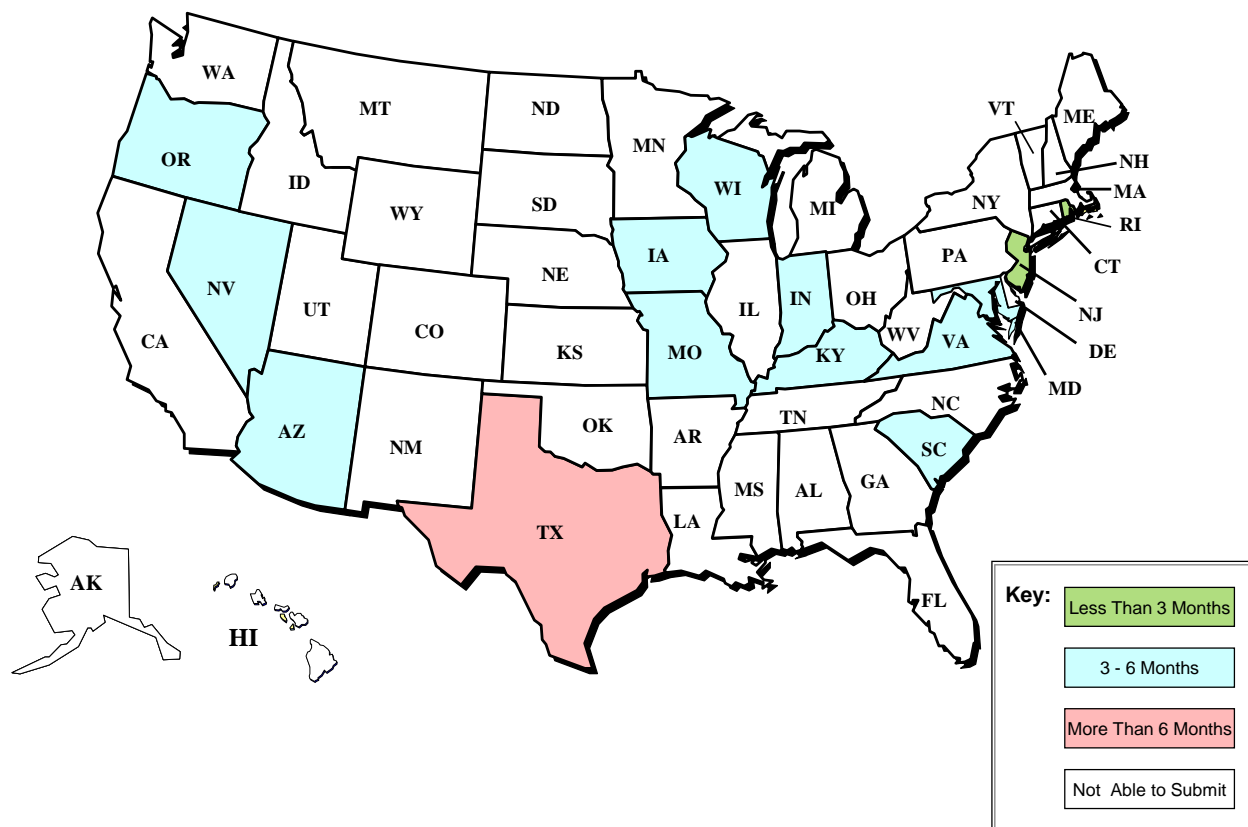


Table 2 below provides the estimated dates when each quarterly data file would be available from each of the 14 Partners able and willing to provide the early data.

**Table 2. State Expectations of Date of Availability of 2011 Quarterly Data Files**

State	CY2011 Quarter 1 – (Jan-Mar)	CY2011 Quarter 2 – (Apr-Jun)	CY2011 Quarter 3 – (Jul-Sep)	CY2011 Quarter 4 – (Oct-Dec)
AZ	10/15/2011	10/15/2011	4/15/2012	4/15/2012
IA	7/1/2011	10/1/2011	1/1/2012	4/1/2012
IN	7/1/2011	10/1/2011	1/1/2012	4/1/2012
KY	7/1/2011	10/1/2011	1/1/2012	4/1/2012
MD	7/1/2011	10/1/2011	1/1/2012	4/1/2012
MO	7/1/2011	10/1/2011	1/1/2012	4/1/2012
NJ	5/1/2011	8/1/2011	11/1/2012	2/1/2012
NV	9/1/2011	12/1/2011	3/1/2012	6/1/2012
OR	7/1/2011	10/1/2011	1/1/2012	4/1/2012
RI	5/1/2011	8/1/2011	11/1/2011	4/1/2012
SC	7/1/2011	10/1/2011	1/1/2012	6/1/2012
TX	3/1/2012	6/1/2012	9/1/2012	12/1/2012
VA	8/1/2011	11/1/2011	2/1/2012	7/1/2012
WI	8/1/2011	11/1/2011	2/1/2012	5/1/2012

Among those 14 State Partners that are willing to contribute early data, 11 (79%) reported that they would charge a relatively small fee or no fee to provide these data.

A summary of key responses regarding data availability, timeliness, and cost is provided in Appendix D for the 39 Partners that currently do not contribute quarterly data to HCUP.

### Completeness & Quality of Quarterly Data

States were asked to report on four aspects of their early (quarterly) data:

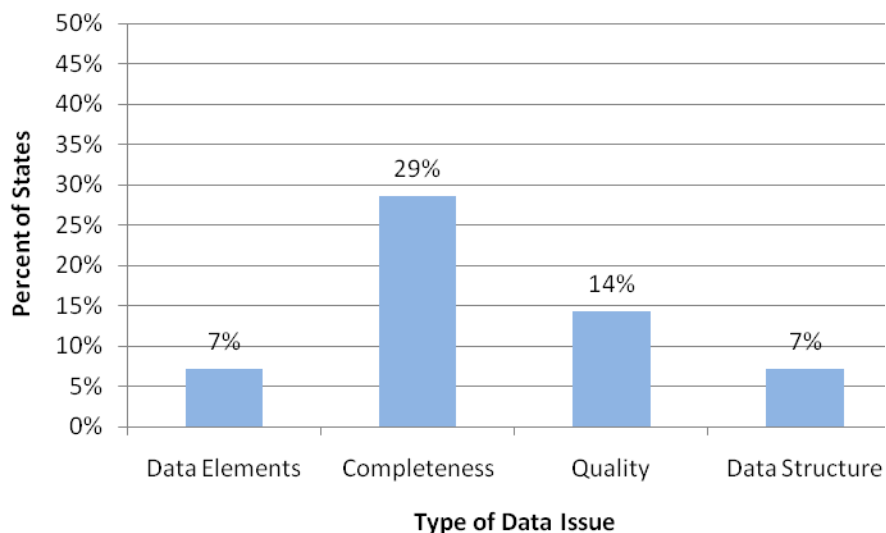
1. Whether the quarterly data had a different set of data elements vs. the annual data
2. Whether the quarterly data was less complete than the annual data
3. Whether the quarterly data differed in quality from the annual data
4. Whether the structure of the quarterly data changed from quarter to quarter

Overall, 19 (54%) of the 35 States that collect early data reported some type of issue with their data. Among the 14 States that collect quarterly data and are willing to supply it to HCUP, seven (50%) reported at least one type of data issue:

- 7 States reported data issues (AZ, IN, KY, MD, MO, NJ & OR)
- 7 States did not report any data issues (IA, NV, RI, SC, TX, VA & WI)

A breakdown of the percent of these 14 States that reported each type of data issue is provided in Figure 3 below.

**Figure 2. Percent of Potential 14 States Reporting Issues with Early Data**

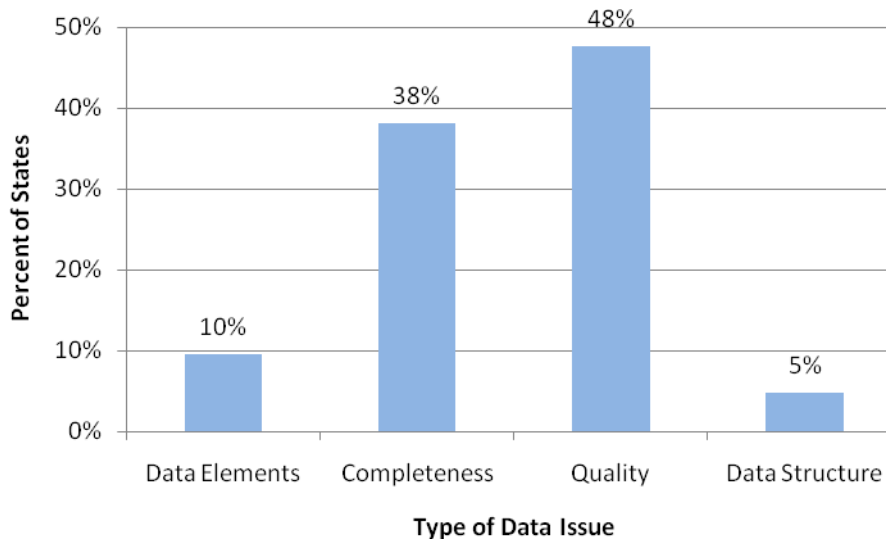


Among the 21 other States that collect quarterly data but are not willing to supply it to HCUP, 12 (57%) reported at least one type of data issue:

- 12 States (57%) reported data issues (AR, CO, MA, ME, MI, MT, NC, TN, UT, VT, WA & WV)
- 9 States (43%) did not report any data issues (CT, FL, IL, NE, NH, NM, OH, PA & WY)

A breakdown of the percent of these 21 States that reported each type of data issue is provided in Figure 4 below.

**Figure 3. Percent of Other (Nonviable) 21 States Reporting Issues with Early Data**



By far the most frequently reported issues across States were that the quarterly data may not include all hospitals, and that hospitals will later re-submit corrected data. Additionally, some States reported that the data quality checking is less rigorous with the quarterly data than with the annual data. It is unknown at this time the extent to which these data completeness and data quality issues may impact the quarterly data files. The effect may be relatively minor, or it may be quite substantial. For instance, one of the 21 States that will not provide the data (UT) reported that about 25% to 40% of their facilities would not be represented in their quarterly data files. The level of these potential problems reported for the 14 States that are willing to submit data is not currently known to be so extreme as to render the quarterly data of limited value (of course, this would need to be determined after discussion with the Partner and review of the quarterly data relative to the annual data).

Appendix E provides the detailed responses given by each State regarding potential issues with their early data. All responses reported by the State for each of the data issue questions are listed. However, in some cases the responses were duplicative, referenced different data issues, or were non-issues. These discrepancies are reconciled in the analysis of responses by data issue type reported above.

## CONCLUSION & RECOMMENDATIONS

Thomson Reuters conducted a quarterly data assessment among the 39 Partners that do not currently contribute quarterly data for HCUP. A total of 35 of the 39 Partners reported that they collect data more frequently than annually, and 14 of these States are willing to provide early data to HCUP:

- Arizona
- Iowa
- Indiana
- Kentucky
- Maryland
- Missouri
- New Jersey
- Nevada
- Oregon
- Rhode Island
- South Carolina
- Texas
- Virginia
- Wisconsin

AHRQ is interested in obtaining data from additional HCUP Partners during 2011, supplementing the existing five Partners who currently contribute quarterly data (CA, GA, HI, MN, NY). Using the information obtained from the State Quarterly Data Assessment, Thomson Reuters identified the following five criteria to be considered in determining which of the 14 possible States should be selected to begin contributing quarterly data:

1. Geographic Distribution
2. Timeliness of Data
3. Data Completeness/Quality Issues
4. Fee
5. Data Release Issues

Geographic distribution is particularly important to the representativeness of the data and its use in the projections and data mining work being conducted with the quarterly data. Significant imbalances in States across regions can create skewed results. Appendix F identifies the status of each State and their participation as a quarterly data contributor (e.g., current participant, possible new State) by Census region and Census regional division. Appendix G provides the regional hospital discharge distribution by State for each Census region and Census regional division, based on results of the 2009 American Hospital Association's (AHA) Annual Survey of Hospitals. According to these latest available results, 23% of community (non-rehabilitation) hospital discharges are in the Midwest, 19% are in the Northeast, 38% are in the South, and 19% are in the West. Selection of new States should ensure that each geographic region is sufficiently represented.

Timeliness of the data, that is, how quickly after the end of the quarter the State can submit the data, is another critical variable in the State selection process, since the purpose of the quarterly data is to obtain more timely information. For example, Texas indicated that quarterly data would not be available until nearly one year after the end of the quarter, and thus is not recommended.

Data completeness/quality is an important consideration for the selection of States, since early data that is very incomplete or has substantial data quality issues will not be very useful. The main issues identified were that the quarterly data may lack some hospitals and that the hospitals may re-submit their data throughout the year. Although several States indicated that

there may be some issues with the completeness and quality of their quarterly data, the level of issues reported would not eliminate a potential State from serious consideration at this time.

Although these first three criteria are the most important substantive issues with respect to selecting States to provide quarterly data, two other more administrative factors also deserve consideration in the State selection process.

Many HCUP Partners charge a fee to submit their data for HCUP, and the results of the State Quarterly Data Assessment revealed that this would be true for quarterly data collection as well. Additionally, the data collection frequency would be more often for the early data, up to four times per year for quarterly data and 12 times per year for monthly data. States that would levy a substantial fee to provide the quarterly data may not be the best candidates if other States are available.

A final consideration may be whether the State has any data release policies or requirements that may present a substantial barrier to obtaining the early data on a more frequent basis.

Factoring in the above criteria, Table 3 below presents an initial set of recommendations to AHRQ for potential State Partners to begin contributing quarterly data for HCUP. Because of the importance of geographic representation, the recommended States are categorized by Census region. Additionally, both a first choice recommendation and a second choice recommendation are provided, in the event that an unforeseen issue arises with the first choice Partner.

**Table 3. Recommended Next States to Contribute Quarterly Data**

Census Region	First Choice	Alternate Choice(s)
Northeast	New Jersey	Rhode Island
Midwest	Missouri	Wisconsin or Iowa
South	Kentucky & Virginia	Maryland
West	Arizona	Oregon

In the Northeast, two possible States are available: New Jersey and Rhode Island. New Jersey is recommended as first choice, with Rhode Island as an alternate. New Jersey constitutes approximately 15% of the Northeast region, whereas Rhode Island constitutes only 2%. Both States are able to contribute their data in less than three months after the end of the quarter.

In the Midwest, four possible States are available: Iowa, Indiana, Missouri, and Wisconsin. Missouri is recommended as the first choice, with Wisconsin or Iowa as alternates. Missouri constitutes the largest proportion of the region (10%). AHRQ has already selected Missouri to participate in the next round of quarterly data collection, and the Partner submitted their first quarter 2011 data file on September 12, 2011. Wisconsin is proposed as a first alternate, constituting 8% of the Midwest region. Wisconsin would add representation from the East North Central regional division (current participating Partner Minnesota is from the West North Central

division, as is Missouri). Iowa could also be considered as an alternate choice, but they constitute only about half of the hospital discharges (4%) in the region versus Wisconsin. AHRQ may wish to consider including one of these two alternate States, in addition to Missouri, since the proportion of discharges in the Midwest from Minnesota (8%) and Missouri (10%) is still relatively small. Indiana is not recommended due to the substantial data fee that would be charged.

In the South, five possible States are available: Kentucky, Maryland, South Carolina, Virginia, and Texas. Kentucky and Virginia are both recommended, with Maryland as an alternate. In the case of the Southern region, the one current participating Partner, Georgia, only constitutes 7% of the region. Although Texas would be a good State to add from a geographic representation perspective (constituting 20% of discharges in the South), this State indicated that their quarterly data would not be available for nearly a year after the end of the quarter. The remaining four States each constitute 4 to 6% of the discharges in the region. For this reason, and because the South represents the largest proportion of hospital discharges in the nation (38%), two States are recommended from the South. AHRQ has already selected Kentucky to participate in the next round of quarterly data collection, and the Partner submitted their first quarter 2011 data file on August 17, 2011. Virginia is also recommended for selection, with the next highest percentage of discharges in the region. However, Maryland represents only slightly fewer discharges than does Virginia, so Maryland can be considered as a strong alternate candidate. South Carolina is also a viable candidate, but represents the smallest proportion of discharges in the region.

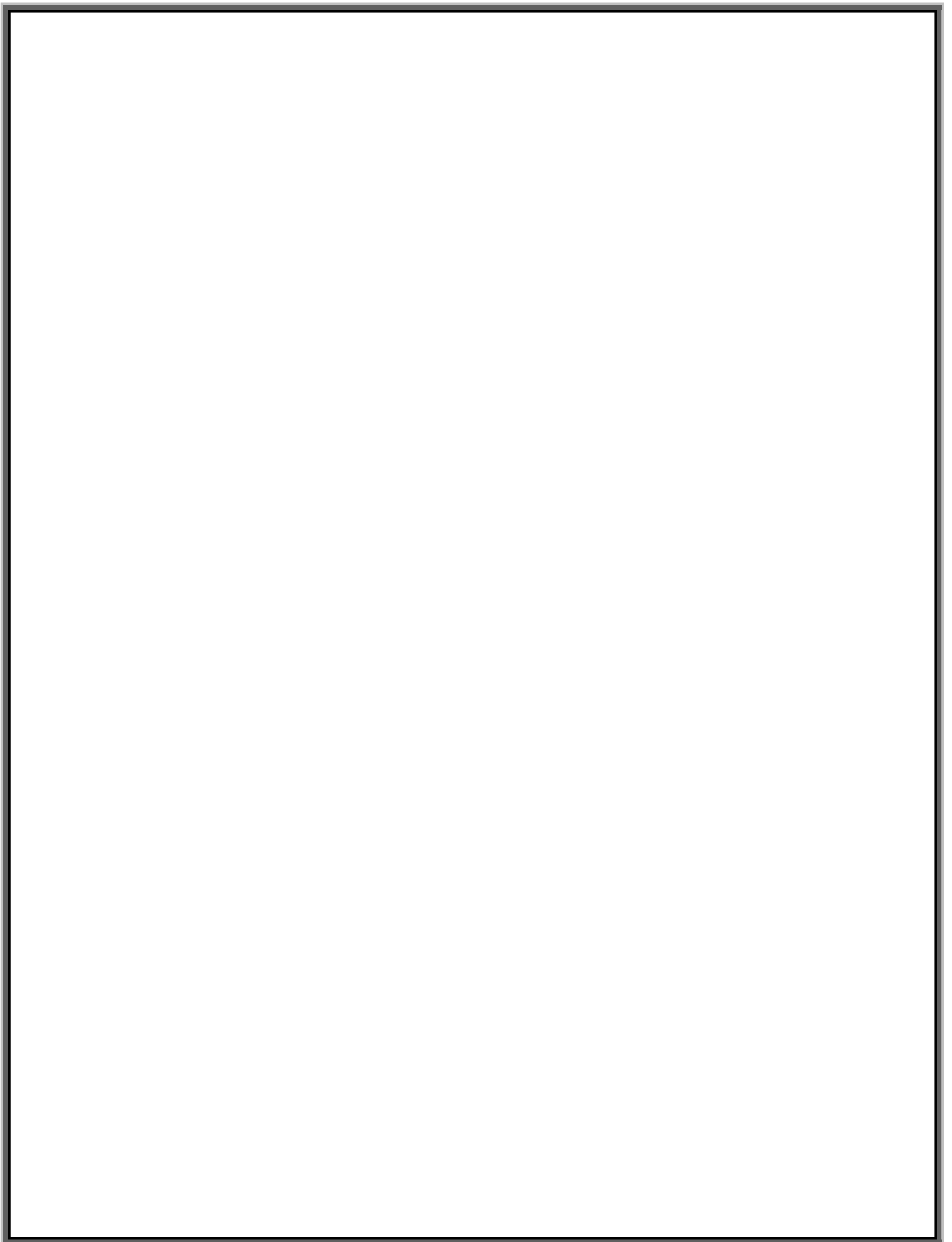
Finally, in the West, three possible States are available: Arizona, Nevada, and Oregon. Arizona is recommended as first choice, with Oregon as an alternate. Although Arizona would submit semi-annual rather than quarterly data, the State constitutes the largest percentage of the region (11%) and also provides geographic representation from the Mountain regional division (current participating Partners California and Hawaii are both from the Pacific division). Oregon would be a reasonable alternate choice, although the State constitutes only 5% of discharges in the West.

In conclusion, 14 Partners reported that they are able and willing to begin contributing quarterly data to HCUP. Several States reported that the completeness and quality of the quarterly data may vary from the annual data, but the level of the potential problems reported is not currently known to preclude their participation. However, two States did have noteworthy issues with regard to the timeliness of their data (TX) and their proposed data fee (IN). Among the remaining 12 States, two (KY and MO) have already agreed to begin providing quarterly data, and all of the remaining 10 States can be considered viable candidates for this initiative.





# **APPENDICES**



## APPENDIX A: STATE QUARTERLY DATA ASSESSMENT FOR HCUP PARTNERS

### Survey 1<sup>st</sup> Page: Introduction

#### Welcome!

Thank you for taking the time to complete the HCUP State Quarterly Data Assessment. Your answers will help AHRQ evaluate the feasibility of using quarterly/monthly data to create certain cost and utilization statistics more quickly than is currently possible with annual data.

Your input is truly appreciated.

Thank you,

Jenny A. Schnaier  
HCUP Project Officer  
Agency for Healthcare Research and Quality

### Survey 2<sup>nd</sup> Page: Background Assessment

#### 1. Contact Information:

Please fill in your contact information:

Name of individual completing this assessment: \_\_\_\_\_

State and organization: \_\_\_\_\_

Phone number: \_\_\_\_\_

#### 2. Data Collection:

Does your organization collect data more frequently than on an annual basis?

Yes

No *(Skip to the thank you page.)*

### Survey 3<sup>rd</sup> Page: Data Frequency & Types

#### 3. Data Frequency & Types

**3A.** What are the time frames during which your organization collects data? Please check all that apply.

- Monthly
- Quarterly
- Semi-Annually
- Other (please specify): \_\_\_\_\_

**3B.** Does your organization collect any of the following types of data on either a quarterly or monthly basis? Please check all data types that apply.

- Inpatient (IP)
- Ambulatory Surgery (AS)
- Emergency Department (ED)
- None of the above (*Skip to the thank you page.*)

**\*\*\*Please answer the remaining questions with respect to the quarterly/monthly data that your organization collects.\*\*\***

**Survey 4<sup>th</sup> Page: Quarterly/Monthly Data Assessment**

**4. Quarterly/Monthly Data Assessment:**

**4A.** Does the quarterly/monthly data contain a different set of data elements than the annual data? Please check all data types that apply

- IP
- AS
- ED
- No difference for any type of data

Please explain if you checked any of the data types above.

---

**4B.** Are the quarterly/monthly data less complete than the annual data? (Ex. missing hospitals or records) Please check all data types that apply.

- IP
- AS
- ED
- No difference for any type of data

Please explain if you checked any of the data types above.

---

**4C.** Does the quarterly/monthly data differ in quality from the annual data? (Ex. inaccuracies in revenue or charge information, procedure codes, or diagnosis codes) Please check all data types that apply.

- IP
- AS
- ED
- No difference for any type of data

Please explain if you checked any of the data types above.

---

**4D.** Do the quarterly/monthly data structures change between quarters/months? Please check all data types that apply.

- IP
- AS
- ED
- No, the data structures do not change between quarters/months

Please explain if you checked any of the data types above.

---

**4E.** Are there any other important differences between your State's quarterly/monthly data versus the annual data? Please describe. \_\_\_\_\_

## Survey 5<sup>th</sup> Page: Quarterly/Monthly Data Participation

### 5. Interest in Submitting Quarterly/Monthly Data:

Is your organization interested in participating in AHRQ's evaluation of quarterly/monthly data by providing your quarterly/monthly data files to HCUP? This would be in addition to providing your annual data files per your existing agreement with AHRQ.

- Yes, we would be interested in participating and willing to provide quarterly/monthly data on a regular (e.g., quarterly) basis.
- No, we would not be interested in participating or willing to provide quarterly/monthly data. *(Skip to the thank you page.)*

## Survey 6<sup>th</sup> Page: Quarterly/Monthly Data Submission

### 6. Data Availability:

When during the year is your quarterly/monthly data typically available?

CY2011 Quarter 1	Month-year drop-down list
CY2011 Quarter 2	Month-year drop-down list
CY2011 Quarter 3	Month-year drop-down list
CY2011 Quarter 4	Month-year drop-down list

### 7. Data Release:

7A. Does your organization have a data release policy for the quarterly/monthly data?

- Yes ► Answer Question 7B below  
 No ► Skip to Question 8

7B. If you answered “Yes” to Question 7A above, would you be able to provide us with information about your data release policy for the quarterly/monthly data?

- Yes  
 No

### 8. Data Fee:

8A. Would your organization charge a fee for the quarterly/monthly data, if acquired for HCUP, in addition to any fee currently charged for annual data?

- Yes ► Answer Question 7B below  
 No ► Skip to next page

8B. If you answered “Yes” to Question 8A above, please specify the amount that would be charged by data type and time period (e.g., month/quarter/half year/full year). (Ex. IP \$100 per quarter)

IP: \_\_\_\_\_  
AS: \_\_\_\_\_  
ED: \_\_\_\_\_

## Survey 7<sup>th</sup> Page: Thank you!

Thank you for completing this assessment. We appreciate your time and effort.





## APPENDIX B: SAMPLE ASSESSMENT INVITATION E-MAIL SENT TO PARTNERS

Dear <Partner Name>,

We are requesting your participation in a brief survey regarding the availability, quality, and timeliness of quarterly/monthly data in your state. Your answers will help AHRQ evaluate the feasibility of using quarterly/monthly data to create certain cost and utilization statistics more quickly than is currently possible with annual data. We are specifically interested in whether your organization collects quarterly or monthly inpatient (IP), ambulatory surgery (AS), and/or emergency department (ED) encounter-level data similar to the annual data that your organization currently provides to HCUP.

Below are instructions to complete the survey:

- The link to the assessment survey is: <https://www.surveymonkey.com/s/2NNW9LD>
- This short survey will only take about 5-10 minutes of your time to complete.
- We would appreciate receiving your feedback before Friday, August 5, 2011.

Your participation in this important survey is greatly appreciated. Thank you for your continued support of HCUP. We look forward to hearing from you.

Regards,

<State Liaison>

## APPENDIX C: HCUP PARTNERS SURVEYED

<b>State</b>	<b>Data Source</b>
Arizona	<b>Arizona</b> Department of Health Services
Arkansas	<b>Arkansas</b> Department of Health
Colorado	<b>Colorado</b> Hospital Association
Connecticut	<b>Connecticut</b> Hospital Association
Florida	<b>Florida</b> Agency for Health Care Administration
Illinois	<b>Illinois</b> Department of Public Health
Indiana	<b>Indiana</b> Hospital Association
Iowa	<b>Iowa</b> Hospital Association
Kansas	<b>Kansas</b> Hospital Association
Kentucky	<b>Kentucky</b> Cabinet for Health and Family Services
Louisiana	<b>Louisiana</b> Department of Health and Hospitals
Maine	<b>Maine</b> Health Data Organization
Maryland	<b>Maryland</b> Health Services Cost Review Commission
Massachusetts	<b>Massachusetts</b> Division of Health Care Finance and Policy
Michigan	<b>Michigan</b> Health & Hospital Association
Missouri	<b>Missouri</b> Hospital Industry Data Institute
Montana	<b>Montana</b> MHA - An Association of Montana Health Care Providers
Nebraska	<b>Nebraska</b> Hospital Association
Nevada	<b>Nevada</b> Department of Health and Human Services
New Hampshire	<b>New Hampshire</b> Department of Health & Human Services
New Jersey	<b>New Jersey</b> Department of Health and Senior Services
New Mexico	<b>New Mexico</b> Health Policy Commission
North Carolina	<b>North Carolina</b> Department of Health and Human Services
Ohio	<b>Ohio</b> Hospital Association
Oklahoma	<b>Oklahoma</b> State Department of Health
Oregon	<b>Oregon</b> Association of Hospitals and Health Systems
Pennsylvania	<b>Pennsylvania</b> Health Care Cost Containment Council
Rhode Island	<b>Rhode Island</b> Department of Health
South Carolina	<b>South Carolina</b> State Budget & Control Board
South Dakota	<b>South Dakota</b> Association of Healthcare Organizations
Tennessee	<b>Tennessee</b> Hospital Association
Texas	<b>Texas</b> Department of State Health Services
Utah	<b>Utah</b> Department of Health
Vermont	<b>Vermont</b> Association of Hospitals and Health Systems
Virginia	<b>Virginia</b> Health Information
Washington	<b>Washington</b> State Department of Health
West Virginia	<b>West Virginia</b> Health Care Authority
Wisconsin	<b>Wisconsin</b> Department of Health Services

Wyoming	<b>Wyoming</b> Hospital Association
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**APPENDIX D: PARTNER RESPONSES REGARDING QUARTERLY DATA AVAILABILITY, TIMELINESS**

State	Data Types	Frequency	Willing to Submit?	2011Q1 Available Date
AR	IP	Qtr	No	
AZ	IP/ED	Semi-Ann	Yes	15-Oct-11
CO	IP/AS/ED	Qtr/Mnth	No	
CT*	IP/AS/ED	Qtr	No	
FL	IP/AS/ED	Qtr	No	
IA	IP/AS/ED	Qtr	Yes	Jul-11
IL*	IP/AS/ED	Qtr	No	
IN	IP/AS/ED	Qtr	Yes	Jul-11
KS	None	n/a	n/a	
KY	IP/AS/ED	Qtr	Yes	Jul-11
LA	None	n/a	n/a	
MA	IP/ED	Qtr	No	
MD	IP/AS/ED	Qtr	Yes	Jul-11
ME*	IP/AS/ED	Qtr	No	
MI	IP/AS	Qtr	No	
MO	IP/AS/ED	Qtr	Yes	Jul-11
MT	IP/AS/ED	Qtr	No	
NC	IP/AS/ED	Qtr	No	
NE	IP/AS/ED	Qtr	No	
NH	IP/AS/ED	Qtr/Mnth	No	
NJ	IP/AS/ED	Mnth	Yes	May-11
NM	IP/ED	Qtr (ED-Mnth Test)	No	
NV	IP/AS/ED	Qtr/Mnth	Yes	Sep-11
OH	IP/AS/ED	Qtr	No	
OK	None	n/a	n/a	
OR	IP/AS	Qtr	Yes	Jul-11
PA	IP/AS	Qtr	No	
RI	IP/ED	Qtr	Yes	May-11
SC	IP/AS/ED	Mnth	Yes	Jul-11
SD	None	n/a	n/a	
TN	IP/AS/ED	Qtr	No	
TX	IP/AS	Qtr	Yes	Mar-12
UT	IP/AS/ED	Qtr	No	
VA	IP/AS	Qtr	Yes	Aug-11
VT*	IP/AS/ED	Qtr	No	
WA	IP	Mnth	No	
WI	IP/AS/ED	Qtr	Yes	Aug-11
WV	IP	Mnth	No	
WY	IP/AS/ED	Qtr	No	

*\*Note: Results reported in this table for CT, IL, ME, and VT are based on these Partners' responses on the 2008 quarterly data assessment instrument. The 2008 instrument did not ask about the frequency with which data was available (for this report, it was assumed that these Partners have data available quarterly, which is the most common frequency) or about Partners' willingness to*

*submit data (for this report, it was assumed that these Partners are not willing to submit quarterly data at this time, since they did not complete the 2011 assessment).*

**APPENDIX E-1: SUMMARY OF POTENTIAL QUARTERLY DATA ISSUES FOR 14 STATES WILLING TO SUBMIT DATA TO HCUP (TABLE CELLS INTENTIONALLY LEFT BLANK)**

14 States Willing to Supply Quarterly Files to HCUP					
State	Data Elements	Completeness	Quality	Structure	Other Noted Differences

**APPENDIX E-2: SUMMARY OF POTENTIAL QUARTERLY DATA ISSUES FOR 21 STATES NOT WILLING TO SUBMIT DATA TO HCUP (TABLE CELLS INTENTIONALLY LEFT BLANK)**

21 States <u>Not</u> Willing to Supply Quarterly Files to HCUP					
State	Data Elements	Completeness	Quality	Structure	Other Noted Differences





APPENDIX G: REGIONAL HOSPITAL DISCHARGE DISTRIBUTION BY STATE (2009)

Census Region	% of Region	State	% of Division	Census Regional Division
1 - Northeast	5.81%	CT	24.48%	1 – New England
	11.48%	MA	48.65%	
	2.09%	ME	8.93%	
	1.74%	NH	7.25%	
	1.81%	RI	7.62%	
	0.74%	VT	3.06%	
	15.34%	NJ	19.86%	2 – Mid-Atlantic
	35.88%	NY	46.74%	
2 - Midwest	25.10%	PA	33.39%	3 – East North Central
	18.90%	IL	27.37%	
	9.18%	IN	13.18%	
	14.76%	MI	21.51%	
	18.50%	OH	27.12%	4 – West North Central
	7.56%	WI	10.81%	
	4.32%	IA	13.94%	
	4.05%	KS	12.81%	
	7.65%	MN	24.53%	
	10.04%	MO	32.62%	
	1.13%	ND	3.64%	
	2.62%	NE	8.35%	
	1.28%	SD	4.11%	
	3 - South	0.98%	DC	
0.75%		DE	1.47%	
17.42%		FL	34.97%	
7.17%		GA	13.76%	
5.13%		MD	10.24%	
7.58%		NC	14.83%	
3.81%		SC	7.52%	
5.80%		VA	11.30%	
1.92%		WV	3.96%	6 – East South Central
4.84%		AL	26.61%	
4.20%		KY	23.49%	
3.00%		MS	16.43%	
6.04%		TN	33.47%	
2.76%		AR	9.09%	
4.87%		LA	15.91%	7 – West South Central
3.40%		OK	10.99%	
20.33%		TX	64.00%	
4 – West		10.58%	AZ	
	6.65%	CO	20.87%	
	2.00%	ID	6.27%	
	1.46%	MT	4.85%	
	2.77%	NM	8.65%	
	3.88%	NV	12.37%	
	3.66%	UT	10.69%	
	0.77%	WY	2.50%	
	0.87%	AK	1.25%	9 – Pacific
	51.75%	CA	75.65%	
	1.56%	HI	2.41%	
	5.12%	OR	7.53%	
	8.94%	WA	13.16%	

Source: American Hospital Association (AHA) Annual Survey of Hospitals, 2009. Includes all hospitals that were open during any part of the calendar year and were designated as community hospitals in the AHA Annual Survey of Hospitals, excluding rehabilitation hospitals.