Overview of Information and Resources Currently Available to Consumers on MHDO Website. https://mhdo.maine.gov/

HealthCost- Claims data used

Average Statewide Procedure Payments and Charges - Provides statewide charge and payment information across all insurance carriers and all medical providers for 29 of the more common "shopable" procedures in the following categories: imaging, preventive health, radiology and surgery. Included are amounts for the professional (provider) portion and for the facility (e.g. hospital) portion of a procedure.

Each procedure has a histogram- A histogram is a graphical display of data. This graph represents the distribution of dollars paid for each patient encounter where the procedure occurred.

Procedure Payments for the Insured - Provides an estimate of totaldollars paid by specific commercial health insurance companies at various facilities in Maine for 29 of the more common "shopable" procedures in the following categories: imaging, preventive health, radiology and surgery.

Estimated Procedure Charges for the Uninsured - Provides an estimate of the median charge at various facilities in Maine for 29 of the more common "shopable" procedures in the following categories: imaging, preventive health, radiology and surgery.

MONAHRQ (My Own Network, Powered by the Agency for Healthcare Research and Quality)-Hospital inpatient encounter data used-refer to attached methodology overview for details.

Hospital Quality Ratings - Consumer can compare hospitals in the State of Maine to assess the level of quality for the following health topics:

Childbirth
Deaths and Readmissions
Heart Attack
Heart Failure
Heart Surgeries and Procedures
Patient Experiences
Pneumonia
Stroke
Surgical Patient Safety

Hospital Utilization - Consumer can compare Maine hospitals by the number of patients they treat for different medical conditions and procedures, costs and average length of stay. Refer to screen shot. Information can be sorted by Major Diagnostic Code (MDC) for example diseases of the nervous system; by Diagnosis Related Group (DRG) for example 28 spinal procedures with MCC.

Map of Avoidable Hospital Stays - Consumer can map and compare counties by rates of potentially avoidable hospital stays for 14 of the 16 Prevention Quality Indicators (PQI's). Compare cost savings from reducing avoidable stays

County Rates of Hospital Use - Consumers can map and compare counties by rates of inpatient medical conditions and procedures by Major Diagnostic Code (MDC) for example diseases of the nervous system; by Diagnosis Related Group (DRG) for example 28 spinal procedures with MCC.

Hospital Financial/ Organization Data

Hospital Financial Data- Annual Summaries of hospital financial data from 2007 through 2011, as reported by Maine's 39 non-governmental hospitals. Profitability, Liquidity, Capital Structure, Asset Efficiency, and other common ratios are also provided in the reports.

Link to IRS 990 Forms posted on DHHS website

Hospital Organizational Data- Reports on major structural changes relevant to the restructuring of hospitals and their parent entities in Maine. Including organizational charts depicting the organizational structure and relationships, in terms of ownership, control, and membership, and the individual corporate tax status, tax identification number, and functional description, among the persons and health care facilities owned by or affiliated with the hospital and parent entity.

External Reports –

Below are the examples of reports and analyses that used data from the MHDO:

- Healthcare Associated Infections in Maine, 2013 Annual Report prepared by Dirigo Health Agency/Maine Quality Forum.
- Maine Health Management Coalition / Onpoint Health Data: Hospital Cost Comparison, January 2013.
- Analytic Models to Identify Patients at Risk for Prescription Opioid Abuse - published in The American Journal of Managed Care, Vol. 15, Issue 12, December 2009, Pages 891-906.
- All-Payer Analysis of Variation in Healthcare in Maine, Conducted on behalf of Dirigo Health Agency's Maine Quality Forum & The Advisory Council on Health Systems Development April, 2009.
- The Epidemiology of Case Fatality Rates for Suicide in the Northeast from the Harvard School of Public Health, Boston, MA. Published in the Annals of Emergency Medicine, Vol. 43, Issue 6, June 2004, Pages 723–730.
- Management of Adult Splenic Injury: A 20 Year Perspective as presented at the 83rd Annual Meeting of the New England Surgical Society, September 2002.
- Decreasing Incidence of Burn Injury in a Rural State - published in Injury Prevention, Vol. 6, Issue 4, 2000, Pages 259-262.

Screen Shot from MONAHRQ Site
Example of type of information available

Maine Health Data Organization's MONAHRQ Website

- Home
- Hospital Quality
  - Ratings for the Public
  - Detailed Quality Statistics
- Hospital Utilization
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- Resources
  - About Hospital Quality
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Home

Utilization

Statistics by hospital for 1 Diseases & Disorders Of The Nervous System (MDC 1) in Maine, 2009

Statistics by hospital for 1 Diseases & Disorders Of The Nervous System (MDC 1) in Maine, 2009

Select Report for Copying Use the Edit menu to Copy and Paste to another application.

< Back

Hospital Name	County	Number of discharges	Mean costs in dollars**	Mean length of stay in days** ↓
TOTAL U.S. in 2009 (standard error)*	--	2,210,056 (62,611)	$11,156 ($242)	4.9 (0.06)
NORTHEAST U.S. in 2009 (standard error)*	--	453,351 (26,565)	$11,448 ($522)	5.2 (0.13)

Screen Shot from MONAHRQ Site
Example of type of information available

Hospital Name	County	Number of discharges	Mean costs in dollars**	Mean length of stay in days**
ALL HOSPITALS IN MAINE	--	8,277	$10,835	4.5
Maine Medical Center	ME - Cumberland	2,301	$14,053	5.8
Penobscot Bay Medical Center	ME - Knox	288	$8,558	5.5
Sebasticook Valley Hospital	ME - Somerset	70	$5,230	5.4
Waldo County General	ME - Waldo	54	$10,820	5.1
The Aroostook Medical Center	ME - Aroostook	109	$13,416	4.9
Mayo Regional Hospital	ME - Piscataquis	72	$5,912	4.6
Inland Hospital	ME - Kennebec	38	$10,891	4.5
Franklin Memorial Hospital	ME - Franklin	104	$10,765	4.4
St Mary's Regional Medical Center	ME - Androscoggin	267	$10,256	4.3
Miles Memorial Hospital	ME - Lincoln	68	$9,961	4.3
MaineGeneral Medical Center	ME - Kennebec	496	$9,254	4.3
Northern Maine Medical Center	ME - Aroostook	80	$10,745	4.2
Southern Maine Medical Center	ME - York	255	$8,809	4.1
Parkview Adventist Medical Center	ME - Cumberland	79	$10,678	4.1
Eastern Maine Medical Center	ME - Penobscot	1,332	$11,410	4.1

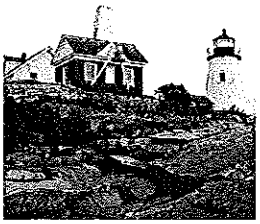
Screen Shot from MONAHRQ Site
Example of type of information available

Hospital Name	County	Number of discharges	Mean costs in dollars**	Mean length of stay in days**
York Hospital	ME - York	240	$9,591	4.0
Blue Hill Memorial Hospital	ME - Hancock	57	$5,654	4.0
Mercy Hospital	ME - Cumberland	283	$9,705	3.9
Central Maine Medical Center	ME - Androscoggin	675	$11,022	3.9
Cary Medical Center	ME - Aroostook	77	$7,989	3.9
Bridgton Hospital	ME - Cumberland	67	$5,943	3.8
St Joseph Hospital	ME - Penobscot	214	$7,956	3.7
Mid Coast Hospital	ME - Cumberland	229	$9,018	3.7
Charles A Dean Memorial Hospital & Nursing Home	ME - Piscataquis	20	$9,018	3.7
Stephens Memorial Hospital	ME - Oxford	101	$7,075	3.6
Maine Coast Memorial Hospital	ME - Hancock	121	$7,466	3.6
Houlton Regional Hospital	ME - Aroostook	64	$7,610	3.5
Calais Regional Hospital	ME - Washington	42	$8,436	3.5
Goodall Hospital	ME - York	130	$7,079	3.4
Down East Community Hospital	ME - Washington	25	$7,269	3.4
Redington-Fairview General Hospital	ME - Somerset	97	$8,042	3.2

Screen Shot from MONAHRQ Site
Example of type of information available

Hospital Name	County	Number of discharges	Mean costs in dollars**	Mean length of stay in days** ↓
Mount Desert Island Hospital	ME - Hancock	70	$5,047	3.2
Rumford Hospital	ME - Oxford	30	$5,188	2.8
Millinocket Regional Hospital	ME - Penobscot	41	$6,292	2.7
St Andrews Hospital & Healthcare Center	ME - Lincoln	25	$4,587	2.5
Penobscot Valley Hospital	ME - Penobscot	56	$6,419	2.5

Values based on 5 or fewer discharges are suppressed to protect confidentiality of patients and are designated with a "c".
*Weighted national estimates from HCUP Nationwide Inpatient Sample (NIS), 2009, Agency for Healthcare Research and Quality (AHRQ), based on data collected by individual States and provided to AHRQ by the States. Total number of weighted discharges in the U.S. based on HCUP NIS = 39,434,956. Statistics based on estimates with a relative standard error (standard error / weighted estimate) greater than 0.30 or with standard error = 0 are not reliable, and are designated with a †.
**All statistics are unadjusted.



Maine Health Data Organization's MONAHRQ Website

About the Methodology

Hospital Quality Ratings

What are the hospital quality ratings?
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Hospital Quality Ratings

What are the hospital quality ratings?

There are many ways to judge the quality of health care. Health care quality can be described as doing the right thing, at the right time, in the right way -- and having the best possible results.

Quality ratings are based on specific quality indicators. A quality indicator is a piece of information, usually a number, that shows how often patients had a particular experience when they received medical care. These experiences reflect a particular aspect of hospital quality. This report uses three different types of quality indicators.

AHRQ Quality Indicators: The AHRQ Quality Indicators were developed by the Agency for Healthcare Research and Quality (AHRQ), a federal government agency whose mission is to improve the quality and safety of health care in the United States. The AHRQ Quality Indicators are calculated from standardized information that hospitals collect as part of the hospital bill. For more information, please visit the AHRQ Quality Indicators Website.

CMS Hospital Compare ratings: The Centers for Medicare and Medicaid Services publicly reports hospital quality measures on its Website, Hospital Compare, which was created as a joint effort by CMS and the Hospital Quality Alliance (HQA). Over 4,500 U.S. hospitals - nearly every hospital in the nation - report performance data to Hospital Compare. For more information, please visit the Hospital Compare Website.

HCAHPS patient experience ratings: HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) is a national, standard survey that asks a random sample of hospital patients about their recent hospital experience. The HCAHPS survey was developed by a partnership of public and private organizations, including CMS and AHRQ. For more information, please visit the HCAHPS Website.

How do I select hospitals to compare?

You can select hospitals in three ways:

By hospital: Select one or more hospital names from the dropdown list.

By ZIP code: Enter a ZIP Code and a distance in miles. Then select one or more hospitals in that area from the dropdown list.

By region: Choose a region to select all hospitals in that region.

What are the health topics?

Quality ratings are organized into topics by health conditions or by different aspects of health care quality, such as patient safety or patient satisfaction. With the exception of some information in "Childbirth", all information refers to adult patients.

For more information on the ratings included in each topic, visit Measure Details.

Childbirth: Ratings about care for new mothers and newborns. It includes information about how often and when C-sections and vaginal births are performed.

Deaths and readmissions: Ratings about numbers of deaths and readmissions. A readmission happens when a patient has to return to the hospital. A high number of deaths or readmissions may mean the hospital is not treating people effectively.

Heart attack: Ratings about heart attack care. A heart attack, also called an AMI or acute myocardial infarction, happens when the arteries leading to the heart become blocked and the blood supply slows or stops.

Heart failure: Ratings about care for heart failure. Heart failure or congestive heart failure is a weakening of the heart's pumping power that prevents the body from getting enough oxygen and nutrients to meet its needs.

Heart surgeries and procedures: Ratings about surgeries and procedures related to the heart such as angioplasty and coronary bypass surgery.

Other surgeries: Ratings about surgeries other than heart surgery such as brain surgery (craniotomy) and hip replacement surgery.

Patient experiences: Ratings from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS, pronounced "H-caps"). HCAHPS is a national, standardized survey of hospital patients that asks patients about their experiences during a recent hospital stay.

Pneumonia: Ratings about pneumonia care. Pneumonia is a serious lung infection that can cause difficulty breathing, fever, cough, and fatigue.

Stroke: Ratings about stroke care. A stroke happens when the blood supply to the brain stops. This topic includes carotid endarterectomy surgery, an operation intended to prevent stroke.

Surgical patient safety: Ratings about how safe the hospital is for patients having surgery. Many medical complications can be avoided if patients receive the right care before, during, and after surgery.

Other patient safety: Ratings about how safe the hospital is for any type of patient. Many medical complications can be avoided if patients receive the right care in the hospital.

What types of ratings are in the health topics?

Health topics include different types of ratings that measure different aspects of health care quality. In the classification table, each tab shows one type of rating. Not all types of ratings are available for every health topic.

Recommended care: Information on how many patients received the care they needed such as the right medicine, surgery, or advice. These ratings are sometimes called *process* measures.

Results of care: Information about patients' health while being cared for in the hospital or after leaving the hospital. These ratings are sometimes called *outcome* measures.

Practice patterns: Information about the types of care provided in the hospital such as information about the numbers and types of surgeries or procedures a hospital performs.

Patient experiences: These types of ratings appear only in the "Patient Experiences" health topic. They are collected in the HCAHPS patient survey.

Communication: Information about how satisfied patients say they are with the way hospital staff communicated with them such as whether staff explained things clearly and gave them the information they needed.

Environment: Information about how satisfied patients say they are with the physical environment in the hospital such as whether they received help quickly, their pain was well-controlled, and their rooms were kept clean and quiet.

Satisfaction overall: Information about how satisfied patients say they are with their recent hospital stay overall.

How did we analyze this data?

AHRQ Quality Indicators: MONAHRQ uses AHRQ's Windows Quality Indicators software, version 4.2, to directly calculate the AHRQ Quality Indicators based on hospital discharge data collected from Test 05/30/2011. For more information on the methods used by the AHRQ QI software, visit the AHRQ QI Website.

CMS Hospital Compare ratings: MONAHRQ obtains this information from the Hospital Compare site. The ratings are calculated by CMS using nationally accepted standards based on data that individual hospitals provide to Hospital Compare. For more information on the methods used by Hospital Compare, visit the Hospital Compare Website.

HCAHPS patient experience ratings: MONAHRQ obtains this information from the Hospital Compare Website. These ratings are reported to CMS by the individual hospitals that provide data to Hospital Compare. For more information on HCAHPS, visit the HCAHPS Website. For more information on HCAHPS measures in Hospital Compare, visit the Hospital Compare Website.

For more details on individual measures, visit Measure Details.

How are the quality ratings assigned?

A hospital is rated by comparing it to other hospitals. Ratings are assigned using two different methods. The key at the top of the quality ratings table tells you which method is used.

Method for all AHRQ Quality Indicators and CMS Hospital Compare measures in "Results of care" and "Practice patterns":

Best: Hospital is better than average compared to other hospitals.
Average: Hospital is about the same or average compared to other hospitals.
Below: Hospital is worse than average compared to other hospitals.

This method includes a significance test. A significance test means we only rate a hospital as better or worse than average when we are at least 95% confident we are correct. Otherwise, we rate the hospital as average. Experts believe that being 95% confident is acceptable.

Method for CMS Hospital Compare measures in the "Recommended care" group and the HCAHPS patient experiences measures. Hospitals are assigned: best, better, below:

Best: Hospital is in the top 10% of hospitals.
Better: Hospital is better than average, but not in the top 10% of hospitals.
Below: Hospital is worse than average compared to other hospitals.

This method does not include a significance test.

Not Enough Data: A hospital is assigned "not enough data" when there are too few cases to rate a hospital with certainty. Most often, the hospital did not have any cases that qualified for the rating. For example, if a hospital had zero heart attack patients, there would not be enough data to rate this hospital.

Not Rated: If there are no national standards for rating hospitals, a number is provided instead. Evidence suggests that hospitals that do many procedures do them better. But experts do not agree about how many procedures are needed to be "better" or "best." Generally, a hospital that performs more procedures may be better.

What are the hospital comparison groups?

A hospital is rated by comparing it to other hospitals. You can compare hospitals with the rest of the nation or with [INSERT AREA DESCRIPTOR TOKEN]. The default is to compare hospitals with Test 05/30/2011. To change this use the selection box "Select a comparison group."

Comparison groups for the AHRQ Quality Indicators:
Nationwide comparisons are calculated by AHRQ based on the most recent year, 2008, of nationwide hospital data collected through AHRQ's Healthcare Cost and Utilization Project (HCUP). Because the national comparison data comes from AHRQ, and the data MONAHRQ uses to calculate the individual indicators values is local, the years of these two datasets may be different.

Local comparisons are calculated directly by MONAHRQ based on data from [INSERT AREA DESCRIPTOR TOKEN]. MONAHRQ calculates the comparison values and individual AHRQ Quality Indicators from the same dataset.

Comparison groups for the CMS Hospital Compare and patient experience measures:
Nationwide comparisons are calculated by CMS based on data they collect directly from hospitals for Hospital Compare. CMS calculates the comparison values and individual measure values from the same dataset.

Local comparisons are calculated directly by MONAHRQ based on information from the CMS Hospital Compare Website. The comparison values and individual measure are derived from the same dataset.

Are the ratings risk adjusted?

Risk adjustment is a statistical process of accounting for how sick patients are before they enter the hospital. This statistical process aims to 'level the playing field' by accounting for health risks that patients have before they enter the hospital.

AHRQ Quality Indicators: Most AHRQ Quality Indicators are risk adjusted. To learn which indicators are risk adjusted, visit Measure Details (link). For more information on the risk adjustment methods used for the AHRQ QIs, visit the AHRQ QI Website.

CMS Hospital Compare ratings: Hospital Compare ratings in the "Results of care" group are risk adjusted. Other Hospital Compare ratings are not risk adjusted. For more information on the risk adjustment methods used by Hospital Compare, visit the Hospital Compare Website.

HCAHPS patient experience ratings: HCAHPS ratings are not risk adjusted.

How do I interpret the hospital quality ratings tables?

The ratings tables show quality ratings for hospitals. You can use this information to help you choose a hospital. The best way is to search for patterns in the ratings. Some hospitals do well in all areas. Others do well in some areas but not others. Still others show problems everywhere. Look for these patterns. At the same time, if there is a particular surgery, medical condition, or health risk that is of particular concern to you, you should give more weight to information related to those concerns.

Each row shows the ratings for one hospital. To sort rows by hospital, select "Hospital Name." Each column shows the results for one quality rating. To sort the ratings, select a rating name. The ratings tables are divided into tabs that show ratings by type, such as "Results of care" or "Recommended care." A hospital is rated by comparing it to other hospitals. The selection box "Select a comparison group" shows you which group of hospitals you're using for comparison.

Some hospital ratings are per 100 cases, per 1,000 cases, or are counts. The information icon for each hospital

rating has more information.

For more detailed ratings information:

 Select this icon for bar charts.

 Select this icon for a detailed statistical table.

 Select this icon at the bottom of the table for ratings plus detailed numbers.

How do I interpret the bar charts?

The bar charts show the specific scores used to create the hospital ratings. There is one bar for each hospital and one bar for each comparison group. The bar chart orders hospitals from best to worst. Depending on the type of rating, larger scores or smaller scores may be better. Better scores are at the top of the chart and worse scores are at the bottom. Each bar is labeled with the score. In the detailed statistics, confidence intervals appear in parentheses.

Each chart tells you how to interpret the length of the bars in that chart:

Figures presented are counts: Here the length of each bar shows the total number of patient stays. For example, a total of 25 heart bypass surgeries were performed.

Figures presented are per 100 cases: Here the length of each bar shows the number of times an event occurred for every 100 hospital stays. For example, for every 100 hospital stays for pneumonia, 5 of the patients died within thirty days.

Figures presented are per 1000 cases: Here the length of each bar shows the number of times an event occurred for every 1,000 hospital stays. These are usually rarer events. For example, for every 1,000 hospital stays for surgeries, 2 of the patients suffered breathing failure afterwards.

How do I interpret the detailed statistics tables?

Different statistics are available for different quality indicators. For more information on which statistics are available for each indicator, visit the Measure Details page. Numbers in the measure details table are not scaled. These are raw statistics.

Numerator: The number of hospital stays in which the event or outcome of interest occurs (e.g., death caused by heart attack).

Denominator: The number of hospital stays in which the event or outcome of interest might potentially occur (e.g., admitted to the hospital for heart attack).

Observed rate: The numerator divided by the denominator. This rate is unadjusted.

Expected rate: The rate the hospital would have if it performed the same as the reference population given the hospital's actual case mix. In other words, the expected rate adjusts for differences in baseline characteristics (e.g., age, gender, DRG, and comorbidity categories) among patients admitted to given hospitals.

Ratio of observed/expected rate: Observed rate divided by expected rate. If the observed rate is greater than the expected rate (i.e., the ratio of observed/expected is greater than 1.0, or observed minus expected is positive), the hospital performed worse than the reference population for that particular indicator. Users may want to focus on these indicators for quality improvement. If the observed rate is less than the expected rate (i.e., the ratio of observed/expected is less than 1.0, or observed minus expected is negative), then the implication is that the hospital performed better than the reference population. Users may want to focus on these indicators for identifying best practices.

Risk adjustment: Risk adjustment is a statistical process that adjusts a hospital's estimated performance if the hospital had an "average" case mix.

Confidence interval: The confidence interval tells us we can be reasonably "confident" (in this case, 95% confident) that a hospital's rate fell somewhere within this specified range. The lower and upper bounds represent the lower and upper limits, respectively, of the confidence interval. The smaller the range, the more precise the estimate.

Number of patients: When hospitals treat a very large number of patients, chance differences will not have much effect on the overall rates. The range will be small and the estimated rates will be more precise. In

hospitals that treat smaller numbers of patients, however, even small chance differences could have a big impact on rates. The 95% confidence interval will be large, and the estimated rates will be much less precise. Because the number of patients treated at U.S. hospitals varies widely, the precision of hospitals' estimated rates also varies.

Small number suppression: Small raw numbers may be suppressed to protect patient confidentiality. In this case, a "c" appears.

Hospital Utilization

What is hospital utilization?

Hospital utilization means use of hospital services, such as the number and length of hospital stays for different health conditions or procedures. It includes information on:

Number of hospital stays: A hospital stay means that you are admitted into the hospital and stay for at least one night. One person may have multiple hospital stays.

Length of hospital stays: This is the number of days a person spends in the hospital during one hospital stay.

Charges or costs for hospital stays: Charges are what a hospital asks to be paid for its services. Costs are what it actually costs the hospital to provide the services. Neither of these is necessarily what the hospital is paid for its services in the end.

How did we analyze this data?

Hospital utilization is calculated from hospital discharge data collected from Test 05/30/2011. Each discharge is counted as a separate hospital stay. No risk adjustment is applied. Condition or procedure categories are assigned based on DRG, MDC, or diagnosis or procedure codes. Diagnosis and procedure codes are grouped using AHRQ's Clinical Classification Software.

To report information on costs, MONAHRQ uses AHRQ's 2008 Cost-to-Charge Ratio Files. AHRQ creates these files using CMS data. They are calculated at the hospital level. Demographic breakdowns by age category, gender, race, and payer type are calculated using demographic information available in the hospital discharge data. National and regional values are derived from 2008 data from AHRQ's HCUP Nationwide Inpatient Sample (NIS). Regions are defined by the Bureau of the Census: Midwest, Northeast, South, and West.

How do I select hospitals to compare?

You can select hospitals in four ways:

By hospital: Select one or more hospital names from the dropdown list.

By ZIP code: Enter a ZIP Code and a distance in miles. Then select one or more hospitals in that area from the dropdown list.

By region: Choose a region to select all hospitals in that region.

All combined: Select "All combined" for information on all hospital combined into one group.

What are the conditions and procedures?

For each hospital stay, hospitals assign one or more codes that describe the diagnosis and the procedures that were performed. You can select conditions and procedures by:

Diagnosis Related Groups (DRGs): DRG codes classify hospital stays into groups based on how much it costs to care for patients. Each hospital stay is assigned one DRG.

Major Diagnostic Categories (MDCs): MDC codes group DRGs into broader categories such as respiratory system or digestive system. Each hospital stay is assigned one MDC.

Conditions: Conditions are assigned by AHRQ's Clinical Classification Software (CCS) based on the principal diagnosis codes assigned by hospitals. More than one condition can be assigned to each hospital stay. The principal diagnosis is the main reason for the hospital stay.

Procedures: Procedures are also assigned by AHRQ's Clinical Classification Software (CCS) based on the principal procedure codes assigned by hospitals. More than one procedure can be assigned to each hospital stay. The principal procedure is the main procedure done to address the principal diagnosis.

How do I interpret the tables?

Information is provided for each selected hospital by condition or procedure grouping. Select the titles in the top row to sort the results. Tables may include the following:

Total US: National numbers are weighted estimates from the HCUP Nationwide Inpatient Sample (NIS), 2008, Agency for Healthcare Research and Quality (AHRQ).

Total US region: Regional categories are defined by the Census Bureau: Midwest, Northeast, South, and West. Numbers for each region are weighted estimates from the HCUP Nationwide Inpatient Sample (NIS), 2008, Agency for Healthcare Research and Quality (AHRQ).

Total of all hospitals in this Website: Numbers are presented for all hospitals included in this Website.

Hospitals: Previously chosen hospitals are listed. You can select a hospital from the list for more detailed results. Detailed results include characteristics of each hospital stay (age, gender, payer, and race).

Hospital county: The county for each hospital is provided.

Number of discharges (all-listed): The number of hospital stays (or discharges) for the selected condition or procedure is provided for each hospital. All listed diagnoses include the principal diagnosis (or reason for going to the hospital) as well as any other conditions that coexist during the hospital stay. All listed procedures include all procedures done for the patient.

Number of discharges (principal): The number of hospital stays (or discharges) for the selected condition or procedure is provided for each hospital. Principal diagnosis means this is the condition chiefly responsible for admission to the hospital for care. The principal procedure is the procedure that was done to address the principal diagnosis.

Mean charges in dollars: The mean or average charge is sometimes reported for each hospital. This is the amount the hospital asked to be paid for services. This does not include professional (MD) fees. Charges are not necessarily how much was paid.

Mean costs in dollars: The mean or average cost is sometimes reported for each hospital. Costs are the actual value of services performed (while charges represent the amount the hospital asked to be paid for services). Total charges were converted to costs using cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS). In general, costs are less than charges. AHRQ adjusts the cost-to-charge ratios to work with this type of hospital data.

Mean length of stay in days: The average or mean length of stay (LOS) is reported for each hospital. This is the average number of nights the patient remained in the hospital. When a patient is admitted and discharged on the same day, it has a length of stay of zero. A longer length of stay does not necessarily mean better or more care is given to patients.

If you select a specific hospital you will get the following.

Age group: Patient age in years is based on the admission date to the hospital and date of birth. The number of stays in each age is reported.

Gender: The number of males and females is reported for the selected hospital and condition or procedure.

Payer: Payer is the expected payer for the hospital stay. Payers are grouped into general categories: Medicaid, Medicare, private insurance, uninsured, other, and missing. The number of stays for each payer category is reported for the selected hospital and condition or procedure.

Race" Race/ethnicity of the patient as listed in the medical record. Racial and ethnic categories are collapsed into larger groups based on US Census Bureau designations.

You may notice some special codes in the tables:

Dash (-): A dash is reported when there are not enough data for the given selection. There are many reasons there may not be enough data to report.

Small number suppression: Small raw numbers may be suppressed to protect patient confidentiality. In this case, a "c" appears.

Avoidable Hospital Stays

What are avoidable hospital stays?

An avoidable hospital stay is one that might have been avoided with better medical care outside of the hospital. For example, a diabetes patient who receives good care from her primary care physician might not need a hospital stay for diabetes complications. Hospital stays like these are not always avoidable, but they are potentially avoidable with good quality health care.

Information about avoidable hospital stays is about communities, not hospitals. It is based on where patients live, not on where hospitals are located. High rates of avoidable hospital stays can point to possible breakdowns in health care in the community.

How did we analyze this data?

MONAHRQ calculates avoidable hospital stays using AHRQ's Quality Indicators software for Windows, version 4.2. These measures are the area-level AHRQ Quality Indicators. The calculations use hospital discharge data collected from Test 05/30/2011.

To determine rates per county, MONAHRQ uses county populations from the US Census Bureau data.

How do I interpret the tables?

This table presents data on a selected quality indicator by county.

Numerator: The number of hospital stays for county residents for whom the event or outcome of interest occurred (e.g., death caused by heart attack).

Denominator: The number of county residents based on US Census Bureau data.

Observed rate: The numerator divided by the denominator. This rate is unadjusted.

Risk adjusted rate: Risk-adjustment is a statistical process that adjusts a hospital's estimated performance if the hospital had an "average" case mix. Risk adjustment is performed as in AHRQ's Quality Indicator software for Window. For indicators that are not risk adjusted, a dash ("-") appears.

S.E of risk-adjusted rate: The standard error (S.E.) is an estimate of the variability around the risk-adjusted rate.

Potential cost savings: The final five columns in the table may show estimated cost savings associated with a 10, 20, 30, 40, and 50 percent reduction in potentially avoidable hospital stays. These cost savings are only provided when total charge data is available for hospital stays.

How do I interpret the maps?

The maps show how many hospital stays in each county could potentially have been avoided for each 100,000 county residents. Darker colors represent higher rates, and lighter colors represent lower rates. Counties are labeled with numbers to save space. The county names appear below the map.

To assign map colors, rates are divided into 3, 4, or 5 groups, depending on how much the rates vary. When there are not enough data to report a rate, the map color is grey. The key tells you whether the rates shown are risk adjusted or observed.

County Rates of Hospital Use

What are county rates of hospital use?

County rates show use of hospital services by county, such as the number and length of hospital stays for different health conditions or procedures. These rates are based on where patients live, not where the hospitals they visit are located.

Number of hospital stays: A hospital stay means that you are admitted into the hospital and stay for at least one night. One person may have multiple hospital stays. County rates show the number of stays for each 1,000 people who live in the county.

Charges or costs for hospital stays: Charges are what a hospital asks to be paid for services. Costs are the actual value of these services. Neither is necessarily the same as what was actually paid.

How did we analyze this data?

County rates are calculated based on hospital discharge data collected from Test 05/30/2011. Each discharge is

counted as a separate hospital stay. Rates are determined by patient residence, not by hospital location. No risk adjustment is applied. Condition or procedure categories are assigned based on DRG, MDC, or principal or all-listed diagnosis or procedure.

To report rates by county, MONAHRQ uses county populations from US Census Bureau data. County rates show the number of hospital discharges per 1,000 county residents. To estimate cost information, MONAHRQ uses AHRQ's 2008 cost-to-charge ratios. AHRQ creates these files using CMS data. They are calculated at the hospital level. The national and regional values shown in the tables are derived from 2008 data from AHRQ's HCUP Nationwide Inpatient Sample (NIS). Regions are defined by the Census Bureau: Midwest, Northeast, South, and West.

Numerators for demographic breakdowns by age category, gender, and race are calculated using demographic information provided in the hospital discharge data. Denominators for each demographic category are obtained from Census data.

What are the conditions and procedures?

For each hospital stay, hospitals assign one or more codes that describe the diagnosis and the procedures that were performed. You can select conditions and procedures by:

Diagnosis Related Groups (DRGs): DRG codes classify hospital stays into groups based on how much it costs to care for patients. Each hospital stay is assigned one DRG.

Major Diagnostic Categories (MDCs): MDC codes group DRGs into broader categories such as respiratory system or digestive system. Each hospital stay is assigned one MDC.

Conditions: Conditions are assigned by AHRQ's Clinical Classification Software (CCS) based on the principal diagnosis codes assigned by hospitals. More than one condition can be assigned to each hospital stay. The principal diagnosis is the main reason for the hospital stay.

Procedures: Procedures are also assigned by AHRQ's Clinical Classification Software (CCS) based on the principal procedure codes assigned by hospitals. More than one procedure can be assigned to each hospital stay. The principal procedure is the main procedure done to address the principal diagnosis.

How do I interpret the tables?

Information is provided for each selected county by condition or procedure grouping. Select the titles in the top row to sort the results. Tables may include the following:

Total US: National numbers are weighted estimates from the HCUP Nationwide Inpatient Sample (NIS), 2008, Agency for Healthcare Research and Quality (AHRQ).

Total US region: Regional categories are defined by the Census Bureau: Midwest, Northeast, South, and West. Numbers for each region are weighted estimates from the HCUP Nationwide Inpatient Sample (NIS), 2008, Agency for Healthcare Research and Quality (AHRQ).

Total of all counties in this Website: Numbers are presented for all counties included in this Website.

Counties: Previously chosen counties are listed. You can select a specific county for more detailed results. Detailed results include characteristics for each county (age, gender, payer, and race).

Number of discharges: The number of hospital stays (or discharges) for the selected condition or procedure is provided for each county.

Rate of discharges: The number of hospital stays (or discharges) divided by the number of residents in the county. County resident or population numbers are obtained from the US Census Bureau.

Mean costs in dollars: The mean or average cost is sometimes reported for each county. Costs are the actual value of these services (while charges are what a hospital asks to be paid for services). Total charges were converted to costs using cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS). In general, costs are less than charges. AHRQ adjusts the cost-to-charge ratios to work with this type of hospital data.

If you select a specific county you will get following:

Age group: Patient age in years is based on the admission date to the hospital and date of birth. The number of stays in each age group is reported.

Gender: The number of males and females is reported for the selected county and condition or procedure.

Race: Race/ethnicity of the patient as listed in the medical record. Racial and ethnic categories are collapsed into larger groups based on US Census Bureau designations.

You may notice some special codes in the tables:

Not enough data: When there are not enough data to report a value, a dash ("-") appears.

Small number suppression: Small raw numbers may be suppressed to protect patient confidentiality. In this case, a "c" appears.

How do I interpret the maps?

The maps show the number of hospital stays in each county for each 1,000, 10,000, or 100,000 county residents. Darker colors represent higher rates, and lighter colors represent lower rates. Counties are labeled with numbers with the county names below the map.

Map colors are assigned based on quintiles. When there are not enough data to report a value, the map color is grey.