Maternity and Newborn Care in Utah Hospitals: Quality and Charges, 2006-2008

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Introduction

The main purpose of this report is to help patients compare Utah hospitals in maternity and newborn care based on quality, charges and patient safety. If you are planning to have a baby here in Utah, you may find this report helpful when considering where to give birth. Health care facilities can vary, sometimes quite a bit, in terms of quality of care, patient charges and patient safety.

To learn important information, see "Maternity and Newborn Resources" later in this report.

Did you know?

- -- Utah has the highest birth rate in the country
- -- Boy babies have outnumbered girl babies for the past 60 years
- -- More babies are born on Tuesday than any other day of the week

For financial help to preparing for pregnancy, Utah's Baby Your Baby program has the answers you are looking for. Visit their Website at <u>http://www.babyyourbaby.org</u> or call toll-free 1-800-826-9662.

Hospital Utilization Rates

See the tables in this report for information comparing Utah's hospitals on the following delivery indicators:

- ✓ First-Time Cesarean (C-Section)
- ✓ Vaginal Birth After C-Section (VBAC)

Read more about methods and measures used for the hospital utilization section in this report in Methods and Measures.

More information about quality indicators can be found at the Agency for Healthcare Research and Quality (AHRQ) web site (<u>http://www.ahcpr.gov</u>).

Hospital Charges

See the tables in this report for information on comparing Utah's hospitals for the following charge indicators:

- ✓ Normal Newborn
- ✓ Vaginal Delivery
- ✓ Vaginal Delivery With Sterilization and/or Dilation and Curettage (D&C)
- ✓ Cesarean Delivery

Your charges may be higher or lower than the average charges shown in the above tables. It is important to remember that "charge" is not the same as "total cost" or "total payment" to the hospital.

<u>Note</u>: Many factors will affect the cost of your hospital stay. Read more in the "About the Report" section later in this report. You can also find more information about these factors at the Utah PricePoint web site (<u>http://www.utpricepoint.org</u>).

Hospital Patient Safety

See the tables in this report for information comparing Utah's hospitals on the following indicators:

- ✓ Obstetric Injuries <u>With</u> Instruments, Vaginal Delivery With Severe Tears
- ✓ Obstetric Injuries <u>Without</u> Instruments, Vaginal Delivery With Severe Tears
- ✓ Birth Injuries, Injury to Newborn

A particular hospital's percentage of injuries depends on its mothers' and newborns' medical history and how ill its mothers and newborns are. You should consult your health care professional for help in understanding the best delivery options for you and your baby.

Many factors affect a hospital's performance on injury measures. Read the online report for more information.

Read more about methods and measures used in this report in Methods and Measures.

Key Findings

How did Utah's quality of maternity and newborn care in hospitals compare with the nation from 2006 through 2008?

Patient Safety Indicators

Utah overall (as a state) had lower rates than expected on three patient safety indicators, compared to similar mothers and newborns in the U.S. Measures and rates are in parentheses.

- 242 (0.15%) of 162,868 newborns experienced newborn injuries (PSI 17) in 2006 through 2008.
- 791 (2.1%) of 38,374 mothers experienced severe tears during vaginal delivery without instruments (PSI 19) in 2008.
- 509 (13.2%) of 3,847 mothers experienced severe tears during vaginal delivery with instruments (PSI 18), in 2008.

Please be aware that information in this report is neither intended nor implied to be a substitute for professional medical advice. Always ask questions and seek the advice of your physician or other qualified health provider prior to starting any new treatment.

26 of the 39 Utah hospitals at which 30 or more babies were born had a lower rate than expected for injuries to the newborn in 2006 through 2008 compared to similar babies nationwide. The remaining hospitals had about the same rate of newborn injuries as expected. Of these remaining hospitals, six had no reported newborn injuries.

The definition of this indicator changed in late 2003. Prior to October 2003, "head molding" might have been included in the indicator. "Newborn head molding" is an abnormal head shape that occurs from pressure on the baby's head during delivery. This is not a serious condition and the baby's head often returns to its normal shape in a few days. The change in definition resulted in a decrease in reported injuries to newborns starting in 2004.

24 of the 36 Utah hospitals at which 30 or more mothers had a vaginal delivery <u>without</u> instruments had a lower rate of severe tears than expected in 2008 compared to similar mothers nationwide. The remaining hospitals had about the same rate of these injuries as expected.

7 of the 24 Utah hospitals at which 30 or more mothers had a vaginal delivery <u>with</u> instruments had a lower rate of severe tears than expected in 2008 compared to similar mothers nationwide. The remaining hospitals had about the same rate as expected.

Note: Many factors can affect in-hospital injuries at a particular hospital. Read more in <u>About the</u> <u>Report</u>.

Utilization Indicators in 2008

- 4,144 (9.8%) of 42,387 deliveries in Utah hospitals were first-time Cesarean deliveries (IQI 33).
- 1,220 (16.6%) of 7,352 women with a previous Cesarean delivery had vaginal births (IQI 34).

Note: Many factors can affect in-hospital procedures at a particular hospital, such as the health of the mother and baby, or the availability of hospital specialists and facilities. Currently, the health care community does not have an agreed-upon benchmark for the optional rates for first-time Cesarean and VBAC deliveries.

How did hospital charges differ among Utah hospitals in 2008?

Average hospital charges for the maternity and newborn cases in this report differed widely. For hospitals with at least five newborns or mothers at the <u>minor/moderate severity of illness level</u>, average hospital charges ranged from:

- \$992 to \$2,535 among 38 Utah hospitals that reported charges for <u>newborns with a birth</u> weight over 2499 grams (about 5.5 pounds) (APR-DRG 640).
- \$3,161 to \$7,024 among 37 Utah hospitals that reported charges for <u>vaginal delivery</u> (APR-DRG 560).
- \$4,560 to \$10,928 among 37 Utah hospitals that reported charges for <u>vaginal delivery with</u> <u>dilation and curettage (D&C) and/or sterilization</u> (APR-DRG 541).

\$ 4,315 to \$14,182 among 37 Utah hospitals that reported charges for <u>Cesarean delivery</u> (APR-DRG 540).

As expected, average hospital charges for maternity and newborn cases where the severity of illness level was major/extreme were higher than cases where the severity of illness level was minor/moderate.

Note: Many factors will affect hospital charges. Read more in About the Report.

About the Report

Please note this report is not intended to be anyone's sole source of information about hospital quality or charges in Utah. Rather, it is designed to provide helpful information that can play an important role in choosing a hospital, along with other sources including doctor recommendations.

Why are you producing this report?

- <u>Senate Bill 132</u> (2005) requires the <u>Health Data Committee</u> (HDC) and its staff to publish readerfriendly reports comparing Utah's hospitals based on nationally-recognized measures for quality, charges and patient safety.
- The HDC and <u>Utah Department of Health</u> are committed to providing useful health care information for all people in Utah. Providers can use these reports to improve the quality of care they give to their patients.

Why is this report important to me?

Hospitals can vary, sometimes quite a bit, in terms of quality of care and patient charges. Consumers are encouraged to use the information in this report to ask questions of their doctor or health care professional, hospital or insurance representative. Let them know you plan to take an active role in your health care decisions.

Who else helped shape this report?

- <u>Utah citizens</u> continually review our consumer reports to make sure they are understandable and easy to read. Since 2005, several focus groups have been held in both rural and urban locations. Public input helps us create user-friendly reports for people who are not medical experts yet need useful health care information.
 - <u>Utah Transparency Advisory Panel</u> (formerly called "SB 132 Task Force) is an HDC advisory group represented by consumers, payers, hospitals, quality organizations and public health.
 Panel members have advised staff about methods and measures to use in the reports as well as reporting priorities.
 - <u>Health care facilities</u> reviewed their data and overall report content before public release. For more information, see the "About the Data" section in this report.

- <u>Statistical experts</u> assisted in selecting the appropriate method for comparing hospital performance.
- <u>Leading physicians and health educators</u> reviewed medical information in the report where applicable.

What are consumers saying about these reports?

Feedback has been received from a variety of sources including our MyHealthCare website, consumer focus groups and newspaper articles. Below are some examples:

- "We have needed these reports for a long time"
- "Now we are more empowered and have tools to compare."
- "This will help us to ask questions when we see our doctor."
- "The consumer reports help people make better choices about their health care. People can use them as a basis for questions to ask their doctors."
- "They [the reports] are not definitive—the end all in choosing one physician or hospital over another—but rather a valuable point of departure for people anticipating specific health care encounters."
- "The more a person knows about the cost and quality of care, the more likely they are to receive the care they need and deserve."

About the Data

Where do the data come from?

Most of the data in this report come from health care hospital claim records. Utah hospitals are required by law to submit a standard set of information about each inpatient who spends at least 24 hours in the hospital to the Office of Health Care Statistics, Utah Department of Health, for the Utah Hospital Discharge Database. The Agency for Healthcare Research and Quality (AHRQ), a federal agency in charge of quality of care, provided national information. For further information visit the AHRQ website <u>http://www.ahrq.gov/</u>

Have the data been verified by others?

Yes. Utah hospitals review the data for accuracy during a review period of at least 30 days while the report is being developed. They also review the completed report before it is released. Hospitals may submit comments to be posted online as part of the report.

Why use these indicators/measures?

SB 132 mandates that the comparison reports use nationally recognized quality standards. A federal agency charged with overseeing health care quality, the Agency for Healthcare Research and Quality (AHRQ), developed the <u>Inpatient Quality Indicators (IQIs</u>). The IQIs allow comparison among Utah hospitals with similar patients nationwide. This report shows two IQIs for deliveries. For more information on the AHRQ IQIs, see <<u>http://www.qualityindicators.ahrq.gov/iqi_overview.htm</u>/>.

The measure for average charge is an All Patient Refined Diagnosis Related Group (APR-DRG) for similar, though not identical, conditions and procedures among inpatients. For this reason, the number of patients for the APR-DRG and the IQI is not the same. Also, keep in mind that for Newborn Injuries (PSI 17), three years of data are used, while a single year is used for charge, the other PSIs and IQIs. For more information on APR-DRGs, see

http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/APRD_RG_Software/.

The Agency for Healthcare Research and Quality (AHRQ) also developed the <u>Inpatient Quality</u> <u>Indicators (PSIs)</u>. The PSIs allow comparison among Utah hospitals with similar patients nationwide. This report shows three PSIs, two for maternal injuries during delivery and one for newborn injuries. For more information on the AHRQ PSIs, see .">http://www.qualityindicators.ahrq.gov/psi_overview.htm/>.

<<u>nup://www.quantyindicators.anrq.gov/psi_overview.num/>.</u>

What are the limitations of quality comparisons in the report?

Many factors affect a hospital's performance on quality measures. Such factors include the hospital's size, its number of maternity and newborn cases, available specialists, teaching status and especially the medical history of the hospital's mothers and newborns and how ill those mothers and newborns are. Hospitals that treat high-risk (very ill) mothers and newborns may have higher percentages of Cesarean deliveries than hospitals that transfer these cases. Quality indicators adjust for how ill each hospital's mothers and newborns are, but the adjustment may not capture the full complexity of the patient's condition. The Utah Hospital Discharge Database includes up to nine diagnoses and up to six procedures for each patient. Some mothers and newborns have additional diagnoses and procedures that are not included in this database. As a result, the measures of inpatient illness may not be complete. See <u>Glossary</u> and <u>Technical Document.</u>

What are the limitations of the charge comparisons in the report?

The average charge shown in this report differs from "costs," "reimbursement," "price" and "payment." Different payers have different arrangements with each hospital for payment. Many factors will affect the cost of your hospital stay, including whether you have health insurance, the type of insurance and the billing procedures at the hospital. This report excludes outlier (unusually high) charge cases and length of stay cases from the calculation of average charge for inpatients (see <u>Glossary</u> and Technical Document). While APR-DRGs do consider levels for each inpatient's severity of illness, these levels may not completely reflect the complexity of the inpatient's condition. The

indicators used in this report do <u>not</u> distinguish between patients expected to recover and patients with do-not-resuscitate (DNR) orders.

What are the limitations of injury (safety) comparisons in the report?

Many factors affect a hospital's performance on injury (safety) measures. Such factors include the hospital's size, its number of maternity and newborn cases, available specialists, teaching status and especially the medical history of the hospital's mothers and newborns and how ill those mothers and newborns are. Hospitals that treat high-risk (very ill) mothers and newborns may have higher percentages of injuries than hospitals that transfer these cases. Quality indicators adjust for how ill each hospital's mothers and newborns are, but the adjustment may not capture the full complexity of the patient's condition. The Utah Hospital Discharge Database includes up to nine diagnoses and up to six procedures for each patient. Some mothers and newborns have additional diagnoses and procedures that are not included in this database. As a result, the measures of inpatient illness may not be complete. See <u>Glossary</u> and <u>Technical Document.</u>

Hospitals in Utah

County Name	Hospital Name	Location City, State, Zip	Phone Number
Beaver	Beaver Valley Hospital	Beaver, UT 84713	(435) 438-7100
Beaver	Milford Valley Memorial Hospital	Milford, UT 84751	(435) 387-2411
Box Elder	Bear River Valley Hospital	Tremonton, UT 84337	(435) 257-7441
Box Elder	Brigham City Community Hospital	Brigham City, UT 84302	(435) 734-9471
Cache	Cache Valley Specialty Hospital	North Logan, UT 84341	(435) 713-9700
Cache	Logan Regional Hospital	Logan, UT 84341	(435) 716-1000
Carbon	Castleview Hospital	Price, UT 84501	(435) 637-4800
Davis	Davis Hospital & Medical Center	Layton, UT 84041	(801) 807-1000
Davis	Lakeview Hospital	Bountiful, UT 84010	(801) 299-2200
Duchesne	Uintah Basin Medical Center	Roosevelt, UT 84066	(435) 722-4691
Garfield	Garfield Memorial Hospital	Panguitch, UT 84759	(435) 676-8811
Grand	Allen Memorial Hospital	Moab, UT 84532	(435) 259-7191
Iron	Valley View Medical Center	Cedar City, UT 84720	(435) 868-5000
Juab	Central Valley Medical Center	Nephi, UT 84648	(435) 623-3000
Kane	Kane County Hospital	Kanab, UT 84741	(435) 644-5811
Millard	Delta Community Medical Center	Delta, UT 84624	(435) 864-5591
Millard	Fillmore Community Medical Center	Fillmore, UT 84631	(435) 743-5591
Salt Lake	Alta View Hospital	Sandy, UT 84094	(801) 501-2600
Salt Lake	Intermountain Medical Center	Murray, UT 84157	(801)-507-7000
Salt Lake	Jordan Valley Medical Center	West Jordan, UT 84088	(801) 561-8888
Salt Lake	LDS Hospital	Salt Lake City, UT 84143	(801) 408-1100
Salt Lake	The Orthopedic Specialty Hospital	Salt Lake City, UT 84107	(801) 314-4100

Hospitals in Utah (continued)

County Name	Hospital Name	Location City, State, Zip	Phone Number
Salt Lake	Pioneer Valley Hospital	West Valley City, UT 84120	(801) 964-3100
Salt Lake	Primary Children's Medical Center	Salt Lake City, UT 84113	(801) 662-1000
Salt Lake	Salt Lake Regional Medical Center	Salt Lake City, UT 84102	(801) 350-4111
Salt Lake	St. Mark's Hospital	Salt Lake City, UT 84124	(801) 268-7111
Salt Lake	University Health Care/University Hospital	Salt Lake City, UT 84132	(801) 581-2121
Salt Lake	Veteran's Administration Medical Center	Salt Lake City, UT 84148	(801) 582-1565
San Juan	San Juan Hospital	Monticello, UT 84535	(435) 587-2116
Sanpete	Gunnison Valley Hospital	Gunnison, UT 84634	(435) 528-7246
Sanpete	Sanpete Valley Hospital	Mount Pleasant, UT 84647	(435) 462-2441
Sevier	Sevier Valley Medical Center	Richfield, UT 84701	(435) 893-4100
Tooele	Mountain West Medical Center	Tooele, UT 84074	(435) 843-3600
Uintah	Ashley Regional Medical Center	Vernal, UT 84078	(435) 789-3342
Utah	American Fork Hospital	American Fork, UT 84003	(801) 855-3300
Utah	Mountain View Hospital	Payson, UT 84651	(801) 465-7000
Utah	Orem Community Hospital	Orem, UT 84057	(801) 224-4080
Utah	Timpanogos Regional Hospital	Orem, UT 84057	(801) 714-6000
Utah	Utah Valley Regional Medical Center	Provo, UT 84603	(801) 357-7850
Wasatch	Heber Valley Medical Center	Heber City, UT 84032	(435) 654-2500
Washington	Dixie Regional Medical Center	St. George, UT 84790	(435) 251-1000
Weber	McKay-Dee Hospital	Ogden, UT 84403	(801) 387-2800
Weber	Ogden Regional Medical Center	Ogden, UT 84405	(801) 479-2111

Become an Informed Health Care Consumer

Choosing a hospital that is right for you or a family member might be one of the most important decisions you'll ever make. You can improve your care and the care of your loved ones by taking an active role in your treatment. Remember to ask questions and always consider yourself a partner in your care and treatment.

The following websites contain materials that will help patients choose wisely when making medical decisions:

Questions are the Answer: Get More Involved in Your Health Care http://www.ahrq.gov/questionsaretheanswer/index.html

<u>Guide to Health Quality: How to Know It When You See It</u> <u>http://www.ahrq.gov/consumer/guidetoq/</u>

<u>Be an Active Health Care Consumer</u> http://www.ahrq.gov/path/beactive.htm

<u>Navigating the Health Care System</u> http://www.ahrq.gov/consumer/cc.htm

Why use these indicators/measures?

AHRQ Inpatient Quality Indicators

The <u>Agency for Healthcare Research and Quality</u> (AHRQ), a federal agency charged with overseeing quality of care, developed the <u>Inpatient Quality Indicators (IQIs</u>). The IQIs allow comparison among Utah inpatients and similar inpatients nationwide based on the State Inpatient Databases 2006, the most recently available database, through the expected rate. These databases represent about 90% of all inpatients in the U.S. from participating states in 2006. The Healthcare Cost and Utilization Project (HCUP) collects these data every year.

The AHRQ IQIs are nationally recognized indicators and are used in this report in compliance with the mandates of <u>Senate Bill 132</u>, the Health Care Consumer's Report Bill, which was passed in 2005.

APR-DRGs

Measures for average hospital charge are All Patient Refined Diagnosis Related Groups (APR-DRGs) for similar, though not identical, kinds of maternity and newborn care in this report's quality of care section. APR-DRG software, widely used in health care research, organizes about 20,000 clinical diagnoses and procedures into about 300 groups. Read this report's <u>Technical Document</u> to learn more.

Each APR-DRG has four levels for severity of illness. This report shows average hospital charge for minor and moderate severity of illness levels combined and average hospital charge for major and extreme severity of illness levels combined. This report uses APR-DRG version 20.0, because the Agency for Healthcare Research and Quality (AHRQ) uses it for expected rate in the Inpatient Quality Indicators (IQIs).

Please note that other Utah Department of Health reports that include average charge information use APR-DRG Version 15.0 for data from 2004 and earlier.

Also be aware that the number of patients in each IQI may not be the same as the number of patients for a similarly named APR-DRG. First, the APR-DRGs are hierarchical, mutually exclusive groups of conditions and procedures. A patient's APR-DRG reflects that patient's most resource-intensive condition and/or procedure. Second, each IQI has patient exclusion and inclusion criteria that may not be the same as those for a similar APR-DRG. Third, most IQIs are based on three years of data because the annual number of deaths per indicator is often small. For more information, see this report's <u>Technical Document</u>.

AHRQ Patient Safety Indicators

The <u>Agency for Healthcare Research and Quality</u> (AHRQ), a federal agency charged with overseeing quality of care, developed the <u>Patient Safety Indicators (PSIs)</u> used for the hospital comparison reports when applicable. The PSIs allow comparison among Utah patients and other U.S. hospitals that treated similar patients based on the State Inpatient Databases 2006, the most recently available database, through the expected rate. These databases represent about 90% of all inpatients in the U.S. from participating states in 2006. The Healthcare Cost and Utilization Project (HCUP) collects these data every year. Read more at <u>http://hcupnet.ahrq.gov/</u>

The Patient Safety Indicators (PSIs) are used as a tool to help identify potential adverse events occurring during hospitalization. Adverse events are undesirable and unintended injuries due to medical care or omission of necessary medical care. Widespread consensus exists that health care organizations can reduce patient injuries by improving the environment for safety. Read more at http://www.qualityindicators.ahrq.gov/

The AHRQ PSIs are nationally recognized indicators, used in this report in compliance with the mandates of <u>Senate Bill 132</u>, the Health Care Consumer's Report Bill passed in 2005.

Maternity and Newborn Resources for Consumers

If you would like to learn more about maternity and newborn care, below is a list of reputable state and national Websites that you may find helpful.

For more information, including a list of sites in Utah that provide low cost or sliding scale prenatal care, please call the Utah Department of Health's <u>Baby Your Baby</u> program at 1-800-826-9662.

<u>American Academy of Pediatrics</u> - offers a wide range of helpful information for parents including how and where to find a pediatrician, safety and injury facts, and immunization tips.

<u>American College of Obstetricians and Gynecologists</u> - is a national medical organization representing over 52,000 members who provide health care for women. ACOG develops standards of care during pregnancy including recommendations about prenatal screening for possible genetic conditions.

<u>**HealthInsight**</u> – is the Quality Improvement Organization (QIO) for both Utah and Nevada. View easy-to-read rankings of Utah hospitals for heart attack, heart failure, pneumonia and surgical infection prevention.

<u>March of Dimes</u> - Whether you're pregnant, thinking about getting pregnant or parenting a newborn, you're bound to have questions. Find the answers you're looking for here.

National Women's Health Information Center - touts itself as "the most reliable and current information resource on women's health today." Site users are reminded that getting informed is the first step in keeping yourself and your baby healthy. Sponsored by the federal agency, U.S. Department of Health and Human Services.

Utah Department of Health, Pregnancy Risk Line - a free, private, and easy-to-use telephone information service that answers questions about medicines, drugs, chemicals, and other environmental exposures that can potentially harm an embryo, fetus, or infant.

<u>Utah Department of Health, Reproductive Health Program</u> - provides consumer resources designed to educate women, families, health care providers, and the community about reproductive health issues.

General Terms Used in This Report

Actual death percentage: the actual number of deaths per 100 patients with a certain condition or procedure. Actual death percentage does <u>not</u> adjust for the hospital's case mix. Other name: observed death rate per 100 patients. Some measures exclude transfer patients.

Actual Rate: The actual rate is the number of events that occurred for every 100 patients for some indicators and for every 1,000 patients for other indicators. Some measures exclude transfer patients. This rate is not risk-adjusted.

Agency for Healthcare Research and Quality (AHRQ): a federal agency that develops indicators of patient safety and quality of care and engages in other related activities.

Allergic reaction: swollen glands, trouble breathing and other body reactions that can be life threatening.

APR-DRG: stands for All Patient Refined Diagnosis Related Group, software widely used in health services research. The APR-DRG software organizes about 20,000 clinical diagnoses and procedures into about 300 groups. Each APR-DRG has four levels for severity of illness. This report combines the Minor and Moderate levels and combines the Major and Extreme levels for the average hospital charge tables. This report uses APR-DRG version 20.0. Read more at

http://solutions.3m.com/wps/portal/3M/en_US/3MHIS/HealthInformationSystems/productsservices/product-list/apr-drg-classification.

Average charge: the average dollars for hospital services for which patients were billed at a particular hospital. The charge does not include physicians' professional fees or patient personal costs. The charge may differ from actual payment that the hospital receives. For this report high outlier charges were excluded from each hospital's average charge. A high outlier (unusually high) charge is over 2.5 standard deviations higher than the state mean for each of four subclasses of severity of illness per APR-DRG.

CAH or "Critical Access Hospital": a nonprofit, profit or public hospital that is enrolled as a Medicaid provider and qualifies as a Critical Access Hospital under 42 CFR, Section 485, Subpart F. For more information, see <u>http://www.rules.utah.gov/publicat/code/r432/r432-106.htm#T3</u> http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title42/42cfr485_main_02.tpl

Expected death percentage: the number of deaths expected per 100 patients with a certain condition or procedure based on similar patients nationwide in the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases for 2006. Expected death percentage adjusts for the hospital's case mix (patients' age, gender and how ill the patients are). Some measures exclude transfer patients. Read more at www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf.

Expected Rate: the number of patients expected for every 100 patients for some indicators and for every 1,000 patients for other indicators with a certain condition or procedure based on similar patients nationwide in the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases for 2006. Expected rate adjusts for the hospital's case mix (patients' age, gender and how ill the patients are). Some measures exclude transfer patients. Read more at www.qualityindicators.ahrq.gov/downloads/iqi/iqi guide v31.pdf.

Facility or facilities: hospitals that treat outpatients and inpatients and hospitals and ambulatory surgery centers that treat outpatients.

Inpatient: spends at least 24 hours in the hospital.

Inpatient Quality Indicators (IQI): were developed by the Agency for Healthcare Research and Quality (AHRQ), a federal agency, to be used on inpatient hospital discharge data. AHRQ IQI definitions and methods were used to calculate the actual and expected deaths rates conditions and procedures in this report. AHRQ IQI limitations include possible differences in hospital coding practices and possible inadequacy of the risk adjustment method for expected death percentage. In some reports AHRQ IQIs and APR-DRGs in Utah Hospital Comparison reports are similar but not identical, so the number of patients may not be the same. See the report specific Technical Document. Read more at

www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf.

Outlier charge: a charge by a specified hospital that is more than 2.5 standard deviations higher than the state average by APR-DRG and severity of illness level. This report excludes outlier charge cases. For more information see the report specific Technical Document.

Outpatient: usually spends less than 24 hours in the facility (hospital or freestanding ambulatory surgery center). Many outpatients have surgery and leave the facility the same day. Others have surgery and leave the next day. A few others may stay longer for observation. Some hospitals consider these patients to be outpatients.

Patient Safety Indicators (PSIs): Patient safety is quality improvement of health care to reduce medical injuries (e.g., injuries to patients in a health care setting such as a hospital). The Agency for Healthcare Research and Quality (AHRQ), a federal agency, has developed a set of indicators of patient safety based on the inpatient hospital discharge data. Although hospital discharge data do have some limitations, research shows that PSIs may serve as proxies for patient safety-related performance. Read more at <u>www.qualityindicators.ahrq.gov/</u>.

Severity of illness: Utah Hospital Comparison reports use two levels of illness based on the APR-DRG's four subclasses for severity of illness (SOI): Minor/Moderate and Major/Severe. For more information see the report specific Technical Document.

Star rating system: Utah Hospital Comparison reports use star rating based on a test of statistical significance, the exact 95% confidence interval. For the Heart Surgeries and Conditions Report and the Hip and Knee Surgeries and Conditions Report, this test shows whether the difference between a hospital's actual death percentage and expected death percentage is real (statistically significant, p < 0.05) or just due to chance. We calculated the upper and lower exact 95% confidence interval limits for each hospital's actual death rate for each indicator. If the expected death percentage is between the lower and higher limits for the actual death percentage, then we are 95% confident that the actual death percentage is lower than the expected death percentage, then we are 95% confident that the actual death percentage is really lower than the expected death rate. If the lower limit for the actual death percentage is higher than the expected death percentage, then we are 95% confident that the actual death percentage is higher than the expected death percentage, then we are 95% confident that the actual death percentage is not precentage is not precentage is not precentage is really lower than the expected death rate. If the lower limit for the actual death percentage is higher than the expected death rate. For more information see the report specific Technical Document.

State Inpatient Databases (SID): a national sample that represents about 90% of all inpatients from 37 participating states in 2006. The Healthcare Cost and Utilization Project (HCUP) collects these data every year. For this report, the percentage of expected deaths for the quality indicators is adjusted using the SID 2006. Read more at <u>www.hcup.ahrq.gov.</u>

Statistically significant difference: the star ratings in the AHRQ IQI tables use exact 95% confidence intervals to show whether differences are statistically significant (p < 0.05). For more information see the report specific Technical Document.

Utah overall: for each specified condition or procedure and (if applicable) severity of illness group (Minor/Moderate or Major/Extreme), all adult cases treated at all Utah hospitals, except some specialty hospitals such as Primary Children's Medical Center. The exceptions are measures for newborns, which, of course, include only newborns for Utah overall. <u>Utah overall average charge</u> is the sum of all reported hospital charges billed to all patients treated at Utah hospitals divided by the number of Utah overall cases <u>except</u> the Veterans Administration. The AHRQ IQI tables include only Utah residents. The APR-DRGs tables include Utah resident and non-resident patients.

Indicator terms, such as expected rate, are based on Agency for Healthcare Research and Quality technical specifications documents.

Maternity and Newborn Terms Used in This Report

Birth injury: injuries that happen to the newborn during birth. Birth injuries could include a local infection, broken collar bone or a head injury. Most birth injuries are minor and heal without complications, but in rare cases some serious injuries can cause permanent harm or death. If an injured newborn is transferred to another hospital, that injury may be counted toward the receiving hospital's injury rate.

Some of the injuries that are included in "Birth Injuries – Injury to Newborn" (PSI 17) are not preventable. For instance, some instances of eye damage are complications of a long or difficult labor. Injuries included in this category can also be unspecified. If the practitioner describes an injury that does not have a code, or does not specify what the injury was, it will also be included in this category.

The definition of this indicator changed in late 2003. Prior to October 2003, "head molding" might have been included in the indicator. "<u>Newborn head molding</u>" is an abnormal head shape that occurs from pressure on the baby's head during delivery. This is not a serious condition and the baby's head often returns to its normal shape in a few days. For the definition of the birth injury indicator used, see the Technical Document in the maternity and newborn report.

Cesarean delivery, cesarean section: a procedure in which the newborn is delivered through a surgical cut in the mother's abdomen. It can be a lifesaving procedure for mothers and babies when a vaginal delivery is not possible. For example, cesarean delivery can be effective when the baby is in distress or in the wrong position for birth. There is concern, however, that more cesarean deliveries are being performed than are medically necessary, which increases health care costs and puts the mother at higher risk for complications, and involves a longer recovery time. For the definition of the indicators used, see the Technical Document in the maternity and newborn report.

Dilation and Curettage (D&C): a procedure that is sometimes used to control unusually high amounts of bleeding after a delivery. In this procedure, the cervix (the opening to the uterus) is dilated (opened up) in order to remove any tissue that should have been delivered (e.g., the placenta). This is done using a curette (a loop, ring or scoop) or suction device.

First-time Cesarean Delivery: a cesarean performed for a woman who has never had a cesarean delivery before. For some women, once they have had a cesarean delivery, they will need to have another one with their next baby. If the number of first-time cesarean deliveries is reduced, fewer women will need to have additional cesareans. This can result in lower health care costs and lower risk of complications. For this indicator, women with certain conditions (for example, women having twins) were excluded. For the definition of the indicator used, see the Technical Document in the maternity and newborn report.

Instruments [Used in Delivery]: medical instruments that help to get the baby out of the birth canal. Forceps and vacuum extractors are two instruments that are used to gently grasp or pull the baby's head to help in delivery. There are some increased risks of injury to the mother or the baby when using instruments during a delivery, but they are typically used only when there is difficulty in getting the baby delivered. For the definition of the indicators used, see the Technical Document in the maternity and newborn report.

Normal Newborns (APR-DRG 640, Version 20.0): babies in this category were born at full term (37 weeks of pregnancy or more, birth weight greater than 2499 grams or about 5.5 pounds). Most, but not all of these babies, do not have any significant health problems. This category accounts for approximately 85% of Utah newborns. Normal newborns stay in the hospital for two days on average. Charges for a normal newborn include only those that are for the baby after he or she is born and none of the charges for the mother or the delivery. However, some hospitals offer a single charge for a mother and her newborn. For the definition of the indicators used, see the Technical Document in the maternity and newborn report.

Obstetric Injuries: lacerations, or tears, in the tissue of the vagina (birth canal), perineum (the tissue between the vagina and the rectum) and rectum (the anal opening) during a vaginal delivery. These tears are classified by different degrees depending on how serious they are. Lacerations classified as 3rd or 4th degree are tracked as patient safety indicators because they can cause long-term complications for women who have them. A third degree laceration is a tear that goes from the vagina and through the perineum to the outer edge of the rectum. A fourth degree laceration extends into the rectum and is the most severe. One factor that can increase the chance that a woman will have a laceration is the use of instruments to help get the baby out of the birth canal. Instruments like forceps and vacuum extractors are used when there is difficulty in getting the baby delivered. The AHRQ Patient Safety Indicators for these injuries include some ICD-9-CM codes for repair of some injuries. For the definition of the indicators used, see the Technical Document in the maternity and newborn report.

Tubal Ligation: a surgical operation that is performed when a woman does not want to have any more children. During the operation, the fallopian tubes are cut to stop eggs from traveling from the ovaries to the uterus.

Note:

Medical terms for maternity and newborn conditions and procedures are based on Healthfinder <u>http://www.healthfinder.gov/library/</u>, MedlinePlus <u>http://www.nlm.nih.gov/medlineplus/encyclopedia.html</u> and the American College of Obstetricians and Gynecologists http://www.acog.com.

17

Injuries to Mother, Severe Vaginal Tears With								
Instruments (PSI 18)								
	2008							
PatientsActualExpectedHospital(Denominator)RateRate								
Utah Overall	3,849	13.2%	19.4%	* * *				
Alta View Hospital	214	16.4%	19.3%	* *				
American Fork Hospital	117	18.8%	19.2%	* *				
Ashley Regional Medical Center	37	16.2%	19.1%	* *				
Brigham City Community Hospital	39	10.3%	19.1%	* *				
Davis Hospital & Medical Center	233	8.2%	19.4%	* * *				
Dixie Regional Medical Center	107	13.1%	19.4%	* *				
Heber Valley Medical Center - CAH	36	8.3%	20.8%	* *				
Intermountain Medical Center	309	17.5%	19.7%	* *				
Jordan Valley Medical Center	323	13.0%	19.3%	* * *				
LDS Hospital	149	20.1%	19.4%	* *				
Lakeview Hospital	47	19.1%	18.9%	* *				
Logan Regional Hospital	265	11.3%	19.3%	* * *				
McKay-Dee Hospital Center	291	7.6%	19.7%	* * *				

Continued on Next Page

Most Utah hospitals (17 of 24) in this table had about the same rate of injuries as expected compared to similar patients nationwide. Seven Utah hospitals had a lower rate than expected (****). No hospitals had a higher rate than expected (*).

See additional hospitals that treated at least one patient but less than 30 patients.

View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

* * * Lower % injuries than expected, * * about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital. **Expected injuries:** percentage of patients who were expected to have injuries at this hospital adjusted for its patient mix (age, gender, how ill the patients were).

Injuries to Mother, Severe Vaginal Tears With								
Instruments (PSI 18)								
	2008							
-	CONTINUED	-						
PatientsActualExpectedHospital(Denominator)RateStatistical Rating								
Utah Overall	3,849	13.2%	19.4%	* * *				
Mountain View Hospital	50	8.0%	19.2%	* *				
Ogden Regional Medical Center	128	7.8%	19.4%	* * *				
Orem Community Hospital	201	3.0%	19.2%	* * *				
Pioneer Valley Hospital	45	6.7%	18.0%	* *				
Salt Lake Regional Medical Center	43	25.6%	19.4%	* *				
St. Mark's Hospital	252	17.1%	19.7%	* *				
Timpanogos Regional Hospital	123	14.6%	19.3%	* *				
University Health Care	119	22.7%	19.7%	* *				
Uintah Basin Medical Center	83	2.4%	19.7%	* * *				
Utah Valley Regional Medical Center	458	15.9%	19.2%	* *				
Valley View Medical Center	37	10.8%	19.1%	* *				

Most Utah hospitals (17 of 24) in this table had about the same rate of injuries as expected compared to similar patients nationwide. Seven Utah hospitals had a lower rate than expected (****). No hospitals had a higher rate than expected (*).

See additional hospitals that treated at least one patient but less than 30 patients.

View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

* * * Lower % injuries than expected, * * about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital.

Injuries to Mother, Severe Vaginal Tears Without						
Instruments (PSI 19)						
	2008					
Patients Actual Expected Statistical						
Hospital	(Denominator)	Rate	Rate	Rating		
Utah Overall	38,374	2.1%	4.8%	* * *		
Alta View Hospital	1,452	1.5%	4.7%	* * *		
American Fork Hospital	2,428	2.3%	4.7%	* * *		
Ashley Regional Medical Center	289	2.1%	4.8%	* * *		
Bear River Valley Hospital	94	0.0%	4.7%	* * *		
Beaver Valley Hospital	62	4.8%	4.9%	* *		
Brigham City Community Hospital	250	1.2%	4.7%	* * *		
Castleview Hospital	291	2.7%	4.8%	* *		
Central Valley Medical Center - CAH	97	1.0%	5.0%	* *		
Davis Hospital & Medical Center	1,599	1.5%	4.8%	* * *		
Delta Community Medical Center - CAH	67	3.0%	4.7%	* *		
Dixie Regional Medical Center	2,160	1.7%	4.7%	* * *		
Fillmore Community Medical Center - CAH	30	0.0%	5.0%	* *		
Gunnison Valley Hospital - CAH	101	3.0%	4.8%	* *		
Heber Valley Medical Center - CAH	149	2.0%	4.7%	* *		
Intermountain Medical Center	4,634	3.4%	4.8%	* * *		
Jordan Valley Medical Center	2,158	2.1%	4.7%	* * *		
Kane County Hospital	59	3.4%	4.8%	* *		
LDS Hospital	2,036	2.5%	4.8%	* * *		
Lakeview Hospital	265	3.0%	4.7%	* *		
Continued on Next Page						

Continued on Next Page

Most Utah hospitals (24 of 36) in this table had a lower rate of injuries than expected compared to similar patients nationwide (***). The remaining 12 Utah hospitals had about the same rate than expected. No hospitals had a higher rate than expected.

See additional hospitals that treated at least one patient but less than 30 patients. View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

*** Lower % injuries than expected, ** about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital.

Injuries to Mother, Severe Vaginal Tears Without					
Instruments (PSI 19)					
2	008				
- CON	LINUED -				
	Patients		Expected	<u>Statistical</u>	
Hospital	(Denominator)	Rate	Rate	<u>Rating</u>	
Utah Overall	38,374	2.1%	4.8%	* * *	
Logan Regional Hospital	1,964	1.3%	4.7%	* * *	
McKay-Dee Hospital Center	2,846	1.4%	4.8%	* * *	
Mountain View Hospital	623	0.5%	4.7%	* * *	
Mountain West Medical Center	358	1.4%	4.7%	* * *	
Ogden Regional Medical Center	1,701	1.2%	4.8%	* * *	
Orem Community Hospital	914	2.2%	4.8%	* * *	
Pioneer Valley Hospital	569	2.1%	4.7%	* * *	
Salt Lake Regional Medical Center	702	2.1%	4.8%	* * *	
San Juan Hospital - CAH	105	4.8%	4.9%	* *	
Sanpete Valley Hospital - CAH	100	4.0%	4.8%	* *	
Sevier Valley Medical Center	196	3.1%	4.7%	* *	
St. Mark's Hospital	2,326	2.1%	4.8%	* * *	
Timpanogos Regional Hospital	1,125	1.4%	4.8%	* * *	
University Health Care	2,268	2.8%	4.9%	* * *	
Uintah Basin Medical Center	341	0.9%	4.9%	* * *	
Utah Valley Regional Medical Center	3,195	2.1%	4.8%	* * *	
Valley View Medical Center	801	0.7%	4.8%	* * *	

Most Utah hospitals (24 of 36) in this table had a lower rate of injuries than expected compared to similar patients nationwide (***). The remaining 12 Utah hospitals had about the same rate than expected. No hospitals had a higher rate than expected.

See additional hospitals that treated at least one patient but less than 30 patients. View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

*** Lower % injuries than expected, ** about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital.

Newborn Injuries (PSI 17) 2006-2008					
Hospital	Patients (Denominator)	Actual Rate	Expected Rate	<u>Statistical</u> <u>Rating</u>	
Utah Overall	162,868	0.1%	0.6%	* * *	
Allen Memorial Hospital	137	0.0%	0.6%	* *	
Alta View Hospital	6,749	0.2%	0.6%	* * *	
American Fork Hospital	9,255	0.3%	0.6%	* * *	
Ashley Regional Medical Center	1,213	0.0%	0.6%	* * *	
Bear River Valley	338	0.3%	0.6%	* *	
Beaver Valley Hospital	281	0.4%	0.6%	* *	
Brigham City Community	976	0.1%	0.6%	* * *	
Castleview Hospital	1,248	0.1%	0.6%	* * *	
Central Valley Hospital	428	0.9%	0.6%	* *	
Cottonwood Hospital	7,441	0.1%	0.6%	* * *	
Davis Hospital	7,447	0.1%	0.6%	* * *	
Delta Community	312	0.3%	0.6%	* *	
Dixie Regional	8,379	0.2%	0.6%	* * *	
Fillmore Community	160	0.0%	0.6%	* *	
Garfield Memorial	111	0.0%	0.6%	* *	
Gunnison Valley Hospital	512		0.6% ed on Next	* *	

Continued on Next Page

Most Utah hospitals (26 of 39) in this table had a lower rate of injuries than expected (***) compared to similar patients nationwide. The remaining hospitals had about the same rate of injuries as expected. Of these, six more hospitals had no reported injuries in three years.

View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

* * * Lower % injuries than expected, * * about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital.

Newborn Injuries (PSI 17)						
	2006-2008					
-	CONTINUED -					
PatientsActualExpectedStatisticalHospital(Denominator)RateRateRating						
Utah Overall	162,868	0.1%	0.6%	* * *		
Heber Valley Hospital	740	0.0%	0.6%	* * *		
Intermountain Medical Center	7,440	0.2%	0.6%	* * *		
Jordan Valley Medical Center	8,202	0.1%	0.6%	* * *		
Kane County Hospital	236	0.0%	0.6%	* *		
Lakeview Hospital	1,319	0.7%	0.6%	* *		
LDS Hospital	11,192	0.1%	0.6%	* * *		
Logan Regional	8,037	0.0%	0.6%	* * *		
McKay-Dee Hospital	12,220	0.1%	0.6%	* * *		
Mountain View Hospital	2,518	0.1%	0.6%	* * *		
Mountain West Hospital	1,534	0.1%	0.6%	* * *		
Ogden Regional	7,281	0.0%	0.6%	* * *		
Orem Community	4,050	0.0%	0.6%	* * *		
Pioneer Valley Hospital	3,385	0.1%	0.6%	* * *		
Salt Lake Regional	3,494		0.6% ed on Next			

Continued on Next Page

Most Utah hospitals (26 of 39) in this table had a lower rate of injuries than expected (***) compared to similar patients nationwide. The remaining hospitals had about the same rate of injuries as expected. Of these, six more hospitals had no reported injuries in three years.

View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

* * * Lower % injuries than expected, * * about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital.

Newborn Injuries (PSI 17)					
	2006-2008				
- C(ONTINUED -				
PatientsActualExpectedStatisticalHospital(Denominator)RateRateRating					
Utah Overall	162,868	0.1%	0.6%	* * *	
San Juan Hospital	424	0.0%	0.6%	* *	
Sanpete Valley Hospital	418	0.2%	0.6%	* *	
Sevier Valley Hospital	804	1.0%	0.6%	* *	
St. Mark's Hospital	11,090	0.1%	0.6%	* * *	
Timpanogos Regional	5,044	0.1%	0.6%	* * *	
University Health Care	10,014	0.3%	0.6%	* * *	
Uintah Basin Hospital	1,666	0.1%	0.6%	* * *	
Utah Valley Regional	13,898	0.2%	0.6%	* * *	
Valley View Hospital	2,875	0.1%	0.6%	* * *	

Most Utah hospitals (26 of 39) in this table had a lower rate of injuries than expected (***) compared to similar patients nationwide. The remaining hospitals had about the same rate of injuries as expected. Of these, six more hospitals had no reported injuries in three years.

View Data Limitations.

Rating: based on the Exact 95% Confidence Interval test of statistical significance.

* * * Lower % injuries than expected, * * about same % injuries as expected, * higher % injuries than expected.

Actual injuries: percentage of patients who had these injuries in this hospital. **Expected injuries:** percentage of patients who were expected to have injuries at this hospital adjusted for its patient mix (age, gender, how ill the patients were).

First-Time Cesarean Delivery (IQI 33)				
2008				
Hospital	Patients (Denominator)	Actual Rate		
Utah Overall	42,387	9.8%		
Alta View Hospital	1,675	8.3%		
American Fork Hospital	2,497	7.6%		
Ashley Regional Medical Center	328	9.5%		
Bear River Valley	103	7.8%		
Beaver Valley Hospital	68	14.7%		
Brigham City Community	298	8.1%		
Castleview Hospital	317	8.5%		
Central Valley Hospital	112	10.7%		
Davis Hospital	1,837	9.7%		
Delta Community	87	13.8%		
Dixie Regional	2,034	3.8%		
Fillmore Community	38	2.6%		
Gunnison Valley Hospital	139	12.2%		
Heber Valley Hospital	206	14.6%		
Intermountain Medical Center	4,865	10.0%		
Jordan Valley Medical Center	2,505	7.3%		
Kane County Hospital	71	15.5%		
LDS Hospital	2,221	8.4%		
Lakeview Hospital	330	12.4%		
Logan Regional	2,138	7.0%		
McKay-Dee Hospital	3,202	11.4%		
Continued on Next Page				

Continued on Next Page

See additional hospitals that treated at least one patient but less than 30 patients. For more information about first-time cesarean sections, <u>click here.</u> View Data Limitations.

Actual rate: percentage of patients who had their first Cesarean delivery in this hospital.

First-Time Cesarean Delivery (IQI 33)				
2008	3			
- CONTIN	NUED -			
TT	Patients			
Hospital	(Denominator)	Actual Rate		
Utah Overall Mountain View Hospital	42,387 705	9.8% 10.8%		
Mountain West Hospital	399	12.3%		
Ogden Regional	1,970	11.7%		
Orem Community	1,132	9.4%		
Pioneer Valley Hospital	652	10.7%		
Salt Lake Regional	758	8.7%		
San Juan Hospital	115	7.8%		
Sanpete Valley Hospital	122	10.7%		
Sevier Valley Hospital	211	7.1%		
St. Mark's Hospital	2,794	15.9%		
Timpanogos Regional	1,299	8.8%		
University Health Care	2,320	14.9%		
Uintah Basin Hospital	446	11.7%		
Utah Valley Regional	3,573	9.0%		
Valley View Hospital	798	6.9%		

See additional hospitals that treated at least one patient but less than 30 patients.

For more information about first-time cesarean sections, <u>click here.</u> <u>View Data Limitations.</u>

Actual rate: percentage of patients who had their first Cesarean delivery in this hospital.

Vaginal Delivery After Cesarean (IQI 34)				
2008	8			
Hospital	Patients (Denominator)	Actual Rate		
Utah Overall	7,352	16.6%		
Alta View Hospital	260	10.4%		
American Fork Hospital	408	26.5%		
Ashley Regional Medical Center	57	8.8%		
Brigham City Community	53	13.2%		
Castleview Hospital	54	3.7%		
Central Valley Hospital	35	0.0%		
Davis Hospital	370	13.2%		
Dixie Regional	360	24.2%		
Heber Valley Hospital	51	2.0%		
Intermountain Medical Center	846	18.9%		
Jordan Valley Medical Center	421	9.0%		
LDS Hospital	319	21.3%		
Lakeview Hospital	34	0.0%		
Logan Regional	344	19.8%		
McKay-Dee Hospital	633	9.8%		
Mountain View Hospital	120	18.3%		
Mountain West Hospital	54	7.4%		
Ogden Regional	356	7.6%		
Orem Community	179	20.7%		
Pioneer Valley Hospital	87	6.9%		
Salt Lake Regional	107	15.0%		
St. Mark's Hospital	511	11.7%		
Timpanogos Regional	181	14.9%		
University Health Care	528	29.4%		
Uintah Basin Hospital	82	9.8%		
Utah Valley Regional	620	21.1%		
Valley View Hospital	111	35.1%		

See additional hospitals that treated at least one patient but less than 30 patients.

<u>Click here to read about suggested guidelines for having a VBAC.</u> <u>View Data Limitations.</u>

Actual rate: percentage of patients who had a vaginal delivery after a previous Cesarean delivery in this hospital.

Normal Newborn (APR-DRG 640)

Average Hospital Charges, Utah, 2008

	Level of Illness			
	Minor/Moderate		Major	/Extreme
		Average		<u>Average</u>
Hospital	Patients	Charge	Patients	<u>Charge</u>
Utah Overall	46,418	\$1,813	1,622	\$6,189
Allen Memorial Hospital	<5	\$2,535	0	\$ 0
Alta View Hospital	1,801	\$2,098	138	\$4,202
American Fork Hospital	2,646	\$2,118	129	\$5,951
Ashley Regional Medical Center	380	\$1,112	15	\$4,939
Bear River Valley Hospital	120	\$1,430	0	\$ 0
Beaver Valley Hospital	82	\$1,239	0	\$ 0
Brigham City Community Hospital	346	\$1,492	<5	\$4,344
Castleview Hospital	320	\$1,800	16	\$5,839
Central Valley Medical Center-CAH	142	\$1,818	0	\$ 0
Davis Hospital & Medical Center	2,204	\$1,578	27	\$7,299
Delta Community Medical Center-CAH	100	\$1,809	<5	\$3,577
Dixie Regional Medical Center	2,253	\$1,844	44	\$6,593
Fillmore Community Medical Center-CAH	41	\$1,920	0	\$ 0
Garfield Memorial Hospital	28	\$1,328	<5	\$2,082

Table Legend

< 5 = 1 to 4 patients

Continued on Next Page

State average hospital length of stay Minor/Moderate is 1.9 days

Major/Extreme is 3.3 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Normal Newborn (APR-DRG 640)

Average Hospital Charges, Utah, 2008 - CONTINUED -Level of Illness Minor/Moderate Major/Extreme Average Average Hospital **Patients** Charge **Patients** Charge **Utah Overall** 46,418 \$1,813 1.622 \$6,189 Gunnison Valley Hospital-CAH 176 \$992 <5 \$3,413 Heber Valley Medical Center-CAH 251 \$1,212 $<\!\!5$ \$3,782 Intermountain Medical Center 5,512 \$1,715 164 \$4,969 2,620 143 \$6,128 Jordan Valley Medical Center \$2,207 <5 Kane County Hospital 79 \$1,231 \$6,344 Lakeview Hospital 351 \$2,152 11 \$4,617 LDS Hospital \$6,881 2,396 \$1,603 74 93 Logan Regional Hospital 2,405 \$1,552 \$7,758 McKay-Dee Hospital \$1,715 99 \$8,324 3,666 Mountain View Hospital 770 \$1,958 12 \$5,020 \$2,199 \$4,270 Mountain West Medical Center 429 6

2,196

Table Legend

< 5 = 1 to 4 patients

Ogden Regional Medical Center

Continued on Next Page

\$8.040

23

State average hospital length of stay

Minor/Moderate is 1.9 days Major/Extreme is 3.3 days.

\$1,406

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Normal Newborn (APR-DRG 640)

Average Hospital Charges, Utah, 2008

- CONTINUED -					
		Level of Illness			
	Minor	/Moderate	Major	/Extreme	
		Average		Average	
Hospital	Patients	Charge	Patients	<u>Charge</u>	
Utah Overall	46,418	\$1,813	1,622	\$6,189	
Orem Community Hospital	1,245	\$2,064	18	\$5,161	
Pioneer Valley Hospital	674	\$2,352	17	\$6,687	
Salt Lake Regional Medical Center	870	\$1,518	5	\$5,339	
San Juan Hospital	149	\$1,429	<5	\$2,026	
Sanpete Valley Hospital-CAH	138	\$1,891	<5	\$3,448	
Sevier Valley Medical Center	251	\$1,510	0	\$ 0	
St. Mark's Hospital	2,921	\$2,073	149	\$9,375	
Timpanogos Regional Hospital	1,249	\$2,393	64	\$6,875	
University Health Care	2,259	\$1,553	183	\$4,328	
Uintah Basin Medical Center	538	\$1,140	5	\$2,338	
Utah Valley Regional Medical Center	3,906	\$2,046	163	\$6,079	
Valley View Medical Center	902	\$1,479	8	\$5,664	

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 1.9 days Major/Extreme is 3.3 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery (APR-DRG 560)

Average Hospital Charges for Adults 18 Years and Older, Utah, 2008 Level of Illness Minor/Moderate Major/Extreme Average Hospital **Patients** Charge Patients Average Charge Utah Overall 38,360 \$5,222 1.319 \$8,726 Alta View Hospital 1,565 \$4,382 48 \$5,390 American Fork Hospital 2,414 \$4,559 60 \$7,124 Ashley Regional Medical Center 291 \$4,316 8 \$5.915 Bear River Valley Hospital <5 \$6,488 86 \$4,545 Beaver Valley Hospital 58 \$3,161 <5 \$5,171 7 \$6,223 Brigham City Community Hospital 245 \$4,498 Castleview Hospital 289 \$4,725 <5 \$5,635 $<\!\!5$ \$8,227 Central Valley Medical Center-CAH 97 \$4,502 Davis Hospital & Medical Center 1,691 \$7,024 35 \$8,288 Delta Community Medical Center-CAH 67 \$4,857 $<\!\!5$ \$7,172 Dixie Regional Medical Center 2,099 \$4,032 67 \$7,649 Fillmore Community Medical Center-CAH 32 \$5,718 $<\!\!5$ \$4,712 \$5.727 Garfield Memorial Hospital 18 \$3,834 <5

Continued on Next Page

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 1.8 days Major/Extreme is 2.6 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery (APR-DRG 560)

Average Hospital Charges for Adults 18 Years and Older, Utah, 2008

- CONTINUED -						
		Level of Illness				
	Minor/	Moderate	Majo	r/Extreme		
		Average				
Hospital	Patients	Charge	Patients	Average Charge		
Utah Overall	38,360	\$5,222	1,319	\$8,726		
Gunnison Valley Hospital-CAH	118	\$3,260	<5	\$2,884		
Heber Valley Medical Center-CAH	170	\$4,198	0	\$ 0		
Intermountain Medical Center	4,463	\$5,591	251	\$8,857		
Jordan Valley Medical Center	2,235	\$6,584	52	\$8,675		
Kane County Hospital	58	\$3,971	<5	\$4,766		
Lakeview Hospital	291	\$5,403	<5	\$6,211		
LDS Hospital	2,003	\$5,457	41	\$8,670		
Logan Regional Hospital	2,094	\$4,165	59	\$6,500		
McKay-Dee Hospital	2,886	\$4,599	81	\$8,996		
Mountain View Hospital	626	\$6,008	<5	\$7,409		
Mountain West Medical Center	308	\$4,478	6	\$9,666		
Ogden Regional Medical Center	1,729	\$5,352	28	\$8,022		

Continued on Next Page

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 1.8 days Major/Extreme is 2.6 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery (APR-DRG 560)

Average Hospital Charges for Adults 18 Years and Older, Utah, 2008

U I U					
- CONTINUED -					
		Level of Illness			
	Minor/	Moderate	Majo	r/Extreme	
		Average			
Hospital	Patients	Charge	Patients	Average Charge	
Utah Overall	38,360	\$5,222	1,319	\$8,726	
Orem Community Hospital	1,063	\$4,883	17	\$7,317	
Pioneer Valley Hospital	521	\$6,536	31	\$7,876	
Salt Lake Regional Medical Center	686	\$5,821	19	\$8,406	
San Juan Hospital	94	\$5,502	5	\$8,175	
Sanpete Valley Hospital-CAH	97	\$4,536	<5	\$4,391	
Sevier Valley Medical Center	187	\$4,050	<5	\$5,477	
St. Mark's Hospital	2,312	\$6,125	96	\$10,093	
Timpanogos Regional Hospital	1,121	\$6,241	17	\$10,312	
University Health Care	1,852	\$6,224	236	\$11,198	
Uintah Basin Medical Center	344	\$4,305	14	\$5,780	
Utah Valley Regional Medical Center	3,376	\$4,632	95	\$8,755	
Valley View Medical Center	774	\$3,611	23	\$4,658	

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay Minor/Moderate is 1.8 days

Major/Extreme is 2.6 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery With Sterilization or Dilation and Curettage				
	PR-DRG 541)			
Average Hospital Charges fo	r Adults 18	Years and Ol	der, Utah,	2008
	Level of Illness			
	Minor	/Moderate	Majo	r/Extreme
II. and tal	Detiente	Average	Detiente	
Hospital Utah Overall	Patients 827	Charge \$7,289	Patients 40	Average Charge \$14,477
Alta View Hospital	24	\$5,589	0	\$0
American Fork Hospital	37	\$5,707	<5	\$11,971
Ashley Regional Medical Center	10	\$8,035	0	\$ 0
Bear River Valley Hospital	7	\$6,610	0	\$ 0
Beaver Valley Hospital	<5	\$4,5 60	0	\$ 0
Brigham City Community Hospital	15	\$7,938	0	\$ 0
Castleview Hospital	<5	\$7,827	0	\$0
Central Valley Medical Center-CAH	6	\$7,375	0	\$ 0
Davis Hospital & Medical Center	29	\$8,917	0	\$ 0
Delta Community Medical Center-CAH	5	\$9,846	0	\$ 0
Dixie Regional Medical Center	53	\$4,857	<5	\$15,964
Fillmore Community Medical Center-CAH	5	\$9,5 70	0	\$ 0
Garfield Memorial Hospital	<5	\$6,034	0	\$0

Continued on Next Page

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 1.9 days Major/Extreme is 2.8 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery	With Sterilizati	ion or Dilatior	and Cure	ttage
	(APR-DRG 541))		_
Average Hospital Charge	s for Adults 18	Years and Ol	der, Utah,	2008
	- CONTINUE	2D -		
		Level	of Illness	
	Minor	/Moderate	Majo	r/Extreme
Hospital	Patients	Average Charge	Patients	Average Charge
Utah Overall	827	\$7,289	40	\$14,477
Gunnison Valley Hospital-CAH	9	\$5,511	0	\$0
Heber Valley Medical Center-CAH	5	\$5,993	<5	\$8,529
Intermountain Medical Center	52	\$6,723	5	\$14,302
Jordan Valley Medical Center	56	\$9,207	<5	\$11,679
Kane County Hospital	<5	\$6,994	0	\$ 0
Lakeview Hospital	13	\$7,665	0	\$ 0
LDS Hospital	42	\$6,587	<5	\$31,021
Logan Regional Hospital	41	\$5,324	<5	\$6,470
McKay-Dee Hospital	60	\$5,965	<5	\$19,584
Mountain View Hospital	8	\$8,052	0	\$ 0
Mountain West Medical Center	18	\$10,488	0	\$ 0
Ogden Regional Medical Center	16	\$8,168	<5	\$13,540
Orem Community Hospital	16	\$7,882	0	\$ 0
Pioneer Valley Hospital	11	\$10,526	<5	\$10,594
Salt Lake Regional Medical Center	21	\$9,133	0	\$0
			Continued	on Next Page

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay Minor/Moderate is 1.9 days Major/Extreme is 2.8 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Vaginal Delivery With Sterilization or Dilation and Curettage (APR-DRG 541)					
Average Hospital Charges for Adults 18 Years and Older, Utah, 2008					
- CONTINUED -					
Level of Illness					
	Minor	/Moderate	Majo	r/Extreme	
Hospital	Patients	Average Charge	Patients	Average Charge	
Utah Overall	827	\$7,289	40	\$14,477	
San Juan Hospital	<5	\$10,928	0	\$ 0	
Sanpete Valley Hospital-CAH	5	\$5,564	0	\$0	
Sevier Valley Medical Center	12	\$7,547	0	\$ 0	
St. Mark's Hospital	55	\$9,174	<5	\$10,638	
Timpanogos Regional Hospital	20	\$8,624	0	\$ 0	
University Health Care	64	\$8,487	9	\$21,341	
Uintah Basin Medical Center	40	\$6,052	<5	\$5,081	
Utah Valley Regional Medical Center	44	\$6,236	0	\$ 0	
Valley View Medical Center	14	\$7,191	<5	\$4,131	

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay Minor/Moderate is 1.9 days

Major/Extreme is 2.8 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Cesarean Delivery (APR-DRG 540)

Average Hospital Charges for	or Adults 18 Y	ears and Ol	der, Utah, 2	008	
	Level of Illness				
	Minor/M	Ioderate	Major	/Extreme	
		Average		Average	
Hospital	Patients	Charge	Patients	<u>Charge</u>	
Utah Overall	11,139	\$8,938	824	\$16,618	
Alta View Hospital	427	\$6,908	19	\$9,454	
American Fork Hospital	542	\$7,999	27	\$9,249	
Ashley Regional Medical Center	94	\$8,520	6	\$20,035	
Bear River Valley Hospital	28	\$7,496	0	\$0	
Beaver Valley Hospital	21	\$4,315	<5	\$9,030	
Brigham City Community Hospital	72	\$9,317	<5	\$12,707	
Castleview Hospital	89	\$8,518	<5	\$12,585	
Central Valley Medical Center-CAH	51	\$8,059	<5	\$7,291	
Davis Hospital & Medical Center	546	\$9,193	25	\$12,529	
Delta Community Medical Center-CAH	29	\$8,516	<5	\$14,517	
Dixie Regional Medical Center	409	\$7,366	32	\$15,598	
Fillmore Community Medical Center-CAH	8	\$9,045	0	\$0	
Garfield Memorial Hospital	8	\$8,492	0	\$0	
	Continued on Next Pag			n Next Page	

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 3.2 days Major/Extreme is 5.4 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Cesarean Delivery (APR-DRG 540)

Average Hospital Charges for Adults 18 Years and Older, Utah, 2008 - CONTINUED -Level of Illness Minor/Moderate Major/Extreme Average Average Charge Hospital **Patients** Charge Patients Utah Overall 11,139 \$8,938 824 \$16,618 Gunnison Valley Hospital-CAH \$5,934 \$14,163 <5 52 Heber Valley Medical Center-CAH 82 \$7,774 <5 \$10,167 Intermountain Medical Center 1,266 \$9,408 153 \$18,089 Jordan Valley Medical Center 601 \$12,182 13 \$18,075 Kane County Hospital 19 \$10,094 0 \$0 0 Lakeview Hospital 92 \$8,303 \$0 LDS Hospital 468 \$9,031 24 \$15,343 Logan Regional Hospital 474 \$6,237 32 \$9,679 McKay-Dee Hospital 79 \$12,947 1,018 \$7,788 Mountain View Hospital 173 \$9,682 <5 \$26,060 Mountain West Medical Center <5 \$19,823 82 \$12,441 Ogden Regional Medical Center 580 \$11,642 21 \$19,584

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Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 3.2 days Major/Extreme is 5.4 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

Cesarean Delivery (APR-DRG 540)

Average Hospital Charges for Adults 18 Years and Older, Utah, 2008

8 1 8						
- CONTINUED -						
		Level of Illness				
	Minor/M	Ioderate	Major	/Extreme		
		Average		<u>Average</u>		
Hospital	Patients	Charge	Patients	Charge		
Utah Overall	11,139	\$8,938	824	\$16,618		
Orem Community Hospital	271	\$8,540	6	\$9,039		
Pioneer Valley Hospital	144	\$12,950	14	\$15,368		
Salt Lake Regional Medical Center	169	\$10,508	8	\$13,021		
San Juan Hospital	30	\$14,182	0	\$0		
Sanpete Valley Hospital-CAH	39	\$8,297	0	\$ 0		
Sevier Valley Medical Center	48	\$8,426	<5	\$8,183		
St. Mark's Hospital	989	\$8,208	76	\$15,337		
Timpanogos Regional Hospital	297	\$10,181	15	\$22,459		
University Health Care	731	\$10,021	164	\$20,972		
Uintah Basin Medical Center	136	\$7,096	6	\$8,113		
Utah Valley Regional Medical Center	907	\$8,509	84	\$18,932		
Valley View Medical Center	147	\$6,565	<5	\$12,539		

Table Legend

< 5 = 1 to 4 patients

State average hospital length of stay

Minor/Moderate is 3.2 days Major/Extreme is 5.4 days.

View Data Limitations.

Level of Illness: Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.