

Readmissions to Utah Hospitals, 2005-2007

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Introduction

The purpose of this report is to help patients compare Utah hospitals based on percentage of readmitted patients by specific medical conditions and procedures. Avoiding preventable readmissions is complex and requires a team effort among patients, their doctors and hospitals. Hospital readmission may indicate:

- Patient did not follow care instructions after a previous hospital stay
- Problems with coordination of care and medications before, during and after a hospital stay
- Problems with care during a previous hospital stay.

If you or someone you know needs to go to a hospital, you may find this report helpful when considering where to receive treatment, especially for:

- Diabetes
- Heart problems and stroke
- Hip and knee problems
- Pneumonia.

Hospitals can vary in terms of the kinds of patients they treat and the percentage of their patients who are readmitted.

Did you know?

- About 7% of adult hospital patients were readmitted within one month for a reason related to a previous hospital stay in 2005 through 2007, not including women giving birth.
- You can prevent readmission by seeing your doctor after leaving the hospital and carefully following instructions for your care.

For information on preventing readmissions, please see <http://www.ahrq.gov/consumer/cc/cc110309.htm>

Hospital Readmission

This report is based on patients who are readmitted to the same or a different hospital from their previous admission for a clinically related reason. Many factors affect a hospital's rate of readmission. For more information, see About the Report, Data and Measures.

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.

Key Findings

How did hospital readmissions from 2005 through 2007 compare across Utah hospitals?

The readmission rate for all adult Utah residents (age 18 years and older) who were readmitted to any Utah short-term, acute-care hospital within 30 days for a reason related to a previous hospital stay was 7.1% (23,354 readmissions out of 389,724 hospital admissions at risk for readmissions). However, readmission rates vary considerably by patients' medical condition and treatment.

This report includes information about hospital readmissions for selected medical conditions and procedures. Specifically, the report's tables include information on across hospital readmissions within 30 days for reasons clinically related to a previous hospital stay. Across hospital readmissions include adult Utah residents (age 18 years and older) who were readmitted to any Utah short-term, acute-care hospital, whether it was the same hospital as the patient's previous stay or a different hospital. Click [Findings](#) to see readmissions for each of 16 medical conditions and procedures in this report.

Actual percentage of readmitted patients varied, depending on the patients' medical conditions and procedures (All Patient Refined Diagnosis Related Groups or APR-DRGs are in parentheses), as determined by 3M Potentially Preventable Readmissions software. For Utah overall (patients from all short-term, acute-care hospitals combined for a specified medical condition or procedure), actual readmission rate for clinically related reasons within 30 days was as follows:

- Heart valve procedures with heart catheterization (APR-DRG 162): 77 readmitted patients out of 501 or 15.4%
- Heart failure (APR-DRG 194): 622 readmitted patients out of 5,532 or 11.2%
- Heart bypass surgery with heart catheterization (APR-DRG 165): 178 readmitted patients out of 1,676 or 10.6%
- Diabetes (APR-DRG 420): 218 readmitted patients out of 2,465 or 8.8%
- Heart attack (APR-DRG 190): 115 readmitted patients out of 1,353 or 8.5%
- Pneumonia (APR-DRG 139): 860 readmitted patients out of 11,730 or 7.3%
- Stroke (APR-DRG 045): 281 readmitted patients out of 3,966 or 7.1%
- Hip joint replacement (APR-DRG 301): 505 readmitted patients out of 8,435 or 6.0%.

Readmission by medical condition and procedure varied among hospitals. For each of the 16 conditions and procedures in this report, most hospitals had about the same actual percentage of readmitted patients as expected. A hospital's expected percentage of readmitted patients was based on the number of patients expected to be readmitted if the hospital treated the same portion of patients as

Utah overall in each of four levels for severity of illness for each condition or procedure. Among hospitals that treated at least 30 patients with the following conditions or procedures:

- Balloon angioplasty with heart attack (APR-DRG 174): among 17 hospitals, 2 had a lower percentage and 1 had a higher percentage of readmitted patients than expected.
- Heart bypass surgery without heart catheterization (APR-DRG 166): among 10 hospitals, 1 had a lower percentage of readmitted patients than expected.
- Heart failure (APR-DRG 194): among 28 hospitals, 1 had a lower percentage and 1 had a higher percentage of readmitted patients than expected.
- Stroke (APR-DRG 045): among 23 hospitals, 1 had a lower percentage and 1 had a higher percentage of readmitted patients than expected.
- Hip joint replacement (APR-DRG 301): among 31 hospitals, 2 had a lower percentage and 4 had a higher percentage of readmitted patients than expected.
- Knee joint replacement (APR-DRG 302): among 31 hospitals, 1 had a lower percentage and 1 had a higher percentage of readmitted patients than expected.
- Pneumonia (APR-DRG 139): among 39 hospitals, 1 had a lower percentage and 2 had a higher percentage of readmitted patients than expected.

The following had no statistically significant differences between each hospital's actual and expected percentage of readmitted patients: diabetes (APR-DRG 420), heart attack (APR-DRG 190), heart bypass surgery with heart catheterization (APR-DRG 165), heart valve procedures with heart catheterization (APR-DGR 162) and heart valve procedures without heart catheterization (APR-DGR 163).

The Office of Health Care Statistics used a statistical test to determine whether the difference between each hospital's actual percentage and expected percentage of readmitted patients was likely to be statistically significant, that is, "real" and not due to chance.

Note that many factors can affect readmissions at a particular hospital. Read more in [About the Report, Data and Measures](#).

About the Report

Note: This report is not intended to be anyone's sole source of information about quality of care or hospital readmissions in Utah. Rather, it is designed to provide helpful information that can play an important role in choosing health care facilities along with other sources, including recommendations from your doctor or other health care professional.

Why are you producing this report?

- [Senate Bill 132](#) (2005) requires the [Health Data Committee](#) (HDC) and its staff to publish reader-friendly reports comparing Utah health care facilities based on nationally-recognized measures for quality, charges and patient safety.
- The HDC and [Utah Department of Health](#) 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 their patients.
- Prevention of avoidable hospital readmissions is part of the national discussion about lowering health care costs and improving quality of care.

Why is this report important to me?

Health care facilities can vary in terms of the number of patients who are readmitted. Consumers are encouraged to use the information in this report to ask questions of their doctor or other 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?

- [Utah Transparency Advisory Panel](#) (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.
- [Health care facilities](#) reviewed their data and overall report content before public release. For more information, see the “About the Data and Measures” section in this report.
- [Statistical experts](#) assisted in selecting the appropriate method for comparing hospital performance.
- [Leading physicians and health educators](#) reviewed medical information in the report where applicable.

About the Data

Where do the data come from?

The data in this report come from hospital claim records. Utah hospitals are required by law to submit a standard set of information about each inpatient to the Office of Health Care Statistics, Utah Department of Health, for the Utah Hospital Discharge Database. Inpatients spend at least one night in the hospital.

Have the data been verified by others?

Yes, Utah hospitals review the data twice. The first review period of 35 days occurs after hospitals have sent their required data to the Utah Department of Health and the data have been processed into a uniform, patient de-identified form. The second review period of 45 days occurs after the percentage of readmitted patients has been determined. The hospitals may also review the completed report before it is released online. Hospitals may submit comments to be posted online as part of the report.

Why use this measure?

Senate Bill 132, the Health Care Consumer Report Bill passed in 2005, mandates that hospital comparison reports use nationally recognized measures. While currently no nationally recognized measure of readmission exists, several states use the 3M Potentially Preventable Readmission software (PPR) for health care research and reporting, and additional states are considering it. This software counts readmitted patients for All Patient Refined Diagnosis Related Groups (APR-DRGs), which encompass a wide range of medical conditions and procedures.

APR-DRGs

APR-DRGs organize about 20,000 clinical diagnoses and procedures into 314 mutually exclusive groups. Patients are assigned an APR-DRG based on their most serious medical condition and their most extensive use of hospital resources. For example, a patient who had a heart bypass surgery with heart catheterization would be assigned APR-DRG 165, whereas a heart attack patient would be assigned APR-DRG 190. Each APR-DRG has four levels for severity of illness: minor, moderate, major and extreme. APR-DRG software is widely used across the nation in health care research and reporting. For more information about APR-DRGs, see http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/APRDRG_Software/.

This report includes hospital readmission tables for 16 selected APR-DRGs, such as Hip Joint Replacement (APR-DRG 301) and Heart Attack (APR-DRG 190).

Potentially Preventable Readmissions

The PPR software identifies readmissions within 30 days of discharge from a previous hospital stay for clinically related reasons. For this report, adult patients are Utah residents who are at least 18 years of age and spent at least one night in the hospital per hospital stay.

This report includes information about across hospital readmissions of patients. Across hospital readmissions include readmissions of patients to any short-term, acute-care hospital in Utah, whether the readmission was to the same hospital as the patient's previous admission or a different hospital.

The PPR software does not count some patients such as transfer patients; patients who left the hospital

against medical advice during a previous hospital stay; patients about whom the medical community is not in agreement regarding potentially preventable readmissions, such as women giving birth and newborns; and patients for whom readmission is part of a plan of care, such as patients with serious burns, multiple trauma or advanced cancer. For more information on PPRs, see

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

Each table for each APR-DRG in this report includes the following columns: hospital name, the number of admissions at risk for readmission (At Risk for Readmission), the percentage of actual readmitted patients (Actual %Readmitted Patients), the percentage of expected readmitted patients (Expected %Readmitted Patients) and Statistical Rating. The tables include short-term, acute-care hospitals that treated at least 30 inpatients at risk for readmission per specified APR-DRG. Some hospitals, such as those for children, psychiatric patients and long-term care patients, were excluded. Admissions at risk for readmission are admissions of patients the PPR does not globally exclude and who could be readmitted for potentially preventable reasons. Excluded patients are transfer patients; women having babies and newborns; inpatients who left the hospital against medical advice; inpatients for whom readmission is part of an accepted plan of care, such as inpatients with multiple trauma, severe burns and advanced cancer. For this report, patients under age 18 years also are excluded.

Actual %Readmitted Patients is the number of readmitted patients divided by the number of admissions at risk for readmission. Expected Readmitted Patients is the number of patients expected to be readmitted if the hospital's patients were about as ill as Utah overall, that is, all patients at risk for readmission to all Utah short-term, acute care hospitals combined. The Expected % Readmitted Patients is the number of Expected Readmitted Patients divided by the number of admissions at risk for readmission.

The statistical rating is based on Exact 95% Confidence Intervals, a test of statistical significance. If a hospital's Actual %Readmitted is significantly less than its Expected %Readmitted for a specified APR-DRG, the Statistical Rating is "****." If a hospital's %Readmitted is significantly greater than its Expected % Readmitted for a specified APR-DRG, the Statistical Rating is "*." If a hospital's %Readmitted is not significantly greater or less than its Expected % Readmitted for a specified APR-DRG, the Statistical Rating is "**." For more information, see this report's Technical Document.

What are the limitations of readmission comparisons in the report?

Many factors affect a hospital's percentage of readmitted patients. Readmissions can vary according to the kinds of patients admitted to the hospital, how ill the patients are and medical treatment patients receive before, during and after a hospital stay. For example, the actual percentage of patients readmitted for knee joint replacement, pneumonia and heart valve procedures differ considerably. This report includes hospital readmission tables by APR-DRG, but patients may vary within a particular APR-DRG. To address this variation, this report compares each hospital's actual percentage of readmitted patients and its expected percentage of readmitted patients. Each hospital's expected percentage of readmitted patients is calculated based on the number of readmitted patients expected if

the hospital's patients were as ill as patients for Utah overall, based on distribution over four severity of illness levels per APR-DRG. However, this method may not capture the complexity of each patient's condition or treatment.

While the PPR software excludes some patients for whom readmission is part of an accepted plan of care, it may not exclude all such patients. The software may also miss some patients who were readmitted with related conditions. This report includes information about adult Utah resident inpatients, that is, patients who spend at least one night in the hospital, are residents of Utah and are at least 18 years of age. The software does not include mothers giving birth, newborns, patients who are less than 18 years of age, emergency department patients or outpatients, that is, patients who do not spend at least one night in the hospital.

Readmission may reflect variations in patterns of practice among hospital physicians. Hospital readmission may be the best option for patients who cannot access other forms of appropriate care such as a skilled nursing facility, patients who have complex medical issues or are near the end of life. Also, hospitals may report patient diagnosis and procedure codes differently, which could impact the comparison of readmissions among hospitals. The Utah Hospital Discharge Database, the data source for this report, includes up to nine diagnoses and up to six procedures for each patient. Some patients have additional diagnoses and procedures that are not included in the database. As a result, the measures of patient illness and treatment may not be complete. While verification tests of the patient linked data show a high level of accurate links, some linkages may have been missed and others may be incorrect. The PPR software and method of determining readmissions used in this report adjust for patient condition and treatment by APR-DRG and severity of illness level, which may not capture the full complexity of the patient's condition.

Differences in actual percentage of readmitted patients may reflect variations in patterns of practice among hospital physicians. Hospital readmission may be the best option for patients who cannot access other forms of appropriate care. Hospitals may code patient diagnoses and procedures differently. The Utah Hospital Discharge Database includes up to nine diagnoses and up to six procedures for each patient. Some patients have additional diagnoses and procedures that are not included in this database. As a result, the measures of patient illness and treatment may not be complete. The readmission measure used in this report includes hospital tables by APR-DRG, which may not capture the full complexity of the patient's condition. See Glossary and Technical Document for more information.

Hospital Readmission Resources for Consumers

If you would like to learn more about hospital readmissions, below is a list of reputable web sites that you may find helpful.

Hospital Readmission Epidemic: How to Stay Out After You Get Out
http://www.bottomlinecrets.com/article.html?article_id=100000122

Rehospitalizations Among Patients in the Medicare Fee-for-Service Program

<http://www.commonwealthfund.org/Content/Publications/In-the-Literature/2009/Apr/Rehospitalizations-Among-Patients-in-the-Medicare-Fee-for-Service.aspx>

Readmission Rates <http://www.mayoclinic.org/quality/readmission-rates.html>

New Study on Hospital Readmissions

<http://www.whitehouse.gov/omb/blog/09/04/08/newstudyonhospitalreadmissions/>

Hospital Readmission Rate High for Medicare Heart Failure Patients

http://www.consumeraffairs.com/news04/2009/11/medicare_heart_failure.html

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

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 will 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 web sites contain materials that may help patients choose wisely when making medical decisions:

Questions are the Answer <http://www.ahrq.gov/questionsaretheanswer/>

Guide to Health Quality: How to Know It When You See It

<http://www.ahrq.gov/consumer/guidetoq/>

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

Consumers & Patients <http://www.ahrq.gov/consumer/>

See the Technical Document of this report.

General Terms Used in This Report

APR-DRGs: All Patient Refined Diagnosis Related Groups organize about 20,000 clinical diagnoses and procedures into 314 mutually exclusive groups. Patients are assigned an APR-DRG based on their most serious medical condition and their most extensive use of hospital resources. Each APR-DRG has four levels for severity of illness: minor, moderate, major and extreme. Read more at

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

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 <http://www.rules.utah.gov/publicat/code/r432/r432-106.htm#T3>
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title42/42cfr485_main_02.tpl

Inpatient: spends at least one night in the hospital.

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 short-term, acute-care hospitals, except some specialty hospitals such as Primary Children’s Medical Center. The readmission tables include only Utah residents who are at least 18 years of age.

Diabetes Related Terms

Diabetes: a disease in which your blood glucose, or sugar, levels are too high. Over time, too much glucose in your blood can cause serious problems, such as damage to your eyes, nerves and kidneys, leading to blindness, amputations and kidney disease. People with diabetes also are more likely to have heart disease and problems with their bones, joints, teeth and gums.

Heart Related Terms

Acute myocardial infarction, acute MI, AMI, myocardial infarction or MI: see heart attack.

Angioplasty: see balloon angioplasty.

Balloon angioplasty: a balloon catheter is used to open narrowed or blocked blood vessels of the heart. The balloon catheter is a thin, flexible tube with a tiny balloon near its end. The balloon is filled to open the artery so blood can flow through it. Other names: angioplasty, coronary angioplasty, coronary artery angioplasty, cardiac angioplasty, percutaneous coronary intervention (PCI); percutaneous transluminal coronary angioplasty (PTCA), heart artery dilation, heart angioplasty and heart artery angioplasty. For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Cardiac catheterization: see heart catheterization.

Cardiac valve procedure: see heart valve procedure.

Coronary angioplasty, coronary artery angioplasty: see balloon angioplasty.

Coronary artery bypass graft (CABG) surgery, coronary bypass surgery: see heart bypass.

Diabetes: a long-term disease marked by high levels of sugar in the blood. It can cause permanent damage throughout the body and result in death if not treated properly. People with diabetes are at higher risk for heart disease than people without diabetes.

Heart artery dilation: See balloon angioplasty.

Heart attack: blood clots, plaques (fat deposits) or artery spasms block a heart artery. This causes tissue damage or death to the heart muscle. Other names: myocardial infarction; MI; acute MI. For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Heart bypass: creates new routes around narrowed or blocked heart arteries. The doctor moves blood vessels from other parts of the body onto the heart. Other names: Heart artery bypass surgery, coronary artery bypass graft (CABG). For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Heart catheterization: a doctor threads a catheter (thin, flexible tube) from an artery or vein in the neck, arm or thigh into the heart arteries or inside the heart. For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Heart failure: the heart cannot pump enough blood. This causes fluid to build up in the legs, arms, digestive tract, lungs and liver. Heart failure is usually a chronic condition (develops over time). Other names: congestive heart failure, ischemic heart disease, ischemic cardiomyopathy. For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Heart valve procedure: repair or replacement of diseased or damaged heart valves. For definitions of the indicators used, see the Technical Document in Heart and Stroke Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Ischemic: the heart muscle does not get enough blood and oxygen.

Percutaneous cardiovascular procedure (PCP): catheters threaded through arteries to the heart to look for and treat heart problems. See heart catheterization.

Percutaneous transluminal coronary angioplasty (PTCA): see balloon angioplasty.

Note:

Medical terms for heart conditions and procedures are based on Healthfinder, <http://www.healthfinder.gov/library/> and MedlinePlus, <http://www.nlm.nih.gov/medlineplus/encyclopedia.html>.

Hip and Knee Related Terms

Hip replacement or hip joint replacement: in the readmission report the term includes total, partial and revised hip joint replacement. For definitions of the indicators used, see the Technical Document in Technical Document in Hip and Knee Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Knee replacement or knee joint replacement: in the readmission report the term includes total and revised knee joint replacement. For definitions of the indicators used, see the Technical Document in Hip and Knee Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Knee, lower leg and ankle: in the readmission report the term includes knee conditions and procedures other than knee joint replacement as well as those for the lower leg and ankle. For definitions of the indicators used, see the Technical Document in Hip and Knee Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Note:

Medical terms for hip and knee conditions and procedures are based on Healthfinder, <http://www.healthfinder.gov/library/>, MedlinePlus, <http://www.nlm.nih.gov/medlineplus/encyclopedia.html> and The American Association of Orthopaedic Surgeons, <http://www.aaos.org/>.

Pneumonia Related Terms

Influenza: a contagious disease that is caused by a virus. When influenza attacks the lungs, the lining of the respiratory tract is damaged. The tissues temporarily become swollen and inflamed but usually heal within two or more weeks. Influenza is often complicated by pneumonia, especially in the elderly. Influenza, especially with pneumonia, can be life threatening. Other name: flu. Read more at <http://www.lungusa.org/site/apps/s/content.asp?c=dvLUK9O0E&b=34706&ct=67283>.

Pneumonia: an inflammation of the lung caused by infection with bacteria, viruses, or other organisms. Pneumonia is often a complication of a pre-existing condition/infection and triggered when a patient's defense system is weakened, most often by a simple viral upper respiratory tract infection or a case of influenza, especially in the elderly. This report includes some but not all kinds of pneumonia among adult hospital inpatients (age 18 years and older). The readmission rates in this report is for patients in the All Patient Refined Diagnosis Related Group 139 (APR-DRG 139) Other Pneumonia. "Other Pneumonia" includes some of the more common kinds of bacterial, viral and mycoplasma pneumonias as well as influenza with pneumonia. It does not include respiratory syncytial viral (RSV) pneumonia, which is more common among children, or many of the rarer kinds of bacterial, viral and fungal pneumonias such as those associated with tuberculosis and cystic fibrosis. For a complete list of the kinds of pneumonia included in these indicators, see the Technical Document in Adult Pneumonia Care in Utah Hospitals at <http://health.utah.gov/myhealthcare/hospital.htm#sb132> .

Medical terms for pneumonia are based on American Lung Association definitions at <http://www.lungusa.org>.

Readmission Related Terms

Across hospital readmission: a readmission of an inpatient to the same or a different short-term, acute-care hospital in Utah. Admissions to other health care facilities, such as skilled nursing facilities, some specialty hospitals, such as psychiatric, rehabilitation, long-term care and children's hospitals.

The tables in the Utah readmission report are based on across hospital readmissions.

Actual percentage of readmitted patients: the number of actual readmitted patients divided by the number of admissions at risk for readmission.

Actual readmitted patients: patients readmitted within a specified readmission time interval after the discharge date from a previous hospital stay for a clinically related reason. Readmitted patients are counted only once, even if they were readmitted more than once.

Admissions at risk for readmission: admissions that could result in a later return to the hospital. Admissions at risk for readmission exclude some admissions, such as transfer patients; women having babies and newborns; inpatients who left the hospital against medical advice; inpatients for whom readmission is part of an accepted plan of care, such as inpatients with multiple trauma, severe burns and advanced cancer. The tables in this report include inpatients who are Utah residents and at least 18 years of age.

Clinically related reason for readmission: the reason for readmission is plausibly related to care received during a previous stay at a short-term, acute-care hospital or care received shortly after discharge from such a hospital, as determined by a panel of physicians who advise the developers of the PPR software.

Exact Confidence Intervals: a test for statistically significant differences. This test is more reliable than other tests of statistical significance when rates are based on small numbers and one cannot assume a normal bell-shaped distribution of values. For more information, see the technical document for this report.

Expected readmitted patients: the number of a particular hospital's patients expected to be readmitted if that hospital treated patients who were as ill as Utah overall, that is, all patients with a specified APR-DRG who were admitted to any short-term, acute care hospital in Utah. Patients who were not residents of Utah or were not at least 18 years of age were excluded.

Expected percentage of readmitted patients: the number of a particular hospital's expected patients divided by that hospital's number of admissions at risk for readmission for a specified APR-DRG.

Potentially preventable readmission (PPR): in this report, a readmission of a Utah resident at least 18 years of age to a short-term, acute-care hospital within 30 days of the discharge date from a previous hospital stay for a clinically related reason as determined by the 3M PPR software.

Readmission time interval: the length of time after the discharge date of a previous hospital stay. For this readmission report, the readmission time interval is 30 days.

Short-term, acute-care hospitals: exclude some specialty hospitals, such as psychiatric, rehabilitation, long-term care and children's hospitals.

Statistical rating for percentage of readmissions: If the hospital's high 95% confidence interval limit for its actual percentage of readmitted patients is less than the hospital's expected percentage of readmitted patients, the hospital's actual percentage is statistically significantly less than its expected percentage, and the hospital's statistical rating equals "***." If the hospital's low 95% confidence interval is greater than the hospital's expected percentage of readmitted patients, the hospital's actual percentage is statistically significantly greater than its expected percentage and the hospital's statistical rating equals "*." If the confidence interval limits of the hospital's actual percentage of readmitted patients overlaps with its expected percentage of readmitted patients, the difference is not statistically different, and the hospital's statistical rating equals "***." If a difference is statistically significant, one can be 95% sure that it is "real" and not due to chance variation.

Utah Overall: inpatients from all short-term, acute-care hospitals combined for a specified APR-DRG.

Within hospital readmission: a readmission to the same short-term, acute-care hospital within 30 days after the discharge date from a previous hospital stay for a clinically related reason. Within hospital readmissions do not include readmissions to a different short-term, acute-care hospital. Within hospital readmissions are a subgroup of across hospital readmissions. This report is based on across hospital readmissions, which include both within hospital readmissions and admissions to a different short-term, acute-care hospital.

For more information about readmission terms, see the Technical Document: Readmissions to Utah Hospitals, 2005-2007.

Readmission terms, such as potentially preventable readmission rate, are based on the 3M PPR Methodology Overview

<http://multimedia.3m.com/mws/mediawebserver?66666UuZjcFSLXTtNXMtmxMEEVuQEcuZgVs6E Vs6E666666--> .

Stroke Related Terms

Cerebral: of or related to the brain or cerebrum.

Stroke (brain attack, cerebral vascular disease, cerebrovascular disease, CVA, cerebral hemorrhage, ischemic stroke): an interruption of the blood supply to any part of the brain. A stroke can happen when a blood vessel carrying blood to the brain is blocked by a blood clot. A stroke can also happen when a blood vessel in the brain breaks. Interruption of the brain's blood supply by either blood clots or breakage of blood vessels can cause a sudden lessening or loss of consciousness, feeling or voluntary movement. Interruption of the brain's blood supply, even for a short time, can result in brain damage, permanent disabilities and death. Read more at <http://www.nlm.nih.gov/medlineplus/ency/article/000726.htm#Definition>.

Medical terms for stroke are based on the National Stroke Association, <http://www.stroke.org>.

Diabetes (APR-DRG 420), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	2,465	8.8%	8.8%	**
Alta View Hospital	79	11.4%	8.4%	**
American Fork Hospital	98	9.2%	8.3%	**
Castleview Hospital	45	2.2%	8.5%	**
Cottonwood Hospital (closed)	177	9.6%	8.9%	**
Davis Hospital & Medical Center	76	9.2%	8.4%	**
Dixie Regional Medical Center	137	4.4%	8.0%	**
Jordan Valley Medical Center	96	4.2%	8.3%	**
Lakeview Hospital	45	11.1%	8.7%	**
LDS Hospital	182	7.1%	9.4%	**
Logan Regional Hospital	57	3.5%	8.6%	**
McKay-Dee Hospital Center	264	9.8%	9.2%	**
Mountain View Hospital	33	9.1%	8.5%	**
Mountain West Medical Center	37	5.4%	8.1%	**
Ogden Regional Medical Center	102	5.9%	9.3%	**
Pioneer Valley Hospital	137	14.6%	9.6%	**
Salt Lake Regional Medical Center	60	13.3%	9.2%	**
St. Mark's Hospital	166	7.8%	9.1%	**
Timpanogos Regional Hospital	50	12.0%	8.6%	**
Uintah Basin Medical Center	48	10.4%	8.1%	**
University of Utah Hospital	134	11.2%	9.2%	**
Utah Valley Regional Medical Center	170	11.8%	9.2%	**
Veterans Administration Medical Center	62	11.3%	9.2%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 22 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, all had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Balloon Angioplasty With Heart Attack (APR-DRG 174), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	4,180	10.4%	10.4%	**
Cottonwood Hospital (closed)	245	8.6%	10.5%	**
Davis Hospital & Medical Center	226	5.3%	10.0%	***
Dixie Regional Medical Center	425	10.1%	10.1%	**
Intermountain Medical Center	69	8.7%	10.4%	**
Jordan Valley Medical Center	87	12.6%	10.0%	**
Lakeview Hospital	122	6.6%	9.9%	**
LDS Hospital	568	13.9%	10.6%	*
McKay-Dee Hospital Center	501	10.6%	10.4%	**
Mountain View Hospital	76	17.1%	10.3%	**
Ogden Regional Medical Center	161	5.0%	10.7%	***
Pioneer Valley Hospital	245	10.6%	10.6%	**
Salt Lake Regional Medical Center	87	6.9%	10.3%	**
St. Mark's Hospital	288	8.3%	10.1%	**
Timpanogos Regional Hospital	68	13.2%	10.3%	**
University of Utah Hospital	224	12.5%	10.3%	**
Utah Valley Regional Medical Center	679	10.5%	10.4%	**
Veterans Administration Medical Center	109	13.8%	11.2%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 17 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 2 had a lower Actual %Readmitted Patients (***) and 1 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)
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Statistical Rating: based on the Exact 95% Confidence Interval test of statistical significance.

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

Balloon Angioplasty Without Heart Attack (APR-DRG 175), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	10,176	8.6%	8.6%	**
Cottonwood Hospital (closed)	263	7.6%	8.2%	**
Davis Hospital & Medical Center	110	5.5%	8.7%	**
Dixie Regional Medical Center	1,383	8.0%	8.2%	**
Intermountain Medical Center	85	4.7%	9.7%	**
Jordan Valley Medical Center	134	10.4%	8.7%	**
Lakeview Hospital	59	3.4%	9.6%	**
LDS Hospital	2,432	8.2%	8.7%	**
McKay-Dee Hospital Center	948	8.8%	8.8%	**
Mountain View Hospital	142	12.7%	9.1%	**
Ogden Regional Medical Center	176	4.5%	9.4%	***
Pioneer Valley Hospital	253	12.3%	9.7%	**
Salt Lake Regional Medical Center	183	7.7%	9.2%	**
St. Mark's Hospital	1,090	7.9%	7.9%	**
Timpanogos Regional Hospital	490	8.6%	7.8%	**
University of Utah Hospital	479	8.6%	8.5%	**
Utah Valley Regional Medical Center	1,660	9.0%	8.6%	**
Veterans Administration Medical Center	290	14.8%	9.5%	*

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 17 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower than Actual % Readmitted Patients (***), and 1 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)
[View Data Limitations.](#)

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

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

Heart Bypass Surgery With Heart Catheterization (APR-DRG 165)

2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	1,676	10.6%	10.6%	**
Dixie Regional Medical Center	357	9.8%	10.4%	**
LDS Hospital	216	8.8%	10.5%	**
McKay-Dee Hospital Center	306	10.8%	10.7%	**
Ogden Regional Medical Center	153	9.2%	10.6%	**
Salt Lake Regional Medical Center	58	13.8%	10.7%	**
St. Mark's Hospital	158	8.9%	11.0%	**
Timpanogos Regional Hospital	34	20.6%	10.8%	**
University of Utah Hospital	67	6.0%	11.3%	**
Utah Valley Regional Medical Center	298	12.8%	10.4%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 9 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, all had an Actual %Readmitted Patients about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Heart Bypass Surgery Without Heart Catheterization (APR-DRG 166)

2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	1,579	10.1%	10.1%	**
Dixie Regional Medical Center	175	9.7%	9.4%	**
LDS Hospital	285	9.8%	10.5%	**
McKay-Dee Hospital Center	193	10.4%	9.9%	**
Ogden Regional Medical Center	88	10.2%	9.7%	**
Salt Lake Regional Medical Center	65	12.3%	10.0%	**
St. Mark's Hospital	365	9.9%	9.9%	**
Timpanogos Regional Hospital	62	9.7%	9.9%	**
University of Utah Hospital	116	14.7%	10.3%	**
Utah Valley Regional Medical Center	140	4.3%	10.3%	***
Veterans Administration Medical Center	76	14.5%	10.7%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another.

Among the 10 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower Actual %Readmitted Patients (***), while the remaining hospitals had an Actual %Readmitted Patients about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Heart Attack (APR-DRG 190), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	1,353	8.5%	8.5%	**
Cottonwood Hospital (closed)	101	9.9%	8.7%	**
Davis Hospital & Medical Center	47	14.9%	7.2%	**
Dixie Regional Medical Center	151	8.6%	7.9%	**
Lakeview Hospital	49	8.2%	8.0%	**
LDS Hospital	163	10.4%	8.8%	**
McKay-Dee Hospital Center	142	7.0%	9.2%	**
Ogden Regional Medical Center	55	5.5%	8.8%	**
Pioneer Valley Hospital	52	3.8%	8.2%	**
Salt Lake Regional Medical Center	30	10.0%	8.6%	**
St. Mark's Hospital	104	3.8%	8.4%	**
University of Utah Hospital	84	10.7%	8.6%	**
Utah Valley Regional Medical Center	113	7.1%	7.5%	**
Veterans Administration Medical Center	83	9.6%	8.9%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 13 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, all had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

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Heart Catheterization Except for Ischemic Disease (APR-DRG 191), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	1,838	8.7%	8.7%	**
Cottonwood Hospital (closed)	101	10.9%	8.7%	**
Davis Hospital & Medical Center	51	7.8%	7.9%	**
Dixie Regional Medical Center	163	9.8%	8.3%	**
Jordan Valley Medical Center	34	5.9%	8.5%	**
LDS Hospital	342	13.2%	9.1%	*
Logan Regional Hospital	31	9.7%	9.7%	**
McKay-Dee Hospital Center	152	3.3%	7.6%	***
Mountain View Hospital	41	12.2%	8.2%	**
Ogden Regional Medical Center	64	6.3%	9.2%	**
Pioneer Valley Hospital	93	6.5%	8.5%	**
Salt Lake Regional Medical Center	57	10.5%	8.6%	**
St. Mark's Hospital	155	5.8%	8.5%	**
Timpanogos Regional Hospital	44	4.5%	9.2%	**
University of Utah Hospital	135	8.9%	8.6%	**
Utah Valley Regional Medical Center	240	6.3%	8.5%	**
Veterans Administration Medical Center	92	12.0%	10.0%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 16 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had an Actual %Readmitted lower than expected (***) and 1 had an Actual %Readmitted higher than expected (*), while the rest had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Heart Catheterization for Ischemic Disease (APR-DRG 192), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	3,547	3.6%	3.6%	**
Cottonwood Hospital (closed)	179	2.2%	3.8%	**
Davis Hospital & Medical Center	75	0.0%	3.6%	**
Dixie Regional Medical Center	546	3.8%	3.3%	**
Jordan Valley Hospital	124	3.2%	3.5%	**
Lakeview Hospital	43	2.3%	3.5%	**
LDS Hospital	356	5.1%	3.8%	**
Logan Regional Hospital	96	0.0%	3.6%	**
McKay-Dee Hospital Center	315	3.5%	3.8%	**
Mountain View Hospital	120	3.3%	3.5%	**
Ogden Regional Medical Center	156	3.2%	3.9%	**
Pioneer Valley Hospital	226	4.0%	3.8%	**
Salt Lake Regional Medical Center	120	4.2%	3.6%	**
St. Mark's Hospital	379	2.9%	3.2%	**
Timpanogos Regional Hospital	69	8.7%	3.1%	*
University of Utah Hospital	151	5.3%	4.1%	**
Utah Valley Regional Medical Center	436	2.8%	3.8%	**
Veterans Administration Medical Center	132	7.6%	4.2%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 17 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a higher than expected %Actual Readmitted, while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (*), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)
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Statistical Rating: based on the Exact 95% Confidence Interval test of statistical significance.

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

Heart Failure (APR-DRG 194), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	5,532	11.2%	11.2%	**
Alta View Hospital	161	11.2%	11.3%	**
American Fork Hospital	194	8.8%	11.1%	**
Ashley Regional Medical Center	59	11.9%	11.0%	**
Beaver Valley Hospital	41	9.8%	11.1%	**
Castleview Hospital	78	9.0%	11.3%	**
Central Valley Medical Center-CAH	49	4.1%	11.2%	**
Cottonwood Hospital (closed)	257	10.1%	11.5%	**
Davis Hospital & Medical Center	187	14.4%	11.2%	**
Dixie Regional Medical Center	328	9.8%	11.1%	**
Gunnison Valley Hospital-CAH	56	10.7%	10.4%	**
Jordan Valley Medical Center	177	20.3%	11.4%	*
Lakeview Hospital	146	8.9%	11.1%	**
LDS Hospital	463	9.3%	11.3%	**
Logan Regional Hospital	96	4.2%	11.4%	***
McKay-Dee Hospital Center	491	12.0%	11.4%	**
Mountain View Hospital	85	12.9%	11.1%	**
Mountain West Medical Center	93	9.7%	11.3%	**
Ogden Regional Medical Center	250	10.4%	11.4%	**
Pioneer Valley Hospital	182	12.6%	11.4%	**
Salt Lake Regional Medical Center	152	10.5%	11.2%	**
Sevier Valley Medical Center	61	11.5%	11.2%	**
St. Mark's Hospital	489	10.6%	11.1%	**
Timpanogos Regional Hospital	113	11.5%	11.2%	**
Uintah Basin Medical Center	52	9.6%	10.0%	**
University of Utah Hospital	249	11.6%	11.2%	**
Utah Valley Regional Medical Center	480	12.1%	11.3%	**
Valley View Medical Center	60	10.0%	10.9%	**
Veterans Administration Medical Center	261	14.9%	11.4%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 28 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower Actual %Readmitted Patients (***) and 1 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Heart Valve Procedures Without Heart Catheterization (APR-DRG 163)

2005 - 2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	1,419	12.6%	12.6%	**
Dixie Regional Medical Center	152	9.9%	12.0%	**
LDS Hospital	333	15.6%	13.6%	**
McKay-Dee Hospital Center	172	15.7%	12.7%	**
Salt Lake Regional Medical Center	37	5.4%	13.8%	**
St. Mark's Hospital	280	10.0%	11.3%	**
University of Utah Hospital	177	13.6%	11.6%	**
Utah Valley Regional Medical Center	161	10.6%	13.9%	**
Veterans Administration Medical Center	36	11.1%	14.6%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 8 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, all had an Actual %Readmitted Patients about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Heart Valve Procedures With Heart Catheterization (APR-DRG 162), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	501	15.4%	15.4%	**
Dixie Regional Medical Center	92	15.2%	14.9%	**
LDS Hospital	168	11.9%	15.9%	**
McKay-Dee Hospital Center	54	9.3%	14.4%	**
St. Mark's Hospital	44	22.7%	15.2%	**
Utah Valley Regional Medical Center	102	18.6%	15.5%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 5 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, all had an Actual %Readmitted Patients about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Hip Joint Replacement (APR-DRG 301), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	8,435	6.0%	6.0%	**
Alta View Hospital	225	9.3%	5.6%	*
American Fork Hospital	146	8.2%	5.7%	**
Brigham City Community Hospital	66	1.5%	5.5%	**
Cache Valley Specialty Hospital	93	5.4%	5.8%	**
Castleview Hospital	99	9.1%	6.1%	**
Cottonwood Hospital (closed)	164	4.9%	5.9%	**
Davis Hospital & Medical Center	148	9.5%	5.6%	**
Dixie Regional Medical Center	714	6.6%	5.8%	**
Jordan Valley Medical Center	100	6.0%	5.7%	**
Lakeview Hospital	360	5.6%	5.9%	**
LDS Hospital	1,194	6.1%	6.1%	**
Logan Regional Hospital	158	3.8%	5.8%	**
McKay-Dee Hospital Center	638	3.4%	5.9%	***
Mountain View Hospital	233	4.3%	6.0%	**
Ogden Regional Medical Center	212	5.7%	5.6%	**
Pioneer Valley Hospital	78	15.4%	5.8%	*
Salt Lake Regional Medical Center	75	6.7%	5.9%	**
St. Mark's Hospital	933	4.4%	5.8%	**
The Orthopedic Specialty Hospital	764	4.1%	6.1%	***
Timpanogos Regional Hospital	148	4.7%	6.6%	**
Uintah Basin Medical Center	71	2.8%	5.5%	**
University of Utah Hospital	595	9.7%	6.4%	*
University Orthopaedic Center	68	1.5%	5.3%	**
Utah Valley Regional Medical Center	692	7.5%	6.5%	**
Valley View Medical Center	221	3.6%	5.6%	**
Veterans Administration Medical Center	135	11.1%	6.2%	*

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 26 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 2 had a lower Actual %Readmitted Patients (***) and 4 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Knee Joint Replacement (APR-DRG 302), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	16,703	2.8%	2.8%	**
Alta View Hospital	643	3.7%	2.9%	**
American Fork Hospital	251	3.2%	2.6%	**
Ashley Regional Medical Center	43	2.3%	2.5%	**
Brigham City Community Hospital	100	2.0%	2.5%	**
Cache Valley Specialty Hospital	377	2.9%	2.8%	**
Castleview Hospital	268	3.0%	2.8%	**
Cottonwood Hospital (closed)	289	4.8%	2.7%	**
Davis Hospital & Medical Center	292	1.4%	2.8%	**
Dixie Regional Medical Center	1,515	2.7%	2.7%	**
Heber Valley Community Hospital	218	0.9%	2.4%	**
Intermountain Medical Care	35	0.0%	3.0%	**
Jordan Valley Medical Center	270	2.6%	2.7%	**
Lakeview Hospital	1,027	1.8%	2.6%	**
LDS Hospital	1,845	3.3%	2.9%	**
Logan Regional Hospital	377	4.0%	2.9%	**
McKay-Dee Hospital Center	1,197	1.9%	2.8%	**
Mountain View Hospital	632	2.8%	2.9%	**
Mountain West Medical Center	151	7.3%	2.7%	*
Ogden Regional Medical Center	300	2.7%	2.7%	**
Pioneer Valley Hospital	231	3.0%	2.8%	**
Salt Lake Regional Medical Center	35	8.6%	2.7%	**
St. Mark's Hospital	1,408	2.6%	2.6%	**
The Orthopedic Specialty Hospital	1,781	1.6%	2.8%	***
Timpanogos Regional Hospital	397	3.8%	3.0%	**
Utah Basin Medical Center	119	0.8%	2.5%	**
University of Utah Hospital	814	3.6%	2.9%	**
University Orthopaedic Center	182	1.1%	2.2%	**
Utah Valley Regional Medical Center	1,278	3.9%	3.3%	**
Valley View Medical Center	389	2.6%	2.5%	**
Veterans Administration Medical Center	231	4.8%	2.8%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 30 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower Actual %Readmitted Patients (***) and 1 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Knee, Lower Leg and Ankle (APR-DRG 313), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	4,731	4.7%	4.7%	**
Alta View Hospital	141	6.4%	4.6%	**
American Fork Hospital	91	4.4%	4.7%	**
Ashley Regional Medical Center	34	2.9%	4.2%	**
Cache Valley Specialty Hospital	37	5.4%	4.7%	**
Castleview Hospital	51	5.9%	4.9%	**
Cottonwood Hospital (closed)	202	5.4%	4.9%	**
Davis Hospital & Medical Center	106	10.4%	4.8%	*
Dixie Regional Medical Center	271	5.2%	5.0%	**
Intermountain Medical Center	31	0.0%	4.6%	**
Jordan Valley Medical Center	150	4.0%	4.3%	**
Lakeview Hospital	100	4.0%	4.1%	**
LDS Hospital	549	4.2%	5.0%	**
Logan Regional Hospital	91	4.4%	4.6%	**
McKay-Dee Hospital Center	360	3.9%	4.9%	**
Mountain View Hospital	97	4.1%	4.4%	**
Mountain West Medical Center	42	4.8%	3.8%	**
Ogden Regional Medical Center	106	3.8%	4.4%	**
Pioneer Valley Hospital	128	10.2%	4.3%	*
Salt Lake Regional Medical Center	44	15.9%	4.6%	*
St. Mark's Hospital	301	3.3%	4.5%	**
The Orthopedic Specialty Hospital	264	2.7%	4.6%	**
Timpanogos Regional Hospital	55	1.8%	4.8%	**
Uintah Basin Medical Center	35	5.7%	4.1%	**
University of Utah Hospital	622	3.5%	5.2%	**
University Orthopaedic Center	179	5.0%	3.1%	**
Utah Valley Regional Medical Center	458	5.7%	4.7%	**
Valley View Medical Center	56	1.8%	4.7%	**
Veterans Administration Medical Center	47	8.5%	4.9%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 28 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 3 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted about the same as the Expected %Readmitted Patients (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)

[View Data Limitations.](#)

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

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

Pneumonia (APR-DRG 139), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	11,730	7.3%	7.3%	**
Allen Memorial Hospital	56	10.7%	6.7%	**
Alta View Hospital	468	6.0%	7.3%	**
American Fork Hospital	386	6.0%	6.9%	**
Ashley Regional Medical Center	128	7.8%	7.0%	**
Bear River Valley Hospital	73	1.4%	6.3%	**
Beaver Valley Hospital	173	7.5%	7.1%	**
Brigham City Community Hospital	71	8.5%	6.9%	**
Castleview Hospital	322	7.1%	7.3%	**
Central Valley Medical Center-CAH	102	6.9%	6.9%	**
Cottonwood Hospital (closed)	724	6.8%	7.8%	**
Davis Hospital & Medical Center	431	9.0%	7.1%	**
Delta Community Medical Center-CAH	59	1.7%	6.6%	**
Dixie Regional Medical Center	680	6.9%	7.0%	**
Fillmore Community Medical Center-CAH	44	6.8%	6.7%	**
Garfield Memorial Hospital	90	11.1%	7.1%	**
Gunnison Valley Hospital-CAH	144	12.5%	6.1%	*
Heber Valley Medical Center-CAH	105	5.7%	7.0%	**
Intermountain Medical Center	45	2.2%	7.9%	**
Jordan Valley Medical Center	528	6.6%	7.2%	**
Kane County Hospital	87	5.7%	5.9%	**
Lakeview Hospital	405	10.6%	7.2%	*
LDS Hospital	607	5.4%	7.7%	***
Logan Regional Hospital	328	4.9%	7.4%	**
McKay-Dee Hospital Center	987	6.6%	7.6%	**
Mountain View Hospital	231	9.5%	7.4%	**
Mountain West Medical Center	149	4.7%	7.3%	**
Ogden Regional Medical Center	420	7.9%	7.5%	**
Pioneer Valley Hospital	463	8.4%	7.4%	**
Salt Lake Regional Medical Center	227	9.3%	7.4%	**

Pneumonia (APR-DRG 139), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	11,730	7.3%	7.3%	**
San Juan Hospital	56	7.1%	7.2%	**
Sanpete Valley Hospital-CAH	122	6.6%	6.2%	**
Sevier Valley Medical Center	152	5.3%	7.4%	**
St. Mark's Hospital	851	6.8%	7.6%	**
Timpanogos Regional Hospital	202	6.4%	7.1%	**
Uintah Basin Medical Center	134	5.2%	6.6%	**
University of Utah Hospital	381	9.2%	7.5%	**
Utah Valley Regional Medical Center	699	9.3%	7.5%	**
Valley View Medical Center	240	7.5%	7.2%	**
Veterans Administration Medical Center	334	9.9%	7.9%	**
<p><u>Across hospital readmissions</u> are readmitted patients who were readmitted to <u>this</u> hospital or <u>another</u> hospital within 30 days of leaving a hospital for a <u>related reason</u>.</p>				
<p>Among the 39 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower Actual % Readmitted and 2 had a higher Actual % Readmitted Patients, while the rest had an Actual %Readmitted Patients that is about the same as the Expected % Readmitted Patients (**), based on Exact 95% Confidence Intervals.</p>				
<p>See additional hospitals that treated at least one patient but less than 30 patients.</p>				
<p>View Data Limitations.</p>				
<p>Statistical Rating: based on the Exact 95% Confidence Interval test of statistical significance.</p>				
<p>*** Lower % than expected, ** same % as expected, * higher % than expected.</p>				

Stroke (APR-DRG 045), 2005-2007

Across Hospital Readmissions among Utah Resident Inpatients Age 18 Years and Older

Hospital	At Risk for Readmission	Actual %Readmitted Patients	Expected %Readmitted Patients	Statistical Rating
Utah Overall	3,966	7.09%	7.09%	**
Alta View Hospital	97	3.09%	7.05%	**
American Fork Hospital	99	6.06%	6.83%	**
Brigham City Community Hospital	31	0.00%	6.82%	**
Castleview Hospital	46	19.57%	6.79%	*
Cottonwood Hospital (closed)	159	9.43%	7.09%	**
Davis Hospital & Medical Center	154	7.79%	6.94%	**
Dixie Regional Medical Center	311	5.47%	6.84%	**
Jordan Valley Medical Center	89	6.74%	7.05%	**
Lakeview Hospital	93	10.75%	7.24%	**
LDS Hospital	343	5.54%	7.29%	**
Logan Regional Hospital	96	8.33%	7.03%	**
McKay-Dee Hospital Center	461	6.51%	7.24%	**
Mountain View Hospital	62	12.90%	7.08%	**
Ogden Regional Medical Center	134	5.97%	7.04%	**
Pioneer Valley Hospital	45	2.22%	7.35%	**
Salt Lake Regional Medical Center	52	9.62%	6.74%	**
Sevier Valley Medical Center	34	11.76%	6.90%	**
St. Mark's Hospital	286	8.04%	6.98%	**
Timpanogos Regional Hospital	56	5.36%	7.08%	**
University of Utah Hospital	593	7.08%	7.12%	**
Utah Valley Regional Medical Center	360	4.44%	7.17%	***
Valley View Medical Center	72	11.11%	7.21%	**
Veterans Administration Medical Center	90	12.22%	7.31%	**

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 23 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 1 had a lower Actual %Readmitted Patients (***) and 1 had a higher Actual %Readmitted Patients (*), while the remaining hospitals had an Actual %Readmitted that is about the same as the Expected %Readmitted (**), based on Exact 95% Confidence Intervals.

[See additional hospitals that treated at least one patient but less than 30 patients.](#)
[View Data Limitations.](#)

Learn about Primary Stroke Centers and Telestroke Facilities on the next page.

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

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

What is Telestroke in Utah?

Telestroke is a system where patients with stroke symptoms living in rural areas can be evaluated by a stroke neurologist. Stroke patients who meet certain criteria throughout Utah are given the opportunity to be prescribed clot busting medication (an effective treatment for stroke), which rural areas are usually unable to administer.

For more information about telestroke and which hospitals have telestroke capability, call the Heart Disease and Stroke Prevention Program at 1-866-88-STROKE.

What is a certified stroke center?

A certified stroke center provides stroke-related care and services that meet the unique, specialized needs of stroke patients. For example, certified stroke centers are required to have health care experts (i.e. doctors, nurses) on hand who provide 24-hour rapid response for stroke care.

As of December 2009, five hospitals in Utah have been certified as Primary Stroke Centers: Intermountain Medical Center, McKay-Dee Hospital, Ogden Regional Medical Center, University of Utah Hospital, and Utah Valley Regional Medical Center. Primary stroke facilities are reviewed every two years by the Joint Commission (TJC).