

Utah Health Status Update:

Potentially Preventable Hospital Readmissions

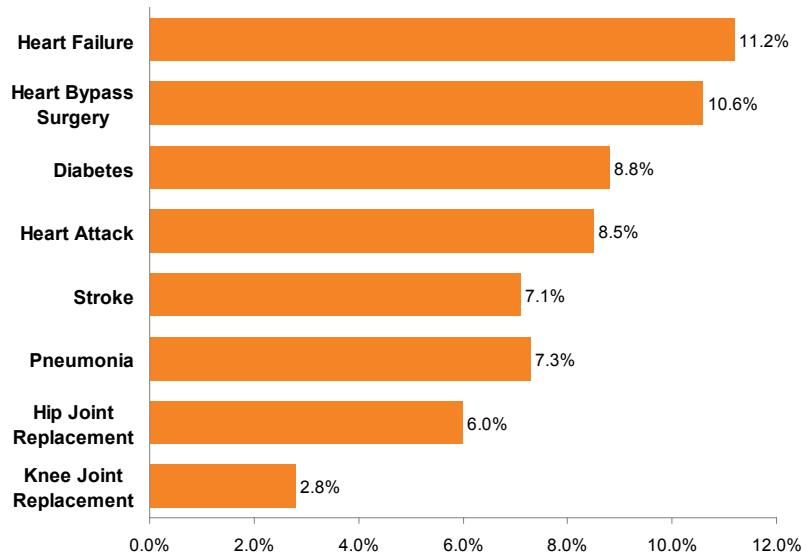
November 2010

Hospital readmissions can be costly and may indicate less than optimal quality of health care. From 2005 through 2007, more than 23,000 Utah adults—or an average of 21 people per day—were readmitted to an acute-care hospital for a clinically-related reason within 30 days of a previous hospital stay, as defined by the 3M Potentially Preventable Readmissions software. A recent report, “Readmissions to Utah Hospitals for Years 2005–2007,” by the Utah Health Data Committee examined potentially preventable hospital readmissions (PPR) for 16 medical conditions and procedures using patient-linked hospital discharge data from the Utah Hospital Discharge Database.

The potentially preventable readmission overall rate was 7.3% (23,354 readmissions out of 321,160 hospital admissions at risk for readmissions) for approximately 300 3M All

Potentially Preventable Readmission Overall

Figure 1. Overall actual rate of potentially preventable readmission within 30 days by medical condition or procedure, Utah, 2005–2007



- From 2005 through 2007, more than 23,000 Utah adults—or an average of 21 people per day—were readmitted to an acute-care hospital for a clinically-related reason within 30 days of a previous hospital stay.
- Potentially preventable readmission rates varied considerably by patients’ medical condition and procedure.
- The highest rates were found among patients having heart procedures.
- Compared to Florida, Utah had lower readmission rates for heart attack, heart bypass surgery, heart failure, pneumonia, and hip joint replacement.
- For each of the 16 conditions and procedures in this report, most hospitals had about the same actual percentage of readmitted patients as expected.
- To read the entire report, please see <http://health.utah.gov/myhealthcare/reports/readmission/index.php>.

Patient Refined Diagnosis Related Groups (APR-DRGs), combined for all adult Utah residents. APR-DRGs, developed by 3M, are a widely used classification of hierarchical, mutually exclusive medical conditions and procedures. Admissions at risk for readmission exclude maternity and newborn cases, patients who left the hospital against medical advice during a previous hospital stay, transfer patients, and patients for whom readmission is part of an accepted plan of care, such as patients with advanced cancer, multiple trauma, and severe burns. This study also excluded patients younger than 18 years of age. However, potentially preventable readmission rates varied considerably by patients’ medical condition and procedure (see Figure 1).

The report compares readmission rates for diabetes care, heart and stroke care, hip and knee care, and pneumonia care. The highest rates were found among patients having heart procedures. While no national readmission rates are currently available, Florida has released readmission findings using the same method used for the Utah Department of Health report, and several other states are adopting this method. Compared to Florida, Utah had lower readmission rates for heart attack, heart bypass surgery, heart failure, pneumonia, and hip joint replacement.

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.

For Hip Joint Replacement (as defined by APR-DRG 301), for example, among the 26 Utah short-term, acute-care hospitals that treated at least 30 hip joint replacement patients at risk for readmission, two hospitals had a lower rate and four hospitals had a higher rate of potentially preventable readmissions than expected (see Table 1). Specifically, McKay-Dee Hospital Center had an actual rate of 3.4%, compared to its expected rate of 5.9%. Alta View Hospital had an actual rate of 9.3%, compared to its expected rate of 5.6%. The remaining 20 hospitals had about the same actual rate as expected, based on the 95% Exact Confidence Interval as a test of whether the difference in the actual and expected rates was statistically significant.

The report on potentially preventable readmissions is not intended or implied to be a substitute for professional medical advice. However, its findings can serve as a spring board for discussions between patients and their health care providers, hospitals, health care plans, legislators, policy makers, and other stakeholders in the cost and quality of health care in Utah.

To read the entire report, please see <http://health.utah.gov/myhealthcare/reports/readmission/index.php>.

Hip Joint Replacement

Table 1. Hip joint replacement (APR-DRG 301) across hospital readmissions among Utah resident inpatients age 18 years and older, 2005–2007

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.

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

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

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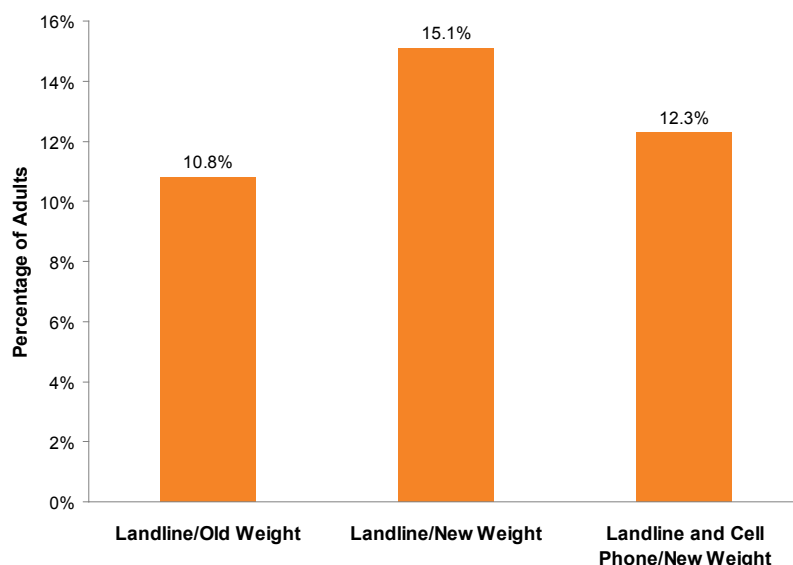
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Breaking News, October 2010

Recent Improvements to the Utah Behavioral Risk Factor Surveillance System Methodology

For the first time in the history of the Behavioral Risk Factor Surveillance System (BRFSS), starting with the 2009 survey, the data are now available for a combined sample of landline and cell phone interviews. In addition, survey researchers developed a new data weighting method that can be used with this combined dataset and better accounts for differences between the people surveyed compared to the general population. The purpose of the Utah BRFSS survey is to obtain data on health-related behaviors, health status, and healthcare access for Utah adults and children. The Utah Department of Health (UDOH), in partnership with the Centers for Disease Control and Prevention (CDC), has collected this information continuously since 1984 using landline telephone interviews. In recent years, there has been a steady and rapid increase in the percentage of people who live in cell phone-only households, especially in Utah. And studies have shown that there are differences in some of the BRFSS measures between people in households with landlines compared to those in cell phone-only households. To address these issues, the UDOH Survey Center started cell phone interviews in 2009. We believe that these improvements to the BRFSS will better allow it to represent the Utah population on these important public health measures.

Percentage of Adults With Fair or Poor Health, Utah BRFSS, 2009



Community Health Indicators Spotlight, October 2010

New Mammography Recommendations

In April 2010, the Utah Department of Health (UDOH) brought together local experts and community partners to discuss the U.S. Preventive Services Task Force (USPSTF) recommendations on breast cancer screening. As a result of the meeting, and additional internal meetings, the UDOH recommends the following breast cancer screening guidelines for the state of Utah:

The Utah Department of Health (UDOH) recommends that all Utah women age 40 and older should continue to get regular mammograms.

The UDOH strongly supports the USPSTF in emphasizing that mammography is a proven and effective way to detect breast cancer and prevent breast cancer deaths. All women who undergo mammography should receive information about its benefits and risks and Utah women are encouraged to discuss the recommendations of their personal doctor who knows their personal and family health history. The UDOH also recommends that women continue to check their own breasts and report any breast change promptly to their doctor.

In 2007 out of 1,145 Utah women who were diagnosed with breast cancer 22% or 257 were diagnosed before the age of 50.¹ Utah's mammogram screening rate (Utah: 67.2%) is one of the lowest in the nation (U.S.: 76.2%). Everyone in Utah needs to help inform and encourage women over 40 to get their mammograms.

¹ Utah Cancer Registry. Retrieved from IBIS on August 19, 2010.

Monthly Health Indicators Report

(Data Through September 2010)

Monthly Report of Notifiable Diseases, September 2010	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (Campylobacter)	13	27	318	260	1.2
Shiga toxin-producing Escherichia coli (E. coli)	4	16	64	95	0.7
Hepatitis A (infectious hepatitis)	0	1	7	10	0.7
Hepatitis B, acute infections (serum hepatitis)	0	1	5	15	0.3
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/flu				
Meningococcal Disease	0	1	1	8	0.1
Pertussis (Whooping Cough)	1	40	172	332	0.5
Salmonellosis (Salmonella)	23	28	258	268	1.0
Shigellosis (Shigella)	3	4	32	33	1.0
Varicella (Chickenpox)	11	40	232	518	0.4
Quarterly Report of Notifiable Diseases, 3rd Qtr 2010	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	10	29	60	95	0.6
Chlamydia	1,536	1,418	4,812	2,744	1.2
Gonorrhea	75	159	252	488	0.5
Tuberculosis	1	8	14	25	0.6
Medicaid Expenditures (in Millions) for the Month of September 2010	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 7.8	\$ 10.5	\$ 35.6	\$ 25.6	\$ 10.0
Inpatient Hospital	\$ 18.7	\$ 23.5	\$ 48.9	\$ 55.7	\$ (6.8)
Outpatient Hospital	\$ 8.1	\$ 10.1	\$ 19.6	\$ 25.7	\$ (6.2)
Long Term Care	\$ 13.8	\$ 15.2	\$ 36.7	\$ 38.6	\$ (1.9)
Pharmacy‡	\$ 12.1	\$ 14.9	\$ 35.5	\$ 45.6	\$ (10.1)
Physician/Osteo Services	\$ 6.2	\$ 6.9	\$ 15.3	\$ 17.2	\$ (1.9)
TOTAL HCF MEDICAID	\$ 111.4	\$ 144.2	\$ 323.7	\$ 365.1	\$ (41.4)

Program Enrollment for the Month of September 2010	Current Month	Previous Month	% Change\$ From Previous Month	1 Year Ago	% Change\$ From 1 Year Ago
Medicaid	226,181	225,703	+0.2%	201,392	+12.3%
PCN (Primary Care Network)	14,225	14,620	-2.7%	20,782	-31.6%
CHIP (Children's Health Ins. Plan)	40,675	40,975	-0.7%	41,025	-0.9%
Health Care System Measures	Annual Visits		Annual Charges		
Number of Events	Rate per 100 Population	% Change\$ From Previous Year	Total Charges in Millions	% Change\$ From Previous Year	
Overall Hospitalizations (2008)	279,504	9.4%	-2.7%	\$ 4,703.3	+10.3%
Non-maternity Hospitalizations (2008)	164,602	5.4%	-3.0%	\$ 3,924.7	+10.4%
Emergency Department Encounters (2008)	681,958	23.4%	-2.9%	\$ 879.5	+12.6%
Outpatient Surgery (2008)	299,958	10.3%	-1.9%	\$ 1,277.7	+15.2%
Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change\$ From Previous Year	State Rank¶ (1 is best)
Obesity (Adults 18+)	2009	465,600	24.0%	+3.9%	11 (2009)
Cigarette Smoking (Adults 18+)	2009	190,300	9.8%	+5.4%	1 (2009)
Influenza Immunization (Adults 65+)	2009	174,400	68.8%	-6.2%	33 (2009)
Health Insurance Coverage (Uninsured)	2009	314,300	11.2%	+4.7%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2009	227	8.1 / 100,000	-16.6%	15 (2007)
Poisoning Deaths	2009	543	19.4 / 100,000	+7.0%	49 (2007)
Suicide Deaths	2009	445	15.9 / 100,000	+15.3%	n/a
Diabetes Prevalence (Adults 18+)	2009	118,500	6.1%	+0.2%	11 (2009)
Poor Mental Health (Adults 18+)	2009	291,600	15.0%	+7.0%	19 (2009)
Coronary Heart Disease Deaths	2009	1,469	52.5 / 100,000	-4.4%	2 (2006)
All Cancer Deaths	2009	2,543	90.8 / 100,000	+1.1%	1 (2006)
Stroke Deaths	2009	734	26.2 / 100,000	-2.2%	7 (2006)
Births to Adolescents (Ages 15-17)	2008	1,122	18.5 / 1,000	-0.6%	22 (2007)
Early Prenatal Care	2008	43,997	79.1%	-0.4%	n/a
Infant Mortality	2008	264	4.7 / 1,000	-7.9%	4 (2007)
Childhood Immunization (4:3:1:3:3:1)	2009	41,500	76.6%	+4.1%	16 (2009)

* Influenza activity remains minimal in Utah. Influenza-like illness activity is below baseline statewide. As of October 20, 2010, 2 influenza-associated hospitalizations have been reported to the UDOH. More information can be found at <http://health.utah.gov/epi/diseases/flu>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ The Pharmacy Expenditure and Budget amount only includes the gross pharmacy costs. The Pharmacy Rebate and Pharmacy Part-D amounts are excluded from this line item.

§ % Change could be due to random variation.

¶ State rank based on age-adjusted rates.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile virus has ended until the 2011 season.