

# Health Facilities Data Reporting Program

# **2015 Annual Report**

June 30, 2017

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Comments, questions, or concerns about this report are welcomed. Additional information is available online at <a href="http://dhss.alaska.gov/dph/VitalStats/Pages/data/">http://dhss.alaska.gov/dph/VitalStats/Pages/data/</a>.

Customized reports are available upon request; \$75 per hour special research fee applies. For further assistance, please contact the Health Analytics Unit.

# Acknowledgments

Data presented in this report are based upon information supplied by hospitals and other health care facilities across the state. Thank you for your participation. A full listing of facilities is included in Appendix II.

The Hospital Industry Data Institute (HIDI) serves as our data warehouse, working with facilities to collect data and returning a cleaned and encrypted file back to the state. We are grateful for their efforts.

We also acknowledge the Alaska State Hospital and Nursing Home Association (ASHNHA) for its substantial input into the Health Facility Data Reporting Program.

The Health Analytics and Vital Records Section staff extends our gratitude to each person who participates in our data gathering effort. Accurate data are essential to the Section's effort to contribute to public health efforts in Alaska.

# I. EXECUTIVE SUMMARY

This is the first annual report of the Health Facilities Data Reporting (HFDR) program of the Alaska Department of Health and Social Services, Division of Public Health, Health Analytics and Vital Records Section. This annual report will serve as both an update on the program management activities as well as a summary of the data reported for discharges during the period January 1, 2015 to December 31, 2015.

Discharge data are useful for both public health purposes and for administrative purposes. Data are used to answer questions about the frequency of hospitalizations for injuries, illness, and other health conditions, and to identify disparities in hospitalization rates. Additionally, discharge data show patient migration to seek care in other geographic areas, market share, billed charges, and volume.

Health Facilities Data Reporting is the continuation of a hospital discharge data reporting program that operated as a voluntary partnership between the Department, hospitals, and the Alaska State Hospital and Nursing Home Association (ASHNHA). Inpatient data were collected beginning in 2001, and outpatient data were collected beginning in 2008. These datasets contain a subset of Alaska hospitals. Reporting largely ceased after 2012, and the partial data submitted during the 2013-2014 period are not currently in use by the Department.

Calendar year 2015 was the first year of mandatory discharge data reporting under regulations 7 AAC 27.660. During this period, 23 hospitals, 13 ambulatory surgery centers, 16 nursing homes, and 1 independent diagnostic testing facilities submitted data. Two community hospitals and two military hospitals were excluded from this report as inclusion criteria for data submission were not met. These data represent the first year of data under the new reporting requirement and will serve as a baseline going forward.

The data collected through this effort comprise two datasets: the Alaska Inpatient Dataset and the Alaska Outpatient Dataset. The inpatient dataset, with about 61,000 records, contains inpatient services in the acute medical/surgical units, psychiatric units, medical rehabilitation units, alcohol and drug rehabilitation units, and alternate levels of care which includes skilled nursing facilities, long term care, and swing beds.<sup>1</sup> The outpatient data, with about 1.2 million records, contains emergency department, observation, outpatient surgery, and other outpatient, which includes laboratory, imaging, and other outpatient services.

Copies of the datasets are available to researchers, public health programs, and participating health care facilities; the 2015 dataset has been distributed to ten entities as of this publication. Special requests for reports and queries are also available from Department staff, in addition to the development of regular standard reports.

Key findings from 2015 data include:

- The 2015 data comprise over \$6.1 billion in billed charges (\$3.3 billion inpatient, \$2.8 billion outpatient)
- Inpatient hospitalization data show that childbirth and newborns are the most common reasons for hospital admission in Alaska, followed by major joint replacement and sepsis or septicemia.
- The most expensive (highest median charges) categories of inpatient hospitalizations are extensive burns with skin grafts and extracorporeal membrane oxygenation; however, higher-frequency but lower cost hospitalization categories, including vaginal delivery, total greater sums of billed charges.
- The most frequent external causes of injury listed for emergency department visit were accidental strikes and falls, but motor vehicle accidents, assault, and injury by animals were also in the top ten.

<sup>&</sup>lt;sup>1</sup> Swing beds may be used as needed to provide either acute or SNF care under an agreement with the Center for Medicare and Medicaid Services. See: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SNFPPS/SwingBed.html.

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# **II. PROGRAM OVERVIEW**

# **A. Introduction**

This report summarizes the data submitted by facilities under 7 Alaska Administrative Code (AAC) 27.660 Reporting of discharge data, also known as the Health Facility Data Reporting program (HFDR). The purpose of this report is to provide information on the program's administration, progress to date and current actions, and to report summary data for discharges occurring between January 1, 2015 and December 31, 2015. This report reflects data submitted by facilities as of September 8, 2016.

The HFDR collects inpatient and outpatient discharge data from Alaska health care facilities including private, municipal, state, or federal hospitals; hospitals operated by Alaska Native organizations; psychiatric hospitals; independent diagnostic testing facilities; residential psychiatric treatment centers; skilled nursing facilities; intermediate care facilities; and ambulatory surgical facilities. The data collected comprise the Alaska Inpatient Dataset and the Alaska Outpatient Dataset.

Data come from billing records and include diagnosis and procedure codes, length of stay, billed charges, expected source of payment, and patient demographics for each hospital discharge. Reporting burden for facilities is minimized by relying on industry-standard Uniform Billing data and electronic transmission.

Health facilities discharge data show utilization of health services and provide evidence of the conditions for which people receive treatment. Data provide valuable information for decision makers at all levels, monitoring emerging issues in health status and health service delivery, and need for expanded services and facilities. Population health status assessment, analysis of health care utilization trends, and health system planning are examples of uses of the data from the reporting program.

# **B. Background**

## Hospital Discharge Data Set

The precursor to HFDR, Alaska's Hospital Discharge Data Set (HDDS) was developed in 2001, with hospitals agreeing to a voluntary participation approach to reporting inpatient discharge data. Outpatient discharges were added in 2008, bringing hospital emergency department, ambulatory surgery, and imaging data into the program. Between 2001 and 2012, the Department of Health and Social Services provided grant funding to Alaska State Hospital and Nursing Home Association (ASHNHA) to facilitate the reporting process and provide data to the Department under a Memorandum of Understanding governing data security, confidentiality, and data use.

There are limitations to using these data because they are not representative of the state; many rural hospitals, small tribal hospitals, and military hospitals were not participating in the data collection. Over time, hospital participation varied, with 17 of 27 Alaska hospitals reporting data at any point between 2001 and 2014. There were 10 hospitals that reported consistently over the 2003-2012 period, making some longitudinal analysis possible. At its peak, the program contained roughly 80% of the state's inpatient discharges. The years 2013 and 2014 contain very limited data and are not currently in use by the Department.

### Regulations

Increasing public and policy-maker interest in health status, healthcare costs, and healthcare quality provided impetus for a more robust data program. Regulations to mandate reporting, 7 AAC 27.660 Article 14. *Health Care Facility Discharge Data Reporting*, became effective December 13, 2014 and apply to discharges occurring on or after January 1, 2015.

The following types of facilities are required to report: private, municipal, state, or federal hospitals; hospitals operated by Alaska Native organizations; psychiatric hospitals; independent diagnostic testing

facilities; residential psychiatric treatment centers; skilled nursing facilities; intermediate care facilities; and ambulatory surgical facilities. Military hospitals in Alaska are requested to report, but not mandated.

Under 7 AAC 27.660, discharge data reporting is required for facilities which are providers of Medicaid services subject to 7 AAC 105 – 7 AAC 160 or subject to licensure under AS 47.32 and 7 AAC 12. Facilities which are required to report but do not may be referred to the Division of Health Care Services to determine whether sanctions may be appropriate under Medicaid or Facilities Licensing and Certification.

### **Data Collection Process**

Data files are uploaded quarterly by facilities via a secure portal to the Hospital Industry Data Institute (HIDI), the data company of the Missouri Hospital Association, a vendor that the Department of Health and Social Services has contracted to collect, validate, encrypt, and clean facility data. After submitting data to HIDI, facilities are notified when an error report is generated. This report contains documentation of all the records that were flagged by the automatic validation process. This process checks for invalid or missing data as well as flagging some fields based on logical tests or to request verification of uncommon values.

Facilities have 30 days following the initial submission due date to review the error validation reports and, if necessary, provide a corrected dataset to HIDI.

At the end of the reporting period, a clean data file is returned to the Department by HIDI. Department staff import the file into Statistical Analysis System (SAS), calculate new fields to facilitate data analysis, and look for other possible errors or inconsistencies in the data. If issues are identified, staff will work directly with facilities to address the issue, which may include submitting a replacement data set to HIDI. After this process is complete, datasets are made available for distribution.

# C. Purpose

#### Data Use

The Department of Health and Social Services uses data from the Health Facilities Data Reporting Program for public health planning, injury and disease surveillance, and health services research. Data contribute to quality assessment and performance improvement activities, community health status assessments, and informing policy deliberations. As a longitudinal data set, trends can be monitored over time; standardization enables comparison to national benchmarks.

Facilities also benefit from discharge reporting; data are available for monitoring quantity and quality, market share, readmissions, and other quality improvement and planning activities. Participating facilities may request a copy of the dataset to work with directly, and may also request customized analyses from the Department.

Because the dataset contains individual discharge records with charge data, there is interest in what these data can tell us about healthcare costs in the state. However, there are some important differences between discharge data and an all-payer claims database (APCD). The HFDR consists of inpatient and outpatient discharge records provided by facilities. The only financial data included are billed charges and anticipated payer type. An APCD collects claims and payment data from public payers and private insurers, which can vary greatly from hospital charges after negotiations and discounts. Alaska does not currently have an APCD.

#### Data Release

Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), a limited data set may be released for certain approved purposes provided that a data use agreement is in place between the user

and the Department. The data may be used only for public health practice, research, and healthcare operations purposes.

Alaska facilities may request the statewide dataset for healthcare operations purposes provided that they are in compliance with the required reporting. The healthcare operations dataset includes diagnosis, procedure, and patient demographic information, but does not include billed charges.

All limited data set requests must include a signed data use agreement, an explanation of the research or other purpose of the request, and a justification for each variable requested. Data are transmitted via a secure data transfer method. The 2015 inpatient dataset contains about 61,000 discharge records, and the outpatient dataset contains about 1.2 million records.

#### Dataset requests

To date, 2015 health care operations inpatient and outpatient datasets have been requested and distributed to four health care facilities in the state, and to the Alaska Hospital and Nursing Home Association.

Research datasets have been requested and distributed to four sections of the Division of Public Health and to the Alaska Native Tribal Health Consortium.

An inpatient dataset was also provided to the Healthcare Cost and Utilization Project (HCUP) of the Agency for Healthcare Research and Quality (AHRQ) for inclusion in the National Inpatient Sample. This dataset is used for health services research and policy analysis on the national level, with 48 states submitting data.

#### Data analysis requests

The Department has used 2015 HFDR data in analyses covering a broad range of public health topics in response to inquiries, legislative requests, media requests, and grant reporting requirements, in addition to publishing bulletins and briefs on topics of interest. As of the publication of this report, the following topics have been examined using HFDR data:

- Marijuana-related hospitalizations
- Opioid-related hospitalizations and emergency department visits (heroin and prescription opioids)
- Alcohol-related emergency department visits
- Self-harm emergency department visits
- Pneumonia-related hospitalizations
- Dental-related emergency department visits
- Potentially preventable hospitalizations
- Billed charges by diagnosis group, by frequency, median charges, and total charges
- Tobacco-related cancer hospitalizations
- Diabetes-related hospitalizations
- Endocarditis hospitalizations

## D. Continuous quality improvement

#### Timelines

With 2015 being the first year of the new reporting program, many new processes and procedures were developed by the Department of Health and Social Services to outline data sharing, reporting, and other policies. At the same time, most facilities were submitting data for the first time, and needed to work with

their own IT staff, electronic health record vendors, and other personnel to develop reporting processes, onboard with the data submission process, and correct errors in the files.

In an effort to have a more complete, and higher quality dataset, extra time was given to facilities to submit data, and 2015 data were made available by request beginning in October 2016.

Over the coming year, the program's focus is to balance data quality with stakeholder needs for timely access to data for decision-making purposes. Calendar year 2016 data is on target to be released in late June 2017. Calendar year 2017 data will be released on a quarterly schedule. Quarterly data releases will be considered preliminary, but will enable quicker access to data. Many facilities, researchers, and the Alaska State Hospital and Nursing Home Association have emphasized the importance of timely access to data for quality improvement and other activities. We remain aware of the time needed to collect and validate quality data, but also require timely input from facilities. We anticipate that this will continue to improve in the coming years.

### Funding/program sustainability

In late 2016, the program was moved from the Section of Health Planning and Systems Development to the Health Analytics and Vital Records Section (formerly Bureau of Vital Statistics), also within the Division of Public Health.

This reorganization enabled HFDR to charge fees for special request data analysis and data access. This will help ensure the sustainability of the resources required to operate the program. These fees help offset the program costs, which include staff time, computer resources, and the cost of the contract to manage data collection.

# III. DATA HIGHLIGHTS

#### Technical notes

The following charts and tables provide summary information from the inpatient and outpatient datasets. Detailed data tables are provided in Appendix I.

Charges as reported here are billed charges, which may differ significantly from what is ultimately paid and settled by insurance companies and other payers. Primary payer code is the expected payer at the time of the hospitalization. Wherever billed charges are presented, at least three facilities' data are included in the total in order to mask individual facilities' charge amounts.

Inpatient records are reported by hospitals and long term care/skilled nursing facilities. Subgroups of admission types are based on Place of Service Codes as defined by the UB-04 reporting format, which comprise the following categories: acute medical-surgical unit, psychiatric unit or facility, medical rehabilitation unit or facility, and skilled nursing facility/intermediate care facility/long-term care/hospice/sub-acute/swing bed.

Inpatient hospital discharges are grouped by principal diagnosis into Major Diagnostic Categories (MDC) and Medicare Severity-Diagnosis-Related Groups (DRG). Emergency department discharges are also grouped by principal diagnosis into MDCs. These groups comprise a system to classify hospital cases into groups for administrative and billing purposes. The MDCs encompass 28 major categories, and the DRGs are more specific, with hundreds of categories. 3M grouper software version 32 was used for grouping discharges into DRGs and MDCs from January through September 2015, and 3M grouper version 33 was used for October through December 2015, corresponding with the change from International Classification of Diseases, 9<sup>th</sup> Revision (ICD-9) to International Classification of Diseases, 10<sup>th</sup> Revision (ICD-10) on October 1, 2015.

DRGs coded as "ungroupable" (about 1.6% of records) are excluded from DRG tables and analysis. These records have missing fields or other inconsistencies that prevent accurate assignment by the grouping software.

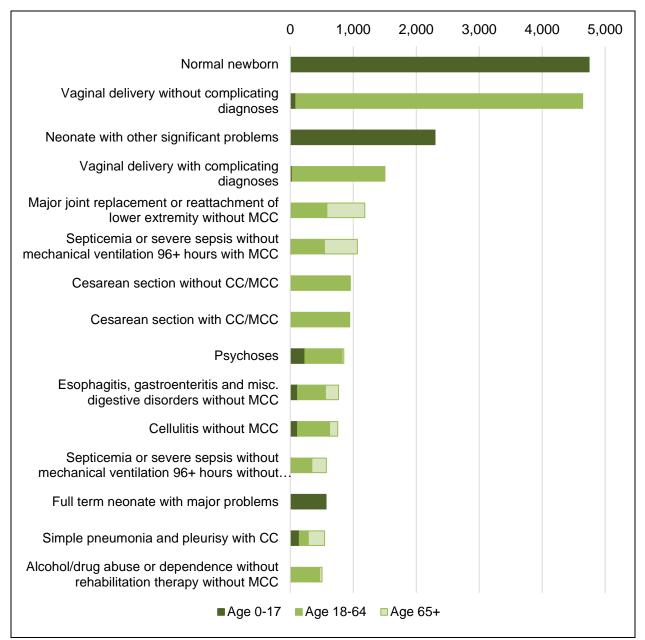
Outpatient records are reported by hospitals, ambulatory surgery centers, and independent diagnostic testing facilities. Categories of outpatient service types are emergency department, outpatient surgery, outpatient observation, and "other outpatient." Other outpatient includes imaging, labs, and other services. Because different facility types reported using both Healthcare Common Procedure Coding System (HCPCS) level I / Current Procedural Terminology (CPT) and HCPCS level II codes, direct comparison is difficult.

The unit of analysis for inpatient and emergency department records is one discharge/visit. A single patient could have multiple inpatient or emergency department visits in a single year, and each of these would be counted once. A discharge record can contain one principal diagnosis and up to 29 secondary diagnoses. Procedure codes may be reported in inpatient records; however, most analysis focuses on diagnosis codes. Unless specified, the tables refer to principal diagnoses only. A separate revenue code file is generated in which the unit of analysis is a procedure. A single patient could have multiple procedures during a single visit.

All data are reported as of September 8, 2016. Two hospitals did not submit data in time to be included in the report. Where population rates are shown, they have been calculated using an adjusted population to account for the missing hospital's service area. A list of included facilities is found in Appendix II.

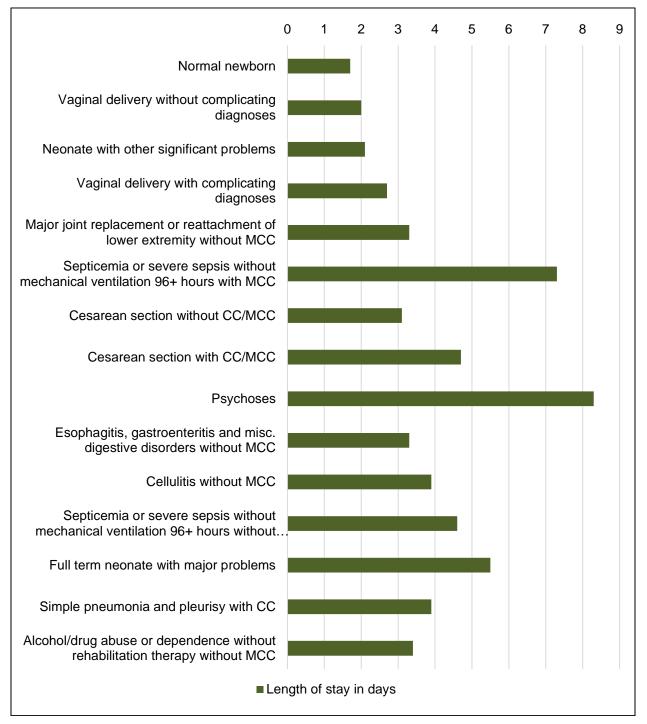
# What types of inpatient hospitalizations are the most common and what are their characteristics?

Figure 1 shows the most common 15 Diagnosis-Related Groups by age group. Newborns comprise 3 of the 15 most frequent DRGs, however, these data illustrate that of the top 15 DRGs by admissions, major joint replacement and septicemia have the largest share of adults aged 65 and over.



## Figure 1. Top 15 Diagnosis-Related Groups by age group Inpatient, statewide, 2015

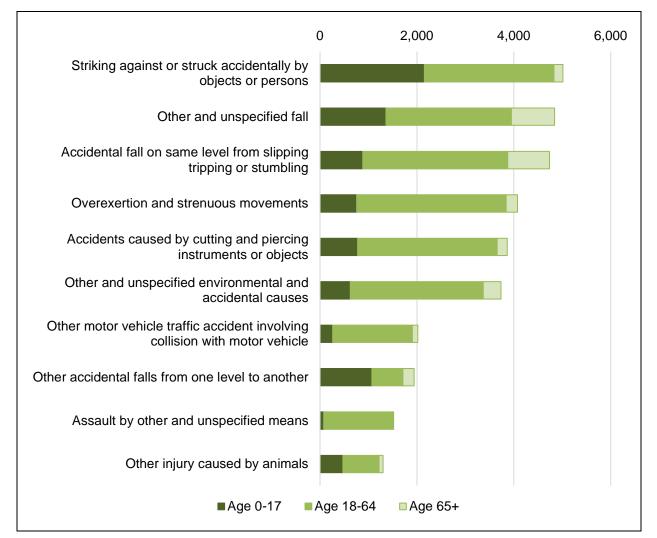
\* MCC = Major complication or comorbidity CC = complication or comorbidity Figure 2 shows the average length of stay in days for the top 15 DRGs. Normal newborn, the most frequent DRG, has the shortest average length of stay among the top 15, at below two days. Among the top 15 DRGs, septicemia with major complicating condition and psychoses both had an average length of stay of more than one week.



# Figure 2. Top 15 Diagnosis-Related Groups, average length of stay in days Inpatient, statewide, 2015

### What external factors cause emergency department visits due to injury?

Figure 3 lists the top categories of first-listed external cause of injury codes ("e-codes") included in emergency department records. Seventeen percent of emergency department records have at least one e-code listed to indicate an external cause of injury. Accidental strikes or falls were the most common causes of injury, but assault, motor vehicle accidents, and injury caused by animals are also among the top ten.



### Figure 3. Top 10 external cause of injury codes, by age group Emergency department, statewide, 2015

\* Limited to quarters 1-3 of 2015 due to ICD-9 to ICD-10 transition Grouped by first 3 digits of external cause of injury code

### When do people seek care?

The heat maps in Tables 1 and 2 provide a visualization of the most frequently-occurring dates and times of emergency department visits and inpatient hospital admissions.

Emergency department visits peak during business hours and are lowest between 3 a.m. and 6 a.m. Monday is the day of the week with the most visits, followed by Sunday and Saturday; visit times remain stable throughout the week.

Inpatient admissions are also more frequent during business hours with a sharp uptick at 5:00 a.m. on weekdays, reflecting scheduling of surgeries. Weekend days have fewer admissions than weekdays.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight	1,114	973	961	1,003	959	977	1,054	7,041
1:00 a.m.	860	752	773	723	756	737	803	5,404
2:00 a.m.	689	594	584	606	582	591	647	4,293
3:00 a.m.	593	511	523	510	516	522	599	3,774
4:00 a.m.	521	491	411	440	469	412	544	3,288
5:00 a.m.	499	497	446	431	446	410	496	3,225
6:00 a.m.	549	589	541	527	518	506	564	3,794
7:00 a.m.	739	837	769	756	742	721	723	5,287
8:00 a.m.	1,039	1,305	1,236	1,115	1,229	1,101	1,043	8,068
9:00 a.m.	1,431	1,794	1,632	1,573	1,545	1,447	1,434	10,856
10:00 a.m.	1,903	1,997	1,730	1,795	1,751	1,816	1,771	12,763
11:00 a.m.	2,182	2,175	1,927	1,954	1,971	1,934	1,931	14,074
Noon	2,159	2,216	1,966	1,865	2,003	2,002	2,065	14,276
1:00 p.m.	2,339	2,223	2,030	1,955	1,864	2,114	2,236	14,761
2:00 p.m.	2,400	2,225	2,017	1,955	2,102	1,996	2,121	14,816
3:00 p.m.	2,202	2,144	1,925	1,967	2,040	1,980	2,095	14,353
4:00 p.m.	2,184	2,197	1,999	1,958	2,059	2,049	2,153	14,599
5:00 p.m.	2,139	2,291	2,107	2,108	2,051	2,107	2,119	14,922
6:00 p.m.	2,168	2,306	2,241	2,165	2,144	2,128	2,135	15,287
7:00 p.m.	2,129	2,266	2,199	2,079	2,148	1,933	1,970	14,724
8:00 p.m.	1,990	2,073	2,012	2,009	1,990	1,957	1,958	13,989
9:00 p.m.	1,722	1,882	1,840	1,829	1,808	1,795	1,900	12,776
10:00 p.m.	1,601	1,620	1,515	1,535	1,575	1,542	1,737	11,125
11:00 p.m.	1,264	1,264	1,280	1,236	1,223	1,375	1,402	9,044
Total	36,416	37,222	34,664	34,094	34,491	34,152	35,500	246,539

# Table 1. Number of emergency department visits by day of week and hourEmergency Department, statewide, 2015

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight	385	247	371	355	430	259	304	2,351
1:00 a.m.	206	216	240	235	253	233	222	1,605
2:00 a.m.	169	208	210	212	193	222	230	1,444
3:00 a.m.	186	190	208	200	184	171	192	1,331
4:00 a.m.	179	166	171	189	167	175	189	1,236
5:00 a.m.	187	452	496	551	495	480	204	2,865
6:00 a.m.	159	532	542	523	351	400	169	2,676
7:00 a.m.	185	426	392	400	332	346	209	2,290
8:00 a.m.	195	472	540	457	465	517	257	2,903
9:00 a.m.	259	459	529	452	431	457	252	2,839
10:00 a.m.	266	489	517	537	450	497	258	3,014
11:00 a.m.	294	490	503	518	526	483	304	3,118
Noon	299	508	503	505	460	473	292	3,040
1:00 p.m.	300	536	537	498	506	505	312	3,194
2:00 p.m.	307	572	552	523	494	478	332	3,258
3:00 p.m.	312	480	517	505	535	524	300	3,173
4:00 p.m.	320	497	570	521	513	532	323	3,276
5:00 p.m.	332	467	493	503	501	490	333	3,119
6:00 p.m.	301	484	493	456	477	442	317	2,970
7:00 p.m.	275	341	399	363	368	394	311	2,451
8:00 p.m.	304	421	431	376	391	376	331	2,630
9:00 p.m.	281	383	347	340	322	366	318	2,357
10:00 p.m.	258	294	329	319	317	382	308	2,207
11:00 p.m.	268	296	292	307	316	313	252	2,044
<u>,</u>								
Total	6,227	9,626	10,182	9,845	9,477	9,515	6,519	61,391

# Table 2.Number of admissions by day of week and hourInpatient, statewide, 2015

### Where do people seek care?

Table 3 shows that the majority of inpatient medical/surgical admissions are in the patient's home region; however, some migration to the Anchorage region is observed.

The Northern region is the one exception, with more hospitalizations for Northern region residents in the Anchorage region reported than in the Northern region. However, these numbers do not include data for the facility serving the Northwest Arctic Borough, which may affect these rates.

The Anchorage region is a major destination for residents of all regions; 45% of hospitalizations for residents of the Southwest region, 36% of hospitalizations for Matanuska-Susitna residents, and 26% of reported hospitalizations for residents of the Gulf Coast region were in Anchorage region facilities.

	Patient Region												
Facility Region**	Anchorage	Gulf Coast	Interior	Matanuska- Susitna	Northern	Southeast <sup>†</sup>	Southwest <sup>†</sup>						
Anchorage	18,643	1,936	854	2,633	1,710	692	1,980						
Gulf Coast	89	5,361	15	18	2	6	8						
Interior	29	17	4,577	9	46	5	6						
Matanuska-Susitna	167	57	29	4,595	3	5	3						
Northern <sup>†</sup>	20	5	6	4	1,198	0	2						
Southeast <sup>†</sup>	6	1	2	2	0	2,484	1						
Southwest	14	1	9	0	4	0	2,426						

# Table 3. Comparison of patient residence region and facility region\*Inpatient (medical/surgical), statewide, 2015

\* Public Health Regions defined by Alaska Division of Public Health.

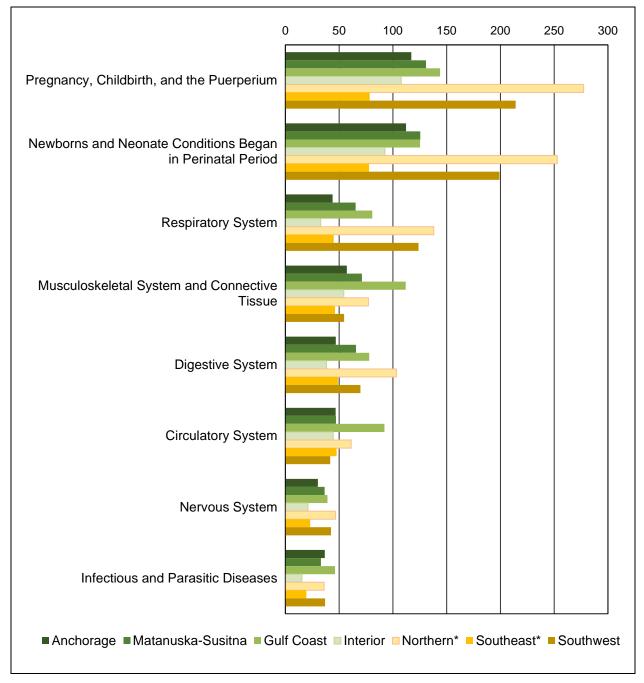
\*\* Out-of-state hospital admissions are not currently collected by the Department and not reflected in these counts. Non-Alaska residents hospitalized in Alaska are excluded.

† Excluded facilities: Maniilaq Association (Northern Region) and PeaceHealth Ketchikan (Southeast Region).

## Are there regional differences in types of admissions?

Figure 4 shows that while the overall ranking Major Diagnostic Categories is similar between the seven public health regions of the state, differences exist in the population rates. The rate for hospitalizations in the musculoskeletal system and connective tissue MDC is highest for the Gulf Coast region, while the highest rates for pregnancy-related, newborns, and respiratory system-related hospitalizations are highest in the Northern and Southwest regions of the state.

# Figure 4. Hospitalization rates per 10,000 population by Major Diagnostic Categories,



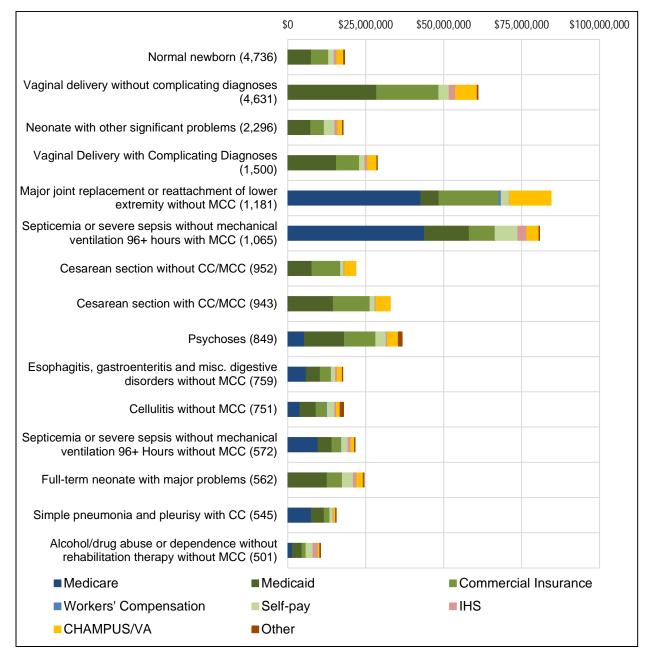
Inpatient, by region, 2015

\* Excluded facilities: Maniilaq Association (Northern Region) and PeaceHealth Ketchikan (Southeast Region).

### What differences in hospitalizations are observed between payer types?

Figure 5 shows that major joint replacement and septicemia are more likely to have Medicare as a primary payer, which is consistent with the age at which patients are more likely to have these conditions. Seven of the top 15 most frequent DRGs are related to childbirth. These hospitalizations are more likely to have Medicaid or commercial insurance as the primary payer. This chart also illustrates that total billed charges of certain lower-volume hospitalizations such as major joint replacement are higher than the total billed for the most frequent DRG types (newborns and deliveries) due to higher average perhospitalization charges.

### Figure 5. Top 15 Diagnosis-Related Groups by primary payer type Total billed charges (number of hospitalizations) Inpatient, statewide, 2015



### What types of visits are the most expensive?

Table 4 lists the top Diagnosis-Related Groups by frequency of inpatient hospitalizations, median billed charges, and sum of billed charges. This table illustrates that some low-volume high-cost types of hospitalizations total more billed charges than the highest-volume lower-charge hospitalizations. Median billed charges total more than \$500,000 for the two most expensive Diagnosis-Related Groups.

# Table 4. Top 10 Diagnosis-Related Groupsby frequency, median charges, and total chargesInpatient (medical/surgical), statewide, 2015

	Diagnosis-Related Group	Number of hospitalizations	Mean billed charges	Median billed charges	Sum of billed charges
795	Normal newborn	4,744	\$4,025	\$3,275	\$19,092,977
775	Vaginal delivery without complicating diagnoses	4,643	\$13,779	\$12,055	\$63,975,009
794	Neonate with other significant problems	2,298	\$8,011	\$4,725	\$18,409,128
774	Vaginal delivery with complicating diagnoses	1,502	\$19,888	\$16,222	\$29,871,491
470	Major joint replacement or reattachment of lower extremity without MCC	1,184	\$74,911	\$70,859	\$88,694,150
871	Septicemia or severe sepsis without mechanical ventilation, 96+ hours with MCC	1,097	\$80,988	\$52,752	\$88,843,391
766	Cesarean section without CC/MCC	954	\$23,891	\$21,924	\$22,791,607
765	Cesarean section with CC/MCC	944	\$37,010	\$27,286	\$34,937,349
885	Psychoses	849	\$49,789	\$40,930	\$42,270,792
392	Esophagitis, gastroenteritis & misc. digestive disorders without MCC	766	\$24,052	\$19,651	\$18,423,968
927	Extensive burns or full thickness burns with mechanical ventilation, 96+ hours with skin graft	1	\$666,429	\$666,429	\$666,429
3	ECMO or tracheostomy with mechanical ventilation, 96+ hours or PDX except face, mouth and neck	52	\$658,525	\$590,122	\$34,243,308
625	Thyroid, parathyroid & thyroglossal procedures with MCC	1	\$480,750	\$480,750	\$480,750
4	Trach with mechanical ventilation, 96+ hours or PDX excluding face, mouth & neck without major OR	35	\$517,609	\$449,114	\$18,116,328
268	Aortic and heart assist procedures except pulsation balloon with MCC	2	\$421,395	\$421,395	\$842,789
216	Cardiac valve & other major cardiothoracic procedure with cardiac catheterization with MCC	20	\$438,770	\$413,848	\$8,775,400
653	Major bladder procedures with MCC	2	\$401,389	\$401,389	\$802,777
790	Extreme immaturity or respiratory distress syndrome, neonate	133	\$577,526	\$374,902	\$76,811,008
232	Coronary bypass with PTCA without MCC	1	\$369,206	\$369,206	\$369,206
217	Cardiac valve & other major cardiothoracic procedure cardiac catheterization with CC	6	\$353,622	\$358,598	\$2,121,730
871	Septicemia or severe sepsis without mechanical ventilation, 96+ hours with MCC	1,097	\$80,988	\$52,752	\$88,843,391

470	Major joint replacement or reattachment of lower extremity without MCC	1,184	\$74,911	\$70,859	\$88,694,150
790	Extreme immaturity or respiratory distress syndrome, neonate	133	\$577,526	\$374,902	\$76,811,008
775	Vaginal delivery without complicating diagnoses	4,643	\$13,779	\$12,055	\$63,975,009
791	Prematurity with major problems	258	\$210,503	\$120,897	\$54,309,761
460	Spinal fusion except cervical without MCC	374	\$135,961	\$115,483	\$50,849,351
853	Infectious and parasitic diseases with OR procedure with MCC	217	\$197,906	\$147,417	\$42,945,564
885	Psychoses	849	\$49,789	\$40,930	\$42,270,792
765	Cesarean section with CC/MCC	944	\$37,010	\$27,286	\$34,937,349
3	ECMO or tracheostomy with mechanical ventilation, 96+ hours or PDX except face, mouth and neck	52	\$658,525	\$590,122	\$34,243,308

Table 5 lists the top Major Diagnostic Categories by frequency of emergency department visits, median billed charges, and sum of billed charges. The most common Major Diagnostic Category of emergency department visits is "diseases and disorders of the skin, subcutaneous tissue, and breast," while the MDC with the highest median billed charges is "diseases and disorders of the hepatobiliary system and pancreas."

# Table 5. Top 10 Major Diagnostic Categoriesby frequency, median charges, and total chargesEmergency Department, statewide, 2015

	Major Diagnostic Categories	Number of ED visits	Mean billed charges	Median billed charges	Sum of billed charges
9	Diseases and disorders of the skin, subcutaneous tissue and breast	36,823	\$1,667	\$1,168	\$61,386,406
8	Diseases and disorders of the musculoskeletal system and connective tissue	36,539	\$2,161	\$1,543	\$78,975,905
3	Diseases and disorders of the ear, nose, mouth and throat	30,092	\$1,473	\$1,066	\$44,316,067
6	Diseases and disorders of the digestive system	28,297	\$3,693	\$2,868	\$104,499,742
4	Diseases and disorders of the respiratory system	19,654	\$2,839	\$1,869	\$55,806,014
5	Diseases and disorders of the circulatory system	15,790	\$4,565	\$4,107	\$72,082,176
1	Diseases and disorders of the nervous system	13,331	\$3,648	\$2,506	\$48,630,121
23	Factors influencing health status and other contacts with health services	12,133	\$1,968	\$1,020	\$23,873,628
11	Diseases and disorders of the kidney and urinary tract	10,645	\$3,256	\$2,153	\$34,664,032
20	Alcohol/drug use or induced mental disorders	9,860	\$2,053	\$1,239	\$20,240,494
7	Diseases and disorders of the hepatobiliary system and pancreas	1421	\$4,897	\$4,293	\$6,959,215

5	Diseases and disorders of the circulatory system	16183	\$4,578	\$3,736	\$74,085,217
25	Human immunodeficiency virus infection	13	\$4,037	\$3,457	\$52,483
17	Myeloproliferative DDs (poorly differentiated neoplasms)	74	\$4,506	\$3,367	\$333,474
10	Diseases and disorders of the endocrine, nutritional and metabolic system	2689	\$3,464	\$2,948	\$9,313,506
6	Diseases and disorders of the digestive system	28297	\$3,693	\$2,868	\$104,499,742
16	Diseases and disorders of the blood and blood forming organs and immunological disorders	924	\$3,855	\$2,554	\$3,561,564
14	Pregnancy, childbirth and puerperium	5896	\$2,785	\$2,528	\$16,419,823
13	Diseases and disorders of the female reproductive system	3847	\$3,181	\$2,513	\$12,237,577
1	Diseases and disorders of the nervous system	13331	\$3,648	\$2,506	\$48,630,121
6	Diseases and disorders of the digestive system	28,297	\$3,693	\$2,868	\$104,499,742
8	Diseases and disorders of the musculoskeletal system and connective tissue	36,539	\$2,161	\$1,543	\$78,975,905
5	Diseases and disorders of the circulatory system	15,790	\$4,565	\$4,107	\$72,082,176
9	Diseases and disorders of the skin, subcutaneous tissue and breast	36,823	\$1,667	\$1,168	\$61,386,406
4	Diseases and disorders of the respiratory system	19,654	\$2,839	\$1,869	\$55,806,014
1	Diseases and disorders of the nervous system	13,331	\$3,648	\$2,506	\$48,630,121
3	Discourse and discurdance of the easy many	30,092	\$1,473	\$1,066	\$44,316,067
	Diseases and disorders of the ear, nose, mouth and throat	30,032	φ1,+70	¢.,000	
11		10,645	\$3,256	\$2,153	\$34,664,032
	mouth and throat Diseases and disorders of the kidney and				
23	mouth and throat Diseases and disorders of the kidney and urinary tract Factors influencing health status and other	10,645	\$3,256	\$2,153	\$34,664,032

# **APPENDIX I: DETAILED DATA TABLES**

# A. Inpatient

# Table 6.Major Diagnostic Categories by frequencyAge group and average length of stayInpatient, statewide, 2015

Major Diagnostic Category	Total discharges	Age 0-17	Age 18-64	Age 65+	Average length of stay (days)
Pregnancy, childbirth, and the puerperium	9,213	151	9,062	0	2.7
Newborns and neonate conditions began in perinatal period	8,522	8,521	1	0	3.8
Musculoskeletal system and connective tissue, diseases & disorders	4,724	209	2,757	1,758	4.8
Respiratory system, diseases & disorders	4,222	901	1,575	1,746	6.3
Digestive system, diseases & disorders	4,086	440	2,337	1,309	5.1
Circulatory system, diseases & disorders	3,893	67	1,702	2,124	5.6
Infectious and parasitic diseases	2,417	140	1,313	964	7.7
Nervous system, diseases & disorders	2,350	261	1,179	910	6.4
Kidney and urinary tract, diseases & disorders	1,457	100	674	683	5
Hepatobiliary system and pancreas, diseases & disorders	1,371	17	1,067	287	4.7
Mental diseases & disorders	1,228	351	761	116	8
Endocrine, nutritional, and metabolic, diseases & disorders	1,220	180	729	311	4.3
Skin, subcutaneous tissue and breast, diseases & disorders	1,211	167	814	230	4.9
Injuries, poisonings, and toxic effects of drugs	950	126	674	150	5.1
Pre-MDC*	755	168	470	117	3.2
Alcohol-drug use and alcohol-drug induced organic mental diseases	697	13	630	54	3.6
Female reproductive system, diseases & disorders	532	13	457	62	2.6
Factors on health status & other contacts with health services	483	33	228	222	9.1
Ear, nose, mouth, & throat, diseases & disorders	474	199	183	92	3.4
Blood, blood forming organs, immunological, diseases & disorders	427	93	198	136	5
Myeloproliferative diseases & poorly differentiated neoplasms	255	95	111	49	7.3
Multiple significant trauma	181	31	126	24	10.8
Male reproductive system, diseases & disorders	146	3	79	64	3
Eye, diseases & disorders	53	15	25	13	3.4
Burns	45	16	24	5	6.3
Human immunodeficiency virus infections	18	0	15	3	10.4

\* Pre-MDC is a category reserved for transplant-related hospitalizations

# Table 7. Major Diagnostic Categories by frequency<br/>Charges and primary payer type<br/>Inpatient, statewide, 2015

				Primary payer type							
Major Diagnostic Category	Total dis- charges	Mean charges	Total charges	Medicare	Medicaid	Commercial Insurance	Workers' Compensation	Self-pay	SHI	CHAMPUS/VA	Other
Pregnancy, childbirth, and the puerperium	9,195	\$19,494	\$179,594,303	33	4,158	2,780	0	476	239	1,054	29
Newborns and neonate conditions began in perinatal period	8,506	\$27,591	\$235,127,770	0	3,510	2,194	0	1,033	381	857	87
Musculoskeletal system and connective tissue, diseases & disorders	4,714	\$76,638	\$362,035,557	1,825	553	903	102	384	87	572	15
Respiratory system, diseases & disorders	4,204	\$49,527	\$209,101,162	1,797	1,064	586	9	243	85	225	49
Digestive system, diseases & disorders	4,061	\$52,471	\$214,395,458	1,440	781	859	6	323	119	366	14
Circulatory system, diseases & disorders	3,871	\$92,253	\$359,140,069	2,018	448	587	1	196	83	279	7
Infectious and parasitic diseases	2,412	\$83,992	\$203,009,531	1,059	481	326	9	205	80	159	12
Nervous system, diseases & disorders	2,343	\$65,306	\$153,468,567	914	456	414	14	174	46	179	16
Kidney and urinary tract, diseases & disorders	1,448	\$50,243	\$73,203,868	743	222	222	0	50	28	111	5
Hepatobiliary system and pancreas, diseases & disorders	1,357	\$51,392	\$70,458,639	338	302	306	2	170	50	127	11
Mental diseases & disorders	1,227	\$44,834	\$55,056,167	184	406	252	0	88	14	90	39
Endocrine, nutritional, and metabolic, diseases & disorders	1,215	\$40,213	\$49,060,379	367	306	241	4	112	23	105	8
Skin, subcutaneous tissue and breast, diseases & disorders	1,209	\$34,568	\$41,862,403	291	318	214	13	160	32	83	45
Injuries, poisonings, and toxic effects of drugs	943	\$52,350	\$49,732,931	219	242	151	12	131	69	67	3
Pre-MDC	755	\$5,697	\$4,301,542	46	70	60	1	508	3	48	1
Alcohol-drug use and alcohol- drug induced organic mental diseases	694	\$27,413	\$19,107,051	96	184	73	0	136	105	32	9
Female reproductive system, diseases & disorders	531	\$46,123	\$24,537,369	81	101	183	0	52	10	78	6
Factors on health status and other contacts with health services	482	\$46,222	\$22,325,310	236	80	80	5	29	9	29	0
Ear, nose, mouth, and throat, diseases & disorders	473	\$39,411	\$18,680,653		154	81	3	48	18	35	7
Blood, blood forming organs, immunological, diseases & disorders	423	\$50,154	\$21,415,802	145	119	79	0	18	9	35	3

Myeloproliferative diseases & poorly differentiated neoplasms	254	\$80,756	\$20,592,668	47	96	55	0	8	7	34	0
Multiple significant trauma	181	\$153,055	\$27,702,964	25	49	53	8	18	1	9	1
Male reproductive system, diseases & disorders	146	\$52,018	\$7,594,649	62	11	30	1	8	2	16	1
Eye, diseases & disorders	53	\$30,355	\$1,608,816	12	16	9	0	7	2	4	2
Burns	45	\$61,656	\$2,774,542	4	18	6	2	7	2	2	2
Human Immunodeficiency Virus Infections	18	\$133,133	\$2,396,395	2	4	2	0	5	1	3	0

# Table 8.Major Diagnostic Categories, rates per 10,000 populationInpatient, by region, 2015

	Anch	orage		iuska- itna	Gulf	Coast	Inte	rior	Nort	hern*	South	neast*	Sout	hwest
Major Diagnostic Category	Count	Rate per 10,000												
Pregnancy, childbirth, and the puerperium	3,503	117.2	1,310	130.8	1,167	143.9	1,216	107.8	553	277.4	475	78.4	908	214.1
Newborns and neonate conditions began in perinatal period	3,355	112.2	1,257	125.5	1,016	125.3	1,045	92.6	504	252.8	472	77.9	845	199.2
Respiratory system	1,709	44.0	713	65.4	908	80.9	613	32.8	154	137.9	280	45.0	232	123.8
Musculoskeletal system and connective tissue	1,315	57.2	655	71.2	656	111.9	370	54.3	275	77.3	273	46.2	525	54.7
Digestive system	1401	46.9	658	65.7	633	78.0	431	38.2	206	103.3	296	48.8	296	69.8
Circulatory system	1,399	46.8	471	47.0	748	92.2	502	44.5	122	61.2	289	47.7	177	41.7
Nervous system	1,096	30.3	331	36.5	375	39.1	174	21.0	72	46.7	118	23.1	157	42.4
Infectious and parasitic diseases	907	36.7	366	33.0	317	46.2	237	15.4	93	36.1	140	19.5	180	37.0
Skin, subcutaneous tissue and breast	535	12.8	252	17.6	226	22.6	180	6.6	44	28.1	94	11.5	96	55.2
Mental diseases and disorders	495	16.8	220	14.6	205	18.5	153	3.1	42	34.6	127	4.8	75	58.9
Kidney and urinary tract	522	17.9	176	25.2	161	27.9	109	16.0	40	22.1	97	15.5	77	22.6
Hepatobiliary system and pancreas	503	16.6	146	22.0	150	25.3	35	13.6	69	21.1	29	21.0	250	17.7
Endocrine, nutritional, and metabolic	383	17.5	176	17.6	183	19.8	74	9.7	56	20.1	70	16.0	234	18.2
Injuries, poisonings, and toxic effects of drugs	430	14.4	105	10.5	121	14.9	103	9.1	56	28.1	52	8.6	61	14.4
Alcohol-drug use and induced organic mental diseases	211	7.1	43	4.3	100	12.3	32	2.8	41	20.6	157	25.9	85	20.0
Female reproductive system	220	7.4	88	8.8	74	9.1	28	2.5	29	14.5	43	7.1	41	9.7
Ear, nose, mouth, and throats	196	6.4	61	6.6	93	7.8	31	2.3	17	12.0	44	4.5	31	15.6
Factors on health status and other contacts with health services	192	6.6	66	6.1	63	11.5	26	2.7	24	8.5	27	7.3	66	7.3
Blood, blood forming organs, immunological	188	6.3	34	3.4	67	8.3	34	3.0	24	12.0	23	3.8	45	10.6

\* Excluded facilities: Maniilaq Association (Northern Region) and PeaceHealth Ketchikan (Southeast Region).

# Table 9.Top 15 Diagnosis-Related Groups by frequencyAge group and average length of stayInpatient, statewide, 2015

Diagnosis-Related Group	Total discharges	Age 0-17	Age 18-64	Age 65+	Average length of stay (days)
Normal newborn	4,744	4,744	0	0	1.7
Vaginal delivery without complicating diagnoses	4,643	87	4,556	0	2.0
Neonate with other significant problems	2,298	2,298	0	0	2.1
Vaginal delivery with complicating diagnoses	1,502	31	1,471	0	2.7
Major joint replacement or reattachment of lower extremity without MCC	1,184	0	580	604	3.3
Septicemia or severe sepsis without mechanical ventilation 96+ hours with MCC	1,066	18	524	524	7.3
Cesarean section without CC/MCC	954	2	952	0	3.1
Cesarean section with CC/MCC	944	6	938	0	4.7
Psychoses	849	233	588	28	8.3
Esophagitis, gastroenteritis and misc. digestive disorders without MCC	765	115	442	208	3.3
Cellulitis without MCC	753	115	509	129	3.9
Septicemia or severe sepsis without mechanical ventilation 96+ hours without MCC	573	16	325	232	4.6
Full term neonate with major problems	568	568	0	0	5.5
Simple pneumonia and pleurisy with CC	546	143	143	260	3.9
Alcohol/drug abuse or dependence without rehabilitation therapy without MCC	504	12	454	38	3.4

## Table 10. Top 15 Diagnosis-Related Groups by frequency Charges and primary payer type Inpatient, statewide, 2015

				Primary payer type							
Diagnosis-Related Group	Total dis- charges	Mean charges	Total charges	Medicare	Medicaid	Commercial Insurance	Workers' Compensation	Self-pay	IHS	CHAMPUS/VA	Other
Normal newborn	4,736	\$4,025	\$19,092,977	0	1,878	1,379	0	447	212	536	58
Vaginal delivery without complicating diagnoses	4,631	\$13,779	\$63,975,009	9	2,055	1,443	0	243	144	507	14
Neonate with other significant problems	2,296	\$8,011	\$18,409,128	0	921	545	0	422	113	193	19
Vaginal delivery with complicating diagnoses	1,500	\$19,888	\$29,871,491	7	777	371	0	89	44	149	4
Major joint replacement or reattachment of lower extremity without MCC	1,181	\$74,911	\$88,694,150	568	78	255	11	34	2	176	0
Septicemia or severe sepsis without mechanical ventilation 96+ hours with MCC	1,065	\$77,946	\$83,089,923	562	184	107	0	93	37	50	2
Cesarean section without CC/MCC	952	\$23,891	\$22,791,607	5	320	384	0	42	16	145	0
Cesarean section with CC/MCC	943	\$37,010	\$34,937,349	8	386	319	0	43	10	121	0

Psychoses	849	\$49,789	\$42,270,792	108	258	201	0	67	10	69	23
Esophagitis, gastroenteritis, and misc. digest disorders without MCC	759	\$24,017	\$18,373,263	246	185	147	1	57	23	66	4
Cellulitis without MCC	751	\$24,784	\$18,662,148	159	208	135	9	97	22	47	42
Septicemia or severe sepsis without mechanical ventilation 96+ hours without MCC	572	\$38,533	\$22,079,658	252	116	77	2	55	22	33	1
Full term neonate with major problems	562	\$46,574	\$26,454,038	0	269	103	0	76	23	44	5
Simple pneumonia and pleurisy with CC	545	\$29,375	\$16,038,543	258	141	60	0	33	11	20	4
Alcohol/drug abuse or dependence without rehabilitation therapy without MCC	501	\$22,886	\$11,534,353	63	136	57	0	97	73	22	8

## Table 11. Top 5 Diagnosis-Related Groups by facility and service type Age group and average length of stay Inpatient, statewide, 2015

Diagnosis-Related Group	Total discharges	Age 0-17	Age 18-64	Age 65+	Average length of stay (days)
Community Hospital, Acute Medical/Surgical					
Normal newborn	4,744	4,744	0	0	1.7
Vaginal delivery without complicating diagnoses	4,643	87	4,556	0	2.0
Neonate with other significant problems	2,298	2,298	0	0	2.1
Vaginal delivery with complicating diagnoses	1,502	31	1,471	0	2.7
Major joint replacement or reattachment of lower extremity without MCC	1,184	0	580	604	3.3
Community Hospital, Medical Rehab/LTC/Swing-bed					
Rehabilitation with CC/MCC	232	1	85	146	15.1
Degenerative nervous system disorders without MCC	77	0	24	53	508.0
Septicemia or severe sepsis without mechanical ventilation 96+ hours with MCC	37	0	15	22	4.6
Vaginal delivery without complicating diagnoses	35	0	35	0	0.9
Rehabilitation without CC/MCC	32	0	10	22	10.5
Community Hospital, Psychiatric/Alcohol Rehabilitation					
Psychoses	591	3	569	19	7.9
Depressive neuroses	134	1	129	4	4.2
Alcohol/drug abuse or dependence with rehabilitation therapy	111	0	110	1	24.9
Alcohol/drug abuse or dependence without rehabilitation therapy without MCC	65	0	63	2	4.8
Neuroses except depressive	56	1	52	3	3.7
Psychiatric Hospital, Psychiatric/Alcohol Rehabilitation					
Psychoses	1,201	426	743	32	19.3
Neuroses except depressive	289	152	133	4	13.1
Alcohol/drug abuse or dependence without rehabilitation therapy without MCC	254	5	249	0	8.2

Behavioral and developmental disorders	199	191	8	0	16.5
Disorders of personality and impulse control	188	55	130	3	11.0
Long-term Care Facility, Medical Rehab/LTC/Swing-bed					
Rehabilitation with CC/MCC	298	1	47	250	63.2
Rehabilitation without CC/MCC	106	0	10	96	45.7
Pulmonary edema and respiratory failure	73	0	49	24	79.3
Degenerative nervous system disorders without MCC	72	0	13	59	481.0
Aftercare, musculoskeletal system and connective tissue with CC	44	0	21	23	44.4

### Table 12. Top Diagnosis-Related Groups by patient residence Age group and average length of stay Inpatient, regions, 2015

Diagnosis-Related Group	Total discharges	Age 0-17	Age 18-64	Age 65+	Average length of stay (days)
Anchorage Municipality					
Normal newborn	1,942	1,942	0	0	1.6
Vaginal delivery without complicating diagnoses	1,695	31	1,664	0	2.1
Neonate with other significant problems	828	828	0	0	2.1
Vaginal delivery with complicating diagnoses	577	10	567	0	2.7
Septicemia or severe sepsis without mechanical ventilation 96+ hours with MCC	*	<6	249	237	8.0
Mat-Su Borough					
Normal newborn	762	762	0	0	1.6
Vaginal delivery without complicating diagnoses	595	7	588	0	1.9
Neonate with other significant problems	282	282	0	0	2.2
Vaginal delivery with complicating diagnoses	*	<6	188	0	2.6
Cesarean section with CC/MCC	186	0	186	0	4.2
Southeast					
Normal newborn	254	254	0	0	1.7
Vaginal delivery without complicating diagnoses	248	6	242	0	2.0
Neonate with other significant problems	139	139	0	0	2.3
Alcohol/drug abuse or dependence without rehabilitation therapy without MCC	*	0	105	<6	3.5
Major joint replacement or reattachment of lower extremity without MCC	106	0	60	46	3.5
Northern Region					
Vaginal delivery without complicating diagnoses	273	11	262	0	2.1
Neonate with other significant problems	200	200	0	0	2.1
Normal newborn	196	196	0	0	1.8

138	7	131	0	2.5
45	20	11	14	3.4
676	7	669	0	2.1
474	474	0	0	1.8
386	386	0	0	2.0
201	0	106	95	3.8
*	<6	159	0	2.8
672	672	0	0	1.6
*	<6	625	0	1.8
224	0	107	117	3.2
216	216	0	0	2.0
168	0	168	0	2.7
487	21	466	0	2.1
428	428	0	0	2.1
238	238	0	0	2.2
220	6	214	0	2.8
200	53	122	25	3.5
	45 676 474 386 201 * 672 * 224 216 168 487 428 238 220	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	45 $20$ $11$ $14$ $676$ 7 $669$ 0 $474$ $474$ 0         0 $386$ $386$ 0         0 $201$ 0 $106$ $95$ $*$ $<6$ $159$ 0 $672$ $672$ 0         0 $*$ $<6$ $625$ 0 $224$ 0 $107$ $117$ $216$ $216$ 0         0 $487$ $21$ $466$ 0 $487$ $21$ $466$ 0 $238$ $238$ 0         0 $220$ $6$ $214$ 0

\* Non-zero cells less than 6 and corresponding totals are suppressed for privacy

### Table 13. Top 5 Diagnosis-Related Groups by facility and service type Charges and primary payer Inpatient, statewide, 2015

						Prim	ary paye	r type	n	n	
Diagnosis-Related Group	Total dis- charges	Mean charges	Total charges	Medicare	Medicaid	Commercial Insurance	Workers' Compensation	Self-pay	SHI	CHAMPUS/VA	Other
Community Hospital, Acute	Medica	l/Surgical							Π	Π	
Normal newborn	4,736	\$4,025	\$19,092,977	0	1,878	1,379	0	447	212	536	58
Vaginal delivery without complicating diagnoses	4,631	\$13,779	\$63,975,009	9	2,055	1,443	0	243	144	507	14
Neonate with other significant problems	2,296	\$8,011	\$18,409,128	0	921	545	0	422	113	193	19
Vaginal delivery with complicating diagnoses	1,500	\$19,888	\$29,871,491	7	777	371	0	89	44	149	4
Major joint replacement or reattachment of lower extremity without MCC	1,181	\$74,911	\$88,694,150	568	78	255	11	34	2	176	0
Community Hospital, Medic	al Reha	b/LTC/Swii	ng-bed								
Rehabilitation with CC/MCC	232	\$63,885	\$14,821,420	150	14	50	0	5	4	7	0
Degenerative nervous system disorders without MCC	77	\$83,881	\$6,458,803	28	44	0	0	0	1	4	0
Septicemia or severe sepsis without mechanical ventilation 96+ Hours with MCC	37	\$34,950	\$1,293,150	23	5	4	0	1	0	2	0
Vaginal delivery without complicating diagnoses	35	\$991	\$34,677	0	0	0	0	0	0	0	0
Rehabilitation without CC/MCC	32	\$38,461	\$1,230,738	24	0	5	0	1	2	0	0
Long-term Care Facility, Me	dical Re	ehab/LTC/S	wing-bed								
Rehabilitation with CC/MCC	298	\$736,980	\$219,620,008	192	45	24	0	24	0	10	1
Rehabilitation without CC/MCC	106	\$256,851	\$27,226,217	76	12	10	0	3	0	1	4
Pulmonary edema and respiratory failure	73	\$177,480	\$12,956,024	27	18	22	0	0	1	5	0
Degenerative nervous system disorders without MCC	72	\$160,556	\$11,560,064	17	42	0	0	1	0	9	0
Aftercare, musculoskeletal system and connective tissue with CC	44	\$68,894	\$3,031,343	26	3	8	1	1	2	3	0

# **B.** Outpatient

## Emergency department

#### Table 14. Major Diagnostic Categories by frequency

## Age group

### Emergency department, statewide, 2015

Major Diagnostic Category	Total discharges	Age 0-17	Age 18-64	Age 65+
Skin, subcutaneous tissue & breast, diseases & disorders	36,823	9,686	23,935	3,202
Musculoskeletal system & connective tissue, diseases & disorders	36,539	5,669	26,763	4,107
Ear, nose, mouth, & throat, diseases & disorders	30,092	12,643	15,417	2,032
Digestive system, diseases & disorders	28,297	5,826	19,295	3,176
Respiratory system, diseases & disorders	19,654	5,342	10,817	3,495
Circulatory system, diseases & disorders	15,790	808	10,661	4,321
Nervous system, diseases & disorders	13,331	1,838	9,999	1,494
Factors on health status & other contacts with health services	12,133	1,837	8,717	1,579
Kidney and urinary tract, diseases & disorders	10,645	1,299	7,313	2,033
Alcohol-drug use and alcohol-drug induced organic mental diseases	9,860	532	8,981	347
Injuries, poisonings, and toxic effects of drugs	8,462	2,409	5,323	730
Mental diseases & disorders	7,142	1,143	5,520	479
Infectious & parasitic diseases	6,029	4,144	1,602	283
Pregnancy, childbirth, & the puerperium	5,896	262	5,633	1
Eye, diseases & disorders	5,144	1,512	3,174	458
Pre-MDC	4,162	1,981	1,968	213
Female reproductive system, diseases & disorders	3,847	365	3,397	85
Endocrine, nutritional, and metabolic, diseases & disorders	2,689	326	1,669	694
Hepatobiliary system & pancreas, diseases & disorders	1,421	48	1,206	167
Male reproductive system, diseases & disorders	1,131	279	740	112

# Table 15. Major Diagnostic Categories by frequencyCharges and primary payer typeEmergency Department, statewide, 2015

						Pri	mary p	ayer ty	уре		
Major Diagnostic Category	Total dis- charges	Mean charges	Total charges	Medicare	Medicaid	Commercial Insurance	Workers' Compensation	Self-pay	IHS	CHAMPUS/VA	Other
Skin, subcutaneous tissue & breast, diseases & disorders	36,234	\$1,667	\$61,386,406	3,997	9,361	8,009	1,195	7,488	1,136	2,091	1,191
Musculoskeletal system & connective tissue, diseases & disorders	36,101	\$2,161	\$78,975,905	5,022	8,215	8,635	1,377	6,919	972	2,438	901
Ear, nose, mouth, & throat, diseases & disorders	29,776	\$1,473	\$44,316,067	2,405	10,187	6,969	84	6,343	544	1,098	993
Digestive system, diseases & disorders	27,899	\$3,693	\$104,499,742	4,220	7,566	6,548	80	4,770	822	2,056	545
Respiratory system, diseases & disorders	19,363	\$2,839	\$55,806,014	3,927	5,746	3,674	111	3,049	501	966	511
Circulatory system, diseases & disorders	15,605	\$4,565	\$72,082,176	4,510	2,252	3,965	76	2,092	427	1,294	215
Nervous system, diseases & disorders	13,188	\$3,648	\$48,630,121	2,106	3,261	3,181	192	2,174	380	997	248
Factors on health status & other contacts with health services	11,979	\$1,968	\$23,873,628	1,994	3,005	1,940	264	2,744	309	618	406
Kidney and urinary tract, diseases & disorders	10,493	\$3,256	\$34,664,032	2,205	2,293	2,573	17	1,801	261	714	203
Alcohol-drug use and alcohol-drug induced organic mental diseases	9,604	\$2,053	\$20,240,494	616	1,939	752	6	3,422	1,159	264	462
Injuries, poisonings, and toxic effects of drugs	8,369	\$2,500	\$21,152,558	856	2,073	2,185	361	1,565	253	423	208
Mental diseases & disorders	7,052	\$2,535	\$18,104,949	1,259	2,009	1,190	4	1,365	286	399	135
Infectious & parasitic diseases	6,000	\$1,896	\$11,431,529	303	2,794	1,166	10	777	121	344	214
Pregnancy, childbirth, & the puerperium	5,862	\$2,785	\$16,419,823	36	2,888	1,303	15	726	120	414	94
Eye, diseases & disorders	5,080	\$1,398	\$7,193,202	503	1,251		141	928	140	381	114
Pre-MDC	4,069	\$1,685	\$7,012,889	303	1,519	0	0	30	457	1,178	0
Female reproductive system, diseases & disorders	3,794	\$3,181	\$12,237,577	161	1,320	917	1	912	81	202	92
Endocrine, nutritional, and metabolic, diseases & disorders	2,671	\$3,464	\$9,313,506	840	560	583	10	312	47	155	35
Hepatobiliary system & pancreas, diseases & disorders	1,399	\$4,897	\$6,959,215	202	284	384	2	295	36	102	30
Male reproductive system, diseases & disorders	1,101	\$2,340	\$2,646,312	128	238	233	11	252	44	74	35

### Table 16. Top 5 Major Diagnostic Categories by patient residence Age group Emergency department, regions, 2015

Major Diagnostic Category	Total discharges	Age 0-17	Age 18-64	Age 65+
Anchorage Municipality	<u> </u>			
Musculoskeletal system & connective tissue, diseases & disorders	14,981	2,059	11,511	1,411
Skin, subcutaneous tissue & breast, diseases & disorders	14,236	3,432	9,697	1,107
Ear, nose, mouth, & throat, diseases & disorders	12,823	5,191	6,888	744
Digestive system, diseases & disorders	11,166	2,189	7,872	1,105
Respiratory system, diseases & disorders	7,086	1,471	4,475	1,140
Mat-Su Borough				
Musculoskeletal system & connective tissue, diseases & disorders	3,515	595	2,525	395
Skin, subcutaneous tissue & breast, diseases & disorders	3,073	878	1,926	269
Digestive system, diseases & disorders	2,785	549	1,957	279
Ear, nose, mouth, & throat, diseases & disorders	2,415	993	1,280	142
Respiratory system, diseases & disorders	1,652	347	994	311
Southeast Region				
Musculoskeletal system & connective tissue, diseases & disorders	2,342	280	1,760	302
Skin, subcutaneous tissue & breast, diseases & disorders	2,031	421	1,418	192
Digestive system, diseases & disorders	1,743	265	1,259	219
Ear, nose, mouth, & throat, diseases & disorders	1,383	464	802	117
Circulatory system, diseases & disorders	1,081	35	733	313
Northern Region				
Ear, nose, mouth, & throat, diseases & disorders	2,878	1,477	1,279	122
Skin, subcutaneous tissue & breast, diseases & disorders	2,742	905	1,679	158
Musculoskeletal system & connective tissue, diseases & disorders	2,300	405	1,637	258
Respiratory system, diseases & disorders	1,721	607	834	280
Digestive system, diseases & disorders	1,720	423	1,089	208
Interior Region				
Skin, subcutaneous tissue & breast, diseases & disorders	4,273	831	3,070	372
Musculoskeletal system & connective tissue, diseases & disorders	4,167	434	3,299	434
Digestive system, diseases & disorders	3,978	577	2,930	471
Ear, nose, mouth, & throat, diseases & disorders	2,438	779	1,439	220
Alcohol-drug use and alcohol-drug induced organic mental diseases	2,395	19	2,280	96
Gulf Coast Region				
Musculoskeletal system & connective tissue, diseases & disorders	4,465	758	2,979	728
Skin, subcutaneous tissue & breast, diseases & disorders	4,240	1,045	2,600	595
Digestive system, diseases & disorders	3,400	701	2,207	492

Ear, nose, mouth, & throat, diseases & disorders	2,752	1,162	1,292	298
Circulatory system, diseases & disorders	2,177	78	1,350	749
Southwest Region				
Skin, subcutaneous tissue & breast, diseases & disorders	4,807	2,042	2,514	251
Ear, nose, mouth, & throat, diseases & disorders	4,530	2,448	1,893	189
Musculoskeletal system & connective tissue, diseases & disorders	3,250	1,061	1,907	282
Respiratory system, diseases & disorders	3,086	1,855	902	329
Digestive system, diseases & disorders	2,679	1,069	1,363	247

## Table 17. Top 15 external cause of injury codes by frequency Age group Emergency department, statewide, 2015\*

	First-listed External Cause of Injury Code	Total discharges	Age 0-17	Age 18-64	Age 65+
E917	Striking against or struck accidentally by objects or persons	5,013	2,152	2,675	186
E888	Other and unspecified fall	4,842	1,361	2,588	893
E885	Accidental fall on same level from slipping tripping or stumbling	4,735	881	2,993	861
E927	Overexertion and strenuous movements	4,075	755	3,086	234
E920	Accidents caused by cutting and piercing instruments or objects	3,863	775	2,881	207
E928	Other and unspecified environmental and accidental causes	3,736	626	2,742	368
E812	Other motor vehicle traffic accident involving collision with motor vehicle	2,018	260	1,647	111
E884	Other accidental falls from one level to another	1,942	1,072	638	232
E968	Assault by other and unspecified means	1,521	75	1,426	20
E906	Other injury caused by animals	1,300	471	747	82
E880	Accidental fall on or from stairs or steps	1,148	176	811	161
E960	Injury purposely inflicted by other persons – fight, brawl, or rape	958	67	878	13
E918	Caught accidentally in or between objects	938	333	566	39
E826	Pedal cycle accident	869	382	467	20
E849	Vehicle accidents, not elsewhere classifiable	858	233	507	118

\* Limited to quarters 1-3 of 2015 due to ICD-9 to ICD-10 transition Grouped by first 3 digits of external cause of injury code

### **Outpatient Surgery**

# Table 18. Top procedures by facility typeMean and total chargesOutpatient surgery, statewide, 2015

Heal	thcare Common Procedure Coding System (HCPCS)*	Total procedures	Mean charges	Total charges
Commu	nity Hospital			
J3010	Fentanyl citrate injection	33,650	\$116	\$3,898,413
J2250	Midazolam hydrochloride injection	25,584	\$96	\$2,451,451
J2405	Ondansetron HCL injection	18,318	\$111	\$2,025,654
J7120	Ringers lactate infusion	14,852	\$102	\$1,515,440
J1100	Dexamethasone sodium phosphate	14,672	\$72	\$1,059,791
J3490	Drugs unclassified injection	14,589	\$129	\$1,882,939
J2704	Propofol, 10 mg, injection	13,871	\$151	\$2,100,526
J2001	Lidocaine injection	13,568	\$77	\$1,037,833
J0690	Cefazolin sodium injection	11,518	\$134	\$1,540,798
J1885	Ketorolac tromethamine injection	6,506	\$82	\$535,108
88305	Surgical pathology, gross and microscopic	5,207	\$655	\$3,410,433
J2710	Neostigmine methylslfte injection	4,744	\$142	\$675,637
J7030	Normal saline solution infusion	4,427	\$164	\$727,051
J1170	Hydromorphone injection	4,416	\$144	\$633,272
J2370	Phenylephrine HCL injection	3,517	\$121	\$425,300
J0330	Succinycholine chloride injection	3,011	\$83	\$248,893
36415	Collection of venous blood by venipuncture	2,860	\$54	\$154,508
Q9967	Low osmolar contrast material	2,815	\$256	\$721,108
45378	Diagnostic colonoscopy	2,628	\$4,055	\$10,603,750
J1644	Heparin sodium per 1000u injection	2,570	\$125	\$320,515
Ambula	tory Surgery Centers	•		
66984	Extracapsular cataract removal with insertion of intraocular lens prosthesis	3,353	\$3,782	\$12,679,692
45385	Polyp removal during fiber optic colonoscopy	3,169	\$2,768	\$8,771,782
45380	Lesion biopsy during fiber optic colonoscopy	2,860	\$2,487	\$7,113,789
43239	Upper gastrointestinal endoscopy including esophagus, stomach, and either the duodenum and/or jejunum as appropriate; with biopsy, single or multiple	2,678	\$2,336	\$6,255,164
L8699	Prosthetic implant not otherwise specified	2,435	\$6,692	\$16,295,968
142	Anesthesia for procedures on eye; lens surgery	2,335	\$198	\$462,345
62311	Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal)	2,299	\$2,172	\$4,994,406
45378	Colonoscopy, flexible, proximal to splenic flexure; diagnostic, with or without collection of specimen(s) by brushing or washing, with or without colon decompression	2,137	\$2,505	\$5,353,019
77003	Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, transforaminal	2,039	\$443	\$903,664

		· · · · · · · · · · · · · · · · · · ·		
	epidural, subarachnoid, paravertebral facet joint, paravertebral facet joint nerve, or sacroiliac joint), including neurolytic agent destruction			
64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level	1,693	\$3,896	\$6,596,656
A4649	Surgical supplies	1,685	\$1,149	\$1,936,276
76942	Ultrasonic guidance for needle placement imaging supervision and interpretation	1,631	\$942	\$1,535,718
64415	Injection, anesthetic agent; brachial plexus, single	1,319	\$2,907	\$3,822,844
41899	Unlisted procedure, dentoalveolar structures (removal of teeth)	1,112	\$4,201	\$4,671,720
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment	1,107	\$12,737	\$14,099,435
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; single level	1,054	\$5,535	\$5,834,016
62310	Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic	848	\$2,231	\$1,891,634
99144	Moderate sedation services (other than those services described by codes 00100-01999) provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; age 5 years or older, first 30 minutes intra-service time	828	\$320	\$265,230

\* Different facility types reported using both HCPCS level I/CPT codes and HCPCS level II, making direct comparison difficult. Both are shown in this table.

### **Outpatient Imaging**

# Table 19. Selected procedures by primary payer typeOutpatient imaging, all facility types, statewide, 2015

							Primar	y paye	r type		
	care Common Procedure ding System (HCPCS)*	Total dis- charges	Mean charges	Total charges	Medicare	Medicaid	Commercial Insurance	Self-pay	IHS	CHAMPUS /VA	Other + Workers' Comp.
G0202	Screening mammography, bilateral (2-view study of each breast), including	37,044	\$326	\$12,089,403	8,918	1,097	12,547	1,268	954	11,223	164

	computer-aided detection when performed										
77052	Computer-aided detection with further physician review for interpretation, with or without digitization of film radiographic images	34,718	\$73	\$2,527,887	8,267	980	11,869	1,221	916	10,562	49
71020	Chest x-ray 2-view (frontal & lateral)	21,259	\$392	\$8,324,201	7,276	2,734	4,734	1,373	832	3,401	235
77063	Screening digital breast tomosynthesis, bilateral	12,370	\$31	\$383,654	2,767	287	4,100	130	99	4,769	12
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	6,810	\$3,431	\$23,366,073	2,300	688	1,595	377	331	1,315	28
76642	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited	6,531	\$355	\$2,318,983	1,109	478	2,207	218	158	1,914	33
77080	Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)	6,493	\$418	\$2,714,497	2,995	222	1,459	175	129	1,385	18

\* Different facility types reported using both HCPCS level I/CPT codes and HCPCS level II, making direct comparison difficult. Both are shown in this table.

# **APPENDIX II: DATA NOTES**

# A. Transition from ICD-9 to ICD-10

A notable limitation of the 2015 dataset is the transition from International Classification of Diseases 9<sup>th</sup> Edition (ICD-9) to ICD-10, which took place October 1, 2015. This includes ICD-10-CM for diagnosis coding and ICD-10-PCS for inpatient procedure coding.

ICD-10 contains many more codes and more specificity than ICD-9. There is not a single one-to-one or one-to-many crosswalk to convert the two, so there is some uncertainty in comparability between ICD-9 and ICD-10.

# **B.** Reporting participation

To facilitate data analysis, facilities are generally grouped according to their type and level of care using the following categories:

- Community hospital (using the definition from American Hospital Association;<sup>2</sup> includes tribal facilities)
- Specialty hospital (includes psychiatric and long-term acute care)
- Ambulatory surgery center (ASC)
- Independent diagnostic testing facility (IDTF)
- Skilled nursing facility/long-term care (SNF/LTC)

Facility Type	Number Reporting	Number licensed	Rate
Community Hospitals	20	22	91%
General Acute Care	10	11	91%
Rural Primary Care Hospital	2	2	100%
Critical Access Hospital (Licensed as CAH)	2	2	100%
Alaska Native Tribal Hospital	6	7	86%
Specialty Hospitals	3	5	60%
Long Term Acute Care	1	1	100%
Specialized Hospital (Psychiatric)	2	2	100%
Military Hospitals	0	2	0%
Independent Diagnostic Testing Facilities	1	*	*
Ambulatory Surgery Centers	13	15	86.7%
Nursing facilities / long term care	16	18	88.9%
* IDTFs are not licensed by DHSS	·		•

#### Table 20. Reporting rates by facility type

<sup>&</sup>lt;sup>2</sup> American Hospital Association (2017). *Fast Facts on US Hospitals*. <u>http://www.aha.org/research/rc/stat-studies/fast-facts.shtml</u>

Facility Name	Category	Inpatient Data	Outpatient Data
Alaska Cardiovascular Surgery Center	ASC		$\checkmark$
Alaska Digestive Center, LLC	ASC		$\checkmark$
Alaska Native Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Alaska Psychiatric Institute	Specialty Hospital	$\checkmark$	
Alaska Regional Hospital	Community Hospital	$\checkmark$	$\checkmark$
Alaska Spine Center	ASC		$\checkmark$
Alaska Spine Institute Surgery Center	ASC		$\checkmark$
Alaska Surgery Center	ASC		$\checkmark$
Anchorage Endoscopy Center, LLC	ASC		$\checkmark$
Bartlett Regional Hospital	Community Hospital	$\checkmark$	$\checkmark$
Bristol Bay Area Health Corp	Community Hospital	$\checkmark$	$\checkmark$
Central Peninsula Hospital	Community Hospital	$\checkmark$	$\checkmark$
Cordova Community Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Creekside Surgery Center	ASC		$\checkmark$
Denali Center	SNF/LTC	$\checkmark$	
Fairbanks Memorial Hospital	Community Hospital	$\checkmark$	$\checkmark$
Geneva Woods Surgical Center	ASC		$\checkmark$
Heritage Place	SNF/LTC	$\checkmark$	
Mat-Su Regional Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Mt. Edgecumbe Hospital	Community Hospital	$\checkmark$	$\checkmark$
North Star Hospital	Specialty	$\checkmark$	
Norton Sound Regional Hospital	Community Hospital	$\checkmark$	$\checkmark$
Pacific Cataract and Laser Institute	ASC		$\checkmark$
Petersburg Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Prestige Care and Rehabilitation Center of Anchorage	SNF/LTC	$\checkmark$	
Providence Alaska Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Providence Extended Care	SNF/LTC	$\checkmark$	
Providence Imaging Center	IDTF		$\checkmark$
Providence Kodiak Island Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Providence Kodiak Island Medical Center	SNF/LTC	$\checkmark$	
Providence Seward Medical & Care Center	Community Hospital	$\checkmark$	$\checkmark$
Providence Seward Medical & Care Center	SNF/LTC	$\checkmark$	
Providence Transitional Care Center	SNF/LTC	$\checkmark$	
Providence Valdez Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Providence Valdez Medical Center	SNF/LTC	$\checkmark$	
Samuel Simmonds Memorial Hospital	Community Hospital	$\checkmark$	$\checkmark$

# Table 21. Reporting facilities by category

Sitka Community Hospital	Community Hospital	$\checkmark$	$\checkmark$
South Anchorage Surgery Center, LLC	ASC		$\checkmark$
South Peninsula Hospital	Community Hospital	$\checkmark$	$\checkmark$
Southeast Alaska Surgical Center (formerly Juneau Pain Center)	ASC		$\checkmark$
St. Elias Specialty Hospital	Specialty Hospital	$\checkmark$	
Surgery Center of Anchorage	ASC		$\checkmark$
Surgery Center of Wasilla, LLC	ASC		$\checkmark$
Wildflower Court	SNF/LTC	$\checkmark$	
Wrangell Medical Center	Community Hospital	$\checkmark$	$\checkmark$
Yukon Kuskokwim Delta Regional Hospital	Community Hospital	$\checkmark$	$\checkmark$

As of September 8, 2016

Long-term care or nursing facilities affiliated with a hospital may not be listed separately.

# C. Data quality

The goal for data quality is an error rate (missing or invalid required fields) of less than 5%. The following table shows error rates for a selected number of fields.

However, it should be noted that not all missing values indicate a problem; for example, not all records would contain a procedure code. Some demographic fields, such as race, were not collected by facilities at admission so are not available. Newborns generally do not have a social security number assigned at the time of discharge, so these records will not have a valid SSN.

		Date o	Date of birth		SN age >0)	Ra	ce	s	ex	Princ diagn	-
Facility	Total records	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate
Alaska Native Medical Center	8,131	-	0.0%	189	2.3%	18	0.2%	-	0.0%	-	0.0%
Alaska Psychiatric Institute	1,550	-	0.0%	13	0.8%	1	0.1%	-	0.0%	2	0.1%
Alaska Regional Hospital	6,012	-	0.0%	150	2.5%	385	6.4%	-	0.0%	91	1.5%
Bartlett Regional Hospital	2,339	-	0.0%	63	2.7%	6	0.3%	-	0.0%	47	2.0%
Bristol Bay Area Health Corp	338	-	0.0%	3	0.9%	18	5.3%	-	0.0%	-	0.0%
Central Peninsula Hospital	3,096	-	0.0%	65	2.1%	70	2.3%	-	0.0%	10	0.3%
Cordova Community Medical Center	52	-	0.0%	1	1.9%	12	23.1%	-	0.0%	-	0.0%
Denali Center	206	-	0.0%	-	0.0%	8	3.9%	-	0.0%	-	0.0%
Fairbanks Memorial Hospital	5,602	-	0.0%	107	1.9%	35	0.6%	4	0.1%	1	0.0%

Table 22. Inpatient data quality by facility, selected variables

Heritage Place	111	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Mat-Su Regional Medical Center	5,218	-	0.0%	170	3.3%	5,218	100%	2	0.0%	-	0.0%
Mt. Edgecumbe Hospital	402	-	0.0%	12	3.0%	34	8.5%	-	0.0%	-	0.0%
North Star Hospital	886	-	0.0%	418	47.2%	-	0.0%	-	0.0%	11	1.2%
Norton Sound Regional Hospital	998	-	0.0%	35	3.5%	5	0.5%	-	0.0%	510	51.1%
Petersburg Medical Center	98	-	0.0%	-	0.0%	1	1.0%	-	0.0%	-	0.0%
Prestige Care and Rehabilitation Center of Anchorage	190	1	0.5%	91	47.9%	-	0.0%	-	0.0%	-	0.0%
Providence Alaska Medical Center	19,657	-	0.0%	1,301	6.6%	485	2.5%	8	0.0%	128	0.7%
Providence Extended Care	43	-	0.0%	-	0.0%	2	4.7%	-	0.0%	7	16.3%
Providence Kodiak Island Medical Center	1,385	-	0.0%	81	5.8%	13	0.9%	-	0.0%	2	0.1%
Providence Seward Medical & Care Center	290	-	0.0%	6	2.1%	5	1.7%	-	0.0%	1	0.3%
Providence Transitional Care Center	443	-	0.0%	3	0.7%	-	0.0%	-	0.0%	52	11.7%
Providence Valdez Medical Center	224	-	0.0%	4	1.8%	7	3.1%	-	0.0%	3	1.3%
Samuel Simmonds Memorial Hospital	243	-	0.0%	-	0.0%	202	83.1%	-	0.0%	-	0.0%
Sitka Community Hospital	328	-	0.0%	7	2.1%	2	0.6%	-	0.0%	-	0.0%
South Peninsula Hospital	974	-	0.0%	18	1.8%	9	0.9%	-	0.0%	-	0.0%
St. Elias Specialty Hospital	364	-	0.0%	4	1.1%	4	1.1%	-	0.0%	-	0.0%
Wildflower Court	46	-	0.0%	-	0.0%	1	2.2%	-	0.0%		0.0%
Wrangell Medical Center	102	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Yukon Kuskokwim Delta Regional Hospital	2,120	-	0.0%	107	5.0%	1	0.0%	-	0.0%	5	0.2%
Maniilaq Association	-	-	-	-	-	-	-	-	-	-	-
PeaceHealth Ketchikan	-	-	-	-	-	-	-	-	-	-	-
Total Statewide	61,448	1	0.0%	2,848	4.6%	6,542	10.6%	14	0.0%	870	1.4%

# Table 23. Outpatient data quality by facility, selected variables

			Date of birth		SSN (where age >0)		Race		Sex		cipal Iosis
Facility	Total records	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate	Missing or invalid	Error rate
Providence Alaska Medical Center	182,344	-	0.0%	18,214	10.0%	3,771	2.1%	9	0.0%	805	0.4%
Alaska Cardiovascular Surgery Center	161	1	0.6%	4	2.5%	6	3.7%	0	0.0%	-	0.0%
Alaska Digestive Center, LLC	4,402	-	0.0%	374	8.5%	2,864	65.1%	0	0.0%	5	0.1%

Alaska Native Medical Center	377,859	2	0.0%	12,066	3.2%	767	0.2%	0	0.0%	25	0.0%
Alaska Regional Hospital	55,875	-	0.0%	4,115	7.4%	2,837	5.1%	2	0.0%	3	0.0%
Alaska Spine Center	1,464	-	0.0%	209	14.3%	1,464	100%	1	0.1%	-	0.0%
Alaska Spine Institute Surgery Center	4,654	-	0.0%	1,488	32.0%	2,081	44.7%	1	0.0%	10	0.2%
Alaska Surgery Center	5,421	-	0.0%	2,198	40.5%	5,421	100%	0	0.0%	11	0.2%
Anchorage Endoscopy Center, LLC	2,861	3	0.1%	113	3.9%	2,183	76.3%	0	0.0%	-	0.0%
Bartlett Regional Hospital	34,003	-	0.0%	2,714	8.0%	74	0.2%	1	0.0%	451	1.3%
Bristol Bay Area Health Corp	3,562	-	0.0%	41	1.2%	129	3.6%	0	0.0%	1	0.0%
Central Peninsula Hospital	77,554	1	0.0%	4,664	6.0%	2,469	3.2%	1	0.0%	5339	6.9%
Cordova Community Medical Center	2,263	-	0.0%	135	6.0%	142	6.3%	0	0.0%	3	0.1%
Creekside Surgery Center	3,198	-	0.0%	1,921	60.1%	322	10.1%	0	0.0%	-	0.0%
Fairbanks Memorial Hospital	137,335	-	0.0%	7,728	5.6%	994	0.7%	8	0.0%	1,130	0.8%
Geneva Woods Surgical Center	1,397	-	0.0%	327	23.4%	1,016	72.7%	6	0.4%	57	4.1%
Mat-Su Regional Medical Center	69,520	-	0.0%	5,881	8.5%	69,520	100%	1	0.0%	1,189	1.7%
Mt. Edgecumbe Hospital	2,987	76	2.5%	210	7.0%	216	7.2%	76	2.5%	46	1.5%
Norton Sound Regional Hospital	42,351	7	0.0%	3,269	7.7%	61	0.1%	1	0.0%	644	1.5%
Pacific Cataract and Laser Institute	2,325	-	0.0%	773	33.2%	68	2.9%	0	0.0%	1	0.0%
Petersburg Medical Center	8,036	-	0.0%	-	0.0%	145	1.8%	0	0.0%	15	0.2%
Providence Imaging Center	43,209	-	0.0%	2,630	6.1%	4,571	10.6%	2	0.0%	12,03 1	27.8%
Providence Kodiak Island Medical Center	23,427	-	0.0%	2,662	11.4%	140	0.6%	0	0.0%	268	1.1%
Providence Seward Medical & Care Center	7,042	-	0.0%	636	9.0%	292	4.1%	0	0.0%	18	0.3%
Providence Valdez Medical Center	6,948	-	0.0%	483	7.0%	191	2.7%	4	0.1%	60	0.9%
Samuel Simmonds Memorial Hospital	31,779	1	0.0%	459	1.4%	26,319	82.8%	1	0.0%	5	0.0%
Sitka Community Hospital	11,678	-	0.0%	809	6.9%	111	1.0%	3	0.0%	4	0.0%
South Anchorage Surgery Center, LLC	1,314	-	0.0%	47	3.6%	419	31.9%	0	0.0%	1	0.1%
South Peninsula Hospital	17,307	-	0.0%	917	5.3%	105	0.6%	0	0.0%	-	0.0%
Southeast Alaska Surgical Center (formerly Juneau Pain Center)	383	-	0.0%	222	58.0%	383	100%	0	0.0%	6	1.6%

Surgery Center of Anchorage	3,132	-	0.0%	566	18.1%	507	16.2%	0	0.0%	-	0.0%
Surgery Center of Wasilla, LLC	2,054	-	0.0%	672	32.7%	1,225	59.6%	0	0.0%	11	0.5%
Wrangell Medical Center	5,979	-	0.0%	178	3.0%	105	1.8%	0	0.0%	7	0.1%
Yukon Kuskokwim Delta Regional Hospital	57,735	2	0.0%	4,275	7.4%	41	0.1%	2	0.0%	51	0.1%
Maniilaq Association	-	•	•	-	-	-	-	-	-	-	-
PeaceHealth Ketchikan	-	-	-	-	-	-	-	-	-	-	-
Total	1,231,559	93	0.0%	81,000	6.6%	130,959	10.6%	119	0.0%	10,166	0.8%