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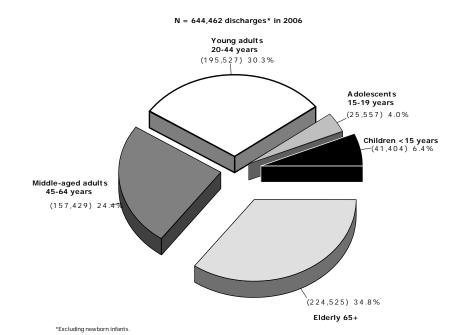
## INPATIENT DISCHARGES FROM SHORT STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS

An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge; thus, the numbers in this report are for discharges, not persons. Federal, military and Department of Veteran Affairs' hospitals are excluded. All discharges are for residents of Arizona. Discharges of out-of-state residents are not included in this report. Discharges of inpatients exclude newborn infants. Diagnostic groupings and code numbers are based on the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

Up to nine diagnoses are coded for each discharge. In this section, discharges are presented by first-listed diagnosis, which is the first one listed on the discharge summary of the medical record. The number of first-listed diagnoses is the same as the number of discharges. For comparability with the national data\*, the discharge rates are presented per 10,000 population. The groupings of ICD-9-CM codes used to identify specific diagnostic categories can be accessed at <a href="http://www.azdhs.gov/plan/hip/cat/icd9primary.xls">http://www.azdhs.gov/plan/hip/cat/icd9primary.xls</a>

<sup>\*</sup>Findings of the National Hospital Discharge Survey are available in bound reports of the National Center for Health Statistics and online at <a href="http://www.cdc.gov/nchs/about/major/hdasd/listpubs.htm">http://www.cdc.gov/nchs/about/major/hdasd/listpubs.htm</a>

Figure 4A-1 Hospital Inpatient Discharges by Age Group, Arizona Residents, 2006

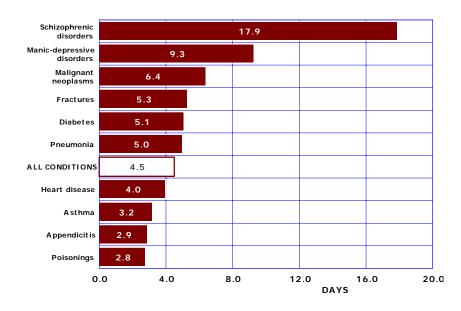


In 2006, there were 644,462 inpatients discharged, excluding newborn infants, from non-Federal short stay hospitals in Arizona (Table 4A-1). Patients who were elderly (65 years or older) accounted for 34.8 percent of hospital discharges (Figure 4A-1), followed by young adults (20-44 years old) who comprised 30.3 percent of discharges, and middle-aged adults 45-64 year olds (24.4 percent of all inpatient discharges)

The discharge rate for all ages was 1,032.9 per 10,000 resident population – 1,243.3 for females (unchanged from 2005) and 823.0 for males, 1.1 percent lower than the 2005 rate.

Diseases of the circulatory system were the most common diagnoses (15.8 percent of all discharges), followed by digestive system diagnoses (10.4 percent), and injury diagnoses (9.5 percent; percentages based on data in Table 4A-1).

Figure 4A-2 Average Length of Hospital Stay for Discharges with Selected First-Listed Diagnosis, Arizona Residents, 2006



Based on the data from the National Hospital Discharge Survey\*, the longest continuously running nationally representative survey hospital of utilization, the length of stay for inpatients has changed dramatically from 1970 through 2003. In 1970, the average length of stay was 7.8 days, with onethird of patients hospitalized for 8 days or more. In 2003, the average length of stay decreased to 4.8 days, with only 16 percent of inpatients staying 8 days or more.

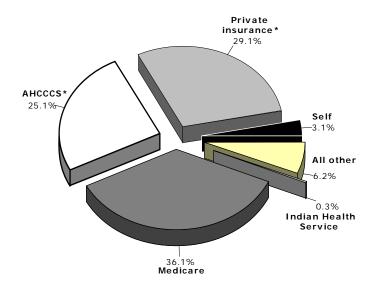
In 2006, the average length of hospital stay for inpatients was 4.5 days (**Figure 4A-2**, **Table 4A-5**). The percent of patients hospitalized for 3 days or less increased to 62 percent, with only 13.4 percent of inpatients staying 8 days or more.

The average length of stay was 4 days for heart disease, 5.1 days for diabetes, 6.4 days for cancer, and 17.9 days for schizophrenic disorders.

<sup>\*</sup>http://www.cdc.gov/nchs/data/ad/ad359.pdf

Figure 4A-3 Hospital Inpatient Discharges by Payer, Arizona Residents, 2006

Medicare paid for 86.8 percent inpatient discharges of persons aged 65 years or older (Table 4A-4) and 36.1 percent of all discharges (Figure 4A-3). Private insurance was the second most frequently recorded expected source of payment, accounting for 29.1 percent of inpatient discharges. The Arizona Health Care Cost Containment System (the State's Medicaid Program) accounted for 25.1 percent.



- \* Indemnity, HMO, PPO
- \* \* The Arizona Health Care Cost Containment System is the State's Medicaid Program.

Figure 4A-4
Percent Hospital Inpatient Admissions by Day of the Week,
Arizona Residents, 2006

The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2006 was substantially lower at weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).

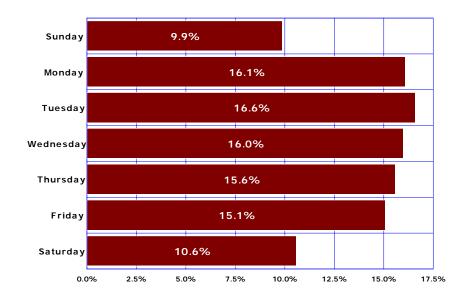
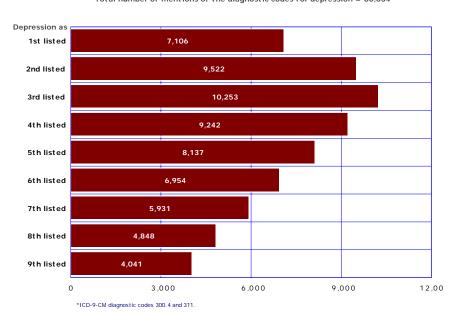


Figure 4A-5
Number of Depression-Related\* Inpatient Discharges of Arizona
Residents, 2006

Total number of depression-related discharges = 65,953
Total number of mentions of the diagnostic codes for depression = 66,034

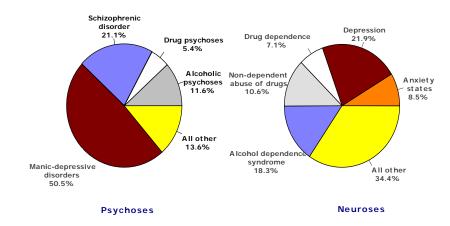


The extent, to which the first-listed diagnosis is the principal reason for hospitalization, ought not to be overestimated. More often than not, the first-listed diagnosis is the <a href="mailto:immediate">immediate</a>, but not necessarily the <a href="mailto:underlying cause">underlying cause</a> of hospitalization.

In 2006, the ICD-9-CM diagnostic codes 300.4 and 311 for depression were used 7,106 times as the first-listed diagnosis (**Table 4A-1**, **Figure 4A-5**). However, when we count all entries of this code within the nine diagnostic fields, depression was mentioned 66,034 times on 65,953 inpatient discharge records. In fact, the depression diagnosis was substantially more frequently present as  $2^{nd} - 5^{th}$  listed on the medical record than it was first-listed (**Figure 4A-5**).

When hospital inpatient data is used to estimate the prevalence of depression, it makes sense to include all mentions of this disorder in all diagnostic fields, not just the first one.

Figure 4A-6 Number of Inpatient Discharges with Mental Disorders by Category, Arizona Residents, 2006



Note: based on first-listed diagnosis.

The category of mental disorders (ICD-9-CM codes 290-319) accounted for 19,197 inpatient hospitalizations by first-listed diagnosis (**Table 4A-1**) and 160,164 inpatient discharges by all-listed diagnoses\* (all occurrences of the diagnosis for mental disorders regardless of the location on the medical record).

Manic-depressive disorders accounted for 50.5 percent of all first-listed psychoses (Figure 4A-6), followed by schizophrenic disorders (21.1 percent).

Depression accounted for 21.9 percent of all first-listed neuroses (Figure 4A-6), followed by alcohol dependence syndrome (18.3 percent). Drug use, abuse and misuse (combined categories of drug dependence and non-dependent abuse of drugs) accounted for 18.7 percent of inpatient hospitalizations for neurosis.

<sup>\*</sup>http://www.azdhs.gov/plan/hip/for/mental/index.htm