

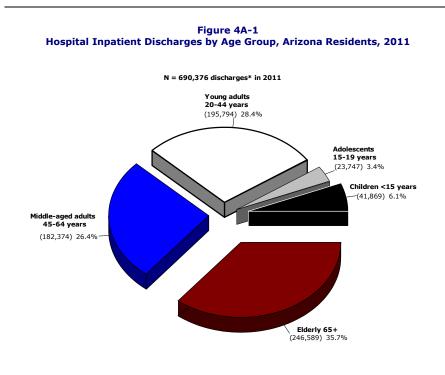
4A.

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. Beginning in 2010, the psychiatric hospitals also are required to report to the Arizona Department of Health Services. All discharges are for residents of Arizona. Discharges of out-of-state residents are not included in this report. Discharges of inpatients in this report exclude newborn infants. Diagnostic groupings and code numbers are based on the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

The change in the Arizona reporting requirements increased the number of diagnoses that are coded for each discharge from nine to twenty five. In this section, discharges are presented by principal 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 ICDbe 9-CM codes used identify specific diagnostic categories accessed to can at http://www.azdhs.gov/plan/hip/cat/icd9primary.xls

*Findings of the National Hospital Discharge Survey are available in bound reports of the National Center for Health Statistics and online at http://www.cdc.gov/nchs/nhds.htm



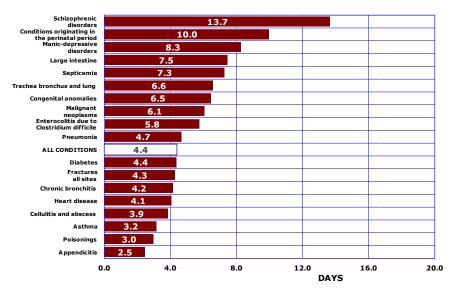
*Excluding newborn infants.

In 2011, there were 690,376 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 35.7 percent of hospital discharges (**Figure 4A-1**), followed by young adults (20-44 years old) who comprised 28.4 percent of discharges, and middle-aged adults 45-64 year olds (26.4 percent of all inpatient discharges)

The discharge rate for all ages was 1072.3 per 10,000 resident population, 0.9 percent greater than the 2010 rate. The discharge rate of 1241.2 for females was 1.4 times greater than the rate of 901.3 for males

Diseases of the circulatory system were the most common diagnoses (13.8 percent of all discharges), followed by digestive system diagnoses (10.8 percent), and *injury and poisoning* diagnoses (9.6 percent; percentages based on data in **Table 4A-1**).





Based on the data from the National Hospital Discharge Survey^{*}, the longest nationally continuously running representative hospital survey of utilization, the length of stay for inpatients has changed dramatically from 1970 through 2009. In 1970, the average length of stay was 7.8 days, with onethird of patients hospitalized for 8 days or more. In 2009, the average length of stay nationally was 4.9 days.

In 2011, the average length of hospital stay for Arizona inpatients was 4.4 days (**Figure 4A-2**, **Table 4A-5**). The percent of patients hospitalized for 3 days or less was 61.0 percent, with 13.3 percent of inpatients staying 8 days or more.

The average length of stay was 4.1 days for heart disease, 4.4 days for diabetes, 6.1 days for cancer, and 13.7 days for schizophrenic disorders. *<u>http://www.cdc.gov/nchs/data/ad/ad385.pdf</u> and <u>http://www.cdc.gov/nchs/data/nhsr/nhsr005.pdf</u>

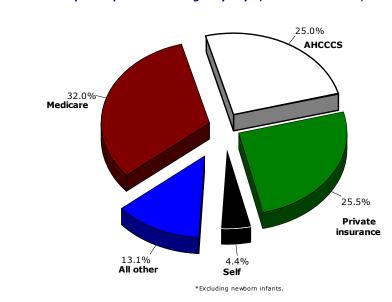


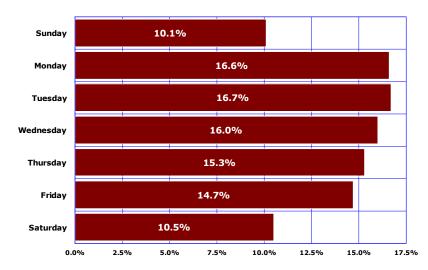
Figure 4A-3 Hospital Inpatient Discharges by Payer, Arizona Residents, 2011

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

of inpatient discharges of persons aged 65 years or older (Table 4A-4) and 32.0 percent of all discharges (Figure 4A-3). Private insurance was the second most frequently recorded expected source of payment, accounting for 25.5 percent of inpatient discharges. The Arizona Health Care Cost Containment System (the State's Medicaid Program) accounted for 25.0 percent.

Medicare paid for 72.4 percent





The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2011 was substantially lower on weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).

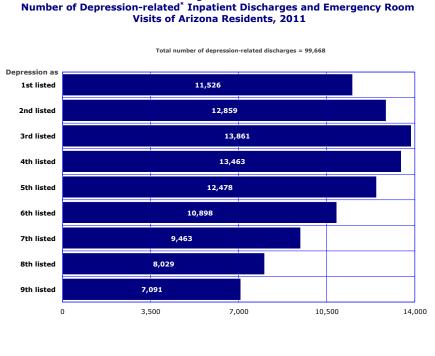


Figure 4A-5

In 2011, the ICD-9-CM diagnostic codes 300.4 and 311 for depression were used on 2,846 inpatient discharge and 3,535 emergency room records as the first-listed diagnosis (for a total of 6,381 hospital encounters; **Figure 4A-5, Table 4A-1, Table 7C-1**).

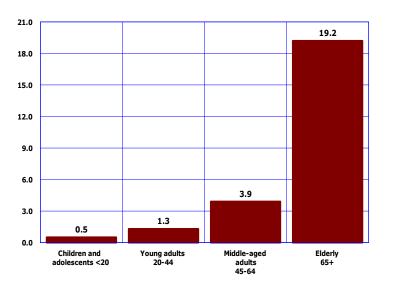
The extent to which the first-listed diagnosis is the principal reason for hospitalization ought not to be overestimated. More often than not, the first-listed diagnosis is the <u>immediate</u>, but not necessarily the <u>underlying cause</u> of hospitalization.

However, when we count all entries of this code within the nine diagnostic fields, depression was mentioned on 99,688 inpatient discharge and emergency room 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 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.

ICD-9-CM diagnostic codes 300.4 and 311.





In 2011, 2,748 Arizonans were hospitalized with the diagnosis of enterocolitis due to *Clostridium difficile*, a bacterial inflammation of the intestines (**Table 4A-1**). The disease is of growing public health concern because it is often acquired in hospitals and other health care institutions with long-term patients as residents.

The inpatient hospitalization rates associated with enterocolitis due to *Clostridium difficile* tend to increase with age. The rate for the elderly 65 years or older (19.2/10,000) was 4.9 times greater than the rate of middle-aged adults (**Figure 4A-6**).

The disparity in enterocolitis-related hospitalization rates was 1.8 times as high for females (5.5 inpatient discharges per 10,000) as for males (3.1/10,000).

In 2011, 186 Arizonans died from enterocolitis due to *Clostridium difficile* (**Table 2B-6**). Elderly 65 years or older accounted for 86.6 percent of these deaths (**Table 2C-27**).