4A.

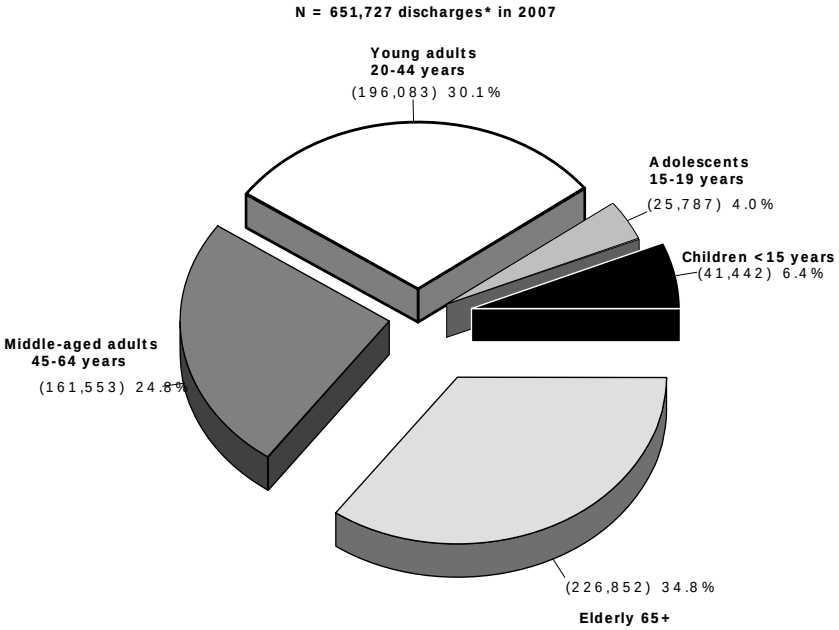
INPATIENT DISCHARGES FROM SHORT STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS

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. 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 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/about/major/hdasd/listpubs.htm

Figure 4A-1
Hospital Inpatient Discharges by Age Group, Arizona Residents, 2007



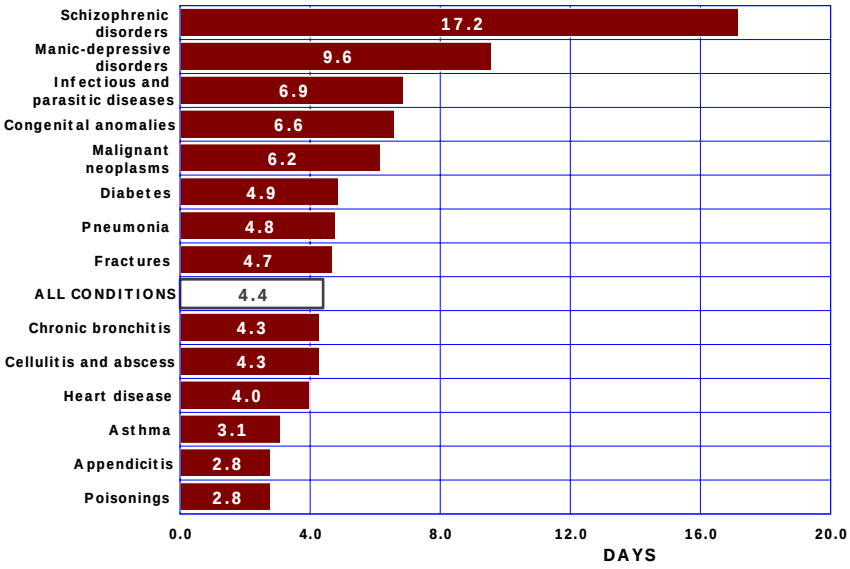
Excluding newborn infants.

In 2007, there were 651,727 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 30.1 percent of discharges, and middle-aged adults 45-64 year olds (24.8 percent of all inpatient discharges)

The discharge rate for all ages was 1013.3 per 10,000 resident population, 1.9 percent lower than the 2006 rate. The discharge rate of 1218.9 for females was 1.5 times greater than the rate of 808.6 for males

Diseases of the circulatory system were the most common diagnoses (15.4 percent of all discharges), followed by *digestive system* diagnoses (10.5 percent), and *injury* diagnoses (9.7 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, 2007



Based on the data from the National Hospital Discharge Survey*, the longest continuously running nationally representative survey of hospital utilization, the length of stay for inpatients has changed dramatically from 1970 through 2005. In 1970, the average length of stay was 7.8 days, with one-third of patients hospitalized for 8 days or more. In 2005, the average length of stay decreased nationally to 4.8 days, with only 16 percent of inpatients staying 8 days or more.

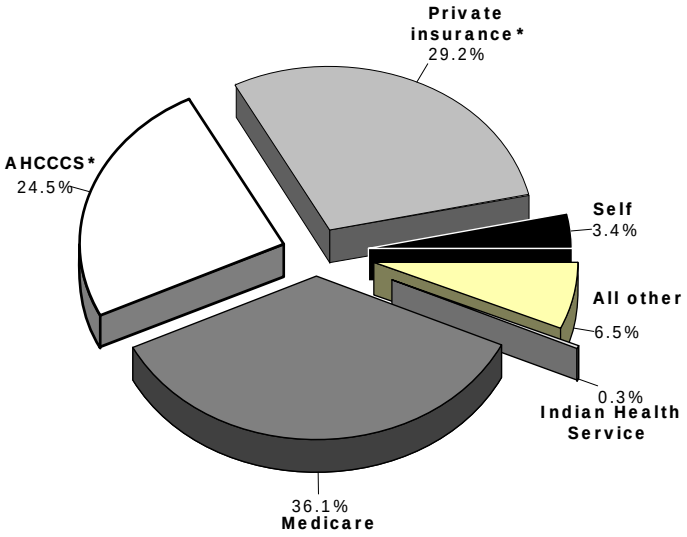
In 2007, the average length of hospital stay for Arizona inpatients was 4.4 days (**Figure 4A-2**, **Table 4A-5**). The percent of patients hospitalized for 3 days or less increased to 62.3 percent, with only 13.2 percent of inpatients staying 8 days or more.

The average length of stay was 4 days for heart disease, 4.9 days for diabetes, 6.2 days for cancer, and 17.2 days for schizophrenic disorders.

*http://www.cdc.gov/nchs/data/ad/ad385.pdf

Figure 4A-3
Hospital Inpatient Discharges by Payer, Arizona Residents, 2007

Medicare paid for 86.3 percent of 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 29.2 percent of inpatient discharges. The Arizona Health Care Cost Containment System (the State's Medicaid Program) accounted for 24.5 percent.



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

Figure 4A-4
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2007

The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2007 was substantially lower at weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).

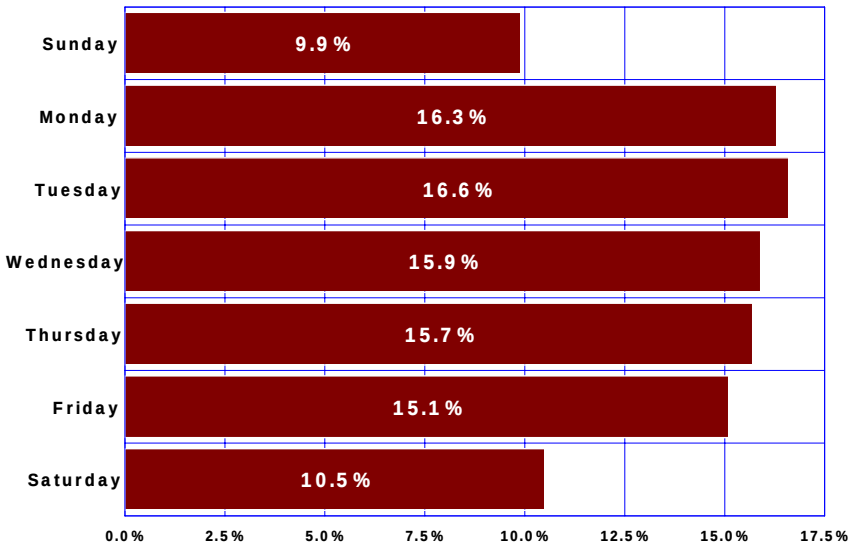
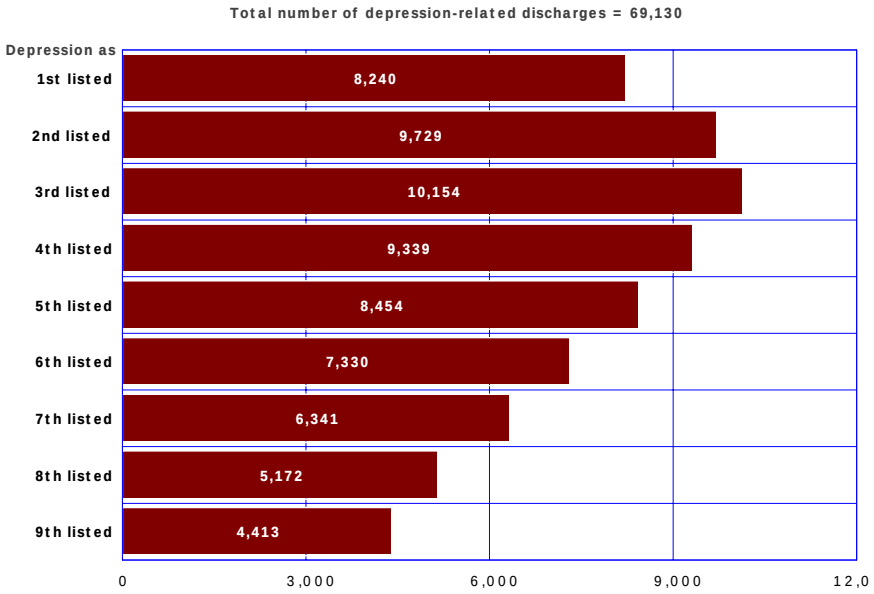


Figure 4A-5
Number of Depression-related* Inpatient Discharges and Emergency Room Visits of Arizona Residents, 2007



ICD-9 CM diagnostic codes 300.4 and 311.

In 2007, the ICD-9-CM diagnostic codes 300.4 and 311 for depression were used on 812 inpatient discharge and 7,428 emergency room records as the first-listed diagnosis (for a total of 8,240 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 immediate, but not necessarily the underlying cause of hospitalization.

However, when we count all entries of this code within the nine diagnostic fields, depression was mentioned on 69,130 inpatient discharge and emergency room records. In fact, the depression diagnosis was substantially more frequently present as 2nd – 5th 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.

Figure 4A-6
Depression-related Inpatient Hospitalization Rates* by Gender and Age Group, Arizona Residents, 2007

	Children <15	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Female	1.3	21.7	62.3	119.7	170.6
Male	1.0	9.6	23.3	59.7	83.8

In 2007, depression diagnosis was mentioned on 34,548 or 5.3 percent of all inpatient discharge records.

The inpatient hospitalization rates tend to increase with age. In each age group, the depression-related hospitalization rates for females exceeded the rates for males (**Figure 4A-6**).

The disparity in depression-related hospitalization rates was 2.7 times as high for young adult females 20-44 years old (62.3 inpatient discharges with any mention of depression diagnosis per 10,000 females in this age group) as young adult males (23.3/10,000).

In 2007, females accounted for 69.7 percent of the 34,548 depression-related inpatient hospitalizations among Arizona residents.

*The number of depression-related (all occurrences of the depression diagnosis regardless of the location on the medical record) inpatient discharges per 10,000 population in specified group.