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.
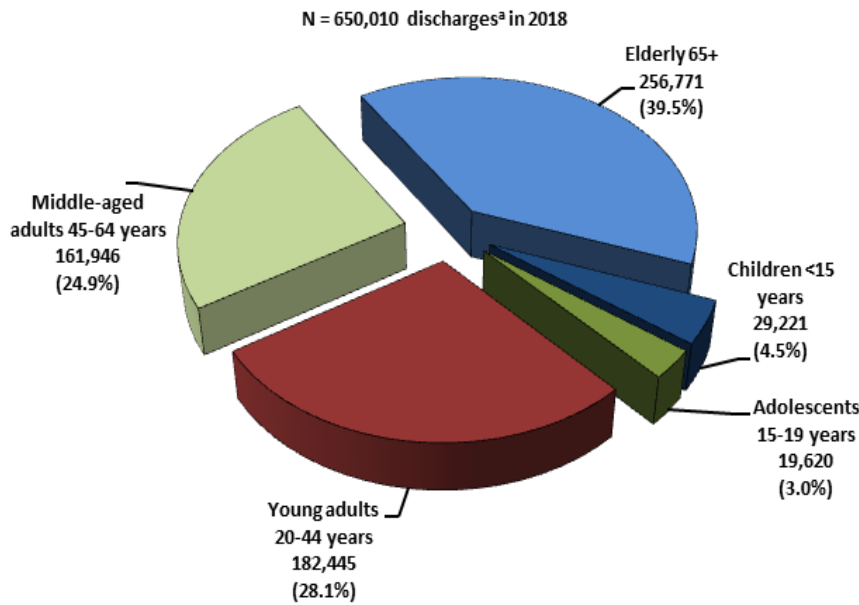
Beginning in 2016, diagnostic groupings and code numbers are based solely on the International Classification of Diseases and Related Problems, 10th Revision, Clinical Modification (ICD-10-CM). ICD-10-CM incorporates greater details about medical diagnosis and represents a substantial increase in number of diagnostic codes, with more than 69,000 codes compared with about 14,000 under ICD-9-CM. Due to fundamental changes in the coding system caution should be exercised in comparing current inpatient data to that of years prior 2016. For further explanation of this new coding system, please refer to "The Implementation of the International Classification of Disease, Tenth Revision," Introduction page ix.

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 ICD-9-CM and ICD-10-CM codes used to identify specific diagnostic categories can be accessed at: http://pub.azdhs.gov/health-stats/hip/cat/icd9-10primary.xlsx.

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*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

Figure 4A-1
Hospital Inpatient Discharges[a] by Age Group, Arizona Residents, 2018

N = 650,010 discharges[a] in 2018

Elderly 65+
256,771
(39.5%)

Children <15 years
29,221
(4.5%)

Adolescents
15-19 years
19,620
(3.0%)

Young adults
20-44 years
182,445
(28.1%)

Middle-aged
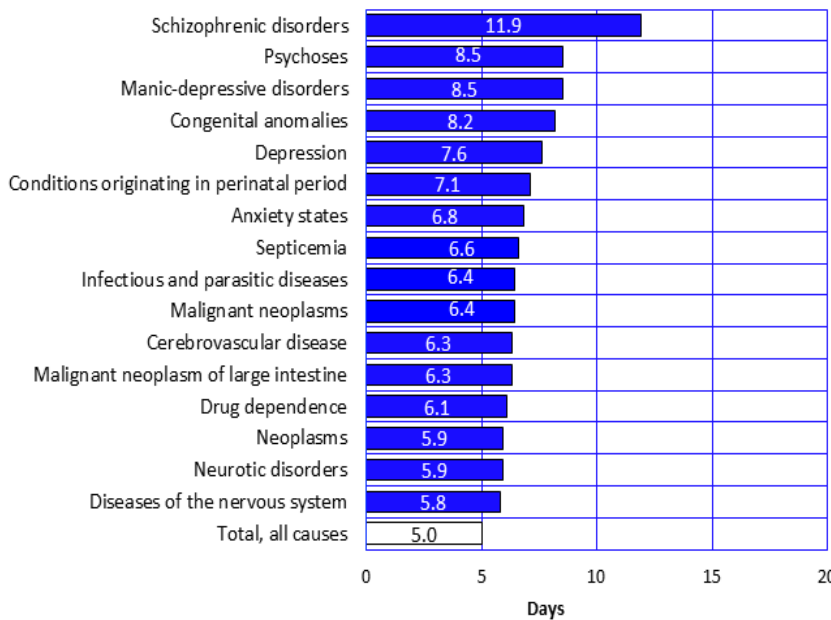adults 45-64 years
161,946
(24.9%)

Note: [a] Excluding newborn infants.

In 2018, there were 650,010 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 39.5 percent of hospital discharges (**Figure 4A-1**), followed by young adults (20-44 years old) who comprised 28.1 percent of discharges, and middle-aged adults (45-64 years old) with 24.9 percent of all inpatient discharges.

Diseases of the circulatory system were the most common diagnoses (13.9 percent of all discharges), followed by *mental disorders* (10.1 percent), and *injury and poisoning* diagnoses (9.8 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, 2018

Diagnosis	Days
Schizophrenic disorders	11.9
Psychoses	8.5
Manic-depressive disorders	8.5
Congenital anomalies	8.2
Depression	7.6
Conditions originating in perinatal period	7.1
Anxiety states	6.8
Septicemia	6.6
Infectious and parasitic diseases	6.4
Malignant neoplasms	6.4
Cerebrovascular disease	6.3
Malignant neoplasm of large intestine	6.3
Drug dependence	6.1
Neoplasms	5.9
Neurotic disorders	5.9
Diseases of the nervous system	5.8
Total, all causes	5.0

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 2010. In 1970, the average length of stay was 7.8 days, with one-third of patients hospitalized for 8 days or more. In 2010, the average length of stay nationally was 4.8 days.
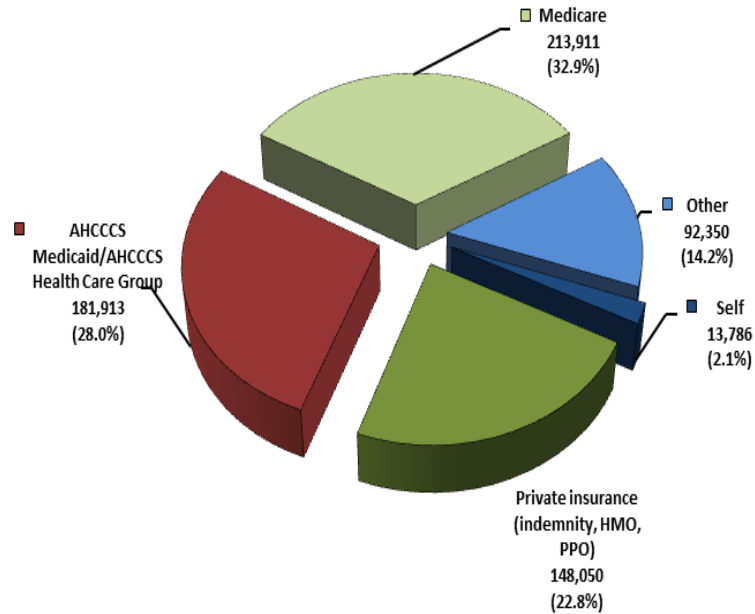
In 2018, the average length of hospital stay for Arizona inpatients was 5.0 days (**Figure 4A-2**, **Table 4A-5**). The percent of patients hospitalized for three days or less was 54.94 percent, with 17.0 percent of inpatients staying eight days or more.

The top five conditions with the longest length of inpatient stay was: *Schizophrenic disorders* (11.9 days), *psychoses* (8.5 days), *manic-depressive disorders* (8.5 days), *congenital anomalies* (8.2 days), and *depression* (7.6 days).

Figure 4A-3
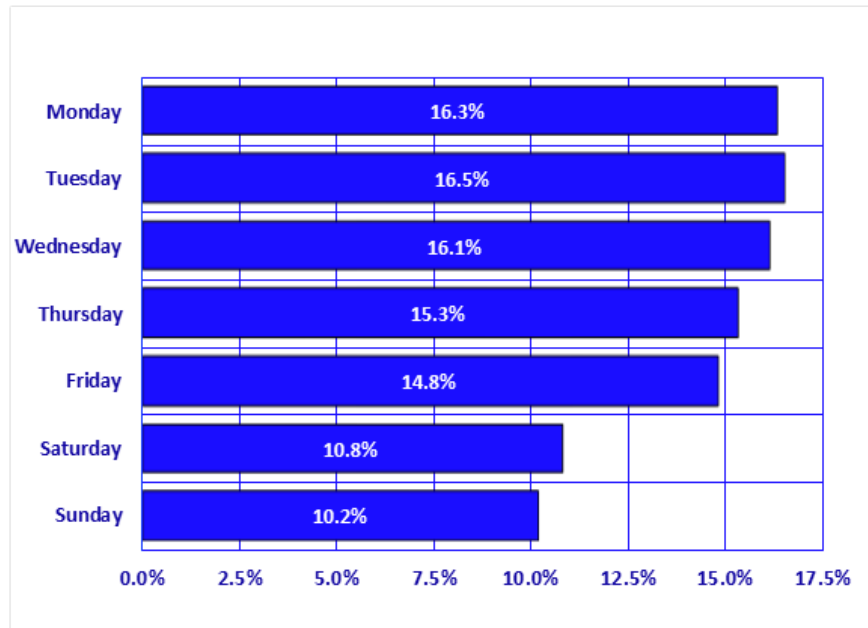**Hospital Inpatient Discharges by Payer, Arizona Residents, 2018**

Medicare paid for 32.9 percent of all discharges (**Figure 4A-3**) and 70.2 percent of inpatient discharges of persons aged 65 years or older (**Table 4A-4**). The Arizona Health Care Cost Containment System (AHCCCS; the State's Medicaid Program) was the second most frequently recorded expected source of payment, accounting for 28.0 percent of inpatient discharges. Private insurance accounted for 22.8 percent of hospital inpatient discharges.

- Medicare 213,911 (32.9%)
- Other 92,350 (14.2%)
- Self 13,786 (2.1%)
- Private insurance (indemnity, HMO, PPO) 148,050 (22.8%)
- AHCCCS Medicaid/AHCCCS Health Care Group 181,913 (28.0%)

Note: The Arizona Health Care Cost Containment System is the State's Medicaid Program.
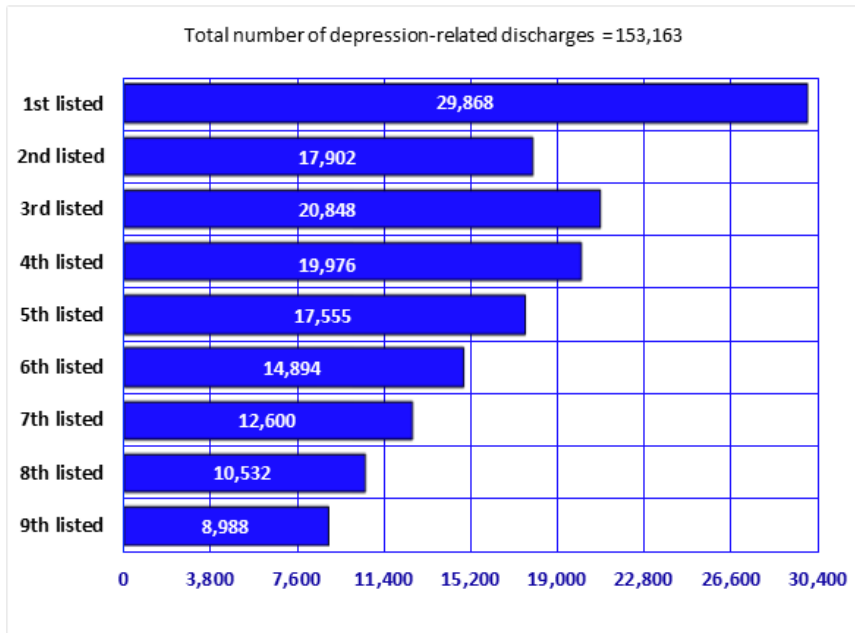
Figure 4A-4
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2018

The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2018 was substantially lower on weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).

Day	Percent
Monday	16.3%
Tuesday	16.5%
Wednesday	16.1%
Thursday	15.3%
Friday	14.8%
Saturday	10.8%
Sunday	10.2%

Figure 4A-5
Number of Depression-Related Inpatient Discharges and Emergency Room
Visits of Arizona Residents, 2018

Total number of depression-related discharges =153,163

In 2018, *depression* accounted for 23,282 inpatient discharges and 6,586 emergency room visits as the first-listed diagnosis (for a total of 29,868 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 153,163 inpatient discharges and emergency room records (**Figure 4A-5**). When hospital data are 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
Inpatient Hospitalization Rates for Enterocolitis due to *Clostridium difficile*
By Age Group, Arizona Residents, 2018
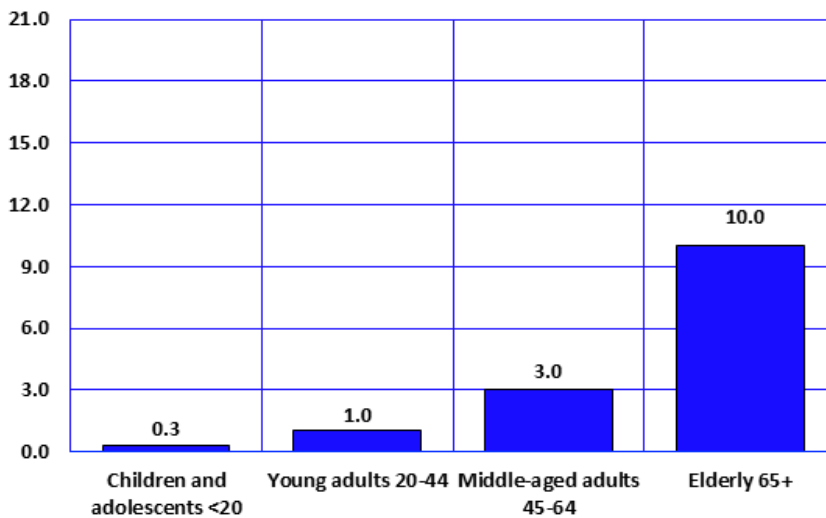
Note: Number of visits per 10,000 population

In 2018, 2,010 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 hospitalization rates associated with enterocolitis due to *Clostridium difficile* tend to increase with age. The rate for the elderly 65 years or older (10.0/10,000) was the highest of all age groups (**Figure 4A-6**).

In 2018, 119 Arizonans died from enterocolitis due to *Clostridium difficile*. Elderly 65 years or older accounted for 84.0 percent of these deaths (**Table 2C-27**).