# SECTION 5 HOSPITAL CARE FOR MENTAL HEALTH AND SUBSTANCE ABUSE CONDITIONS



## HIGHLIGHTS

This section focuses on inpatient stays and emergency department (ED) visits in community hospitals for mental health (MH) and substance abuse (SA) treatment, providing details on principal conditions of:

- anxiety disorders
- adjustment disorders
- attention-deficit, conduct, and disruptive behavior disorders
- developmental disorders
- autism and other childhood disorders
- impulse control disorders
- mood disorders
- personality disorders
- schizophrenia and other psychotic disorders
- alcohol-related disorders
- drug-related disorders
- pregnancy and other miscellaneous mental health disorders

Dementia and other cognitive disorders are excluded because they are often characterized by multiple cognitive problems that result from a condition that requires medical instead of psychiatric treatment. Screenings for mental health (MH) and substance abuse (SA) conditions are also excluded because they may not result in a MHSA diagnosis. In addition, suicide and intentional self-inflicted injury is excluded from analyses of principal reasons for inpatient MH stays because it occurs less than 2,000 times in 2008; however, this diagnosis is included in analysis of secondary diagnoses for inpatient MH stays and for emergency department visits where it appears more frequently as a reason for the stay/visit.

This analysis reflects care only in community hospitals and thus excludes MHSA stays in specialty psychiatric and chemical dependency hospitals.

## Hospitalizations for Mental Health and Substance Abuse (MHSA) Conditions

- Of the 39.9 million community hospital discharges in 2008, about 5 percent had a principal diagnosis of a MH or SA disorder.
- An additional 13.6 percent of all hospital discharges had a secondary MH diagnosis and 5.4 percent had a secondary SA diagnosis.
- Depression was responsible for 24 percent of MHSA stays and bipolar disorders for another 20 percent of MHSA stays.
- Hospital stays with MH and SA diagnoses were more commonly uninsured (12 percent) or insured by Medicaid (27 percent) than were hospital stays overall (5 percent uninsured and 18 percent insured by Medicaid).
- In 2008, the average cost for a MHSA hospital stay was $5,500, compared to an average of $9,100 for all stays and $6,700 for all stays without a major operating room procedure.
- Non-elderly adults (18-64 years old) accounted for a disproportionate share of all MHSA hospitalizations (83 percent) relative to their share of the total population (63 percent) and all hospitalizations (49 percent).
- From 1997 to 2008, the MHSA discharge rate for adults 65 years and older has fallen appreciably—from 55 to 43 discharges per 10,000.

## Hospitalizations for Mental Health Conditions

- In 2008, patients living in the poorest communities experienced MH hospitalization rates 44 percent higher than patients living in higher income communities—5.8 stays per 1,000 compared to 4.0 stays per 1,000 in higher income communities.
- Hospitalizations for schizophrenia and other psychotic disorders for residents in the poorest communities (1.9 discharges per 1,000) occurred at twice the rate of all other communities (0.9 discharges per 1,000).

## Hospitalizations for Substance Abuse Conditions

- Patients residing in the poorest communities experienced similar overall rates of hospitalization for SA as patients residing in higher income communities.
- Between 1997 and 2008, the number of hospital stays for drug-related conditions rose rapidly among 45-64 year olds (117-percent increase), 65-84 year olds (96-percent increase), and adults 85 and older (87-percent increase) while remaining relatively stable (11-percent decline) among adults 18-44 years.
- Rapid growth in drug-induced delirium and in poisonings by opiate-based pain medications was primarily responsible for the increase in drug-related hospitalizations for patients 65 years and older. In 2008, these two conditions accounted for 60 percent of drug-related stays for patients 65-84 years old and 78 percent of the drug-related stays in patients 85 years and older.
- Alcohol-related disorders accounted for 12 percent of MHSA hospital stays among 18-44 year olds, 21 percent of MHSA stays among 45-64 year olds, and 12 percent of MHSA stays for 65-84 year olds.

## ED Visits for MHSA Conditions[2]

- In 2007, there were 122.3 million emergency department visits. Of those ED visits, 9.9 million had an all-listed MH diagnosis, 2.8 million had an all-listed alcohol-related diagnosis, and 2.2 million had an all-listed drug-related diagnosis. (All-listed diagnoses include all diagnoses listed on the discharge record.)

[2] This section contains information from the Nationwide Emergency Department Sample (NEDS) for 2007, constructed from information from a 20-percent sample of community hospital emergency departments.

- A diagnosis of depression was the most frequently noted MHSA diagnosis (4.2 million ED visits), and the second most frequent MHSA diagnosis was anxiety (3.3 million ED visits).
- About one in five of all ED visits (20.4 million, or 17 percent of all ED visits) in 2007 resulted in inpatient hospital admission. In comparison, ED visits were much more likely to result in inpatient admission for MHSA conditions:
  - 42 percent of all MH ED visits resulted in hospitalization.
  - 44 percent of alcohol-related ED visits resulted in hospitalization.
  - 49 percent of all drug-related ED visits resulted in hospitalization.
- Three-quarters of ED visits for personality disorders led to an inpatient admission in 2007 and another 4 percent in a transfer to another facility such as a psychiatric hospital or to a skilled nursing or intermediate care facility. Among ED visits for suicide or intentional self-inflicted injury, 42 percent resulted in inpatient admission and another 28 percent resulted in transfer to another facility.

## EXHIBIT 5.1 Characteristics of U.S. Community Hospitals for MHSA Stays

**Characteristics of U.S. Community Hospitals† for All Stays and Stays with a Principal Mental Health (MH) and Substance Abuse (SA) Diagnosis, 2008**

| UTILIZATION, CHARGES, AND COSTS | ALL STAYS | MHSA STAYS | MH STAYS | SA STAYS |
|---|---|---|---|---|
| Discharges | | | | |
| Total discharges in millions | 39.9 | 1.8 | 1.3 | 0.5 |
| Number of discharges per 1,000 population* | 131.0 | 6.0 | 4.4 | 1.6 |
| Total days of care in millions | 183.6 | 13.1 | 10.8 | 2.3 |
| Average length of stay in days | 4.6 | 7.1 | 8.0 | 4.7 |
| | | | | |
| Percent of discharges from: | | | | |
| Metropolitan hospitals | 87% | 89%‡ | 89%‡ | 90% |
| Teaching hospitals | 47% | 50%‡ | 50%‡ | 51%‡ |
| Hospital ownership | | | | |
| Non-Federal government hospitals | 14% | 14%‡ | 13%‡ | 16%‡ |
| Private not-for-profit hospitals | 73% | 76%‡ | 76%‡ | 74%‡ |
| Private for-profit hospitals | 13% | 11%‡ | 11%‡ | 9%‡ |
| | | | | |
| Charges and costs** | | | | |
| Charges | | | | |
| Average charges per stay | $29,000 | $16,400 | $17,000 | $14,600 |
| Costs | | | | |
| Total aggregate costs in billions | $364.7 | $10.1 | $7.7 | $2.4 |
| Average costs per stay | $9,100 | $5,500 | $5,700 | $4,900 |

† HCUP is based on data from community hospitals, defined as short-term, non-Federal, general and other hospitals, excluding hospital units of other institutions (e.g., prisons). Community hospitals (and HCUP data) include OB-GYN, ENT, orthopedic, cancer, pediatric, public, and academic medical hospitals. They exclude hospitals whose main focus is long-term care, psychiatric, and alcoholism and chemical dependency treatment, although discharges from these types of units that are part of community hospitals are included.

* Calculated using resident population for July 2008 from the U.S. Bureau of the Census, retrieved on June 22, 2010 (http://www.census.gov/popest/national/asrh/2009-nat-res.html).

‡ Distribution of MHSA, MH, or SA discharges is not statistically different from distribution of all discharges at $p<0.05$.

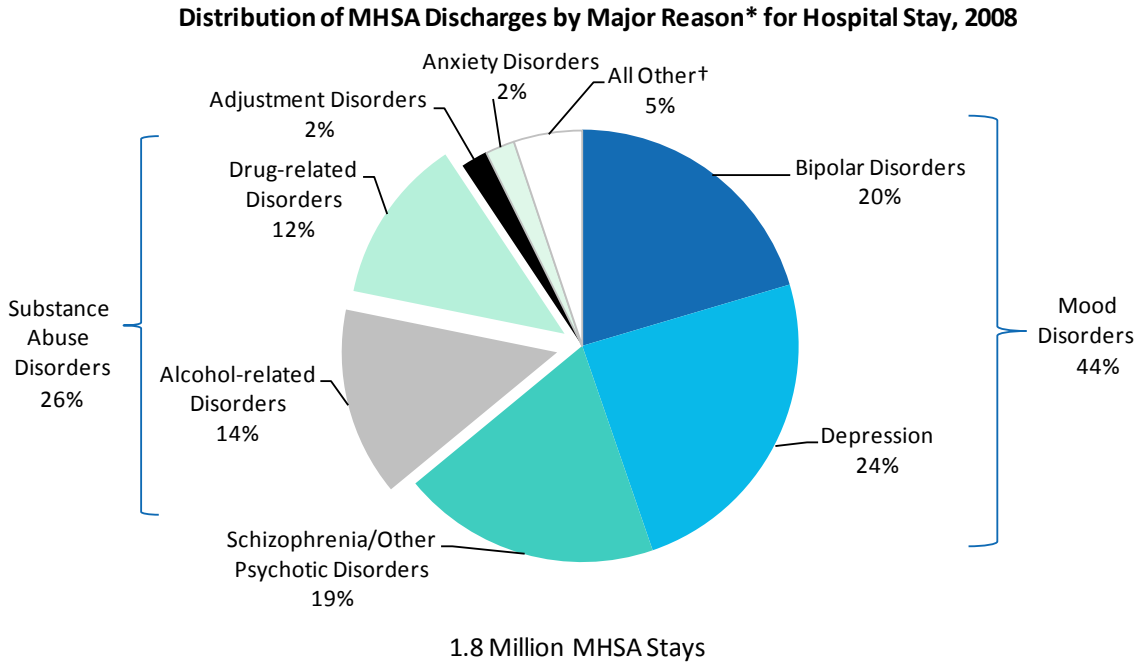
** Charges represent amounts billed by hospitals. These amounts are seldom paid in full by insurers or patients. Costs are calculated from charges using cost-to-charge ratios calculated from hospital-reported Medicare Cost Reports submitted to the Centers for Medicare and Medicaid Services (CMS).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- Of the 39.9 million community hospital discharges in 2008, 1.8 million discharges, or about 5 percent, had a principal diagnosis of a MHSA condition—1.3 million discharges with a MH diagnosis and 0.5 million with a SA disorder as the major reason for the stay.
- For every 1,000 persons in the United States in 2008, there were 6.0 stays for a principal MHSA condition—4.4 stays for MH disorders and 1.6 stays for SA disorders.
- The average length of stay (ALOS) for any MHSA condition was 7.1 days. The ALOS for MH (8.0 days) was 75 percent longer than for all stays (4.6 days). When the main reason for the stay was a SA disorder, the average length of stay (4.7 days) was similar to all stays (4.6 days).

- The distribution of discharges among hospitals by metropolitan location, teaching status and ownership was similar for all stays, MHSA stays, MH stays, and SA stays. The only exception was for patients with principal SA diagnoses, who were more likely to be hospitalized in a metropolitan hospital.
- Average charges per stay—the amounts patients are billed for their rooms, nursing care, diagnostic tests, and other services—were lower for MHSA ($16,400) than for all stays ($29,000). Average charges for MH stays ($17,000) were higher than for SA stays ($14,600) and about half of the average charges for all stays. (Charges are seldom paid in full because insurers negotiate substantial discounts with hospitals.)
- The aggregate costs for hospital stays with a principal MHSA diagnosis ($10.1 billion) accounted for 2.8 percent of the all hospital costs ($364.7 billion) in 2008. Most of these MHSA charges were for MH stays: MH disorders contributed $7.7 billion (2.1 percent) of all hospital costs and SA disorders accounted for $2.4 billion (0.7 percent).
- The average cost for a MHSA stay ($5,500) was smaller than for all stays ($9,100) in 2008. The average cost was $5,700 for MH stays and $4,900 for SA stays.

## EXHIBIT 5.2 Reasons for MHSA Inpatient Hospital Stays



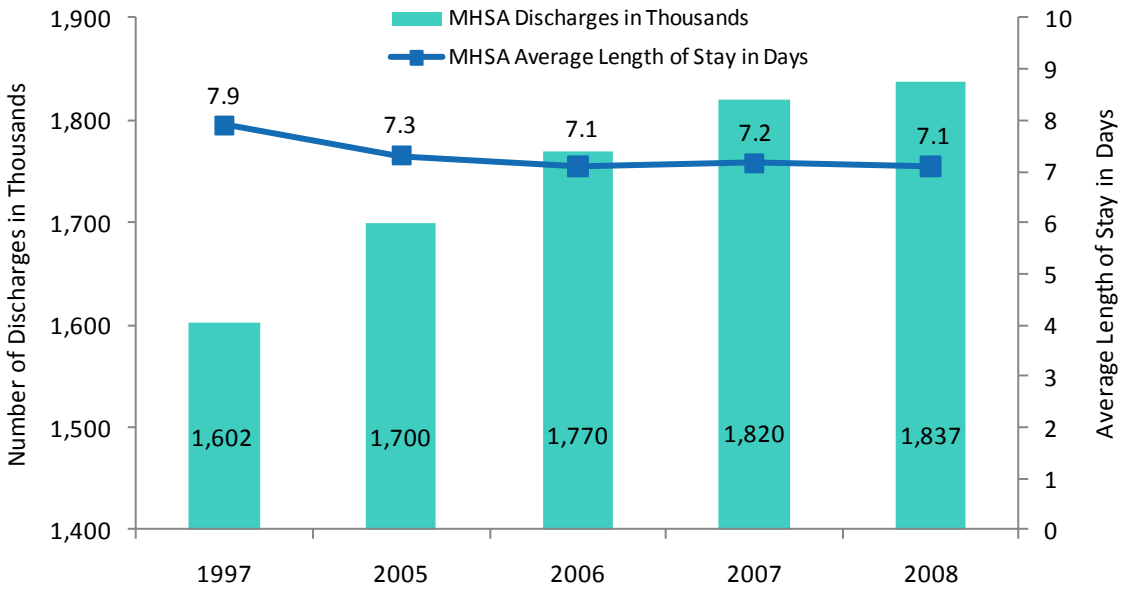

* Based on principal CCS conditions.
† Includes attention-deficit, conduct, and disruptive behavior disorders; impulse control disorders; personality disorders; autism and other childhood disorders; developmental disorders; and pregnancy-related and other miscellaneous MH disorders.
Note: Pie slices do not add to 100% because of rounding.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

In 2008, there were 1.8 million stays for a principal MHSA diagnosis. About three-quarters (1.3 million) of these stays had a MH disorder and one-quarter of these (0.5 million) had a SA disorder.

- Accounting for 44 percent of discharges, mood disorders (depression and bipolar disorders) was the most common reason for a MHSA stay in 2008. Depression was responsible for 24 percent of the 1.8 million MHSA stays and bipolar disorders for another 20 percent of MHSA stays.
- SA disorders contributed 26 percent of all MHSA discharges, with alcohol-related disorders responsible for 14 percent and drug-related disorders for 12 percent of all MHSA discharges.
- Schizophrenia/other psychotic disorders made up nearly one in five MHSA hospitalizations (19 percent).
- The remaining 9 percent of MHSA stays in 2008 were for anxiety disorders (2 percent), adjustment disorders (2 percent), and all other MH conditions (5 percent).

## EXHIBIT 5.3 MHSA Hospitalizations and Average Length of Stay

**Number of Inpatient Hospital Stays and Average Length of Stay for Discharges with a Principal MHSA Diagnosis, 1997-2008**

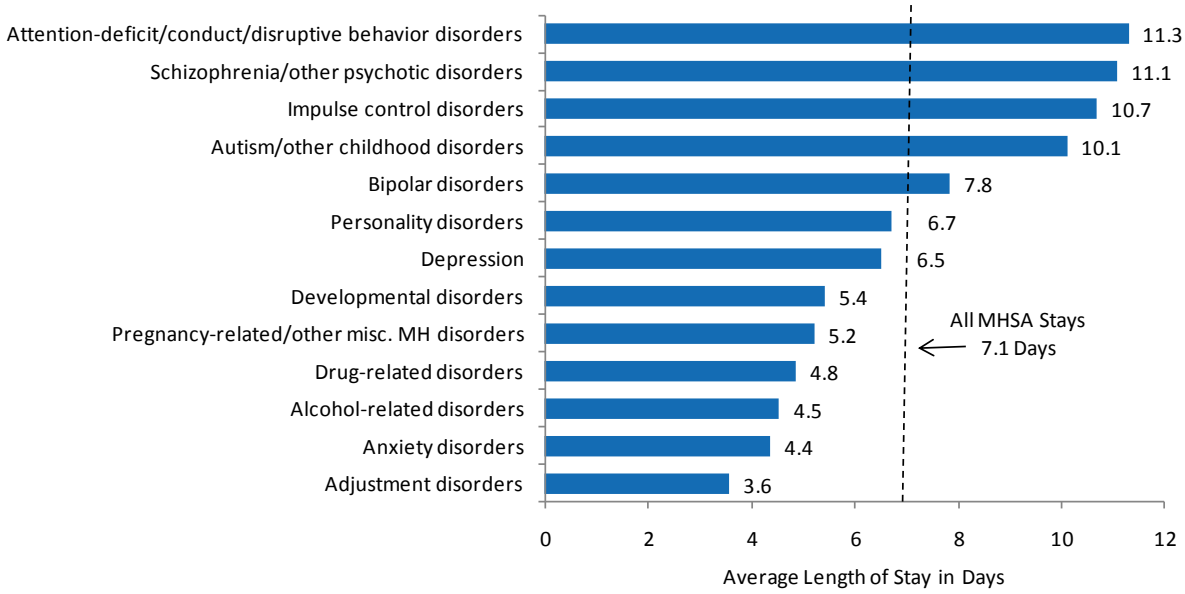



Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997, 2005, 2006, 2007 and 2008.

The average length of stay (ALOS) for all discharges in U.S. community hospitals in 2008 was 4.6 days (Exhibit 1.2). In contrast, the ALOS for discharges with a principal diagnosis of a MHSA disorder was much longer—7.1 days.

- From 1997 to 2008, the number of discharges for all conditions and for MHSA conditions each rose by 15 percent (increasing by 5.2 million discharges for all conditions (Exhibit 1.2) and by 0.2 million discharges for MHSA conditions).
- The ALOS for all hospital stays declined by 4 percent from 1997 to 2008 (from 4.8 days in 1997 to 4.6 days in 2008, Exhibit 1.2). The ALOS for MHSA hospital stays fell at more than twice the rate of all hospital stays, or 10 percent (from 7.9 days in 1997 to 7.1 days in 2008).

**Average Length of Stay by Principal Reason for MHSA Stay, 2008**



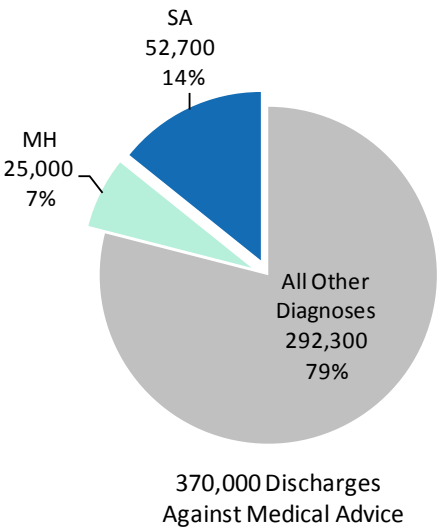

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

Although the average length of stay (ALOS) for all MHSA stays in community hospitals was 7.1 days, ALOS varied considerably by MHSA condition.

- Attention-deficit/conduct/disruptive behavior disorders and schizophrenia/other psychotic disorders each had an ALOS that was greater than 11 days, or 4 days more than the average MHSA stay in 2008.
- The ALOS was 7.8 days for bipolar disorders and 6.5 days for depression.
- The ALOS for both drug- and alcohol-related disorders in community hospitals was less than 5 days—4.8 and 4.5 days, respectively.

## EXHIBIT 5.4 MH and SA Inpatient Hospital Discharges Against Medical Advice

**MHSA* Inpatient Hospital Discharges Against Medical Advice (AMA) as a Share of All Discharges AMA, 2008**

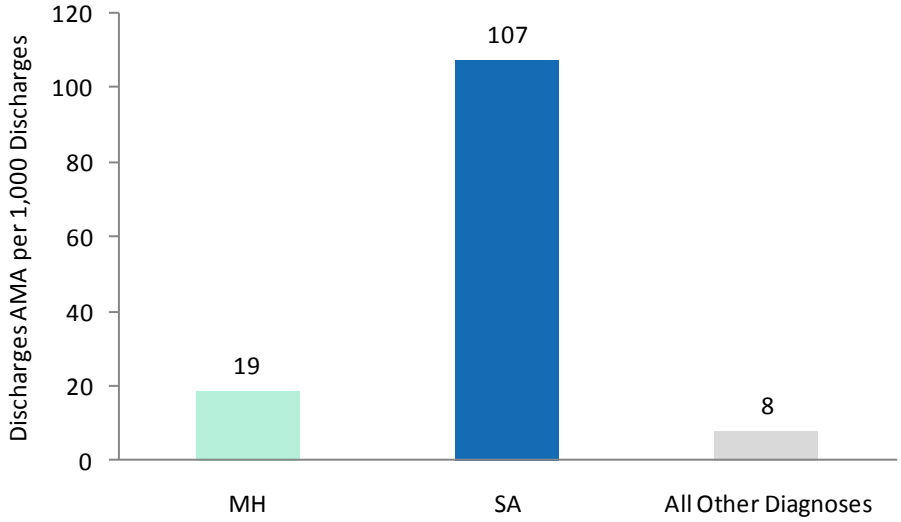



* Based on principal CCS diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

Although MHSA discharges represented 5 percent of all community hospital discharges in 2008, they accounted for 21 percent of all discharges leaving the hospital against medical advice (AMA).

- Of the 39.5 million hospital discharges in 2008, 370,000 discharges were designated as AMA. Of these AMA discharges, 25,000 AMA stays (7 percent) had a principal MH diagnosis and 52,700 (14 percent) had a principal SA diagnosis.

**Discharge Rate Against Medical Advice (AMA) for MHSA* and All Other Diagnoses, 2008**

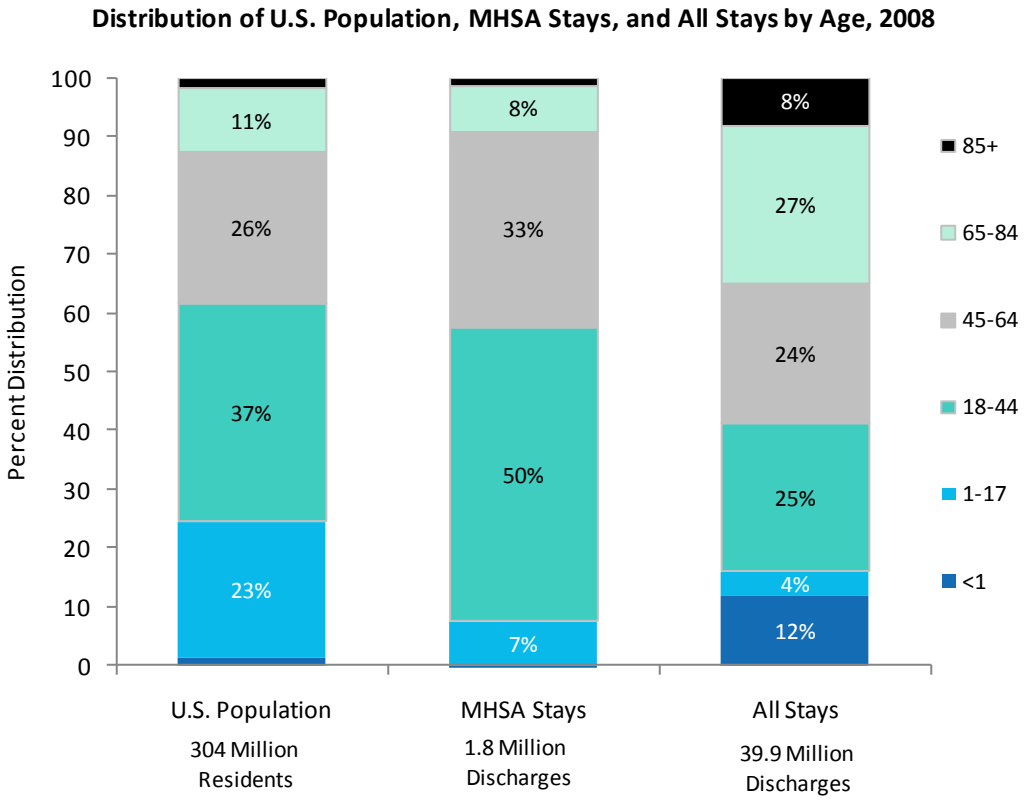



* Based on principal CCS diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

The rate of discharges AMA was higher for MH and SA discharges than for all other discharges in 2008.

- Of the 1.3 million MH stays, 19 per 1,000 discharges were AMA.
- Of the 0.5 million SA stays, 107 per 1,000 discharges were AMA. Discharges AMA occurred 11 times more frequently for SA stays than for all the other non-MHSA discharges (8 per 1,000 discharges).

## EXHIBIT 5.5 MHSA Inpatient Hospital Discharges by Age

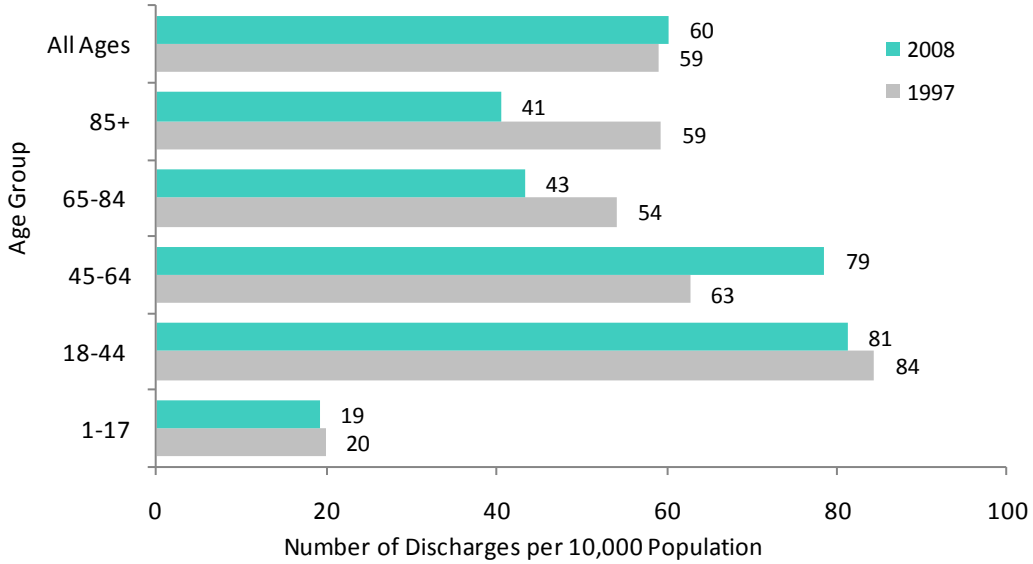



Note: Excludes a small number of MHSA discharges (2,500 or 0.1 percent) and of all discharges (50,000 or 0.1 percent) with missing age.
Note: Bar segments representing 2 percent or less have not been labeled.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

By age, the distribution of MHSA hospitalizations differed substantially from the distribution of hospitalizations for all reasons and from the distribution of the U.S. population in 2008.

- Adults 18-64 years old accounted for a disproportionate share of all MHSA hospitalizations (83 percent) relative to their share of the total population (63 percent) and all hospitalizations (49 percent).
- While those 65 years and older were responsible for 35 percent of all stays and 13 percent of the U.S. population, they accounted for only 9 percent of MHSA stays.
- Children 1-17 years old accounted for 4 percent of all hospital stays and 7 percent of MHSA stays, compared to their population share of 23 percent.
- Children under 1 year accounted for 1 percent of the overall population, 12 percent of all hospital stays (mostly as newborns), and less than 0.1 percent of MHSA discharges (mostly for drug-related disorders).

**MHSA Discharges per 10,000 Population by Age, 1997 and 2008**




Note: Excludes a small number of discharges (4,000 or 0.2 percent) less than 1 year of age or with missing age.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2008.

- In 2008, there were 60 MHSA hospital stays per 10,000 population.
  - Children 1-17 had the lowest rate of hospitalization for MHSA conditions—19 stays per 10,000.
  - For adults 65 and older, MHSA hospitalization occurred at about twice the rate of children—more than 40 discharges per 10,000. These stays excluded those with a principal diagnosis of dementia.
  - Adults 18-64 experienced the highest rate of MHSA hospital stays—about 80 discharges per 10,000, or twice the rate of adults 65 years and older.
- The MHSA discharge rate for adults 65 years and older has fallen appreciably from 1997 to 2008:
  - The MHSA discharge rates for adults 65 to 84 years decreased from 54 to 43 discharges per 10,000 between 1997 and 2008.
  - The rates for those 85 years and older also declined over the same period—from 59 to 41 discharges per 10,000.
- While the rates of MHSA hospitalizations have remained steady or fallen for other age groups, the discharge rate for 45-64 year olds increased from 63 to 79 discharges per 10,000 from 1997 to 2008.

## EXHIBIT 5.6 Most Frequent Principal MHSA Diagnoses by Age

**Number of Discharges, Percent Distribution, and Growth of the Most Frequent Principal MHSA Diagnoses for Inpatient Hospital Stays by Age, 1997 and 2008**

| | NUMBER OF MHSA DISCHARGES IN THOUSANDS | | PERCENT OF AGE-SPECIFIC TOTAL MHSA DISCHARGES | | CUMULATIVE GROWTH |
|---|---|---|---|---|---|
| AGE GROUP AND PRINCIPAL CCS DIAGNOSIS | 1997 | 2008 | 1997 | 2008 | 1997-2008 |
| **All ages, total MHSA discharges*** | **1,602** | **1,837‡** | | | **15%** |
| **1-17 years, total discharges** | **134** | **135‡** | **100.0%** | **100.0%** | **1** |
| Mood disorders | 64 | 83‡ | 48.0 | 61.3 | 29 |
| Depression | 54 | 38‡ | 40.3 | 28.3 | -29 |
| Bipolar disorders | 10 | 45 | 7.7 | 33.0 | 333 |
| Attention-deficit/conduct/disruptive behavior disorders | 23 | 16‡ | 17.4 | 12.0 | -30 |
| Schizophrenia/other psychotic disorders | 7 | 6‡ | 4.9 | 4.1 | -14 |
| Anxiety disorders | 5 | 5‡ | 3.7 | 4.0 | 9 |
| **18-44 years, total discharges** | **927** | **920‡** | **100.0** | **100.0** | **-1** |
| Mood disorders | 335 | 415 | 36.1 | 45.1 | 24 |
| Depression | 236 | 212‡ | 25.5 | 23.1 | -10 |
| Bipolar disorders | 98 | 202 | 10.6 | 22.0 | 106 |
| Schizophrenia/other psychotic disorders | 197 | 173‡ | 21.2 | 18.8 | -12 |
| Drug-related disorders | 156 | 139‡ | 16.8 | 15.1 | -11 |
| Alcohol-related disorders | 141 | 109 | 15.2 | 11.9 | -22 |
| **45-64 years, total discharges** | **353** | **612** | **100.0** | **100.0** | **73** |
| Mood disorders | 136 | 251 | 38.7 | 41.1 | 84 |
| Depression | 93 | 145 | 26.3 | 23.7 | 56 |
| Bipolar disorders | 44 | 107 | 12.4 | 17.4 | 145 |
| Schizophrenia/other psychotic disorders | 84 | 136 | 23.9 | 22.3 | 62 |
| Alcohol-related disorders | 78 | 131 | 22.1 | 21.4 | 68 |
| Drug-related disorders | 30 | 65 | 8.5 | 10.7 | 117 |
| **65-84 years, total discharges** | **165** | **144** | **100.0** | **100.0** | **-13** |
| Mood disorders | 92 | 65 | 55.5 | 45.3 | -28 |
| Depression | 72 | 44 | 43.8 | 30.6 | -39 |
| Bipolar disorders | 19 | 21‡ | 11.7 | 14.7 | 10 |
| Schizophrenia/other psychotic disorders | 33 | 34‡ | 19.8 | 23.5 | 4 |
| Alcohol-related disorders | 18 | 18‡ | 11.0 | 12.3 | -2 |
| Drug-related disorders | 8 | 16 | 4.9 | 11.1 | 96 |
| **85+ years, total discharges** | **23** | **22‡** | **100.0** | **100.0** | **-5** |
| Mood disorders | 14 | 9 | 59.8 | 41.6 | -34 |
| Depression | 13 | 8 | 54.0 | 35.3 | -38 |
| Bipolar disorders | 1 | 1‡ | 5.8 | 6.4 | 5 |
| Schizophrenia/other psychotic disorders | 5 | 6 | 20.2 | 28.1 | 33 |
| Drug-related disorders | 2 | 3 | 7.4 | 14.6 | 87 |
| Anxiety disorders | 1 | 1‡ | 4.0 | 4.8 | 14 |

* Includes a small number of discharges (2,500 or 0.1 percent) with missing age.

‡ 2008 discharges are not statistically different from 1997 discharges at p<0.05.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2008.

- Mood disorders was the most frequent principal MHSA diagnosis across all age groups in 1997 and 2008.
  - Mood disorders accounted for the majority (61 percent) of all MHSA hospitalizations among children 1-17 years in 2008 and about four in ten MHSA discharges in other age groups.
  - The number of stays with a principal diagnosis of mood disorders increased among 18-44 year olds (24 percent) and 45-64 year olds (84 percent) from 1997 to 2008.
  - The number of hospitalizations specifically for depression changed little for children 1-17 and adults 18-44, rose for adults 45-64 (by 56 percent), and decreased for older adults (by -39 percent for 65-84 year olds and -38 percent for those 85 years and older).
  - In contrast, stays for bipolar disorders more than doubled over the same period for patient age groups of 64 years and younger. Growth in stays was especially high for children 1-17 years (increasing by 333 percent between 1997 and 2008). While the cause of this increase is unclear and should be interpreted cautiously, it may reflect an increased recognition of bipolar disorder, especially in children—a group that has been historically under-diagnosed.[3,4] It may also reflect the difficulty of assigning a diagnosis for a condition, especially in children, that may share presenting symptoms with schizophrenia/other psychotic disorders and attention deficit/conduct/disruptive behavior disorders.
- Schizophrenia/other psychotic disorders was the second most frequent MHSA condition for all adult age groups (18 years and older), and it was the third most frequent MHSA condition for children 1-17 years in 2008.
  - While the number of stays for schizophrenia for most age groups changed little from 1997 to 2008, it increased 62 percent for 45-64 year olds and 33 percent for patients 85 years and older.
- Alcohol-related disorders accounted for 12 percent of MHSA hospital stays among 18-44 year olds, 21 percent of MHSA stays among 45-64 year olds, and 12 percent of MHSA stays for 65-84 year olds.
- Drug-related disorders appeared prominently among the top four principal MHSA conditions for all age groups except children (1-17 years):
  - The number of hospital stays for drug-related conditions rose rapidly among 45-64 year olds (117 percent), 65-84 year olds (96 percent), and adults 85 and older (87 percent) while remaining relatively stable (11-percent decline) among adults 18-44.

**Number, Growth, and Percent Contribution to Growth of Drug-related Discharges for Selected Age Groups, 1997-2008**

| | NUMBER OF DRUG-RELATED DISCHARGES IN 2008 | | | CUMULATIVE GROWTH IN DRUG-RELATED DISCHARGES 1997-2008 | | | PERCENT CONTRIBUTION TO GROWTH IN DRUG-RELATED DISCHARGES 1997-2008 | | |
|---|---|---|---|---|---|---|---|---|---|
| PRINCIPAL ICD-9-CM DIAGNOSIS | 45-64 YEARS | 65-84 YEARS | 85+ YEARS | 45-64 YEARS | 65-84 YEARS | 85+ YEARS | 45-64 YEARS | 65-84 YEARS | 85+ YEARS |
| All drug-related discharges | 65,400 | 16,000 | 3,200 | 117% | 96% | 87% | 100.0% | 100.0% | 100.0% |
| Drug withdrawal (ICD-9-CM 292.0) | 20,300 | 2,000 | 100 | 270 | 107 | 71 | 41.9 | 13.5 | 3.9 |
| Drug-induced delirium (ICD-9-CM 292.81) | 4,200 | 6,400 | 2,100 | 143 | 56 | 98 | 7.0 | 29.0 | 69.8 |
| Poisonings by codeine [methylmorphine], meperidine [pethidine], morphine (ICD-9-CM 965.09) | 8,300 | 3,300 | 400 | 693 | 381 | 245 | 20.6 | 32.9 | 19.1 |
| All other drug-related conditions* | 32,600 | 4,300 | 600 | 49 | 80 | 24 | 21.5 | 14.0 | 0.4 |

* ICD-9-CM codes 292.1, 292.2, 292.82-292.89, 292.9, 304, 305.2-305.9, 648.3, 655.5, 760.72, 760.73, 760.75, 779.5, 965.00-965.02, and V65.42.

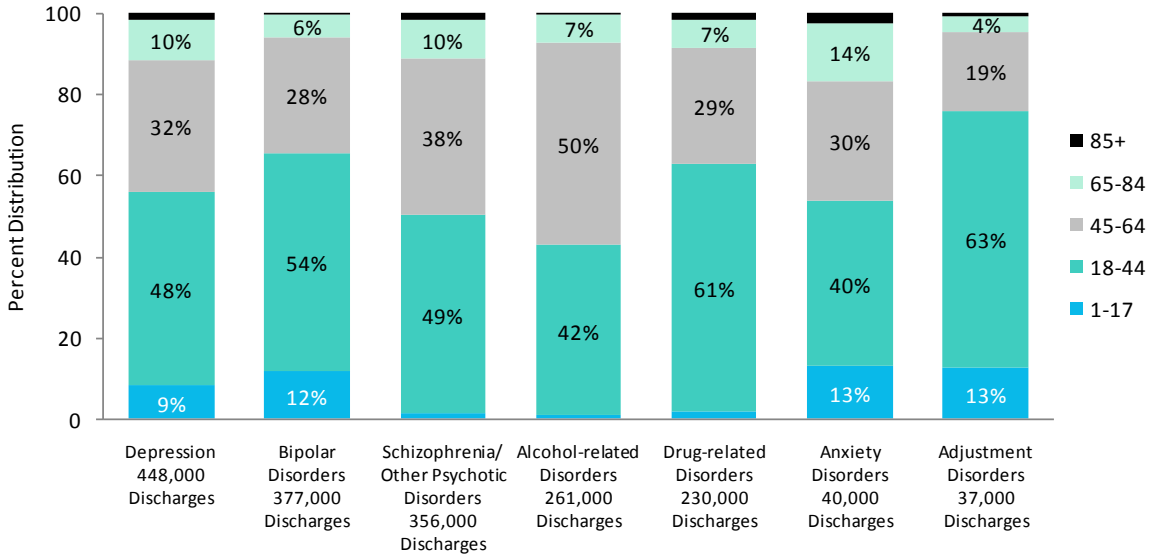
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2008.

[3] Rates of Bipolar Diagnosis in Youth Rapidly Climbing, Treatment Patterns Similar to Adults. National Institutes for Mental Health, Press Release. September 3, 2007. Available at http://www.nimh.nih.gov/science-news/2007/rates-of-bipolar-diagnosis-in-youth-rapidly-climbing-treatment-patterns-similar-to-adults.shtml.

[4] Moreno C, Laje G, Blanco C, Jiang H, Schmidt AB, Olfson M. National trends in the outpatient diagnosis and treatment of bipolar disorder in youth. *Arch Gen Psychiatry*. 2007 Sep;64(9): 1032-1039.

- Rapid growth in drug-induced delirium and in poisonings by opiate-based pain medications was primarily responsible for the increase in drug-related hospitalizations for patients 85 years and older. Together in 2008, these conditions accounted for 78 percent of the drug-related stays and 89 percent of the increase in drug-related stays for these oldest patients. Drug-induced delirium can result from side-effects of medications and occurs often in elderly hospitalized patients.[5,6,7]
- Drug-induced delirium and poisonings by opiate-based pain medications were also responsible for a large number of drug-related discharges in 45-64 year olds (19 percent) and 65-84 year olds (60 percent).

**Distribution of the Most Frequent MHSA Conditions* by Age, 2008**




* Based on principal CCS diagnosis.
Note: Excludes a small number of MHSA discharges (2,500 or 0.1 percent) and of all discharges (50,000 or 0.1 percent) with missing age.
Note: Bar segments representing 3 percent or less have not been labeled.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- Adults 18-44 years accounted for the majority of stays for bipolar disorders, drug-related disorders, and adjustment disorders.
- For alcohol-related disorders, 18-44 year olds accounted for 42 percent of stays and 45-64 year olds accounted for 50 percent of stays.
- For schizophrenia/other psychotic disorders, 18-44 year olds accounted for 49 percent of stays and 45-64 year olds accounted for 38 percent of stays.
- Children 1-17 years accounted for a substantial proportion (9 to 13 percent) of stays for depression, bipolar disorders, anxiety disorders, and adjustment disorders.
- Patients 65 and older accounted for 17 percent of anxiety disorders and 12 percent of both depression and schizophrenia/other psychotic disorders.

[5] Alagiakrishnan K, Wiens C. An approach to drug induced delirium in the elderly. Postgrad Med J. 2004 July; 80(945): 388–393.
[6] Alagiakrishnan K. Delirium. Available at http://emedicine.medscape.com/article/288890-overview, updated Apr 2, 2010.
[7] Fong TG, Tulebaev SR, and Inouye SK. Delirium in elderly adults: diagnosis, prevention and treatment. Nat Rev Neurol. 2009 Apr; 5: 210-220.

## EXHIBIT 5.7 MHSA Inpatient Discharges by Gender

**Number of Discharges, Percent Distribution, and Growth of Principal Diagnoses for MHSA Inpatient Hospital Stays by Gender, 2008**

| PRINCIPAL CCS DIAGNOSIS | NUMBER OF MHSA DISCHARGES IN THOUSANDS | | PERCENT OF GENDER-SPECIFIC DISCHARGES | | CUMULATIVE GROWTH 1997-2008 | |
|---|---|---|---|---|---|---|
| | MALES | FEMALES | MALES | FEMALES | MALES | FEMALES |
| All MHSA diagnoses* | 947.1 | 883.5‡ | 100.0% | 100.0% | 18% | 11% |
| Mood disorders | 358.5 | 463.3 | 37.8 | 52.4 | 44 | 19 |
| Depression | 193.0 | 253.3 | 20.4 | 28.7 | 7 | -12 |
| Bipolar disorders | 165.4 | 210.1 | 17.5 | 23.8 | 137 | 104 |
| Schizophrenia/other psychotic disorders | 199.6 | 154.4 | 21.1 | 17.5 | 14 | 3 |
| Alcohol-related disorders | 188.0 | 72.8 | 19.9 | 8.2 | 7 | 11 |
| Drug-related disorders | 134.6 | 95.1 | 14.2 | 10.8 | 8 | 19 |
| Adjustment disorders | 18.5 | 18.1‡ | 2.0 | 2.1 | -36 | -45 |
| Anxiety disorders | 15.1 | 25.2 | 1.6 | 2.9 | 14 | 8 |
| Attention-deficit/conduct/disruptive behavior disorders | 12.7 | 5.7 | 1.3 | 0.6 | -26 | -19 |
| Impulse control disorders | 8.5 | 3.7 | 0.9 | 0.4 | 29 | 36 |
| Pregnancy-related/other misc. MH disorders | 5.3 | 40.3 | 0.6 | 4.6 | -31 | 4 |
| Pregnancy-related MH disorders | - | 24.5 | - | 2.8 | - | 36 |
| Autism/other childhood disorders | 3.2 | 1.0 | 0.3 | 0.1 | 69 | 41 |
| Personality disorders | 1.6 | 2.6 | 0.2 | 0.3 | -49 | -42 |
| Developmental disorders | 1.4 | 1.2‡ | 0.1 | 0.1 | 76 | 53 |

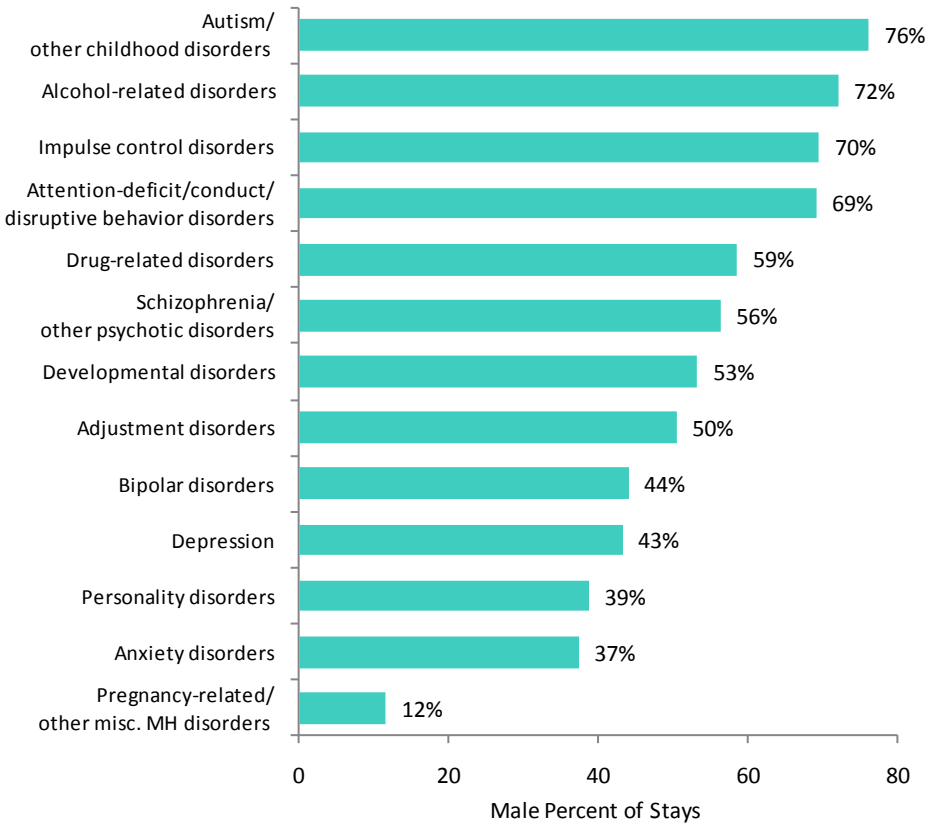
* Excludes a small number of discharges (6,000 or 0.3 percent) with missing gender.

‡ Female discharges are not statistically different from male discharges at p<0.05.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2008.

- Males accounted for about half (52 percent) of all MHSA discharges—947,100 inpatient hospitalizations in 2008.
- Mood disorders was the most frequent principal diagnosis for a MHSA stay for both males (38 percent of all male MHSA stays) and females (52 percent of all female MHSA stays). The majority of these stays for mood disorders were for depression.
- The second and third most frequent reason for male MHSA stays were schizophrenia/other psychotic disorders and alcohol-related disorders; for females, they were schizophrenia/other psychotic disorders and drug-related disorders.

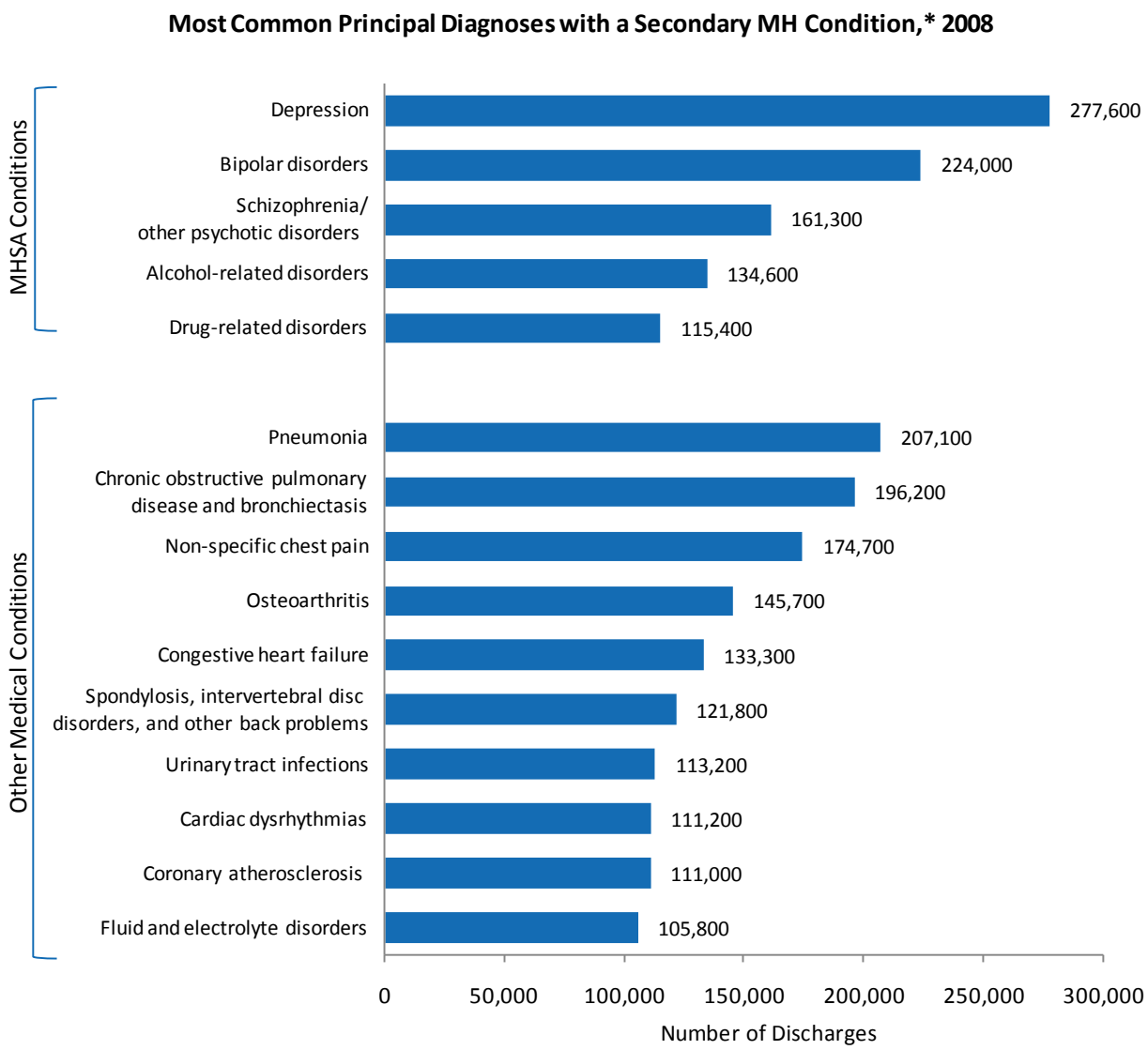
**Percent of MHSA Stays for Males by Principal MHSA Diagnosis, 2008**




Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- Stays for autism/other childhood disorders, alcohol-related disorders, impulse control disorders, attention-deficit/conduct/disruptive behavior disorders, drug-related disorders, and schizophrenia/other psychotic disorders were more frequent among males than females in 2008.
  - About three-quarters of MHSA stays with a principal diagnosis of autism/other childhood disorders and alcohol-related disorders were for males.
  - About seven of ten MHSA stays for impulse control disorders and attention-deficit/conduct/disruptive behavior disorders were for males.
- In contrast, stays for pregnancy-related/other miscellaneous MH disorders, anxiety disorders, personality disorders, depression, and bipolar disorders were less common among males than females.
- Stays with principal diagnoses of adjustment and developmental disorders were split evenly by gender.

## EXHIBIT 5.8 Principal Diagnoses with a Secondary MH or SA Condition



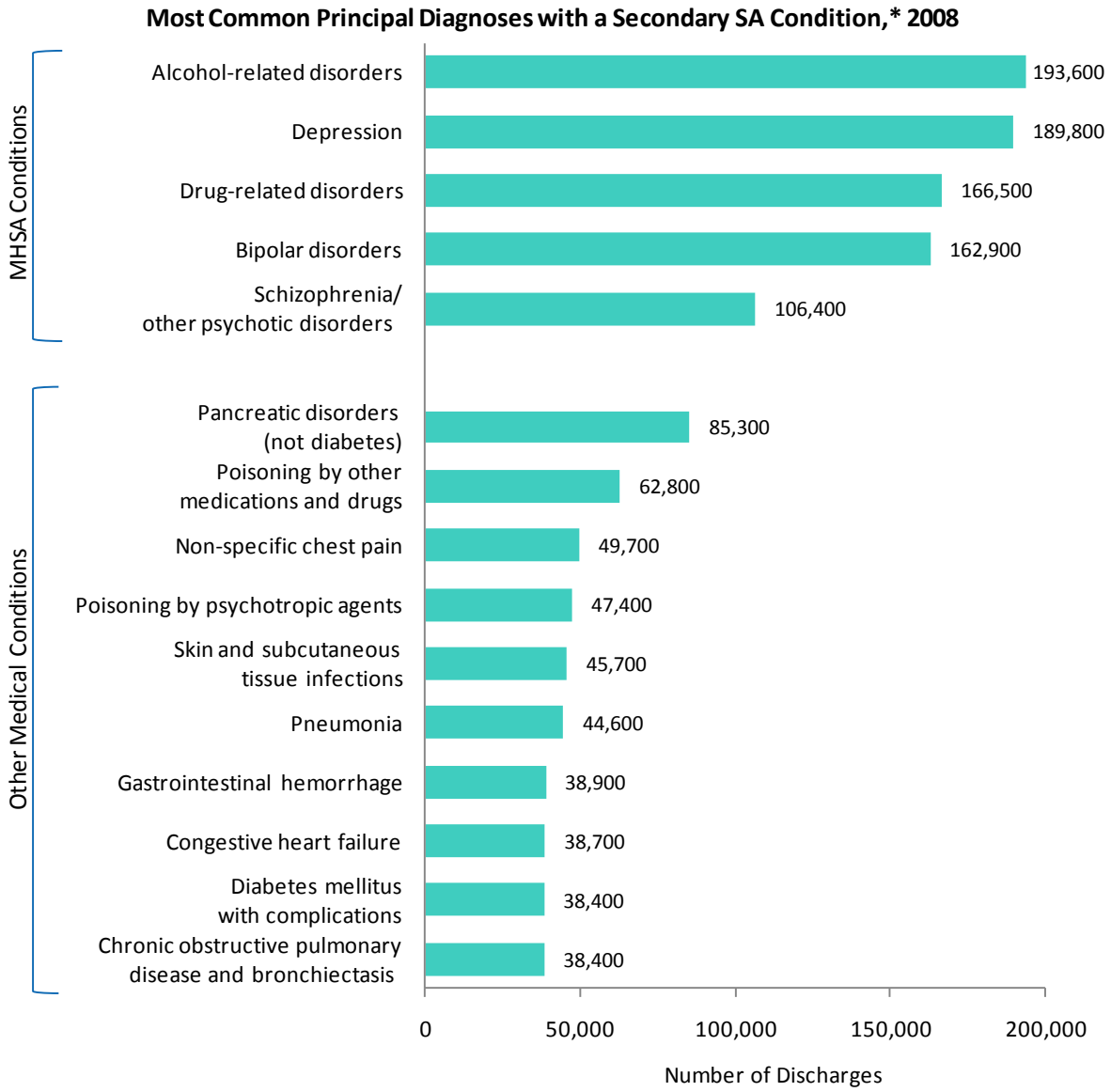

*All conditions are defined using CCS. Once a secondary MH diagnosis is detected, the discharge is counted according to its principal CCS diagnosis. Suicide/intentional self-inflicted injury is included as a secondary MH diagnosis .
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

MH and SA conditions may be the principal reason for hospitalization or they may be secondary, co-existing conditions that potentially complicate the stay. In addition to discharges with a principal MH or SA condition, another 5.4 million discharges (13.6 percent of all hospital discharges) had a secondary MH diagnosis and 2.2 million (5.4 percent) had a secondary SA diagnosis in 2008.

- Stays with a secondary MH condition often co-occur with a principal MH or SA diagnosis.
  - Three of the top 15 principal conditions that occurred with a secondary MH diagnosis in 2008 were MH conditions (depression (277,600 stays), bipolar disorders (224,000 stays), and schizophrenia (161,300 stays)).

- Both alcohol- and drug-related disorders ranked among the top 15 principal reasons for hospitalizations with a secondary MH condition. Alcohol-related disorders were responsible for 134,600 stays and drug-related disorders for another 115,400 stays with a secondary MH diagnosis.

- A secondary MH diagnosis also occurred often with many of the top 15 most frequent medical conditions.
  - The most frequent conditions with a secondary MH diagnosis included pneumonia (207,100 stays), chronic obstructive lung disease (196,200 stays), and non-specific chest pain (174,700 stays).
  - Secondary MH diagnoses often accompanied stays with principal cardiac and musculoskeletal conditions. These conditions included congestive heart failure (133,300 stays), cardiac dysrhythmias (111,200 stays), coronary atherosclerosis (111,000 stays), osteoarthritis (145,700 stays) and spondylosis, intervertebral disc disorders, and other back problems (121,800 stays).
  - Stays for urinary tract infections and fluid and electrolyte disorders also had frequent secondary MH disorders—113,200 and 105,800 stays, respectively.

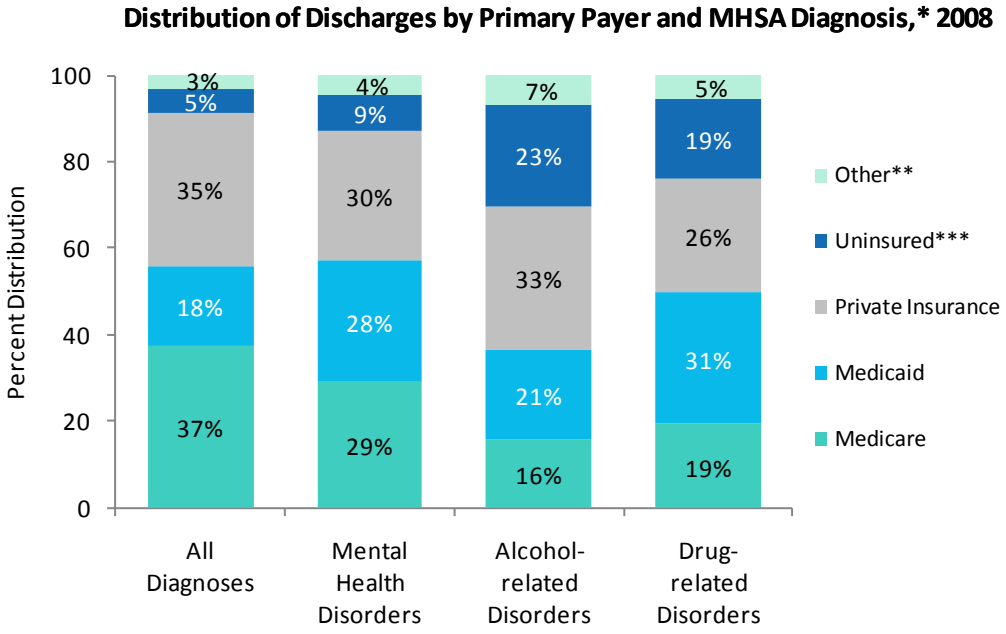



*All conditions are defined using CCS. Once a secondary SA diagnosis is detected, the discharge is counted according to its principal CCS diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- MH and SA conditions often co-occur.
  - The top five most common principal diagnoses for stays with a secondary SA disorder in 2008 were MHSA conditions: alcohol-related disorders (193,600 stays), depression (189,800 stays), drug-related disorders (166,500 stays), bipolar disorders (162,900 stays), and schizophrenia/other psychotic disorders (106,400 stays).
- Secondary SA diagnoses are often associated with hospitalizations for the treatment of other medical conditions, some of which may be the consequence of or related to SA.
  - Other frequent principal medical conditions that accompanied a secondary SA diagnosis in 2008 included conditions affecting the pancreas, liver, and digestive tract, as well as poisonings. These included pancreatic disorders other than diabetes (85,300 stays), poisonings by other medications or drugs (62,800 stays), poisoning by psychotropic agents (47,400 stays), gastrointestinal hemorrhage (38,900 stays), and diabetes with complications (38,400 stays).

- Non-specific chest pain (49,700 stays), skin and subcutaneous tissue infections (45,700 stays), pneumonia (44,600 stays), congestive heart failure (38,700 stays), and chronic obstructive pulmonary disease and bronchiectasis (38,400 stays) were also frequent reasons for hospitalizations with a secondary SA diagnosis.

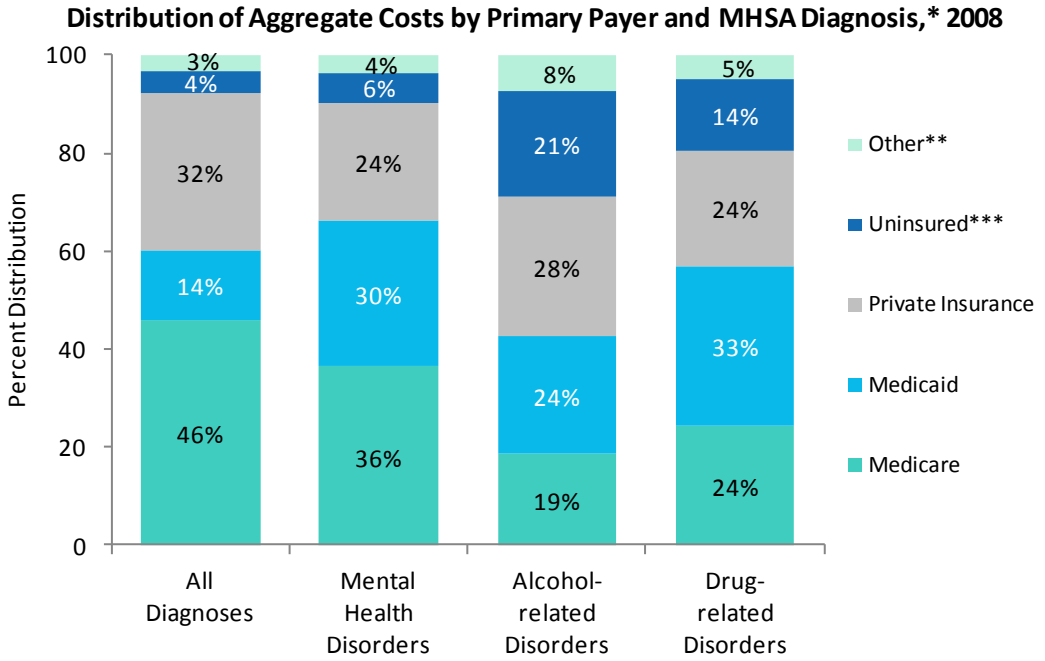
## EXHIBIT 5.9 Inpatient Discharges for MH and SA Conditions by Payer




*Based on principal CCS diagnosis.
**Includes other payers such as Workers' Compensation, TRICARE, CHAMPUS, CHAMPVA, Title V, and other government programs.
***Includes discharges classified as self-pay or no charge.
Note: Excludes a small number of discharges (68,000 or 0.2 percent) with missing payer.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- Hospital stays with MH and SA diagnoses were more commonly uninsured or insured by Medicaid than were hospital stays overall.
  - Medicaid was the primary insurer for 18 percent of all community hospital discharges in 2008. Medicaid was the primary payer for 21 percent of discharges with an alcohol-related diagnosis, a share similar to all hospitalizations, but for 31 percent of discharges with a drug-related diagnosis and 28 percent of discharges with a MH diagnosis.
  - Five percent of all hospital stays were uninsured. Almost one-quarter of stays for alcohol-related diagnoses, one-fifth for drug-related diagnoses, and one-tenth for MH diagnoses were uninsured.
- Medicare was the primary payer for 37 percent of all hospital stays, but paid for smaller shares of MH and SA stays. Medicare paid for 29 percent of stays with a MH diagnosis, 16 percent with an alcohol-related diagnosis, and 19 percent with a drug-related diagnosis.
- Private insurance was billed for 35 percent of all hospital stays and for almost an equivalent share of alcohol-related stays (33 percent). Private insurance was the primary payer for smaller shares of MH and drug-related stays—30 percent of discharges with a MH diagnosis and 26 percent with a drug-related diagnosis.

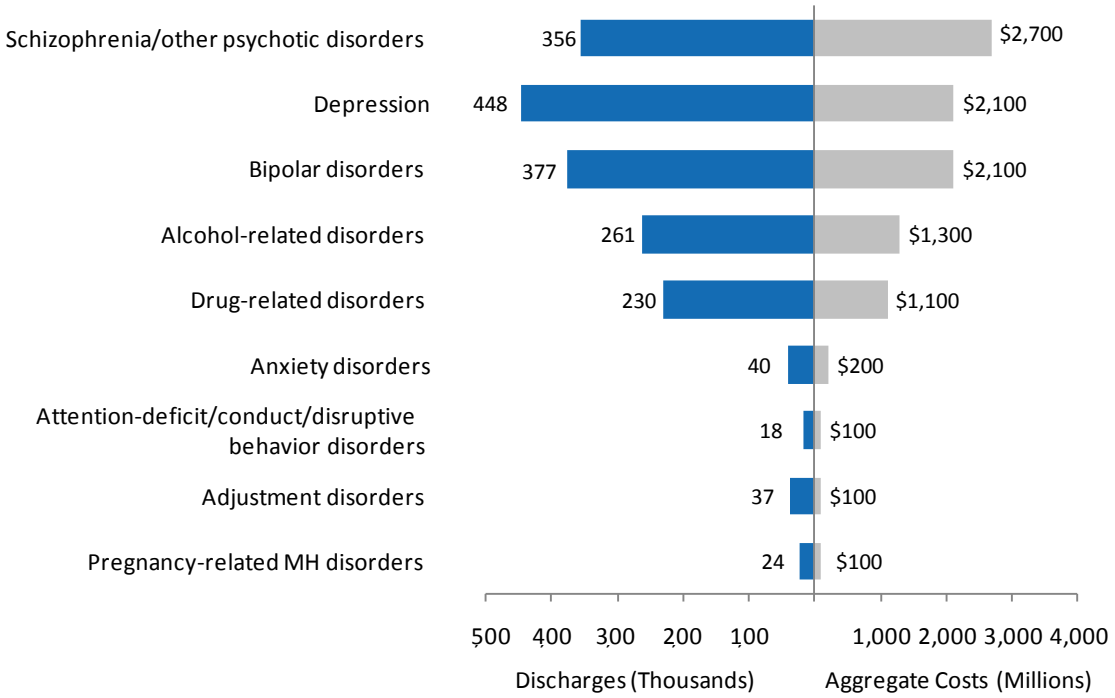
## EXHIBIT 5.10 Costs for MH and SA Discharges by Payer




*Based on principal CCS diagnosis.
**Includes other payers such as Workers' Compensation, TRICARE, CHAMPUS, CHAMPVA, Title V, and other government programs.
***Includes discharges classified as self-pay or no charge.
Note: Excludes a small number of discharges (68,000 or 0.2 percent) with missing payer that have a small sum of missing costs ($642 million or 0.2 percent).
Note: Costs reflect all costs associated with stay, not solely those associated with the principal diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- In 2008, the uninsured and Medicaid covered a disproportionate share of the costs for MH and SA hospital stays.
  - Medicaid insured 14 percent of costs for all hospitalizations, but was responsible for 33 percent of costs for stays with a drug-related diagnosis, 30 percent with a MH diagnosis, and 24 percent with an alcohol-related diagnosis.
  - The uninsured accounted for 4 percent of all hospital costs, but 21 percent of the costs for alcohol-related stays and 14 percent of the costs for drug-related stays.
- The costs of hospital stays with MH and SA diagnoses were less commonly the primary responsibility of Medicare and private insurance than were the costs for all hospital stays.
  - Costs associated with stays where Medicare was the primary payer accounted for 46 percent of the aggregate hospital costs in 2008, but for smaller shares of MHSA stays—36 percent of stays with a principal MH diagnosis, 19 percent with a principal alcohol-related diagnosis, and 24 percent with a principal drug-related diagnosis.
  - Overall, 32 percent of hospital costs were associated with discharges with private insurance as a primary payer, but only 24 percent of discharges with a MH or a drug-related diagnosis and 28 percent with an alcohol-related diagnosis.

**Number of Discharges and Aggregate Costs for the Most Frequent Principal MHSA Diagnoses, 2008**

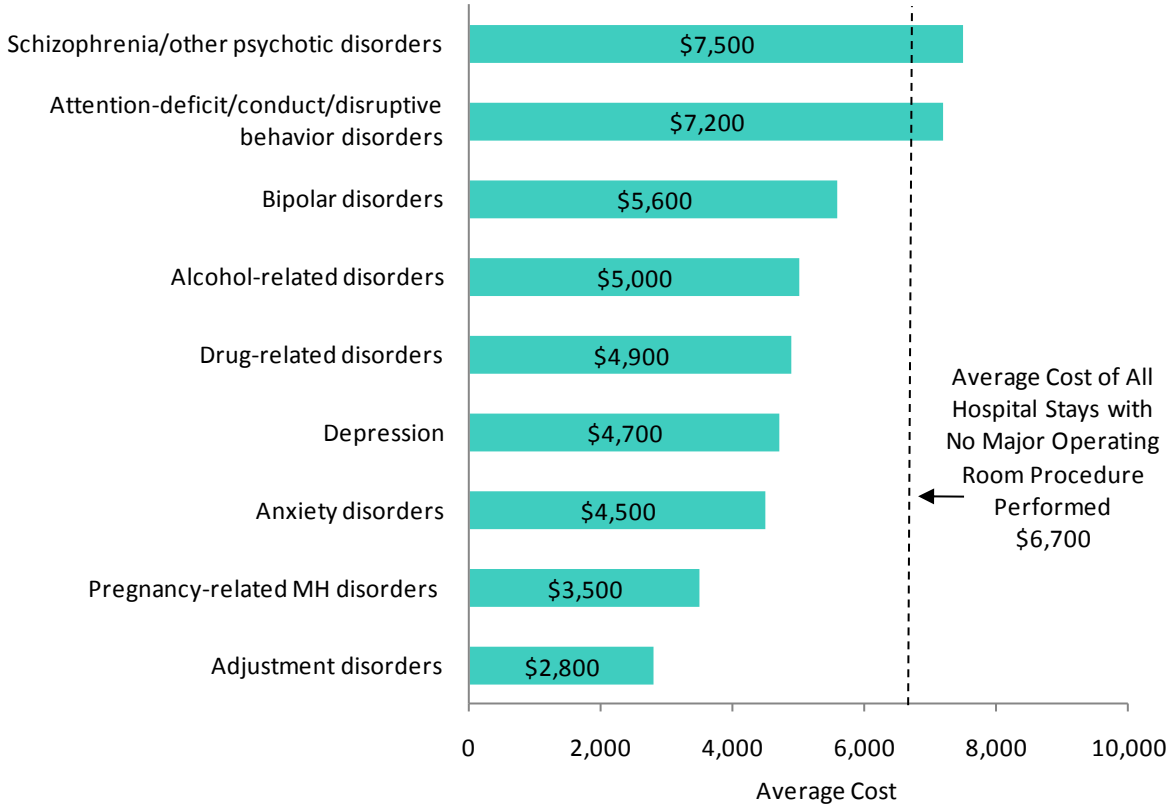



Note: Costs reflect all costs associated with stay, not solely those associated with the principal diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

Schizophrenia/other psychotic disorders, depression, bipolar disorders, and alcohol- and drug-related disorders were the most costly MHSA diagnoses in 2008, in part because these diagnoses accounted for the majority of MHSA hospitalizations.

- The aggregate cost of hospitalizations for schizophrenia ($2.7 billion) was greater than that for other MHSA conditions, although there were fewer hospitalizations for this condition than for a few other MHSA conditions.
- Hospitalizations for depression and bipolar disorders each cost $2.1 billion. There were more hospitalizations for depression than for any other MHSA condition.
- Discharges for alcohol-related disorders cost $1.3 billion in 2008 and those for drug-related disorders cost $1.1 billion.
- The aggregate costs of hospital stays for other MHSA conditions (anxiety disorders, attention-deficit/conduct/disruptive behavior disorders, adjustment disorders, and pregnancy-related MH disorders) were smaller by comparison. Lower aggregate costs were mostly attributable to fewer inpatient hospitalizations for these conditions.

**Average Cost of a Hospital Stay for the Most Frequent Principal MHSA Diagnoses, 2008**

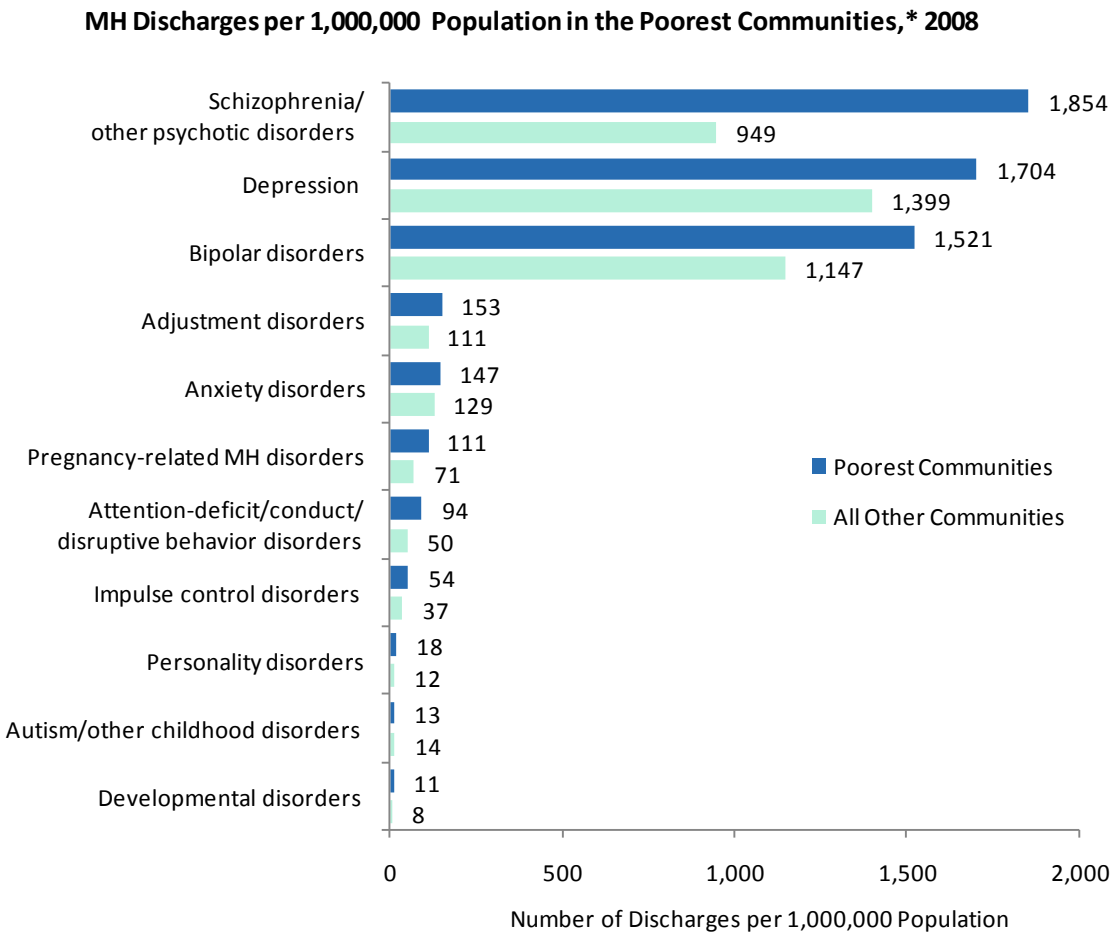



Note: Costs reflect all costs associated with stay, not solely those associated with the principal diagnosis.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

MHSA stays, unlike many other hospitalizations, seldom include costly major procedures, making these stays less expensive. In 2008, the average cost of a hospital stay without a major operating room procedure ($6,700) was higher than the average cost of hospitalizations for most MHSA conditions.

- The average cost of a hospital stay for schizophrenia/other psychotic disorders ($7,500) and for attention-deficit/conduct/disruptive behavior disorders ($7,200) was greater than that of any other common MHSA condition, and greater than the average cost for all hospitalizations in which no major operating room procedure was performed.
- Two of the most frequent reasons for MHSA hospitalizations—depression and bipolar disorders—averaged costs of $4,700 and $5,600, respectively.
- Costs of stays for alcohol- and drug-related disorders were similar on average, at $5,000 and $4,900, respectively.

## EXHIBIT 5.11 Inpatient Discharges for MH and SA Conditions by Community Income

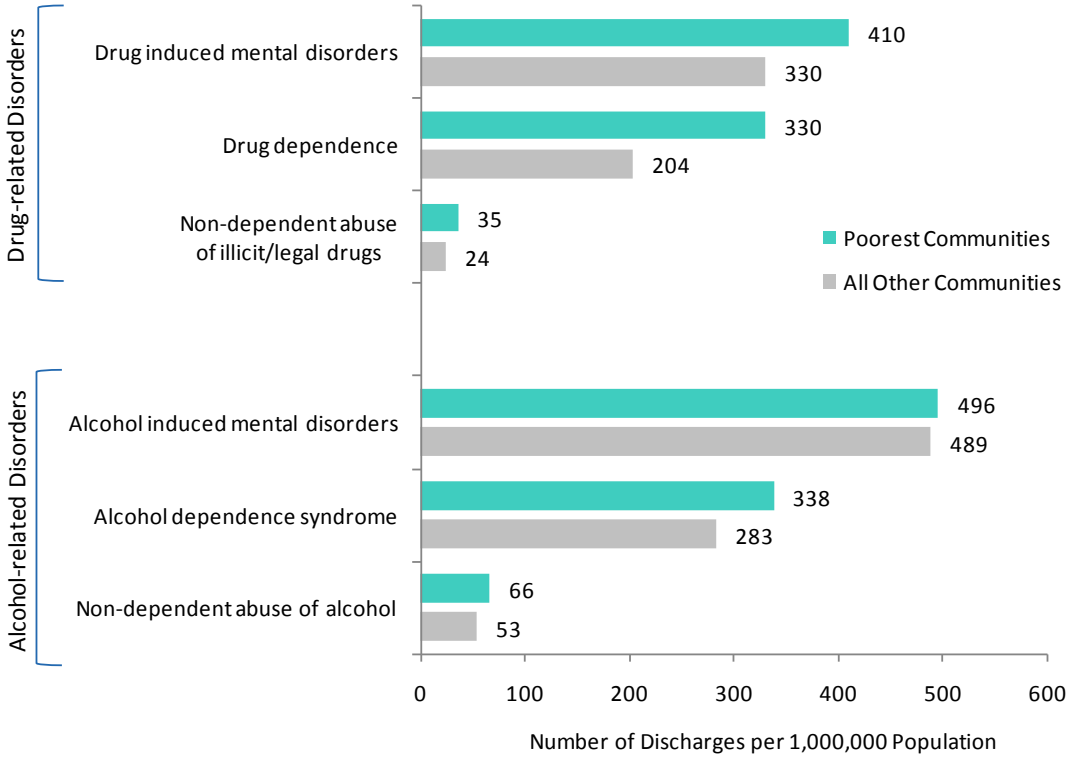



* The poorest communities are defined by ZIP code and have median household income of less than $39,000.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

- In 2008, persons living in the poorest communities experienced MH hospitalization rates 44 percent higher than those living in higher income communities—5,753 stays per million population, compared to 3,995 stays in higher income communities. In comparison, persons residing in the poorest communities had a 21-percent higher hospitalization rate for all diagnoses.
  - Hospitalizations for schizophrenia/other psychotic disorders for residents in the poorest communities occurred at almost twice the rate of all other communities (1,854 and 949 discharges per million, respectively).
  - Similarly, discharge rates were significantly higher in the poorest communities compared to all other communities for:
    - bipolar disorders (1,521 discharges per million in the poorest communities, 33 percent higher),
    - pregnancy-related MH disorders (111 discharges per million, 57 percent higher),
    - attention-deficit/conduct/disruptive behavior disorders (94 discharges per million, 87 percent higher), and
    - personality disorders (18 discharges per million, 46 percent higher).

- There is no relationship between community income and hospitalization rates for depression, adjustment disorders, anxiety disorders, impulse control disorders, autism and other childhood disorders, and developmental disorders.[8]

**SA Discharges per 1,000,000 Population in the Poorest Communities,* 2008**




* The poorest communities are defined by ZIP code and have median household income of less than $39,000.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2008.

For SA conditions, persons residing in the poorest communities experienced similar rates of hospitalizations as persons residing in higher income communities.[9]

- The rate of hospital stays for non-dependent abuse of illicit or legal drugs was higher among residents of the poorest communities (35 discharges per million) than it was among residents of all other communities (24 discharges per million). However, the rate of hospitalizations for this diagnosis was very small.
- Patients residing in the poorest communities experienced a higher rate of non-dependent abuse of alcohol (66 discharges per million compared to 53 discharges per million in all other communities).
- Drug-induced mental disorders and drug dependence were reasons for the largest number of drug-related hospitalizations in 2008. The rates of hospitalization in the poorest and all other communities were similar for both conditions.[10]
- Hospital stays for alcohol induced mental disorders and alcohol dependence syndrome were the most frequent alcohol-related reasons for hospitalizations in 2008. Community income was unrelated to hospitalization rates for these conditions.[11]

[8] Differences in discharge rates for the poorest and all other communities are not statistically significant at p<.05.
[9] Differences in discharge rates for the poorest and all other communities are not statistically significant at p<.05.
[10] Differences in discharge rates for the poorest and all other communities are not statistically significant at p<.05.
[11] Differences in discharge rates for the poorest and all other communities are not statistically significant at p<.05.

## EXHIBIT 5.12 Emergency Department Visits for MH and SA Conditions

**Number of Discharges and Percent Distribution of Emergency Department (ED) Visits for Discharges with All-listed MHSA Diagnoses,* 2007**

| ALL-LISTED CCS DIAGNOSIS | NUMBER OF DISCHARGES IN THOUSANDS | PERCENT OF DISCHARGES |
|---|---|---|
| All emergency department visits | 122,332 | 100.0% |
| Mental health-related disorders | 9,927 | 8.1 |
| Depression | 4,150 | 3.4 |
| Anxiety disorders | 3,277 | 2.7 |
| Bipolar disorders | 1,373 | 1.1 |
| Schizophrenia/other psychotic disorders | 1,205 | 1.0 |
| Suicide/intentional self-inflicted injury | 521 | 0.4 |
| Attention-deficit/conduct/disruptive behavior disorders | 496 | 0.4 |
| Pregnancy-related/other misc. MH disorders | 348 | 0.3 |
| Personality disorders | 231 | 0.2 |
| Adjustment disorders | 213 | 0.2 |
| Alcohol-related disorders | 2,815 | 2.3 |
| Drug-related disorders | 2,195 | 1.8 |

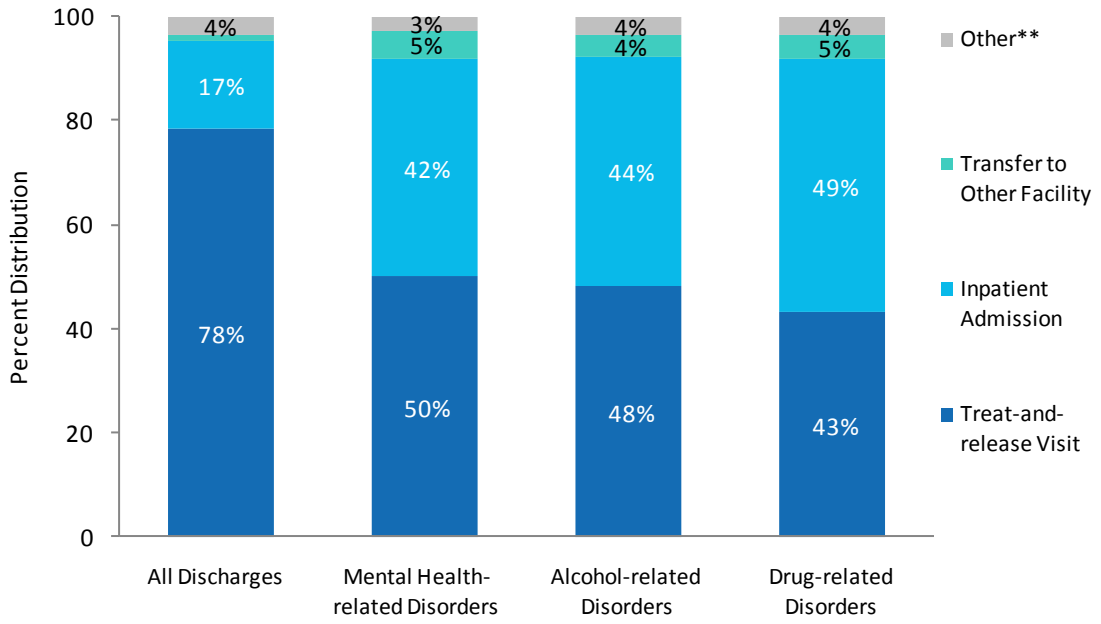
*All-listed diagnoses include the first-listed diagnosis plus additional conditions that coexist at the time of the ED visit, or that develop during the stay following the ED visit, and which have an effect on the treatment or length of stay in the ED or hospital. All-listed diagnoses are used because there is no indication of the principal cause of the ED visit on the discharge record.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2007.

The latest available HCUP data on emergency department (ED) visits is for 2007, one year earlier than the most current data for inpatient stays.

- In 2007, there were 122.3 million ED visits for all conditions.
- An all-listed MH diagnosis appeared in discharge records for 8.1 percent of all ED visits (9.9 million visits).
  - A diagnosis of depression was noted during 4.2 million ED visits and a diagnosis of anxiety during 3.3 million visits.
- An alcohol-related disorder was noted during 2.3 percent of ED visits (2.8 million visits) and a drug-related disorder during 1.8 percent of visits (2.2 million visits).

**Distribution of All-listed† Emergency Department (ED) Visits by Discharge Status for All and MHSA* Discharges, 2007**

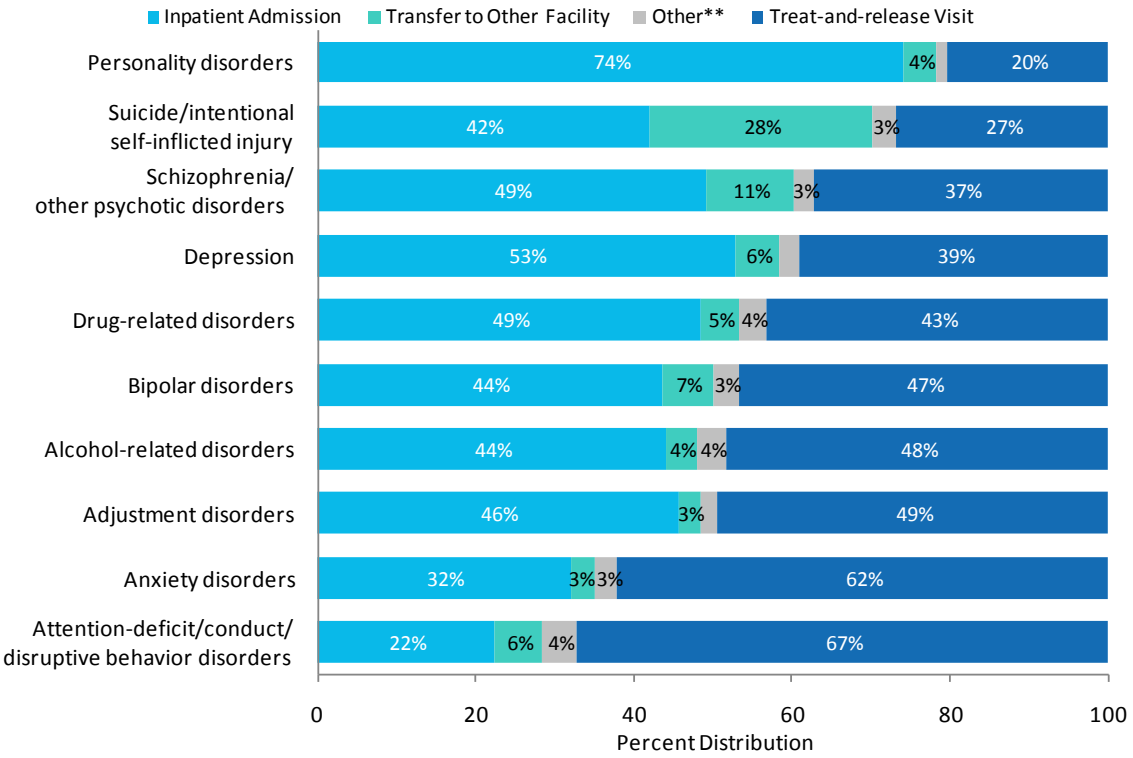



† All-listed diagnoses include the first-listed diagnosis plus additional conditions that coexist at the time of the ED visit, or that develop during the stay following the ED visit, and which have an effect on the treatment or length of stay in the ED or hospital. All-listed diagnoses are used because there is no indication of the principal cause of the ED visit on the discharge record.
* Based on all-listed CCS diagnoses.
** Includes discharges to home health care, against medical advice, destination unknown, and died in the ED.
Note: Bar segments representing 1 percent or less have not been labeled.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2007.

- The vast majority of ED visits resulted in the patient's treatment and release from the ED (78 percent). About one in five visits (20.4 million or 17 percent) resulted in inpatient hospital admission.[12]
- MHSA-related ED visits were more likely to result in inpatient admission than all discharges.
  - Among ED visits involving a MH-related disorder, 42 percent resulted in inpatient admission to a short-term hospital and 5 percent in transfer to another facility, such as a psychiatric hospital, skilled nursing facility, or intermediate care facility.
  - Similarly, 44 percent of ED visits involving an alcohol-related disorder resulted in inpatient admission and 4 percent were transferred to another facility.
  - Almost half (49 percent) of ED visits involving a drug-related disorder led to inpatient admission; 5 percent of these visits resulted in transfer to another facility.

[12] Inpatient admissions through the ED accounted for almost half (48 percent) of all inpatient hospitalizations.

**Distribution of Most Frequent Emergency Department (ED) All-Listed† MHSA Visits* by Discharge Status, 2007**




† All-listed diagnoses include the first-listed diagnosis plus additional conditions that coexist at the time of the ED visit, or that develop during the stay following the ED visit, and which have an effect on the treatment or length of stay in the ED or hospital. All-listed diagnoses are used because there is no indication of the principal cause of the ED visit on the discharge record.
* Based on all-listed CCS diagnoses.
** Includes discharges to home health care, against medical advice, destination unknown, and died in the ED.
Note: Bar segments representing 2 percent or less have not been labeled.
Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2007.

The discharge status of ED visits involving MHSA conditions varied by specific condition.

- Three-quarters of ED visits for personality disorders led to an inpatient admission in 2007 and another 4 percent in a transfer to another facility, such as a psychiatric hospital or to a skilled nursing or intermediate care facility. Only 20 percent of these visits resulted in treatment and release from the ED.
- Among ED visits for suicide or intentional self-inflicted injury, 42 percent ended in an inpatient admission and another 28 percent in transfer to another facility.
- Almost half of the ED visits involving a diagnosis of schizophrenia resulted in an inpatient admission, and in 11 percent of the cases the patient was transferred to another facility.
- ED visits with a depression diagnosis were more likely to result in admission to a health care facility (inpatient hospital admission, 53 percent, or transfer to another facility, 6 percent) than in treat-and-release (39 percent).
- For ED visits in which bipolar disorder was a listed diagnosis, 44 percent led to an inpatient admission; about half (47 percent) were treat-and-release. Another 7 percent of these visits resulted in the patient being transferred to a psychiatric hospital or to a skilled nursing or intermediate care facility.
- Around half of all drug- and alcohol- related visits to the ED ended in an inpatient admission to a hospital (49 percent and 44 percent, respectively), with another 4-5 percent resulting in admission to another facility.

- ED visits for adjustment disorders led to an inpatient admission 46 percent of the time and treat-and-release 49 percent of the time.
- ED visits involving an anxiety or attention-deficit/conduct/disruptive behavior disorder led more often to treat-and-release (62 and 67 percent, respectively) than to inpatient admissions or transfers.