



# HIDI HealthStats

Statistics and Analysis From the Hospital Industry Data Institute

MAY 2014 ■ MENTAL HEALTH MONTH

Mental Health Month was established to raise awareness about mental illnesses and the importance of mental wellness. The objectives of Mental Health Month are to increase the public's understanding of the influence of a healthy lifestyle on preventing mental health problems and the associated benefits accrued for both mind and body.<sup>i</sup>

Mental health disorders are pervasive and often chronic conditions.

- Nearly 20 percent of all adults in the United States experience a diagnosable mental health disorder each year.<sup>ii</sup>
- Almost half (46.4 percent) of all United States adults will undergo a mental health disorder in their lifetime.<sup>iii</sup>
- Seven in 10 Americans experience the physical and emotional symptoms of stress, and fewer than four in 10 believe they can adequately manage their stress.<sup>iv</sup>
- Binge drinking is reported by 17 percent of adults in the United States, which contributes to roughly 80,000 deaths annually.<sup>v</sup>



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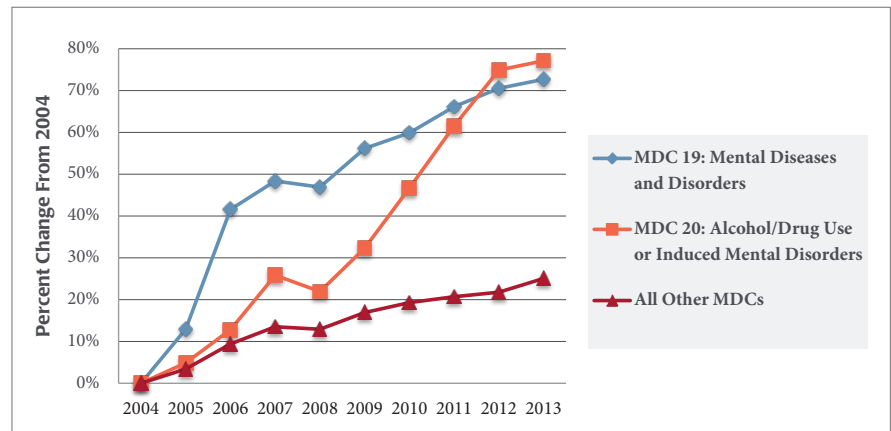
## Missouri's Mental Health

Hospital inpatient, outpatient and emergency department utilization for mental disorders and substance abuse has increased dramatically for Missourians during the last decade. In 2004, Missourians visited a hospital inpatient, outpatient or emergency department for mental health-related problems 222,000 times. By 2013, this number rose to 384,000 visits. During the 10-year period, hospital utilization for mental diseases and disorders increased by 73 percent for Missouri patients. Visits for substance abuse



or induced mental disorders grew by 77 percent. By comparison, Missouri hospital utilization for all other diagnoses increased by only 25 percent (Figure 1). This 10-year expansion in hospital utilization for mental health-related issues tripled the growth rate for all other hospital utilization combined.<sup>vi</sup>

Figure 1: 10-Year Trend in Mental Health Disorders Compared to All Other Conditions Diagnosed in Missouri Hospitals



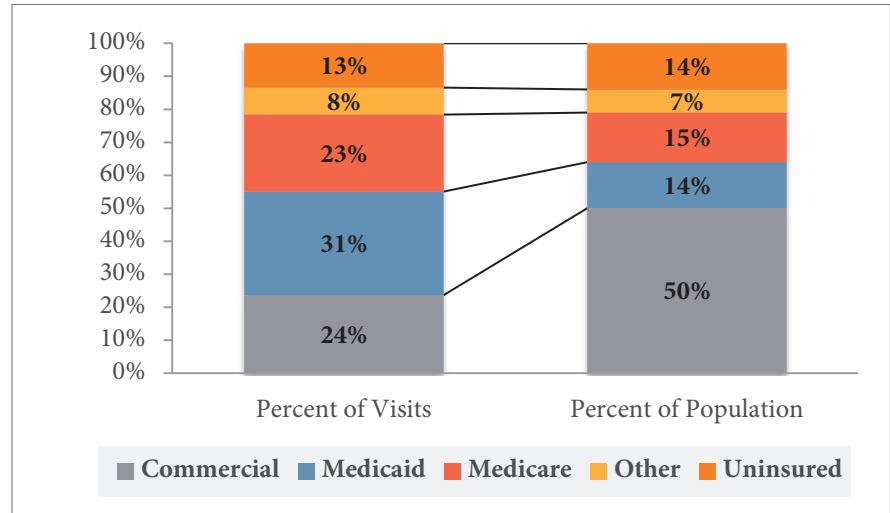
MDC: major diagnostic category  
Source: Hospital Industry Data Institute

In 2013, Missouri hospitals treated nearly 142,000 unique patients for mental disorders or substance abuse.<sup>vii</sup> At an average of 2.4 visits each, these patients were treated for mental health or substance abuse on multiple occasions. The majority of these visits — 87 percent — were for mental diseases and disorders. Substance abuse or induced mental disorders accounted for 13 percent of visits.

Among all payers, Medicaid patients seeking treatment for mental health diseases and disorders and substance abuse accounted for the most hospital visits in 2013. Patients with Medicaid listed as their primary insurer accounted for 31 percent of visits and 14 percent of Missouri’s total population (Figure 2).<sup>viii</sup> Of those visits, 90 percent were for mental diseases and disorders, and 10 percent were for substance abuse or induced mental disorders. Medicare patients also accounted for a larger proportion of total visits than expected at 23 percent, based on their composition of the population of 15 percent.

Table 1 shows the demographic distribution of hospital utilization for mental disorders and substance abuse in Missouri in 2013. Although overall hospital utilization is fairly evenly distributed among males and females, hospital visits for substance abuse and induced mental disorders are nearly twice as high among males. The visits that were for substance abuse and induced mental disorders were evenly distributed for white and black patients at 12.9 percent and 12.6 percent respectively, while visits for substance abuse among patients of other races was 10.2 percent. Utilization by race approximately reflects the overall population. However, black patients accounted for 16 percent of visits and 12 percent<sup>ix</sup> of the population, which may be reflective of systemic issues such as access to ambulatory mental health care in Missouri’s minority communities. The prevalence of visits for substance abuse or induced mental disorders is lowest among the youngest and oldest age cohorts. The working-age cohorts between 18 to 64 years accounted for a disproportionate share of all mental health and substance abuse visits at 72 percent, compared to only 62 percent of the overall population.<sup>x</sup>

**Figure 2: Distribution of Visits for Mental Health Disorders and the Missouri Population by Insurance Status**



Source: Hospital Industry Data Institute

**Table 1: 2013 Hospital Utilization for Mental Health Diseases and Disorders (MDC 19) and Substance Abuse or Induced Mental Disorders (MDC 20) in Missouri**

	MDC 19	MDC 20	Total	Percent Total
<b>Visits by Gender</b>				
Male	83.0%	17.0%	187,976	49.0%
Female	91.3%	8.7%	195,931	51.0%
<b>Visits by Race</b>				
White	87.1%	12.9%	301,132	78.4%
Black	87.4%	12.6%	63,088	16.4%
Other	89.8%	10.2%	19,709	5.1%
<b>Visits by Age</b>				
0-17	98.4%	1.6%	76,564	19.9%
18-35	81.8%	18.2%	109,990	28.6%
36-64	84.2%	15.8%	164,579	42.9%
65+	95.0%	5.0%	32,796	8.5%
<b>Visits by Hospital Setting</b>				
Inpatient	84.1%	15.9%	77,193	20.1%
Outpatient	98.1%	1.9%	186,199	48.5%
Emergency Department	72.5%	27.5%	120,537	31.4%
<b>All Visits</b>				
Total	87.3%	12.7%	383,929	100.0%
Average Length of Stay	7.1	3.8	6.6	—
Average Charges	\$3,747	\$4,851	\$3,887	—

MDC: major diagnostic category  
 Source: Hospital Industry Data Institute

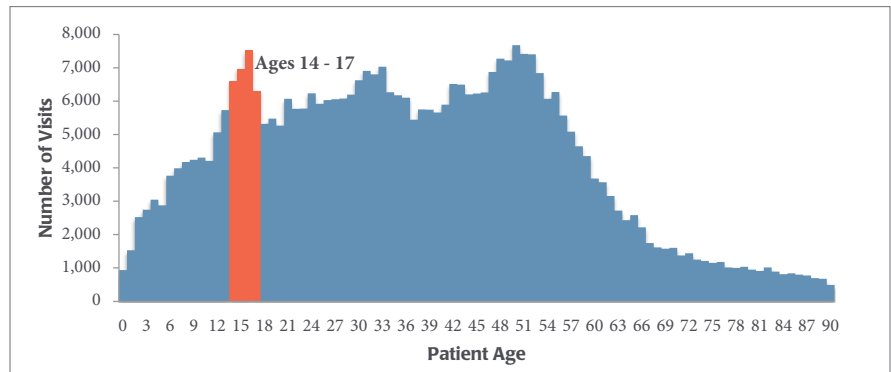
Nearly half of all visits — 48 percent — for mental disorders and substance abuse occurred in outpatient settings. Nearly one-third of visits — 31 percent — originated in emergency rooms. One in five visits resulted in a patient being admitted for an overnight stay with an average duration of 6.6 days. The average amount charged for each visit was nearly \$4,000. Total hospital charges for mental disorders and substance abuse visits in Missouri approached \$1.5 billion last year.

### Utilization by Teens

Mental health disorders can occur at any age. Hospital utilization for mental disorders among high school-aged children is among the highest for any age cohort in the state (Figure 3). Patients ages 14 to 17 accounted for 7 percent of hospital visits for mental disorders and substance abuse in 2013, but only represent 5 percent of the total population in Missouri.<sup>x</sup>

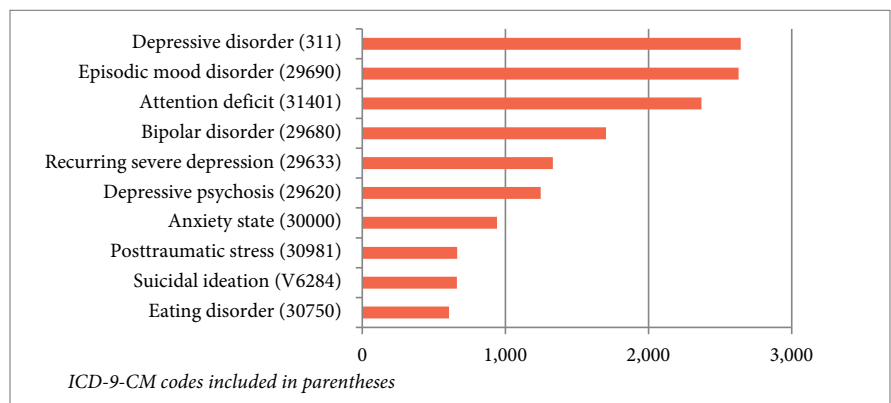
Visits for patients ages 14 to 17 were predominantly for mental diseases and disorders at 96 percent; only 4 percent were for substance abuse or induced mental disorders. The most common causes of hospital visits among teenagers in 2013 were depression, mood disorders, attention deficit disorder, bipolar disorder, anxiety and stress, suicidal thoughts and eating disorders. Figure 4 shows the top 10 primary diagnoses among teens ages 14 to 17 in 2013.

Figure 3: Missouri Hospital Visits for Mental Health Disorders in 2013 by Age



Source: Hospital Industry Data Institute

Figure 4: Top Ten Primary Diagnoses for Mental Health Disorders for Missouri Patients Ages 14-17 in 2013



Source: Hospital Industry Data Institute

<sup>i</sup> Mental Health America, 2014 May is Mental Health Month “Mind Your Health” Toolkit. Available at <http://www.mentalhealthamerica.net/may>.

<sup>ii</sup> Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (February 28, 2014). The NSDUH Report: State Estimates of Adult Mental Illness from the 2011 and 2012 National Surveys on Drug Use and Health. Rockville, MD.

<sup>iii</sup> Kessler R.C., Berglund P.A., Demler O., Jin R., Walters E.E. Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication (NCS-R).

<sup>iv</sup> American Psychological Association. (2012) Impact of Stress. Available at <http://www.apa.org/news/press/releases/stress/2012/impact-report.pdf>.

<sup>v</sup> U.S. Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/vitalsigns/BingeDrinking/index.html>.

<sup>vi</sup> All Missouri hospital utilization data are from HIDI inpatient and outpatient discharge databases. All years reported refer to fiscal years beginning Oct. 1 of the previous calendar year. Hospital visits for mental diseases and disorders were identified by MDC 19. Visits for alcohol/drug use or induced mental disorders were identified by MDC 20.

<sup>vii</sup> During fiscal year 2013, 90 percent of visits for MDC 19 and 20 had a unique patient identifier.

<sup>viii</sup> Data on the insurance status of the total population in Missouri are from Kaiser Family Foundation’s State Health Facts: Health Insurance Coverage of the Total Population. Available at <http://kff.org/other/state-indicator/total-population/>.

<sup>ix</sup> U.S. Census Bureau, 2012 State and County QuickFacts. Available at <http://quickfacts.census.gov/qfd/states/29000.html>.

<sup>x</sup> U.S. Census Bureau, 2011 Population Estimates. Available at [http://www.census.gov/popest/data/historical/2010s/vintage\\_2011/state.html](http://www.census.gov/popest/data/historical/2010s/vintage_2011/state.html).



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P.O. Box 60  
Jefferson City, MO 65102-0060