Medicaid Access in Brief: Adolescents' Use of Behavioral Health Services

Medicaid and the State Children's Health Insurance Program (CHIP) play an important role in the treatment of mental illness and substance use disorder (SUD) in children and adolescents. In 2012, behavioral health disorders—that is, mental illness and SUD combined—were one of the five costliest conditions affecting those age 17 and younger. Medicaid and CHIP were the largest payers for this care, representing 44.6 percent of all expenditures (AHRQ 2015). Medicaid, including Medicaid-expansion CHIP, must cover medically necessary mental health and SUD treatment services for children and adolescents as part of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit. While separate CHIP programs are not required to cover behavioral health services, as of 2013, all covered some outpatient and inpatient mental health services, and nearly all covered some form of outpatient and inpatient SUD treatment (MACPAC 2015, Cardwell et al. 2014).[1]

More than one in five adolescents age 13–18 (22 percent) have at some point in their life experienced a mental illness or SUD that caused severe impairment (Merikangas 2010). Additionally, about half of all lifetime cases of behavioral health disorders begin by age 14 and three-fourths by age 24 (Kessler 2005). These disorders negatively affect physical, emotional, and social development. For example, adolescents with depression have a higher risk of attempting suicide, engaging in drug use and high-risk sexual behavior, and having problems in school or in relationships with family and peers (Murphey et al. 2013, CBHSQ 2016). Substance use disorders can also interfere with normal brain maturation (NIDA 2014).

Behavioral health disorders are treatable, but many adolescents do not receive needed services. In 2015, only 6.3 percent of adolescents age 12–17 with an SUD had received treatment in a specialty facility in the past year; about 4 in 10 (39.3 percent) with a major depressive disorder had received treatment (SAMHSA 2016a). Factors affecting access to care include stigma associated with treatment, availability of providers, insurance coverage and benefit design, and poorly coordinated care (Murphy et al. 2013). Lack of access makes the transition into adulthood more difficult, and can have long-ranging effects on adolescents' abilities to be healthy and become independent and self-sufficient (CBHSQ 2014).

This issue brief uses data from the 2015 National Survey on Drug Use and Health (NSDUH) to analyze the prevalence of certain behavioral health disorders and access to services for adolescents age 12–17, comparing those who are enrolled in Medicaid or CHIP with those who have private insurance or who are uninsured.[2] We find that there was no significant difference in the prevalence of major depressive episodes between adolescents enrolled in Medicaid or CHIP and those who are uninsured or have private insurance coverage. Similarly, there was no difference in rates of substance use disorder. However, when considering alcohol use disorder only (as opposed to all SUDs), privately insured adolescents had higher rates of alcohol use disorder than adolescents with Medicaid or CHIP coverage.

Medicaid and CHIP Payment and Access Commission

1800 M Street NW
Suite 650 South
Washington, DC 20036

www.macpac.gov
202-350-2000
202-273-2452

Further, adolescents with Medicaid or CHIP coverage were more likely than their privately insured peers to receive care in specialty mental health inpatient and residential settings and in non-specialty settings. Adolescents covered by Medicaid or CHIP who had experienced depressive symptoms in the previous year were more likely than their uninsured peers to have spoken to a doctor or other professional, or to have taken medication for the symptoms. There was no significant difference in previous SUD treatment utilization between adolescents with Medicaid or CHIP and those with private insurance.

It is important to note that these utilization measures do not account for differences in need among adolescents or potential differences in the quality of services received.

Prevalence of Selected Behavioral Health Conditions

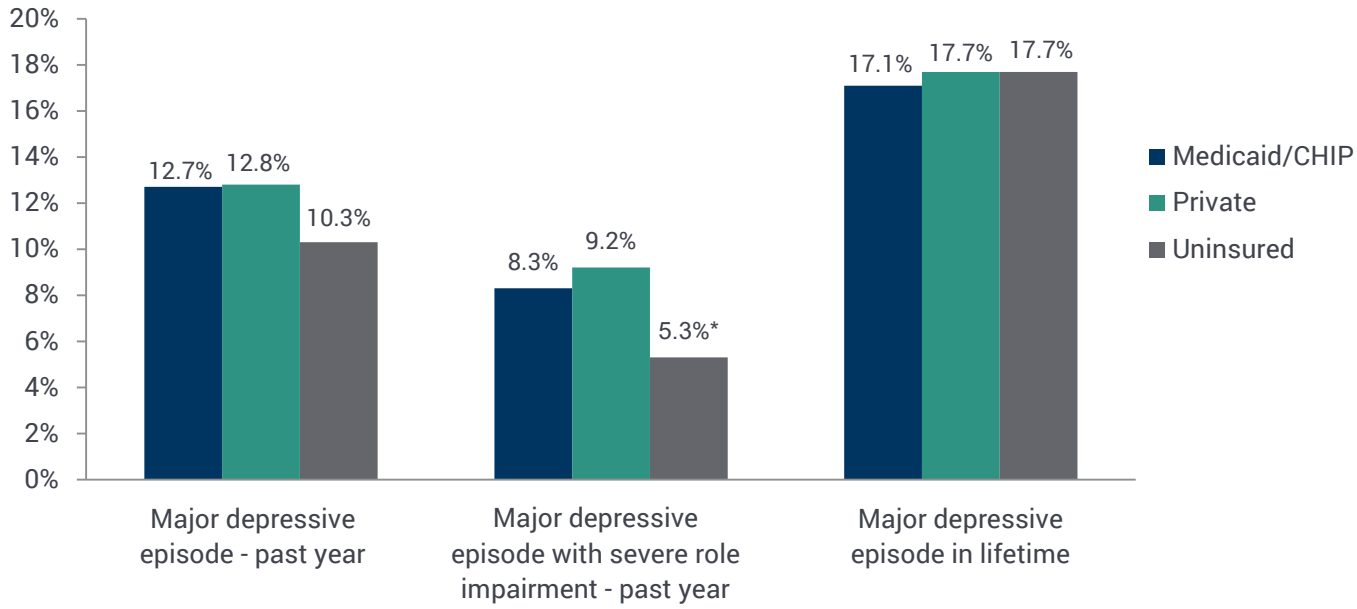
For adolescent respondents, the NSDUH captures prevalence of major depressive episodes, both with and without severe role impairment; different types of substance use disorders; and nicotine dependence.

Major depressive episodes

Major depressive episodes are characterized by the presence of more depressive symptoms and for a longer duration than recurrent brief depression or short-duration depressive episodes.[3] There was no significant difference in the prevalence of major depressive episodes experienced by adolescents enrolled in Medicaid or CHIP when compared to uninsured adolescents or those with private insurance.

There was also no significant difference in the prevalence of past year major depressive episodes with severe role impairment; meaning that the depressive episode created major problems in daily living such as the ability to do chores at home, do well at work or school, get along with family, or have a social life (SAMHSA 2016b). Uninsured adolescents, by contrast, were less likely to have experienced a major depressive episode with severe role impairment in the past year than adolescents with Medicaid or CHIP coverage.

FIGURE 1. Prevalence of Major Depressive Episode in Non-Institutionalized Adolescents Age 12–17, by Insurance Status, 2015



Notes: The National Survey on Drug Use and Health used the fourth edition Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) diagnostic criteria for major depressive disorder to identify major depressive episodes. The survey did not exclude depressive symptoms caused by medical illness, bereavement, or substance use disorders. Questions from the Sheehan Disability Scale (SDS) determined if a major depressive episode caused severe role impairment by creating major problems with the ability to do chores at home, do well at work or school, get along with family, or have a social life.

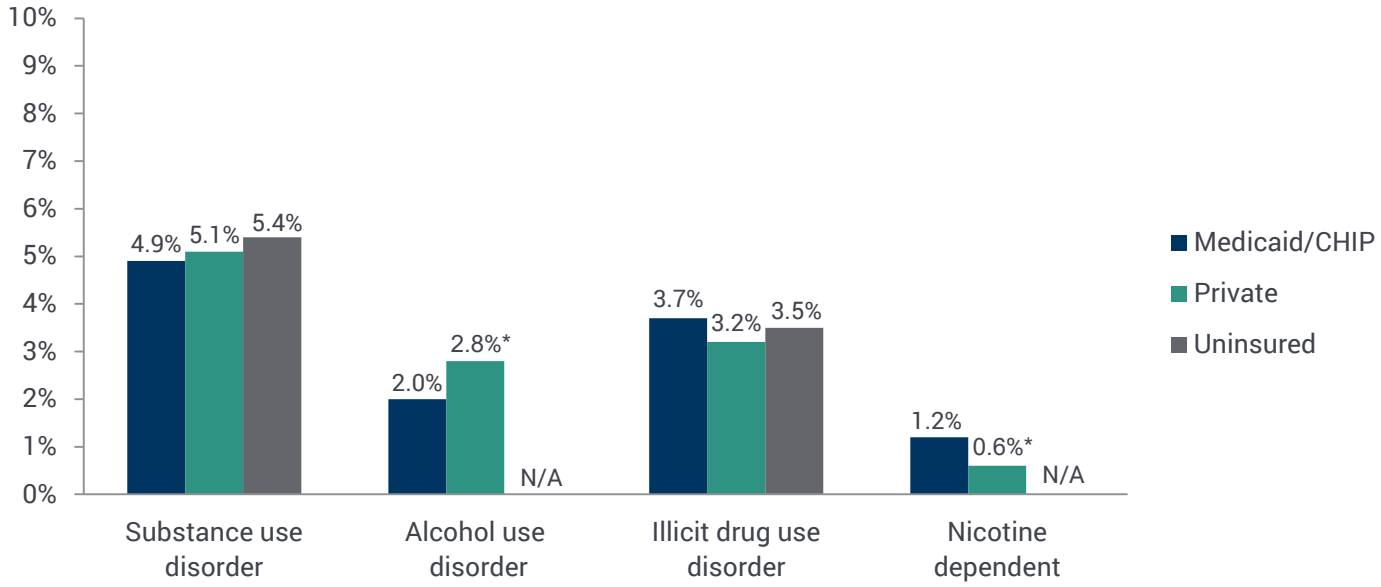
* Difference from Medicaid/CHIP is statistically significant at the 0.05 level.

Source: SHADAC 2017.

Substance use disorders and nicotine dependence

There was no significant difference in the overall rate of substance use disorders (which include both alcohol use and illicit drug use disorder) and illicit drug use disorder between adolescents enrolled in Medicaid or CHIP, when compared to those with private insurance, or who did not have insurance. However, adolescents with private insurance were more likely than those covered by Medicaid or CHIP to have an alcohol use disorder. Adolescents with Medicaid or CHIP were more likely to be nicotine dependent than their privately insured counterparts.

FIGURE 2. Substance Use Disorders in Past Year and Nicotine Dependence in Past Month among Non-Institutionalized Adolescents Age 12–17, by Insurance Status, 2015



Notes: N/A indicates that estimate for uninsured adolescents is unreliable because it has a relative standard error of more than 30 percent. Illicit drugs include any of the following substances: marijuana, hallucinogens, inhalants, methamphetamines, tranquilizers, cocaine, heroin, prescription pain relievers that are not used as prescribed, stimulants, or sedatives.
Nicotine dependence was defined according to Nicotine Dependence Syndrome Scale (NDSS) criteria.

* Difference from Medicaid/CHIP is statistically significant at the 0.05 level.

Source: SHADAC 2017.

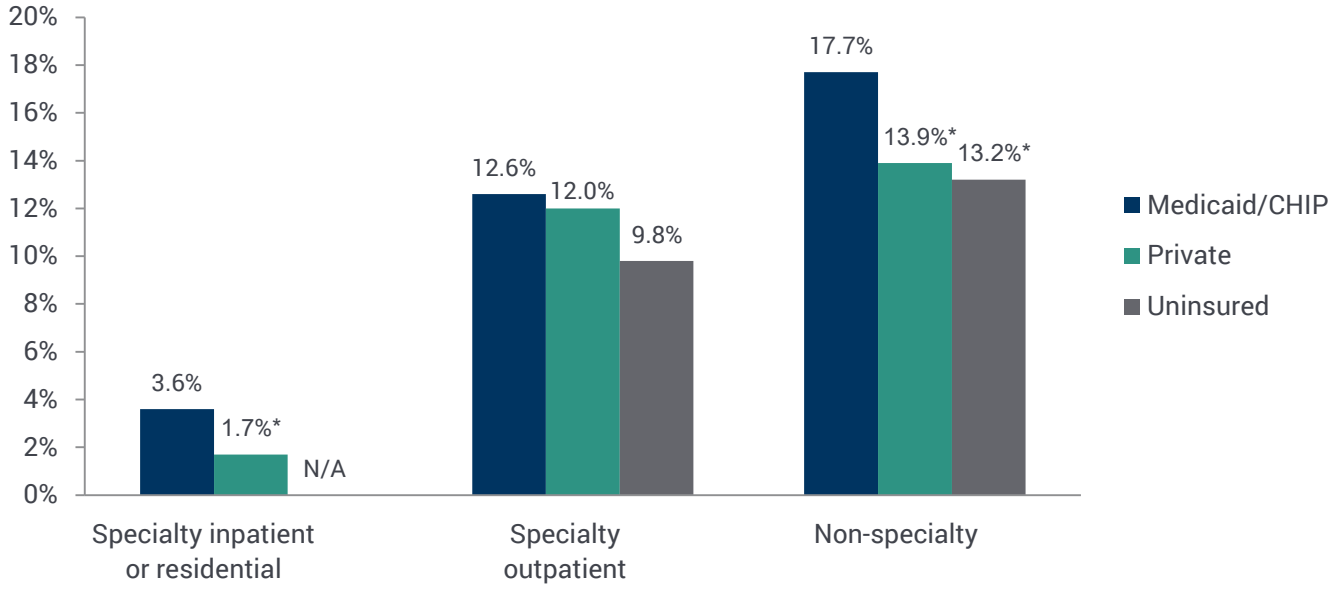
Use of Behavioral Health Care by Insurance Status

For adolescent respondents, the NSDUH captures use of treatment services for emotional and behavioral problems, unrelated to substance use, as well use of services for substance use disorders.[5]

Treatment for emotional or behavioral problems

Treatment for emotional or behavioral problems can be delivered in multiple settings. The NSDUH reports on adolescents' receipt of care for emotional or behavioral problems not related to drugs and alcohol in specialty inpatient and residential settings, in specialty outpatient settings, and by non-specialty providers. Among all adolescents surveyed, those with Medicaid or CHIP coverage were more likely than both privately insured and uninsured adolescents to have received services in non-specialty settings, including treatment by a pediatrician or family physician, care in schools, or the criminal justice or foster care systems. Adolescents with Medicaid or CHIP were also more likely than privately insured adolescents to access services as hospital inpatients and in residential treatment settings. For care provided in specialty outpatient settings, there was no significant difference by source of coverage.[6]

FIGURE 3. Treatment for Emotional or Behavioral Problems among Non-Institutionalized Adolescents Age 12–17 in Past Year, by Setting and Insurance Status, 2015



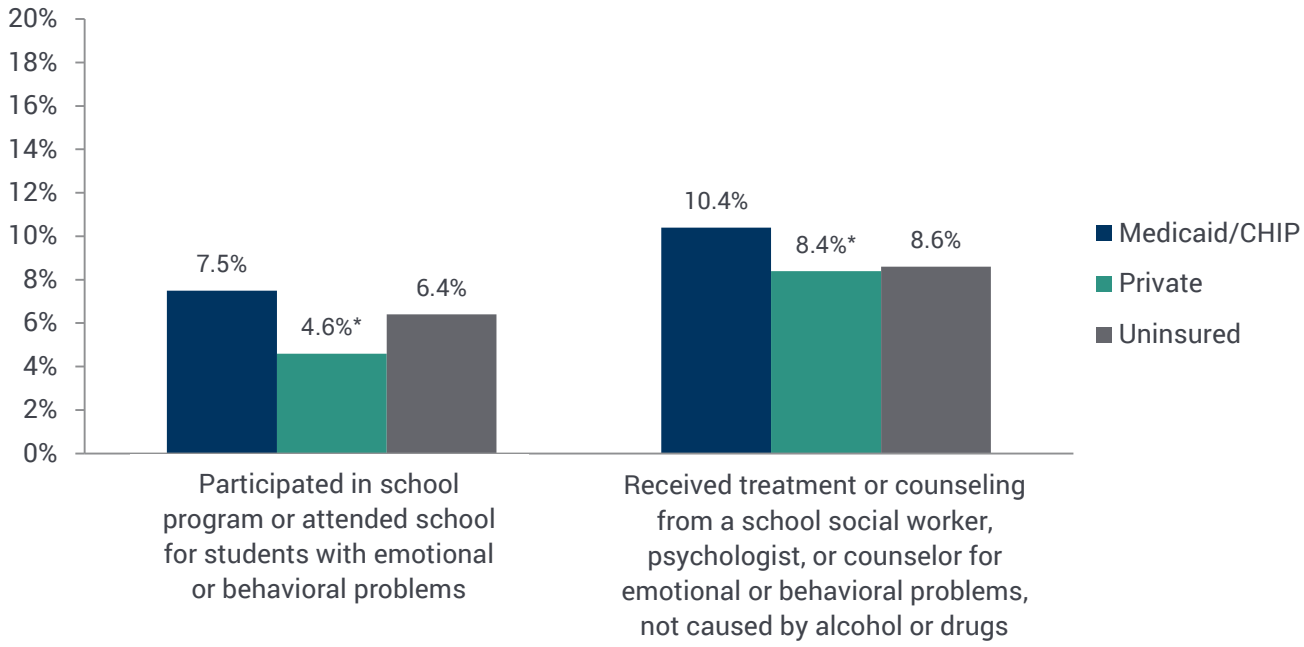
Notes: N/A indicates that estimate for uninsured adolescents is unreliable because it has a relative standard error of more than 30 percent. Specialty inpatient or residential care is defined as treatment delivered while overnight or longer in any hospital or a residential treatment center. The specialty outpatient setting captures care delivered in a mental health clinic or center; in a partial day hospital or day treatment program; by a private therapist, psychologist, psychiatrist, social worker, or counselor; or by an in-home therapist, counselor, or family preservation worker. Care in the non-specialty setting is defined as treatment from a pediatrician or other family doctor; from a school social worker, psychologist, or counselor; or in a juvenile detention center, prison or jail; or participation in a school program inside a regular school or attendance at a special school for students with emotional or behavioral problems; or staying overnight or longer in foster care or in a therapeutic foster care home because of emotional or behavioral problems.

* Difference from Medicaid/CHIP is statistically significant at the 0.05 level.

Source: SHADAC 2017.

Adolescents age 12–17 enrolled in Medicaid or CHIP were more likely than privately insured adolescents to have participated in a school program or attended a school specifically designed for students with emotional or behavioral problems. Similarly, those with Medicaid or CHIP were more likely than their privately insured counterparts to have received treatment or counseling from a school-based mental health professional in the past year for emotional or behavioral problems not caused by alcohol or drugs. These professionals may be social workers, psychologists, or counselors. Uninsured adolescents, however, were as likely as adolescents with Medicaid or CHIP to have accessed some type of school-based service to address emotional or behavioral problems.

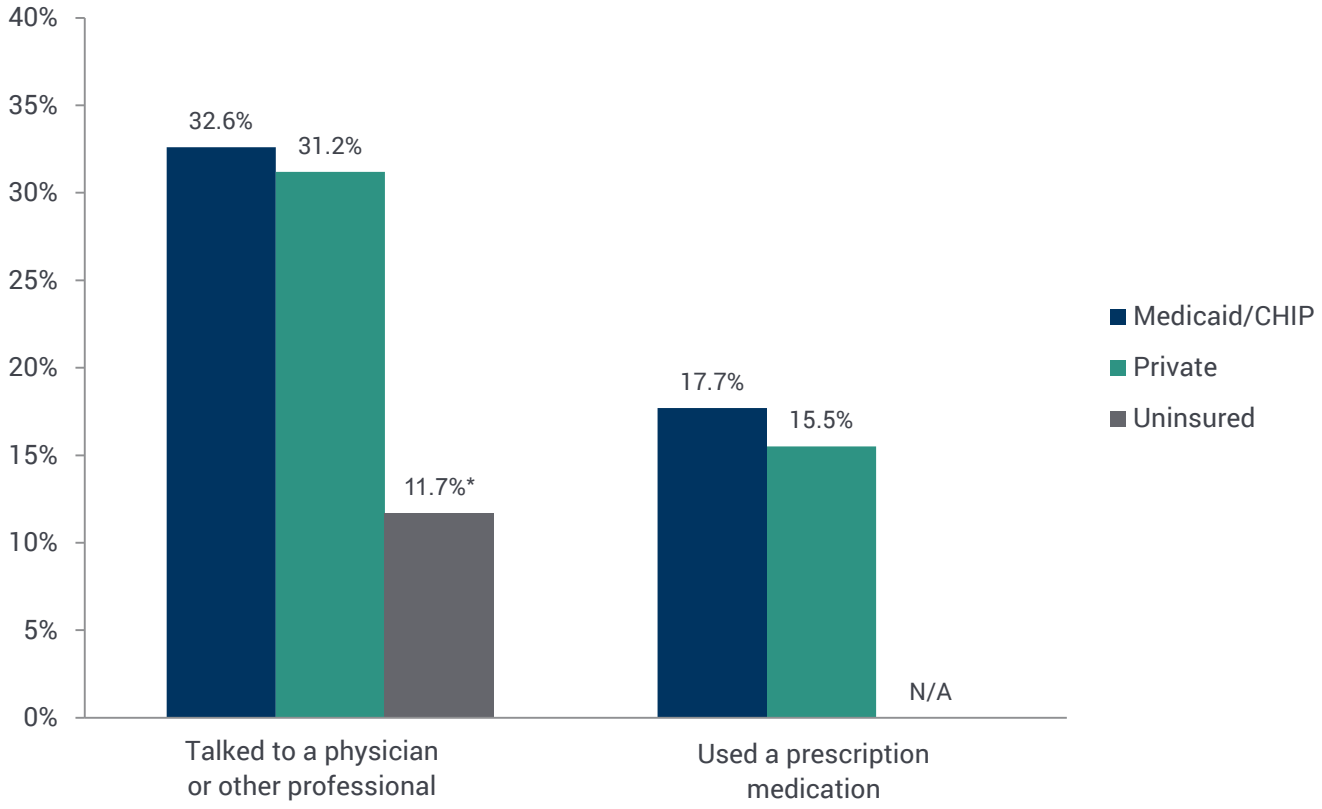
FIGURE 4. Non-Institutionalized Adolescents Age 12–17 Accessing School-Based Services Related to Emotional or Behavioral Problems in Past Year, by Insurance Status, 2015



Note: * Difference from Medicaid or CHIP is statistically significant at the 0.05 level.
Source: SHADAC 2017.

Among adolescents with depressive symptoms, those insured by Medicaid or CHIP were as likely as privately insured adolescents, and more likely than those without insurance, to have spoken with a physician or other professional about symptoms experienced in the past year. There was no significant difference in the use of prescription medication for depressive symptoms between those with Medicaid or CHIP coverage and those with private insurance coverage.

FIGURE 5. Non-Institutionalized Adolescents Age 12–17 with Depressive Symptoms Who Spoke with a Doctor or Other Professional about or Took Prescription Medication for Their Symptoms in Past Year, by Insurance Status, 2015



Notes: Professional is defined as a general practitioner or family doctor; other medical doctor; psychologist; psychiatrist or psychotherapist; social worker; counselor; other mental health professional (e.g.; mental health nurse); nurse, occupational therapist, or other health professional; religious or spiritual advisor (e.g., minister, priest, or rabbi); or another healer (e.g.; herbalist, chiropractor, acupuncturist, or massage therapist). N/A indicates that estimate for uninsured adolescents is unreliable because it has a relative standard error of more than 30 percent.

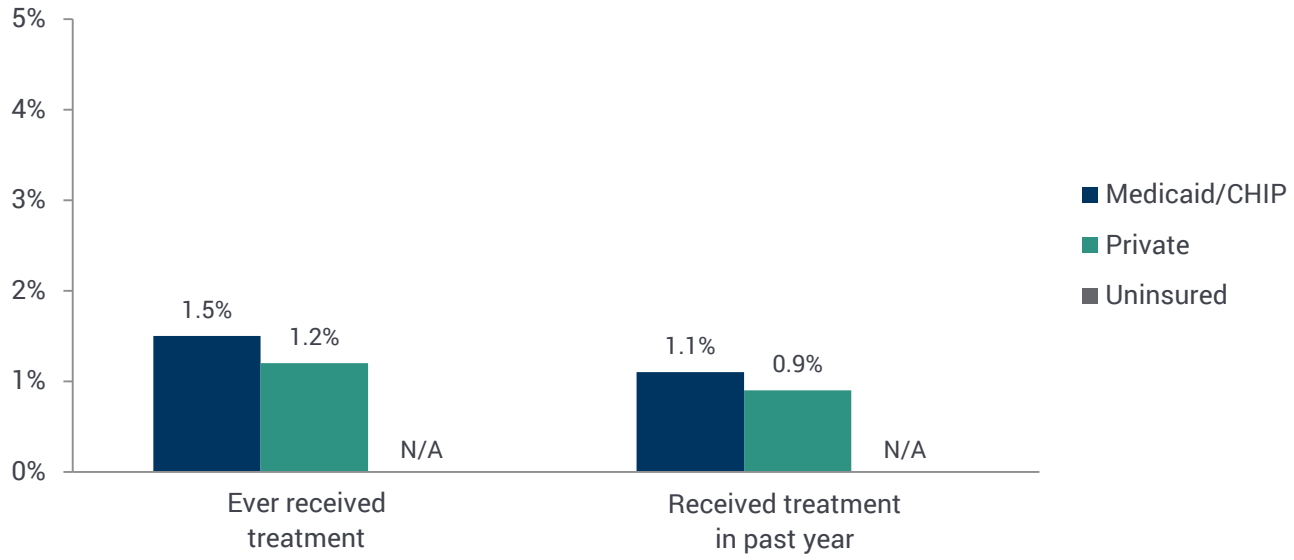
* Difference from Medicaid/CHIP is statistically significant at the 0.05 level.

Source: SHADAC 2017.

Treatment for substance use disorders

Adolescents enrolled in Medicaid or CHIP were as likely as those with private coverage to have received treatment for substance use disorders (including detoxification) or associated medical problems during the past year. There was no difference in lifetime treatment utilization. These estimates reflect the responses of all NSDUH-surveyed adolescents with Medicaid or CHIP and those in private insurance, not just those who have used drugs or alcohol, or who have a substance use disorder.

FIGURE 6. Receipt of Treatment to Stop or Reduce Substance Use or Treat Associated Medical Problems among Non-Institutionalized Adolescents Age 12–17, by Insurance Status, 2015



Notes: N/A indicates that estimate for uninsured adolescents is unreliable because it has a relative standard error of more than 30 percent. Results are not limited to adolescents with substance use disorders or who have previously used drugs or alcohol.
Source: SHADAC 2017.

Data and Methods

Data source

Data for this report come from the 2015 NSDUH, an annual, nationwide survey sponsored by the Substance Abuse and Mental Health Services Administration that conducts interviews with approximately 70,000 randomly selected, civilian, non-institutionalized individuals age 12 and older in the United States. Respondents are residents of households (e.g., houses, apartments, and civilians living in military base housing) and individuals in non-institutional group quarters (e.g., shelters, rooming houses, college dorms, and halfway houses). Individuals with no fixed household addresses (e.g., people who are homeless and not in shelters), active-duty military personnel, and residents of institutional group quarters (e.g., correctional facilities, nursing homes, and mental institutions) are excluded. The NSDUH is a primary source of national and state-level estimates on use of tobacco products, alcohol, illicit drugs (including non-medical use of prescription drugs), substance use disorders, mental health status, and related treatment (SAMHSA 2016a, SAMHSA 2016c). For more information on the NSDUH, see https://www.samhsa.gov/data/population-data-nsduh.

Data methods

The following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare; private with no Medicare; Medicaid/CHIP with no Medicare or private; other type of insurance

(e.g. TRICARE, military health care) with no Medicare, private, or Medicaid; uninsured all year. Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care. For individuals age 12–17, the NSDUH accepts proxy responses from household members identified as being better able to give the accurate information about health insurance (SAMHSA 2016b).

To determine if an adolescent has experienced a major depressive episode, the 2015 NSDUH used questions reflecting the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) criteria for depression, but no exclusions were made for depressive symptoms caused by medical illness, bereavement, or substance use disorders. Alcohol use disorder was defined using DSM-IV criteria for either dependence or abuse. Illicit drug use disorder was defined using DSM-IV criteria for dependence or abuse of marijuana, heroin, methamphetamine, cocaine, hallucinogens, inhalants, and prescription psychotherapeutic drugs, such as stimulants, pain relievers, or tranquilizers (SAMHSA 2016c).

Point estimates were calculated using sample weights, and corresponding variances accounted for the complex sample design of the NSDUH. All estimates shown in this report have a relative standard error of less than or equal to 30 percent. All differences discussed in the text of this brief were computed using t-tests and are significant at the 0.05 level.

Endnotes

[1] States may operate CHIP as an extension of Medicaid or as a separate program. Benefits offered by these separate programs vary because states have flexibility in designing their programs and are not required to cover the EPSDT benefit in separate CHIP (MACPAC 2015). As of 2013, 14 separate CHIP programs, however, have opted to cover the EPSDT benefit or a similar set of services (Cardwell 2014).

[2] The National Survey on Drug Use and Health (NSDUH) does not measure overall prevalence of mental illness among adolescents age 12–17, but it does report estimates of lifetime and past year major depressive episodes. Other national surveys also estimate rates of depression, as well as other mental health conditions, but results may differ because of methodological differences in the surveys. The National Survey on Children's Health's depression estimates rely on parent-reported information about whether he or she had been told that their child has depression, whereas the 2015 NSDUH asked adolescents directly questions that measure specific symptoms of depression based on the clinical criteria of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (SAMHSA 2016b). The NSDUH also provides prevalence estimates of nicotine dependence in adolescents and different types of substance use disorders, such as alcohol use disorder or illicit drug use disorder.

[3] The 2015 NSDUH defined individuals as having had a lifetime major depressive episode (MDE) if they reported at least five or more of the following symptoms in the same two-week period during their lifetime (at least one of the symptoms had to have been a depressed mood or loss of interest or pleasure in daily activities): "(1) depressed mood most of the day, nearly every day; (2) markedly diminished interest or pleasure in all or almost all activities most of the day, nearly every day; (3) significant weight loss when not dieting or weight gain or decrease or increase in appetite nearly every day; (4) insomnia or hypersomnia nearly every day; (5) psychomotor agitation or retardation nearly every day; (6) fatigue or loss of energy nearly every day; (7) feelings of worthlessness nearly every day; (8) diminished ability to think or concentrate or indecisiveness nearly every day; and (9) recurrent thoughts of death or recurrent suicide ideation."

The NSDUH defined an individual as having had a MDE in the past year if he or she "(a) had a lifetime MDE, (b) had a period of time in the past 12 months when he or she felt depressed or lost interest or pleasure in daily activities for 2 weeks or longer, and (c) reported during this period of 2 weeks or longer in the past 12 months that he or she had 'some of the other problems' that he or she reported for a lifetime MDE." The NSDUH, unlike the DSM-IV, however, did not exclude depressive symptoms caused by medical illness, bereavement, or substance use disorders (SAMHSA 2016c, p.113–114).

[5] The reported estimates are for utilization among all adolescents surveyed in the NSDUH by insurance status, and do not account for differences in need.

[6] Specialty outpatient services are defined as care provided in mental health clinics; partial day hospital or day treatment programs; by a private therapist, psychologist, psychiatrist, social worker, or counselor; or by an in-home therapist, counselor, or family preservation worker.

References

Agency for Healthcare Research and Quality (AHRQ). U.S. Department of Health and Human Services. 2015. *Statistical brief #472—Top five most costly conditions among children, ages 0–17, 2012: Estimates for the U.S. civilian noninstitutionalized population.* Rockville, MD: AHRQ. https://meps.ahrq.gov/data_files/publications/st472/stat472.pdf.

Cardwell A., C. Hess, J. Jee, et al. 2014. *Benefits and cost sharing in separate CHIP programs.* Washington, DC: Georgetown University Center for Children and Families and National Academy for State Health Policy. http://ccf.georgetown.edu/wp-content/uploads/2014/05/Benefits-and-Cost-Sharing-in-Separate-CHIP-Programs.pdf.

Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. 2016. *State estimates of major depressive episode among adolescents: 2013 and 2014.* Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/report_2385/ShortReport-2385.html.

Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. 2014. *Serious mental health challenges among older adolescents and young adults.* Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/sr173-mh-challenges-young-adults-2014/sr173-mh-challenges-young-adults-2014/sr173-mh-challenges-young-adults-2014.htm.

Kessler R.C., P. Berglund, O. Demler, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62, no. 6: 593–602. http://jamanetwork.com/journals/jamapsychiatry/fullarticle/208678.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015. Chapter 3: Comparing CHIP benefits to Medicaid, exchange plans, and employer-sponsored insurance. In *Report to Congress on Medicaid and CHIP*. March 2015. https://www.macpac.gov/wp-content/uploads/2015/03/March-2015-Report-to-Congress-on-Medicaid-and-CHIP.pdf.

Merikangas, K.R., J. He, M. Burstein, et al. 2010. Lifetime prevalence of mental disorders in us adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry* 49, no. 10: 980–989. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2946114/.

Murphey, D., M. Barry, and B. Vaughn. 2013. *Adolescent Health Highlight: Mental Health Disorders.* Publication # 2013-1. Bethesda, MD: Child Trends. https://www.childtrends.org/wp-content/uploads/2013/03/Child_Trends-2013_01_01_AHH_MentalDisordersl.pdf.

National Institute on Drug Abuse (NIDA), National Institutes of Health, U.S. Department of Health and Human Services. 2014. *Principles of adolescent substance use disorder treatment: A research-based guide.* Bethesda, MD: NIDA. https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/podata_1_17_14.pdf.

State Health Access Data Assistance Center (SHADAC), University of Minnesota. 2017. Analysis for MACPAC of 2015 National Survey on Drug Use and Health (NSDUH).Minneapolis, MN: SHADAC.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2016a. *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health.* Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2016b. *2015 National Survey on Drug Use and Health: Methodological summary and definitions*. Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/NSDUH-MethodSummDefsHTML-2015/NSDUH-MethodSummDefsHTML-2015/NSDUH-MethodSummDefs-2015.htm.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2016c. About population data / NSDUH. Rockville, MD: SAMHSA. https://www.samhsa.gov/data/population-data-nsduh/about.