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YOUTH MENTAL HEALTH: TRENDS IN DIAGNOSIS AND TREATMENT OF MAJOR DEPRESSIVE DISORDER

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INTRODUCTION

The United States is grappling with an unprecedented youth mental health crisis.ⁱ Even before the COVID-19 pandemic, troubling trends were present: Many young people reported feelings of persistent sadness, hopelessness and suicidal thoughts. The pandemic only intensified these trends, disproportionately affecting socially vulnerable communities and racial and ethnic minorities.ⁱⁱ Isolation, school closures, and heightened social stress deepened the struggle, creating a more urgent need to address the mental well-being of young people across America.ⁱⁱⁱ

Major Depressive Disorder (MDD) is a serious mental health condition among youth,^{iv} often associated with adverse childhood experiences (ACEs)^v —traumatic events that occur in childhood. ACEs are common, affecting almost two-thirds of youth by age 16,^{vi} and ACEs can have mental health and physical health impacts that carry well into adulthood.^{vii} ACEs have also been shown to have a greater impact on children from communities facing social, economic, or geographic barriers.^{viii,ix} This includes racial and ethnic minorities, youth of greater social vulnerability, and rural youth. Given these patterns, early detection of MDD is critical and may potentially avert serious downstream effects.

Our study investigates the latest trends in MDD diagnosis and treatment in youth by race/ethnicity, social vulnerability,¹ and geographic population density. This analysis spans 2019 to 2023 and is based on the medical claims of more than one million Blue Cross and Blue Shield (BCBS) commercially insured² youth with MDD between the ages of 6 and 17. Our research shows that MDD prevalence rates are rising, especially among teens ages 15-17, and there are differences in prevalence and treatment rates among socially vulnerable youth¹ and also youth from majority Black, Hispanic and Asian/Pacific Islander communities.

KEY FINDINGS

- 1.** MDD prevalence rates in youth spiked during the COVID-19 pandemic and remain significantly elevated.
 - Teens ages 15-17 years are most affected, with prevalence of MDD doubling from 2019 to 2022.
- 2.** MDD prevalence rates are lower in socially vulnerable and majority Black, Hispanic, and Asian/Pacific Islander communities.
 - Prevalence of MDD in Black and Hispanic youth was 30% lower and in Asian/Pacific Islander youth was 50% lower than White youth.
 - Prevalence of MDD in the most socially vulnerable youth was 25% lower than the least socially vulnerable youth.
- 3.** Socially vulnerable and Black and Hispanic youth are more likely to be diagnosed with MDD for the first time during a crisis event.³
 - The most socially vulnerable youth are 40% more likely to be diagnosed with MDD during a crisis event than the least socially vulnerable youth.
 - Black youth are 50% and Hispanic youth are 25% more likely than White youth to be first diagnosed with MDD during a crisis event.
- 4.** Primary care providers (PCPs) are critical sources of in-community behavioral health services, accounting for 41% of all new MDD diagnoses in youth.
- 5.** Psychotherapy and prescription treatment rates have risen for youth with MDD, including an increase in telehealth therapy use.

(1) The CDC's Social Vulnerability Index is a measure comprised of 16 American Community Survey variables that encompass socioeconomic status, household characteristics, racial & ethnic minority status, and housing type & transportation. The result is a number that represents the vulnerability of a population in a given area in the event of a disaster. In this report, the SVI measure was converted into quartiles, where Quartile 1 represents the 25% of the population with the lowest SVI scores that are least vulnerable and best equipped to withstand disaster. Quartile 4 represents the 25% of the population with the highest SVI scores that are most vulnerable and least equipped to withstand disaster. [Social Vulnerability Index | Place and Health - Geospatial Research, Analysis, and Services Program \(GRASP\) | ATSDR](#)

(2) Commercial data comes from the Blue Cross Blue Shield (BCBS) national claims database and includes employer provided and individual insurance policies. This database does not include government insurance policies, such as Medicaid data.

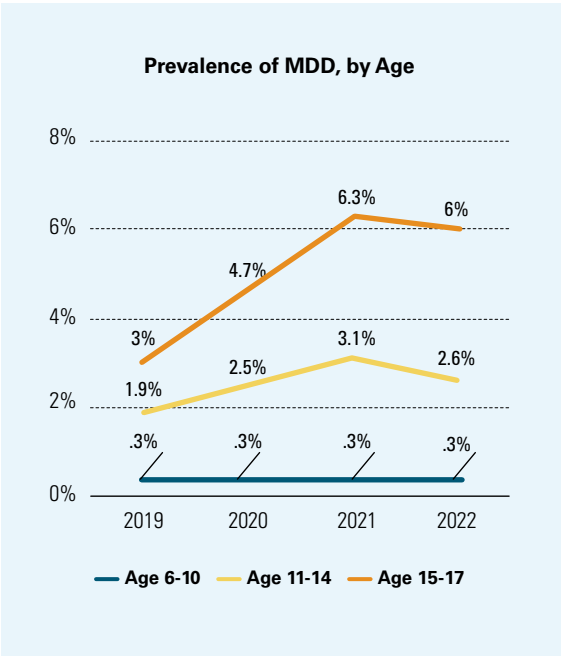
(3) In this report, a crisis event is defined as an ER visit or inpatient hospitalization associated with a diagnosis related to a mental health condition, self-harm, poisoning, or suicidality.

RESEARCH FINDINGS

Trends and Differences in MDD Prevalence and Diagnosis Setting

The prevalence of MDD among youth increased during the COVID-19 pandemic, from 2019 to 2021, and remained significantly elevated in 2022 compared to the pre-pandemic year of 2019. Teens were most affected; the prevalence of MDD diagnoses in youth ages 15-17 increased from 3.0% to 6.0% between 2019 and 2022.

Exhibit 1



MDD prevalence peaked in 2021 for youth of every race and ethnicity, social vulnerability quartile, and geographic population density (Exhibit 2). In 2022, MDD prevalence was 30% lower for Black and Hispanic youth than for White youth. Asian/Pacific Islander youth had 50% lower MDD prevalence than White youth. Youth in the most socially vulnerable quartile were 25% less likely to be diagnosed with MDD than youth from the least vulnerable quartile. MDD prevalence was similar across geographic population densities⁴ (i.e., rural, suburban, urban). The data shows that there are differences in MDD among various groups, which suggests that further research should be done, as there could be some concerning trends.

Prior ACE studies and national youth surveys show that minority youth and socially vulnerable youth face a significantly higher prevalence of ACEs,^{xi,xii} record higher rates of persistent feelings of sadness or loneliness, and are more likely to have a suicide plan and attempt suicide than White youth.^{xiii} Perceived stigma in diagnosis and treatment in these communities as well as barriers to accessing mental health providers may also be contributing factors to these trends.^{xiv}

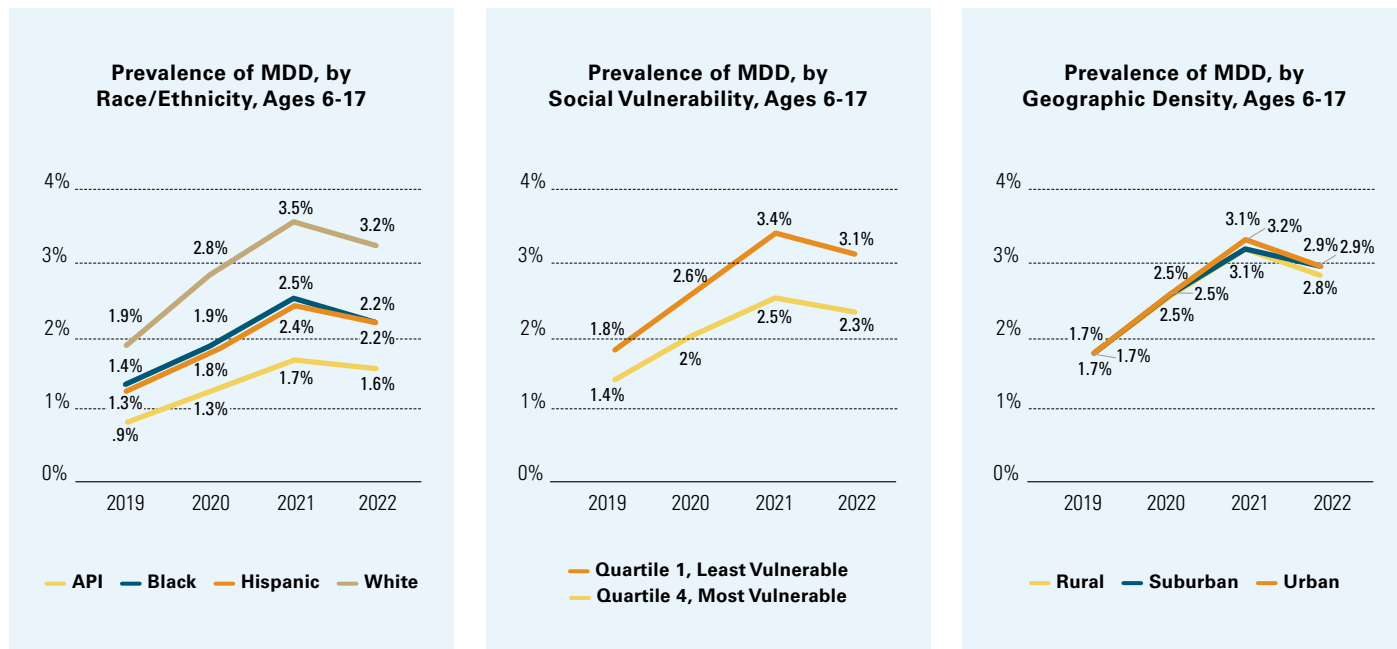
ABOUT MAJOR DEPRESSION

It's normal for children and teens to feel sad or irritable sometimes. MDD, also known as clinical depression, is more than just moodiness. MDD affects daily functioning and can manifest through various symptoms such as changes in sleep and appetite, decreased energy, difficulty concentrating and feelings of hopelessness or guilt. For a diagnosis of MDD to be made, a child typically needs to exhibit symptoms for more than two weeks, on most days. The onset of MDD in children is becoming increasingly common, often persisting into adulthood, and is influenced by factors like family history, excessive stress, and trauma. Early intervention is crucial to manage the condition effectively.^x



(4) Source USDA ERS - Rural-Urban Commuting Area Codes

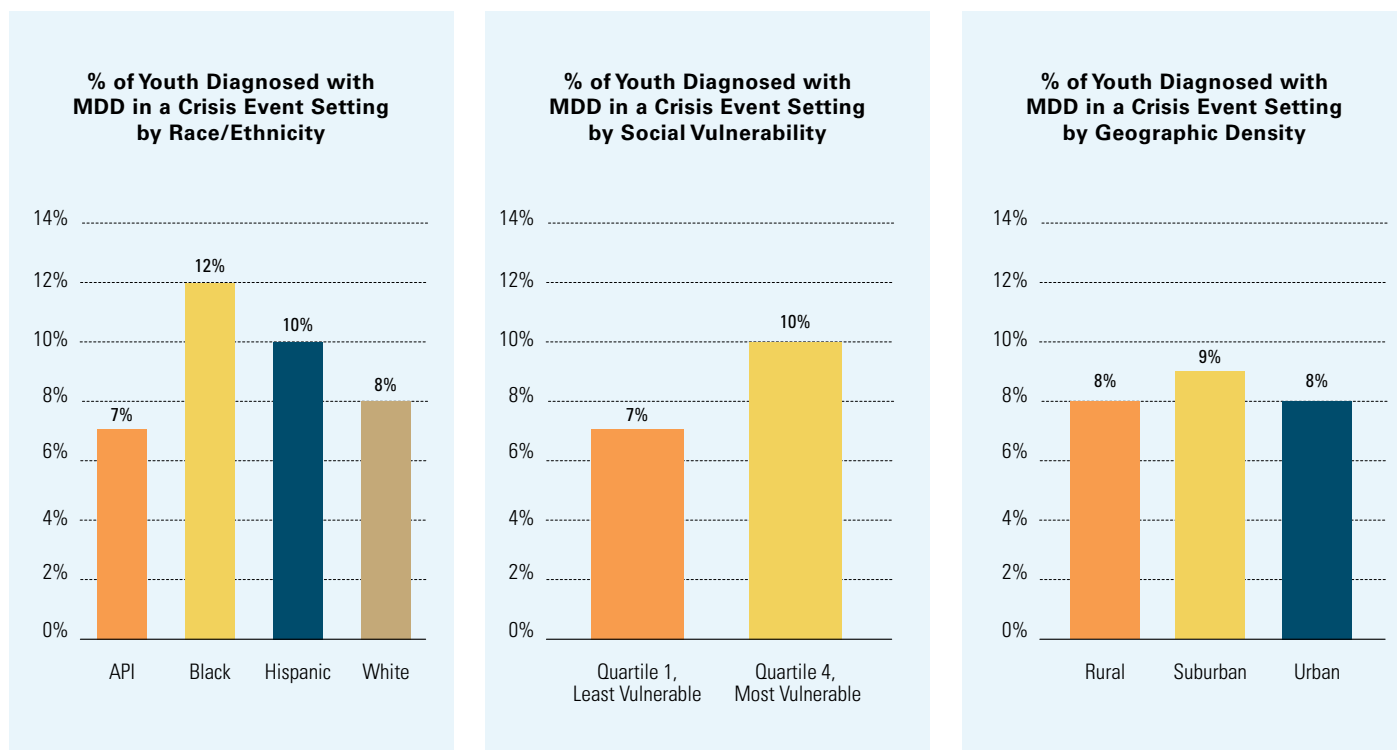
Exhibit 2



Our data also shows Black youth are 50% and Hispanic youth are 25% more likely than White youth to be first diagnosed with MDD during a crisis event (Exhibit 3). The most socially vulnerable youth are 40% more likely to be diagnosed with MDD during a crisis event than the least socially vulnerable youth. Geographic population density did not impact the percent of youth diagnosed in a crisis setting.

Focusing on early detection through primary care has the potential to avoid first diagnosis in a crisis setting.

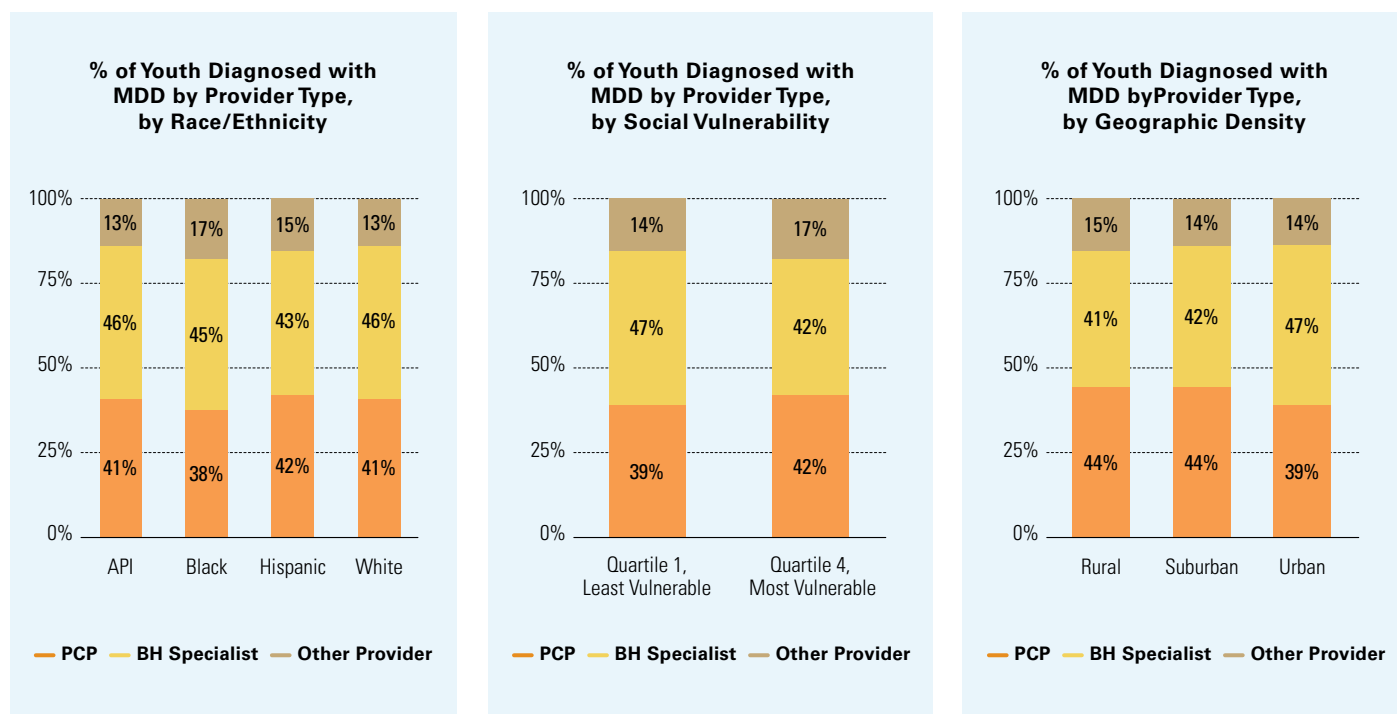
Exhibit 3



THE CRUCIAL ROLE OF PRIMARY CARE IN MDD DIAGNOSIS

Our research assessed the role of primary care providers,⁵ behavioral health providers,⁶ and other providers (emergency department physicians, hospitalists, and other specialists) in the initial diagnosis of MDD in youth. We found that primary care providers are the first diagnosing provider of MDD for a large percentage of youth of every race/ethnicity, social vulnerability quartile, and geographic population density. Overall, PCPs account for 41% of initial MDD diagnoses in youth. PCPs play a larger role in diagnosing MDD for youth residing outside of urban counties; they provide the initial diagnosis for 44% of rural and suburban youth compared to 39% of urban youth (Exhibit 4). Screening of MDD and early detection by primary care providers can be a path to prompt treatment plans.^{iv}

Exhibit 4



RISING TREATMENT RATES OF PSYCHOTHERAPY AND ANTIDEPRESSANTS FOR MDD

According to American Academy of Pediatrics (AAP) Guidelines for Adolescent Depression in Primary Care, psychotherapy and medication may be part of a comprehensive treatment for some adolescents.^{xv} Our data shows a trend of rising treatment rates within three months of initial diagnosis for youth with MDD (Exhibit 5). Youth diagnosed with MDD who received psychotherapy increased across all race and ethnicity groups between 2021 and 2022. However, in 2022, psychotherapy usage by minorities was lower compared to White youth. Most notably, Hispanic youth with MDD utilized psychotherapy 12% less than White youth in the three months following diagnosis.

All races/ethnicities also experienced an increase in antidepressant (SSRI/SSNI) treatment rates in the period from 2019 through early 2023. However, White youth filled antidepressant prescriptions at significantly higher rates than minority youth across the four-plus years.

(5) Provider specialty types included in the PCP category: Family Medicine, Internal Medicine, Nurse Practitioner, Clinical Nurse Pediatric Specialist, Pediatrician, Physician Assistant, and Registered Nurse.

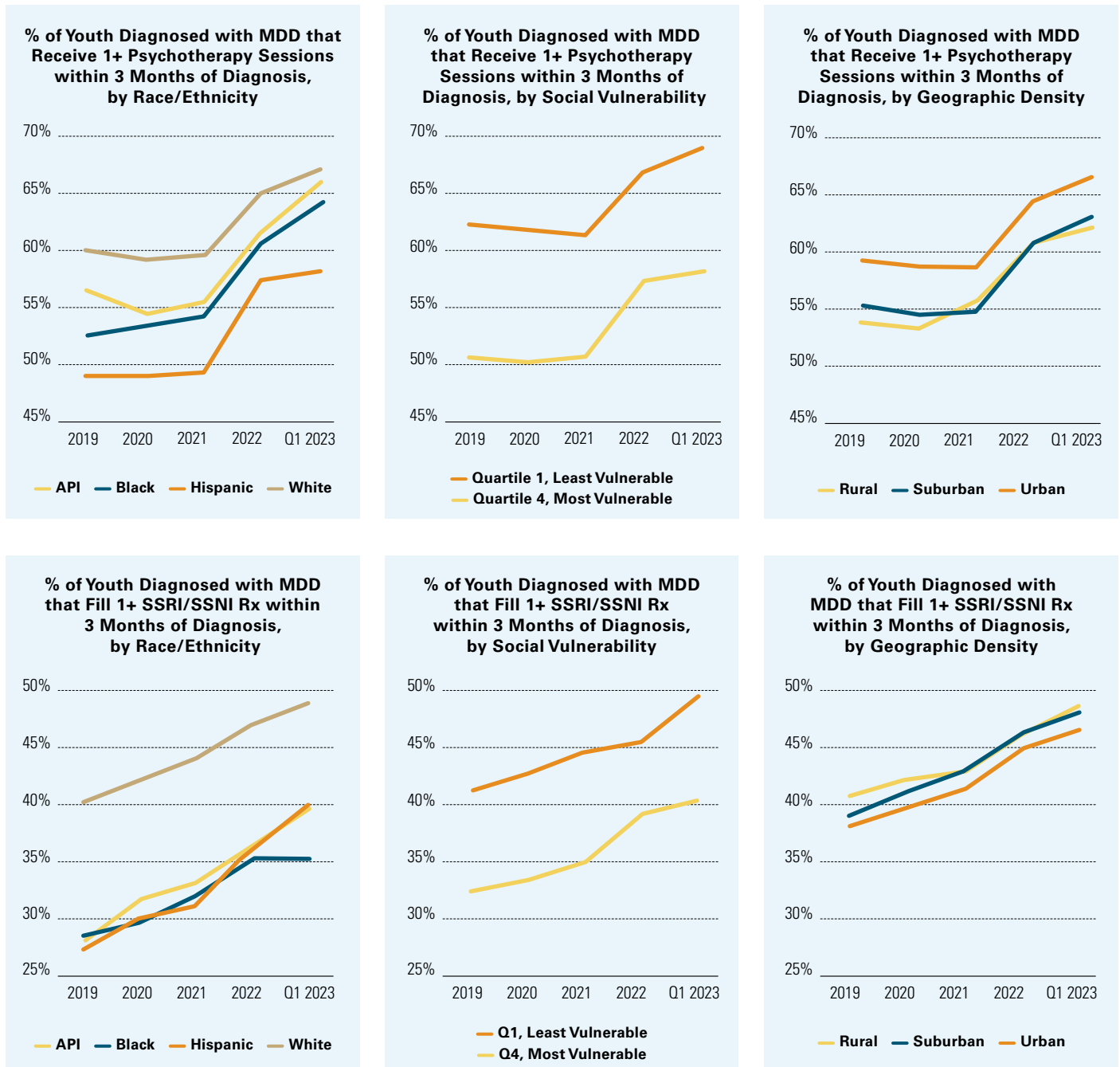
(6) Behavioral Health Providers include the following: Behavioral Health Analysts, Child & Adolescent Psychiatrists, Clinical Mental Health Nurse Specialist, Psychiatric Mental Health, Community Based Residential Treatment Facility, Licensed Counselors/Counselor/Professional Counselor, Marriage & Family Therapist, Neurologist, Neurophysiologists, Other BH Providers, Psychiatric Hospital, Psychiatric RN, Psychiatrists, Psychoanalysts, Psychologists, Rehabilitation Facilities, and Social Workers.



Psychotherapy treatment and antidepressant prescription rates rose between 2021 and 2022 in both the least and most socially vulnerable quartiles of youth with MDD. However, the most socially vulnerable group has experienced a persistently lower rate over the four-year period as reflected in Exhibit 5.

Geographic population density showed a small difference in treatment rates for psychotherapy but not for antidepressant prescriptions for youth with MDD. Urban youth had the highest rates of psychotherapy treatment across this four-plus year time period.

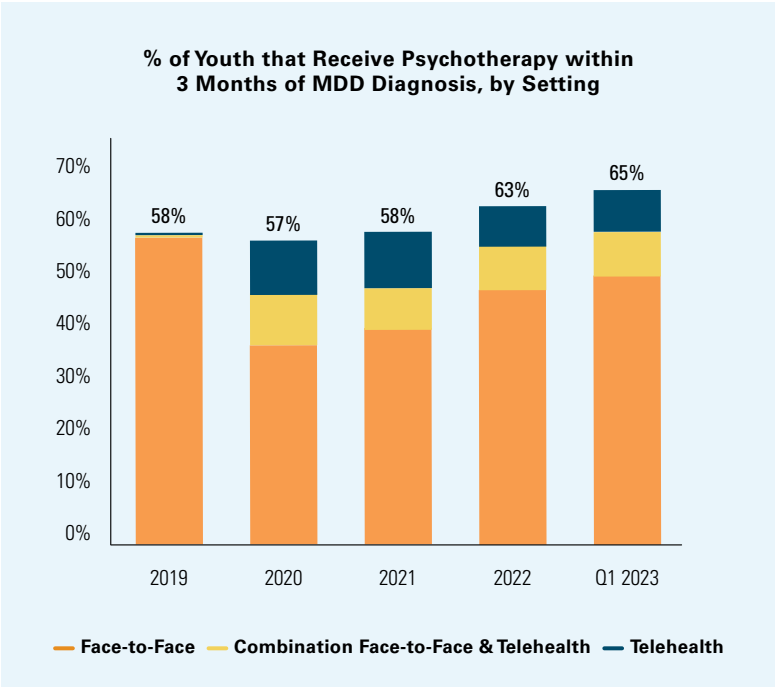
Exhibit 5



RISING RATES OF TELEHEALTH PSYCHOTHERAPY

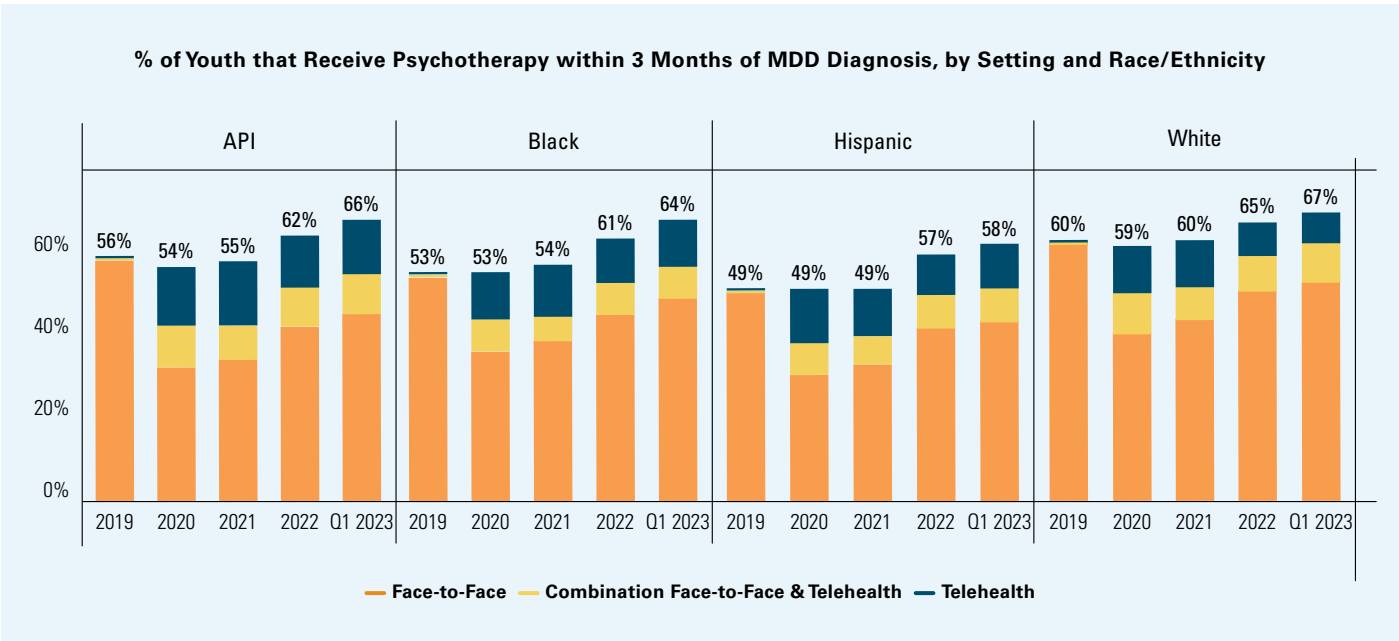
Telehealth psychotherapy was uncommon for youth prior to the COVID-19 pandemic. However, the essential shut down of face-to-face visits starting in March 2020 led to a rapid uptake of telehealth by providers and patients.^{xvi} Whereas in 2019, less than 1% of youth used telehealth psychotherapy in the first three months of treatment after initial MDD diagnosis, this figure increased to 16% by early 2023 (Exhibit 6).

Exhibit 6



Youth with MDD of every race and ethnicity showed an increase in usage of telehealth in 2020. By 2023, 22% of Asian/Pacific Islander youth, 17% of Black youth, 16% of Hispanic youth, and 15% of White youth received some or all treatment via telehealth psychotherapy within three months of their diagnosis with MDD (Exhibit 7).

Exhibit 7





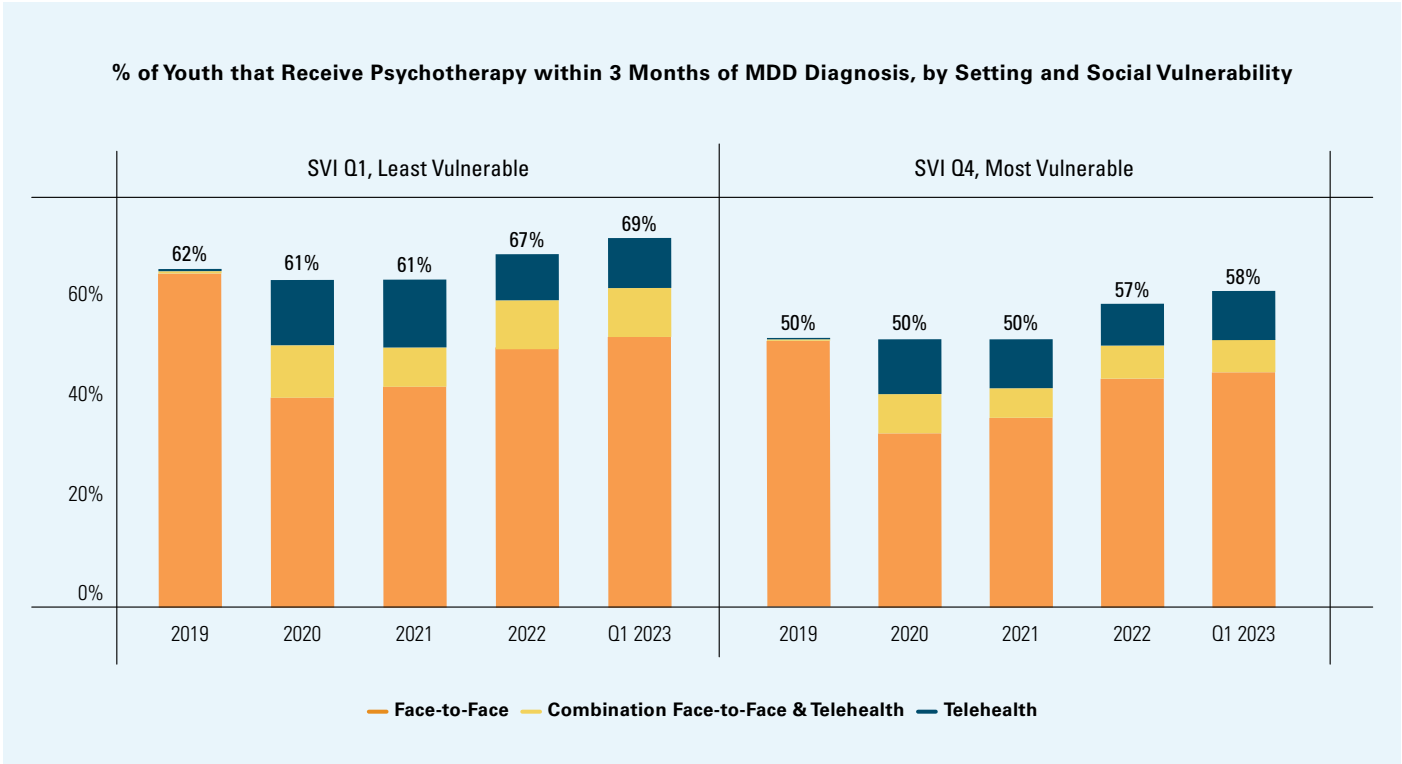
TAKING ON THE MENTAL HEALTH CRISIS

As we continue to face the national mental health crisis, BCBS companies are taking action to improve access to youth mental health care in their local communities. These innovative approaches ensure we meet young people where they are with the right form of support.

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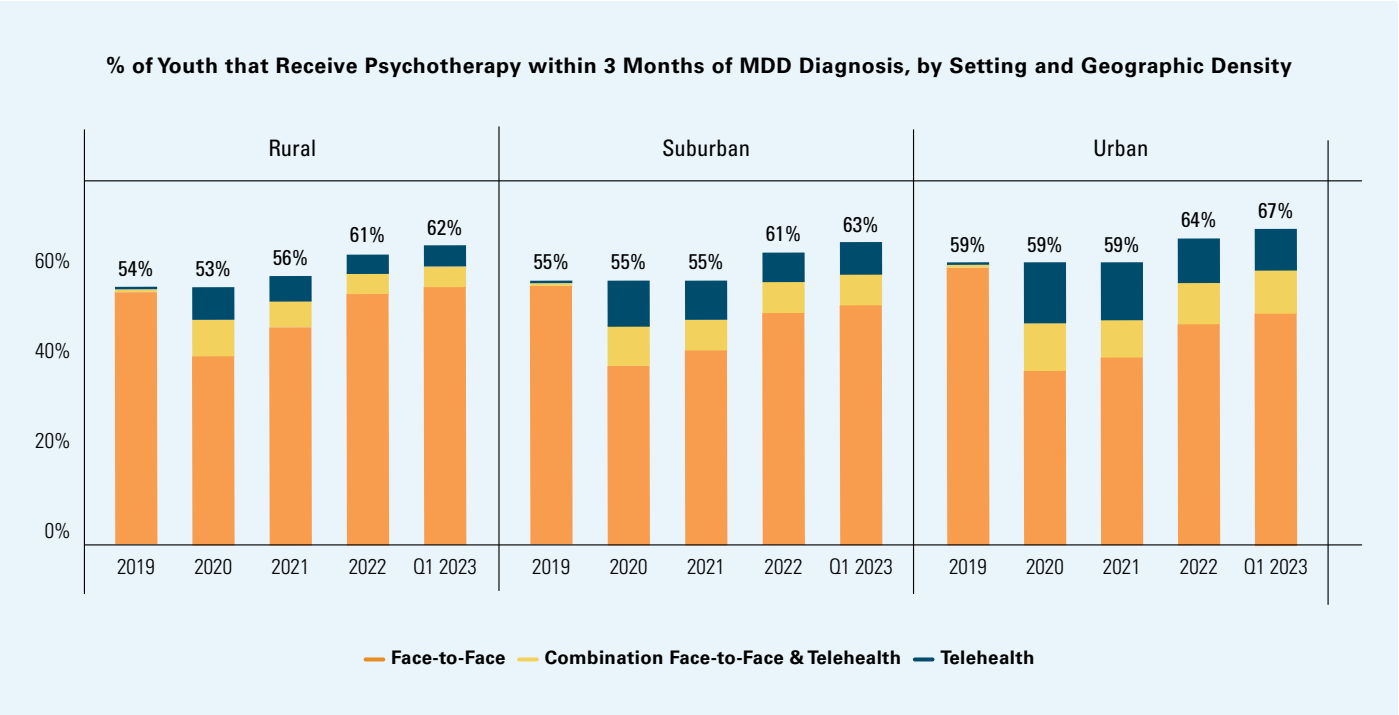
The most socially vulnerable youth with MDD have used telehealth for psychotherapy less than the least socially vulnerable (Exhibit 8). By early 2023, 18% of the least socially vulnerable youth with MDD and 13% of the most socially vulnerable youth were utilizing telehealth for psychotherapy.

Exhibit 8



In 2020, at the height of the pandemic, 14% of rural youth used telehealth for some treatment. By early 2023, 18% of urban youth, 13% of suburban youth, and 9% of rural youth used telehealth for psychotherapy appointments (Exhibit 9).

Exhibit 9





BCBS PARTNERING WITH NQF TO IMPROVE BEHAVIORAL HEALTH QUALITY MEASURES

BCBS companies have joined National Quality Forum’s Aligned Innovation developing a new generation of health care quality measures that fill high priority gaps in our nation’s portfolio of measures and represent the outcomes that patients and clinicians say matter most. A Behavioral Health Patient Reported Outcome Measure is under development and will assess symptoms and function for children, adolescents, and adults with depression or anxiety.

[>> READ MORE](#)



TAKING ACTION TO IMPROVE YOUTH MENTAL HEALTH

Childhood is a critical period for identifying and addressing mental health concerns. Early diagnosis and treatment for conditions like MDD lay the foundation for improved mental and physical health in later life. Our findings suggest prevalence and treatment of MDD is on the rise, however there are differences in these rates among various groups, and primary care providers are playing a large role in care. Blue Cross and Blue Shield companies are taking action in communities across the country, partnering with providers and working with policymakers to break down barriers to accessing quality mental health care by:

1. Growing our network of providers
2. Continuing to support virtual care and mental health digital solutions
3. Providing training and resources for primary care providers on diagnosing and managing behavioral health conditions
4. Improving care integration of physical and mental health
5. Investing in communities across the country to help all youth get the care they need

Blue Cross and Blue Shield companies are steadily adding behavioral health providers to networks nationwide. We continue to expand the number of behavioral health providers in our networks with a 55% increase between 2020 and 2023 to more than 450,000 across all 50 states. In addition to expanding our provider networks, we support additional actions at the state and federal level to bolster the available workforce to further improve access, including supporting the use of non-clinical personnel to help extend the mental health workforce, including connecting youth with personnel who match their care preferences.

We are also expanding virtual care and digital solutions as they continue to help bridge the gap in access to mental health care. Policymakers can further close the gap by reducing barriers to tele-mental health access. We encourage accelerated implementation of the investments made by Congress for broadband and telehealth infrastructure and investing in pathways toward alternative payment models (APMs) for telehealth based on value, distinct from its current payment structure for telehealth and tied to clear quality metrics.

BCBS companies are committed to providing resources and training to help pediatricians and family medicine physicians manage mental health. These tools allow primary care providers to screen, diagnose, and manage mental health conditions as part of their patients' overall wellness. BCBS companies also support implementation of mental health screenings to enable early identification and intervention.⁷ We recommend continued investment in training and resources for primary care providers.

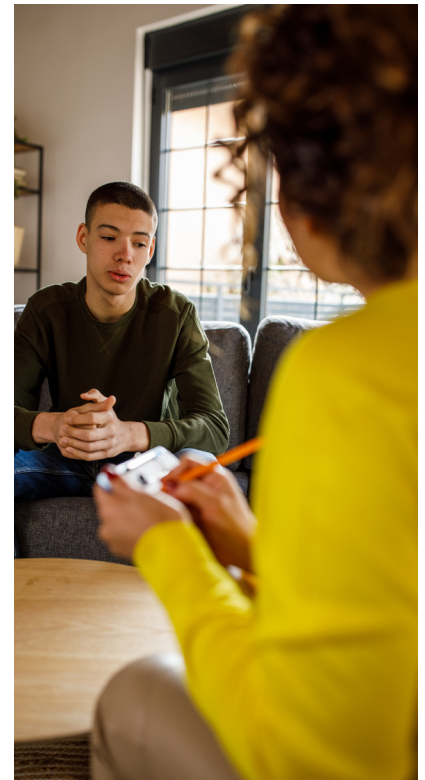
(7) Recommendation: Depression and Suicide Risk in Children and Adolescents: Screening | United States Preventive Services Taskforce

Integrating mental and physical health care is also critically important given that these conditions often co-occur. BCBS companies are empowering primary care physicians to build care teams that treat the whole person. This approach allows pediatricians and family medicine providers to work with mental health clinicians to better coordinate holistic care. We urge policymakers to continue to support adoption of integrated care models to help close gaps in care and support all member needs.

We're also meeting young people where they are in communities across the country to help turn the tide on the youth mental health crisis. BCBS companies are investing \$10 million in Boys & Girls Clubs of America to bring trauma-informed practices to more than 5,400 Clubs and their youth development staff. Many of these Clubs reach youth in socially vulnerable communities and can thereby provide a non-traditional care setting for early intervention and mental health support. The scaling of trauma-informed practices will touch the lives of more than three million kids and teens across the country by 2026.

In addition, BCBS companies foster more than 250 youth mental health programs nationwide. Collectively, in 2023, we invested \$50 million in community mental health programs.

The findings in this report underscore the urgency for taking action to improve youth mental health in America. Learning from this data and acting together is the path toward improving mental health outcomes for youth.



METHODOLOGY

This is the 38th study of the Blue Cross Blue Shield, The Health of America Report series, which uses a large claims database to uncover trends and insights about health care utilization and access. The report was developed through collaboration with Blue Health Intelligence® (BHI)®.

This report draws on data from more than 24 million Blue Cross Blue Shield commercially insured youth ages 6 to 17 eligible during the period from Jan 1, 2018 to July 31, 2023. From this population, we identified more than 1 million youth diagnosed with major depressive disorder (MDD) between Jan 1, 2019 and March 31, 2023, and measured their treatment with psychotherapy counseling and antidepressant medications.

Major depressive disorder was identified through claims using the ICD-10 coding schema (F32.0, F32.1, F32.2, F32.3, F32.4, F32.5, F32.9, F33, F33.0, F33.1, F33.2, F33.3, F33.4, F33.40, F34.41, F34.42, F33.9). Prevalence was estimated as a percentage of the population that had major depressive disorder diagnosis attached to at least one medical claim in the calendar year. Analyses of anti-depressive prescription treatment data were restricted to members with pharmacy and medical coverage. Selective serotonin reuptake inhibitors (SSRI) and serotonin and norepinephrine reuptake inhibitors (SNRI) medications were identified using the Medi-Span Generic Product Identifier (GPI) reference data and literature review of MDD treatment guidelines to pull the appropriate NDC data. Treatment rates were measured within 3 months of diagnosis, a period that is closely monitored by health care providers assessing symptom improvement and medication side effects.^{xvii}

Race and ethnicity identifiers for youth were obtained using the RAND corporation's Bayesian Improved First Name Surname Geocoding race/ethnicity imputation methodology, which employs geocodes and names as inputs.^{xviii} Social vulnerability was measured using the CDC/Agency for Toxic Substances and Disease Registry Social Vulnerability Index^{xix}. The SVI indicates the relative vulnerability of populations in every U.S. Census tract based on 16 social factors. The index creates a score from one to 100 and was grouped for analysis into quartiles. Geographic density groups were determined by Rural-Urban Commuting Area (RUCA) codes from the USDA. This system determines the type of geographic population density at a census tract level, using a combination of population density, urbanization, and daily commuting patterns. The measure results in four groups: urban, suburban, large-town rural and small-town rural. For this report, we condensed the large-town and small-town rural groups into one Rural grouping for simplicity and similarities in patterns for depression diagnosis and treatment.^{xx}

ENDNOTES

- i. American Academy of Pediatrics. AAP-AACAP_CHA Declaration of a National Emergency in Child and Adolescent Mental Health. <https://www.aap.org/>
- ii. Alihomsi A, Quintero SM, Ponce S, Mendes I, Stewart AL, Napoles AM, and Strassle PD. Racial/Ethnic Disparities in Financial Hardship During the First Year of the Pandemic. *Health Equity*. 2023 Aug 30;7(1):453-461.
- iii. Centers for Disease Control and Prevention. Youth Risk Behavior Survey 2013-2023. <https://www.cdc.gov/yrbs/dstr/index.html>
- iv. US Preventive Services Task Force. Recommendation Statement: Screening for Depression and Suicide Risk in Children and Adolescents. *JAMA*. 2022;328(15):1534-1542.Doi:10.1001/jama.2022.16946. <https://jamanetwork.com/journals/jama/fullarticle/2797145>
- v. Bomysoad RN, Francis LA. Adverse Childhood Experiences and Mental Health Conditions Among Adolescents. *J Adolesc Health*. 2020 Dec; 67(6): 868-870. Doi: 10.1016/j.jadohealth.2020.04.013. Epub 2020 Jun 20. PMID: 32476484.
- vi. [Understanding Child Trauma - What is Childhood Trauma? | SAMHSA](#)
- vii. Silva C, P Moreira, DS Moreira, et. Al. Impact of Adverse Childhood Experiences in Young Adults and Adults: A Systematic Literature Review. *Pediatr Rep*. 2024 Jun 7;16(2): 461-481. Doi: 10.3390/pediatric16020040.
- viii. [About Adverse Childhood Experiences | Adverse Childhood Experiences \(ACEs\) | CDC](#)
- ix. American Academy of Pediatrics. Pediatric Collections: Social Determinants of Health – Part 1: Underserved Communities. American Academy of Pediatrics ISBN-13: 978-1-61002-634-5.
- x. American Psychological Association: [APA Clinical Practice Guideline for the Treatment of Depression Across Three Age Cohorts](#)
- xi. Crouch E, Probst JC, Radcliff E, Bennett KJ, McKinney SH. Prevalence of adverse childhood experiences (ACEs) among US children. *Child Abuse Negl*. 2019 Jun;92:209-218. doi: 10.1016/j.chiabu.2019.04.010. Epub 2019 Apr 16. PMID: 31003066.
- xii. Goldstein E, J Topitzes, J Miller-Cribbs, RL Brown. Influence of Race/Ethnicity and Income on the Link between Adverse Childhood Experiences and Child Flourishing. *Pediatric Research* 2022, 89: 1861-1869.
- xiii. Centers for Disease Control and Prevention. Youth Risk Behavior Survey 2013 – 2023. <https://www.cdc.gov/yrbs/dstr/index.html>
- xiv. [Exploring Barriers to Mental Health Care in the U.S. | Research and Action Institute](#)
- xv. <https://publications.aap.org/pediatrics/article/141/3/e20174082/37654/Guidelines-for-Adolescent-Depression-in-Primary?autologincheck=redirected>
- xvi. Shaver J. The State of Telehealth Before and After the COVID-19 Pandemic. *Prim Care*. 2022 Dec;49(4):517-530. doi: 10.1016/j.pop.2022.04.002. Epub 2022 Apr 25. PMID: 36357058; PMCID: PMC9035352.
- xvii. Anxiety & Depression Association of America. Clinical Practice Review for Major Depressive Disorder. <https://adaa.org/resources-professionals/practice-guidelines-mdd>
- xviii. RAND Bayesian Improved Surname Geocoding: Advancing Equity through Data Science, RAND corporation
- xix. <https://www.atsdr.cdc.gov/place-health/php/svi/index.html>
- xx. [USDA ERS - Rural-Urban Commuting Area Codes](#)



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