

Dig into depression with MarketScan

Explore our latest depression-related findings, with a focus on major depressive disorder and postpartum depression.





Depression is an everyday battle for millions of Americans – diagnosed or not. To better treat and prevent mental health disorders, we first need to understand them. Many researchers have turned to real-world data (RWD), such as MarketScan® by Merative™, to gain insights on the state of depression in the United States (US) as they search for opportunities to improve care. More than 35 depression-related publications that relied on MarketScan can be found at the [end of this report](#).

Our MarketScan team is proud to present several recent analyses and findings related to depression, highlighting the importance of the topic and the capabilities of our databases. Using our MarketScan Commercial and Medicare Databases, we created a dataset to examine prevalence and healthcare expenditure trends in certain types of depression, including major depressive disorder (MDD) and postpartum depression (PPD).

Prevalence of major depressive disorder

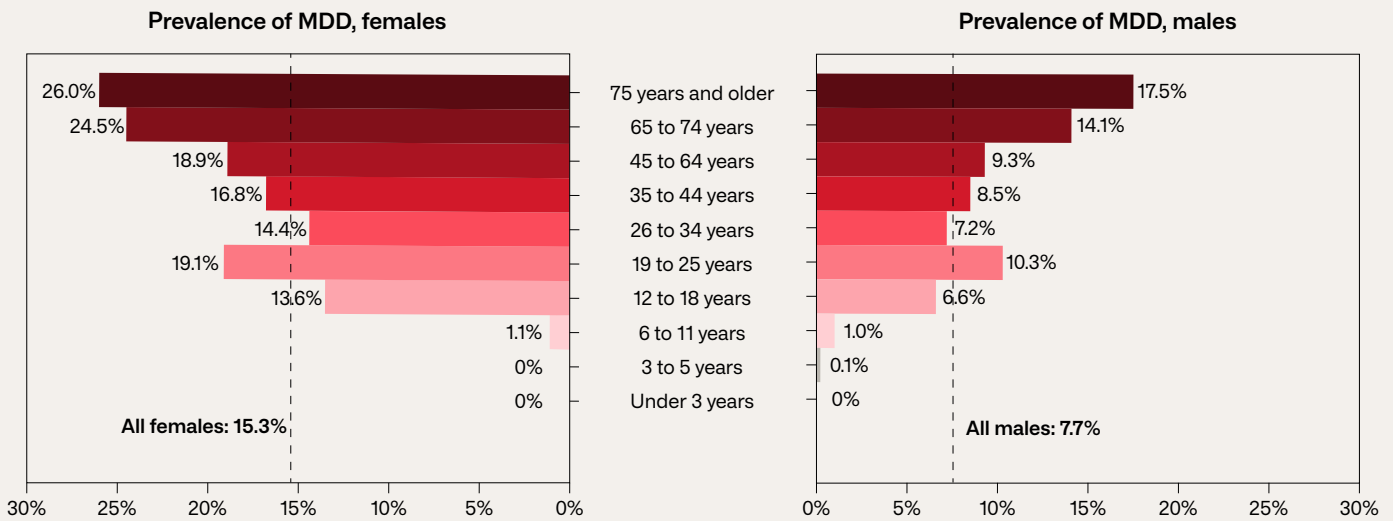
The Centers for Disease Control (CDC) publishes prevalence data for a variety of diseases, including MDD, based on the National Health and Nutrition Examination Survey.¹ MDD prevalence rates from large national claims databases, like MarketScan, offer an alternative estimate using the most recent real-world data.

In this analysis, we took advantage of the longitudinality of the MarketScan databases to estimate the prevalence of MDD using the Commercial and Medicare Databases from 2012-2022. Looking back over a 10-year period, we estimated prevalence of any MDD (including diagnosis codes for MDD in remission) overall, and by age and gender. The denominator of the prevalence rate included all enrollees who had at least 1 day enrollment in the databases in 2022. The numerator included eligible enrollees who had a diagnosis for MDD between 2012 and 2022.

The overall prevalence was 11.6%, with females (15.3%) twice as likely to be diagnosed with depression than males (7.7%). Prevalence generally increased with age, with 26% of females aged 75 and older having a depression diagnosis between 2012 and 2022 (Figure 1).



Figure 1: Period prevalence (2012-2022) of MDD by age and gender, MarketScan Commercial and Medicare Databases



Five-year trends in non-remission MDD among US school-aged children and young adults

Recent publications have highlighted the rise in depression in school aged children and young adults.² The COVID-19 pandemic has increased awareness of the rising mental health issues in children.^{2,3} Here, we examined the annual prevalence rates of non-remission MDD (i.e., excluding diagnosis codes for MDD in remission) in enrollees between 5 and 24 years old, spanning years both pre- and post-pandemic (2018-2022).

Enrolled youths in the MarketScan Commercial Database with full continuous enrollment in the reporting year were included in the denominator, and eligible enrollees with a diagnosis for non-remission MDD were included in the numerator.

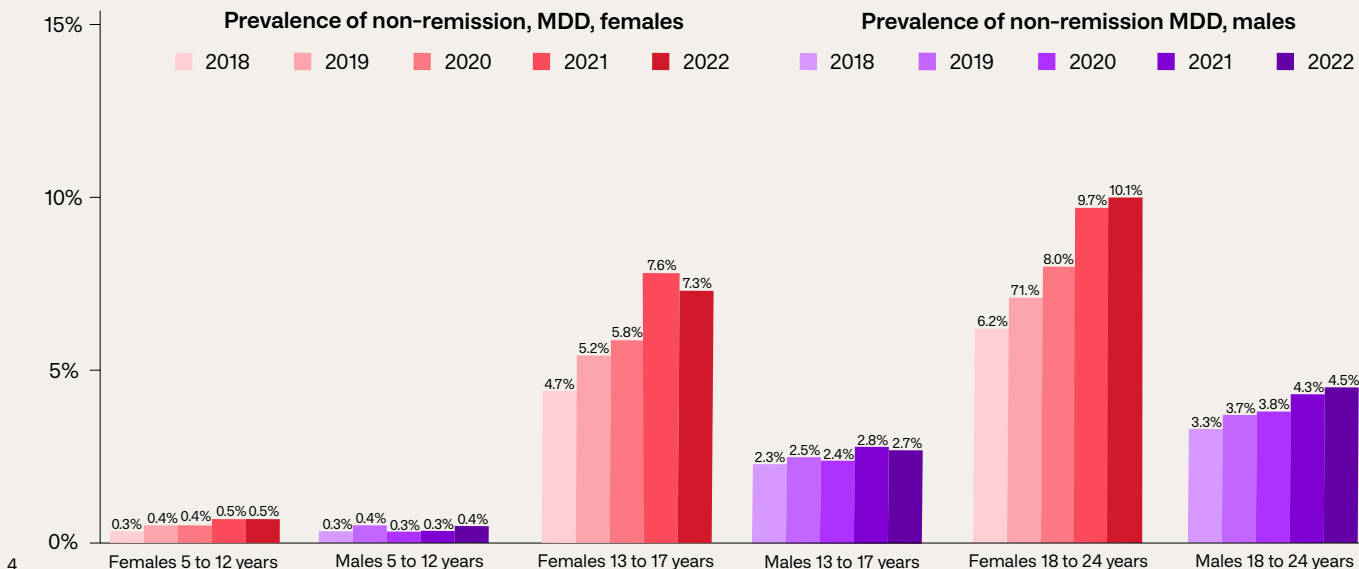
As shown in Figure 2, while there were steady increases in non-remission MDD rates from 2018 to 2022 in both genders and across all age groups, females consistently had higher prevalence rates than males. Females aged 18-24 years reached the highest rate of 10.1% in 2022, a 63% increase from 2018.

Prior publications have shown that MDD is under-reported in boys and young men as compared to their female counterparts.⁴ Our findings highlight the need for regular mental health screening for young men and the youth population in general.

Within each age group and year, females had higher rates of non-remission MDD and observed larger increases than males.



Figure 2: Annual prevalence of non-remission MDD in school-aged children and young adults by age and gender (2018-2022), MarketScan Commercial Database



Prevalence and incremental cost associated with postpartum depression (PPD), 2019-2022

It is estimated that between 10% to 20% of women will experience postpartum depression (PPD) after giving birth.⁵ However, nearly half of them are not diagnosed. With nearly 4 million live births each year, this means that nearly 300,000 women struggling with PPD will not be identified as such.⁵ It was difficult to capture PPD from claims until 2019, when a specific diagnosis code for PPD became available. A previous publication using a proxy algorithm for PPD and estimated costs showed that households with a woman with a PPD diagnosis after deliveries between 2010 and 2014 incurred 22% higher total healthcare costs than household without a mother with a PPD diagnosis.⁶

In this analysis, using the Commercial Database and actual cost data from MarketScan, we estimated the rate of diagnosed PPD and the cost differences between mothers with PPD and those not diagnosed with PPD during one-year post-discharge. Women with a live birth between 2019-2022 were identified and required to have at least one year enrollment in MarketScan after being discharged from the hospital. Women were classified into PPD and non-PPD cohorts based on presence of PPD diagnosis during one year following birth. All-cause healthcare costs were estimated based on paid amounts of adjudicated claims, including insurer and health plan payments and patient cost-sharing in the form of copayment, deductible, and coinsurance.

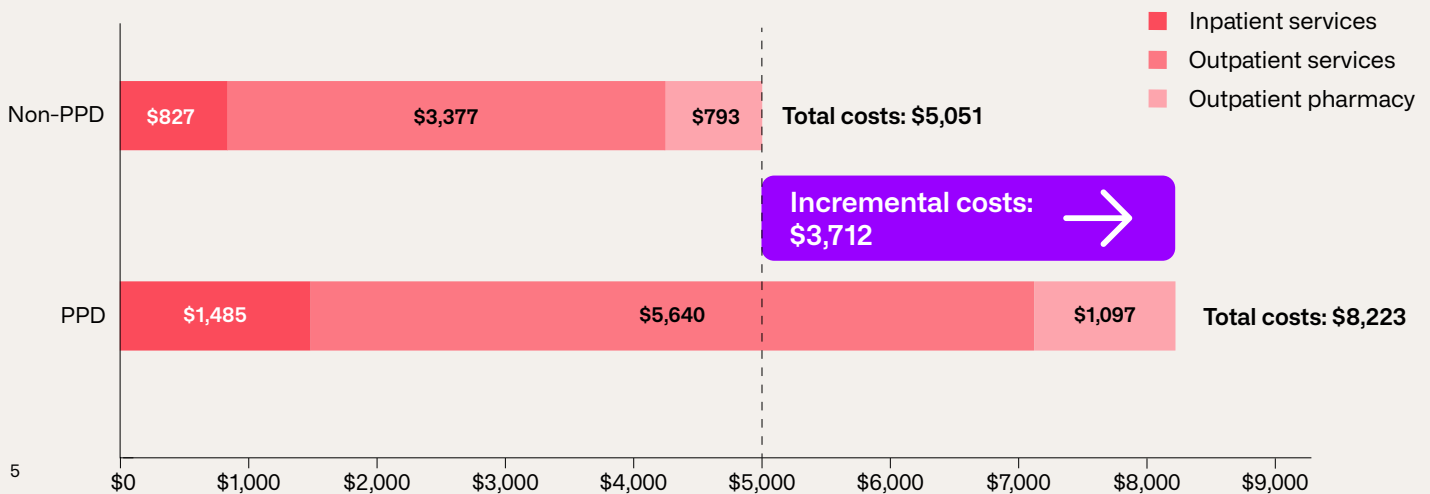
Of the 329,724 women that qualified for the analysis, 4.8% had a diagnosis of PPD within one year following birth. This rate is lower than previous estimates,⁵ likely reflecting underdiagnosis of PPD. During the one-year post-delivery, women with PPD had all-cause total healthcare costs of \$8,223 compared to \$5,051 for women without PPD – an incremental cost of \$3,172 (or 39%) per patient annually (Figure 3). Taken together, the low rate of diagnosed PPD and the significant costs burden associated with managing PPD highlights the need for mental health screening in postpartum.

\$3,172

In the year after discharge, women with PPD incurred \$3,172, or 39%, higher costs than women without PPD.



Figure 3: All-cause healthcare costs in women with PDD versus without PDD in the year following giving birth (2019-2022)



⁵

Limitations:

All administrative claims databases may be subject to coding limitations and data entry error. The MarketScan databases are based on a large convenience sample of enrollees with Commercial, Medicare Advantage, and Medicare Supplemental insurance from large employers and health plans. As a result, the findings from these analyses may not be generalizable to other populations.

The 2022 prevalence rates may be underestimated due to the following: 1) Patients with depression did not seek medical services during 2012-2022; 2) Patients disenrolled from the databases between 2012-2022; as a result, MarketScan did not have the full picture of their healthcare experiences.

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About MarketScan

MarketScan by Merative provides deidentified, longitudinal, patient-level closed claims and specialty data for 293M+ patients sourced directly from a diverse pool of payers. Industry-leading researchers rely on MarketScan to derive valuable insights pertaining to health economics and outcomes research, treatment patterns, and disease progression across the industry resulting in more than 3,500 peer-reviewed manuscripts.

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About Merative

Merative is a data, analytics and technology partner for the health industry, including providers, health plans, employers, life sciences companies and governments. With trusted technology and human expertise, Merative works with clients to drive real progress. Merative helps clients orient information and insights around the people they serve to improve decision-making and performance. Merative, formerly IBM Watson Health, became a new standalone company as part of Francisco Partners in 2022.

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