



## ADHD Medication Trends Among Middle Market Self-Funded Employer Groups: 2019-2023

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### Introduction

The pandemic had a negative impact on the mental health of many people which may have presented as an exacerbation of ADHD symptoms including lack of focus and poor memory function. A survey given to adults who transitioned from an in-office work environment to a work-from-home environment found that many people were unable to maintain productivity and attention throughout the workday.<sup>1</sup>

Barriers to accessing ADHD diagnosis and treatment were relaxed during the COVID-19 pandemic with the easing of in-person requirements and the expansion of telehealth services. Outcomes assessed from these services have shown this service delivery model that includes pharmacotherapy and caregiver behavior training may have improved ADHD outcomes.<sup>2</sup>

Historically, there have been access challenges to mental healthcare services for underrepresented populations such as people of color and women.<sup>3</sup> Telehealth services may have improved access in these populations.<sup>4</sup>

New diagnosis of ADHD has risen in all age groups, particularly women.

Prescription stimulant use has risen during the COVID-19 pandemic. Increased need and reduced barriers to access may have impacted diagnosis and treatment.<sup>5</sup>

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*The COVID-19 pandemic worsened ADHD symptoms for many and led to a notable rise in ADHD diagnoses and prescription stimulant use, particularly among women.*

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## Objective

To identify drivers contributing to increased ADHD medication use within commercial employer groups over the past five years.

## Methods

### Study Design

- Claims data was compiled from an aggregation of 4,484,920 unique claims across three separate claims databases using Power Query analytics with focused query isolating 103 ADHD-related GPI-14s.
- Retrospective trend analysis was conducted utilizing 164,895 paid pharmacy claims across all therapeutic treatment classes for ADHD with service dates from Q1 2019 through Q2 2023.

### Population

- Claims for the entire EpiphanyRx book of business were analyzed, which included 112 middle-market self-funded employer groups.
- Group size ranged from 30 to 13,000 lives, with most having less than 3,000 lives.

### Data Analysis

- Data was adjusted to account for increase in total membership by measuring as a percentage of total claims.
- ADHD claims were identified using GPI 61\* and non-ADHD indicated products (modafinil and armodafinil) were removed.
- Claims were aggregated by quarter for the following characteristics:
  - Member age and gender
  - Drug brand/generic status
  - Drug class (stimulant/non-stimulant)

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*The study utilized data from over 4.4 million claims, isolating 103 ADHD-related items, then conducted a retrospective trend analysis on 164,895 paid pharmacy claims for ADHD treatment from Q1 2019 to Q2 2023.*

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## Findings

Total ADHD claims increased from 3.08% to 3.89% from Q1 2019 to Q2 2023, with the largest growth occurring between Q4 2020 and Q1 2021 (Figure 1).

Claim growth was driven by a larger percentage of utilization among females starting in Q2 2020 and continuing through Q2 2023 (Figure 2).

The percentage of ADHD claims for ages 0-19 decreased from 38.5% to 29.0%, while ages 20-89 increased from 61.5% to 71.0%. Data also showed ADHD claims for ages 10-19 consistently dropped across each year in Q2 and Q3, compared with claims for Q1 and Q4. This trend was not seen among adults (Figure 3).

Non-stimulant products accounted for more growth during the study period, increasing from 12.6% of ADHD claims in 2019 to 14.9% in 2023 (Figure 4).

Brand products accounted for more growth than generics starting in Q2 2022, increasing from 20.1% of ADHD claims to 26.0% in one year (Figure 5).

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*ADHD claims increased from 3.08% to 3.89% between Q1 2019 and Q2 2023, driven by higher utilization among females, a shift in age distribution toward adults, and increased use of non-stimulant products.*

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**Figure 1: Total ADHD Claims Over Time**

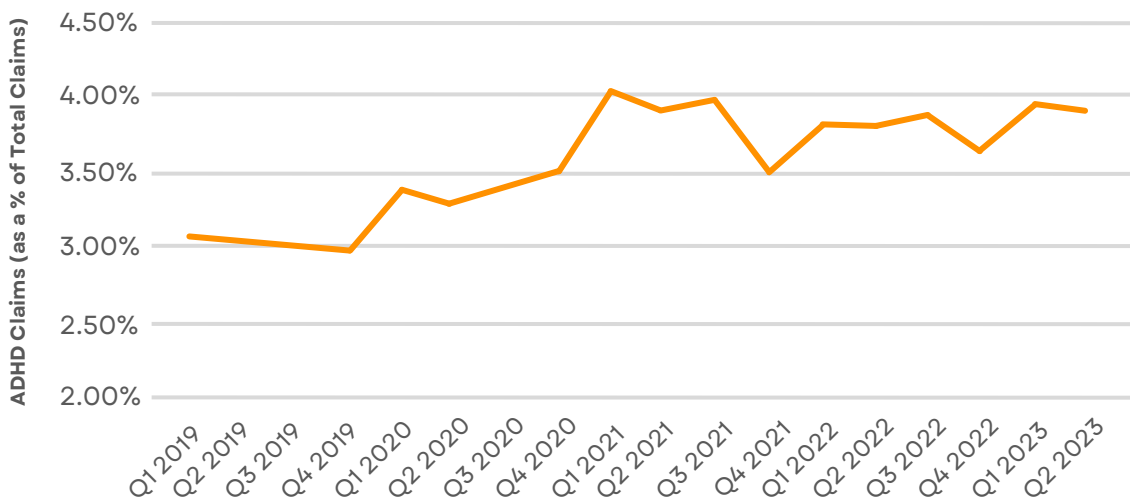


Figure 2: ADHD Claims by Gender Over Time

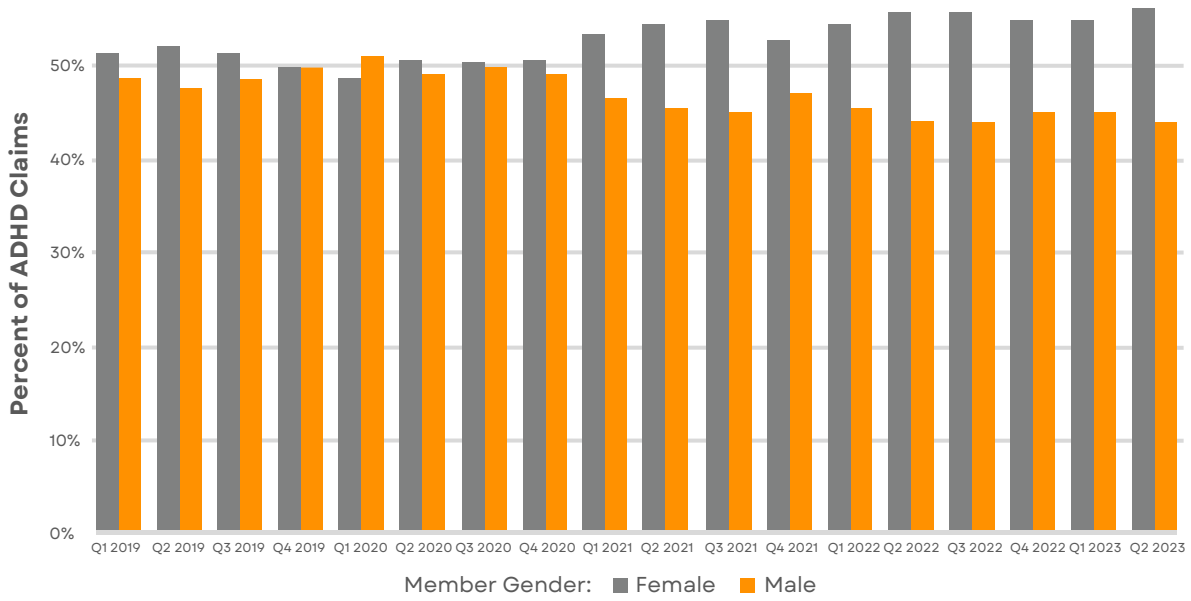
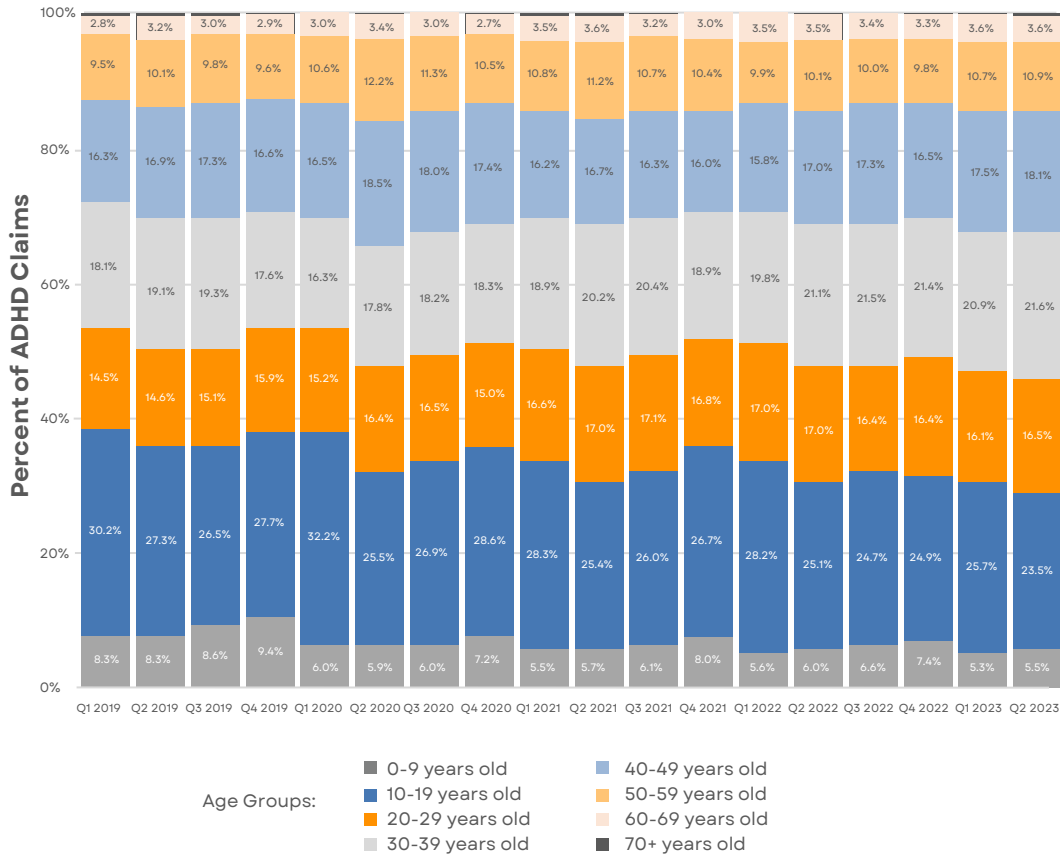


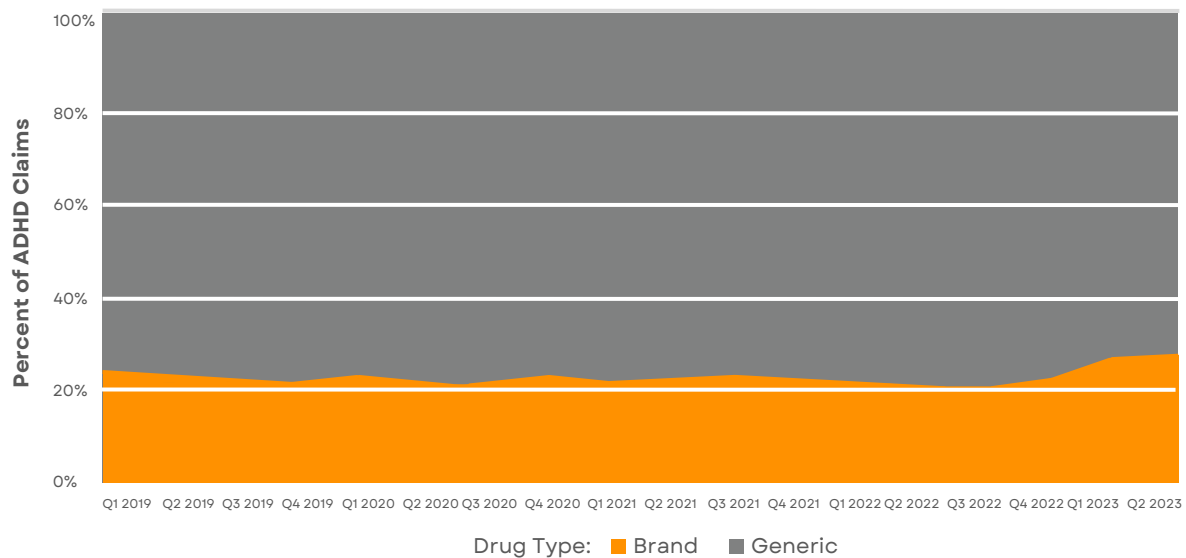
Figure 3: ADHD Claims by Age Group Over Time



**Figure 4: Percent of Stimulant vs. Non-Stimulant ADHD Claims Over Time**

Year	Stimulants	Non-Stimulants
2019	87.4%	12.6%
2020	87.0%	13.0%
2021	87.2%	12.8%
2022	86.9%	13.1%
2023	85.1%	14.9%
<b>Average</b>	<b>86.7%</b>	<b>13.3%</b>

**Figure 5: Percent of Brand vs. Generic ADHD Claims Over Time**



## Take Aways

ADHD claims increased over the past five years and appear to be influenced by the COVID-19 pandemic. The most rapid increase in ADHD claims aligns with the peak of the pandemic, mandatory work-from-home orders, and the rise in telehealth availability.

Claims increases mirror the rise in diagnosis of ADHD, especially among females. Interestingly, ADHD claims for female patients now exceed those for male patients across the EpiphanyRx book of business. This may represent historical underdiagnoses of females who now have improved access to treatment or to a disproportionate impact of COVID-19 on the mental health of female patients.

Claims among school age children were lower during remote learning periods and higher during this same time in adults, many of whom moved to remote offices. This may suggest a decreased treatment need for children when attending school from home, perhaps due to the familiar environment and dedicated attention from parents or guardians. On the other hand, adults may have a greater treatment need when working remotely, particularly when balancing multiple priorities during the pandemic.

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*The surge in ADHD claims may reflect increased diagnoses among females, potentially due to historical underdiagnosis or the COVID-19 pandemic's disproportionate impact on their mental health.*

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Claims for school age children consistently indicate preference for medication holidays over the summers, shown by the decrease in ADHD claims for those age groups in Q2 and Q3 of each year compared to Q1 and Q4.

With increase in diagnosis of ADHD, shortages became prevalent, driving use of non-stimulants and brands. To ensure access to treatment, formulary preferences should include generic ADHD medications and offer flexibility during medication shortages.

### **Disclaimer**

This research was conducted by EpiphanyRx, A Navitus Company, based in Madison, WI, without external funding.

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*The increase in ADHD diagnoses has caused shortages, emphasizing the need for formulary preferences favoring generic medications and flexibility during medication scarcities to ensure treatment access.*

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