



Exploring the Impact of Mental Health on Emergency Department Utilization

The emergency department (ED) is an important component of the U.S. healthcare system, designed to provide necessary, life-saving care to those with urgent health needs. Because EDs must be staffed and available at all times, their operational costs are significantly higher than those of other provider types. Consequently, visits to the emergency department are more costly than standard office visits – even for relatively minor medical issues. For example, 34% of emergency department visits typically take between two and four hours, and 18% take between four and six hours. A non-emergency outpatient office visit, in comparison, usually lasts between 15 and 30 minutes.

While critical to public health, the emergency department is a source of high spending and utilization – often driven by a small subset of individuals who use the emergency department multiple times for non-emergency reasons. Often described as “frequent flyers,” these members and their non-emergency visits contribute to wait times for other patients, divert physician time and resources, and help drive growing healthcare spending.

While much has been reported on emergency department use, including drill-downs on frequent flyers, little is known about such utilization in populations with mental health conditions and how that utilization may be different from individuals without mental health conditions. This brief, drawing upon cross-state data from Onpoint’s Multi-State Behavioral

Health Initiative, explores utilization for members with and without mental health conditions across payer types, states, and age/gender, both in aggregate and for the frequent-flyer, high-utilizer population.

ABOUT THE MULTI-STATE BEHAVIORAL HEALTH INITIATIVE

Onpoint Health Data is an independent, nonprofit organization providing reliable data, accurate analysis, and innovative reporting services for nearly 50 years. Our Collective Impact initiative reflects our mission by providing pro bono solutions that deliver insights, deepen understanding, and demonstrate the value of APCDs nationwide.

For the first Collective Impact project, Onpoint worked closely with five of our state all-payer claims database (APCD) clients – Connecticut, Maryland, Minnesota, Vermont, and Washington – to develop a set of behavioral health dashboards using each state’s APCD data. The initiative explored diagnoses, utilization, cost, co-occurring medical conditions, and social drivers of health. This issue brief uses the same data set to explore emergency department visits for members with and without mental health conditions across these states. (Note: As Washington’s dashboards are not yet released, this analysis cites results from four of the participating states.)

METHODS

Data used in this study were restricted to APCD medical and pharmacy claims for services performed in calendar year 2022 (unless otherwise indicated), with three months of claims run-out to capture changes in payment responsibilities and amounts. The data included all three major payer types: commercial, Medicaid (both fee for service and managed care), and Medicare (both fee for service and Medicare Advantage). (Note: Connecticut's 2022 Medicare data were not yet available.)

Members with mental health conditions were flagged using diagnosis codes and condition definitions from the U.S. Substance Abuse & Mental Health Services Administration (SAMHSA). Onpoint flagged members if they had at least one inpatient or two outpatient claims reported to the APCD that included any of the relevant diagnosis codes. Given the variability in the availability of substance use disorder (SUD) data between APCDs, SUD claims were flagged using SAMHSA criteria and removed from this analysis to support comparable reporting.

Emergency department visits were flagged according to the following criteria: place of service code = 23, or revenue code = 0450-0459, or CPT code = 99281-9288. Facility and professional claims were grouped together.

FINDINGS

Overall ED Utilization

Members with mental health (MH) conditions had higher ED utilization than those without MH conditions. For the commercial population, the ED utilization rate was approximately twice as high for members with mental health conditions as for those without MH conditions. The ED visit rate ranged from 352.5 to 415.3 per 1,000 members with mental health conditions compared to 158.1 to 201.3 per 1,000 members without MH conditions. For the Medicaid and Medicare populations, the rates also were about twice as high for members with mental health conditions compared to those without, though some states skewed higher – such as Connecticut (where rates for the Medicaid members with mental health conditions were three times higher than for members without) and Maryland (where, in the Medicare population, the ED utilization rate for those with MH conditions was more than four times higher than for those without).

ED Visit Rate Per 1,000 – Members with Mental Health Conditions (2022)

Payer Type	Connecticut	Maryland	Minnesota	Vermont
Commercial	415.3	411.2	356.5	352.5
Medicaid	1,386.0	939.8	845.2	817.7
Medicare	-	1,488.8	1,258.3	1,275.3

ED Visit Rate Per 1,000 – Members without Mental Health Conditions (2022)

Payer Type	Connecticut	Maryland	Minnesota	Vermont
Commercial	194.1	201.3	158.1	200.8
Medicaid	464.0	412.7	413.2	419.5
Medicare	-	363.3	456.6	529.6

ED Visit Rate Per 1,000 – Ratio for Members with MH Conditions to Those Without (2022)

Payer Type	Connecticut	Maryland	Minnesota	Vermont
Commercial	2.1	2.0	2.3	1.8
Medicaid	3.0	2.3	2.0	1.9
Medicare	-	4.1	2.8	2.4

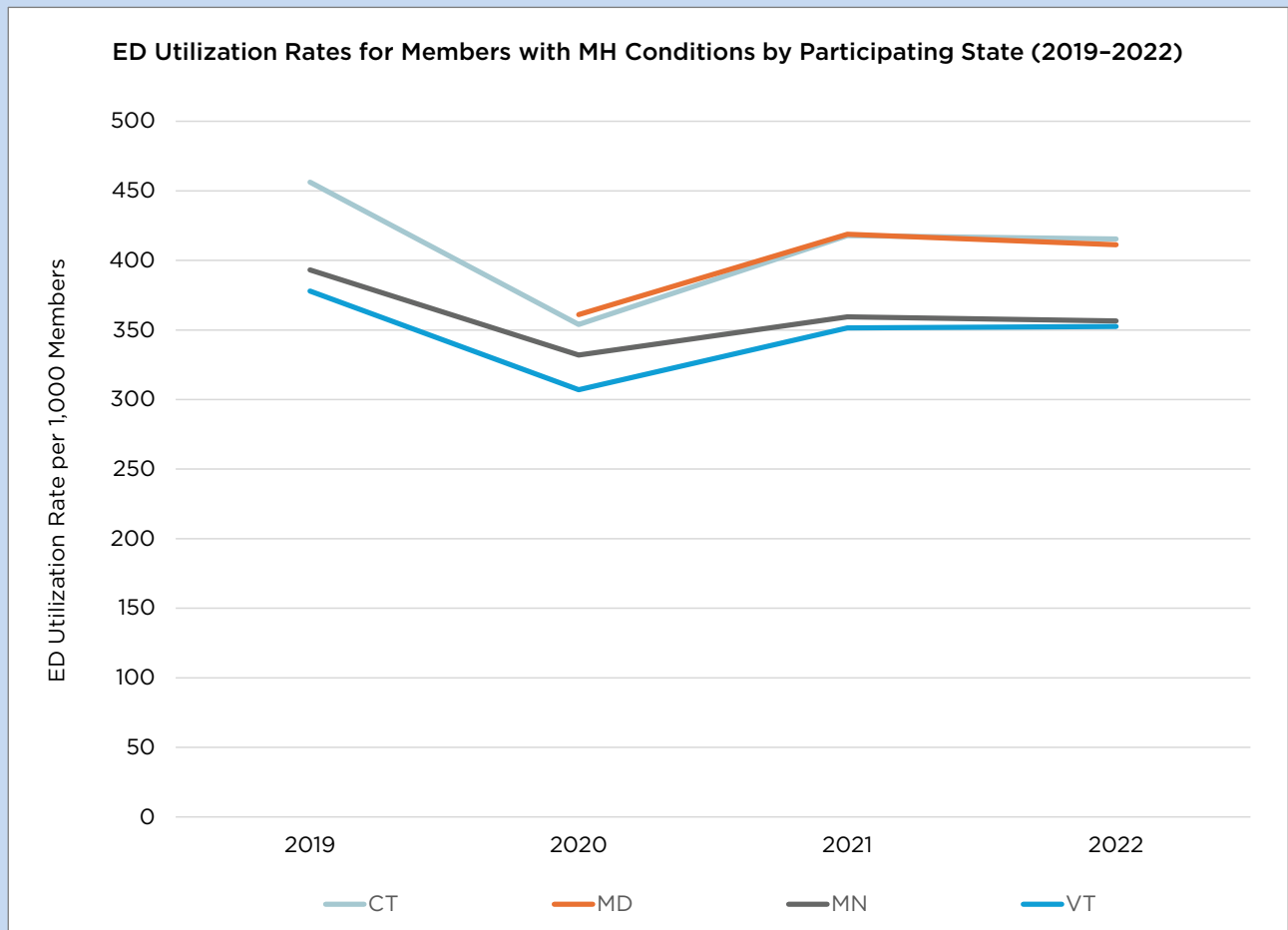
Regardless of whether an individual had a mental health condition, emergency department use varied by payer type as shown in the first two tables above. Medicaid and Medicare had much higher ED utilization rates than commercial members in 2022. On average, ED utilization for Medicaid members with MH conditions was 2.6 times higher than for commercial members with MH conditions and 2.3 times higher than for commercial members without a mental health condition. Medicare had the highest ED utilization overall. Within Medicare, the ED

utilization rate for members with MH conditions was an average of 3.0 times higher than for those without MH conditions.

These comparisons highlight a key difference between Medicaid and Medicare. In the Medicare population, there was a greater differential (1,340.8 to 449.8) in ED utilization rates between members with MH conditions and those without. For the Medicaid population, the differential in rates between these two groups was smaller (997.2 to 427.4).

ED UTILIZATION FOR MEMBERS WITH MH CONDITIONS BEFORE & AFTER THE COVID-19 PANDEMIC

The reporting period for the Multi-State Behavioral Health Initiative dashboards covered calendar years 2019 through 2022. Across those four years, commercial data was available for all of the participating states except Maryland. A COVID utilization “dip” was observed in all states. For example, the ED utilization rate for commercial members with mental health conditions in Connecticut dropped from 456.2 in 2019 to 353.9 in 2020 before rebounding to 417.8 in 2021. This pattern was seen across all participating states as illustrated in the figure below. Following the COVID dip, all states showed an increase in 2021 followed by a leveling off - minimal declines or similar utilization rates - in 2022.



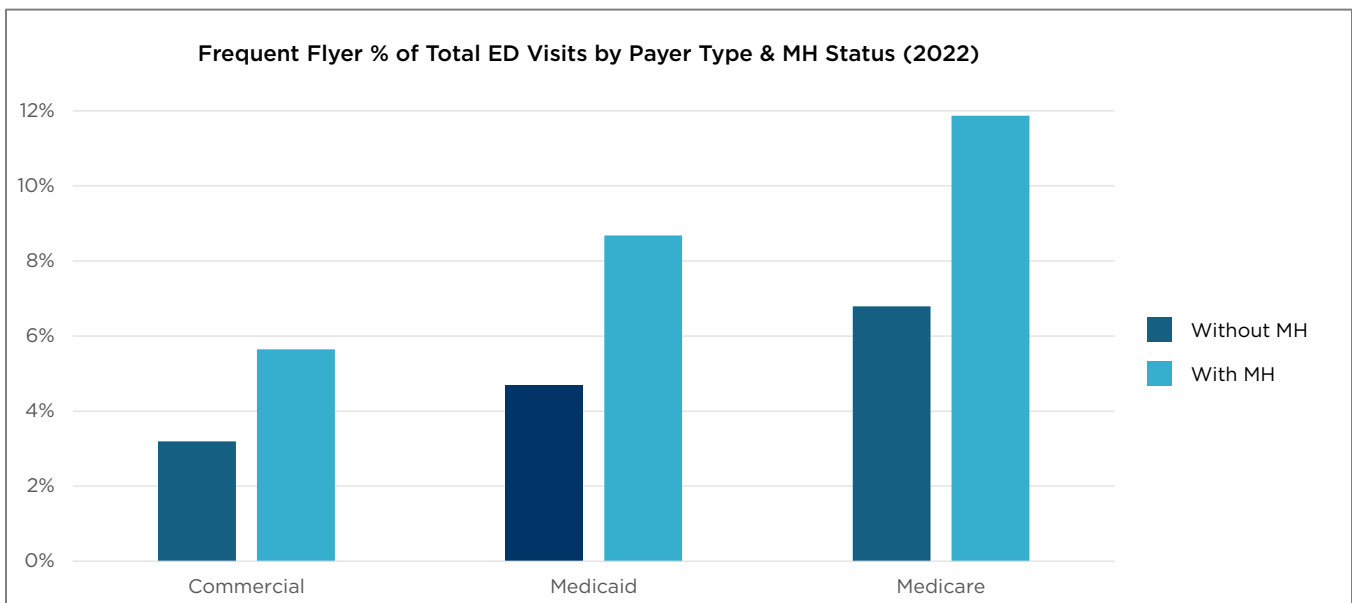
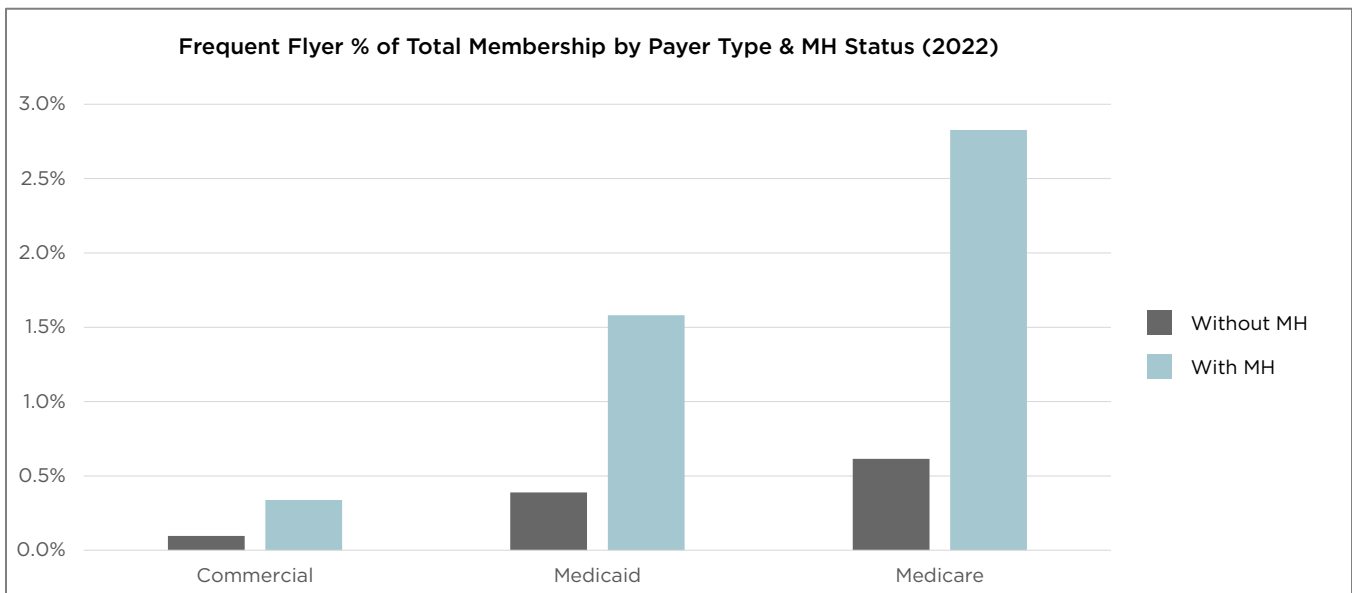
Frequent Flyer ED Utilization

As part of this analysis, Onpoint also examined “frequent flyers” – members with four or more ED visits in a year. Frequent flyers were evaluated both in terms of the percentage of total members and percentage of total ED visits. More frequent flyers had mental health conditions than did not, and Medicare frequent flyers with MH conditions accounted for the largest percentage of visits.

Not surprisingly, frequent flyers accounted for a small percentage of membership (upper graph) but a larger share of visits (lower graph) regardless of MH status. For example, for

Medicare members with MH conditions, frequent flyers comprised 3% of membership but accounted for 12% of visits in 2022. Among Medicare members without a mental health condition, frequent flyers comprised 0.6% of members but accounted for 7% of visits.

Additionally, the difference between frequent flyers with and without MH conditions was evident across payer types but most pronounced in Medicare – a difference of 5% (12% with MH and 7% without MH). Medicaid showed a difference of 4%, and commercial had a difference of 2.5%.



CONCLUSION

Across the states, members with mental health conditions had higher emergency department use across all payer types. The difference in emergency department use between members with and without mental health conditions was most pronounced in the Medicare population, followed by Medicaid and then commercial.

Additionally, across states and payer types, a small percentage of members – “frequent flyers” – accounted for a disproportionate share of visits. Additionally, more of these frequent-flyer emergency department visits were attributable to members who had mental health conditions.

ABOUT THE AUTHOR



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ABOUT ONPOINT HEALTH DATA

Onpoint Health Data is a nonprofit organization that specializes in collecting, integrating, and analyzing health data to provide our clients with enriched data sets and innovative analytic solutions tailored to their specific needs. We are an independent, nonpartisan organization supporting federal, state, and regional health improvement initiatives for nearly 50 years.



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