



CY 2025 Population Health Report

Cass

Southwest Michigan Behavioral Health

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1. Introduction

Southwest Michigan Behavioral Health (SWMBH) developed this Population Health Analysis to examine the health characteristics and healthcare utilization of Medicaid enrollees in Cass County. The report primarily evaluates calendar year 2025 data while incorporating trend and historical analyses from 2022 through 2025 where appropriate. Areas of focus include demographic characteristics, behavioral and chronic health conditions, multimorbidity, healthcare utilization, prescribing patterns, and healthcare quality measures.

Medicaid populations may experience complex physical, behavioral, and social health needs that influence healthcare utilization and outcomes. By examining diagnoses, utilization, and quality measures together, this report provides a broader view of population health and helps identify patterns and populations that may warrant additional attention, planning, or quality improvement efforts.

Data sources include Medicaid enrollment and encounter records for medical, behavioral health, and pharmacy services for residents of Cass County, made available to SWMBH by the State of Michigan. The Behavioral Health Treatment Episode Data Set (BH-TEDS) was also used to supplement living arrangement information for individuals receiving PIHP- or CMH-funded services.

Behavioral health and chronic physical health conditions were organized into broader diagnosis groups to examine disease prevalence, multimorbidity, and associations with healthcare utilization. Utilization analyses include inpatient hospitalizations and emergency department visits, while quality and prescribing analyses examine preventive care measures and medication use. Results are stratified by demographic characteristics, including age, sex, race and ethnicity, and Medicare-Medicaid dual eligibility, to identify populations with elevated health needs and potential disparities.

Relias's Population Performance platform was used to support analyses of healthcare quality measures and prescription patterns.

2. Key Findings

The following highlights summarize key findings from the 2025 Population Health Analysis. They are intended to provide a high-level overview of the most important population health patterns, trends, and areas for continued attention identified throughout the report. Additional detail and interpretation are provided in the sections that follow.

- **Cass County's Medicaid population became smaller while service use increased.** The county included 13,983 Medicaid enrollees in 2025, representing approximately 27.1% of county residents. Enrollment declined from 16,208 in 2024, while the percentage receiving at least one Medicaid service increased from 73.1% to 77.1%. PIHP/CMH service use also increased over the four-year period, from 6.3% in 2022 to 7.9% in 2025. These patterns may reflect a smaller Medicaid population with greater and more complex healthcare needs.
- **Overall behavioral health diagnosis prevalence was lower than in the remainder of the SWMBH region, but ADHD stood out as a Cass-specific area of elevated prevalence.** In 2025, 30.3% of Cass County enrollees had a documented behavioral health diagnosis compared with 32.9% in the remainder of the region. Most individual behavioral health diagnoses were also significantly lower, while ADHD was significantly higher in Cass County at 7.6% compared with 6.7%.
- **Behavioral health diagnosis prevalence increased in Cass County in 2025, although changes were not uniform across conditions.** Full-population behavioral health prevalence increased from 28.6% in 2024 to 30.3% in 2025. Among enrollees present in both years, overall prevalence remained relatively stable, while individual conditions showed mixed patterns.
- **Cass County had lower documented chronic-condition prevalence than the remainder of the region, but chronic and behavioral health needs frequently overlapped.** Overall, 35.1% of enrollees had at least one chronic condition. Adults with behavioral health diagnoses had substantially greater chronic disease burden than adults without a behavioral health diagnosis, particularly those in the Other, Mild/Moderate MI, and SMI/SED groups.
- **Social needs were less frequently documented in Cass County but were strongly associated with hospitalization when identified.** Social Determinants of Health diagnoses were less prevalent than in the remainder of the region, yet an SDoH diagnosis was associated with 6.07 times the adjusted odds of inpatient hospitalization after accounting for other chronic conditions. This makes documented social needs an important potential marker of elevated acute-care risk.
- **Behavioral health populations experienced substantially elevated acute-care utilization.** SUD had the highest average medical ED utilization, while SMI/SED showed consistently elevated medical inpatient and behavioral health inpatient utilization. These differences persisted within age groups, indicating that age alone did not account for the higher acute-care use among several behavioral health populations.
- **Different behavioral health diagnoses were associated with different patterns of medical utilization.** SUD showed particularly high ED utilization, while bipolar disorder had the highest medical inpatient utilization among the specific diagnosis

categories examined. Depressive disorders and Other behavioral health conditions also showed comparatively high inpatient use, reinforcing that acute-care needs differ across behavioral health populations.

- **A small proportion of enrollees with complex health profiles accounted for particularly high acute-care utilization.** High Chronic Complexity represented 5.7% of the ever-diagnosed population and had the highest inpatient utilization, while Complex Behavioral Health represented 3.2% and had the highest ED utilization. Together, these groups represented only 8.9% of the ever-diagnosed population but experienced markedly elevated acute-care use.
- **Healthcare quality findings identified specific opportunities for monitoring.** Cass County performed above the SWMBH regional rate for continuous antidepressant treatment but slightly below the region for mood stabilizer adherence. Adult pharmacy quality indicators showed higher triggering rates for antipsychotic refill concerns and psychotropic polypharmacy, while pediatric multiple-prescriber triggering was also elevated. Pharmacy quality indicators identified small adult and pediatric populations with substantially elevated hospitalization risk.

3. Who is in the Study

The total Cass County Medicaid population in 2025 included 13,983 unique enrollees with full Medicaid or Health Michigan Plan benefits at some point during the one-year report period. Individuals enrolled with unmet spenddown or with coverage limited to maternal services or emergency services only were excluded. Individuals were included regardless of the number of months they were enrolled during the year.

Each enrollee was assigned to their most recent Medicaid county during 2025. As a result, county-level counts reflect an individual's latest county of enrollment rather than all counties in which they may have been enrolled during the year.

Of those enrolled, 77.1% had at least one Medicaid service during 2025, and 7.9% received at least one PIHP- or CMH-funded service. Enrollees were covered for an average of 9.5 months during the report period.

As shown in Table 1, total Medicaid enrollment declined from 16,208 in 2024 to 13,983 in 2025. At the same time, the percentage of enrollees receiving at least one Medicaid service increased from 73.1% to 77.1%. The percentage receiving PIHP/CMH-funded services also continued to increase, rising from 6.3% in 2022 to 7.9% in 2025. These patterns provide important context for interpreting changes in diagnosis prevalence and healthcare utilization later in the report.

Table 1: Enrollment and Service Utilization, 2022-2025 - Cass County			
Year	Total Enrollees	1+ Medicaid Service	1+ CMH/PIHP Service
2022	16,518	77.4%	6.3%
2023	17,511	75.4%	6.6%
2024	16,208	73.1%	7.6%
2025	13,983	77.1%	7.9%

Medicaid coverage varied across counties. Calhoun had the highest estimated Medicaid coverage rate at 35.8%, while Barry had the lowest at 20.8%. Berrien, Branch, Saint Joseph, and Van Buren each had coverage rates of approximately 30%. These differences provide additional context for interpreting county-level population health patterns throughout the report.

Unless otherwise specified, subsequent analyses in this report describe the Cass County Medicaid population defined above.

Table 2: County Population and Medicaid Coverage - CY 2025			
County	Medicaid Enrollees	Est. County Population	Medicaid Coverage Rate
Barry	13,333	63,991	20.8%
Berrien	46,972	152,444	30.8%
Branch	14,081	45,993	30.6%
Calhoun	47,743	133,408	35.8%
Cass	13,983	51,677	27.1%
Kalamazoo	68,218	263,795	25.9%
Saint Joseph	18,740	60,968	30.7%
Van Buren	23,356	76,071	30.7%

Estimated county population (total residents, not limited to Medicaid-eligible individuals) from U.S. Census Bureau county population estimates, CY 2025.

3.1. Distribution of Cass County Enrollees by Zip Code

The map below presents a heat map of the geographic distribution of the Cass County Medicaid cohort based on zip code of residence.

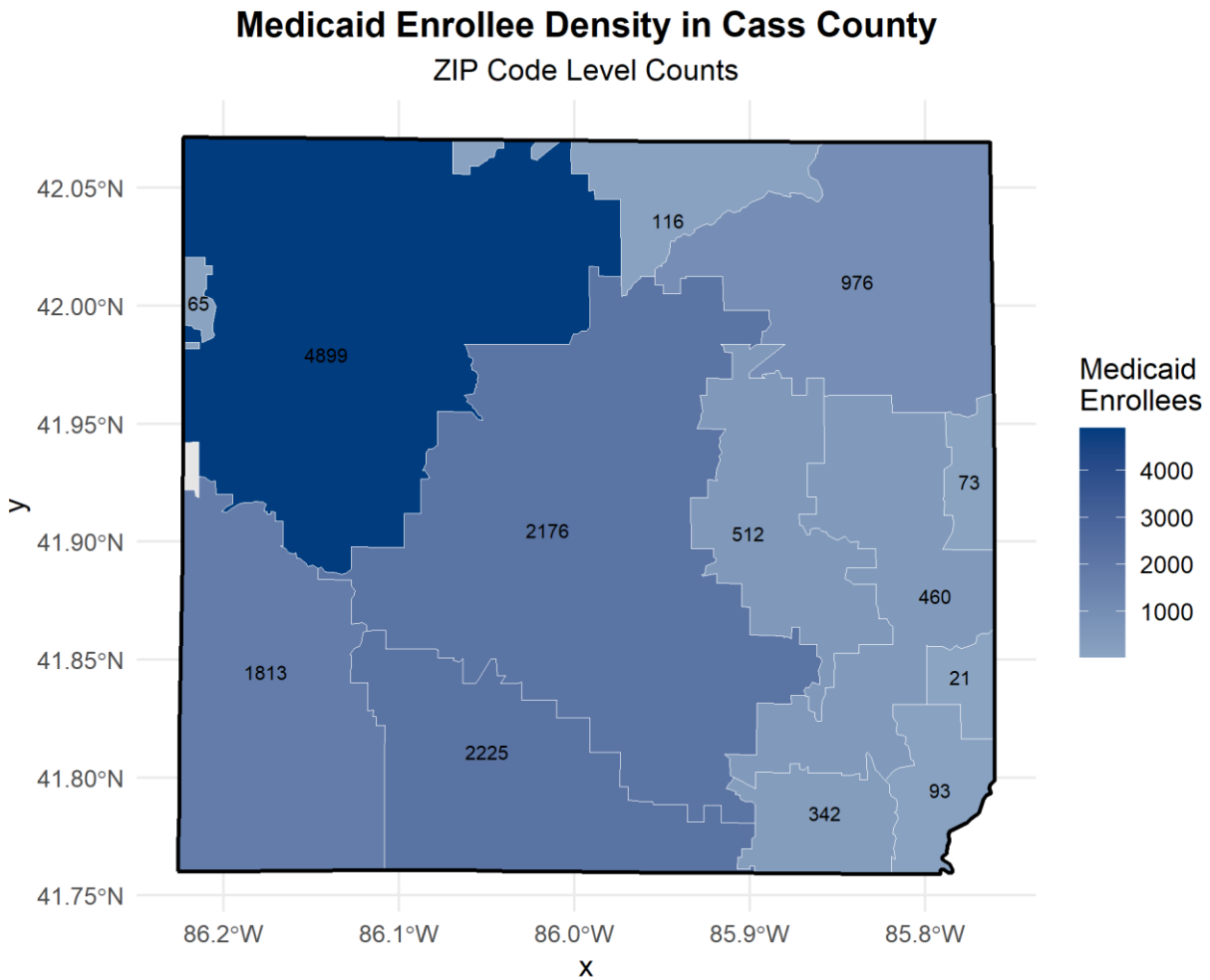


Figure 1: Count of CY 2025 Medicaid enrollees by zip code of address.

4. Population Characteristics

Understanding the demographic characteristics of the Medicaid population provides important context for interpreting the health conditions, healthcare utilization, and outcomes presented throughout the remainder of this report. This section summarizes the population by age, sex, race and ethnicity, living arrangement, and Medicare-Medicaid dual eligibility to provide a baseline description of the individuals included in the analysis.

4.1. Age and Sex

Age is strongly associated with patterns of disease burden and healthcare utilization, while both age and sex provide important context for understanding differences across the Medicaid population (Atella et al., 2019). Figure 2 shows the age distribution of Medicaid enrollees by sex, with percentages calculated within each sex to allow comparison of enrollment patterns across the lifespan. In Cass County, the average age at the end of 2025 was 29.2 years. Overall, 37.8% of enrollees were younger than 18 years, 55.6% were between 18 and 64 years, and 6.6% were 65 years or older. The population was 46% male and 54% female.

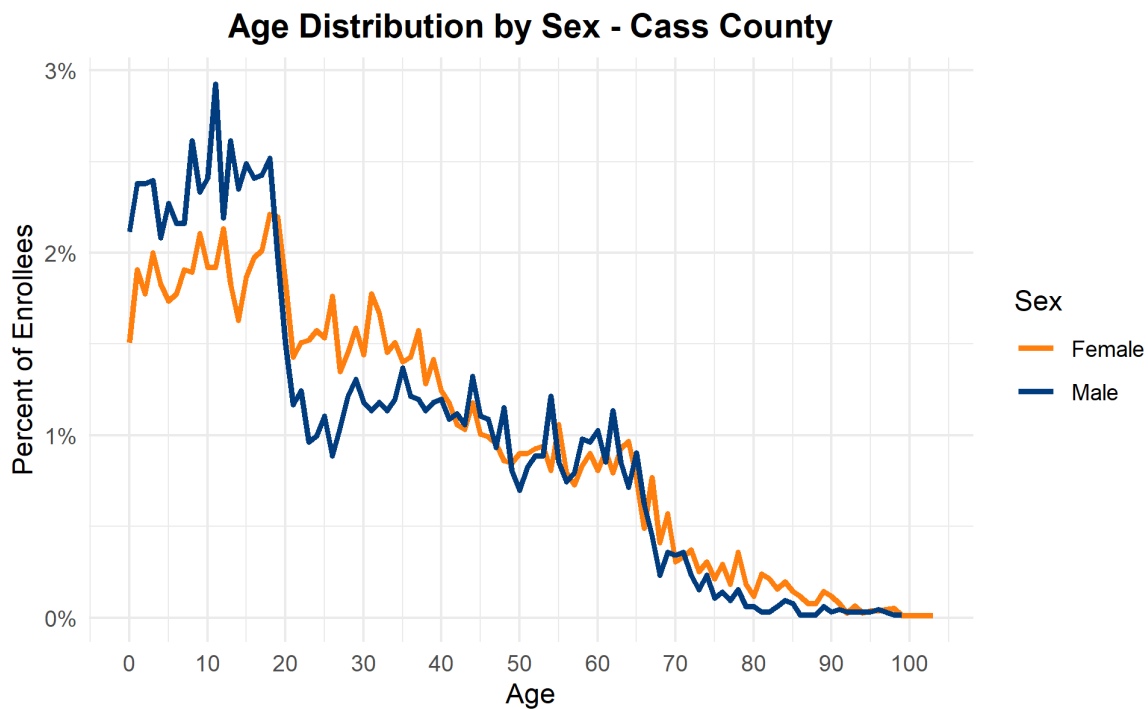


Figure 2: Percent of enrollees at each single year of age, by sex.

Male enrollees make up a larger share of the population at younger ages, while female enrollment becomes more prominent beginning in early adulthood, particularly through the 20s and 30s. The distributions become more similar through middle adulthood before females again represent a somewhat larger share at older ages. The higher representation of women during early adulthood may partly reflect Medicaid eligibility pathways related to pregnancy and parenting.

4.2. Race/Ethnicity

Race and ethnicity provide important context for identifying potential differences in health conditions, healthcare utilization, and quality of care across population groups. Throughout this report, race and ethnicity are used to examine whether meaningful disparities are present within the Cass County Medicaid population.

To align with MDHHS methodology for Core Set measures, race and ethnicity were assigned using the most recent Medicaid enrollment record available at the time of data extraction. Individuals identified as Hispanic ethnicity were classified in the Hispanic or Latino group regardless of reported race. For all other individuals, classification was based on the primary race field reported in Medicaid enrollment records.

Figure 3 summarizes the racial and ethnic composition of Medicaid enrollees in Cass County. Overall, 73.9% identified as White, 9.8% identified as Black or African American, 7% identified as Other Race, 6.5% identified as Hispanic or Latino, 2.6% identified as American Indian or Alaska Native, 0.1% identified as Asian, 0% identified as Native Hawaiian or Other Pacific Islander.

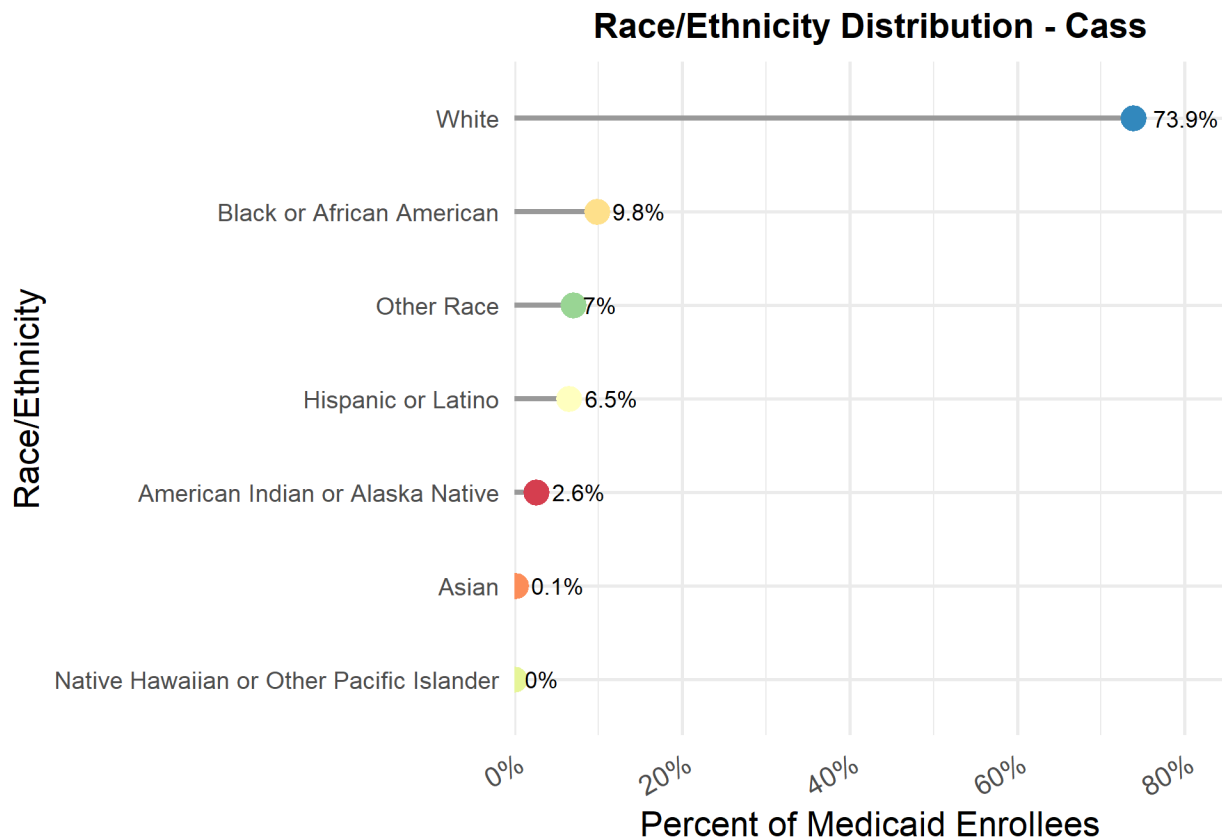


Figure 3: Percentage of Medicaid enrollees by race and ethnicity.

4.3. Living Arrangements for CMH/PIHP-Served Population

Living arrangement provides important context for understanding social support and housing stability among individuals receiving behavioral health services. Because living arrangement information is collected through the Behavioral Health Treatment Episode Data Set (BH-TEDS), this analysis is limited to Medicaid enrollees who received PIHP- or CMH-funded services and had a recorded living arrangement.

Living arrangements were grouped into four categories: dependent, independent, unhoused, and unknown. Individuals classified as “Other” were excluded from this analysis.

The following table compares the distribution of living arrangements in Cass County with the remainder of the SWMBH region. Living arrangements in Cass County differed from the rest of the SWMBH region. Among PIHP/CMH-served Medicaid enrollees with recorded living arrangement information, 82.1% were living independently compared with 85.8% in the rest of the region. Cass County also had significantly lower percentages of individuals identified as unhoused (1.5% vs. 6.6%). These findings suggest that the PIHP/CMH-served population in Cass County was more likely to be living independently and less likely to be unhoused than comparable enrollees elsewhere in the region.

**Table 3. Living Arrangement -
Cass vs. Rest of Region**

Percent in each living arrangement category (2025)

Condition	Cass (N=1,288)	Rest of Region (N=32,359)
Dependent	12.7%	11.2%
Independent	85.8% ↑	82.1%
Unhoused	1.5% ↓	6.6%
Unknown	0.1%	0.1%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

4.3.1. Living Arrangement Trends (2022-2025)

Monitoring living arrangements over time helps identify changes in housing stability among individuals receiving behavioral health services. The figure below displays annual trends in living arrangement categories from 2022 through 2025, allowing changes in the distribution of living arrangements to be compared across years. Exact annual percentages are presented in the table below the figure.

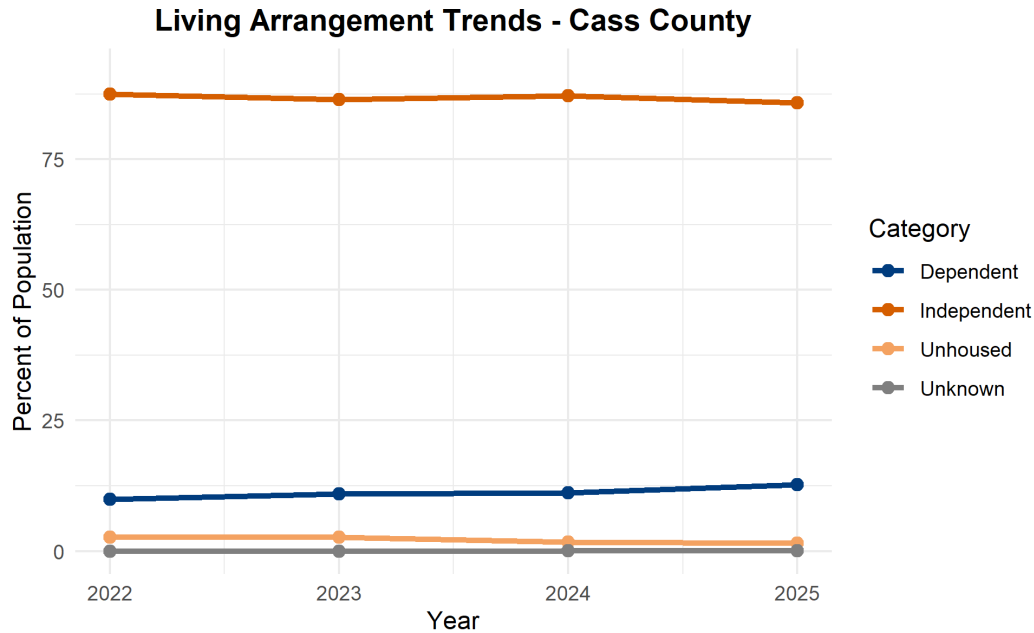


Figure 4: Percent of population in each living arrangement category, 2022-2025.

Table 4. Living Arrangement Trends

Percent of the population in each living arrangement category, 2022–2025.

Living Arrangement	2022	2023	2024	2025
Independent	87.4%	86.4%	87.1%	85.8%
Dependent	9.9%	10.9%	11.1%	12.7%
Unhoused	2.7%	2.6%	1.7%	1.5%
Unknown	0.0%	0.0%	0.1%	0.1%

Living arrangements remained relatively stable from 2022 through 2025, although the distribution shifted somewhat over the period. The percentage identified as living independently decreased from 87.4% in 2022 to 85.8% in 2025, while dependent living increased from 9.9% to 12.7%. In contrast, the percentage identified as unhoused decreased from 2.7% to 1.5%. The increase in dependent living alongside the decrease in independent living may indicate growing support needs among some individuals receiving PIHP/CMH-funded services.

4.4. Medicaid-Medicare Dual Eligibility

Medicare-Medicaid dual eligibility identifies individuals enrolled in both Medicare and Medicaid. Dual-eligible populations often have greater medical complexity and healthcare needs, making dual eligibility an important consideration when interpreting differences in disease burden and healthcare utilization later in this report.

In 2025, 10.7% of the Cass County Medicaid population was also enrolled in Medicare in 2025. This report compares adults with Medicaid-only coverage to those who are dually enrolled in both Medicaid and Medicare. Dual enrollment increases sharply with age: 8% of adults aged 18 to 64 and 95% of those aged 65 and older were enrolled in both programs. No individuals younger than 18 in the study population were identified as Medicare-enrolled.

Table 5: Medicare Coverage by Age Group - Cass County			
Age Group	Total Enrollees	Enrolled in Medicare	Percent Medicare
<18	5,292	0	0.0%
18-64	7,773	620	8.0%
65+	918	872	95.0%
All Ages	13,983	1,492	10.7%

5. Behavioral Health

Behavioral health conditions are an important contributor to healthcare utilization, quality of care, and overall population health. Understanding the prevalence and distribution of behavioral health conditions helps identify populations with greater service needs, monitor changes over time, and support planning for behavioral health programs and resources.

This section summarizes the prevalence of behavioral health diagnoses among Medicaid enrollees, trends from 2022 through 2025, differences across demographic groups, and geographic variation within Cass County.

5.1. Primary Behavioral Health Group Definitions

To summarize the behavioral health population, individuals with a behavioral health diagnosis were assigned to a single primary behavioral health diagnosis group. Assignment was based on the behavioral health diagnosis category that appeared most frequently across an individual's Medicaid encounter history from 2022 through 2025. These groups provide a consistent way to compare healthcare utilization, chronic physical health conditions, and other outcomes throughout the remainder of this report.

Each enrollee was assigned to only one primary behavioral health diagnosis group, so the groups do not overlap. The primary behavioral health diagnosis groups used in this report are:

- **Intellectual/Developmental Disabilities (IDD):** Intellectual disabilities and pervasive developmental disorders such as autistic disorder are included.
- **Mild/Moderate Mental Illness:** This group is primarily comprised of anxiety disorders, ADHD, and mild to moderate forms of depressive and bipolar disorders.
- **Serious Mental Illness (SMI) / Serious Emotional Disturbance (SED):** This group is primarily comprised of schizophrenia and severe forms of depressive and bipolar disorders. SMI is the adult-focused term and SED is the child/adolescent-focused term for the same underlying diagnostic severity category.
- **Substance Use Disorders (SUD):** Includes addictive and substance use-related disorders including gambling disorder.
- **Other:** This group includes behavioral health conditions not included in the other groups, such as conditions with known physiological causes (e.g., dementia), specific learning disorders, communication disorders, and unspecified mental health conditions.

5.2. Prevalence of Behavioral Health (BH) Conditions

Figure 5 summarizes the proportion of Medicaid enrollees with and without a behavioral health diagnosis in 2025. Behavioral health diagnoses include mental health conditions, substance use disorders, and intellectual/developmental disabilities identified through Medicaid encounter data. Overall, 30.3% of the Cass County Medicaid population had a recorded behavioral health diagnosis in 2025. Among those with a behavioral health diagnosis, 60.4% had primarily Mild/Moderate MI diagnoses, 15.4% had primarily SMI/SED diagnoses, 12.8% had primarily Other diagnoses, 6% had primarily SUD diagnoses, 5.4% had primarily IDD diagnoses.

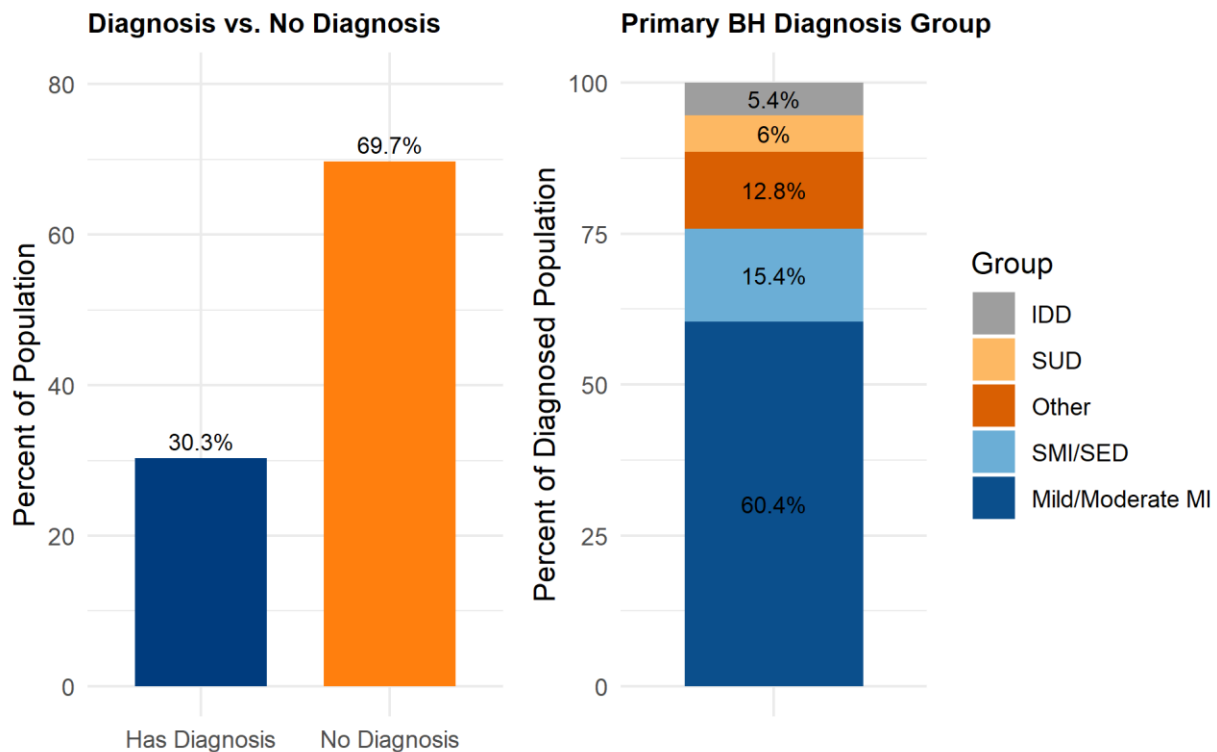


Figure 5: Left: percentage with and without a recorded BH diagnosis. Right: breakdown of primary BH diagnosis group among those with a diagnosis.

5.2.1. BH Condition Comorbidity by Primary Diagnosis Group

Behavioral health diagnoses often co-occur with one another. The following table summarizes the prevalence of individual behavioral health conditions within each primary behavioral health diagnosis group, illustrating how commonly additional diagnoses occur alongside the predominant diagnosis category.

Because each individual is assigned to only one primary behavioral health diagnosis group, the primary group reflects the diagnosis category most frequently represented in the individual's encounter history rather than the only behavioral health condition present. Several of the conditions shown are also used to define the primary diagnosis groups; therefore, this table is descriptive and was not statistically tested. Shading is used to highlight differences in diagnostic patterns across groups.

Table 6. BH Condition Comorbidity by Primary Diagnosis Group - Cass County

Percent with each condition, by primary BH diagnosis group among members with a BH diagnosis (2025)

Condition	IDD (N=228)	Mild/Moderate MI (N=2,560)	Other (N=541)	SMI/SED (N=652)	SUD (N=255)
Anxiety	19.3%	62.7%	9.6%	43.9%	23.1%
Depressive	8.8%	44.8%	7.0%	41.6%	17.6%
SUD	2.6%	5.3%	0.7%	17.9%	100.0%
Bipolar	1.8%	7.0%	0.6%	25.5%	7.1%
Schizophrenia/Psychosis	0.4%	1.6%	1.7%	25.9%	2.4%
Personality Disorder	0.4%	3.0%	0.6%	12.9%	0.8%
OCD	3.1%	1.8%	0.6%	2.6%	0.0%
Adjustment Disorder	3.1%	19.2%	3.3%	6.9%	3.9%
Dementia	2.6%	1.0%	16.5%	0.8%	0.4%
Impulse Control/Conduct	7.0%	3.3%	2.4%	10.1%	0.4%
Autism Spectrum	65.8%	1.8%	5.2%	2.0%	0.0%
IDD	46.5%	0.9%	1.8%	5.8%	0.0%
Trauma-Related (PTSD)	4.4%	9.6%	1.8%	28.5%	7.8%
ADHD	22.4%	32.0%	9.6%	18.1%	6.3%

Shading reflects diagnosis rate magnitude (lighter = lower, darker = higher). No statistical testing was performed for this table.

Distinct patterns of behavioral health comorbidity were evident across the primary diagnosis groups. Among individuals in the IDD group, autism spectrum disorder was particularly common (65.8%), while 46.5% had an IDD diagnosis and 22.4% had ADHD. The Mild/Moderate MI group showed substantial overlap with ADHD (32.0%), adjustment disorder (19.2%), and trauma-related diagnoses (9.6%). Among those classified as SMI/SED, trauma-related diagnoses were especially common at 28.5%, along with bipolar disorder (25.5%), schizophrenia/psychosis (25.9%), and ADHD (18.1%). The Other group was distinguished by a high prevalence of dementia (16.5%), while individuals in the SUD group also showed notable overlap with anxiety (23.1%), depression (17.6%), and trauma-related diagnoses (7.8%).

These patterns reinforce that the primary behavioral health groups represent broader profiles of behavioral health need rather than mutually exclusive diagnoses. Individuals within a single primary group may therefore require care addressing multiple co-occurring behavioral health conditions.

5.2.2. Behavioral Health Diagnosis Trend (2022-2025)

Monitoring diagnosis rates over time helps identify changes in the behavioral health needs of the Medicaid population. Figure 6 displays annual trends in the percentage of Medicaid enrollees with at least one behavioral health diagnosis from 2022 through 2025.

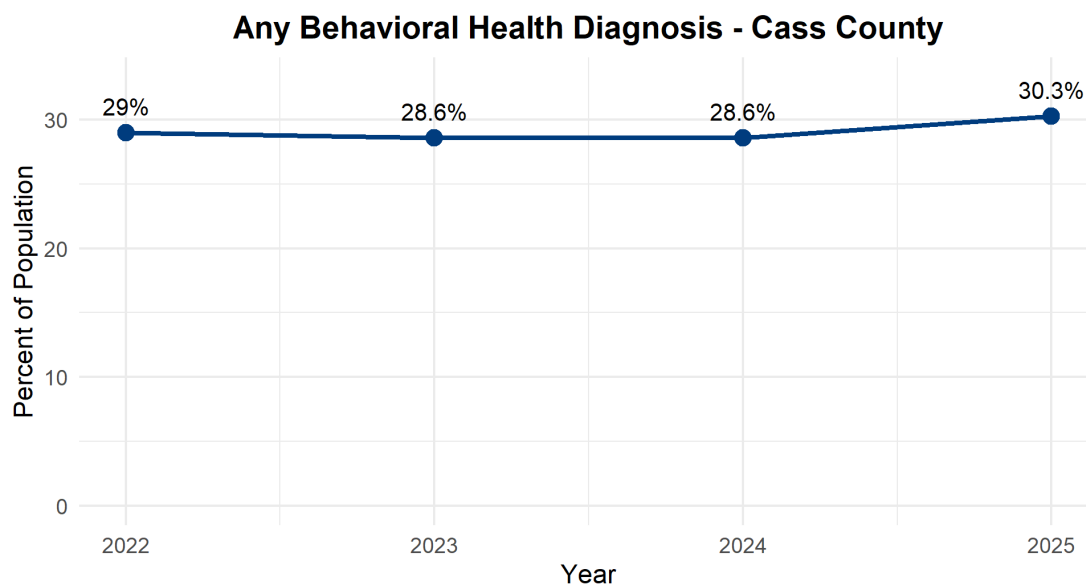


Figure 6: *Percent of population with any behavioral health diagnosis, 2022-2025.*

Behavioral health diagnosis prevalence remained relatively stable from 2022 through 2024 before increasing from 28.6% in 2024 to 30.3% in 2025. The percentage of enrollees receiving at least one Medicaid service also increased in 2025 after declining during the prior two years, suggesting that greater contact with the healthcare system may have contributed to increased identification of behavioral health conditions. However, the available data cannot determine whether the increase reflects greater underlying behavioral health need, increased identification or treatment, or a combination of factors.

5.2.3. Behavioral Health Diagnosis Trend by Primary Group (2022-2025)

Examining trends within each primary behavioral health diagnosis group helps identify whether changes in overall behavioral health prevalence are driven by specific diagnosis categories. The figure below displays annual trends in the percentage of Medicaid enrollees by primary behavioral health diagnosis group from 2022 through 2025. Exact annual percentages for each diagnosis group are presented in the table below the figure.

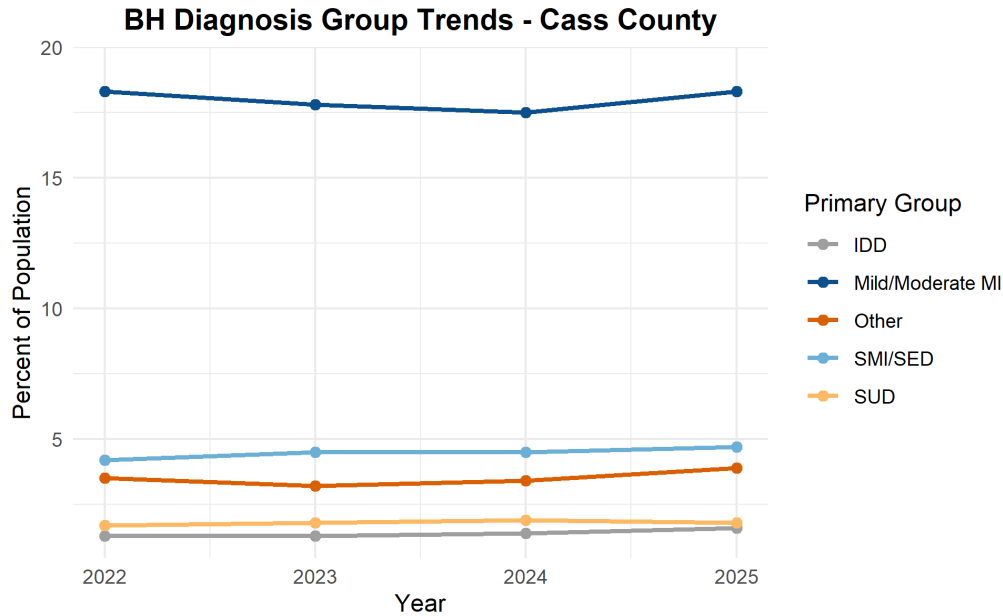


Figure 7: Percent of population with each primary BH diagnosis group, 2022-2025.

Table 7. BH Diagnosis Group Trends

Percent of the population in each primary behavioral health diagnosis group, 2022–2025.

Primary BH Diagnosis Group	2022	2023	2024	2025
IDD	1.3%	1.3%	1.4%	1.6%
Mild/Moderate MI	18.3%	17.8%	17.5%	18.3%
Other	3.5%	3.2%	3.4%	3.9%
SMI/SED	4.2%	4.5%	4.5%	4.7%
SUD	1.7%	1.8%	1.9%	1.8%

Trends varied across primary behavioral health groups. Mild/Moderate MI remained the largest group throughout the period, declining from 18.3% in 2022 to 17.5% in 2024 before increasing back to 18.3% in 2025. SMI/SED and IDD showed more consistent increases across the four-year period, reaching 4.7% and 1.6%, respectively, in 2025. The Other group also increased in 2025 to 3.9%, while SUD remained relatively stable at approximately 1.7% to 1.9% across the period.

5.2.4. Year-Over-Year Change (2024 vs. 2025)

Changes in behavioral health diagnosis prevalence between 2024 and 2025 were evaluated among Medicaid enrollees who were active in both years (N = 11,513). Using the same individuals in both years reduces the influence of changes in Medicaid enrollment on the year-over-year comparison. As individuals age and remain engaged in care, additional conditions may be identified and documented over time; however, the matched comparison also provides insight into changes in the clinical complexity of the continuously enrolled population. Statistical significance was evaluated using McNemar's test with Bonferroni correction for multiple comparisons.

Table 8: Year-Over-Year Change - Cass County (N matched = 11,513)			
Condition	2024 %	2025 %	Change
Any BH Diagnosis	32.5%	31.7%	-0.8 ↓
Anxiety	14.8%	15.4%	+0.6 ↑
Depressive	11.9%	11.2%	-0.7 ↓
ADHD	8.3%	8.1%	-0.2 ↓
Adjustment Disorder	3.8%	4.1%	+0.3 ↑
SUD	3.8%	3.6%	-0.2 ↓
Trauma-Related (PTSD)	3.4%	3.4%	0
Bipolar	2.8%	2.7%	-0.1 ↓
Autism Spectrum	2.0%	1.9%	-0.1 ↓
Schizophrenia/Psychosis	1.6%	1.7%	+0.1 ↑
IDD	1.3%	1.5%	+0.2 ↑
Impulse Control/Conduct	1.4%	1.4%	0
Personality Disorder	1.2%	1.2%	0
Dementia	0.8%	0.8%	0
OCD	0.5%	0.6%	+0.1 ↑

Bold, colored Change values are statistically significant (McNemar's test, Bonferroni-corrected): red = significant increase, green = significant decrease.

Behavioral health diagnosis prevalence remained relatively stable within the matched Cass County population, decreasing slightly from 32.5% in 2024 to 31.7% in 2025. Individual condition changes were mixed, with anxiety showing the largest increase (+0.6 percentage points) and depressive disorders the largest decrease (-0.7 percentage points). None of the year-over-year changes were statistically significant after correction for multiple comparisons. Overall, the matched analysis suggests relatively stable behavioral health prevalence among individuals enrolled in both years.

5.3. Behavioral Health Diagnosis Rates by County

Behavioral health diagnosis prevalence in Cass County is compared with the remainder of the SWMBH region. Because individuals may have more than one behavioral health diagnosis, condition-specific percentages are not mutually exclusive and should not be summed.

The table below compares Cass County's 2025 diagnosis rates with the rest of the SWMBH region. Statistically significant differences between Cass County and the remainder of the region are identified using bold text, colored shading, and arrows. Conditions are ordered from highest to lowest regional prevalence.

Table 9. Behavioral Health Diagnosis Rates - Cass vs. Rest of Region

Percent with diagnosis (2025)

Condition	Cass (N=13,983)	Rest of Region (N=232,443)
Any BH Diagnosis	30.3% ↓	32.9%
Anxiety	14.6% ↓	15.9%
Depressive	10.9% ↓	12.5%
ADHD	7.6% ↑	6.7%
Adjustment Disorder	4.1% ↓	5.6%
SUD	3.7% ↓	4.9%
Trauma-Related (PTSD)	3.4% ↓	4.9%
Bipolar	2.6% ↓	3.5%
Schizophrenia/Psychosis	1.6% ↓	2.5%
Autism Spectrum	1.7% ↓	2.2%
Impulse Control/Conduct	1.3% ↓	1.7%
IDD	1.3%	1.4%
Personality Disorder	1.2%	1.3%
Dementia	0.9%	0.9%
OCD	0.5%	0.6%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Cass County had a significantly lower overall behavioral health diagnosis rate than the remainder of the region (30.3% vs. 32.9%). Anxiety, depressive disorders, adjustment disorders, SUD, trauma-related (PTSD), bipolar, schizophrenia/psychosis, autism, and impulse control/conduct were also significantly less prevalent in Cass County. In contrast, ADHD was significantly more prevalent than in the remainder of the region.

5.4. Behavioral Health Conditions Demographic Comparisons

Examining behavioral health diagnoses across demographic groups helps identify populations with different patterns of behavioral health need and potential disparities in diagnosis or access to care. The following analyses compare diagnosis prevalence by age, sex, race and ethnicity, and Medicare-Medicaid dual eligibility.

5.4.1. Behavioral Health Conditions by Age Group

Behavioral health diagnosis patterns varied substantially across age groups. Overall, 25% of enrollees younger than 18 had at least one behavioral health diagnosis, compared with 34% of adults ages 18–64, and 29.1% of adults ages 65 or older. The most common conditions among those younger than 18 were ADHD, Anxiety, Adjustment Disorder. Among adults ages 18–64, the most common were Anxiety, Depressive, ADHD, while among adults ages 65 or older, the most common were Depressive, Anxiety, Dementia.

Table 10. Behavioral Health Conditions by Age Group - Cass County*Percent with diagnosis (2025)*

Condition	<18 (N=5,292)	18-64 (N=7,773)	65+ (N=918)
Any BH Diagnosis	25.0%	34.0%	29.1%
Anxiety	6.5%	20.6%	11.4%
Depressive	2.9%	15.9%	13.9%
SUD	0.3%	6.3%	1.9%
Bipolar	0.1%	4.4%	2.4%
Schizophrenia/Psychosis	0.1%	2.4%	3.7%
Personality Disorder	0.2%	2.0%	0.4%
OCD	0.3%	0.7%	0.1%
Adjustment Disorder	3.9%	4.4%	2.5%
Dementia	0.1%	0.2%	11.1%
Impulse Control/Conduct	2.4%	0.6%	0.3%
Autism Spectrum	3.0%	1.0%	0.1%
IDD	0.3%	1.9%	1.3%
Trauma-Related (PTSD)	1.6%	4.7%	2.4%
ADHD	10.2%	6.6%	0.4%

Shading reflects diagnosis rate magnitude (lighter = lower, darker = higher). No statistical testing was performed for this table.

Among children and adolescents, ADHD was the most commonly documented condition (10.2%), followed by anxiety (6.5%) and adjustment disorder (3.9%). Adults ages 18–64 had the highest rates of anxiety (20.6%), depression (15.9%), SUD (6.3%), and trauma-related diagnoses (4.7%). Among adults ages 65 and older, depression (13.9%) and anxiety (11.4%) remained common, while dementia increased sharply to 11.1%. Schizophrenia/psychosis was also more prevalent among adults age 65 and older than among the younger age groups.

5.4.2. Behavioral Health Conditions by Sex

Behavioral health diagnosis patterns differed by both age and sex. Overall, 33.4% of females and 26.6% of males had at least one behavioral health diagnosis in 2025. Among adults, females had substantially higher rates of anxiety (25.1% vs. 12.1%) and depression (20.0% vs. 9.8%), while adult males had higher rates of SUD (7.4% vs. 4.7%) and schizophrenia/psychosis (3.2% vs. 2.1%). Among children, males had a higher overall behavioral health diagnosis rate than females (26.9% vs. 23.0%), driven in part by higher rates of ADHD (13.1% vs. 7.0%), autism spectrum disorder (4.2% vs. 1.6%), and impulse control/conduct disorders (3.3% vs. 1.5%).

Table 11. Behavioral Health Conditions by Age Group and Sex - Cass County

Percent with diagnosis (2025)

Condition	Adult Female (N=5,007)	Adult Male (N=3,684)	Child Female (N=2,546)	Child Male (N=2,746)
Any BH Diagnosis	38.7%	26.4%	23.0%	26.9%
Anxiety	25.1%	12.1%	8.2%	4.9%
Depressive	20.0%	9.8%	4.3%	1.7%
SUD	4.7%	7.4%	0.2%	0.3%
Bipolar	4.9%	3.3%	0.1%	0.1%
Schizophrenia/Psychosis	2.1%	3.2%	0.1%	0.1%
Personality Disorder	2.3%	1.1%	0.4%	0.0%
OCD	0.7%	0.6%	0.3%	0.3%
Adjustment Disorder	5.1%	3.1%	4.0%	3.7%
Dementia	1.7%	1.0%	0.1%	0.1%
Impulse Control/Conduct	0.3%	1.0%	1.5%	3.3%
Autism Spectrum	0.5%	1.5%	1.6%	4.2%
IDD	1.7%	2.1%	0.3%	0.3%
Trauma-Related (PTSD)	5.8%	2.7%	1.7%	1.5%
ADHD	6.9%	4.7%	7.0%	13.1%

Shading reflects diagnosis rate magnitude (lighter = lower, darker = higher). No statistical testing was performed for this table.

5.4.3. Behavioral Health Conditions by Medicare-Medicaid Dual Eligibility

Comparing behavioral health diagnoses by Medicare-Medicaid dual eligibility provides insight into differences between individuals with more complex healthcare needs and those covered by Medicaid alone. In 2025, 36.9% of dual-eligible Medicaid enrollees had at least one behavioral health diagnosis, compared to 29.5% of non-dual enrollees.

Table 12. Behavioral Health Conditions by Medicare Dual Status - Cass County

Percent with diagnosis (2025)

Condition	Dual (N=1,492)	No (N=12,491)
Any BH Diagnosis	36.9%	29.5%
Anxiety	15.9%	14.5%
Depressive	16.0%	10.3%
SUD	3.8%	3.7%
Bipolar	4.5%	2.4%
Schizophrenia/Psychosis	6.4%	1.0%
Personality Disorder	1.6%	1.1%
OCD	0.5%	0.5%
Adjustment Disorder	2.5%	4.3%
Dementia	7.2%	0.1%
Impulse Control/Conduct	1.1%	1.3%
Autism Spectrum	1.4%	1.7%
IDD	6.3%	0.7%
Trauma-Related (PTSD)	3.3%	3.4%
ADHD	2.5%	8.1%

Shading reflects diagnosis rate magnitude (lighter = lower, darker = higher). No statistical testing was performed for this table.

Dual-eligible enrollees had higher documented rates of several behavioral health conditions. Differences were particularly pronounced for dementia (7.2% vs. 0.1%), IDD (6.3% vs. 0.7%), schizophrenia/psychosis (6.4% vs. 1.0%), bipolar disorder (4.5% vs. 2.4%), and depressive disorders (16.0% vs. 10.3%). Overall, 36.9% of dual-eligible enrollees had a behavioral health diagnosis compared with 29.5% of non-dual enrollees.

In contrast, ADHD was substantially more common among non-dual enrollees (8.1% vs. 2.5%), as was adjustment disorder to a lesser extent (4.3% vs. 2.5%). Many of these differences likely reflect the substantially older age distribution of the dual-eligible population, particularly for conditions such as dementia, and should not be interpreted as effects of dual eligibility itself.

5.4.4. BH Diagnosis by Race/Ethnicity

Race and ethnicity are important factors for identifying potential disparities in behavioral health diagnoses. The following table, and the race/ethnicity tables later in this report, use abbreviated column labels for the following categories: American Indian or Alaska Native (AI/AN) and Native Hawaiian or Other Pacific Islander (NH/PI). The remaining categories - White, Black or African American, Hispanic or Latino, Asian, and Other Race - are shown by their full names.

The following table summarizes behavioral health diagnosis prevalence by race and ethnicity in 2025. Because individuals may have more than one behavioral health diagnosis, condition-specific percentages within each racial/ethnic group are not mutually exclusive and should not be summed. Statistical significance was assessed using chi-square tests with Bonferroni correction.

Table 13. Behavioral Health Diagnoses by Race/Ethnicity - Cass

Percent with diagnosis, by race/ethnicity (2025)

Condition	AI/AN (N=369)	Asian (N=19)	Black (N=1,365)	Hispanic (N=906)	NH/PI (N=4)	Other (N=985)	White (N=10,335)
Any BH Diagnosis	32.8%	36.8%	25.3% ↓	19.9% ↓	0.0%	23.2% ↓	32.4% ↑
Anxiety	18.7%	26.3%	10.0% ↓	7.5% ↓	0.0%	9.0% ↓	16.3% ↑
Depressive	13.8%	15.8%	7.8% ↓	5.2% ↓	0.0%	6.8% ↓	12.1% ↑
SUD	4.9%	0.0%	3.5%	1.2% ↓	0.0%	2.2%	4.1% ↑
Bipolar	4.6%	0.0%	2.2%	1.0%	0.0%	1.3%	2.9%
Schizophrenia/Psychosis	2.2%	5.3%	2.1%	0.4%	0.0%	1.0%	1.7%
Personality Disorder	1.9%	0.0%	0.7%	0.7%	0.0%	0.5%	1.4%
OCD	0.5%	0.0%	0.1%	0.3%	0.0%	0.3%	0.6%
Adjustment Disorder	5.7%	0.0%	3.5%	2.9%	0.0%	2.8%	4.3%
Dementia	0.0%	0.0%	1.0%	0.1%	0.0%	0.5%	1.0%
Impulse Control/Conduct	0.5%	0.0%	1.0%	0.6%	0.0%	1.5%	1.4%
Autism Spectrum	1.1%	5.3%	2.0%	1.7%	0.0%	1.8%	1.7%
IDD	0.5%	0.0%	1.5%	0.2%	0.0%	1.1%	1.4%
Trauma-Related (PTSD)	4.1%	5.3%	2.1%	1.8%	0.0%	2.1%	3.8% ↑
ADHD	9.8%	15.8%	4.8% ↓	5.4%	0.0%	6.6%	8.1% ↑

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Behavioral health diagnosis prevalence varied across racial and ethnic groups. White enrollees had a significantly higher overall rate of any behavioral health diagnosis at 32.4%. In contrast, Black enrollees (25.3%), Hispanic or Latino enrollees (19.9%), and those categorized as Other Race (23.2%) had significantly lower overall diagnosis rates than the remainder of the population.

White enrollees also had significantly higher rates of anxiety, depressive disorders, SUD, trauma-related diagnoses, and ADHD. Black enrollees had significantly lower rates of anxiety, depressive disorders, and ADHD, while Hispanic or Latino enrollees had lower rates of anxiety, depressive disorders, and SUD. The Other Race group also had significantly lower rates of anxiety and depressive disorders.

Rates for American Indian or Alaska Native and Asian enrollees were comparatively high for several conditions, but these differences were not statistically significant. Results for some racial and ethnic groups should be interpreted cautiously because of small sample sizes, particularly Asian (N=19) and Native Hawaiian or Other Pacific Islander (N=4) enrollees, which can produce unstable percentages and limit the ability to detect statistically significant differences.

These differences should not be interpreted as direct measures of underlying behavioral health need. Diagnosis prevalence may also reflect differences in access to care, help-seeking, screening, diagnostic practices, cultural factors, and documentation. The patterns may therefore help identify areas where additional review of access and potential disparities is warranted.

Together, these findings show that behavioral health diagnosis patterns vary across demographic groups, geographic areas, and diagnosis categories within the Cass County Medicaid population. These differences provide important context for the chronic physical health, multimorbidity, and healthcare utilization analyses that follow.

6. Chronic Health Conditions

6.1. Overview and Methods

Chronic physical health conditions are an important contributor to healthcare utilization, quality of life, and overall healthcare costs (Centers for Disease Control and Prevention, 2026). Understanding the prevalence and distribution of chronic conditions helps identify populations with greater medical complexity, supports prevention and care management efforts, and provides context for the healthcare utilization and multimorbidity analyses presented later in this report.

This section summarizes documented chronic physical health conditions among Medicaid enrollees, trends from 2022 through 2025, and differences across demographic groups.

For this analysis, ICD-10 diagnosis codes from Medicaid service encounters between 2022 and 2025 were used to identify documented chronic conditions among the Cass County Medicaid population. Services funded by Medicaid Health Plans or Medicaid Fee-for-Service were included, along with PIHP/CMH-funded services containing one of the diagnoses of interest. A condition was considered present if a qualifying diagnosis appeared on an encounter during the study period, regardless of funding source, service type, diagnostic position on the claim, or number of times the diagnosis was reported.

To simplify interpretation, individual diagnosis codes were organized into broader analytic condition groups based on clinically related diseases. These groupings allow related conditions to be examined together when they share common risk factors, treatment approaches, or affected organ systems. The composite groups used in this section are:

- **Cardiac Disease:** Coronary artery disease (CAD), congestive heart failure, valvular heart disease, and other chronic ischemic heart disease.
- **Vascular Disease:** Atherosclerosis, peripheral vascular disease, stroke, and transient ischemic attack (TIA).
- **Metabolic Risk Factors:** Hypertension, diabetes, hyperlipidemia, obesity/morbid obesity, and sleep apnea.
- **GI Functional Disorder:** GERD/esophageal disorders and gastrointestinal motility disorders.
- **Chronic Pain/Migraine:** Chronic pain syndrome, migraine, fibromyalgia, and myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS).
- **Social Determinants of Health (SDoH):** Housing/economic instability, social/family circumstance concerns, education/employment problems, and other psychosocial circumstances.

SDoH are included as a health-related condition grouping rather than a chronic physical health condition because social and economic circumstances can substantially influence physical and behavioral health outcomes, access to care, and treatment stability (McQueen et al., 2021).

6.2. Prevalence of Chronic Conditions

The tables in this section examine the prevalence of documented chronic health conditions among Medicaid enrollees in Cass County. These results represent documented diagnosis history among the 2025 Medicaid population rather than conditions newly diagnosed during the year.

Conditions are not mutually exclusive; an individual may be represented in more than one category when multiple chronic conditions are present. Percentages across conditions therefore should not be summed to estimate overall chronic disease prevalence.

The table compares Cass County with the remainder of the SWMBH region. Overall, 35.1% of enrollees had at least one of the chronic conditions included in this analysis. The most commonly identified conditions were Metabolic Risk Factors (22.4%), Chronic Pain/Migraine (9%), GI Functional Disorder (7.3%). Statistical significance was assessed using chi-square tests with Bonferroni correction.

Table 14. Chronic Health Condition Rates - Cass vs. Rest of Region

Percent with condition (2025)

Condition	Cass (N=13,983)	Rest of Region (N=232,443)
Any Chronic Condition	35.1% ↓	38.2%
Metabolic Risk Factors	22.4% ↓	24.0%
Chronic Pain/Migraine	9.0%	9.6%
GI Functional Disorder	7.3% ↓	8.2%
Tobacco Use	6.5% ↓	7.2%
Asthma	5.2% ↓	6.3%
Social Determinants of Health	2.2% ↓	4.3%
Cardiac Disease	3.9%	3.9%
COPD	3.4%	3.5%
Hypothyroidism	2.5%	2.8%
Urinary Tract Infection	2.5%	2.8%
Vascular Disease	2.2%	2.3%
Liver Disease	2.1%	2.1%
Chronic Kidney Disease	1.8%	2.1%

Table 14. Chronic Health Condition Rates - Cass vs. Rest of Region*Percent with condition (2025)*

Condition	Cass (N=13,983)	Rest of Region (N=232,443)
Cancer	1.6%	1.8%
Epilepsy	1.6%	1.7%
Prediabetes	1.2%	1.6%
Traumatic Brain Injury	0.8%	1.0%
Feeding Difficulty	0.5%	0.6%
Inflammatory Bowel Disease	0.4%	0.4%
Rheumatoid Arthritis	0.2%	0.3%
Lupus/SLE	0.1%	0.2%
Multiple Sclerosis	0.2%	0.2%
Sickle Cell Disease	0.1%	0.1%
Long COVID	0.0%	0.0%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Chronic condition prevalence was significantly lower in Cass County than in the remainder of the SWMBH region. Overall, 35.1% of Cass County enrollees had at least one documented chronic condition, compared with 38.2% in the rest of the region.

Several individual conditions were also significantly less prevalent in Cass County, including Metabolic Risk Factors (22.4% vs. 24.0%), GI functional disorders (7.3% vs. 8.2%), tobacco use (6.5% vs. 7.2%), asthma (5.2% vs. 6.3%), and documented Social Determinants of Health concerns (2.2% vs. 4.3%). Chronic pain/migraine was also somewhat lower in Cass County, although the difference was not statistically significant.

These lower documented rates should not necessarily be interpreted as lower underlying health need. Differences may reflect variation in population characteristics, risk factors, healthcare access and utilization, diagnostic practices, or documentation.

6.2.1. Chronic Condition Prevalence Trend (2022-2025)

Monitoring chronic condition prevalence over time helps identify changes in disease burden and may reflect shifts in population health, healthcare access, or diagnosis practices. The figure below displays annual trends in the percentage of Medicaid enrollees with at least one chronic physical health condition from 2022 through 2025.

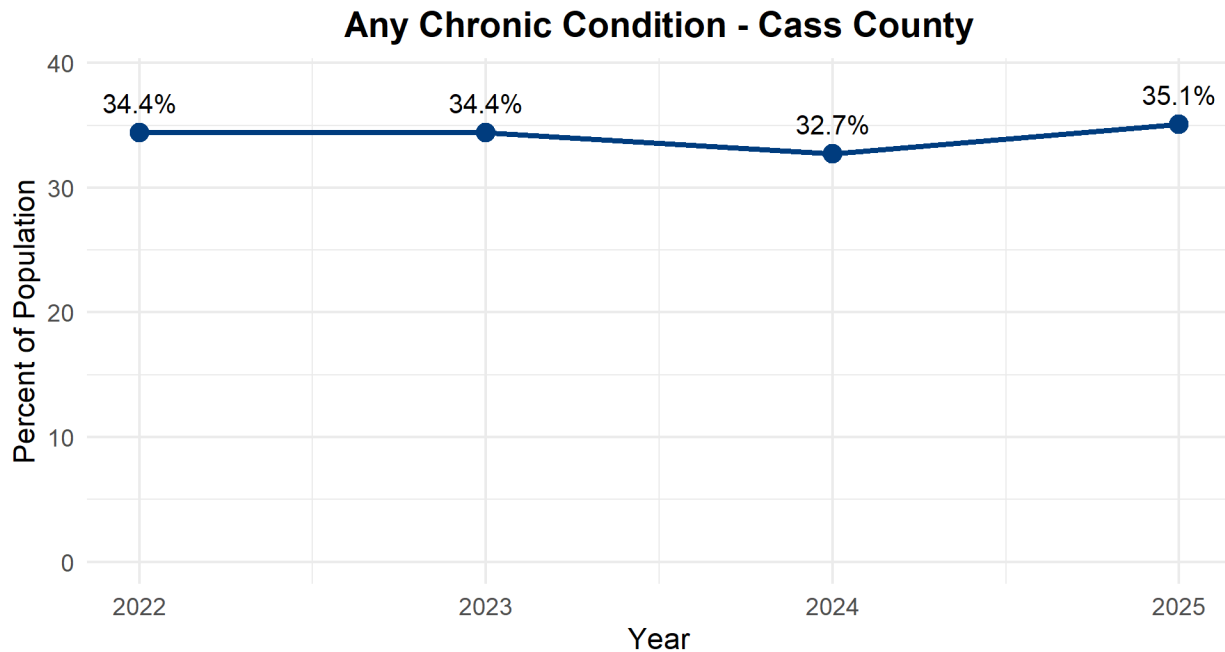


Figure 8: *Percent of population with any chronic condition studied, 2022-2025.*

Chronic condition prevalence was relatively stable from 2022 through 2024 before increasing from 32.7% in 2024 to 35.1% in 2025. This pattern is similar to the increase observed in behavioral health diagnoses during the same period. Because the percentage of enrollees receiving at least one Medicaid service also increased in 2025, greater healthcare contact may have contributed to increased identification of both chronic and behavioral health conditions.

Changes between 2024 and 2025 were also evaluated among Medicaid enrollees active in both years using McNemar's test with Bonferroni correction. This matched-cohort approach reduces the influence of changes in Medicaid enrollment on the year-over-year comparison. Because individuals were one year older in 2025 and had additional opportunities for conditions to be identified and documented over time, some increase is expected within a continuously enrolled population. The matched comparison nevertheless provides insight into changes in the medical complexity of this population. Because the matched population differs from the full population used in the annual trend figure, the percentages below will not exactly match the 2024 and 2025 values shown above.

Table 15: Year-Over-Year Change (Chronic Conditions) - Cass County (N matched = 11,513)

Condition	2024 %	2025 %	Change
Any Chronic Condition	36.1%	36.3%	+0.2 ↑
Metabolic Risk Factors	22.7%	23.6%	+0.9 ↑
Chronic Pain/Migraine	9.1%	9.5%	+0.4 ↑
GI Functional Disorder	7.9%	7.6%	-0.3 ↓
Tobacco Use	7.0%	6.7%	-0.3 ↓
Asthma	5.6%	5.6%	0
Cardiac Disease	3.7%	4.0%	+0.3 ↑
COPD	3.5%	3.6%	+0.1 ↑
Hypothyroidism	3.0%	2.8%	-0.2 ↓
Urinary Tract Infection	2.6%	2.6%	0
Liver Disease	1.9%	2.3%	+0.4 ↑
Vascular Disease	2.1%	2.2%	+0.1 ↑
Social Determinants of Health	2.2%	2.0%	-0.2 ↓
Chronic Kidney Disease	1.6%	1.8%	+0.2 ↑
Cancer	1.4%	1.7%	+0.3 ↑
Epilepsy	1.7%	1.7%	0
Prediabetes	1.3%	1.4%	+0.1 ↑
Traumatic Brain Injury	0.8%	0.9%	+0.1 ↑
Feeding Difficulty	0.4%	0.4%	0
Inflammatory Bowel Disease	0.4%	0.4%	0
Rheumatoid Arthritis	0.3%	0.2%	-0.1 ↓
Multiple Sclerosis	0.3%	0.2%	-0.1 ↓
Sickle Cell Disease	0.1%	0.1%	0
Lupus/SLE	0.1%	0.1%	0
Long COVID	0.1%	0.0%	-0.1 ↓

Bold, colored Change values are statistically significant (McNemar's test, Bonferroni-corrected): red = significant increase, green = significant decrease.

Chronic condition prevalence remained relatively stable within the matched Cass County population, increasing slightly from 36.1% in 2024 to 36.3% in 2025. Metabolic Risk Factors showed the largest observed increase (+0.9 percentage points), while most other condition-level changes were small and mixed. None of the year-over-year changes were statistically significant after correction for multiple comparisons. Overall, the matched analysis suggests relatively stable chronic condition prevalence among individuals enrolled in both years.

6.3. Chronic Conditions by Age Group

Chronic disease burden varies considerably across the lifespan, making age an important consideration when comparing condition prevalence across populations (Watson et al., 2025). In Cass County, 60.3% of adults age 65 and older had at least one chronic condition, compared with 45% of adults ages 18–64 years, and 16.2% of children younger than 18.

Table 16. Chronic Conditions by Age Group - Cass County

Percent with condition (2025)

Condition	<18 (N=5,292)	18-64 (N=7,773)	65+ (N=918)
Any Chronic Condition	16.2%	45.0%	60.3%
Cardiac Disease	0.1%	4.3%	21.9%
Vascular Disease	0.0%	2.4%	12.5%
Metabolic Risk Factors	4.8%	31.2%	49.2%
GI Functional Disorder	2.4%	9.5%	16.0%
Chronic Pain/Migraine	1.5%	13.5%	14.3%
Social Determinants of Health	2.5%	2.2%	1.0%
Asthma	4.9%	5.6%	3.6%
COPD	0.1%	3.9%	18.6%
Cancer	0.2%	1.9%	7.4%
Epilepsy	0.6%	2.2%	2.9%
Hypothyroidism	0.3%	3.4%	8.1%
Long COVID	0.0%	0.1%	0.0%
Tobacco Use	0.1%	10.2%	12.1%
Prediabetes	0.2%	1.9%	2.2%

Table 16. Chronic Conditions by Age Group - Cass County*Percent with condition (2025)*

Condition	<18 (N=5,292)	18-64 (N=7,773)	65+ (N=918)
Sickle Cell Disease	0.2%	0.1%	0.0%
Traumatic Brain Injury	1.0%	0.7%	0.4%
Urinary Tract Infection	0.7%	3.3%	7.0%
Feeding Difficulty	1.1%	0.1%	0.2%
Inflammatory Bowel Disease	0.0%	0.6%	0.4%
Liver Disease	0.3%	3.3%	3.1%
Rheumatoid Arthritis	0.0%	0.2%	1.3%
Lupus/SLE	0.0%	0.2%	0.1%
Multiple Sclerosis	0.0%	0.3%	0.5%
Chronic Kidney Disease	0.1%	1.7%	12.4%

Shading reflects diagnosis rate magnitude (lighter = lower, darker = higher). No statistical testing was performed for this table.

Chronic condition prevalence increased substantially with age, from 16.2% among children to 45.0% among adults ages 18–64 and 60.3% among adults age 65 and older. Metabolic Risk Factors showed a particularly strong age-related pattern, increasing from 4.8% among children to 31.2% among adults ages 18–64 and 49.2% among adults age 65 and older.

Several other conditions were also substantially more common among older adults, including cardiac disease, vascular disease, COPD, chronic kidney disease, cancer, hypothyroidism, and urinary tract infection. Chronic pain/migraine increased sharply between childhood and adulthood but was relatively similar between the two adult age groups. In contrast, Social Determinants of Health diagnoses were somewhat more common among children and working-age adults than among adults age 65 and older.

These patterns underscore the importance of age when interpreting chronic disease prevalence and suggest that older adults may require more intensive management of multiple co-occurring physical health conditions.

6.4. Chronic Conditions by Age Group and Dual Eligibility

Medicare dual eligibility provides another way to examine differences in chronic disease burden within the Medicaid population. Individuals enrolled in both Medicare and Medicaid represent a diverse population that differs in age, disability status, healthcare needs, and patterns of service use (Fox & Reichard, 2013).

The table below presents chronic condition prevalence by age group and Medicare dual eligibility status. Examining dual and non-dual populations within age groups helps distinguish differences associated with dual eligibility from patterns that may primarily reflect the older age distribution of the dual-eligible population. Statistical comparisons are made between dual-eligible and non-dual enrollees within the same adult age group.

Table 17. Chronic Conditions by Age Group and Dual Eligibility - Cass County

Percent with condition (2025)

Condition	Dual 18-64 (N=620)	Dual 65+ (N=872)	No <18 (N=5,292)	No 18-64 (N=7,153)	No 65+ (N=46)
Any Chronic Condition	57.1% ↑	61.1% ↑	16.2% ↓	44.0% ↑	45.7%
Cardiac Disease	10.5% ↑	22.1% ↑	0.1% ↓	3.8%	17.4% ↑
Vascular Disease	4.8% ↑	13.1% ↑	0.0% ↓	2.2%	2.2%
Metabolic Risk Factors	45.5% ↑	49.7% ↑	4.8% ↓	29.9% ↑	41.3%
GI Functional Disorder	15.8% ↑	16.4% ↑	2.4% ↓	9.0% ↑	8.7%
Chronic Pain/Migraine	17.6% ↑	14.6% ↑	1.5% ↓	13.1% ↑	8.7%
Social Determinants of Health	0.8%	1.0%	2.5%	2.3%	0.0%
Asthma	6.0%	3.7%	4.9%	5.6%	2.2%
COPD	9.8% ↑	19.2% ↑	0.1% ↓	3.4%	8.7%
Cancer	2.9%	7.7% ↑	0.2% ↓	1.8%	2.2%
Epilepsy	6.3% ↑	3.0%	0.6% ↓	1.8%	2.2%
Hypothyroidism	7.7% ↑	8.3% ↑	0.3% ↓	3.1% ↑	4.3%
Long COVID	0.2%	0.0%	0.0%	0.1%	0.0%
Tobacco Use	12.1% ↑	11.8% ↑	0.1% ↓	10.0% ↑	17.4%
Prediabetes	2.9% ↑	2.2%	0.2% ↓	1.8% ↑	2.2%
Sickle Cell Disease	0.2%	0.0%	0.2%	0.1%	0.0%
Traumatic Brain Injury	1.0%	0.5%	1.0%	0.7%	0.0%

Table 17. Chronic Conditions by Age Group and Dual Eligibility - Cass County

Percent with condition (2025)

Condition	Dual 18-64 (N=620)	Dual 65+ (N=872)	No <18 (N=5,292)	No 18-64 (N=7,153)	No 65+ (N=46)
Urinary Tract Infection	3.4%	7.0% ↑	0.7% ↓	3.3% ↑	6.5%
Feeding Difficulty	0.2%	0.2%	1.1% ↑	0.0% ↓	0.0%
Inflammatory Bowel Disease	1.3%	0.5%	0.0% ↓	0.5%	0.0%
Liver Disease	3.2%	2.9%	0.3% ↓	3.3% ↑	6.5%
Rheumatoid Arthritis	0.5%	1.4% ↑	0.0% ↓	0.2%	0.0%
Lupus/SLE	0.5%	0.1%	0.0%	0.2%	0.0%
Multiple Sclerosis	1.5% ↑	0.6%	0.0% ↓	0.2%	0.0%
Chronic Kidney Disease	4.2% ↑	12.8% ↑	0.1% ↓	1.5%	4.3%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Among adults ages 18–64, dual-eligible enrollees had substantially greater chronic disease burden than non-dual enrollees. Any chronic condition was documented for 57.1% of dual-eligible adults compared with 44.0% of non-dual adults in the same age group. Metabolic Risk Factors were also considerably more common among dual-eligible adults ages 18–64 (45.5% vs. 29.9%). Higher rates among dual-eligible adults were also observed for cardiac and vascular disease, chronic pain/migraine, COPD, chronic kidney disease, epilepsy, hypothyroidism, and several other conditions.

Among adults age 65 and older, 61.1% of dual-eligible enrollees had at least one chronic condition. Metabolic Risk Factors were present in 49.7%, while cardiac disease, COPD, chronic kidney disease, vascular disease, and GI functional disorders were also common. Comparisons with non-dual adults age 65 and older should be interpreted cautiously because this group was very small (N=46), which can produce unstable percentages and limits meaningful comparison between the two Medicare-status groups.

Overall, the findings indicate that dual-eligible adults ages 18–64 represent a population with elevated chronic health needs even when comparing individuals within the same broad age group.

6.5. Multiple Chronic Conditions by Dual Eligibility (Adults)

The number of chronic conditions present provides another measure of overall medical complexity. Individuals with multiple chronic conditions often require more intensive care management and may experience higher healthcare utilization.

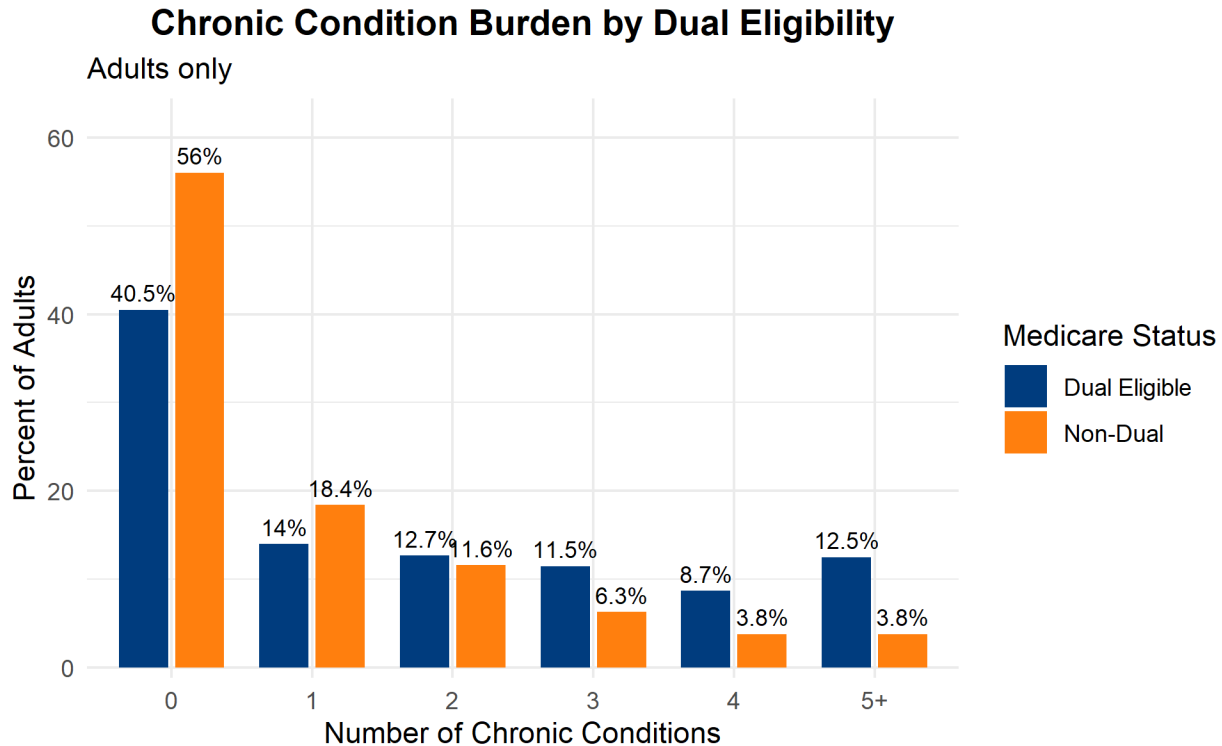


Figure 9: Percent of adult enrollees by number of chronic conditions, by Medicare dual eligibility status.

Dual-eligible adults had a greater chronic condition burden than non-dual adults. While 56.0% of non-dual adults had none of the chronic conditions included in this analysis, only 40.5% of dual-eligible adults had no identified chronic conditions. Differences became more pronounced at higher levels of complexity: 12.5% of dual-eligible adults had five or more chronic conditions, compared with 3.8% of non-dual adults. Dual-eligible adults were also more likely to have three or four chronic conditions.

These findings reinforce that dual-eligible adults represent a population with greater medical complexity and may warrant greater emphasis on care coordination and management of multiple co-occurring conditions.

6.6. Chronic Conditions by Behavioral Health Diagnosis Group

Physical and behavioral health conditions frequently occur together, and examining chronic disease prevalence across behavioral health populations can help identify groups with greater combined medical and behavioral health needs.

The following tables compare chronic condition prevalence across the primary behavioral health diagnosis groups defined earlier in this report. Individuals without an identified behavioral health diagnosis are included as a comparison group. Because chronic condition prevalence differs substantially by age, results are presented separately for children and adolescents and for adults. This stratification allows behavioral health groups to be compared within more similar age ranges and reduces the influence of age-related differences in chronic disease burden.

Table 18. Chronic Conditions by BH Diagnosis Group - Adults*Percent with condition among enrollees age 18 and older (2025)*

Condition	No BH Diagnosis (N=5,778)	IDD (N=121)	Mild/Moderate MI (N=1,855)	Other (N=127)	SMI/SED (N=557)	SUD (N=253)
Any Chronic Condition	32.4% ↓	68.6% ↑	76.9% ↑	84.3% ↑	74.3% ↑	59.3% ↑
Cardiac Disease	4.2% ↓	4.1%	9.5% ↑	40.2% ↑	9.3%	5.5%
Vascular Disease	1.6% ↓	2.5%	6.8% ↑	30.7% ↑	5.2%	3.2%
Metabolic Risk Factors	22.3% ↓	47.1%	56.4% ↑	70.1% ↑	54.4% ↑	37.2%
GI Functional Disorder	4.8% ↓	19.8%	21.3% ↑	37.8% ↑	19.0% ↑	14.6%
Chronic Pain/Migraine	7.2% ↓	5.0%	29.9% ↑	17.3%	23.3% ↑	20.9%
Social Determinants of Health	0.7% ↓	2.5%	5.1% ↑	1.6%	5.2% ↑	3.6%
Asthma	3.0% ↓	7.4%	11.7% ↑	5.5%	9.3% ↑	5.9%
COPD	3.3% ↓	2.5%	9.5% ↑	18.9% ↑	11.1% ↑	7.9%
Cancer	1.9% ↓	3.3%	3.8% ↑	9.4% ↑	2.0%	2.8%
Epilepsy	1.0% ↓	21.5% ↑	3.7% ↑	17.3% ↑	4.1%	1.6%
Hypothyroidism	2.0% ↓	12.4% ↑	7.5% ↑	17.3% ↑	7.0% ↑	3.2%
Long COVID	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%
Tobacco Use	6.2% ↓	2.5%	19.2% ↑	17.3%	20.1% ↑	19.0% ↑
Prediabetes	1.1% ↓	2.5%	4.2% ↑	0.8%	3.1%	1.6%
Sickle Cell Disease	0.1%	0.0%	0.1%	0.0%	0.0%	0.4%
Traumatic Brain Injury	0.4% ↓	1.7%	1.2%	3.1%	1.3%	0.8%
Urinary Tract Infection	2.2% ↓	2.5%	6.1% ↑	18.1% ↑	7.2% ↑	4.7%
Feeding Difficulty	0.0%	0.8%	0.1%	1.6% ↑	0.0%	0.4%
Inflammatory Bowel Disease	0.4%	1.7%	0.9%	0.8%	1.1%	0.4%
Liver Disease	1.8% ↓	1.7%	6.3% ↑	3.1%	3.9%	12.6% ↑
Rheumatoid Arthritis	0.3%	0.0%	0.4%	2.4%	0.4%	0.0%
Lupus/SLE	0.2%	0.0%	0.4%	0.8%	0.4%	0.0%
Multiple Sclerosis	0.2%	0.8%	0.6%	2.4%	0.5%	0.0%
Chronic Kidney Disease	1.7% ↓	3.3%	4.3% ↑	27.6% ↑	4.8%	1.2%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Among adults, chronic condition prevalence was substantially higher across all behavioral health diagnosis groups than among adults without a behavioral health diagnosis. Only 32.4% of adults with no behavioral health diagnosis had at least one chronic condition, compared with 59.3% to 84.3% across the behavioral health groups. Adults in the Other diagnosis group had the highest overall chronic condition prevalence at 84.3%, including particularly high rates of Metabolic Risk Factors (70.1%), cardiac disease (40.2%), vascular disease (30.7%), and chronic kidney disease (27.6%).

Adults with Mild/Moderate MI and SMI/SED also showed broad elevations in chronic physical health conditions compared with adults without a behavioral health diagnosis. Mild/Moderate MI was associated with especially high rates of chronic pain/migraine (29.9%), while SMI/SED showed elevated tobacco use (20.1%), chronic pain/migraine (23.3%), and several other chronic conditions. The SUD group also had a lower overall chronic condition rate than the other behavioral health groups, but still substantially exceeded the no-BH group and showed particularly high rates of tobacco use (19.0%) and liver disease (12.6%).

Overall, these findings reinforce the substantial overlap between behavioral and physical health needs among adults with behavioral health diagnoses and support integrated approaches to care for individuals with more complex diagnostic profiles.

Table 19. Chronic Conditions by BH Diagnosis Group - Children and Adolescents*Percent with condition among enrollees under age 18 (2025)*

Condition	No BH Diagnosis (N=3,969)	IDD (N=107)	Mild/Moderate MI (N=705)	Other (N=414)	SMI/SED (N=95)	SUD (N=2)
Any Chronic Condition	12.1% ↓	23.4%	30.9% ↑	25.6% ↑	29.5%	0.0%
Cardiac Disease	0.1%	0.9%	0.3%	0.2%	0.0%	0.0%
Vascular Disease	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Metabolic Risk Factors	3.4% ↓	7.5%	9.4% ↑	8.5%	9.5%	0.0%
GI Functional Disorder	1.6% ↓	5.6%	4.3%	6.3% ↑	2.1%	0.0%
Chronic Pain/Migraine	1.2% ↓	1.9%	4.1% ↑	0.2%	3.2%	0.0%
Social Determinants of Health	1.4% ↓	1.9%	6.0% ↑	5.6% ↑	7.4%	0.0%
Asthma	3.7% ↓	6.5%	9.8% ↑	7.5%	6.3%	0.0%
COPD	0.0%	0.9%	0.1%	0.2%	0.0%	0.0%
Cancer	0.1%	0.9%	0.3%	0.2%	0.0%	0.0%
Epilepsy	0.2% ↓	7.5% ↑	0.7%	2.4% ↑	1.1%	0.0%
Hypothyroidism	0.2%	0.9%	0.6%	0.2%	1.1%	0.0%
Long COVID	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓
Tobacco Use	0.0%	0.0%	0.1%	0.2%	1.1%	0.0%
Prediabetes	0.1% ↓	0.9%	0.6%	0.2%	2.1%	0.0%
Sickle Cell Disease	0.2%	0.0%	0.0%	0.0%	1.1%	0.0%
Traumatic Brain Injury	0.8%	0.0%	2.0%	1.2%	1.1%	0.0%
Urinary Tract Infection	0.7%	0.0%	0.6%	0.7%	2.1%	0.0%
Feeding Difficulty	0.5% ↓	5.6% ↑	1.1%	5.6% ↑	0.0%	0.0%
Inflammatory Bowel Disease	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Liver Disease	0.2%	0.0%	0.9%	0.2%	1.1%	0.0%
Rheumatoid Arthritis	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓
Lupus/SLE	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓
Multiple Sclerosis	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓
Chronic Kidney Disease	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Among children and adolescents, those without a behavioral health diagnosis had the lowest overall chronic condition prevalence at 12.1%. Prevalence was higher across the behavioral health groups, including 23.4% among children with IDD, 30.9% among those with Mild/Moderate MI, 25.6% in the Other group, and 29.5% among those with SMI/SED. The SUD group included only two children and should not be interpreted as a stable estimate.

Children with Mild/Moderate MI showed significantly higher rates of several chronic and social health conditions, including Metabolic Risk Factors (9.4%), chronic pain/migraine (4.1%), Social Determinants of Health concerns (6.0%), and asthma (9.8%). Children with IDD had particularly high rates of epilepsy (7.5%) and feeding difficulty (5.6%), while the Other group also showed elevated GI functional disorders (6.3%), epilepsy (2.4%), and feeding difficulty (5.6%).

Overall, these findings indicate substantial overlap between behavioral and physical health needs among children with behavioral health diagnoses. The patterns also differ across diagnosis groups, suggesting that integrated care needs may vary depending on the child's behavioral health profile and co-occurring medical conditions.

6.7. Chronic Conditions by Race/Ethnicity

The table below examines chronic condition prevalence across race and ethnicity groups to identify differences in diagnosed chronic disease burden within the Medicaid population. Differences observed across groups may reflect a combination of underlying health risk, social and environmental conditions, access to healthcare, healthcare utilization, and differences in opportunities for conditions to be diagnosed. Statistical significance was assessed using chi-square tests with Bonferroni correction.

Table 20. Chronic Conditions by Race/Ethnicity - Cass County*Percent with condition (2025)*

Condition	AI/AN (N=369)	Asian (N=19)	Black (N=1,365)	Hispanic (N=906)	NH/PI (N=4)	Other (N=985)	White (N=10,335)
Any Chronic Condition	40.7%	36.8%	34.9%	23.6% ↓	50.0%	24.8% ↓	37.0% ↑
Cardiac Disease	2.4%	10.5%	4.4%	0.9% ↓	0.0%	2.7%	4.3%
Vascular Disease	3.0%	5.3%	2.9%	0.7%	0.0%	0.7%	2.3%
Metabolic Risk Factors	26.3%	26.3%	21.9%	13.4% ↓	50.0%	13.6% ↓	23.9% ↑
GI Functional Disorder	7.6%	0.0%	6.1%	2.8% ↓	0.0%	4.6%	8.1% ↑
Chronic Pain/Migraine	11.1%	10.5%	7.8%	3.5% ↓	0.0%	4.7% ↓	10.0% ↑
Social Determinants of Health	1.6%	10.5%	1.6%	2.3%	0.0%	2.4%	2.3%
Asthma	5.7%	0.0%	7.0%	3.1%	25.0%	3.5%	5.3%
COPD	1.9%	5.3%	2.6%	0.1% ↓	0.0%	1.8%	4.0% ↑
Cancer	0.8%	0.0%	1.5%	0.8%	0.0%	0.9%	1.8%
Epilepsy	0.5%	0.0%	1.8%	0.3%	0.0%	1.8%	1.8%
Hypothyroidism	1.6%	0.0%	1.1%	0.9%	0.0%	1.0%	3.1% ↑
Long COVID	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Tobacco Use	8.1%	5.3%	5.6%	3.0% ↓	0.0%	2.4% ↓	7.2% ↑
Prediabetes	1.9%	0.0%	1.1%	0.7%	25.0%	1.0%	1.3%
Sickle Cell Disease	0.3%	0.0%	0.9% ↑	0.0%	0.0%	0.0%	0.0% ↓
Traumatic Brain Injury	2.2%	0.0%	0.6%	0.3%	0.0%	0.8%	0.8%
Urinary Tract Infection	1.1%	5.3%	3.0%	2.3%	0.0%	1.2%	2.7%
Feeding Difficulty	0.0%	5.3%	0.5%	0.3%	0.0%	1.5% ↑	0.4%
Inflammatory Bowel Disease	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.5%
Liver Disease	1.6%	0.0%	1.2%	1.5%	0.0%	1.1%	2.4% ↑
Rheumatoid Arthritis	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.2%
Lupus/SLE	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Multiple Sclerosis	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%
Chronic Kidney Disease	0.8%	5.3%	2.9%	0.3%	0.0%	0.6%	1.9%

Bold font with red or green shading and an arrow indicates a rate is significantly higher (red ↑) or lower (green ↓) than the remaining population.

Darker shading indicates a greater proportional difference in rates.

Chronic condition prevalence varied across racial and ethnic groups. White enrollees had a significantly higher overall prevalence of any chronic condition at 37.0%. In contrast, Hispanic or Latino enrollees (23.6%) and those categorized as Other Race (24.8%) had significantly lower overall chronic condition prevalence than the remainder of the population.

White enrollees also had significantly higher rates of several individual conditions, including Metabolic Risk Factors, GI functional disorders, chronic pain/migraine, COPD, hypothyroidism, tobacco use, and liver disease. Hispanic or Latino enrollees had significantly lower rates of cardiac disease, Metabolic Risk Factors, GI functional disorders, chronic pain/migraine, COPD, and tobacco use, while the Other Race group had lower rates of Metabolic Risk Factors, chronic pain/migraine, and tobacco use.

Black enrollees did not have significantly higher overall chronic condition prevalence, but sickle cell disease was significantly more common in this group. Feeding difficulty was also significantly higher among enrollees categorized as Other Race.

Results for several smaller racial and ethnic groups should be interpreted cautiously, particularly Asian (N=19) and Native Hawaiian or Other Pacific Islander (N=4) enrollees, because small sample sizes can produce unstable percentages and limit the ability to detect statistically significant differences. More broadly, lower documented prevalence should not be interpreted as lower underlying health need without considering differences in population characteristics, healthcare access and utilization, diagnostic practices, and documentation.

6.8. Chronic Conditions and Inpatient (IP) Hospitalization Risk

Chronic conditions are associated not only with disease burden but also with healthcare utilization. The following analyses examine the relationship between chronic conditions and inpatient hospitalization during 2025.

Inpatient utilization increased substantially as chronic condition burden increased. Individuals with no identified chronic conditions averaged only 0.13 inpatient days during 2025, while average inpatient days generally increased as the number of chronic conditions rose. The increase became especially pronounced at higher levels of multimorbidity, with average inpatient utilization exceeding 20 days among some of the highest condition-count groups.

Although utilization fluctuated among individuals with the greatest numbers of chronic conditions, these upper categories likely include relatively few enrollees and should be interpreted cautiously. Overall, the pattern demonstrates a strong relationship between greater chronic disease burden and increased use of inpatient care.

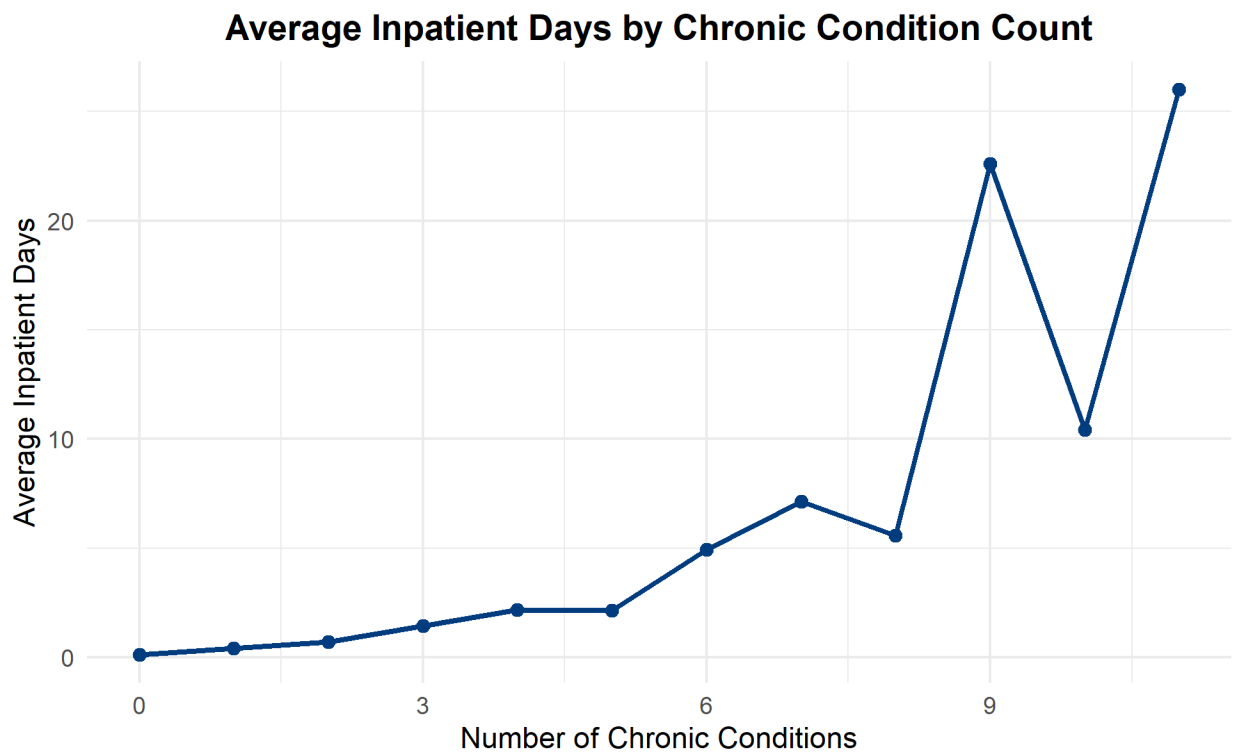


Figure 10: Average number of inpatient days among Medicaid enrollees, by total number of chronic conditions.

To identify which chronic conditions were most strongly and independently associated with inpatient hospitalization, a multivariable logistic regression model was used, predicting any inpatient hospitalization in 2025 from all conditions studied simultaneously. This approach estimates the association between each condition and hospitalization while accounting for the other conditions included in the model (LaValley, 2008).

Results are reported as adjusted odds ratios (ORs). An odds ratio greater than 1 indicates higher odds of hospitalization among individuals with the condition, while an odds ratio below 1 indicates lower odds, after accounting for the other conditions in the model.

Because very large samples can produce statistically significant results even when differences are small, statistical significance should be considered alongside the magnitude of the observed association (Peeters, 2016). For this reason, the table emphasizes conditions with **meaningfully large** associations (odds ratios greater than 1.5 or less than 0.67) rather than relying solely on statistical significance. These thresholds help distinguish conditions that may have greater practical importance for understanding hospitalization risk.

Table 21: Chronic Conditions Associated with Inpatient Hospitalization - Cass County			
Condition	Odds Ratio	95% CI	p-value
Sickle Cell Disease	9.33	(3.24 - 25.45)	<0.001
Social Determinants of Health	6.07	(4.56 - 8.00)	<0.001
Feeding Difficulty	5.38	(2.79 - 9.95)	<0.001
Rheumatoid Arthritis	3.52	(1.38 - 8.46)	0.006
Urinary Tract Infection	2.47	(1.82 - 3.30)	<0.001
Cardiac Disease	2.29	(1.76 - 2.97)	<0.001
GI Functional Disorder	2.13	(1.73 - 2.61)	<0.001
Epilepsy	2.10	(1.44 - 3.01)	<0.001
Tobacco Use	2.06	(1.66 - 2.55)	<0.001
Liver Disease	2.03	(1.47 - 2.79)	<0.001
Traumatic Brain Injury	2.01	(1.12 - 3.44)	0.014
Asthma	1.91	(1.50 - 2.41)	<0.001
Chronic Kidney Disease	1.89	(1.34 - 2.65)	<0.001
Inflammatory Bowel Disease	1.73	(0.78 - 3.54)	0.152

Table 21: Chronic Conditions Associated with Inpatient Hospitalization - Cass County			
Condition	Odds Ratio	95% CI	p-value
Multiple Sclerosis	1.68	(0.54 - 4.43)	0.325
Metabolic Risk Factors	1.67	(1.40 - 2.00)	<0.001
COPD	1.54	(1.16 - 2.02)	0.002
Cancer	1.50	(1.02 - 2.17)	0.036
Vascular Disease	1.37	(0.99 - 1.89)	0.055
Hypothyroidism	0.87	(0.61 - 1.21)	0.415
Lupus/SLE	0.85	(0.22 - 2.71)	0.791
Chronic Pain/Migraine	0.63	(0.50 - 0.79)	<0.001
Prediabetes	0.43	(0.23 - 0.75)	0.005
Long COVID	0.00	(NA - 661660.69)	0.963

Multivariable logistic regression predicting any inpatient hospitalization in 2025, adjusting for all conditions listed simultaneously. OR > 1 indicates increased odds of hospitalization. Bold/colored rows have a meaningfully large odds ratio (>1.5 or <0.67), not just a significant p-value.

Several chronic conditions were strongly associated with inpatient hospitalization after accounting for the other conditions included in the model. Sickle cell disease had the largest estimated association, with 9.33 times the odds of hospitalization compared with individuals without the condition, holding the other modeled conditions constant. Social Determinants of Health and feeding difficulty were also strongly associated with hospitalization, with adjusted odds ratios of 6.07 and 5.38, respectively. Rheumatoid arthritis was associated with 3.52 times the odds of hospitalization.

Other conditions with meaningfully elevated hospitalization odds included urinary tract infection, cardiac disease, GI functional disorders, epilepsy, tobacco use, liver disease, traumatic brain injury, asthma, chronic kidney disease, Metabolic Risk Factors, COPD, and cancer. In contrast, chronic pain/migraine and prediabetes were associated with lower adjusted odds of hospitalization. These below-one associations should not be interpreted as evidence that the conditions are protective, as they reflect relationships within a multivariable model that simultaneously accounts for the other conditions included.

The association with Social Determinants of Health is particularly notable. Although documented SDoH concerns were less prevalent in Cass County than in the remainder of the region, individuals with an SDoH diagnosis had substantially higher adjusted odds of hospitalization. This suggests that identified social and economic needs may be an important marker of elevated acute-care risk among the individuals for whom those needs are documented.

While individual conditions provide useful information about hospitalization risk, the preceding analyses also demonstrate the importance of overall disease burden. Many Medicaid enrollees experience multiple chronic and behavioral health conditions simultaneously. Examining these conditions together provides a more complete picture of health complexity and its relationship with healthcare utilization than considering individual diagnoses in isolation.

7. Inpatient and Emergency Department Utilization

Emergency department visits and inpatient hospitalizations represent some of the most intensive forms of healthcare utilization. Examining these patterns helps identify populations with greater healthcare needs and may highlight opportunities for prevention, care coordination, and earlier intervention. This section summarizes inpatient and emergency department utilization during 2025 and examines how utilization varies by age and behavioral health diagnosis group.

7.1. Overview and Methods

Medicaid inpatient and emergency department (ED) encounters during 2025 were analyzed to assess patterns of acute healthcare utilization in Cass County. The analysis included PIHP- and CMH-funded behavioral health inpatient services, including behavioral health state inpatient services, as well as acute medical inpatient and ED services funded by Medicaid Health Plans and Medicaid Fee-for-Service.

ED visits and medical inpatient days with a primary substance use service diagnosis were not available for this report because of 42 CFR Part 2 privacy protections. As a result, ED and medical inpatient utilization among individuals with substance use disorders is underrepresented in the analyses that follow.

For this analysis, an ED visit or inpatient day was classified as behavioral when the principal service diagnosis associated with the claim was behavioral and as medical when it was not. If multiple ED claims were billed on the same day and included both behavioral and medical principal service diagnoses, the visit was counted in both categories.

7.2. Overall Utilization

The following summary provides an overview of medical and behavioral health ED and inpatient utilization during 2025. Percentages represent the proportion of enrollees with at least one visit or inpatient day, while averages reflect utilization across the full Medicaid population, including individuals with no utilization during the year.

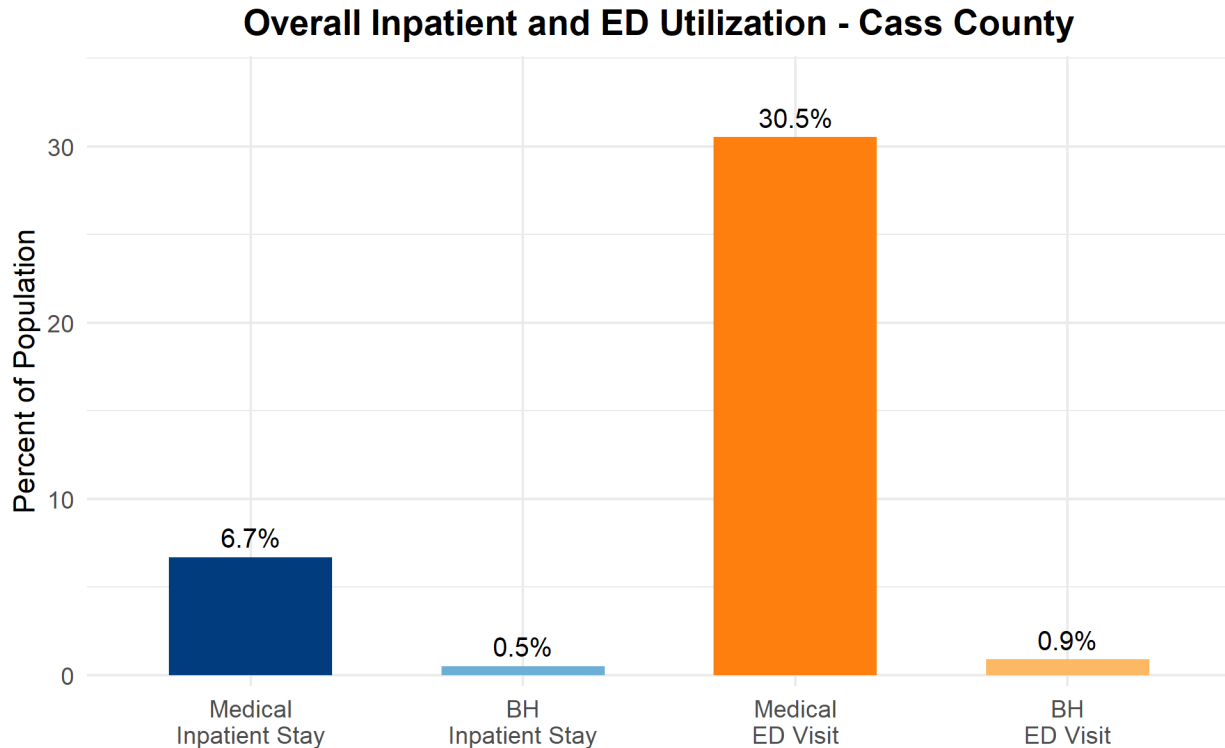


Figure 11: *Percent of Medicaid enrollees with at least one inpatient stay or emergency department visit, by service type, 2025.*

Medical emergency department use was the most common form of acute-care utilization, with 30.5% of enrollees having at least one medical ED visit during 2025. In comparison, 6.7% had at least one medical inpatient day, 0.9% had a behavioral health ED visit, and 0.5% had a behavioral health inpatient day. Across the full Medicaid population, enrollees averaged 1.95 medical ED visits and 0.04 behavioral health ED visits, along with 7.17 medical inpatient days and 1.03 behavioral health inpatient days.

7.3. Utilization by Age

Patterns of healthcare utilization vary across the lifespan as healthcare needs change with age. The following figures compare average medical and behavioral health ED visits and inpatient days across age groups during 2025.

7.3.1. Emergency Department Visits

The figure below compares average medical and behavioral health ED visits per enrollee across age groups.

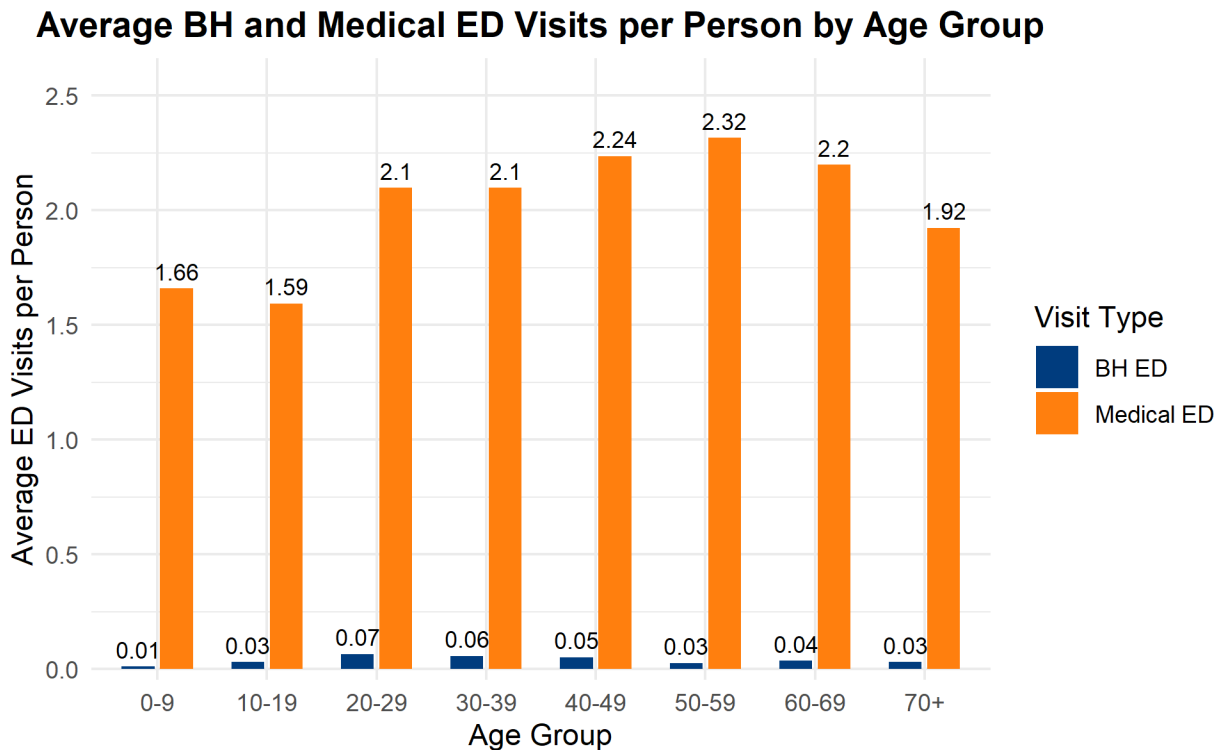


Figure 12: Average number of ED visits per Medicaid enrollee stratified by age group and visit type.

Medical ED utilization increased from childhood through middle adulthood, peaking among adults ages 50–59 at 2.32 visits per person before declining somewhat at older ages. Behavioral health ED utilization was much lower overall and showed a different age pattern, with the highest average rates among adolescents and younger adults. Behavioral health ED visits peaked among ages 20–29 at 0.07 visits per person and then declined steadily with age.

7.3.2. Inpatient Utilization

The figure below compares average medical and behavioral health inpatient days per enrollee across age groups.

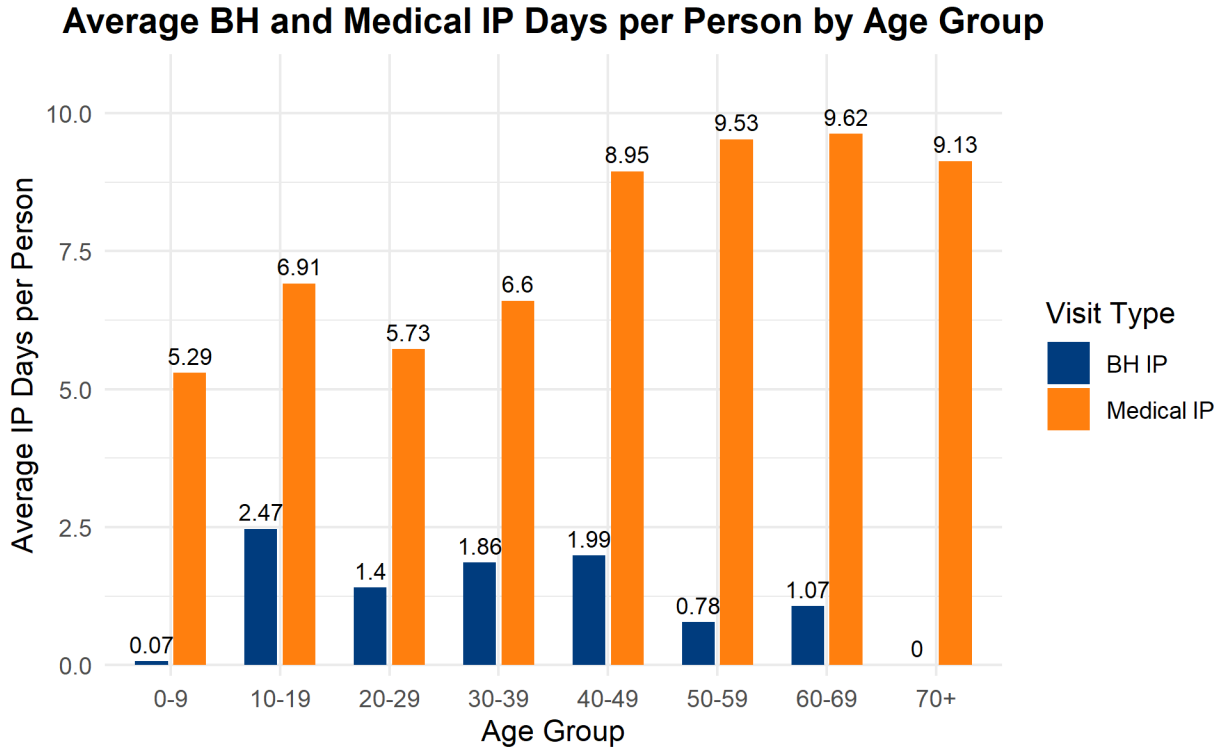


Figure 13: Average number of IP days per Medicaid enrollee stratified by age group and stay type.

Medical inpatient utilization increased overall with age, particularly beginning in middle adulthood. The highest average number of medical inpatient days was observed among adults ages 60–69 at 9.62 days per person, followed closely by ages 50–59 at 9.53 and age 70 and older at 9.13.

Behavioral health inpatient utilization followed a different age pattern, with the highest average among adolescents ages 10–19 at 2.47 days per person. Utilization remained elevated among adults ages 20–49, including 1.99 days among ages 40–49, before declining in older age groups.

7.4. Utilization Among Individuals with Behavioral Health Diagnoses

The following analyses examine medical and behavioral health utilization across the primary behavioral health diagnosis groups defined earlier in this report. Trends from 2022 through 2025 show average utilization per enrollee over time, while 2025 age-stratified comparisons help account for differences in age distribution across behavioral health populations.

For the age-stratified comparisons, each behavioral health diagnosis group is compared with enrollees in the same age bracket who had no behavioral health diagnosis. Ratios above 1 indicate higher average utilization than the same-age no-BH-diagnosis comparison group, while ratios below 1 indicate lower utilization.

7.4.1. Medical Emergency Department Visits

The figure and table below show average medical ED visits per enrollee by primary behavioral health diagnosis group from 2022 through 2025. The figure highlights changes over time, while the accompanying table provides the annual values and uses shading to make differences across groups easier to identify.

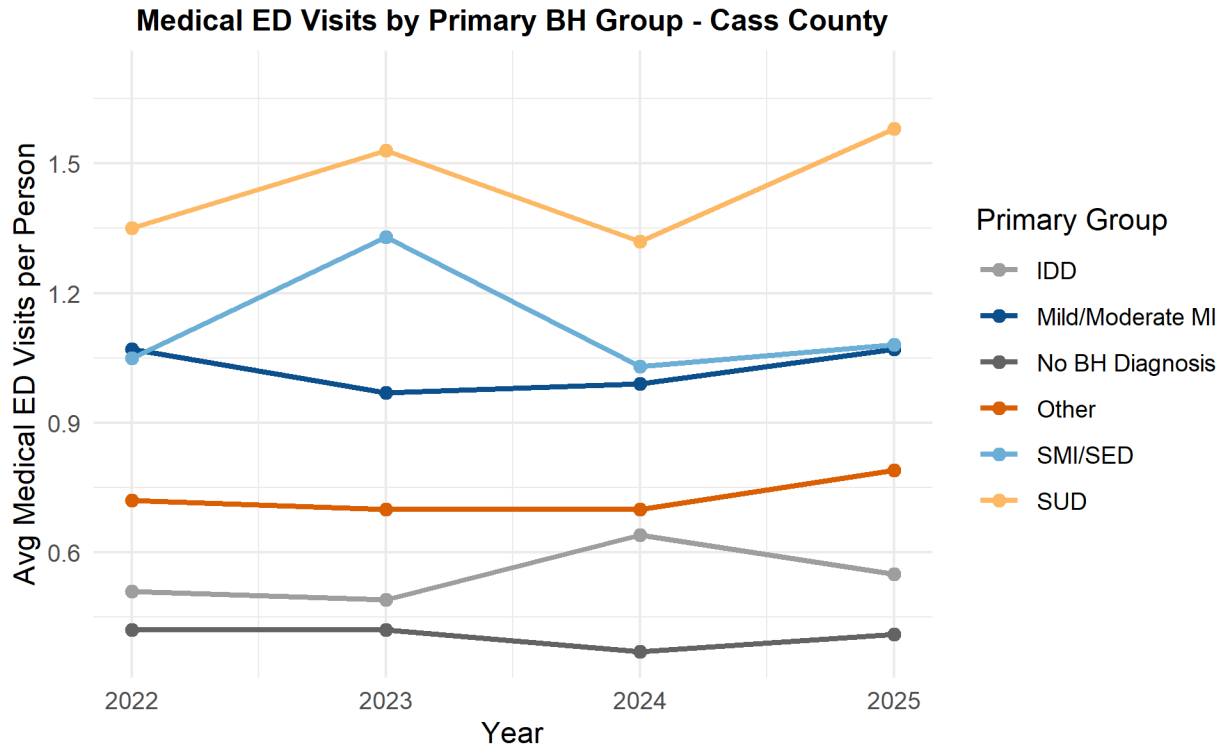


Figure 14: Average medical ED visits per person by primary BH group, 2022-2025.

Table 22. Average Medical ED Visits by Primary BH Group and Year - Cass County

Average visits per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.51	0.49	0.64	0.55
Mild/Moderate MI	1.07	0.97	0.99	1.07
No BH Diagnosis	0.42	0.42	0.37	0.41
Other	0.72	0.70	0.70	0.79
SMI/SED	1.05	1.33	1.03	1.08
SUD	1.35	1.53	1.32	1.58

Medical ED utilization was consistently higher among enrollees with behavioral health diagnoses than among those with no behavioral health diagnosis. In 2025, individuals with SUD had the highest average medical ED utilization at 1.58 visits per person, followed by SMI/SED at 1.08 and Mild/Moderate MI at 1.07. Enrollees with no behavioral health diagnosis averaged 0.41 medical ED visits per person. Utilization patterns were relatively stable from 2022 through 2025, although SMI/SED and SUD remained persistently elevated.

The following table presents age-stratified risk ratios for having at least one medical ED visit in 2025, comparing each behavioral health diagnosis group with enrollees in the same age bracket who had no behavioral health diagnosis.

Table 23. Risk Ratios for Medical ED Visits - Cass County

Risk of 1+ medical ED visits compared with individuals with no BH diagnosis, by age bracket (2025)

Age Bracket	IDD	Mild/Moderate MI	Other	SMI/SED	SUD
0-9	1.23	1.19	1.46	0.62	N/A
10-19	0.99	1.57	1.50	2.69	2.39
20-29	1.12	1.99	1.47	2.16	2.17
30-39	0.32	1.74	1.77	1.80	2.17
40-49	0.49	1.98	1.13	1.64	2.07
50-59	1.25	2.21	2.63	1.95	2.14
60-69	1.98	2.35	3.27	1.94	1.71
70+	3.37	3.27	2.82	3.21	3.37

Risk ratio compares the proportion with at least one utilization event with the same-age No BH Diagnosis group. "N/A" indicates the reference group's risk was 0, so a risk ratio could not be calculated.

The elevated medical ED utilization observed among behavioral health populations also remained evident when comparing the likelihood of any ED use within the same age groups. SUD and SMI/SED showed some of the highest relative risks across most age brackets. For example, adolescents ages 10–19 with SUD were 3.27 times as likely to have at least one medical ED visit as same-age enrollees without a behavioral health diagnosis, while those with SMI/SED were 2.35 times as likely. Elevated risk persisted across adulthood, with SUD generally associated with the highest or among the highest relative risks.

Medical ED utilization among individuals with SUD should be interpreted cautiously because ED services with a primary substance use diagnosis are not fully represented in the available data due to 42 CFR Part 2 restrictions.

7.4.2. Behavioral Health Emergency Department Visits

The figure and table below show average behavioral health ED visits per enrollee by primary behavioral health diagnosis group from 2022 through 2025. The figure highlights changes over time, while the accompanying table provides the annual values and uses shading to make differences across groups easier to identify.

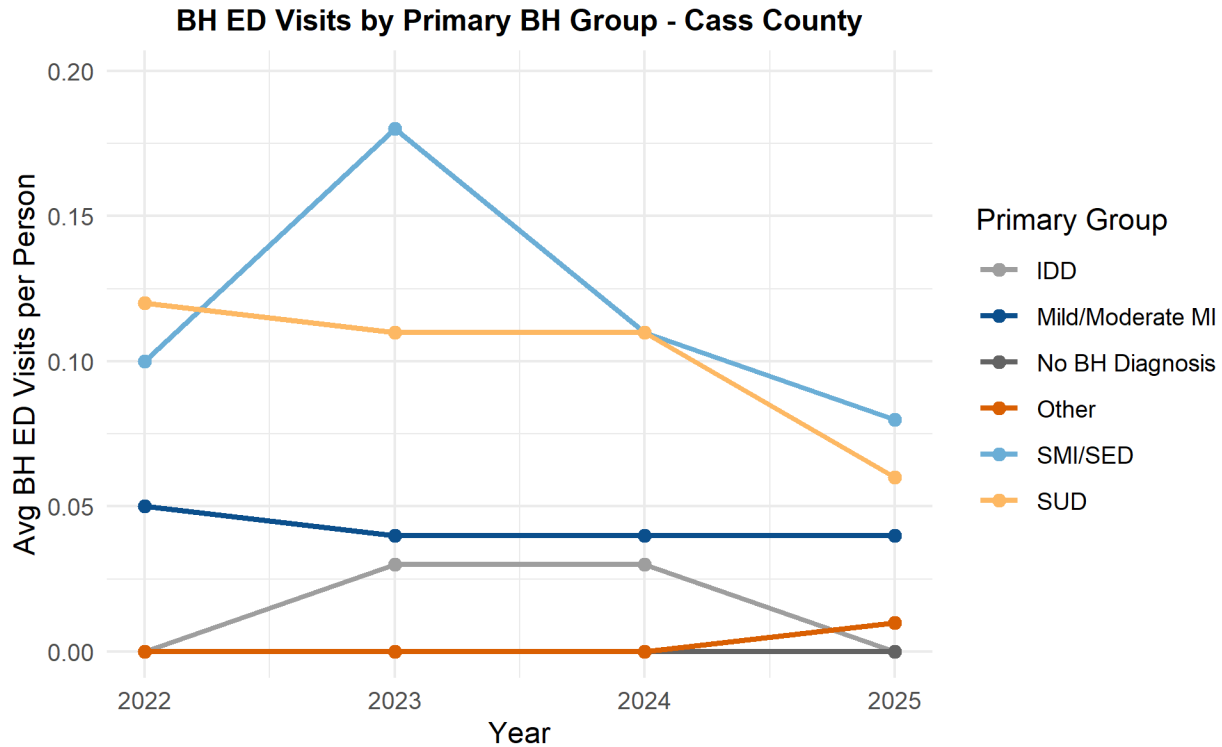


Figure 15: Average BH ED visits per person by primary BH group, 2022-2025.

Table 24. Average BH ED Visits by Primary BH Group and Year - Cass County

Average visits per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.00	0.03	0.03	0.00
Mild/Moderate MI	0.05	0.04	0.04	0.04
No BH Diagnosis	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.01
SMI/SED	0.10	0.18	0.11	0.08
SUD	0.12	0.11	0.11	0.06

Behavioral health ED utilization was concentrated primarily among individuals with SMI/SED and SUD. In 2025, the SMI/SED group had the highest average behavioral health ED utilization at 0.08 visits per enrollee, followed by SUD at 0.06. Utilization was substantially lower among the remaining behavioral health groups and was near zero among individuals without a behavioral health diagnosis.

The following table further breaks down 2025 average utilization by age bracket to examine whether differences across primary behavioral health groups are consistent across age groups.

Table 25. Average BH ED Visits by Age Bracket and Primary BH Group - Cass County

Average visits per person, by age bracket (2025)

Age Bracket	IDD	Mild/Moderate MI	No BH Diagnosis	Other	SMI/SED	SUD
0-9	0.00	0.02	0.00	0.00	0.23	
10-19	0.00	0.03	0.00	0.00	0.04	0.00
20-29	0.02	0.04	0.00	0.14	0.15	0.06
30-39	0.00	0.05	0.00	0.00	0.09	0.09
40-49	0.00	0.04	0.00	0.00	0.08	0.06
50-59	0.00	0.02	0.00	0.00	0.02	0.04
60-69	0.00	0.05	0.00	0.00	0.01	0.00
70+	0.00	0.02	0.00	0.00	0.14	0.00

Age-specific patterns show that elevated behavioral health ED utilization among individuals with SMI/SED occurred across the lifespan, with the highest average observed among children ages 0-9. SUD-related behavioral health ED utilization was most prominent among working-age adults. These findings suggest that crisis-oriented behavioral health utilization is particularly concentrated among populations with more severe or complex behavioral health needs.

7.4.3. Medical Inpatient Utilization

The figure and table below show average medical inpatient days per enrollee by primary behavioral health diagnosis group from 2022 through 2025. The figure highlights changes over time, while the accompanying table provides the annual values and uses shading to make differences across groups easier to identify.

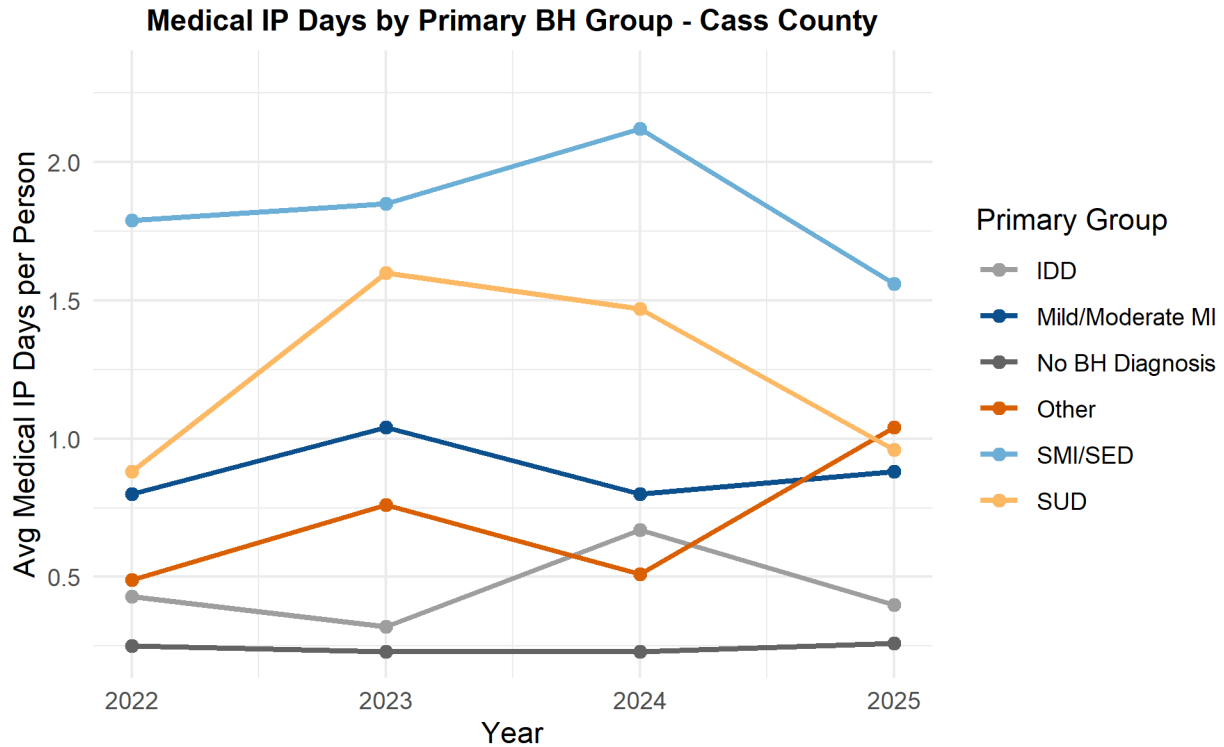


Figure 16: Average medical inpatient days per person by primary BH group, 2022-2025.

Table 26. Average Medical IP Days by Primary BH Group and Year - Cass County

Average days per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.43	0.32	0.67	0.40
Mild/Moderate MI	0.80	1.04	0.80	0.88
No BH Diagnosis	0.25	0.23	0.23	0.26
Other	0.49	0.76	0.51	1.04
SMI/SED	1.79	1.85	2.12	1.56
SUD	0.88	1.60	1.47	0.96

Medical inpatient utilization was consistently higher among enrollees with behavioral health diagnoses than among those without a behavioral health diagnosis. In 2025, individuals with SMI/SED had the highest average medical inpatient utilization at 1.56 days per enrollee, followed by the Other group at 1.04 days and SUD at 0.96 days. Individuals without a behavioral health diagnosis averaged 0.26 medical inpatient days.

SMI/SED and SUD showed particularly elevated utilization across the study period, with both reaching their highest averages in 2024 before declining in 2025. SMI/SED decreased from 2.12 days in 2024 to 1.56 in 2025, while SUD decreased from 1.47 to 0.96. The Other group showed a different pattern, increasing to its highest average of 1.04 days in 2025.

The following table presents age-stratified risk ratios for having any medical inpatient utilization in 2025, comparing each behavioral health diagnosis group with enrollees in the same age bracket who had no behavioral health diagnosis.

Table 27. Risk Ratios for Medical Inpatient Utilization - Cass County

Compared to individuals with no BH diagnosis, by age bracket (2025)

Age Bracket	IDD	Mild/Moderate MI	Other	SMI/SED	SUD
0-9	0.16	0.10	0.43	0.94	N/A
10-19	3.74	5.62	4.99	21.03	0.00
20-29	1.12	2.44	2.34	3.11	1.93
30-39	1.94	2.01	5.33	2.31	2.93
40-49	3.56	6.81	0.00	7.53	7.02
50-59	3.37	5.51	7.09	4.65	6.51
60-69	0.00	3.40	8.28	1.52	2.96
70+	4.06	3.69	3.95	3.09	4.06

Risk ratio compares the proportion with at least one utilization event with the same-age No BH Diagnosis group. "N/A" indicates the reference group's risk was 0, so a risk ratio could not be calculated.

The higher medical inpatient utilization observed among behavioral health populations was also evident when comparing the likelihood of any inpatient use within the same age groups. Among adolescents ages 10–19, SMI/SED showed a particularly large relative risk at 21.03 compared with same-age enrollees without a behavioral health diagnosis. Mild/Moderate MI, Other, and IDD were also associated with elevated inpatient risk in this age group.

Elevated risk persisted throughout adulthood across several behavioral health groups. SMI/SED and SUD were consistently elevated across most adult age brackets, while Mild/Moderate MI and the Other diagnosis group also showed substantial relative risks at

several ages. These age-stratified comparisons indicate that higher medical inpatient utilization among behavioral health populations is not explained by age alone.

Very large risk ratios should be interpreted alongside the underlying hospitalization rates and subgroup sizes, as low baseline utilization can produce large relative differences.

7.4.4. Behavioral Health Inpatient Utilization

The figure and table below show average behavioral health inpatient days per enrollee by primary behavioral health diagnosis group from 2022 through 2025. The figure highlights changes over time, while the accompanying table provides the annual values and uses shading to make differences across groups easier to identify.

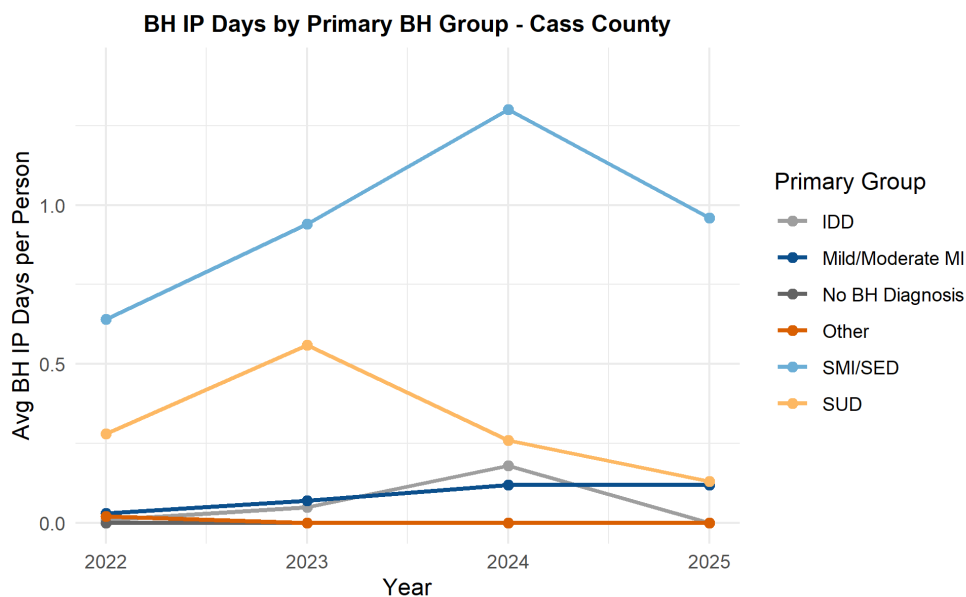


Figure 17: Average BH inpatient days per person by primary BH group, 2022-2025.

Table 28. Average BH IP Days by Primary BH Group and Year - Cass County

Average days per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.01	0.05	0.18	0.00
Mild/Moderate MI	0.03	0.07	0.12	0.12
No BH Diagnosis	0.00	0.00	0.00	0.00
Other	0.02	0.00	0.00	0.00
SMI/SED	0.64	0.94	1.30	0.96
SUD	0.28	0.56	0.26	0.13

Behavioral health inpatient utilization was most heavily concentrated among individuals with SMI/SED throughout the study period. Average behavioral health inpatient days in this group increased from 0.64 per enrollee in 2022 to a peak of 1.30 in 2024 before declining to 0.96 in 2025.

SUD had the second-highest utilization in 2025 at 0.13 days per enrollee, although its utilization also declined from earlier years after reaching 0.56 days in 2023. Behavioral health inpatient utilization remained substantially lower among the remaining diagnosis groups, with Mild/Moderate MI averaging 0.12 days in 2025 and IDD and Other at 0.00.

The following table breaks the 2025 average down further by age bracket, to show whether the relationship between primary BH group and BH inpatient utilization holds consistently across age groups.

Table 29. Average BH IP Days by Age Bracket and Primary BH Group - Cass County

Average days per person, by age bracket (2025)

Age Bracket	IDD	Mild/Moderate MI	No BH Diagnosis	Other	SMI/SED	SUD
0-9	0.00	0.00	0.00	0.00	0.73	
10-19	0.00	0.06	0.00	0.00	0.81	0.00
20-29	0.00	0.14	0.00	0.00	1.59	0.00
30-39	0.00	0.13	0.00	0.00	1.38	0.16
40-49	0.00	0.04	0.00	0.00	1.24	0.17
50-59	0.00	0.10	0.00	0.00	0.34	0.20
60-69	0.00	0.56	0.00	0.00	0.23	0.00
70+	0.00	0.00	0.00	0.00	0.00	0.00

SMI/SED had the highest average behavioral health inpatient utilization across most age groups in Cass County. Utilization was highest among adults ages 20–29 at 1.59 days per person, followed by ages 30–39 at 1.38 and ages 40–49 at 1.24. SMI/SED utilization was also elevated among children and adolescents before declining in later adulthood.

SUD-related behavioral health inpatient utilization was much lower overall and was concentrated among working-age adults, reaching its highest average among ages 50–59 at 0.20 days per person. Mild/Moderate MI was generally associated with relatively low inpatient utilization, although adults ages 60–69 stood out at 0.56 days per person. No behavioral health inpatient days were observed among adults age 70 and older in 2025.

Overall, the concentration of behavioral health inpatient utilization among individuals with SMI/SED, particularly from adolescence through middle adulthood, identifies this population as an important focus for crisis prevention, transitions of care, and ongoing community-based behavioral health supports.

7.5. Medical Emergency Department and Hospital Utilization by Type of Behavioral Health Diagnosis

The analyses above compare utilization across the broader primary behavioral health diagnosis groups used throughout this report. The following figure provides a more detailed view by examining the most common specific behavioral health diagnosis categories.

Average medical ED visits and medical inpatient days are shown together to illustrate how patterns of acute medical utilization differ across behavioral health diagnoses. Diagnosis categories appearing farther to the right have higher average medical ED utilization, while those appearing higher on the figure have higher average medical inpatient utilization.

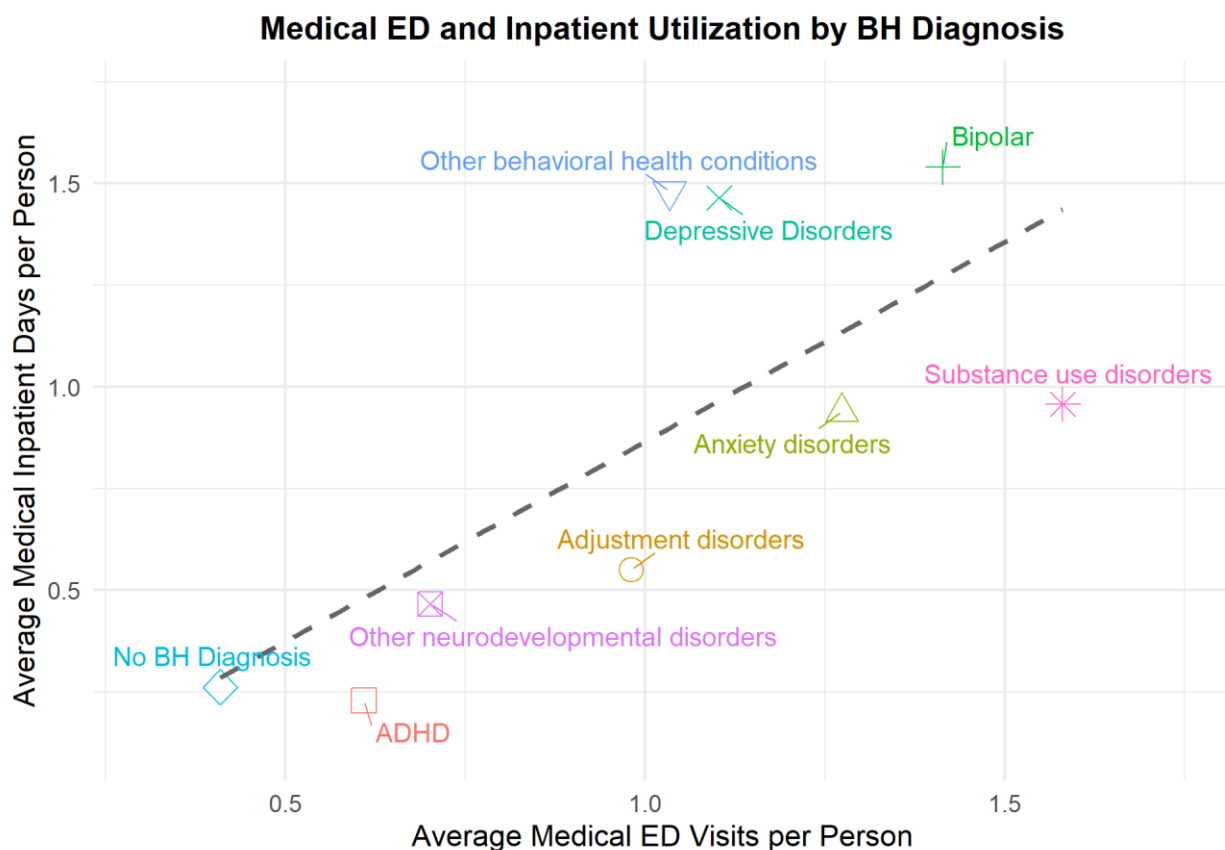


Figure 18: Average medical ED visits and inpatient days per Medicaid enrollee among the most common behavioral health diagnosis categories.

Acute medical utilization differed substantially across specific behavioral health diagnosis categories. Bipolar disorder stood out with the highest average medical inpatient utilization and among the highest medical ED utilization. Substance use disorders had the highest average medical ED utilization but substantially lower inpatient use than bipolar disorder. Depressive disorders and Other behavioral health conditions also showed relatively high inpatient utilization, while ADHD and adjustment disorders were lower on both measures.

The figure illustrates that higher medical ED utilization does not necessarily correspond with higher inpatient utilization. Substance use disorders had the highest ED utilization at approximately 1.6 visits per person but averaged fewer than 1 inpatient day, while bipolar disorder had slightly lower ED utilization but approximately 1.5 inpatient days per person. Depressive disorders and Other behavioral health conditions showed another pattern, with moderate ED utilization but comparatively high inpatient use. These differences suggest that specific behavioral health conditions may be associated with distinct patterns of acute medical need and may require different approaches to care coordination and prevention.

Medical ED and inpatient utilization among individuals with substance use disorders may be underrepresented because services with a primary substance use diagnosis are not fully available in the data.

Together, these analyses demonstrate that healthcare utilization varies substantially across behavioral health populations. Differences are evident in both emergency department and inpatient use and persist across multiple years and age groups. The consistently elevated utilization observed among populations with SMI/SED, SUD, and several specific serious behavioral health diagnoses reinforces the importance of integrated medical and behavioral health care, care coordination, and strategies aimed at reducing avoidable acute-care use.

8. Multimorbidity and Hospitalization Risk

8.1. Overview and Methodology

Individuals with multiple chronic and behavioral health conditions often have more complex healthcare needs, making care coordination, resource planning, and prevention efforts more challenging (Skou et al., 2022). Understanding which conditions commonly occur together can help identify groups of individuals with similar healthcare needs and support more targeted interventions.

To better understand these patterns, this report uses **latent class analysis (LCA)**. LCA is a statistical method used to identify unobserved groups within a population based on patterns across multiple observed characteristics (Sinha et al., 2021). Rather than examining one diagnosis at a time, LCA considers an individual's broader pattern of chronic and behavioral health conditions and groups people with similar profiles together. Unlike approaches that require disease combinations to be defined in advance, LCA identifies these patterns directly from the data. LCA has been used in healthcare research to identify patterns of multimorbidity and examine differences in healthcare utilization across the resulting groups (Whitson et al., 2016).

The analysis was conducted once at the regional level using all SWMBH Medicaid enrollees who were ever diagnosed with at least one condition of interest between 2022 and 2025. Based on the overall patterns of co-occurring conditions, six distinct multimorbidity classes were identified:

- **Low Diagnosis Complexity** - Few diagnosed chronic or behavioral health conditions, with no condition strongly elevated relative to the other classes.
- **Metabolic Health Complexity** - Predominantly characterized by metabolic syndrome, with modest elevations in related chronic conditions such as cardiac disease, chronic kidney disease, prediabetes, and tobacco use.
- **Anxiety and Depressive Disorders** - Primarily characterized by elevated anxiety and depressive disorders, with some additional behavioral health conditions but comparatively lower chronic physical health burden.
- **High Chronic Complexity** - Multiple co-occurring chronic physical health conditions, including metabolic, cardiovascular, gastrointestinal, respiratory, kidney, liver, vascular, and chronic pain-related conditions.
- **Neurodevelopmental Disorders & IDD** - Predominantly characterized by ADHD, other neurodevelopmental conditions, impulse control or conduct disorders, and intellectual/developmental disabilities.
- **Complex Behavioral Health** - Multiple co-occurring behavioral health conditions, including anxiety, depression, PTSD, bipolar disorder, substance use disorders, schizophrenia or psychosis, personality disorders, and related conditions.

Every enrollee in the ever-diagnosed 2022–2025 population was assigned to the single class that best matched their overall pattern of diagnoses. Because class assignment was

based on diagnoses accumulated over the full four-year period, the classes represent longer-term health profiles rather than an individual's health status during 2025 alone.

Once each enrollee was assigned to a multimorbidity class, the classes were examined to better understand how common each health profile was within the population and whether different profiles were associated with differences in healthcare utilization. Rather than focusing on individual diagnoses, the following analyses compare groups of individuals with similar overall patterns of chronic and behavioral health conditions.

8.2. Multimorbidity Class Diagnosis Profiles

The figure below illustrates the diagnosis patterns that distinguish the six multimorbidity classes. Each cell represents the estimated probability that an enrollee assigned to a class had a particular chronic or behavioral health condition. Darker shading and higher percentages indicate that the condition was more characteristic of that class. These probabilities describe the profile of each class and should not be interpreted as the percentage of the full Medicaid population with the condition.

The multimorbidity classes and diagnosis profiles shown here were developed using the full SWMBH regional population. The same regional class definitions were then applied in each county report, allowing class distributions and outcomes to be compared consistently across the region. The figure is therefore identical across the regional and county reports, while the class distribution and utilization results that follow are specific to Cass County.

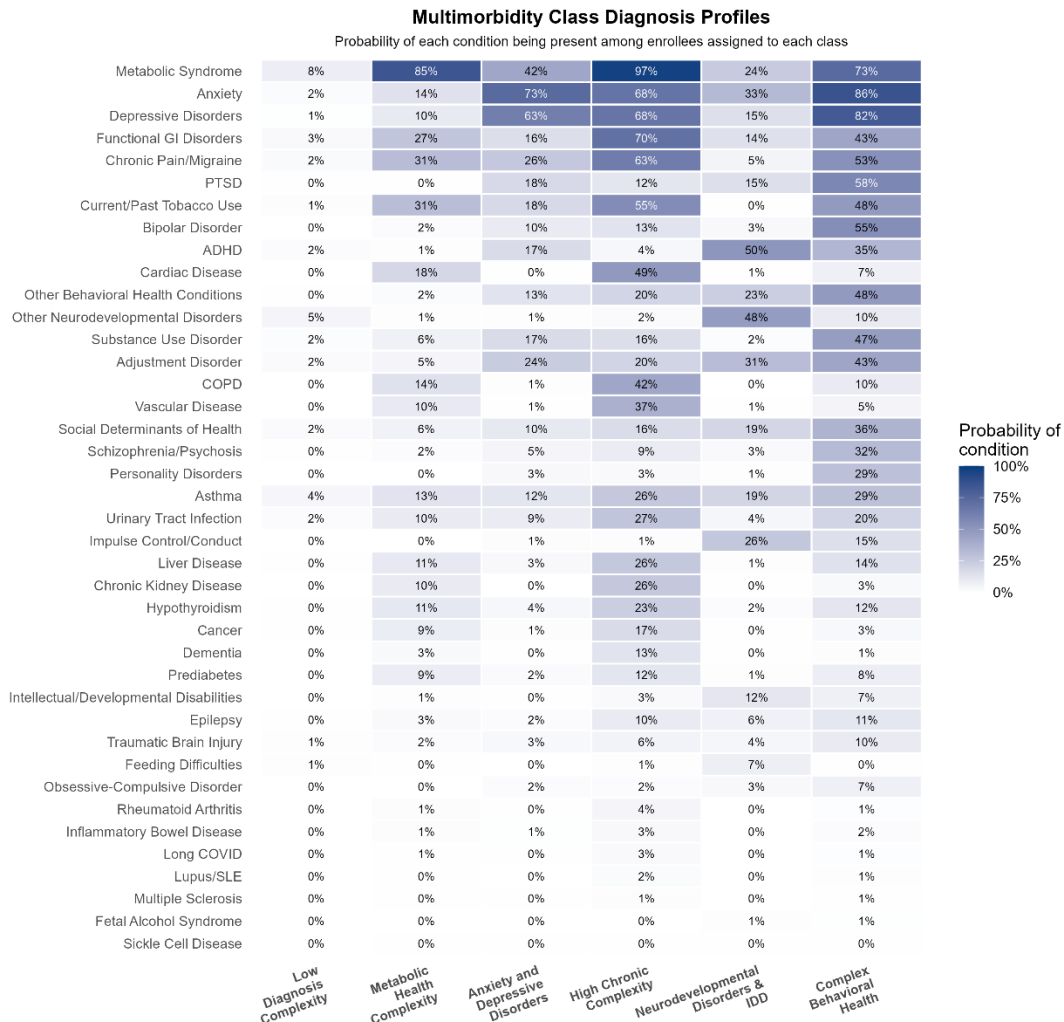


Figure 19: Estimated probability of each condition being present within each regionally defined multimorbidity class.

The six classes reflect distinct patterns of physical and behavioral health complexity. Low Diagnosis Complexity is characterized by relatively low probabilities across nearly all conditions, while Metabolic Health Complexity is dominated by metabolic syndrome and related chronic conditions. Anxiety and Depressive Disorders is distinguished primarily by anxiety and depression with comparatively lower physical health burden. High Chronic Complexity shows broad elevation across multiple physical health conditions, particularly metabolic, cardiac, gastrointestinal, respiratory, kidney, liver, and pain-related diagnoses. Neurodevelopmental Disorders & IDD is characterized by ADHD, other neurodevelopmental conditions, impulse control/conduct disorders, and IDD, while Complex Behavioral Health shows the broadest concentration of co-occurring behavioral health diagnoses, including anxiety, depression, PTSD, bipolar disorder, SUD, schizophrenia/psychosis, and personality disorder.

8.3. Class Distribution and Utilization

The following table summarizes the distribution of multimorbidity classes within the ever-diagnosed Medicaid population and compares emergency department utilization and inpatient utilization across classes. Together, these measures illustrate how overall health complexity is associated with healthcare utilization.

Table 30: Multimorbidity Class Distribution and Utilization - Cass County				
Multimorbidity Class	N	% of Population	ED per 1,000	IP per 1,000
Low Diagnosis Complexity	12,777	59.6%	293.6	216.9
Metabolic Health Complexity	2,672	12.5%	710.0	1,023.1
Anxiety and Depressive Disorders	2,997	14.0%	733.4	375.8
High Chronic Complexity	1,221	5.7%	1,593.0	2,594.8
Neurodevelopmental Disorders & IDD	1,085	5.1%	606.5	364.7
Complex Behavioral Health	675	3.2%	1,948.5	1,867.8

Ever-diagnosed population, 2022-2025. Utilization rates are annualized averages across each person's active years.

Most individuals in the ever-diagnosed population were classified as Low Diagnosis Complexity (59.6%), while the more complex multimorbidity classes represented substantially smaller portions of the population. Despite their smaller size, High Chronic Complexity and Complex Behavioral Health had markedly elevated acute-care utilization. Together, these two classes represented 8.9% of the ever-diagnosed population. Complex Behavioral Health had the highest ED utilization at 1,948.5 visits per 1,000 person-years, while High Chronic Complexity had the highest inpatient utilization at 2,594.8 per 1,000 person-years.

The following figure provides a visual summary of the distribution of multimorbidity classes within the Medicaid population.

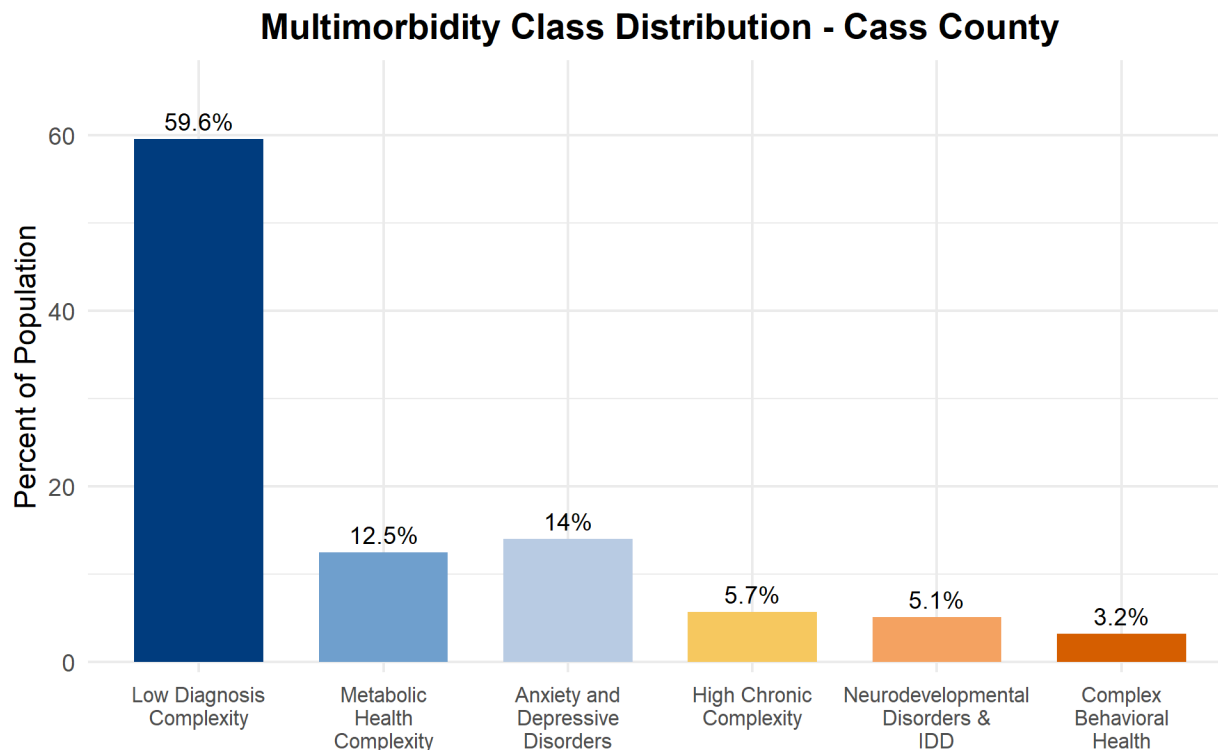


Figure 20: *Percent of the ever-diagnosed population in each multimorbidity class.*

High Chronic Complexity and Complex Behavioral Health represented relatively small portions of the ever-diagnosed population, accounting for 5.7% and 3.2%, respectively. Despite their smaller size, these groups may represent important populations for intensive care coordination, transitions-of-care interventions, and strategies addressing co-occurring behavioral and physical health needs.

Comparing emergency department and inpatient utilization across multimorbidity classes helps identify which health profiles are associated with the greatest use of acute healthcare services. The following figure presents annualized utilization rates for each class.

ED and IP Utilization by Multimorbidity Class - Cass County

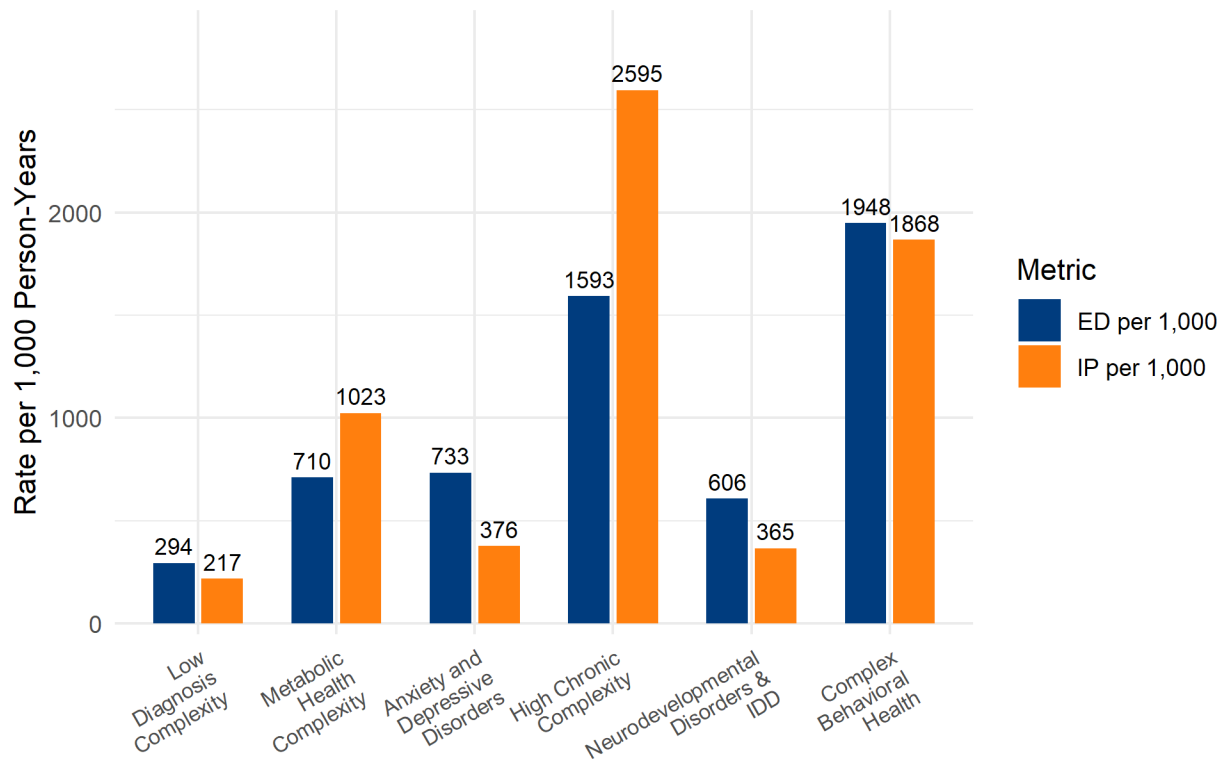


Figure 21: Average ED and IP utilization rates per 1,000 person-years, by multimorbidity class.

Acute-care utilization varied substantially across multimorbidity classes. Complex Behavioral Health had the highest ED utilization at 1,948 visits per 1,000 person-years and also had high inpatient utilization at 1,868 per 1,000. High Chronic Complexity showed a different pattern, with the highest inpatient utilization of any class at 2,595 per 1,000 person-years and the second-highest ED utilization at 1,593 per 1,000.

In contrast, Anxiety and Depressive Disorders and Neurodevelopmental Disorders & IDD had considerably lower inpatient utilization at 376 and 365 per 1,000 person-years, respectively. Metabolic Health Complexity fell between these groups, with 710 ED visits and 1,023 inpatient events per 1,000 person-years. Overall, the findings show that different forms of multimorbidity are associated with distinct patterns of acute-care use, with High Chronic Complexity particularly associated with inpatient utilization and Complex Behavioral Health with elevated use of both ED and inpatient care.

9. Healthcare Quality and Medication Monitoring

9.1. Disease Management Metrics

Monitoring adherence to evidence-based clinical guidelines helps identify opportunities to improve healthcare quality and prevent avoidable complications. This section summarizes selected adult disease management measures reported through the Relias Population Performance platform. These measures evaluate whether eligible Medicaid enrollees received recommended monitoring or treatment for selected conditions.

Measure direction varies across the analyses in this section. For disease management measures, higher percentages generally indicate better adherence to recommended care. Medication utilization rates are descriptive and do not have an inherently favorable direction. For pharmacy quality indicators, lower triggering rates are generally preferable because higher rates indicate that a greater proportion of individuals met criteria for a situation warranting clinical review. Specific interpretation guidance is provided with each analysis. Individuals dually eligible for Medicare and Medicaid are excluded because complete Medicare claims were not available for this analysis.

Table 31. Adult Disease Management Metric Completion - Cass County

Percent completed, 2025

Metric ID	Quality Metric	SWMBH	Cass
343	Presence of at least 84 days of continuous treatment with an Antidepressant medication	62.7%	67.4%
515	Adherence to Mood Stabilizer medications for individuals with bipolar disorder	55.6%	52.7%

Cass County performed above the SWMBH regional rate for continuous antidepressant treatment, with 67.4% meeting the measure compared with 62.7% regionally. For adherence to mood stabilizer medications among individuals with bipolar disorder, Cass County's rate was slightly below the regional rate (52.7% vs. 55.6%). These results suggest stronger performance on antidepressant continuity, while mood stabilizer adherence may warrant continued monitoring.

9.2. Behavioral Pharmacy Analysis

Medication use and medication management are important components of behavioral healthcare quality. The following analyses summarize behavioral health medication utilization, pharmacy quality indicators, and associations between pharmacy quality indicators and hospitalization among adults and children.

9.2.1. Adults

9.2.1.1. Adult General Behavioral Pharmacy Use Data

The following table summarizes behavioral health medication utilization among adults in 2025 and compares Cass County with the overall SWMBH region. Medication utilization rates are descriptive and should not be interpreted as measures in which a higher or lower percentage necessarily represents better performance. Differences may reflect variation in diagnoses, clinical need, prescribing practices, or other population characteristics.

Table 32. Adult Behavioral Health Medication Utilization - Cass County

Percent utilizing, 2025

Medication Class	SWMBH	Cass
Opioids	4.2%	3.8%
Insomnia Agents	3.0%	3.1%
ADHD: Stimulants	2.8%	3.5%
Antipsychotics	5.5%	5.3%
Antidepressants	14.5%	14.6%
Antidepressants: SSRIs	8.7%	8.6%
Mood Stabilizers	2.7%	2.3%
Benzodiazepines	3.4%	3.0%
ADHD Medication	3.3%	4.1%
Antidepressants: TCAs	1.2%	1.6%

Antidepressants were the most commonly utilized behavioral health medication class among adults in Cass County, with 14.6% receiving an antidepressant and 8.6% receiving an SSRI. Antipsychotics were used by 5.3% of adults, while ADHD medications were used by 4.1% and stimulants by 3.5%. Insomnia agents, mood stabilizers, opioids, benzodiazepines, and TCAs each had utilization rates below 5%.

Compared with the SWMBH region overall, adult medication utilization in Cass County was generally similar across most classes. Cass County had somewhat higher utilization of ADHD medications (4.1% vs. 3.3%), stimulants (3.5% vs. 2.8%), and TCAs (1.6% vs. 1.2%). Antidepressant and insomnia-agent utilization were very similar to the regional rates, while opioid, antipsychotic, mood stabilizer, and benzodiazepine utilization were somewhat lower.

9.2.1.2. Adult Quality Indicator Triggering Rates

Pharmacy quality indicators identify medication-related situations that may warrant additional clinical review. For these measures, lower triggering rates are generally preferable because a higher percentage indicates that more individuals met the criteria for a potential medication-management concern. Triggering an indicator does not, however, confirm inappropriate care for any individual.

Table 33. Adult Pharmacy Quality Indicator Triggering Rates - Cass County

Percent triggered, 2025

Metric ID	Quality Metric	SWMBH	Cass
214	Failure to Refill Antipsychotic Medication	11.2%	13.2%
217	Use of four or more psychotropic medications for 60 or more days	3.5%	6.2%
231	Use of Opioids and Benzodiazepines for 30 or More Days	35.3%	27.6%
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	3.9%	3.7%

Among adults in Cass County, the most common pharmacy quality indicator was concurrent use of opioids and benzodiazepines for 30 or more days, which triggered for 27.6% of the population evaluated for that measure. Failure to refill antipsychotic medication triggered for 13.2% of adults, while 6.2% triggered the indicator for use of four or more psychotropic medications for 60 or more days and 3.7% triggered the indicator for multiple prescribers of the same class of psychotropic medications for 45 or more days. Lower triggering rates are generally preferable for these measures because they indicate fewer individuals met criteria for a situation warranting additional clinical review.

Compared with the SWMBH region, Cass County had a lower and therefore more favorable triggering rate for concurrent opioid and benzodiazepine use (27.6% vs. 35.3%) and a slightly lower rate for multiple prescribers of the same psychotropic medication class (3.7% vs. 3.9%). In contrast, Cass County had higher and potentially less favorable triggering rates for failure to refill antipsychotic medication (13.2% vs. 11.2%) and use of four or more psychotropic medications (6.2% vs. 3.5%). These differences may help identify areas for additional clinical review, although triggering an indicator should not be interpreted on its own as evidence of inappropriate prescribing or care.

9.2.1.3. Adult Hospitalization Rates by Quality Indicator

The following table compares hospitalization rates among adults with and without each pharmacy quality indicator. Rates are expressed per 100 individuals, and relative risks compare each quality indicator group with adults who triggered no pharmacy quality indicators.

Table 34. Adult Hospitalization Rates by Pharmacy Quality Indicator - Cass County

Hospitalizations per 100, with risk ratio vs. no QIs triggered (2025)

Metric ID	Quality Indicator	N	% of Population	Total / 100	RR - Total	BH / 100	RR - BH	Non-BH / 100	RR - Non-BH
1	No QIs Triggered	6,236	96.0%	6.8	Ref.	0.5	Ref.	6.2	Ref.
2	1+ QIs Triggered	260	4.0%	35.8	5.29 ↑	3.8	6.97 ↑	31.9	5.13 ↑
515	Adherence to Mood Stabilizer medications for individuals with bipolar disorder	15	0.2%	26.7	3.95 ↑	20.0	36.68 ↑	6.7	1.08
231	Use of opioids and benzodiazepines for 30 or more days	8	0.1%	75.0	11.08 ↑	0.0	0.00 ↓	75.0	12.05 ↑
343	Presence of at least 84 days of continuous treatment with an Antidepressant medication	140	2.2%	13.6	2.01 ↑	2.1	3.85 ↑	11.4	1.83 ↑
214	Failure to refill antipsychotic medication within 30 days of the prescription ending	46	0.7%	10.9	1.61 ↑	8.7	15.96 ↑	2.2	0.35 ↓
217	Use of four or more psychotropic medications for 60 or more days	46	0.7%	13.0	1.92 ↑	0.0	0.00 ↓	13.0	2.09 ↑
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	40	0.6%	15.0	2.22 ↑	2.5	4.59 ↑	12.5	2.01 ↑

Shading with an arrow identifies meaningfully elevated (red ↑, RR > 1.20) or lower (green ↓, RR < 0.83) risk ratios. "Ref." indicates the no-QI reference group.

Adults who triggered at least one pharmacy quality indicator experienced substantially higher hospitalization rates than those who triggered none. Individuals with one or more indicators had 35.8 hospitalizations per 100 people, compared with 6.8 per 100 among adults with no indicators, corresponding to 5.29 times the overall hospitalization risk. Elevated risk was observed for both behavioral health and non-behavioral health hospitalizations.

Several individual indicators were also associated with markedly elevated hospitalization risk. The mood stabilizer indicator had the strongest association with behavioral health

hospitalization, with 36.68 times the risk observed among adults with no quality indicators. This likely reflects the underlying severity and complexity of bipolar disorder among individuals prescribed these medications, rather than an effect of adherence itself. Failure to refill antipsychotic medication and multiple prescribers of the same psychotropic medication class were also associated with substantially elevated behavioral health hospitalization risk. Concurrent opioid and benzodiazepine use showed a different pattern, with no behavioral health hospitalizations observed in this small group but 12.05 times the non-behavioral health hospitalization risk of the reference population.

These findings do not establish that the medication-related indicators caused hospitalization. Several individual indicator groups were also small, including mood stabilizer adherence (N=15) and concurrent opioid and benzodiazepine use (N=8), so the largest risk ratios should be interpreted cautiously. More broadly, the indicators may help identify individuals with greater clinical complexity, medication-management challenges, or care-coordination needs who are also at elevated risk for acute-care utilization.

9.2.2. Children and Adolescents

The same pharmacy analyses were performed for children and adolescents. Because medication recommendations and quality indicators differ between pediatric and adult populations, separate results are presented below.

9.2.2.1. Child General Behavioral Pharmacy Use Data

The following table summarizes behavioral health medication utilization among children and adolescents. As with the adult analysis, medication utilization rates are descriptive and do not have an inherently favorable higher or lower direction.

Table 35. Pediatric Behavioral Health Medication Utilization - Cass County

Percent utilizing, 2025

Medication Class	SWMBH	Cass
Opioids	0.4%	0.4%
Insomnia Agents	0.5%	0.5%
ADHD: Stimulants	5.4%	6.8%
Antipsychotics	1.6%	1.4%
Antidepressants	3.1%	2.7%
Antidepressants: SSRIs	2.6%	2.2%
Mood Stabilizers	0.6%	0.4%
Benzodiazepines	0.3%	0.3%
ADHD Medication	6.1%	7.9%
Antidepressants: TCAs	0.2%	0.2%

ADHD medications were the most commonly utilized behavioral health medication class among children and adolescents in Cass County, with 7.9% receiving an ADHD medication and 6.8% receiving a stimulant. Antidepressants were used by 2.7% of the pediatric population, including 2.2% receiving an SSRI, while antipsychotics were used by 1.4%.

Compared with the SWMBH region overall, Cass County had higher utilization of ADHD medications (7.9% vs. 6.1%) and stimulants (6.8% vs. 5.4%). Utilization of opioids, insomnia agents, benzodiazepines, and TCAs was essentially the same as the regional rate, while antipsychotic, antidepressant, SSRI, and mood stabilizer utilization was somewhat lower.

9.2.2.2. Child Quality Indicator Triggering Rates

Pediatric pharmacy quality indicators identify medication-related situations that may warrant additional clinical review. Lower triggering rates are generally preferable for each of the indicators presented below; however, triggering an indicator does not by itself indicate inappropriate prescribing or care.

Table 36. Pediatric Pharmacy Quality Indicator Triggering Rates - Cass County

Percent triggered, 2025

Metric ID	Quality Metric	SWMBH	Cass
214	Failure to Refill Antipsychotic Medication	10.0%	11.8%
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	1.6%	4.0%
301	Use of Antipsychotic Medication for Member Under the Age of 18 Diagnosed with ADHD	49.8%	47.4%

Pediatric pharmacy quality indicator triggering rates varied substantially by measure. The most common indicator in Cass County was antipsychotic use among children diagnosed with ADHD, which triggered for 47.4% of the eligible population. Failure to refill antipsychotic medication triggered for 11.8%, while multiple prescribers of the same psychotropic medication class triggered for 4.0%. Lower triggering rates are generally preferable for these measures because they indicate fewer children met criteria for a situation warranting additional clinical review.

Compared with the SWMBH region, Cass County had a higher and potentially less favorable rate of failure to refill antipsychotic medication (11.8% vs. 10.0%) and a notably higher rate of multiple prescribers of the same psychotropic medication class (4.0% vs. 1.6%). Antipsychotic use among children diagnosed with ADHD was somewhat lower, and therefore more favorable, in Cass County (47.4% vs. 49.8%). These indicators identify situations that may warrant review and should not be interpreted as evidence of inappropriate prescribing or care without additional clinical context.

9.2.2.3. Child Hospitalization Rates by Quality Indicator

The following table compares hospitalization rates across pediatric pharmacy quality indicator groups using the same methodology described for adults.

Table 37. Pediatric Hospitalization Rates by Pharmacy Quality Indicator - Cass County

Hospitalizations per 100, with risk ratio vs. no QIs triggered (2025)

Metric ID	Quality Indicator	N	% of Population	Total / 100	RR - Total	BH / 100	RR - BH	Non-BH / 100	RR - Non-BH
1	No QIs Triggered	4,238	98.9%	3.4	Ref.	0.1	Ref.	3.2	Ref.
2	1+ QIs Triggered	47	1.1%	8.5	2.54 ↑	4.3	36.45 ↑	4.3	1.33 ↑
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	8	0.2%	25.0	7.46 ↑	12.5	105.95 ↑	12.5	3.87 ↑
214	Failure to refill antipsychotic medication within 30 days of the prescription ending (any diagnosis)	7	0.2%	0.0	0.00 ↓	0.0	0.00 ↓	0.0	0.00 ↓
301	Use of Antipsychotic Medication for Member Under the Age of 18 Diagnosed with ADHD	28	0.7%	7.1	2.12 ↑	3.6	30.51 ↑	3.6	1.11

Shading with an arrow identifies meaningfully elevated (red ↑, RR > 1.20) or lower (green ↓, RR < 0.83) risk ratios. "Ref." indicates the no-QI reference group.

Children and adolescents who triggered at least one pharmacy quality indicator had higher hospitalization rates than those who triggered none. The overall hospitalization rate was 8.5 per 100 among children with one or more indicators compared with 3.4 per 100 among those with none, corresponding to 2.54 times the overall hospitalization risk. The difference was especially pronounced for behavioral health hospitalization, although the very low behavioral health hospitalization rate in the reference group contributed to the large relative risk.

Multiple prescribers of the same psychotropic medication class had the highest overall hospitalization rate at 25.0 per 100 and was associated with elevated behavioral and non-behavioral health hospitalization risk. Antipsychotic use among children diagnosed with ADHD was also associated with higher overall and behavioral health hospitalization risk. In contrast, no hospitalizations were observed among the seven children who triggered the failure-to-refill indicator.

These results should be interpreted cautiously because the individual indicator groups were very small, including only 8 children with multiple prescribers, 7 with failure to refill antipsychotic medication, and 28 with antipsychotic use among children diagnosed with

ADHD. Low baseline behavioral health hospitalization rates also produced very large relative risk estimates.

Across both adults and children, pharmacy quality indicators identified relatively small populations with elevated hospitalization risk. Adults triggering at least one indicator had 5.29 times the overall hospitalization risk of adults triggering none, while children and adolescents had 2.54 times the risk. These associations do not establish that medication-related concerns caused hospitalization, but the indicators may help identify populations with greater clinical complexity, medication-management challenges, or care-coordination needs.

Together, these quality measures provide additional context regarding medication management, adherence to recommended care, and populations that may benefit from further clinical review. They complement the diagnosis, utilization, and multimorbidity findings presented earlier in the report.

10. Conclusion

This Population Health Analysis demonstrates that the health needs of Cass County Medicaid enrollees reflect substantial interaction among behavioral health conditions, chronic physical illness, social needs, healthcare utilization, and quality of care. Examining these areas together provides a more complete view of population health than considering individual diagnoses or services in isolation.

Cass County showed a distinctive behavioral health profile in 2025. Overall behavioral health diagnosis prevalence was significantly lower than in the remainder of the SWMBH region, as were rates for many individual conditions. ADHD was an important exception, with significantly higher prevalence in Cass County and higher use of ADHD medications and stimulants among both adults and children. Full-population behavioral health prevalence increased in 2025, but the matched-cohort analysis showed a slight decline among individuals present in both 2024 and 2025, indicating that behavioral health trends were not uniform across populations or diagnosis categories.

Chronic physical health findings also reflected a mixed pattern. Cass County had lower overall documented chronic-condition prevalence than the remainder of the region, yet individuals with behavioral health diagnoses experienced substantially greater chronic disease burden than those without a behavioral health diagnosis. Dual-eligible working-age adults also showed considerably greater chronic health needs than non-dual adults of the same broad age group. These findings reinforce the importance of considering physical and behavioral health needs together when identifying populations that may benefit from more integrated care.

Social needs may also provide an important signal of acute-care risk. Although documented Social Determinants of Health concerns were less common in Cass County than elsewhere in the region, individuals with an SDoH diagnosis had substantially higher adjusted odds of inpatient hospitalization. This finding suggests that when social and economic needs are identified, they may help identify individuals who could benefit from additional support or care coordination.

Acute-care utilization was particularly elevated among populations with more complex behavioral and physical health profiles. Individuals with SMI/SED and SUD consistently experienced higher medical ED or inpatient utilization, while specific diagnoses showed different patterns of acute medical use. At the multimorbidity level, High Chronic Complexity was especially associated with inpatient utilization, whereas Complex Behavioral Health showed the highest ED utilization. These patterns support continued attention to integrated medical and behavioral healthcare, crisis prevention, transitions of care, and coordination for populations with complex needs.

Healthcare quality and medication-monitoring analyses provide additional areas for targeted review. Cass County performed comparatively well on continuity of antidepressant treatment, while mood stabilizer adherence was slightly below the regional rate. Several adult and pediatric pharmacy quality indicators also identified opportunities for review, particularly psychotropic polypharmacy and multiple prescribers. Individuals triggering pharmacy quality indicators had

substantially higher hospitalization risk, although the small size of several indicator groups and low baseline hospitalization rates require cautious interpretation.

Overall, the findings identify several areas that may warrant continued attention in Cass County, including ADHD-related needs, integrated physical and behavioral healthcare, social needs associated with hospitalization, acute-care utilization among individuals with SMI/SED and SUD, and selected medication-management measures. Findings should be interpreted alongside local knowledge of service availability, access to care, population characteristics, and documentation practices. Continued monitoring can help determine whether these patterns persist and where more focused analysis or quality-improvement efforts may be most useful.

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