



CY 2025 Population Health Report

Saint Joseph

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 Saint Joseph 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 Saint Joseph 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.

- **Saint Joseph County's Medicaid population declined in 2025, while a greater proportion of those remaining enrolled used healthcare services.** Enrollment decreased from 22,072 in 2024 to 18,740 in 2025, while the percentage receiving at least one Medicaid service increased from 76.3% to 78.7%. Behavioral health and chronic condition prevalence also increased in the full 2025 population, while prevalence remained relatively stable among members enrolled in both years. These patterns may reflect a smaller Medicaid population with greater and more complex healthcare needs.
- **Saint Joseph County had a distinct behavioral health profile despite having an overall diagnosis rate similar to the rest of the SWMBH region.** Anxiety, ADHD, substance use disorders, and trauma-related diagnoses were significantly more prevalent, with SUD and trauma-related diagnoses each affecting 6.5% of enrollees compared with 4.7% in the remainder of the region.
- **Behavioral and physical health needs frequently overlapped, particularly among individuals with more complex behavioral health conditions.** Adults and children with behavioral health diagnoses generally had higher chronic condition prevalence than those without a behavioral health diagnosis, with especially broad chronic health burden among SMI/SED and other complex diagnosis groups.
- **SMI/SED and SUD stood out as important acute-care populations.** Individuals with SMI/SED had consistently high behavioral health and medical inpatient utilization, while SUD was associated with elevated emergency department and inpatient utilization across much of adulthood. Elevated medical inpatient risk persisted within age groups, indicating that age alone did not explain these differences.
- **A relatively small share of the population accounted for disproportionately high acute-care utilization.** Complex Behavioral Health and High Chronic Complexity represented only 9.7% of the ever-diagnosed population but had the highest emergency department and inpatient utilization rates, identifying these groups as potential priorities for care coordination and transitions-of-care strategies.
- **Social and economic needs were strongly associated with hospitalization risk.** Documented Social Determinants of Health were associated with nearly three times the adjusted odds of inpatient hospitalization after accounting for the other chronic conditions studied, suggesting that social needs may be important markers of elevated acute-care risk.
- **Pharmacy quality indicators identified relatively small groups with elevated hospitalization risk.** Adults triggering at least one indicator had 3.83 times the overall hospitalization risk of adults triggering none, while pediatric indicators were especially associated with behavioral health hospitalization. Saint Joseph County

also had a higher-than-regional triggering rate for antipsychotic use among children diagnosed with ADHD, suggesting an area for continued clinical review.

3. Who is in the Study

The total Saint Joseph County Medicaid population in 2025 included 18,740 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, 78.7% had at least one Medicaid service during 2025, and 12.8% received at least one PIHP- or CMH-funded service. Enrollees were covered for an average of 9.4 months during the report period.

As shown in Table 1, total Medicaid enrollment declined from 22,072 in 2024 to 18,740 in 2025. At the same time, the percentage of enrollees receiving at least one Medicaid service increased from 76.3% to 78.7%. The percentage receiving PIHP/CMH-funded services also continued to increase, rising from 9.5% in 2022 to 12.8% 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 - Saint Joseph County			
Year	Total Enrollees	1+ Medicaid Service	1+ CMH/PIHP Service
2022	22,609	80.3%	9.5%
2023	23,868	77.9%	10.8%
2024	22,072	76.3%	12.8%
2025	18,740	78.7%	12.8%

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 Saint Joseph 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 Saint Joseph County Enrollees by Zip Code

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

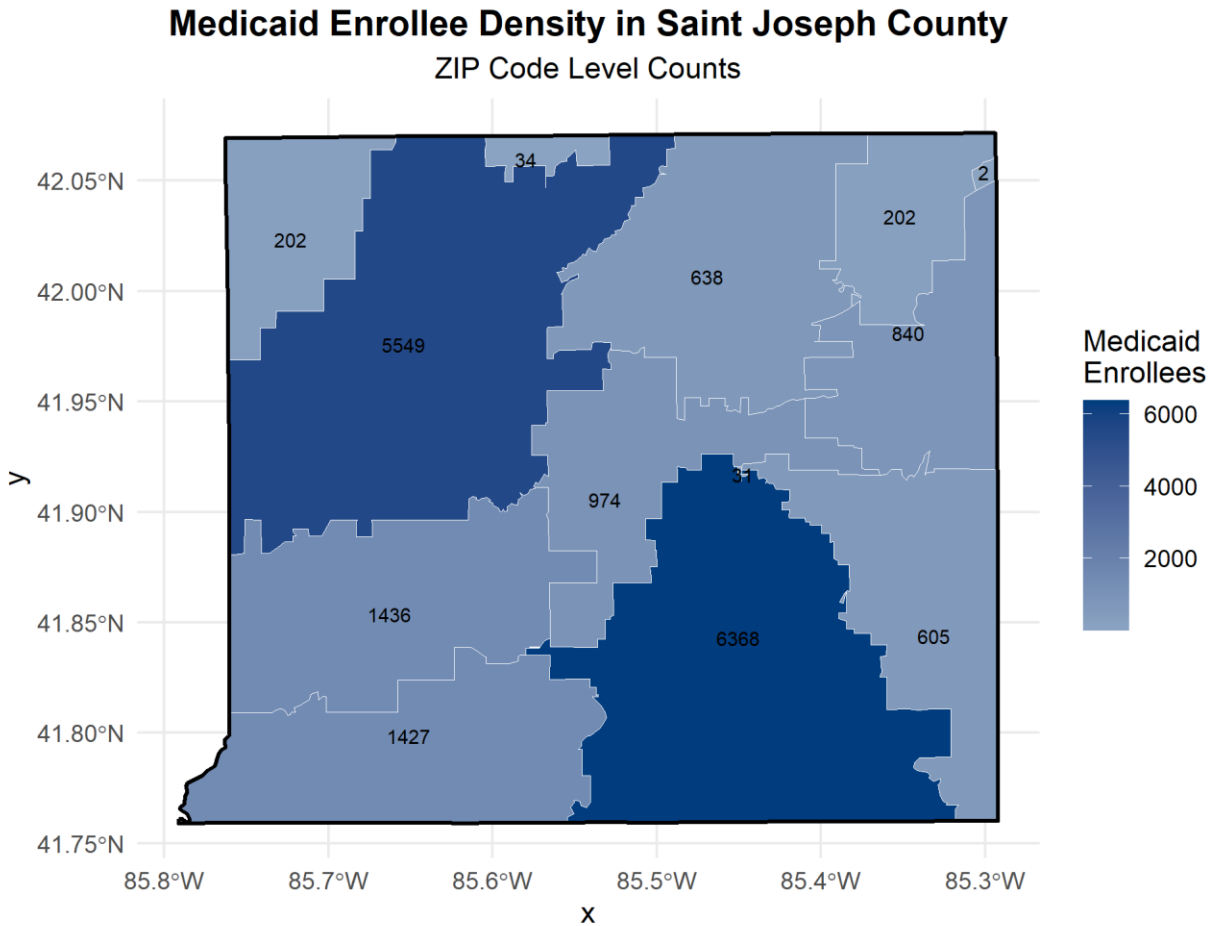


Figure 1: Count of CY 2025 Medicaid enrollees by zip code of address.

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 Saint Joseph County, the average age at the end of 2025 was 28.1 years. Overall, 40.3% of enrollees were younger than 18 years, 53.7% were between 18 and 64 years, and 6% were 65 years or older. The population was 45.7% male and 54.3% female.

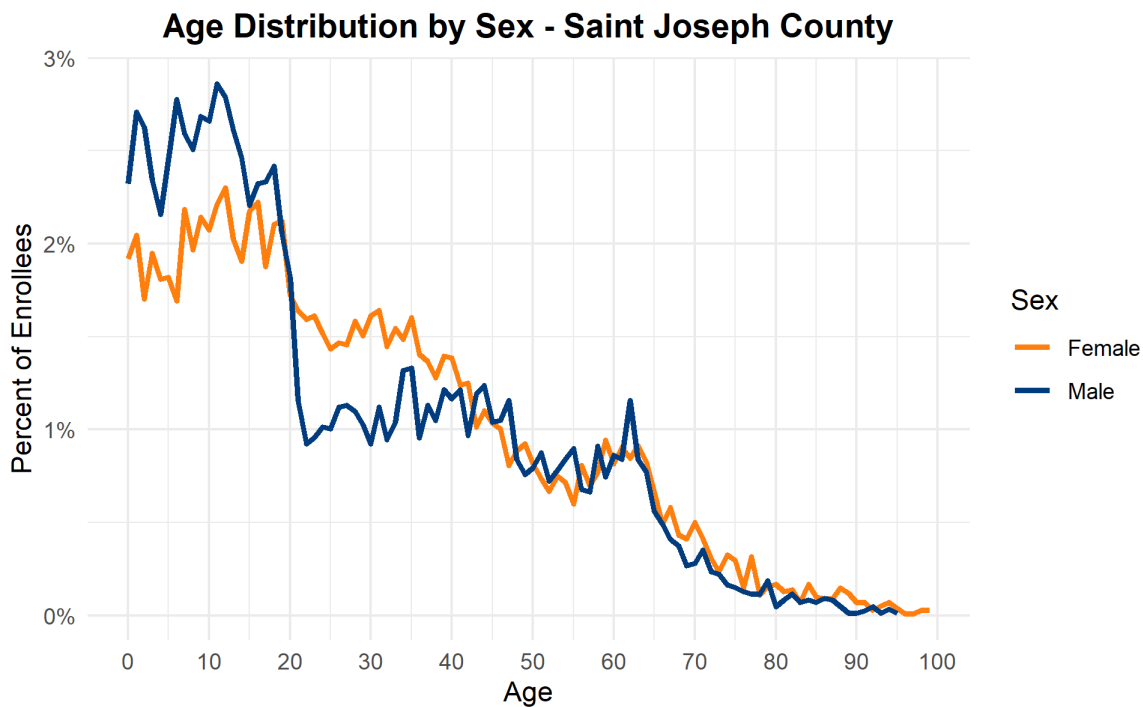


Figure 2: Percent of enrollees at each single year of age, by sex.

Male enrollees make up a noticeably larger share of the population throughout childhood and adolescence. Beginning in early adulthood, female enrollment becomes more prominent, particularly through the 20s and 30s. The distributions become much more similar through middle adulthood, with females again representing a somewhat larger share at many 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 Saint Joseph 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 Saint Joseph County. Overall, 74% identified as White, 11.8% identified as Hispanic or Latino, 7.4% identified as Other Race, 5.7% identified as Black or African American, 0.8% identified as American Indian or Alaska Native, 0.2% identified as Asian, 0.1% identified as Native Hawaiian or Other Pacific Islander.

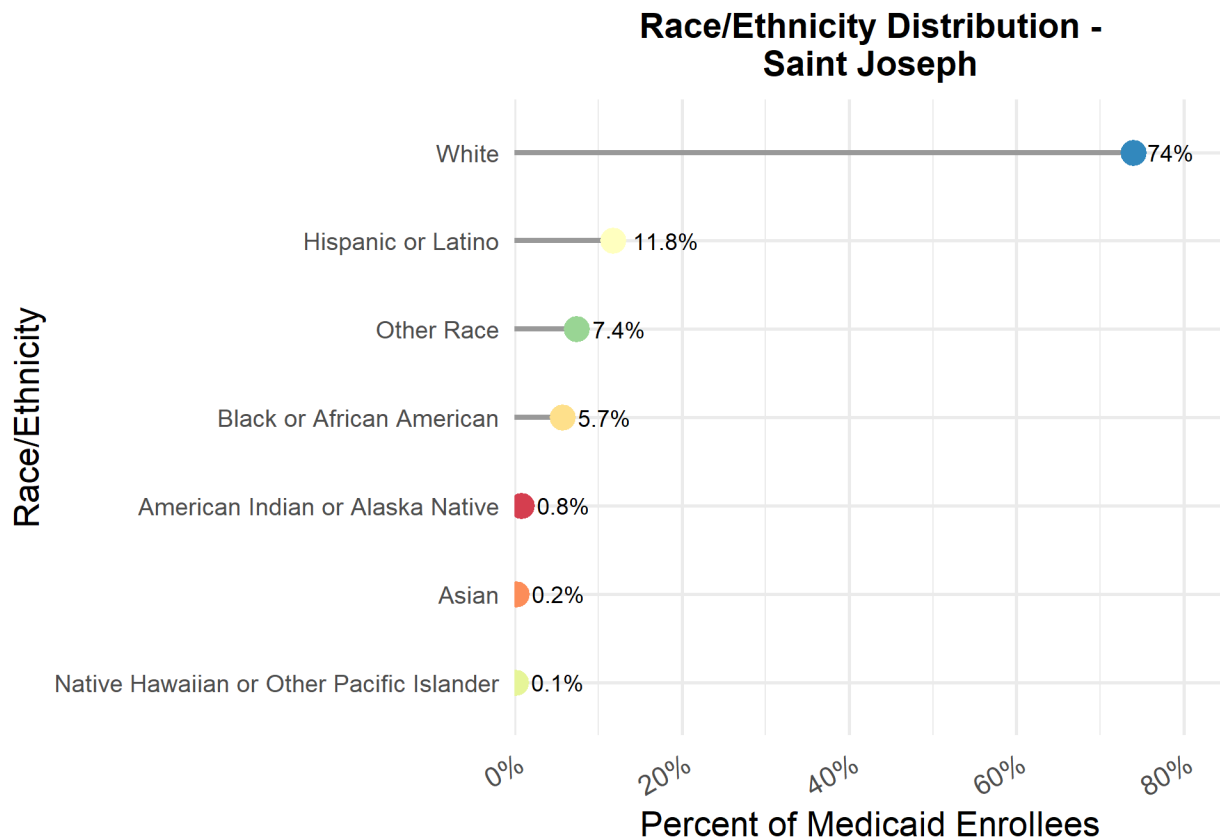


Figure 3: Percentage of Medicaid enrollees by race and ethnicity.

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 Saint Joseph County with the remainder of the SWMBH region. Living arrangements in Saint Joseph County differed from the rest of the SWMBH region. Among PIHP/CMH-served Medicaid enrollees with recorded living arrangement information, 85.8% were living independently compared with 81.9% in the rest of the region. Saint Joseph County had significantly lower percentages of individuals identified as unhoused (3.4% vs. 6.7%). These findings suggest that the PIHP/CMH-served population in Saint Joseph County was more likely to be living independently than comparable enrollees elsewhere in the region.

Table 3. Living Arrangement - Saint Joseph vs. Rest of Region

Percent in each living arrangement category (2025)

Condition	Saint Joseph (N=3,137)	Rest of Region (N=30,510)
Dependent	10.6%	11.3%
Independent	85.8% ↑	81.9%
Unhoused	3.4% ↓	6.7%
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.

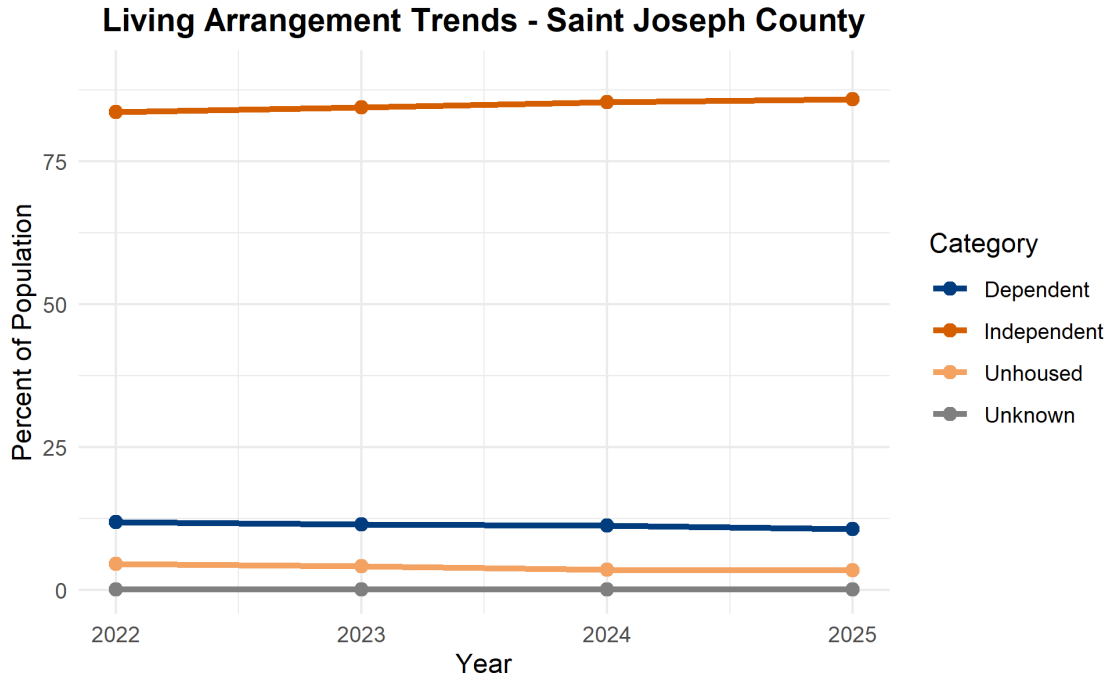


Figure 4: Percent of population in each living arrangement category, 2022-2025.

Table 4. Living Arrangement Trends

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

Living Arrangement	2022	2023	2024	2025
Independent	83.6%	84.4%	85.3%	85.8%
Dependent	11.8%	11.4%	11.2%	10.6%
Unhoused	4.5%	4.1%	3.5%	3.4%
Unknown	0.1%	0.1%	0.1%	0.1%

Living arrangements remained relatively stable from 2022 through 2025, with a gradual shift toward independent living. The percentage identified as living independently increased from 83.6% to 85.8%, while dependent living declined from 11.8% to 10.6% and unhoused status decreased from 4.5% to 3.4%. Overall, these changes suggest a modest improvement in living stability over the four-year period, although continued monitoring will help determine whether the trend persists.

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, 10.4% of the Saint Joseph 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: 8.9% of adults aged 18 to 64 and 93.6% 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 - Saint Joseph County			
Age Group	Total Enrollees	Enrolled in Medicare	Percent Medicare
<18	7,555	0	0.0%
18-64	10,058	892	8.9%
65+	1,127	1,055	93.6%
All Ages	18,740	1,947	10.4%

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 Saint Joseph 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, 33.6% of the Saint Joseph County Medicaid population had a recorded behavioral health diagnosis in 2025. Among those with a behavioral health diagnosis, 66.1% had primarily Mild/Moderate MI diagnoses, 11.9% had primarily SMI/SED diagnoses, 9.3% had primarily Other diagnoses, 8% had primarily SUD diagnoses, and 4.7% had primarily IDD diagnoses.

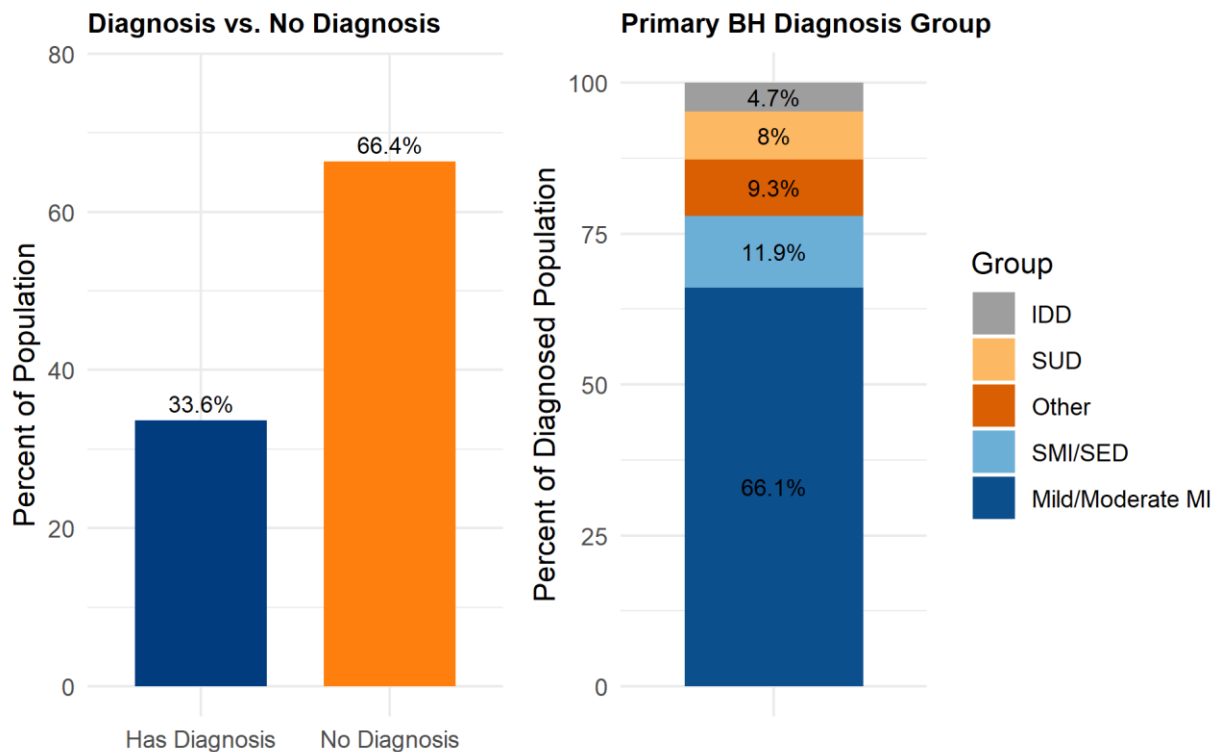


Figure 5: Left: percentage with and without a recorded BH diagnosis. Right: breakdown of primary BH diagnosis group among those with a diagnosis.

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 - Saint Joseph County

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

Condition	IDD (N=298)	Mild/Moderate MI (N=4,166)	Other (N=584)	SMI/SED (N=748)	SUD (N=506)
Anxiety	20.5%	64.6%	10.6%	53.5%	30.4%
Depressive	6.0%	45.4%	7.4%	47.9%	23.5%
SUD	0.7%	11.9%	0.3%	27.7%	100.0%
Bipolar	4.7%	5.6%	0.9%	31.4%	9.5%
Schizophrenia/Psychosis	4.0%	2.7%	1.5%	29.0%	4.5%
Personality Disorder	1.7%	2.8%	0.0%	13.8%	3.8%
OCD	1.0%	1.6%	0.2%	4.4%	0.2%
Adjustment Disorder	5.4%	22.1%	3.9%	8.2%	4.2%
Dementia	0.7%	0.8%	14.7%	1.3%	0.4%
Impulse Control/Conduct	4.4%	3.4%	2.9%	9.6%	1.0%
Autism Spectrum	64.4%	2.2%	6.3%	1.6%	0.0%
IDD	49.0%	1.4%	2.1%	3.6%	0.6%
Trauma-Related (PTSD)	7.0%	19.7%	6.2%	38.0%	10.1%
ADHD	19.1%	26.9%	9.6%	14.4%	7.1%

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 (64.4%), while 49.0% had an IDD diagnosis and 19.1% had ADHD. The Mild/Moderate MI group showed substantial overlap with ADHD (26.9%), adjustment disorder (22.1%), and trauma-related diagnoses (19.7%).

Among those classified as SMI/SED, trauma-related diagnoses were especially common at 38.0%, alongside bipolar disorder (31.4%), schizophrenia/psychosis (29.0%), and SUD (27.7%). The Other group was distinguished by a relatively high prevalence of dementia (14.7%), while individuals in the SUD group also showed notable overlap with anxiety (30.4%), depression (23.5%), and trauma-related diagnoses (10.1%).

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.

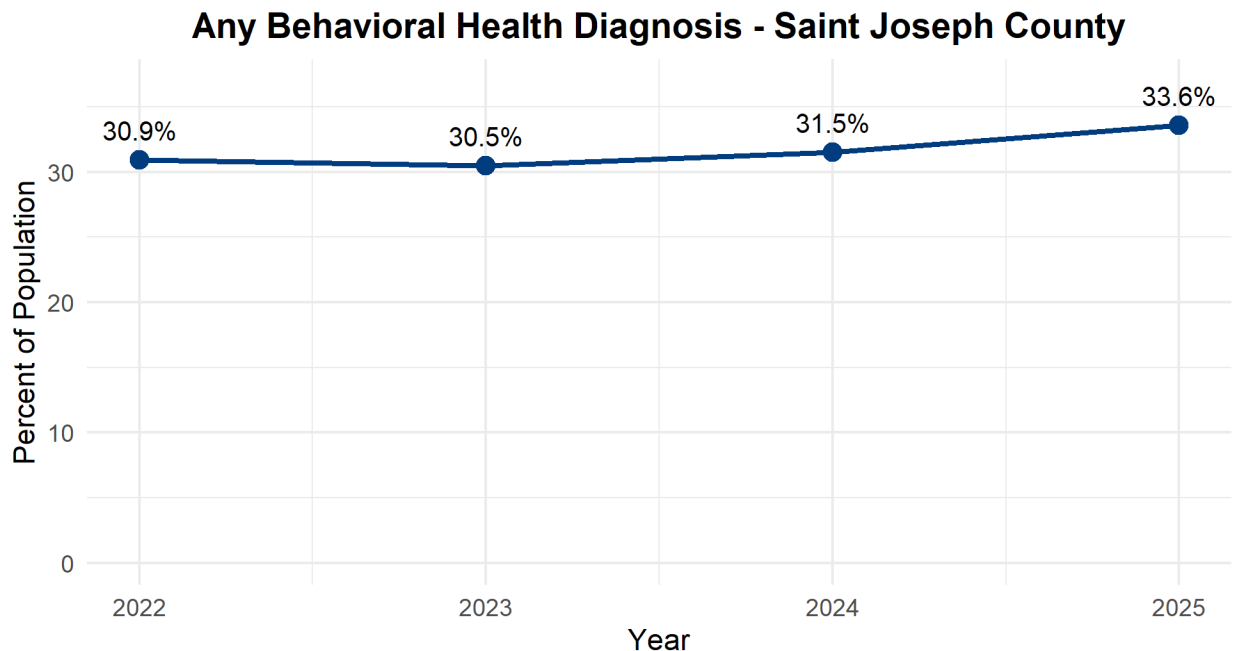


Figure 6: *Percent of population with any behavioral health diagnosis, 2022-2025.*

Behavioral health diagnosis prevalence remained relatively stable from 2022 through 2024 before increasing from 31.5% in 2024 to 33.6% 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.

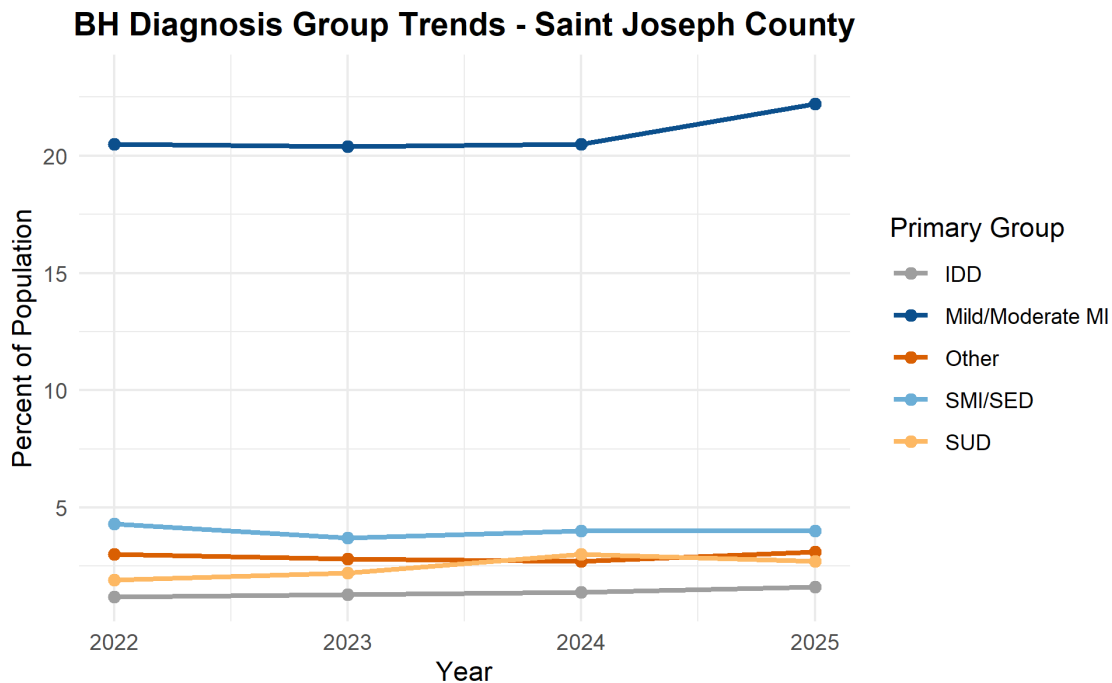


Figure 7: Percent of population with each primary BH diagnosis group, 2022-2025.

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	1.2%	1.3%	1.4%	1.6%
Mild/Moderate MI	20.5%	20.4%	20.5%	22.2%
Other	3.0%	2.8%	2.7%	3.1%
SMI/SED	4.3%	3.7%	4.0%	4.0%
SUD	1.9%	2.2%	3.0%	2.7%

Trends varied across primary behavioral health groups. Mild/Moderate MI remained the largest group and accounted for much of the increase observed in 2025, rising from 20.5% of the Medicaid population in 2024 to 22.2% in 2025. IDD showed a gradual increase across the four-year period, reaching 1.6% in 2025.

SUD increased from 1.9% in 2022 to 3.0% in 2024 before declining slightly to 2.7% in 2025, while SMI/SED remained comparatively stable around 4% in the most recent years. The Other diagnosis group also remained relatively stable, ending at 3.1% in 2025.

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 = 15,950). 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 - Saint Joseph County (N matched = 15,950)			
Condition	2024 %	2025 %	Change
Any BH Diagnosis	35.4%	34.6%	-0.8 ↓
Anxiety	18.5%	18.5%	0
Depressive	13.4%	13.2%	-0.2 ↓
ADHD	7.6%	7.9%	+0.3 ↑
Trauma-Related (PTSD)	6.2%	6.5%	+0.3 ↑
SUD	6.6%	6.2%	-0.4 ↓
Adjustment Disorder	6.3%	5.7%	-0.6 ↓
Bipolar	3.1%	2.9%	-0.2 ↓
Schizophrenia/Psychosis	2.1%	2.0%	-0.1 ↓
Autism Spectrum	1.9%	1.9%	0
Impulse Control/Conduct	1.5%	1.4%	-0.1 ↓
IDD	1.4%	1.4%	0
Personality Disorder	1.2%	1.3%	+0.1 ↑
Dementia	0.6%	0.7%	+0.1 ↑
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 Saint Joseph County population, decreasing slightly from 35.4% in 2024 to 34.6% in 2025. Adjustment disorder showed the only statistically significant year-over-year change, decreasing by 0.6 percentage points. ADHD and trauma-related diagnoses each increased by 0.3 percentage points, while SUD decreased by 0.4 percentage points, although these changes were not statistically significant after correction for multiple comparisons. Overall, the matched analysis suggests relatively stable behavioral health prevalence among continuously enrolled members, with some shifts in the types of conditions identified over time.

5.3. Behavioral Health Diagnosis Rates by County

Behavioral health diagnosis prevalence in Saint Joseph 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 Saint Joseph County's 2025 diagnosis rates with the rest of the SWMBH region. Statistically significant differences between Saint Joseph 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 - Saint Joseph vs. Rest of Region

Percent with diagnosis (2025)

Condition	Saint Joseph (N=18,740)	Rest of Region (N=227,686)
Any BH Diagnosis	33.6%	32.7%
Anxiety	18.0% ↑	15.6%
Depressive	13.0%	12.4%
ADHD	7.4% ↑	6.7%
Adjustment Disorder	5.5%	5.6%
SUD	6.5% ↑	4.7%
Trauma-Related (PTSD)	6.5% ↑	4.7%
Bipolar	2.9% ↓	3.5%
Schizophrenia/Psychosis	2.0% ↓	2.5%
Autism Spectrum	1.8% ↓	2.2%
Impulse Control/Conduct	1.3% ↓	1.7%
IDD	1.3%	1.4%
Personality Disorder	1.3%	1.3%
Dementia	0.7% ↓	1.0%
OCD	0.6%	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.

Overall behavioral health diagnosis prevalence in Saint Joseph County was similar to the remainder of the SWMBH region (33.6% vs. 32.7%). However, several individual conditions showed significant differences. Anxiety (18.0% vs. 15.6%), ADHD (7.4% vs. 6.7%), SUD (6.5% vs. 4.7%), and trauma-related diagnoses (6.5% vs. 4.7%) were significantly more prevalent in Saint Joseph County.

In contrast, bipolar disorder (2.9% vs. 3.5%), schizophrenia/psychosis (2.0% vs. 2.5%), autism spectrum disorder (1.8% vs. 2.2%), impulse control/conduct disorders (1.3% vs. 1.7%), and dementia (0.7% vs. 1.0%) were significantly less 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, 27% of enrollees younger than 18 had at least one behavioral health diagnosis, compared with 38.5% of adults ages 18–64, and 34.3% 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, SUD, while among adults ages 65 or older, the most common were Anxiety, Depressive, Dementia.

Table 10. Behavioral Health Conditions by Age Group - Saint Joseph County

Percent with diagnosis (2025)

Condition	<18 (N=7,555)	18-64 (N=10,058)	65+ (N=1,127)
Any BH Diagnosis	27.0%	38.5%	34.3%
Anxiety	9.4%	24.4%	18.1%
Depressive	4.0%	19.3%	16.4%
SUD	0.6%	11.3%	2.8%
Bipolar	0.2%	4.8%	3.0%
Schizophrenia/Psychosis	0.1%	3.2%	4.0%
Personality Disorder	0.1%	2.3%	1.2%
OCD	0.4%	0.7%	0.4%
Adjustment Disorder	6.8%	4.9%	3.1%
Dementia	0.0%	0.2%	10.2%
Impulse Control/Conduct	2.1%	0.9%	0.2%
Autism Spectrum	2.7%	1.2%	0.2%
IDD	0.4%	1.8%	2.6%
Trauma-Related (PTSD)	6.6%	6.9%	1.8%
ADHD	10.1%	6.0%	0.9%

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

Overall, the age-specific profiles highlight different behavioral health needs across the lifespan, with ADHD and adjustment-related conditions more prominent among children, SUD and trauma-related diagnoses concentrated more heavily among working-age adults, and dementia emerging primarily among older adults.

5.4.2. Behavioral Health Conditions by Sex

Behavioral health diagnosis patterns differed by both age and sex. Among adults, females had a substantially higher overall behavioral health diagnosis rate than males (42.3% vs. 32.3%). Adult females also had notably higher rates of anxiety (29.4% vs. 15.9%) and depression (23.2% vs. 13.2%), while adult males had higher rates of SUD (12.5% vs. 8.9%) and schizophrenia/psychosis (4.0% vs. 2.7%).

Among children, males had a higher overall behavioral health diagnosis rate than females (28.6% vs. 25.3%), driven in part by higher rates of ADHD (12.7% vs. 7.2%), autism spectrum disorder (4.0% vs. 1.4%), and impulse control/conduct disorders (2.7% vs. 1.5%). In contrast, child females had somewhat higher rates of anxiety, depression, adjustment disorder, and trauma-related diagnoses.

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

Percent with diagnosis (2025)

Condition	Adult Female (N=6,507)	Adult Male (N=4,678)	Child Female (N=3,663)	Child Male (N=3,892)
Any BH Diagnosis	42.3%	32.3%	25.3%	28.6%
Anxiety	29.4%	15.9%	11.5%	7.5%
Depressive	23.2%	13.2%	5.8%	2.3%
SUD	8.9%	12.5%	0.8%	0.4%
Bipolar	5.4%	3.5%	0.3%	0.2%
Schizophrenia/Psychosis	2.7%	4.0%	0.2%	0.1%
Personality Disorder	2.9%	1.1%	0.1%	0.0%
OCD	0.8%	0.5%	0.4%	0.3%
Adjustment Disorder	5.1%	4.1%	7.3%	6.2%
Dementia	1.4%	1.0%	0.0%	0.0%
Impulse Control/Conduct	0.5%	1.2%	1.5%	2.7%
Autism Spectrum	0.6%	1.9%	1.4%	4.0%
IDD	1.4%	2.6%	0.3%	0.5%
Trauma-Related (PTSD)	7.9%	4.2%	7.0%	6.2%
ADHD	5.7%	5.2%	7.2%	12.7%

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, 42.8% of dual-eligible Medicaid enrollees had at least one behavioral health diagnosis, compared to 32.6% of non-dual enrollees.

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

Percent with diagnosis (2025)

Condition	Dual (N=1,947)	No (N=16,793)
Any BH Diagnosis	42.8%	32.6%
Anxiety	22.3%	17.5%
Depressive	19.9%	12.2%
SUD	6.7%	6.4%
Bipolar	5.3%	2.6%
Schizophrenia/Psychosis	6.3%	1.5%
Personality Disorder	2.7%	1.1%
OCD	0.9%	0.5%
Adjustment Disorder	4.1%	5.7%
Dementia	6.1%	0.1%
Impulse Control/Conduct	0.7%	1.4%
Autism Spectrum	1.3%	1.8%
IDD	6.7%	0.7%
Trauma-Related (PTSD)	5.1%	6.6%
ADHD	3.3%	7.8%

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

Dual-eligible enrollees had higher documented rates across many behavioral health conditions. Particularly large differences were observed for schizophrenia/psychosis (6.3% vs. 1.5%), IDD (6.7% vs. 0.7%), dementia (6.1% vs. 0.1%), bipolar disorder (5.3% vs. 2.6%), and depression (19.9% vs. 12.2%). Anxiety was also more common among dual-eligible enrollees (22.3% vs. 17.5%).

In contrast, ADHD was more common among non-dual enrollees (7.8% vs. 3.3%), as were adjustment disorder and trauma-related diagnoses. These differences likely reflect, in part, the very different age distributions of the dual and non-dual populations, so dual-status comparisons should not be interpreted as age-adjusted effects.

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 - Saint Joseph

Percent with diagnosis, by race/ethnicity (2025)

Condition	AI/AN (N=145)	Asian (N=44)	Black (N=1,064)	Hispanic (N=2,220)	NH/PI (N=16)	Other (N=1,380)	White (N=13,870)
Any BH Diagnosis	40.7%	4.5% ↓	29.9%	16.6% ↓	31.2%	21.7% ↓	37.9% ↑
Anxiety	21.4%	0.0%	13.2% ↓	6.9% ↓	18.8%	9.9% ↓	20.9% ↑
Depressive	21.4%	0.0%	9.0% ↓	4.8% ↓	0.0%	7.5% ↓	15.1% ↑
SUD	8.3%	0.0%	5.4%	2.0% ↓	0.0%	3.0% ↓	7.6% ↑
Bipolar	4.8%	0.0%	2.2%	0.5% ↓	6.2%	1.3% ↓	3.4% ↑
Schizophrenia/Psychosis	3.4%	0.0%	3.3%	0.3% ↓	6.2%	1.0%	2.2% ↑
Personality Disorder	4.8%	0.0%	0.8%	0.3% ↓	0.0%	0.4%	1.6% ↑
OCD	0.7%	0.0%	0.4%	0.2%	0.0%	0.3%	0.7%
Adjustment Disorder	4.1%	2.3%	5.5%	2.5% ↓	0.0%	3.3% ↓	6.3% ↑
Dementia	0.7%	0.0%	0.4%	0.0% ↓	0.0%	0.7%	0.9% ↑
Impulse Control/Conduct	2.1%	0.0%	1.0%	0.4% ↓	0.0%	1.2%	1.5% ↑
Autism Spectrum	2.1%	0.0%	1.8%	1.1%	0.0%	2.2%	1.9%
IDD	0.7%	0.0%	0.5%	0.2% ↓	0.0%	1.4%	1.6% ↑
Trauma-Related (PTSD)	7.6%	0.0%	5.3%	2.7% ↓	12.5%	4.9%	7.3% ↑
ADHD	10.3%	0.0%	6.3%	2.6% ↓	0.0%	5.4%	8.4% ↑

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 substantially across racial and ethnic groups. White enrollees had a significantly higher overall rate of any behavioral health diagnosis at 37.9%, while Hispanic or Latino enrollees (16.6%), Other Race enrollees (21.7%), and Asian enrollees (4.5%) had significantly lower overall diagnosis rates than the remainder of the population.

White enrollees also had significantly higher rates across many individual conditions, including anxiety, depression, SUD, bipolar disorder, schizophrenia/psychosis, personality disorder, adjustment disorder, dementia, impulse control/conduct disorders, IDD, trauma-related diagnoses, and ADHD. In contrast, Hispanic or Latino enrollees had significantly lower rates across nearly all of these conditions, including anxiety, depression, SUD, bipolar disorder, schizophrenia/psychosis, trauma-related diagnoses, and ADHD. Black enrollees had significantly lower rates of anxiety and depression, while Other Race enrollees also showed significantly lower rates across several conditions.

American Indian or Alaska Native enrollees had some of the highest raw percentages for several conditions, including anxiety, depression, SUD, trauma-related diagnoses, and ADHD, but these differences were not identified as statistically significant in this table. The relatively small size of some racial and ethnic groups, particularly Asian and Native Hawaiian or Other Pacific Islander enrollees, should also be considered when interpreting these estimates.

As with the other demographic comparisons, these differences should not be interpreted as direct measures of underlying behavioral health need. Diagnosis prevalence may reflect differences in access to care, help-seeking, screening, diagnostic practices, cultural factors, and documentation, and may help identify areas for further review of access and potential disparities.

Together, these findings show that behavioral health diagnosis patterns vary across demographic groups, geographic areas, and diagnosis categories within the Saint Joseph 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 Saint Joseph 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 Saint Joseph 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 Saint Joseph County with the remainder of the SWMBH region. Overall, 36.2% of enrollees had at least one of the chronic conditions included in this analysis. The most commonly identified conditions were Metabolic Risk Factors (23.1%), GI Functional Disorder (7.9%), Chronic Pain/Migraine (6.9%). Statistical significance was assessed using chi-square tests with Bonferroni correction.

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

Percent with condition (2025)

Condition	Saint Joseph (N=18,740)	Rest of Region (N=227,686)
Any Chronic Condition	36.2% ↓	38.2%
Metabolic Risk Factors	23.1%	24.0%
Chronic Pain/Migraine	6.9% ↓	9.8%
GI Functional Disorder	7.9%	8.2%
Tobacco Use	5.7% ↓	7.3%
Asthma	5.8%	6.2%
Social Determinants of Health	3.3% ↓	4.2%
Cardiac Disease	4.0%	3.9%
COPD	3.7%	3.5%
Hypothyroidism	4.5% ↑	2.6%
Urinary Tract Infection	3.4% ↑	2.7%
Vascular Disease	1.9% ↓	2.3%
Liver Disease	1.5% ↓	2.2%
Chronic Kidney Disease	1.5% ↓	2.2%

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

Condition	Saint Joseph (N=18,740)	Rest of Region (N=227,686)
Cancer	1.5%	1.8%
Epilepsy	1.9%	1.7%
Prediabetes	1.2% ↓	1.6%
Traumatic Brain Injury	0.9%	1.0%
Feeding Difficulty	0.4%	0.6%
Inflammatory Bowel Disease	0.3%	0.4%
Rheumatoid Arthritis	0.3%	0.3%
Lupus/SLE	0.1%	0.2%
Multiple Sclerosis	0.1%	0.2%
Sickle Cell Disease	0.0% ↓	0.2%
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 Saint Joseph County than in the remainder of the SWMBH region. Overall, 36.2% of Saint Joseph 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 Saint Joseph County. Chronic pain/migraine showed one of the largest differences (6.9% vs. 9.8%), while tobacco use (5.7% vs. 7.3%) and documented Social Determinants of Health concerns (3.3% vs. 4.2%) were also lower. Vascular disease, liver disease, chronic kidney disease, prediabetes, and sickle cell disease were likewise significantly less prevalent.

In contrast, hypothyroidism (4.5% vs. 2.6%) and urinary tract infection (3.4% vs. 2.7%) were significantly more prevalent in Saint Joseph County. Metabolic Risk Factors, the most common chronic condition group, were similar to the remainder of the region (23.1% vs. 24.0%). These differences may reflect variation in underlying population health, risk factors, healthcare access, 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.

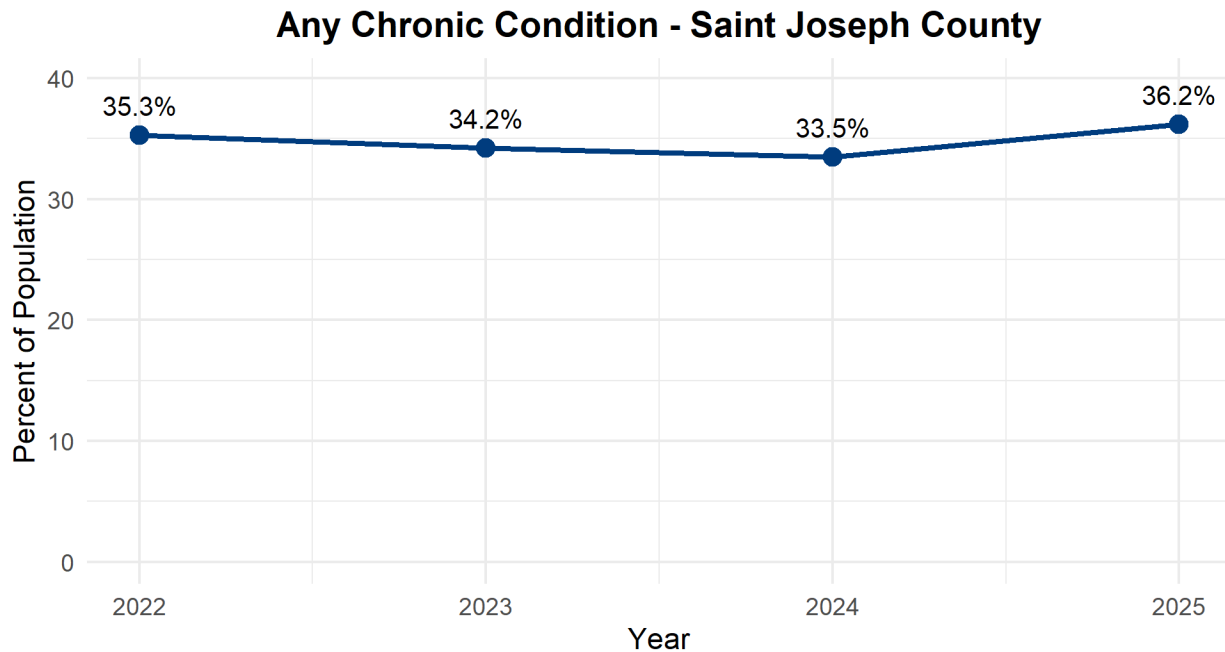


Figure 8: *Percent of population with any chronic condition studied, 2022-2025.*

Chronic condition prevalence declined slightly from 35.3% in 2022 to 33.5% in 2024 before increasing to 36.2% in 2025. Because the percentage of enrollees receiving at least one Medicaid service also increased in 2025, greater healthcare contact may have contributed to increased identification and documentation of chronic conditions. However, the available data cannot determine whether the increase reflects changes in underlying health need, healthcare utilization, population composition, or a combination of these factors.

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) - Saint Joseph County (N matched = 15,950)

Condition	2024 %	2025 %	Change
Any Chronic Condition	37.0%	36.9%	-0.1 ↓
Metabolic Risk Factors	22.9%	24.1%	+1.2 ↑
GI Functional Disorder	8.6%	7.9%	-0.7 ↓
Chronic Pain/Migraine	7.0%	7.1%	+0.1 ↑
Asthma	6.5%	6.2%	-0.3 ↓
Tobacco Use	5.6%	5.8%	+0.2 ↑
Hypothyroidism	4.9%	4.7%	-0.2 ↓
Cardiac Disease	4.0%	4.1%	+0.1 ↑
COPD	3.6%	3.8%	+0.2 ↑
Urinary Tract Infection	3.9%	3.6%	-0.3 ↓
Social Determinants of Health	3.1%	2.9%	-0.2 ↓
Epilepsy	2.0%	2.0%	0
Vascular Disease	2.0%	1.9%	-0.1 ↓
Cancer	1.4%	1.6%	+0.2 ↑
Chronic Kidney Disease	1.4%	1.6%	+0.2 ↑
Liver Disease	1.2%	1.5%	+0.3 ↑
Prediabetes	1.2%	1.3%	+0.1 ↑
Traumatic Brain Injury	0.9%	1.0%	+0.1 ↑
Feeding Difficulty	0.4%	0.4%	0
Inflammatory Bowel Disease	0.3%	0.4%	+0.1 ↑
Rheumatoid Arthritis	0.4%	0.4%	0
Sickle Cell Disease	0.0%	0.1%	+0.1 ↑
Lupus/SLE	0.2%	0.1%	-0.1 ↓
Multiple Sclerosis	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 essentially stable within the matched Saint Joseph County population, decreasing slightly from 37.0% in 2024 to 36.9% in 2025. Metabolic Risk Factors showed the only statistically significant year-over-year change, increasing by 1.2 percentage points from 22.9% to 24.1%. Most other chronic conditions changed only slightly and were not statistically significant after correction for multiple comparisons. Overall, the matched analysis suggests relatively stable chronic condition prevalence among continuously enrolled members, with some changes in the types of conditions documented over time.

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 Saint Joseph County, 62.7% of adults age 65 and older had at least one chronic condition, compared with 45.8% of adults ages 18–64 years, and 19.4% of children younger than 18.

Table 16. Chronic Conditions by Age Group - Saint Joseph County

Percent with condition (2025)

Condition	<18 (N=7,555)	18-64 (N=10,058)	65+ (N=1,127)
Any Chronic Condition	19.4%	45.8%	62.7%
Cardiac Disease	0.1%	4.9%	22.5%
Vascular Disease	0.0%	2.2%	11.8%
Metabolic Risk Factors	7.1%	31.7%	53.8%
GI Functional Disorder	3.0%	10.6%	16.6%
Chronic Pain/Migraine	1.5%	10.7%	10.1%
Social Determinants of Health	2.9%	3.8%	1.4%
Asthma	5.4%	6.2%	3.9%
COPD	0.0%	4.6%	20.4%
Cancer	0.1%	1.9%	7.9%
Epilepsy	0.9%	2.5%	3.5%
Hypothyroidism	0.5%	6.8%	10.4%
Long COVID	0.0%	0.1%	0.0%
Tobacco Use	0.3%	9.2%	10.6%

Table 16. Chronic Conditions by Age Group - Saint Joseph County

Percent with condition (2025)

Condition	<18 (N=7,555)	18-64 (N=10,058)	65+ (N=1,127)
Prediabetes	0.1%	1.9%	1.9%
Sickle Cell Disease	0.0%	0.0%	0.1%
Traumatic Brain Injury	0.8%	1.0%	1.2%
Urinary Tract Infection	1.5%	4.5%	6.7%
Feeding Difficulty	1.1%	0.0%	0.1%
Inflammatory Bowel Disease	0.0%	0.5%	0.8%
Liver Disease	0.2%	2.5%	2.0%
Rheumatoid Arthritis	0.0%	0.4%	1.7%
Lupus/SLE	0.0%	0.2%	0.0%
Multiple Sclerosis	0.0%	0.2%	0.2%
Chronic Kidney Disease	0.1%	1.7%	9.9%

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

Chronic condition burden increased substantially with age. Any chronic condition was documented for 19.4% of children and adolescents, compared with 45.8% of adults ages 18–64 and 62.7% of adults age 65 and older. Metabolic Risk Factors showed one of the strongest age-related patterns, increasing from 7.1% among children to 31.7% among adults ages 18–64 and 53.8% among adults age 65 and older.

Several other conditions also increased markedly with age. Cardiac disease, vascular disease, COPD, chronic kidney disease, cancer, hypothyroidism, and urinary tract infection were all substantially more common among adults age 65 and older. In contrast, asthma and documented Social Determinants of Health concerns varied less consistently with age, while children had the lowest chronic condition burden across most categories.

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 - Saint Joseph County

Percent with condition (2025)

Condition	Dual 18-64 (N=892)	Dual 65+ (N=1,055)	No <18 (N=7,555)	No 18-64 (N=9,166)	No 65+ (N=72)
Any Chronic Condition	56.3% ↑	63.7% ↑	19.4% ↓	44.8% ↑	48.6%
Cardiac Disease	12.0% ↑	22.7% ↑	0.1% ↓	4.2%	19.4% ↑
Vascular Disease	4.7% ↑	12.0% ↑	0.0% ↓	1.9%	8.3% ↑
Metabolic Risk Factors	44.8% ↑	54.8% ↑	7.1% ↓	30.4% ↑	38.9%
GI Functional Disorder	17.2% ↑	17.2% ↑	3.0% ↓	9.9% ↑	8.3%
Chronic Pain/Migraine	14.6% ↑	10.7% ↑	1.5% ↓	10.3% ↑	1.4%
Social Determinants of Health	2.8%	1.3% ↓	2.9%	3.9% ↑	2.8%
Asthma	7.8%	4.0%	5.4%	6.1%	2.8%
COPD	11.9% ↑	20.9% ↑	0.0% ↓	3.9%	12.5% ↑
Cancer	3.3% ↑	8.0% ↑	0.1% ↓	1.8%	6.9%
Epilepsy	7.0% ↑	3.7% ↑	0.9% ↓	2.1%	0.0%
Hypothyroidism	9.2% ↑	10.7% ↑	0.5% ↓	6.6% ↑	5.6%
Long COVID	0.0%	0.0%	0.0%	0.1%	0.0%
Tobacco Use	10.9% ↑	10.7% ↑	0.3% ↓	9.0% ↑	8.3%
Prediabetes	1.9%	1.8%	0.1% ↓	1.9% ↑	2.8%
Sickle Cell Disease	0.0%	0.1%	0.0%	0.1%	0.0%
Traumatic Brain Injury	1.2%	1.2%	0.8%	1.0%	0.0%

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

Percent with condition (2025)

Condition	Dual 18-64 (N=892)	Dual 65+ (N=1,055)	No <18 (N=7,555)	No 18-64 (N=9,166)	No 65+ (N=72)
Urinary Tract Infection	5.3%	7.1% ↑	1.5% ↓	4.4% ↑	1.4%
Feeding Difficulty	0.0%	0.1%	1.1% ↑	0.0% ↓	0.0%
Inflammatory Bowel Disease	0.7%	0.8%	0.0% ↓	0.4%	1.4%
Liver Disease	3.0% ↑	1.9%	0.2% ↓	2.5% ↑	2.8%
Rheumatoid Arthritis	1.0%	1.8% ↑	0.0% ↓	0.4%	0.0%
Lupus/SLE	0.6% ↑	0.0%	0.0% ↓	0.2%	0.0%
Multiple Sclerosis	0.6% ↑	0.2%	0.0% ↓	0.2%	0.0%
Chronic Kidney Disease	7.4% ↑	10.3% ↑	0.1% ↓	1.1% ↓	4.2%

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 ages 18–64, dual-eligible enrollees had substantially greater chronic disease burden than non-dual enrollees. Any chronic condition was documented for 56.3% of dual-eligible adults compared with 44.8% of non-dual adults in the same age group. Metabolic Risk Factors were also considerably more common among dual-eligible adults ages 18–64 (44.8% vs. 30.4%).

Higher rates among dual-eligible adults ages 18–64 were observed across many additional conditions, including cardiac disease (12.0% vs. 4.2%), vascular disease (4.7% vs. 1.9%), chronic pain/migraine (14.6% vs. 10.3%), COPD (11.9% vs. 3.9%), chronic kidney disease (7.4% vs. 1.1%), epilepsy (7.0% vs. 2.1%), and hypothyroidism (9.2% vs. 6.6%).

Differences also remained among adults age 65 and older, although the comparison group was much smaller. Any chronic condition was documented for 63.7% of dual-eligible older adults compared with 48.6% of non-dual older adults. Dual-eligible adults age 65 and older also had higher rates of Metabolic Risk Factors, vascular disease, COPD, chronic kidney disease, urinary tract infection, and several other conditions.

Overall, the findings suggest that dual eligibility identifies a population with elevated chronic health needs even when age is considered, particularly among adults ages 18–64. The age 65 and older comparison should be interpreted cautiously because the non-dual group was relatively small (N=72).

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.

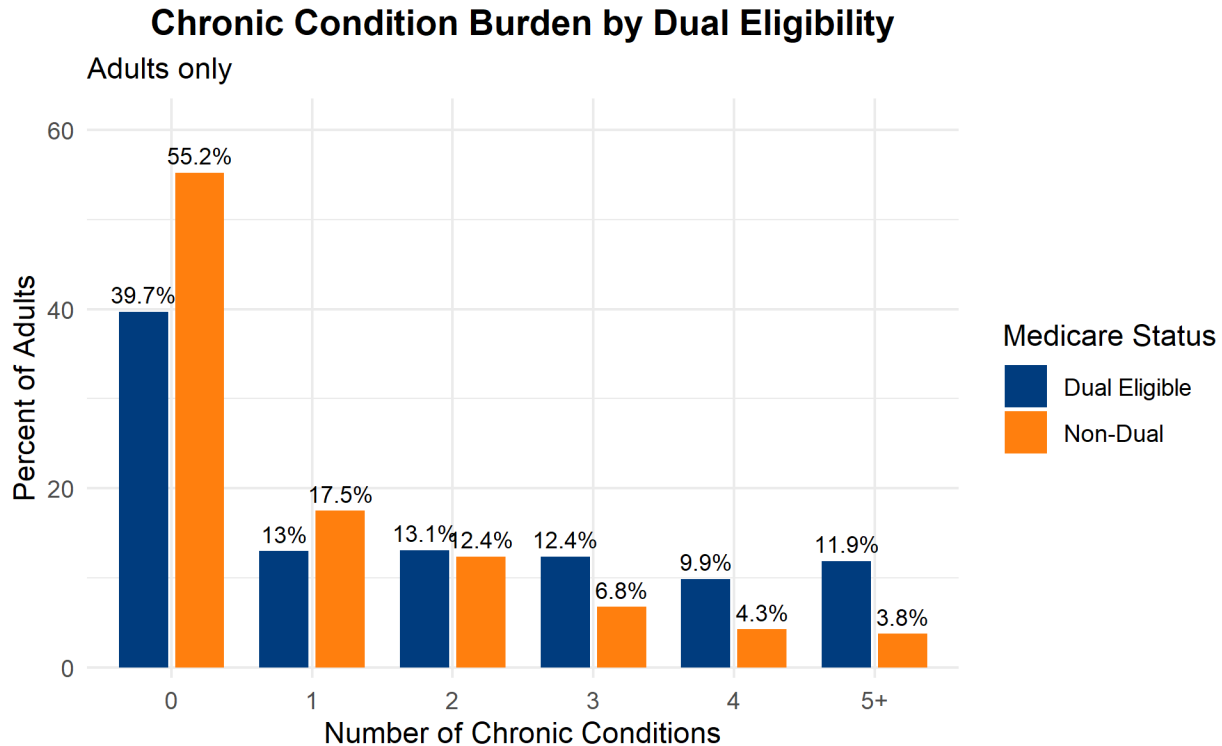


Figure 9: *Percent of adult enrollees by number of chronic conditions, by Medicare dual eligibility status.*

Dual-eligible adults had a greater chronic condition burden than non-dual adults. While 55.2% of non-dual adults had none of the chronic conditions included in this analysis, only 39.7% of dual-eligible adults had no identified chronic conditions. Differences became more pronounced at higher levels of complexity: 11.9% 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=6,923)	IDD (N=166)	Mild/Moderate MI (N=2,825)	Other (N=124)	SMI/SED (N=643)	SUD (N=504)
Any Chronic Condition	31.6% ↓	53.0%	75.7% ↑	86.3% ↑	74.3% ↑	62.5% ↑
Cardiac Disease	4.6% ↓	5.4%	10.1% ↑	24.2% ↑	10.1%	7.5%
Vascular Disease	1.9% ↓	3.6%	5.0% ↑	20.2% ↑	5.3%	2.8%
Metabolic Risk Factors	21.9% ↓	35.5%	56.5% ↑	71.0% ↑	53.5% ↑	38.1%
GI Functional Disorder	5.0% ↓	16.3%	22.3% ↑	25.8% ↑	23.2% ↑	13.5%
Chronic Pain/Migraine	4.9% ↓	4.8%	22.5% ↑	10.5%	20.7% ↑	11.3%
Social Determinants of Health	1.2% ↓	3.0%	6.0% ↑	2.4%	10.6% ↑	12.7% ↑
Asthma	2.8% ↓	5.4%	11.9% ↑	3.2%	13.4% ↑	8.3%
COPD	3.8% ↓	2.4%	10.3% ↑	16.1% ↑	10.9% ↑	8.3%
Cancer	2.0% ↓	1.2%	3.7% ↑	5.6%	2.6%	2.4%
Epilepsy	0.9% ↓	16.3% ↑	5.1% ↑	8.1%	4.8%	4.6%
Hypothyroidism	4.0% ↓	7.2%	13.6% ↑	10.5%	12.1% ↑	6.5%
Long COVID	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%
Tobacco Use	5.2% ↓	0.6% ↓	16.3% ↑	5.6%	20.1% ↑	16.5% ↑
Prediabetes	1.2% ↓	1.2%	3.6% ↑	0.8%	2.8%	1.0%
Sickle Cell Disease	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
Traumatic Brain Injury	0.4% ↓	1.8%	1.6%	8.9% ↑	1.7%	2.8% ↑
Urinary Tract Infection	2.6% ↓	4.2%	8.6% ↑	11.3%	8.2% ↑	5.4%
Feeding Difficulty	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Inflammatory Bowel Disease	0.3%	0.0%	1.1% ↑	0.8%	0.2%	0.2%
Liver Disease	1.5% ↓	4.8%	4.0% ↑	2.4%	2.2%	5.8% ↑
Rheumatoid Arthritis	0.4%	0.0%	0.9%	3.2%	0.3%	1.2%
Lupus/SLE	0.1%	0.0%	0.4%	0.8%	0.3%	0.2%
Multiple Sclerosis	0.1%	0.0%	0.5% ↑	0.8%	0.2%	0.0%
Chronic Kidney Disease	1.7% ↓	2.4%	3.9% ↑	14.5% ↑	3.6%	2.4%

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 31.6% of adults with no behavioral health diagnosis had at least one chronic condition, compared with 53.0% to 86.3% across the behavioral health groups.

Adults in the Other diagnosis group had the highest overall chronic condition prevalence at 86.3%, including particularly high rates of Metabolic Risk Factors (71.0%), cardiac disease (24.2%), vascular disease (20.2%), and chronic kidney disease (14.5%). Adults with Mild/Moderate MI and SMI/SED also showed broad elevations across chronic physical health conditions, with approximately three-quarters having at least one chronic condition (75.7% and 74.3%, respectively).

The patterns differed somewhat by behavioral health group. IDD was strongly associated with epilepsy (16.3%), while SUD had particularly high documented Social Determinants of Health concerns (12.7%), tobacco use (16.5%), and liver disease (5.8%). SMI/SED similarly showed elevated SDoH concerns (10.6%) and tobacco use (20.1%). Overall, these findings demonstrate substantial overlap between behavioral and physical health needs and reinforce the potential value of integrated approaches to care.

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=5,515)	IDD (N=132)	Mild/Moderate MI (N=1,341)	Other (N=460)	SMI/SED (N=105)	SUD (N=2)
Any Chronic Condition	14.1% ↓	32.6% ↑	36.1% ↑	25.9%	42.9% ↑	50.0%
Cardiac Disease	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%
Vascular Disease	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Metabolic Risk Factors	5.2% ↓	11.4%	12.9% ↑	9.3%	16.2%	0.0%
GI Functional Disorder	2.3% ↓	4.5%	5.4% ↑	4.6%	2.9%	0.0%
Chronic Pain/Migraine	1.0% ↓	2.3%	3.6% ↑	0.4%	5.7%	0.0%
Social Determinants of Health	1.2% ↓	4.5%	8.7% ↑	3.3%	17.1% ↑	0.0%
Asthma	3.9% ↓	5.3%	10.6% ↑	8.5%	8.6%	0.0%
COPD	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Cancer	0.1%	0.0%	0.2%	0.4%	0.0%	0.0%
Epilepsy	0.4% ↓	4.5% ↑	1.2%	3.9% ↑	2.9%	50.0% ↑
Hypothyroidism	0.3%	0.8%	0.8%	0.7%	3.8% ↑	0.0%
Long COVID	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓	0.0% ↓
Tobacco Use	0.1% ↓	0.0%	1.1% ↑	0.0%	1.9%	0.0%
Prediabetes	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%
Sickle Cell Disease	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%
Traumatic Brain Injury	0.5% ↓	0.8%	1.9% ↑	1.3%	2.9%	0.0%
Urinary Tract Infection	1.1% ↓	1.5%	2.8% ↑	1.1%	5.7%	0.0%
Feeding Difficulty	0.8%	6.1% ↑	0.6%	4.1% ↑	1.0%	0.0%
Inflammatory Bowel Disease	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Liver Disease	0.1%	0.0%	0.4%	0.2%	0.0%	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	0.0%	0.0%	0.1%	0.4%	1.0%	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.

A similar pattern was observed among children and adolescents. Those without a behavioral health diagnosis had the lowest overall chronic condition prevalence at 14.1%, while prevalence was substantially higher across most behavioral health groups. Children in the SMI/SED group had the highest overall prevalence among the larger diagnosis groups at 42.9%, followed by Mild/Moderate MI at 36.1% and IDD at 32.6%.

Children with SMI/SED had particularly high documented Social Determinants of Health concerns at 17.1%, along with elevated Metabolic Risk Factors and asthma. Children in the Mild/Moderate MI group also showed higher rates of SDoH concerns (8.7%), asthma (10.6%), Metabolic Risk Factors (12.9%), chronic pain/migraine, and several other conditions. Among children with IDD, epilepsy (4.5%) and feeding difficulty (6.1%) were notably elevated.

Overall, these findings indicate substantial overlap between behavioral and physical health needs among children and adolescents. Pediatric behavioral health populations, particularly those with SMI/SED, Mild/Moderate MI, or IDD, may benefit from integrated approaches that address behavioral health, chronic physical conditions, and social needs together.

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 - Saint Joseph County*Percent with condition (2025)*

Condition	AI/AN (N=145)	Asian (N=44)	Black (N=1,064)	Hispanic (N=2,220)	NH/PI (N=16)	Other (N=1,380)	White (N=13,870)
Any Chronic Condition	40.0%	36.4%	34.7%	26.3% ↓	37.5%	25.5% ↓	38.9% ↑
Cardiac Disease	6.2%	4.5%	3.9%	0.9% ↓	12.5%	3.1%	4.6% ↑
Vascular Disease	1.4%	0.0%	2.2%	0.3% ↓	0.0%	1.4%	2.2% ↑
Metabolic Risk Factors	28.3%	20.5%	23.1%	14.5% ↓	25.0%	14.6% ↓	25.3% ↑
GI Functional Disorder	8.3%	4.5%	6.7%	3.9% ↓	6.2%	5.0% ↓	8.9% ↑
Chronic Pain/Migraine	10.3%	2.3%	5.1%	2.9% ↓	6.2%	3.8% ↓	8.0% ↑
Social Determinants of Health	5.5%	0.0%	3.6%	3.0%	12.5%	1.8%	3.4%
Asthma	5.5%	0.0%	7.5%	3.9% ↓	0.0%	4.5%	6.1%
COPD	5.5%	2.3%	2.5%	0.4% ↓	12.5%	2.0%	4.5% ↑
Cancer	1.4%	0.0%	1.4%	0.9%	0.0%	1.1%	1.7%
Epilepsy	3.4%	2.3%	1.4%	0.6% ↓	0.0%	1.2%	2.2% ↑
Hypothyroidism	6.9%	6.8%	1.8% ↓	2.6% ↓	0.0%	2.6%	5.1% ↑
Long COVID	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Tobacco Use	6.2%	4.5%	5.7%	1.8% ↓	6.2%	2.8% ↓	6.5% ↑
Prediabetes	0.7%	11.4% ↑	1.6%	0.7%	0.0%	0.8%	1.2%
Sickle Cell Disease	0.7%	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%
Traumatic Brain Injury	1.4%	0.0%	0.4%	0.9%	6.2%	0.9%	1.0%
Urinary Tract Infection	4.1%	2.3%	2.9%	2.4%	0.0%	2.8%	3.6%
Feeding Difficulty	0.0%	4.5%	0.2%	0.6%	0.0%	0.7%	0.4%
Inflammatory Bowel Disease	0.0%	0.0%	0.5%	0.1%	0.0%	0.1%	0.4%
Liver Disease	2.8%	4.5%	0.9%	0.6%	0.0%	1.3%	1.7%
Rheumatoid Arthritis	0.0%	0.0%	0.3%	0.1%	0.0%	0.4%	0.4%
Lupus/SLE	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.1%
Multiple Sclerosis	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%
Chronic Kidney Disease	1.4%	2.3%	2.0%	0.5% ↓	6.2%	1.0%	1.7%

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 38.9%, while Hispanic or Latino enrollees (26.3%) and Other Race enrollees (25.5%) had significantly lower overall prevalence than the remainder of the population.

White enrollees also had significantly higher rates across several individual conditions, including cardiac disease, vascular disease, Metabolic Risk Factors, GI functional disorders, chronic pain/migraine, COPD, epilepsy, hypothyroidism, and tobacco use. In contrast, Hispanic or Latino enrollees had significantly lower rates across many of these same conditions, including cardiac and vascular disease, Metabolic Risk Factors, GI functional disorders, chronic pain/migraine, asthma, COPD, epilepsy, hypothyroidism, tobacco use, and chronic kidney disease. Other Race enrollees also had significantly lower rates of several conditions, including Metabolic Risk Factors, GI functional disorders, chronic pain/migraine, and tobacco use.

A few different condition-specific patterns were also evident. Asian enrollees had a significantly higher documented prediabetes rate (11.4%), while Black enrollees had a significantly lower hypothyroidism rate (1.8%). American Indian or Alaska Native enrollees had relatively high raw rates for several conditions, but these differences were not identified as statistically significant in this table.

These patterns may reflect differences in underlying health risk, environmental and social conditions, healthcare access and utilization, and opportunities for conditions to be identified and documented. Lower documented prevalence should therefore not be interpreted as lower health need without additional context, particularly for smaller racial and ethnic groups.

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 generally increased as the number of chronic conditions increased. Individuals with no identified chronic conditions averaged very few inpatient days, while average utilization rose progressively across lower and moderate levels of chronic disease burden. The increase became particularly pronounced among individuals with seven or more chronic conditions, with average inpatient days generally reaching much higher levels than among those with fewer conditions.

At the highest condition counts, however, the pattern became less consistent, including a sharp increase among individuals with 11 conditions followed by a drop among those with 12. These fluctuations likely reflect small numbers of individuals at the extreme end of the chronic-condition distribution and should be interpreted cautiously. Overall, the broader pattern supports a strong relationship between greater chronic disease burden and inpatient utilization.

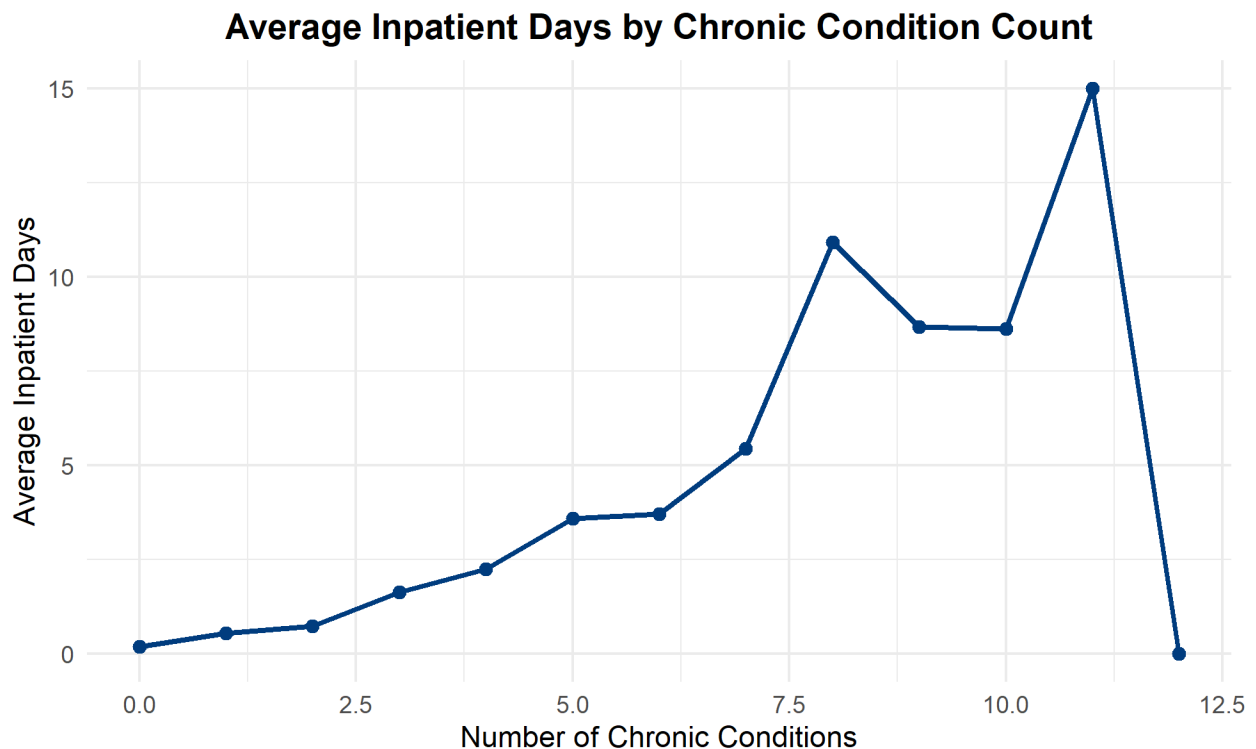


Figure 10: Average number of inpatient days among Medicaid enrollees, by total number of chronic conditions.

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 - Saint Joseph County			
Condition	Odds Ratio	95% CI	p-value
Sickle Cell Disease	8.01	(1.82 - 32.51)	0.004
Feeding Difficulty	3.95	(2.22 - 6.70)	<0.001
Social Determinants of Health	2.96	(2.37 - 3.68)	<0.001
Liver Disease	2.48	(1.84 - 3.32)	<0.001
Tobacco Use	2.40	(2.00 - 2.87)	<0.001
Long COVID	2.31	(0.26 - 14.13)	0.398
Cardiac Disease	2.28	(1.84 - 2.81)	<0.001
Traumatic Brain Injury	2.23	(1.46 - 3.31)	<0.001
Cancer	2.18	(1.61 - 2.92)	<0.001
Urinary Tract Infection	2.03	(1.62 - 2.53)	<0.001
Epilepsy	1.89	(1.40 - 2.51)	<0.001
Chronic Kidney Disease	1.84	(1.36 - 2.48)	<0.001
Vascular Disease	1.80	(1.36 - 2.37)	<0.001
Inflammatory Bowel Disease	1.72	(0.84 - 3.33)	0.120

Table 21: Chronic Conditions Associated with Inpatient Hospitalization - Saint Joseph County

Condition	Odds Ratio	95% CI	p-value
Multiple Sclerosis	1.63	(0.43 - 4.86)	0.420
GI Functional Disorder	1.61	(1.35 - 1.91)	<0.001
COPD	1.40	(1.11 - 1.74)	0.004
Metabolic Risk Factors	1.39	(1.19 - 1.60)	<0.001
Rheumatoid Arthritis	1.15	(0.55 - 2.27)	0.691
Asthma	1.14	(0.92 - 1.41)	0.214
Chronic Pain/Migraine	0.99	(0.81 - 1.20)	0.917
Hypothyroidism	0.87	(0.68 - 1.10)	0.251
Prediabetes	0.67	(0.42 - 1.04)	0.088
Lupus/SLE	0.61	(0.12 - 2.23)	0.496

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 remained strongly associated with inpatient hospitalization after accounting for the other conditions included in the model. Sickle cell disease had the strongest association, with 8.01 times the odds of hospitalization compared with individuals without the condition, holding the other modeled conditions constant. Feeding difficulty and documented Social Determinants of Health were also strongly associated with hospitalization, with adjusted odds ratios of 3.95 and 2.96, respectively.

Other conditions with meaningfully elevated and statistically significant hospitalization odds included liver disease, tobacco use, cardiac disease, traumatic brain injury, cancer, urinary tract infection, epilepsy, chronic kidney disease, vascular disease, and GI functional disorders.

The association observed for Social Determinants of Health is particularly notable. SDoH diagnoses are associated with nearly three times the adjusted odds of hospitalization which suggests that documented social and economic needs may be important markers of individuals at elevated risk for acute healthcare utilization.

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 Saint Joseph 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.

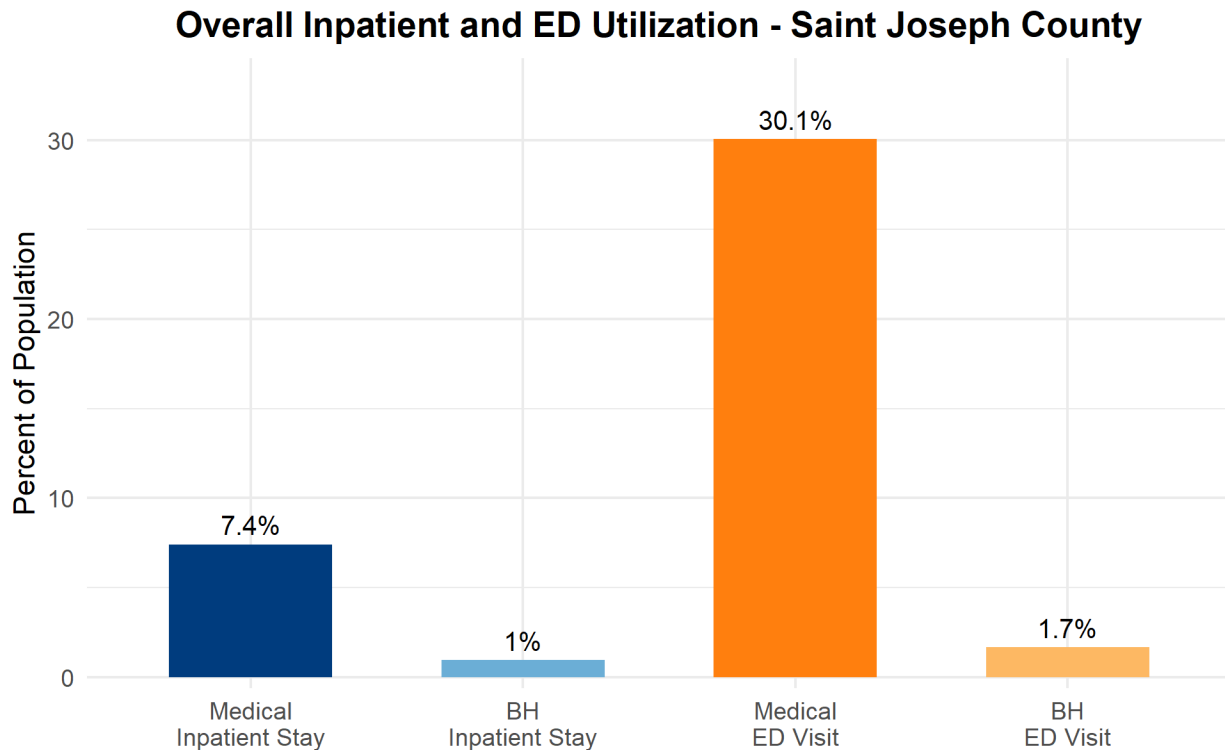


Figure 11: *Percent of Medicaid enrollees with at least one inpatient stay or emergency department visit, by service type, 2025.*

Medical emergency department use was the most common form of acute-care utilization, with 30.1% of enrollees having at least one medical ED visit during 2025. In comparison, 7.4% had at least one medical inpatient day, 1.7% had a behavioral health ED visit, and 1% had a behavioral health inpatient day. Across the full Medicaid population, enrollees averaged 1.99 medical ED visits and 0.09 behavioral health ED visits, along with 7.61 medical inpatient days and 2.2 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.

Average BH and Medical ED Visits per Person by Age Group

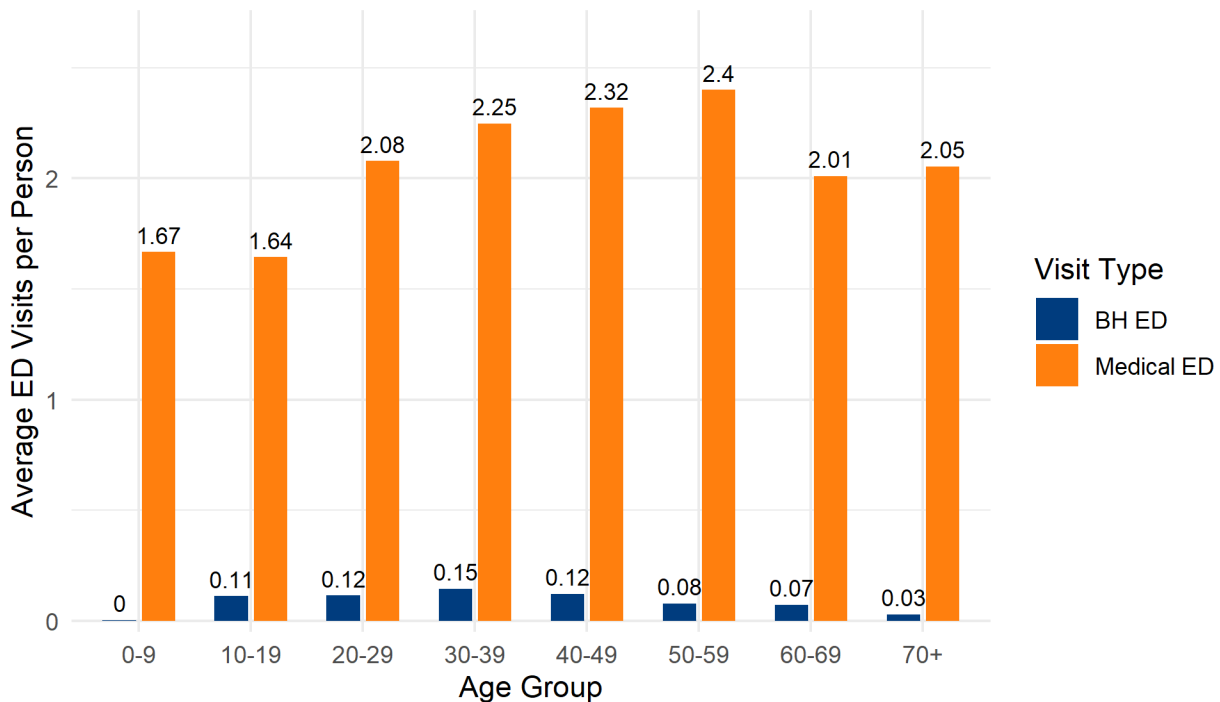


Figure 12: Average number of ED visits per Medicaid enrollee stratified by age group and visit type.

Medical ED utilization increased from childhood through middle adulthood, peaking among adults ages 50–59 at 2.4 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 30–39 at 0.15 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.

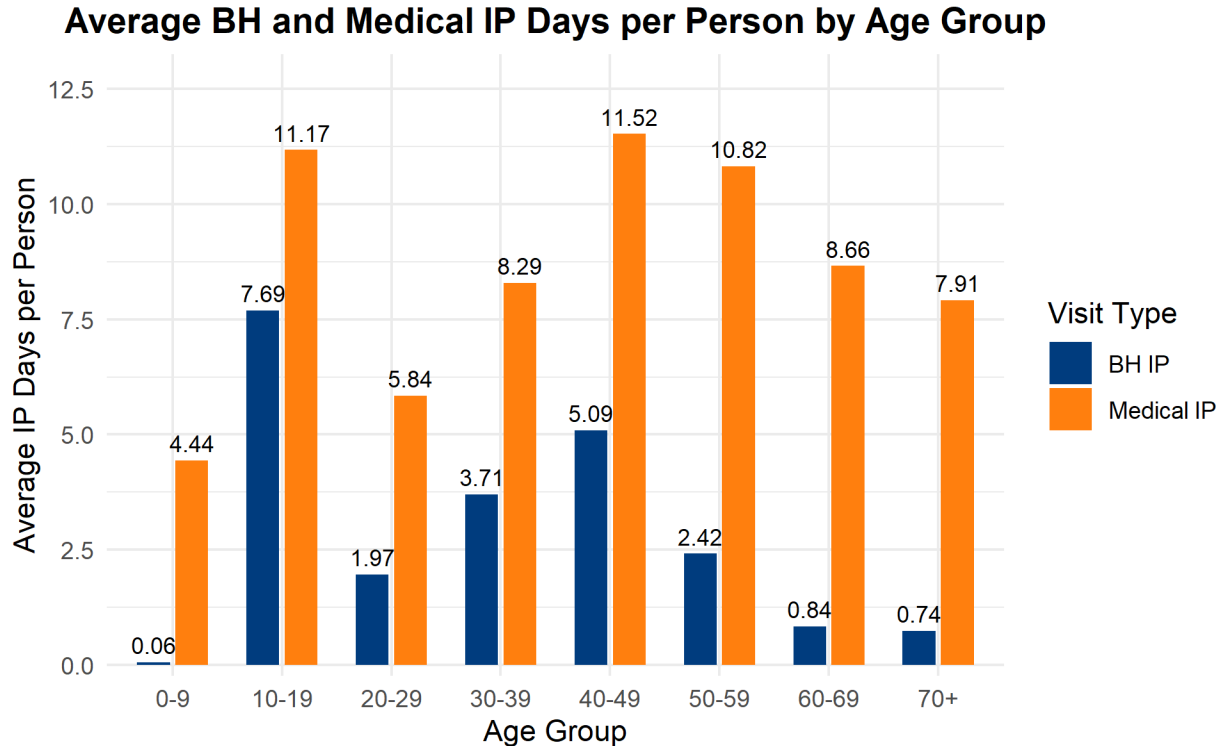


Figure 13: Average number of IP days per Medicaid enrollee stratified by age group and stay type.

Medical inpatient utilization varied across age groups rather than increasing consistently with age. Average medical inpatient days were relatively high among adolescents ages 10–19 at 11.17 days per person, declined among ages 20–29, and then increased again through middle adulthood, reaching the highest average among ages 40–49 at 11.52 days per person. Utilization remained elevated among ages 50–59 before declining somewhat in the older age groups.

Behavioral health inpatient utilization followed a distinct pattern, with by far the highest average among adolescents ages 10–19 at 7.69 days per person. Behavioral health inpatient days were also elevated among adults ages 30–49, particularly ages 40–49 at 5.09 days per person, before declining substantially after age 50.

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.

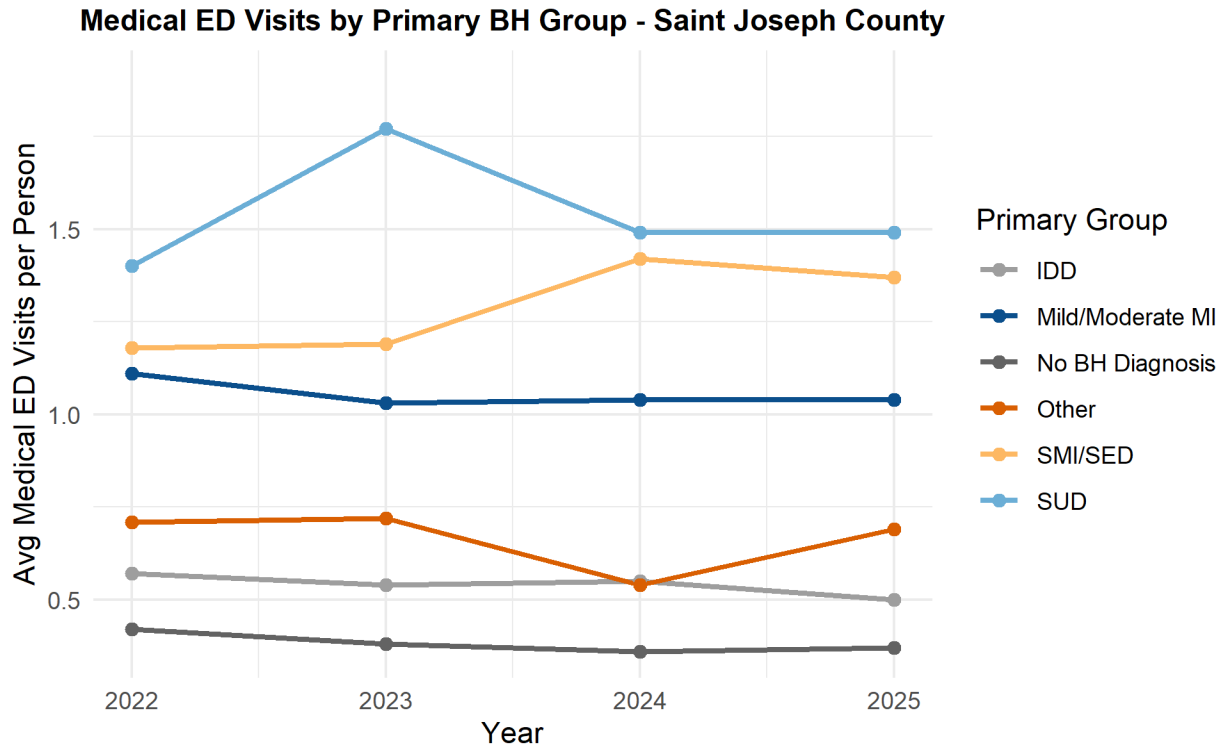


Figure 14: Average medical ED visits per person by primary BH group, 2022-2025.

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

Average visits per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.57	0.54	0.55	0.50
Mild/Moderate MI	1.11	1.03	1.04	1.04
No BH Diagnosis	0.42	0.38	0.36	0.37
Other	0.71	0.72	0.54	0.69
SMI/SED	1.18	1.19	1.42	1.37
SUD	1.40	1.77	1.49	1.49

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 1.49 visits per person, followed by SMI/SED at 1.37 and Mild/Moderate MI at 1.04. Enrollees with no behavioral health diagnosis averaged 0.37 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 - Saint Joseph 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	1.01	1.18	1.48	1.79	N/A
10-19	1.69	2.11	1.59	3.05	3.82
20-29	1.35	2.21	3.11	2.40	2.86
30-39	0.95	2.21	0.00	2.18	2.30
40-49	0.85	1.85	0.00	2.18	2.06
50-59	1.15	2.10	1.95	2.13	3.44
60-69	1.51	2.09	2.02	1.99	3.30
70+	0.46	2.98	2.12	3.22	6.44

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 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. SUD was generally associated with the highest or among the highest relative risks, including 3.44 among ages 50–59, 3.30 among ages 60–69, and 6.44 among adults age 70 and older. SMI/SED was also consistently elevated, while Mild/Moderate MI showed approximately two to three times the risk across most adult age groups. Overall, these age-stratified comparisons indicate that higher medical ED utilization among behavioral health populations is not explained by age alone.

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.

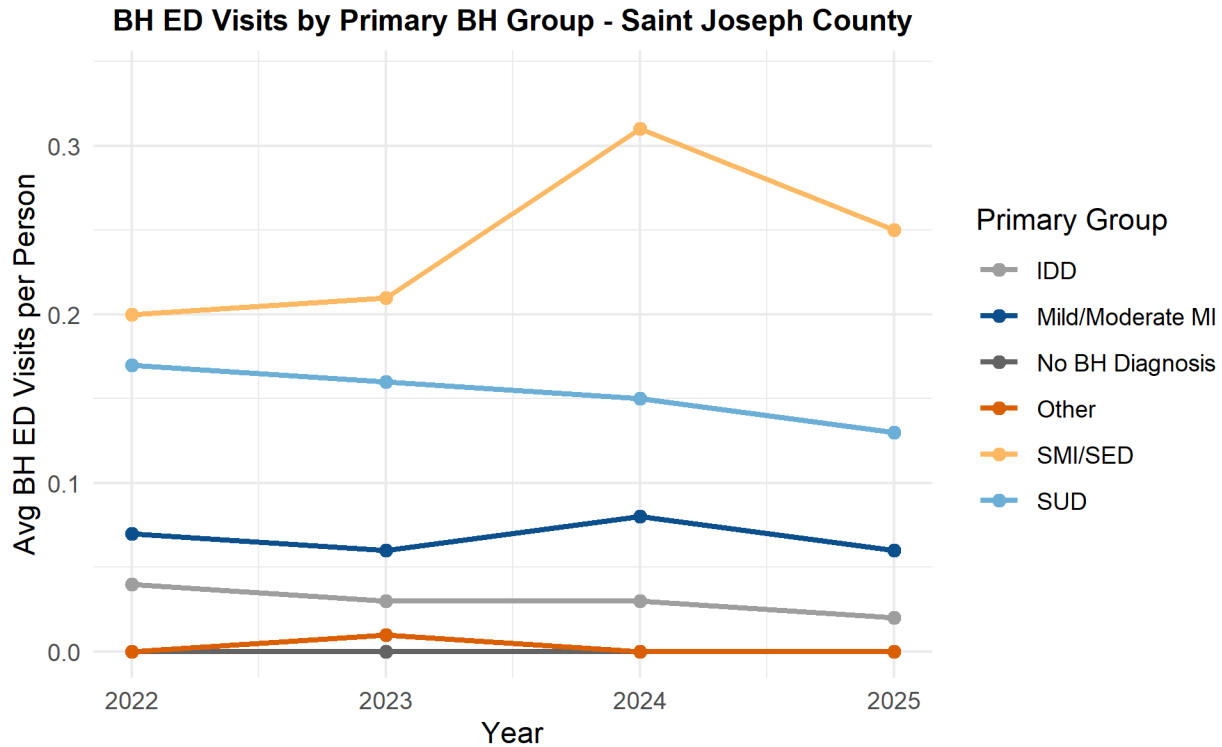


Figure 15: Average BH ED visits per person by primary BH group, 2022-2025.

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

Average visits per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.04	0.03	0.03	0.02
Mild/Moderate MI	0.07	0.06	0.08	0.06
No BH Diagnosis	0.00	0.00	0.00	0.00
Other	0.00	0.01	0.00	0.00
SMI/SED	0.20	0.21	0.31	0.25
SUD	0.17	0.16	0.15	0.13

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 0.25 visits per enrollee, followed by SUD at 0.13. Utilization was substantially lower among the remaining behavioral health groups and was near zero among individuals without a behavioral health diagnosis.

SMI/SED remained the highest-utilization group throughout the study period, increasing from 0.20 visits per enrollee in 2022 to a peak of 0.31 in 2024 before declining to 0.25 in 2025. In contrast, SUD showed a gradual decline from 0.17 visits per enrollee in 2022 to 0.13 in 2025. Despite these different trends, both groups remained consistently elevated relative to the other diagnosis groups.

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 - Saint Joseph 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	0.01	0.00	0.00	0.07	
10-19	0.07	0.07	0.00	0.00	0.39	0.00
20-29	0.02	0.09	0.00	0.00	0.22	0.16
30-39	0.03	0.06	0.00	0.00	0.42	0.14
40-49	0.00	0.07	0.00	0.00	0.26	0.07
50-59	0.00	0.04	0.00	0.00	0.11	0.20
60-69	0.00	0.04	0.00	0.11	0.11	0.14
70+	0.00	0.03	0.00	0.00	0.08	0.00

Age-specific patterns show that behavioral health ED utilization among individuals with SMI/SED was elevated across most age groups, with the highest average observed among adults ages 30–39 at 0.42 visits per person. Utilization was also notably high among adolescents ages 10–19 at 0.39 visits per person.

SUD-related behavioral health ED utilization was concentrated primarily among working-age adults, with the highest average observed among ages 50–59 at 0.20 visits per person. Utilization was also elevated among ages 20–39 and 60–69.

Overall, these findings suggest that crisis-oriented behavioral health ED utilization is particularly concentrated among populations with more severe or complex behavioral health needs, especially SMI/SED and SUD.

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.

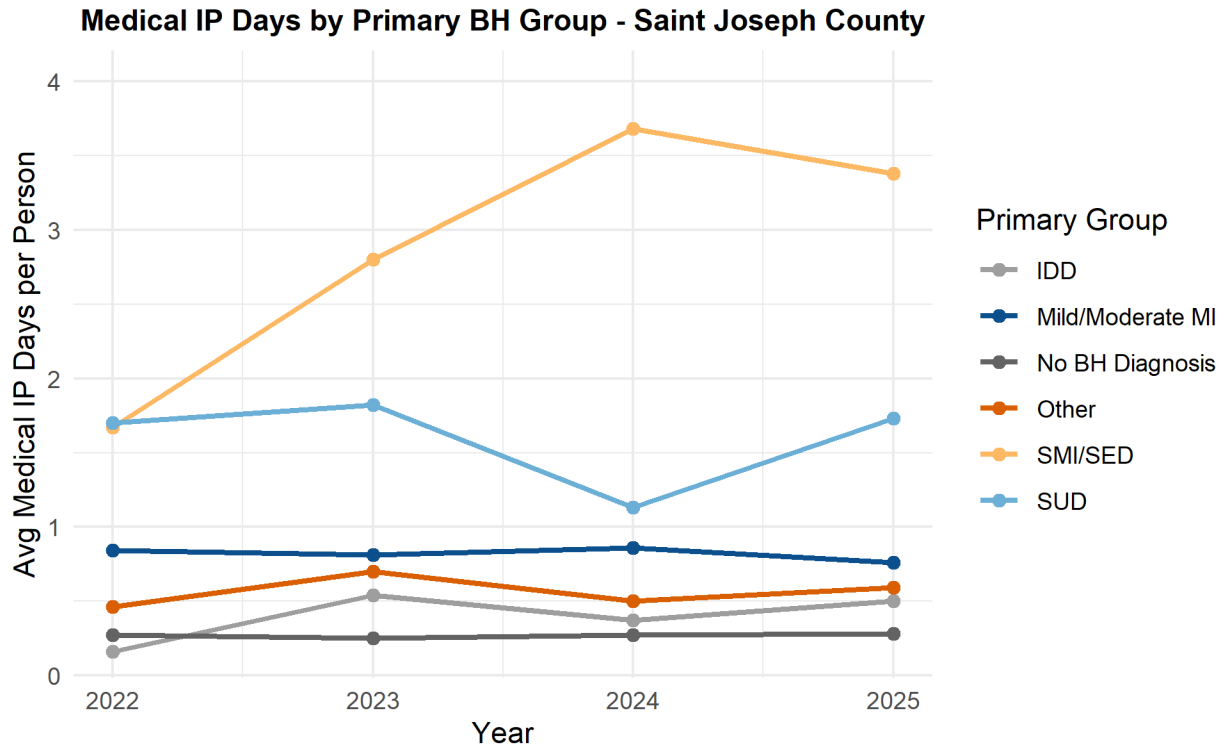


Figure 16: Average medical inpatient days per person by primary BH group, 2022-2025.

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

Average days per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.16	0.54	0.37	0.50
Mild/Moderate MI	0.84	0.81	0.86	0.76
No BH Diagnosis	0.27	0.25	0.27	0.28
Other	0.46	0.70	0.50	0.59
SMI/SED	1.67	2.80	3.68	3.38
SUD	1.70	1.82	1.13	1.73

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 3.38 days per enrollee, followed by SUD at 1.73 days. Individuals without a behavioral health diagnosis averaged only 0.28 medical inpatient days.

SMI/SED remained the highest-utilization group throughout the study period, increasing from 1.67 days per enrollee in 2022 to a peak of 3.68 in 2024 before declining slightly to 3.38 in 2025. SUD also remained persistently elevated, although its pattern was more variable, ranging from 1.13 to 1.82 days per enrollee across the four years.

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 - Saint Joseph County

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

Age Bracket	IDD	Mild/Moderate MI	Other	SMI/SED	SUD
0-9	0.12	0.20	0.41	0.34	N/A
10-19	2.99	2.51	0.79	19.22	0.00
20-29	1.46	1.81	2.61	3.89	2.13
30-39	0.00	2.30	0.00	5.66	2.98
40-49	1.11	2.99	0.00	5.87	3.44
50-59	1.76	2.24	3.71	3.56	4.62
60-69	3.51	2.99	5.27	3.73	4.31
70+	1.01	3.21	2.24	4.35	2.83

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. SMI/SED was associated with elevated hospitalization risk across nearly every age bracket, with a particularly large relative risk among adolescents ages 10–19 at 19.22 compared with same-age enrollees without a behavioral health diagnosis.

Elevated risk persisted throughout adulthood. SMI/SED remained consistently high, while SUD was also associated with substantially greater inpatient risk across most adult age groups, reaching 4.62 among ages 50–59 and 4.31 among ages 60–69. Mild/Moderate MI was elevated across most adult age groups as well, and the Other group showed high relative risks in several older age brackets.

Overall, these age-stratified comparisons indicate that higher medical inpatient utilization among behavioral health populations is not explained by age alone. Very large risk ratios in groups with low baseline hospitalization rates should be interpreted alongside the underlying utilization rates, as relatively small absolute differences 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.

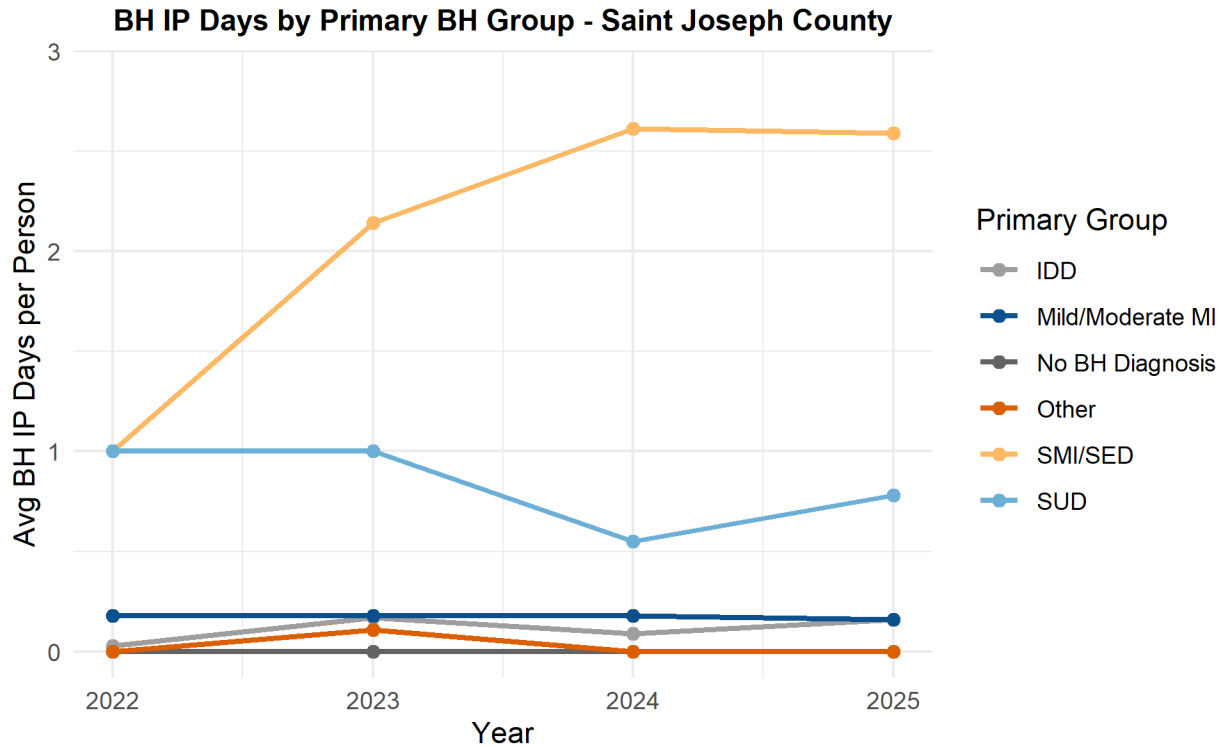


Figure 17: Average BH inpatient days per person by primary BH group, 2022-2025.

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

Average days per person, 2022-2025

Primary BH Group	2022	2023	2024	2025
IDD	0.03	0.17	0.09	0.16
Mild/Moderate MI	0.18	0.18	0.18	0.16
No BH Diagnosis	0.00	0.00	0.00	0.00
Other	0.00	0.11	0.00	0.00
SMI/SED	1.00	2.14	2.61	2.59
SUD	1.00	1.00	0.55	0.78

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 substantially from 1.00 day per enrollee in 2022 to 2.14 in 2023 and 2.61 in 2024, before remaining nearly unchanged at 2.59 in 2025.

SUD had the second-highest utilization in 2025 at 0.78 days per enrollee. Unlike SMI/SED, SUD utilization declined overall from 1.00 day per enrollee in 2022 and 2023 to 0.55 in 2024 before increasing somewhat in 2025. Utilization remained substantially lower among the IDD, Mild/Moderate MI, and Other groups and was near zero among individuals without a behavioral health diagnosis.

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 - Saint Joseph 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	0.75	
10-19	0.48	0.31	0.00	0.00	2.84	0.00
20-29	0.32	0.20	0.00	0.00	3.08	0.44
30-39	0.00	0.18	0.00	0.00	3.06	0.68
40-49	0.00	0.15	0.00	0.00	3.08	0.93
50-59	0.00	0.05	0.00	0.00	2.25	1.65
60-69	0.00	0.02	0.00	0.00	1.16	0.32
70+	0.00	0.00	0.00	0.00	2.31	0.00

SMI/SED had the highest average behavioral health inpatient utilization in every age bracket. Utilization was elevated beginning in adolescence and remained high throughout adulthood, with averages of approximately 3 days per person among ages 20–49. The highest values were observed among ages 20–29 and 40–49 at 3.08 days per person, followed closely by ages 30–39 at 3.06.

SUD-related behavioral health inpatient utilization was concentrated more heavily among working-age adults, with the highest average observed among ages 50–59 at 1.65 days per person. Utilization was also elevated among ages 40–49 and 30–39 before declining in older age groups.

The persistence of elevated behavioral health inpatient utilization among individuals with SMI/SED across age groups 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.

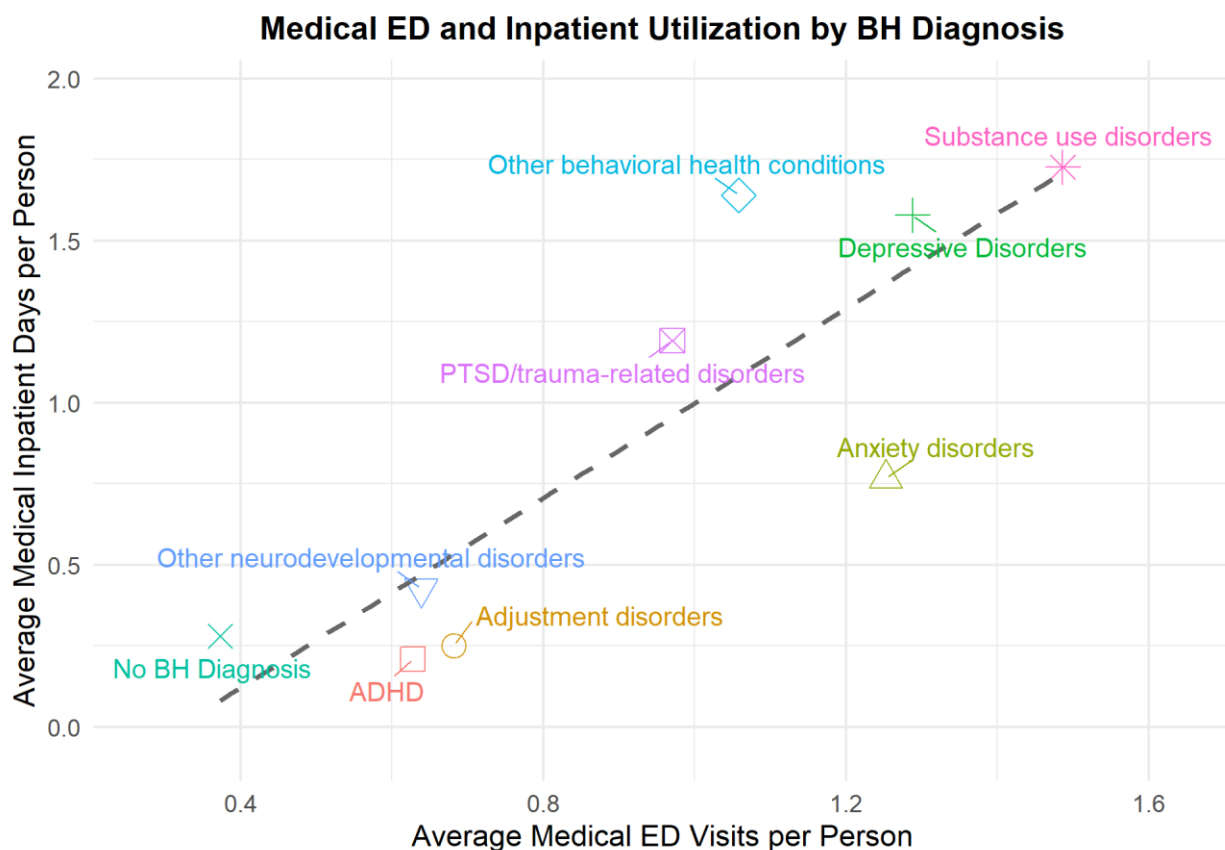


Figure 18: Average medical ED visits and inpatient days per Medicaid enrollee among the most common behavioral health diagnosis categories.

Acute medical utilization differed substantially across specific behavioral health diagnosis categories. Substance use disorders had the highest average medical ED utilization and also the highest average medical inpatient utilization. Other behavioral health conditions and depressive disorders also showed relatively high inpatient utilization, while anxiety disorders had comparatively high ED use but fewer inpatient days. Adjustment disorders, ADHD, and other neurodevelopmental disorders had lower levels of acute medical utilization.

The figure also shows that medical ED and inpatient utilization do not always move together. Anxiety disorders, for example, had relatively high ED utilization but substantially lower inpatient utilization than depressive disorders or other behavioral health conditions. In contrast, the Other Behavioral Health Conditions group had comparatively high inpatient utilization despite lower ED use than SUD or depressive disorders. These differences suggest that 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 Saint Joseph County.

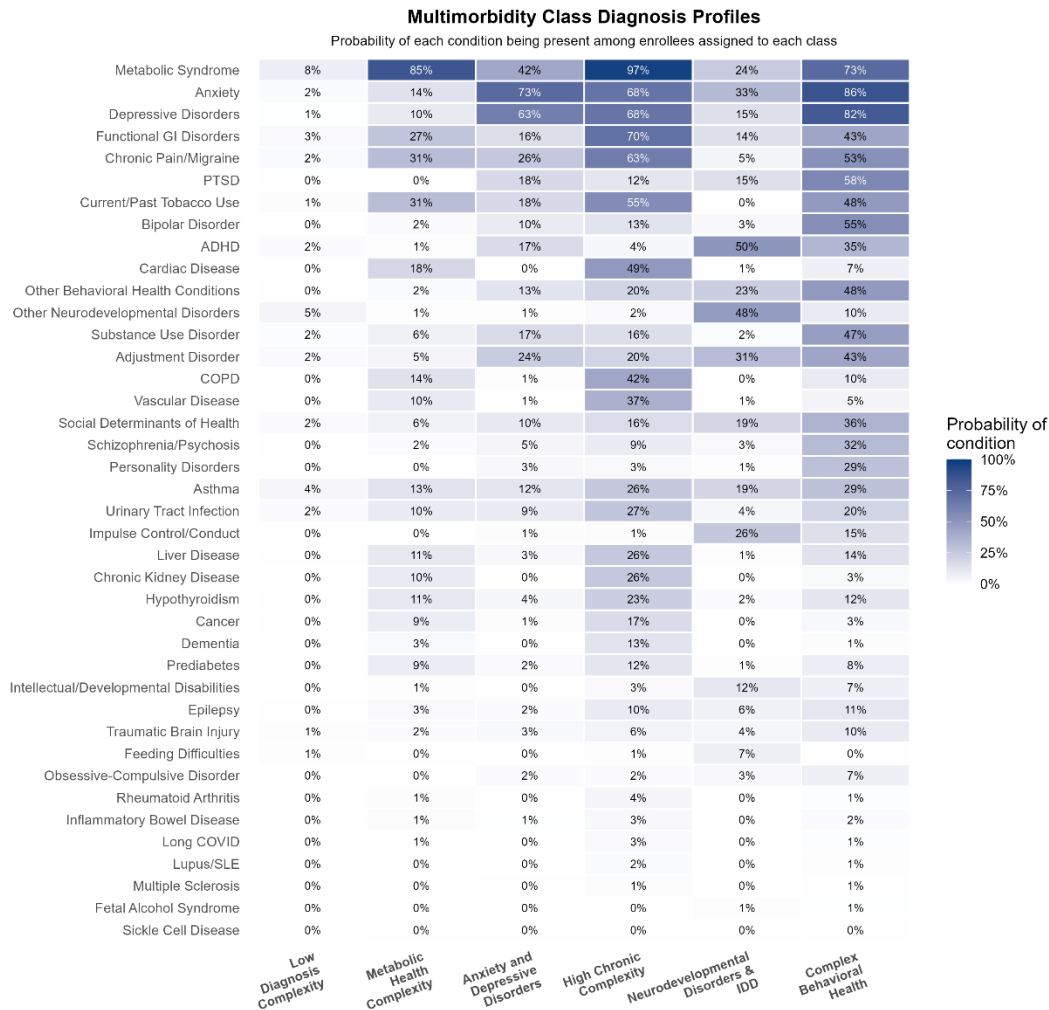


Figure 19: Estimated probability of each condition being present within each regionally defined multimorbidity class.

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 - Saint Joseph County				
Multimorbidity Class	N	% of Population	ED per 1,000	IP per 1,000
Low Diagnosis Complexity	16,551	57.0%	283.0	252.3
Metabolic Health Complexity	3,432	11.8%	675.3	869.1
Anxiety and Depressive Disorders	4,558	15.7%	705.0	459.6
High Chronic Complexity	1,625	5.6%	1,748.1	2,696.7
Neurodevelopmental Disorders & IDD	1,688	5.8%	611.2	332.8
Complex Behavioral Health	1,194	4.1%	2,295.9	2,831.4

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 (57.0%), followed by Anxiety and Depressive Disorders (15.7%) and Metabolic Health Complexity (11.8%). The more complex classes represented substantially smaller portions of the population. Despite their smaller size, Complex Behavioral Health and High Chronic Complexity had markedly higher acute-care utilization than the other multimorbidity groups. Together, these two classes represented only 9.7% of the ever-diagnosed population but had the highest ED and inpatient utilization rates.

Complex Behavioral Health had the highest ED utilization at 2,295.9 visits per 1,000 person-years and the highest inpatient utilization at 2,831.4 per 1,000 person-years. High Chronic Complexity was similarly elevated, particularly for inpatient utilization at 2,696.7 per 1,000 person-years. In contrast, Neurodevelopmental Disorders & IDD had substantially lower acute-care utilization despite representing another clinically complex population.

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

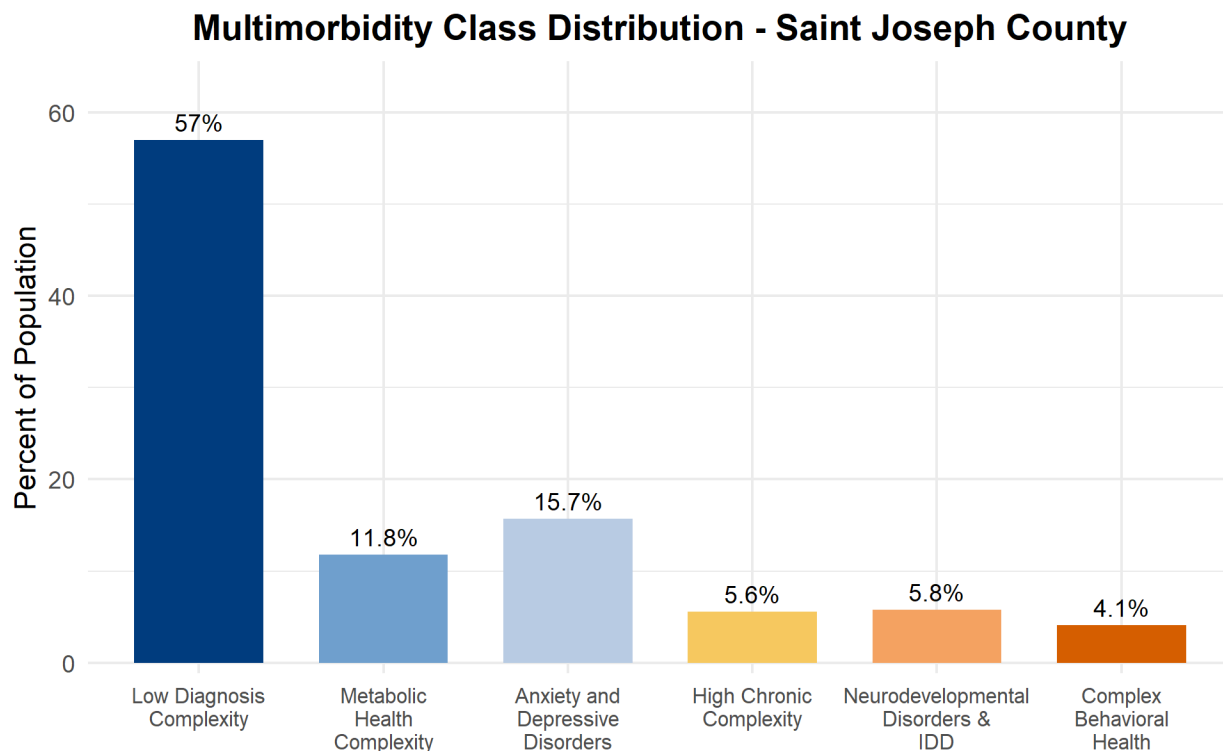


Figure 20: *Percent of the ever-diagnosed population in each multimorbidity class.*

Most individuals in the ever-diagnosed population were classified as Low Diagnosis Complexity (57.0%), followed by Anxiety and Depressive Disorders (15.7%) and Metabolic Health Complexity (11.8%). The more complex classes represented smaller portions of the population, including Neurodevelopmental Disorders & IDD at 5.8%, High Chronic Complexity at 5.6%, and Complex Behavioral Health at 4.1%.

Despite their smaller size, the Complex Behavioral Health and High Chronic Complexity classes may represent particularly important populations for intensive care coordination, transitions-of-care interventions, and strategies addressing co-occurring behavioral and physical health needs because of their high acute-care utilization.

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.

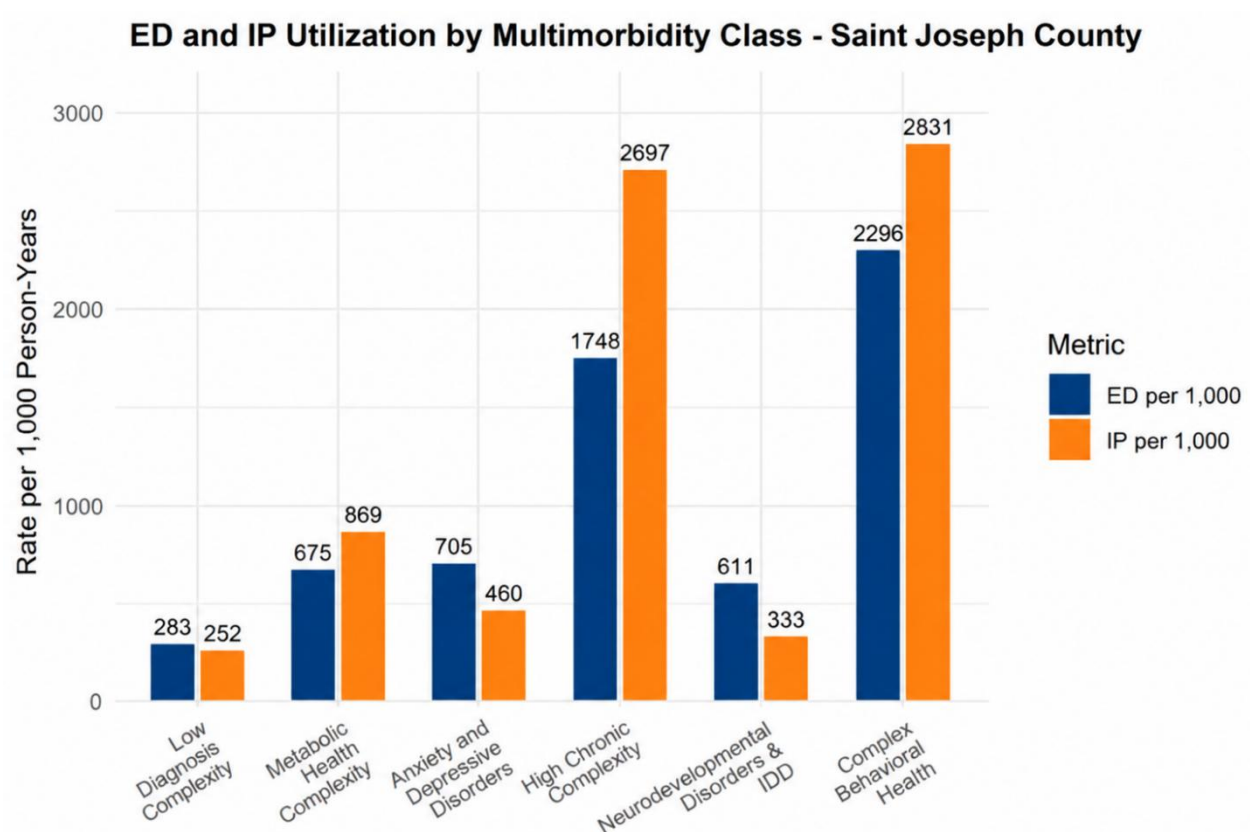


Figure 21: Average ED and IP utilization rates per 1,000 person-years, by multimorbidity class.

Acute-care utilization varied substantially across multimorbidity classes. Complex Behavioral Health had the highest ED utilization at 2,296 visits per 1,000 person-years and the highest inpatient utilization at 2,831 per 1,000 person-years. High Chronic Complexity was similarly elevated, with 1,748 ED visits and 2,697 inpatient events per 1,000 person-years.

The remaining classes had substantially lower acute-care utilization. Metabolic Health Complexity had 675 ED visits and 869 inpatient events per 1,000 person-years, while Neurodevelopmental Disorders & IDD had 611 and 333, respectively. Anxiety and Depressive Disorders showed a different pattern, with ED utilization (705 per 1,000) exceeding inpatient utilization (460 per 1,000).

Overall, the findings identify Complex Behavioral Health and High Chronic Complexity as particularly high-utilization populations while also showing that different multimorbidity profiles are associated with distinct patterns of ED and inpatient use.

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 - Saint Joseph County

Percent completed, 2025

Metric ID	Quality Metric	SWMBH	Saint Joseph
343	Presence of at least 84 days of continuous treatment with an Antidepressant medication	62.7%	61.5%
515	Adherence to Mood Stabilizer medications for individuals with bipolar disorder	55.6%	53.9%

Saint Joseph County performed slightly below the SWMBH regional rate for continuous antidepressant treatment, with 61.5% meeting the measure compared with 62.7% regionally. For adherence to mood stabilizer medications among individuals with bipolar disorder, Saint Joseph County's rate was slightly below the regional rate (53.9% vs. 55.6%).

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 Saint Joseph 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 - Saint Joseph County

Percent utilizing, 2025

Medication Class	SWMBH	Saint Joseph
Opioids	4.2%	4.6%
Insomnia Agents	3.0%	3.0%
ADHD: Stimulants	2.8%	2.7%
Antipsychotics	5.5%	5.8%
Antidepressants	14.5%	16.5%
Antidepressants: SSRIs	8.7%	9.1%
Mood Stabilizers	2.7%	2.6%
Benzodiazepines	3.4%	4.0%
ADHD Medication	3.3%	3.2%
Antidepressants: TCAs	1.2%	1.7%

Antidepressants were the most commonly utilized behavioral health medication class among adults in Saint Joseph County, with 16.5% receiving an antidepressant and 9.1% receiving an SSRI. Antipsychotics were used by 5.8% of adults, while opioids were used by 4.6%, benzodiazepines by 4.0%, and ADHD medications by 3.2%.

Compared with the SWMBH region overall, Saint Joseph County had somewhat higher utilization of antidepressants (16.5% vs. 14.5%), SSRIs (9.1% vs. 8.7%), antipsychotics (5.8% vs. 5.5%), opioids (4.6% vs. 4.2%), benzodiazepines (4.0% vs. 3.4%), and TCAs (1.7% vs. 1.2%). Utilization of ADHD medications, stimulants, and mood stabilizers was slightly lower, while insomnia-agent use was the same as the regional rate.

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 - Saint Joseph County

Percent triggered, 2025

Metric ID	Quality Metric	SWMBH	Saint Joseph
214	Failure to Refill Antipsychotic Medication	11.2%	8.2%
217	Use of four or more psychotropic medications for 60 or more days	3.5%	4.7%
231	Use of Opioids and Benzodiazepines for 30 or More Days	35.3%	34.2%
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	3.9%	4.0%

Among adults in Saint Joseph County, the most common pharmacy quality indicator was concurrent use of opioids and benzodiazepines for 30 or more days, which triggered for 34.2% of the population evaluated for that measure. Failure to refill antipsychotic medication triggered for 8.2%, while 4.7% triggered the indicator for use of four or more psychotropic medications for 60 or more days and 4.0% triggered the indicator for multiple prescribers of the same psychotropic medication class for 45 or more days.

Compared with the SWMBH regional population, Saint Joseph County had a lower rate of failure to refill antipsychotic medication (8.2% vs. 11.2%) and a slightly lower rate of concurrent opioid and benzodiazepine use (34.2% vs. 35.3%). In contrast, use of four or more psychotropic medications was somewhat higher in Saint Joseph County (4.7% vs. 3.5%), while the multiple-prescriber indicator was nearly the same as the regional rate (4.0% vs. 3.9%). These indicators may help identify areas for additional clinical review but should not be interpreted on their 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 - Saint Joseph 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	7,932	96.2%	8.6	Ref.	0.9	Ref.	7.8	Ref.
2	1+ QIs Triggered	314	3.8%	33.1	3.83 ↑	5.7	6.55 ↑	27.4	3.53 ↑
515	Adherence to Mood Stabilizer medications for individuals with bipolar disorder	20	0.2%	55.0	6.37 ↑	30.0	34.49 ↑	25.0	3.22 ↑
231	Use of opioids and benzodiazepines for 30 or more days	26	0.3%	26.9	3.11 ↑	0.0	0.00 ↓	26.9	3.46 ↑
343	Presence of at least 84 days of continuous treatment with an Antidepressant medication	155	1.9%	10.3	1.19	4.5	5.17 ↑	5.8	0.75 ↓
214	Failure to refill antipsychotic medication within 30 days of the prescription ending	37	0.4%	32.4	3.75 ↑	10.8	12.42 ↑	21.6	2.78 ↑
217	Use of four or more psychotropic medications for 60 or more days	63	0.8%	19.0	2.20 ↑	9.5	10.92 ↑	9.5	1.22 ↑
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	64	0.8%	15.6	1.81 ↑	7.8	8.97 ↑	7.8	1.00

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 33.1 hospitalizations per 100 people, compared with 8.6 per 100 among adults with no indicators, corresponding to 3.83 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 adherence indicator had the strongest association with behavioral health hospitalization, with 34.49 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 was also strongly associated with behavioral health hospitalization risk at 12.42 times the reference level, while use of four or more psychotropic medications and multiple prescribers of the same psychotropic medication class had behavioral health risk ratios of 10.92 and 8.97, respectively.

Concurrent opioid and benzodiazepine use showed a different pattern, with no behavioral health hospitalizations observed in this group but 3.46 times the non-behavioral health hospitalization risk of the reference population. Continuous antidepressant treatment was associated with elevated behavioral health hospitalization risk but not with higher overall hospitalization risk, illustrating that individual quality indicators may identify different patterns of clinical need.

These findings do not establish that medication-related indicators caused hospitalization. Rather, the indicators may identify individuals with greater clinical complexity, medication-management challenges, or care-coordination needs who are also at elevated risk for acute-care utilization. Some indicator groups were relatively small, so particularly large risk ratios should be interpreted alongside the underlying hospitalization rates and group sizes.

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 - Saint Joseph County

Percent utilizing, 2025

Medication Class	SWMBH	Saint Joseph
Opioids	0.4%	0.5%
Insomnia Agents	0.5%	1.3%
ADHD: Stimulants	5.4%	6.7%
Antipsychotics	1.6%	1.8%
Antidepressants	3.1%	4.7%
Antidepressants: SSRIs	2.6%	4.0%
Mood Stabilizers	0.6%	0.7%
Benzodiazepines	0.3%	0.4%
ADHD Medication	6.1%	7.7%
Antidepressants: TCAs	0.2%	0.4%

ADHD medications were the most commonly utilized behavioral health medication class among children and adolescents in Saint Joseph County, with 7.7% receiving an ADHD medication and 6.7% receiving a stimulant. Antidepressants were used by 4.7% of the pediatric population, including 4.0% receiving an SSRI, while antipsychotics were used by 1.8%.

Compared with the SWMBH region overall, Saint Joseph County had higher utilization across all behavioral health medication classes shown. The largest differences were observed for ADHD medications (7.7% vs. 6.1%), stimulants (6.7% vs. 5.4%), antidepressants (4.7% vs. 3.1%), SSRIs (4.0% vs. 2.6%), and insomnia agents (1.3% vs. 0.5%).

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 - Saint Joseph County

Percent triggered, 2025

Metric ID	Quality Metric	SWMBH	Saint Joseph
214	Failure to Refill Antipsychotic Medication	10.0%	9.2%
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	1.6%	2.5%
301	Use of Antipsychotic Medication for Member Under the Age of 18 Diagnosed with ADHD	49.8%	59.1%

Pediatric pharmacy quality indicator triggering rates varied substantially by measure. The most common indicator in Saint Joseph County was antipsychotic use among children diagnosed with ADHD, which triggered for 59.1% of the eligible population. Failure to refill antipsychotic medication triggered for 9.2%, while multiple prescribers of the same psychotropic medication class triggered for 2.5%.

Compared with the SWMBH region, Saint Joseph County had a higher triggering rate for antipsychotic use among children diagnosed with ADHD (59.1% vs. 49.8%) and for multiple prescribers of the same psychotropic medication class (2.5% vs. 1.6%). In contrast, failure to refill antipsychotic medication was slightly lower in Saint Joseph County (9.2% vs. 10.0%).

These indicators identify situations that may warrant additional clinical review but should not be interpreted on their own 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 - Saint Joseph 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	5,993	98.4%	3.5	Ref.	0.1	Ref.	3.3	Ref.
2	1+ QIs Triggered	100	1.6%	6.0	1.74 ↑	4.0	34.25 ↑	2.0	0.60 ↓
283	Multiple prescribers of the same class of psychotropic medications for 45 or more days	17	0.3%	17.6	5.10 ↑	17.6	150.68 ↑	0.0	0.00 ↓
214	Failure to refill antipsychotic medication within 30 days of the prescription ending (any diagnosis)	9	0.1%	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	65	1.1%	4.6	1.33 ↑	1.5	12.84 ↑	3.1	0.93

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 a higher overall hospitalization rate than those who triggered none. The hospitalization rate was 6.0 per 100 among children with one or more indicators compared with 3.5 per 100 among those with none, corresponding to 1.74 times the overall hospitalization risk. The difference was concentrated in behavioral health hospitalization, where children triggering at least one indicator had 34.25 times the risk of those triggering none. In contrast, non-behavioral health hospitalization risk was lower than the reference group.

Multiple prescribers of the same psychotropic medication class showed the strongest association with hospitalization. Among the 17 children triggering this indicator, the overall hospitalization rate was 17.6 per 100 and all observed hospitalizations were behavioral health related, producing a behavioral health risk ratio of 150.68. Antipsychotic use among children diagnosed with ADHD was also associated with elevated behavioral health hospitalization risk (RR 12.84), although its overall hospitalization risk was only modestly elevated (RR 1.33). No hospitalizations were observed among the nine children triggering the antipsychotic refill indicator.

These very large behavioral health risk ratios should be interpreted cautiously because the reference-group behavioral health hospitalization rate was only 0.1 per 100 and several indicator groups were small. Low baseline rates and small numbers can produce very large

relative differences. Across adults and children in Saint Joseph County, pharmacy quality indicators identified relatively small populations with elevated hospitalization risk, although the strength and type of association differed by age and indicator. These findings do not establish that medication-related concerns caused hospitalization but may help identify individuals with greater clinical complexity 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 presented earlier in the report.

10. Conclusion

This Population Health Analysis brings together demographic characteristics, behavioral and chronic health conditions, healthcare utilization, multimorbidity, and healthcare quality to provide a broad view of the health needs of Medicaid enrollees in Saint Joseph County. Examining these areas together demonstrates that population health needs are rarely isolated: behavioral health, physical health, social needs, medication management, and acute-care utilization frequently overlap.

The 2025 results should be interpreted in the context of a changing Medicaid population. Total enrollment declined substantially from 2024 to 2025, while the proportion of enrollees receiving at least one Medicaid service increased. Although documented behavioral and chronic condition prevalence increased in the full annual population, these increases were not reproduced among individuals enrolled in both years. This suggests that changes in enrollment and population composition may have contributed to the annual trends, in addition to possible changes in healthcare contact and opportunities for diagnosis and documentation.

Several Saint Joseph-specific patterns warrant continued attention. Overall behavioral health prevalence was similar to the remainder of the SWMBH region, but anxiety, ADHD, substance use disorders, and trauma-related diagnoses were more prevalent. SUD and trauma-related conditions were particularly prominent among working-age adults, and individuals with SMI/SED and SUD experienced elevated behavioral health and medical acute-care utilization across multiple age groups. These findings support continued attention to crisis prevention, transitions of care, substance use treatment, trauma-informed care, and coordination between behavioral and physical healthcare services.

The analysis also reinforces the importance of looking beyond individual diagnoses. Chronic physical health conditions were frequently present alongside behavioral health conditions, and the multimorbidity analysis identified Complex Behavioral Health and High Chronic Complexity as relatively small populations with disproportionately high emergency department and inpatient utilization. Documented social determinants of health were also strongly associated with hospitalization, suggesting that identification of social and economic needs may provide additional information for recognizing individuals at elevated risk of acute-care use.

Healthcare quality and pharmacy analyses provide another potential avenue for identifying populations that may benefit from review or care coordination. Pharmacy quality indicators were associated with elevated hospitalization risk among both adults and children, although the strength and type of association varied by indicator and some groups were small. These findings should not be interpreted as evidence that medication-related factors caused hospitalization; rather, the indicators may help identify individuals with greater clinical complexity or medication-management needs.

Overall, the findings support a population health approach that considers behavioral health, chronic physical conditions, social needs, and patterns of healthcare utilization together. The report can be used to identify populations for further review, inform quality improvement and care-coordination strategies, and monitor whether the patterns

identified in 2025 persist over time. Observed associations and statistically significant differences should be interpreted alongside local knowledge of service availability, access to care, population characteristics, and documentation practices and do not, by themselves, establish why the differences occurred.

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