



mosaic
GROUP

Behavioral Health Data Quantitative and Qualitative Analysis

Appendix A

March 2026



Purpose & Strategic Questions

- **Our Strategic Questions:**
 - **Where** is behavioral health burden geographically concentrated?
 - **Who** experiences disproportionate crisis burden?
 - **What** structural and systemic factors drive ED utilization?
 - **How** can philanthropic investment achieve measurable impact?
- **Overarching Goal:**
 - Reduce preventable behavioral health crises and emergency system reliance by intervening earlier, where risk concentrates, and across co-occurring conditions.
- **Key Insight:**
 - The majority of behavioral health ED utilization New Hanover County is concentrated in fewer than half of ZIP codes.

Data Sources and Methodology

Multi-Level, Spatial, and Equity-Focused Analysis

Geo-Spatial Analysis	• ZIP-level granular analysis (10 ZIPs) • County-level context • State comparative benchmarking
Disparity Analysis	• Race/ethnicity stratification • Age cohort analysis (10-18, 19-24, 25-44, 45-64, 65+) • Gender-based patterns • Socioeconomic overlays
Temporal Trend Analysis	• 5-year longitudinal data (2020-2024) • Pre/post-COVID patterns • Emerging hotspot identification
Co-occurrence Analysis	• Multi-diagnosis patterns • Substance-specific profiles • ED utilization vs. mortality gap

Analytical Methodology

Source	Data Type	Time Period	Geographic Level
NC DETECT	ED visits (behavioral health, overdose, substance use)	2020–2024	ZIP code
NC State Center for Health Statistics	Hospitalizations	2020–2024	ZIP code
NC Violent Death Reporting System	Suicide deaths	2019–2023	ZIP code
HMIS (Homeless Management Information System)	Crisis service utilization, housing instability indicators	2020–2024	County / service region
Trillium Health Resources Claims Data	Behavioral health and substance use service claims (Medicaid / publicly funded services)	2020–2024	County / service catchment
New Hanover County Schools	Student behavioral health indicators (disciplinary events, school-based crime)	2021–2024	School / district Level
U.S. Census Bureau ACS	Demographics, socioeconomic indicators	5-year estimates	ZIP code
County Health Rankings	Social determinants and community health indicators	2024	County

Rate Construction:

- Crude rates per 10,000 or 100,000 population
- Age-stratified where applicable
- Suppression applied for counts <5

Analytical Notes:

- ZIP-level analyses are descriptive and exploratory
- Support place-based planning, not clinical conclusions
- May mask within-ZIP heterogeneity

Community Context – Comparative Profile

Characteristic	New Hanover County	North Carolina	National Context
Age Profile	Older population (~22–24% age 65+)	Younger age distribution	Similar aging trend nationally
Behavioral Health Utilization	ED behavioral health utilization geographically concentrated in a few ZIP codes	More dispersed crisis utilization	Urban counties show similar concentration patterns
Gender Disparities	Men experience substantially higher overdose ED visits and mortality	Similar gender disparities statewide	National opioid mortality patterns mirror local trends
Racial Disparities	ZIP-level disparities, particularly among Black non-Hispanic residents in high-burden areas	Racial disparities in overdose and behavioral health access present statewide	Persistent national disparities in behavioral health outcomes
Education	Higher educational attainment than NC average	Lower attainment overall	Wide national variation
Poverty	Higher median but persistent neighborhood pockets of poverty	Higher overall poverty rate	National inequality patterns similar
Behavioral Health Workforce	Higher mental health provider rate than NC average	Lower provider availability in many rural areas	Workforce shortages persist nationally

New Hanover County is older, more geographically concentrated, and exhibits sharper ZIP-level disparities than state or national context, suggesting place-based strategies will be highly effective

ZIP Code Profiles – Geographic Regions

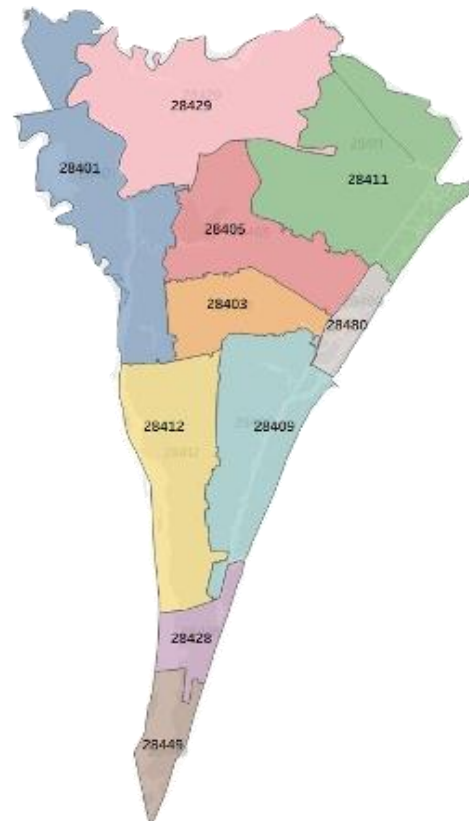
ZIP	Area Name	Population	Median Age	Key Characteristics	Behavioral Health Profile
28401	Historic Downtown Wilmington	22,007	41.7	Lowest median (\$57,968), highest poverty (25%), most diverse	HIGHEST BURDEN: Multi-diagnosis co-occurrence, crisis convergence zone
28412	Myrtle Grove	44,166	40.8	Largest population, moderate (\$71,636), elevated uninsured (5%)	HIGH VOLUME: Limited proximate behavioral health resources
28403	Central Wilmington (Forest Hills, Oleander)	40,319	28.5	Youngest population, elevated poverty relative to	HIGH UTILIZATION: Alcohol and mental health overlap
28405	Northeast Wilmington	35,467	38.0	Mixed- with embedded deprivation pockets (14% poverty)	MODERATE-HIGH: School system exposure, neighborhood variation
28409	Monkey Junction	36,163	43.2	Higher (\$111,048), older, lower poverty (4%)	MODERATE: Access-driven rather than deprivation-driven
28411	Ogden	37,233	42.1	Affluent suburban (\$97,387), low poverty (4%)	LOW-MODERATE: Selective access gaps
28429	Castle Hayne (Rural)	9,662	43.8	Rural, higher poverty (18%), limited service density	ACCESS GAP ZONE: Geographic and transportation barriers
28428	Carolina Beach	7,136	53.2	Older, small, stable (6% poverty)	LOW RISK: Seasonal population shifts



ZIPs 28401, 28412, 28403, and 28405 combine larger populations, higher poverty, and greater diversity, while 28429 stands out as a rural access-gap zone.

Geographic Regions and Rationale

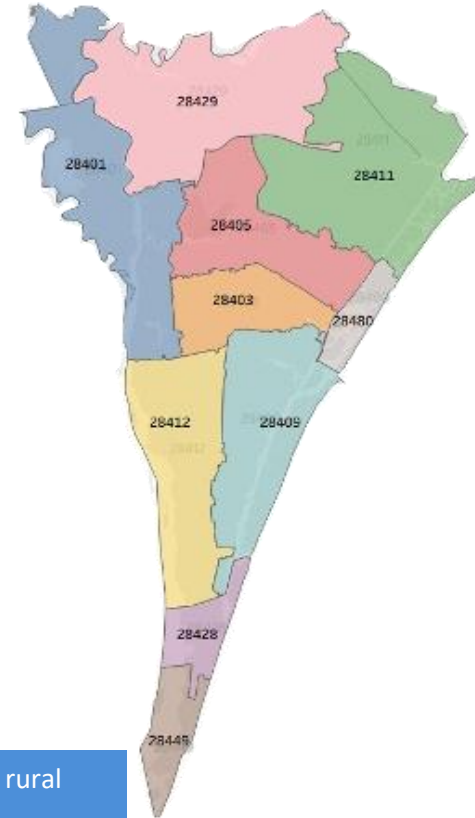
Zip Code	City/Area Name	Key takeaway
28401	Historic/Downtown Wilmington (north side + southside arts district)	Highest concentration of socioeconomic vulnerability: lowest median , high poverty, higher uninsured rates, and greater racial diversity, aligning with the county's highest ED volume and multi-diagnosis co-occurrence.
28403	Central Wilmington (Forest hills, Oleander, College Roads, Autumn Hall)	Younger, high-density population with mixed affluence: lowest median age, elevated poverty relative to , and notable alcohol + mental health overlap associated with elevated utilization
28405	Northeast Wilmington (Quarters Neck)	Mixed- ZIP with embedded deprivation pockets: moderate overall but higher poverty and racial diversity in specific neighborhoods (e.g., Creekwood), intersecting with school and juvenile justice system exposure.
28409	Wilmington (Monkey Junction Area)	Higher-, older population with lower poverty: demographic profile suggests lower baseline socioeconomic risk; observed behavioral health burden may reflect access patterns rather than socioeconomic deprivation



In 28401, 28403, 28405, and 28409, distinct mixes of poverty, age structure, and service access explain why some ZIPs function as crisis convergence zones while others show burden driven more by access than deprivation

Geographic Regions and Rationale

28411	Wilmington (Ogden)	Affluent suburban ZIP with moderate population size: higher , lower poverty, but nontrivial uninsured presence suggests selective access gaps rather than widespread vulnerability.
28412	Wilmington (Myrtle Grove)	Large population with moderate and elevated uninsured rate: high ED volume combined with fewer proximate behavioral health resources increases system reliance.
28428	Carolina Beach	Older, smaller population with relatively stable socioeconomic indicators: lower poverty and no uninsured population suggest lower structural risk, though contextual factors such as seasonal population shifts may influence utilization
28429	Castle Hayne	Rural access-gap ZIP: smaller population with higher poverty and limited service density, indicating elevated risk driven by geographic and transportation barriers rather than volume alone.
28449	Kure Beach	Small, older, affluent coastal ZIP: high median , very low poverty, and low uninsured rates indicate minimal structural behavioral health risk.
28480	Wrightsville Beach	Highest and oldest median age in the county: extremely low poverty, unemployment, and uninsured rates; serves as a low-risk comparator ZIP.



Affluent coastal ZIPs such as 28449 and 28480 serve as low-risk comparators, while 28429 exemplifies a rural access-gap ZIP with higher poverty and limited behavioral health service density.

Five-Year Trajectory – ED Visits vs Hospitalizations

Condition	2020 Hosp.	2024 Hosp.	Change	2020 ED	2024 ED	Change	Interpretation
Anxiety	3,371	5,088	+51%	1,164	1,288	+11%	Severe inpatient crisis acceleration
Depression	3,040	4,426	+46%	980	941	-4%	Parallel hospitalization rise
Suicidal Ideation	729	704	-3%	1,152	1,350	+17%	High ED-to-admission rate (52%)
Self-Inflicted Injury	74	87	+18%	189	199	+5%	Low admission rate (44%) - many treated/released
Polysubstance Use	96	201	+109%	236	620	+163%	Fastest-growing crisis
Stimulant Use	106	186	+75%	94	154	+64%	Emerging parallel crisis

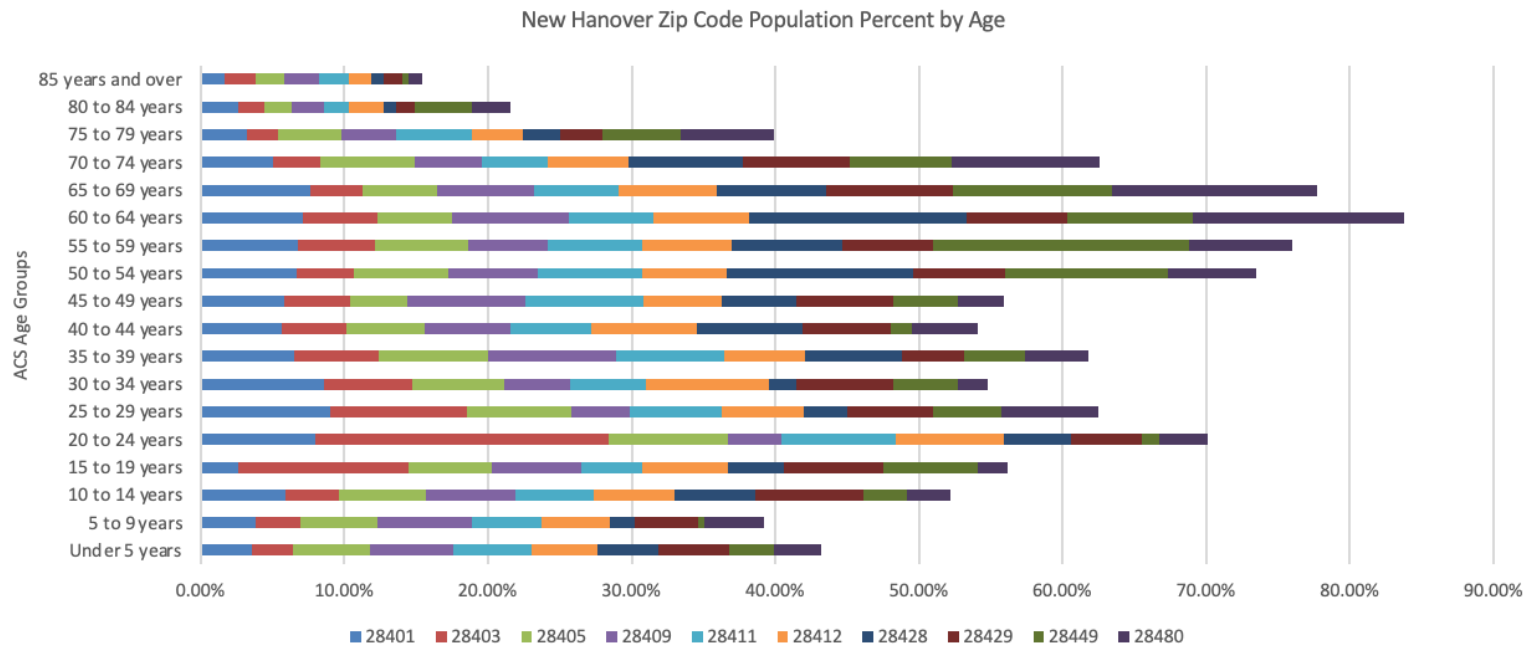
Behavioral health burden is not returning to pre-pandemic levels, it is accelerating. Anxiety and depression drive inpatient psychiatric bed demand (5,088 + 4,426 = 9,514 hospitalizations annually), while suicidal ideation and polysubstance use strain ED crisis capacity with high-acuity presentations requiring immediate stabilization.

Zip Code Level Demographic and Socioeconomic Profile 2020-2024

ZIP-Level Demographics Provide
Context for Interpreting Health
Outcomes

- Demographics
- Poverty
- Housing
- Population totals
- Vehicle Access
- Educational Attainment
- School Enrollment

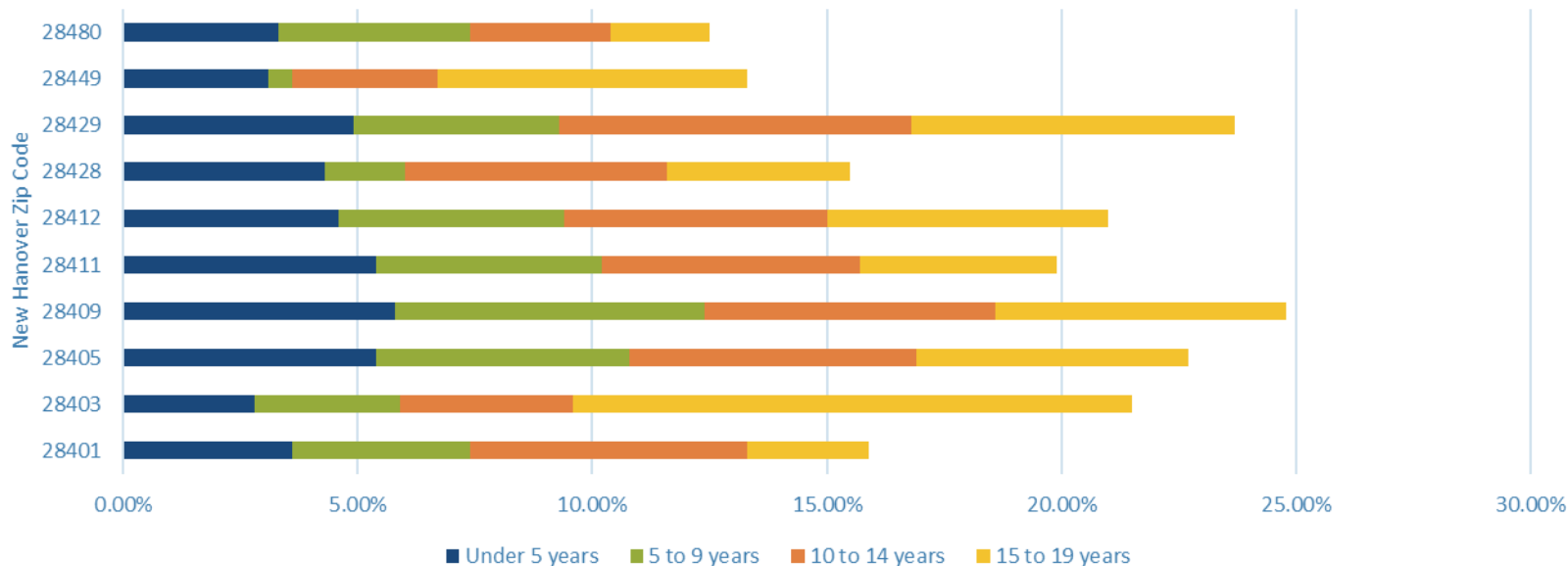
Demographic Snapshot – All Ages



The age distribution across New Hanover ZIP codes shows notable geographic variation, with several ZIP codes (particularly 28409, 28411, and 28412) having higher proportions of middle-aged and older adults, while others such as 28401 and 28403 skew relatively younger.

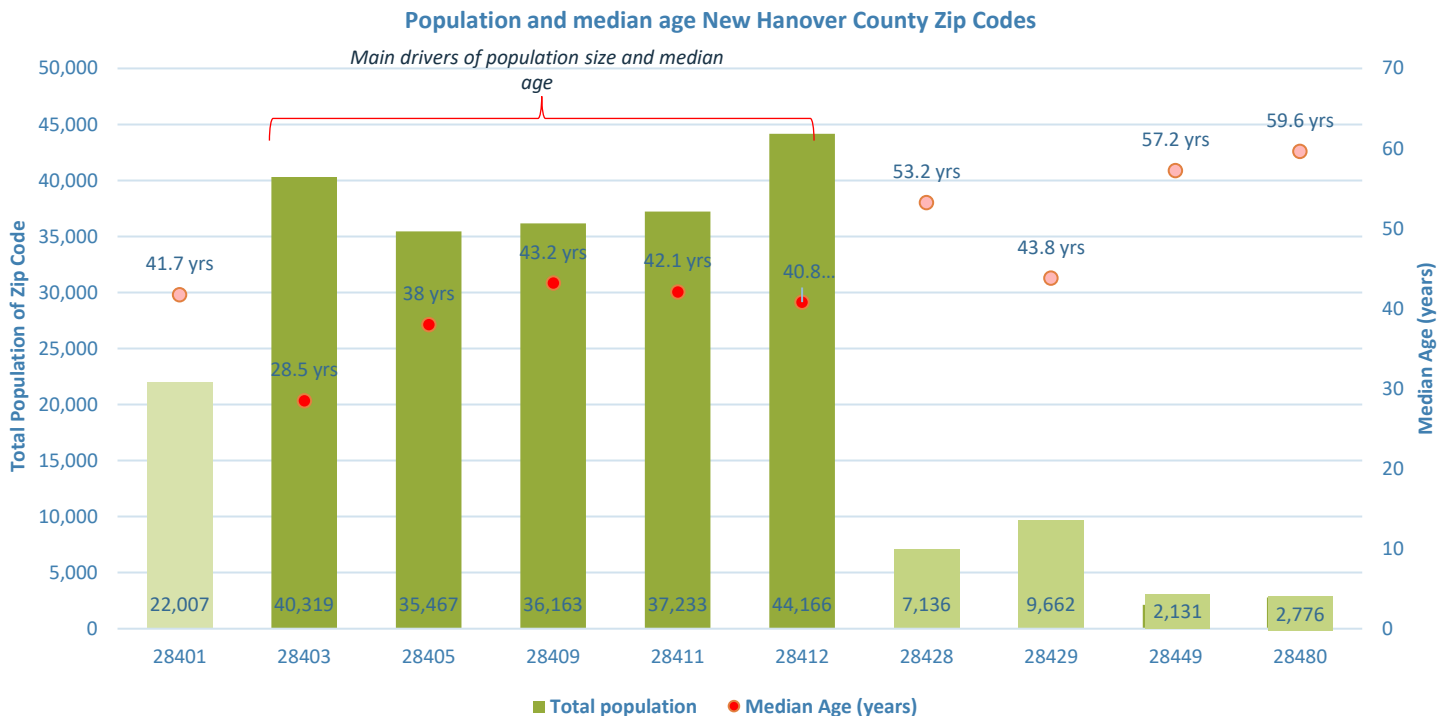
Demographic Snapshot –Age (Youth)

New Hanover Youth Only Population Proportion



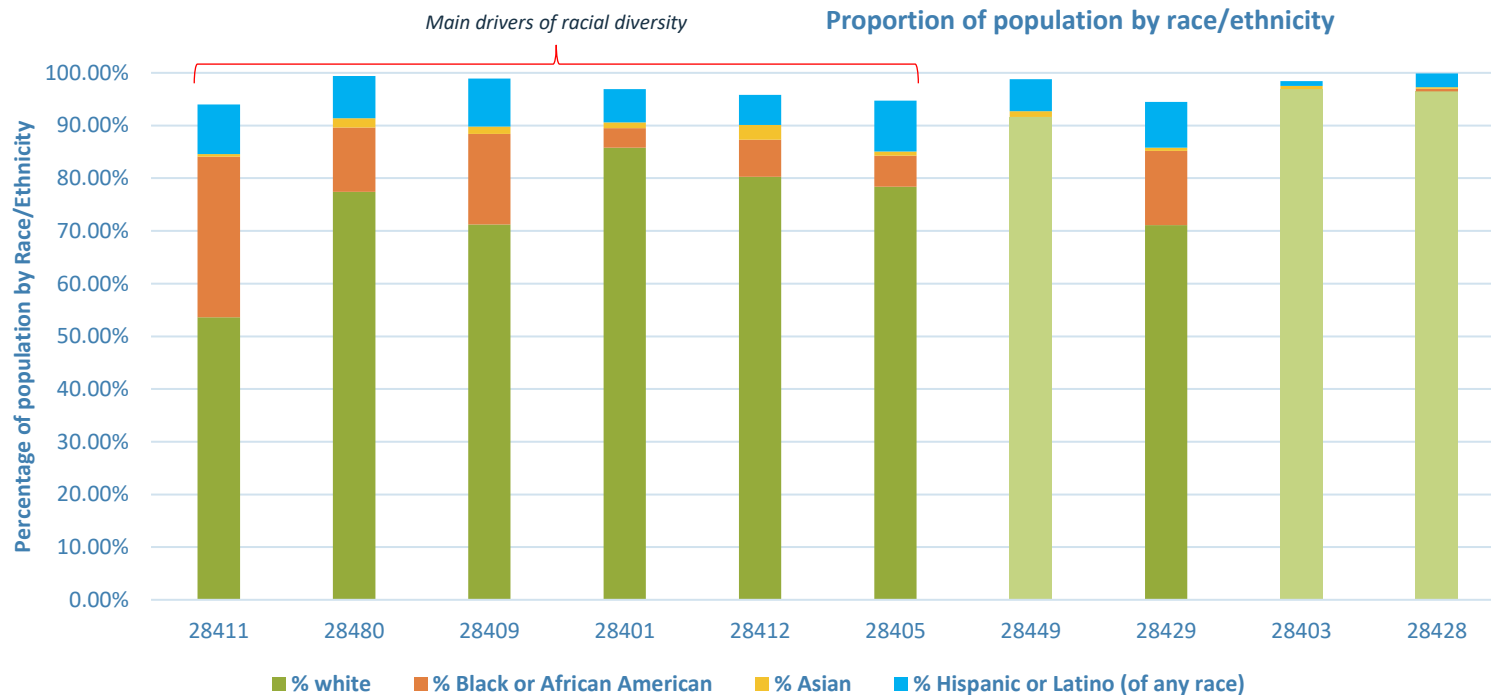
Youth populations are unevenly distributed across ZIP codes, with areas such as 28409, 28412, and 28429 showing the highest concentration of residents under age 20, indicating potential geographic clustering of youth populations within the county.

Demographic Snapshot – Population & Median Age



Population size ranges from under 3,000 to over 44,000 residents, while median age varies from 28.5 to 59.6 years, reflecting substantial demographic heterogeneity.

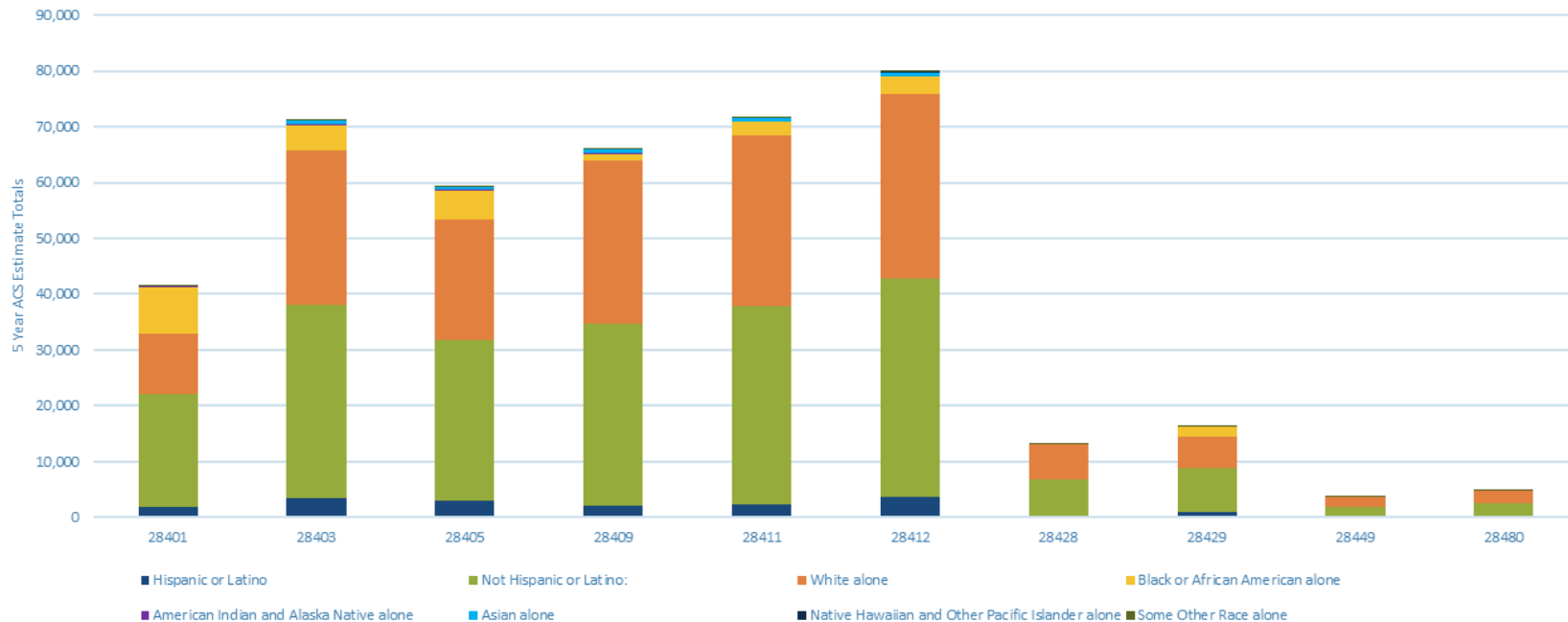
Demographic Snapshot – Race/Ethnicity



White residents comprise 53–96% of ZIP-level populations, while Black and Hispanic residents cluster in a minority of ZIPs, particularly 28401, 28409, and 28411, producing localized opportunities to address racial inequity.

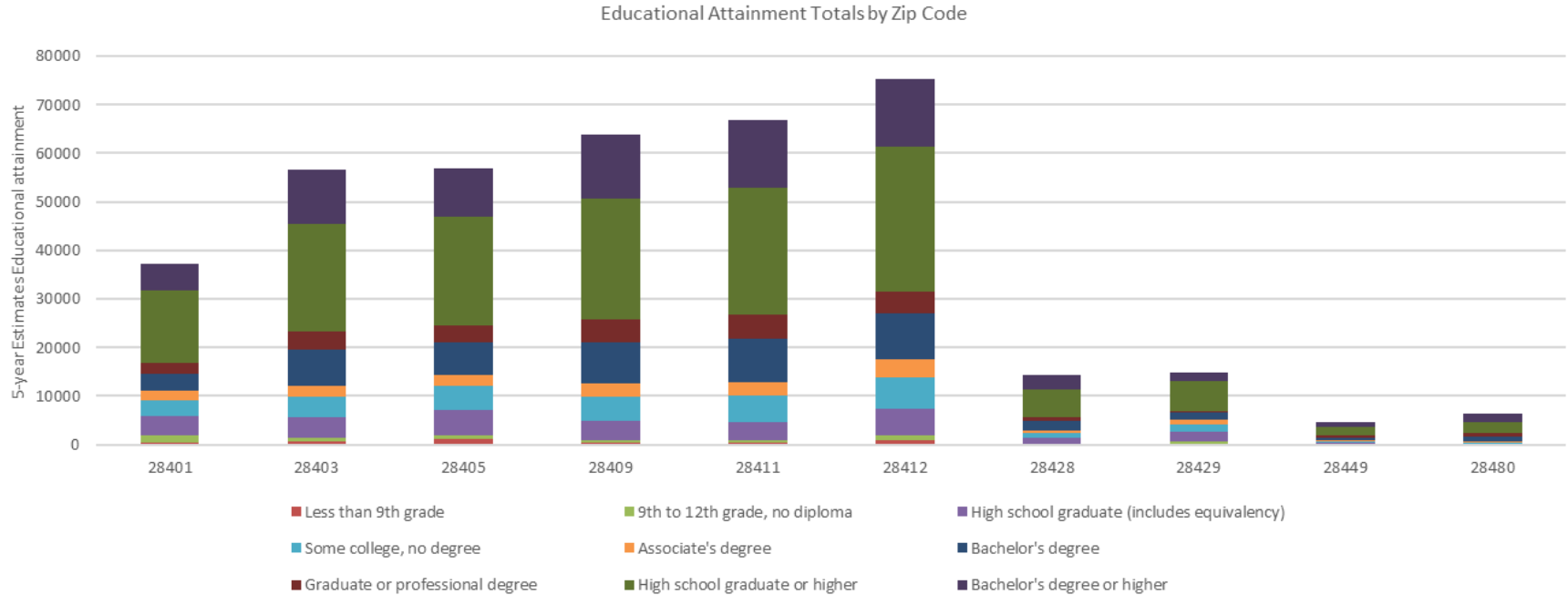
Demographic Snapshot – Race/Ethnicity

Total Population by Race/Ethnicity



Across the ZIP codes shown, 28412, 28411, and 28403 have the largest populations, with White alone and Not Hispanic or Latino representing the largest portions of the population distribution in each ZIP code.

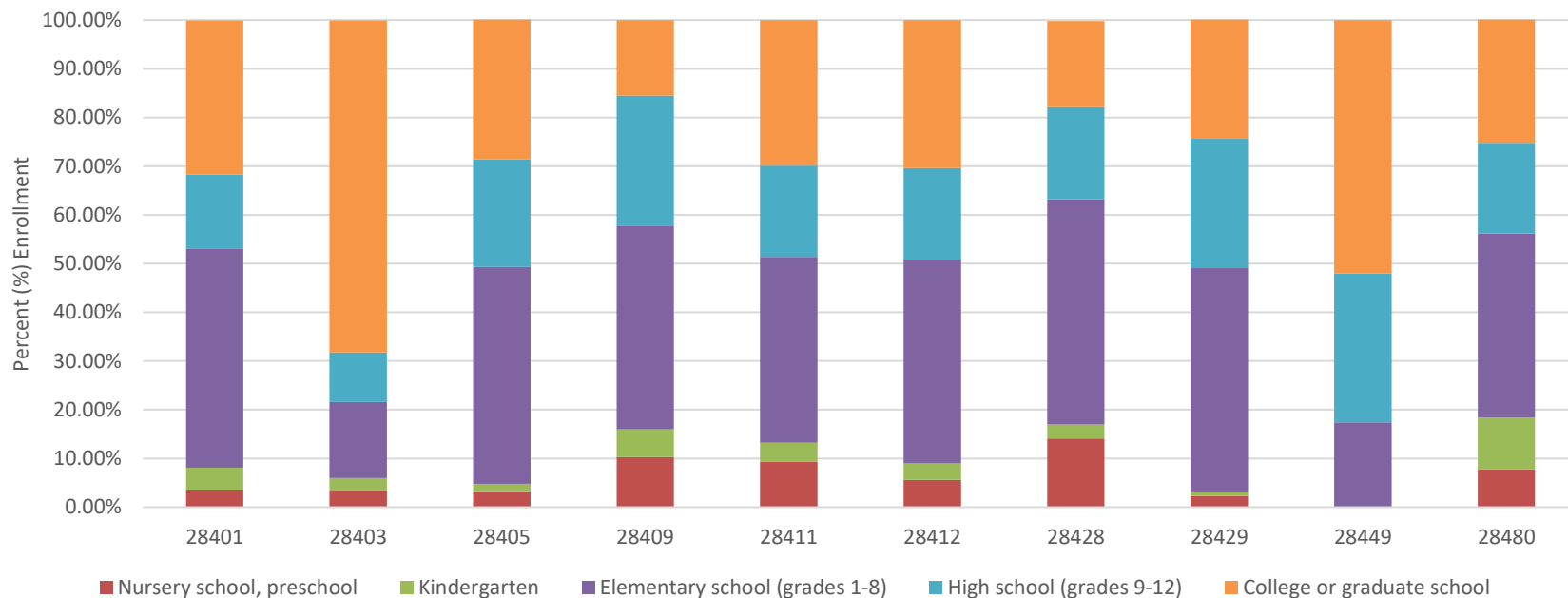
Demographic Snapshot – Educational Attainment



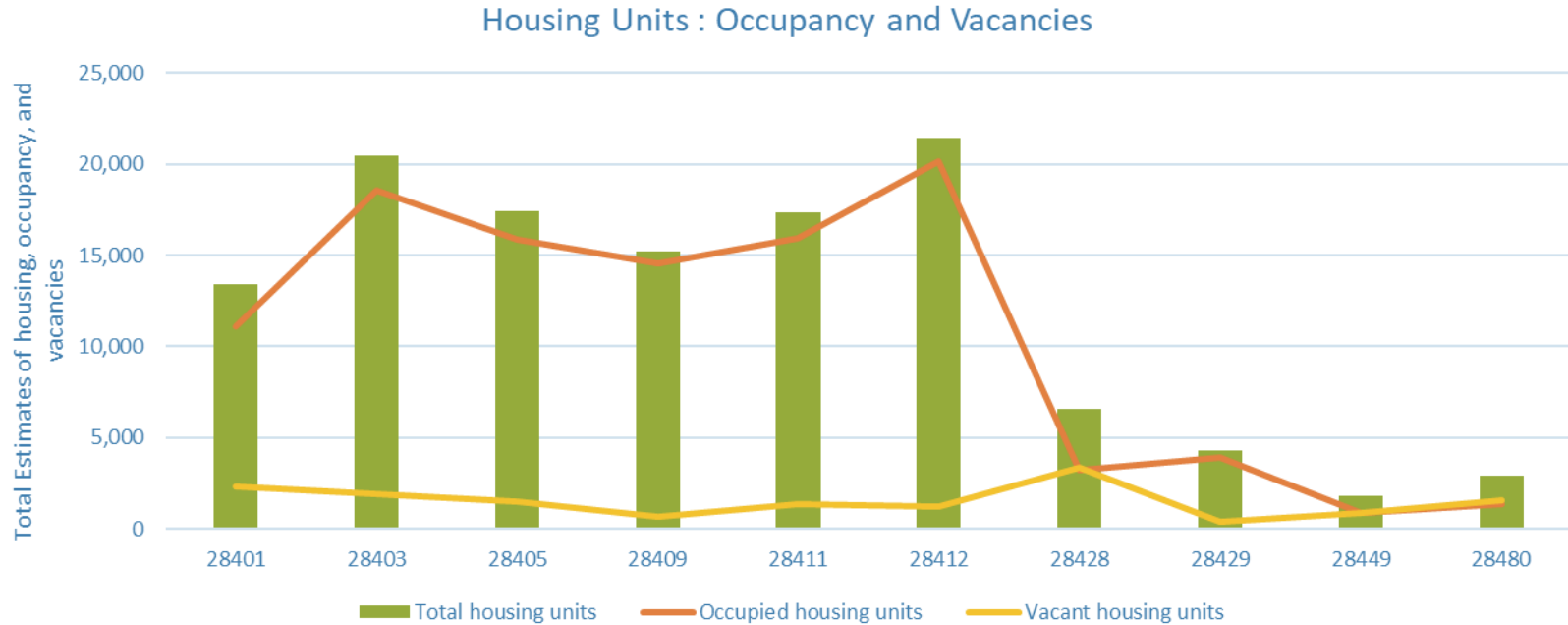
ZIP codes 28412, 28411, and 28409 show the highest total counts of residents across education levels, with high school graduates and residents with some college or bachelor's degrees comprising large portions of the educational attainment totals.

School Enrollment

Percent population school enrollment

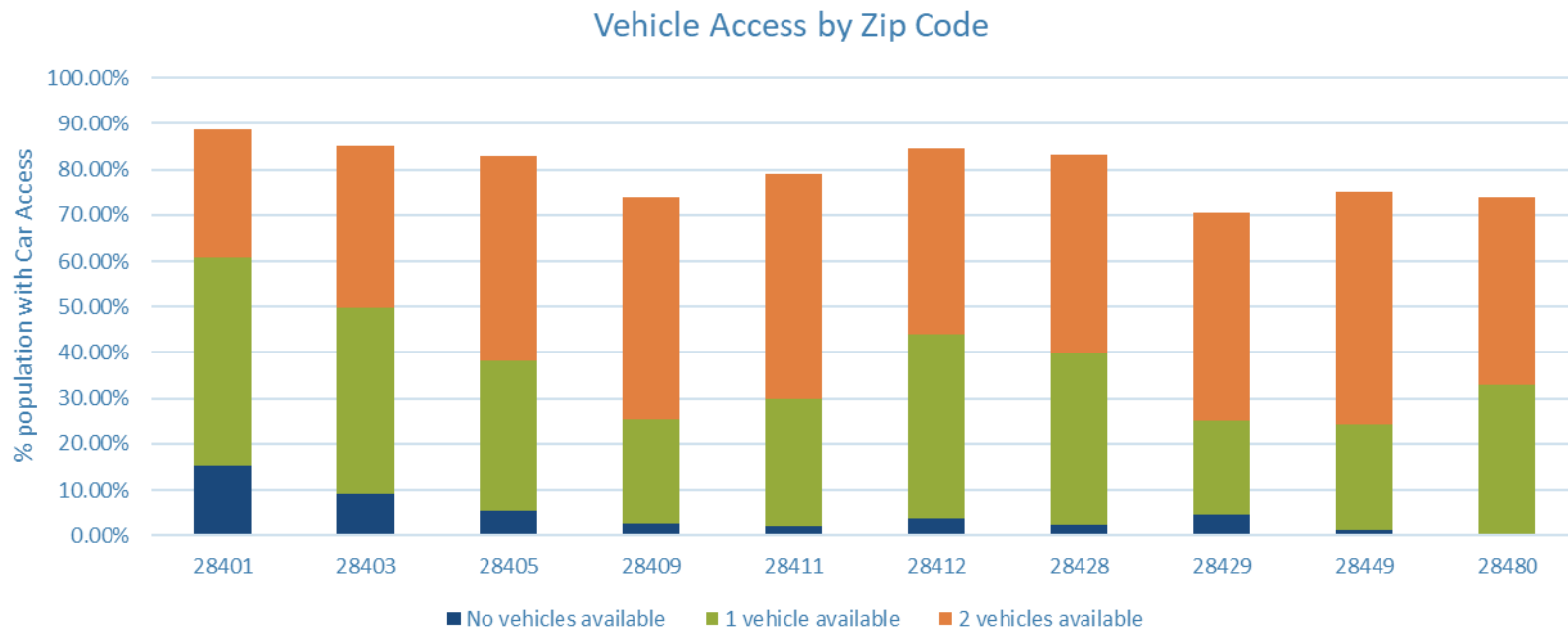


Demographic Snapshot – All Housing Units



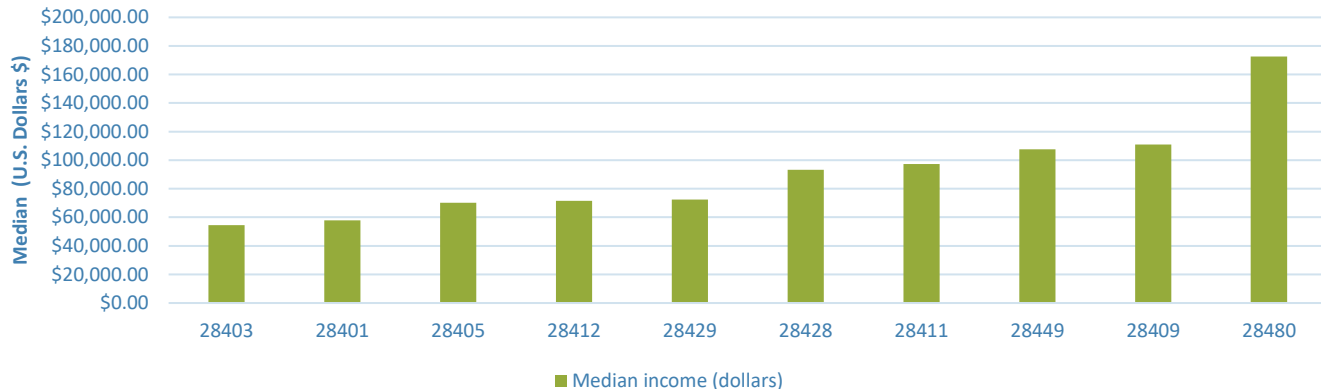
ZIP codes 28412, 28403, and 28411 have the highest total housing unit counts and the largest number of occupied units, while vacant units remain comparatively smaller across all ZIP codes.

Demographic Snapshot – Transportation

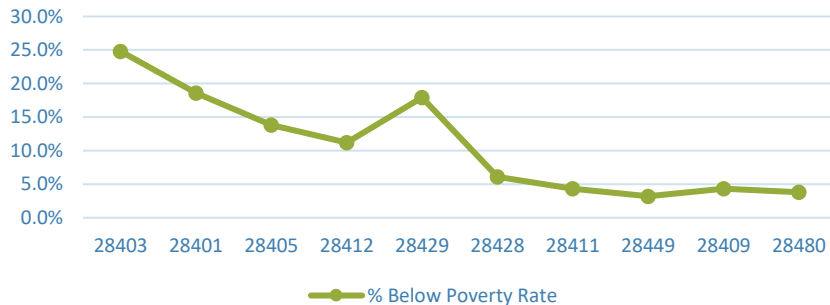


Demographic Snapshot – Economic Profile

Median (\$)



Proportion of Uninsured Population (%)



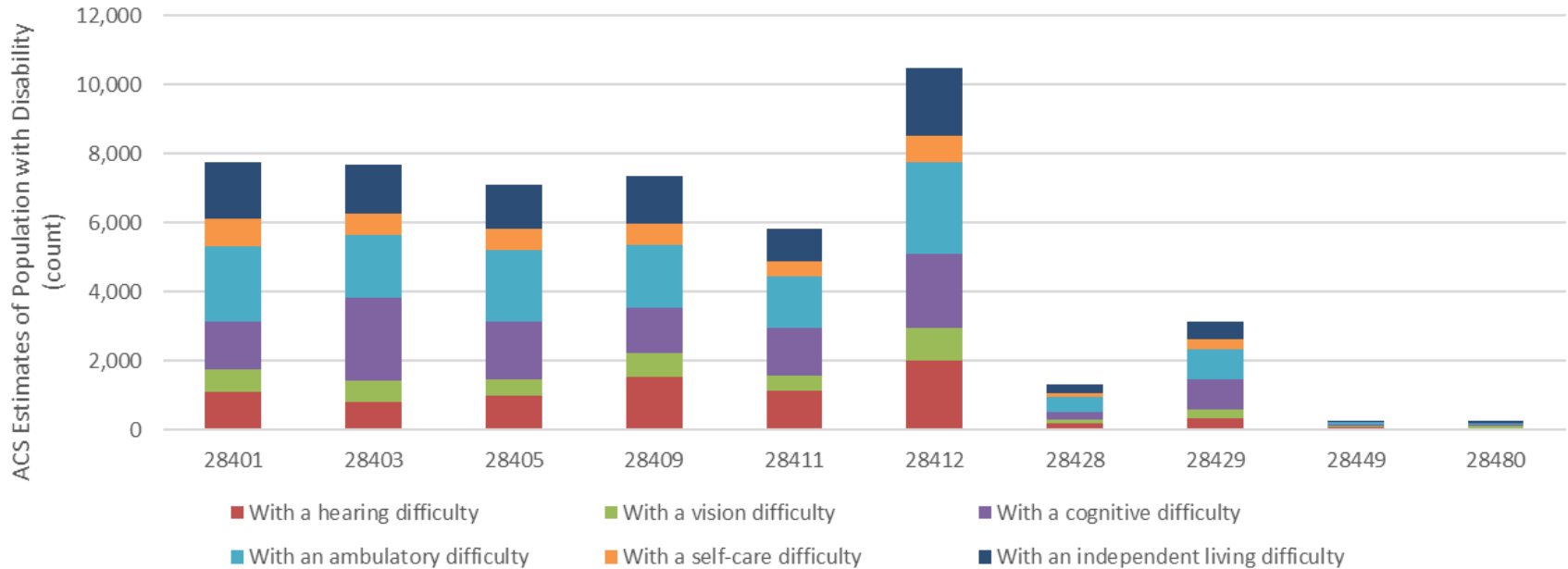
Proportion of Population facing Unemployment (%)



ZIPs with lower median (28401, 28403) show the highest poverty and moderate uninsured rates, while affluent coastal ZIPs combine high with low poverty and unemployment

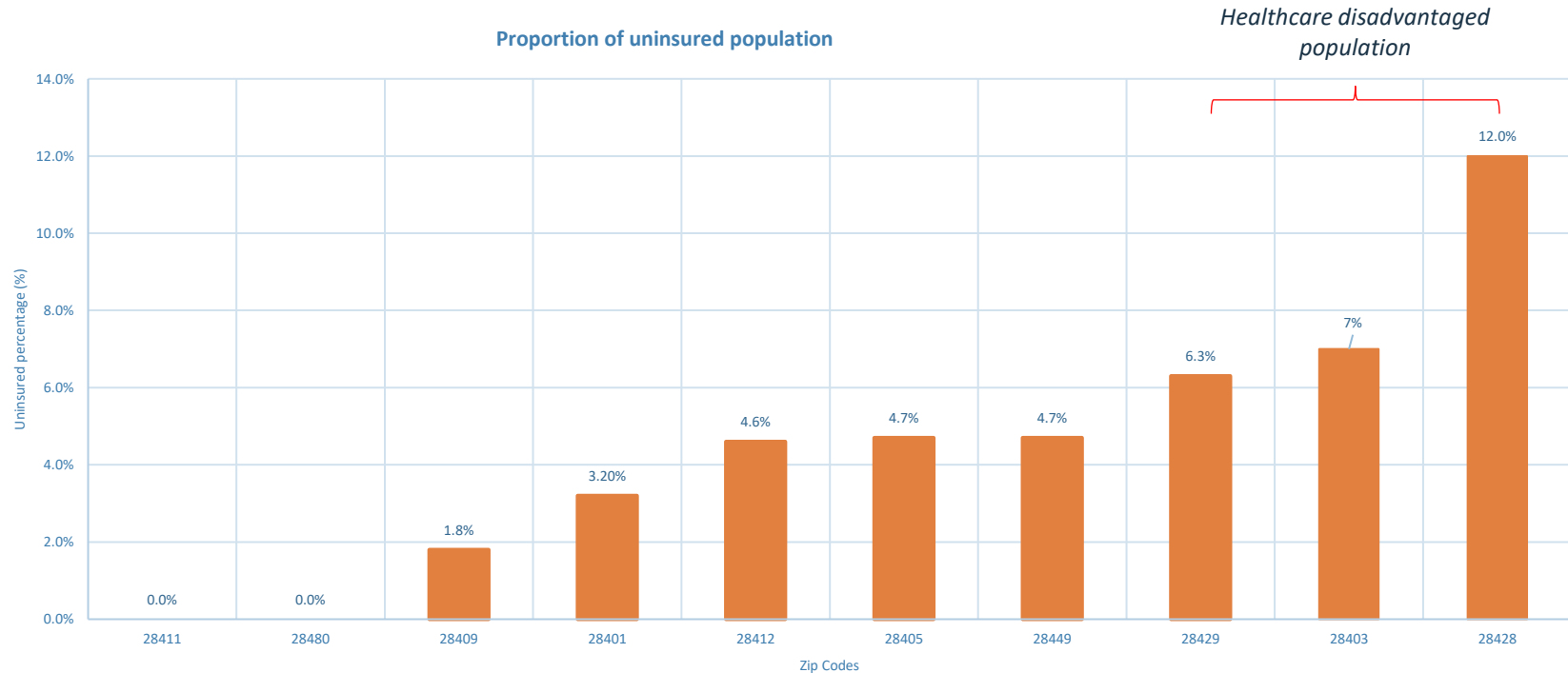
Demographic Snapshot – Disability

Population with Disability



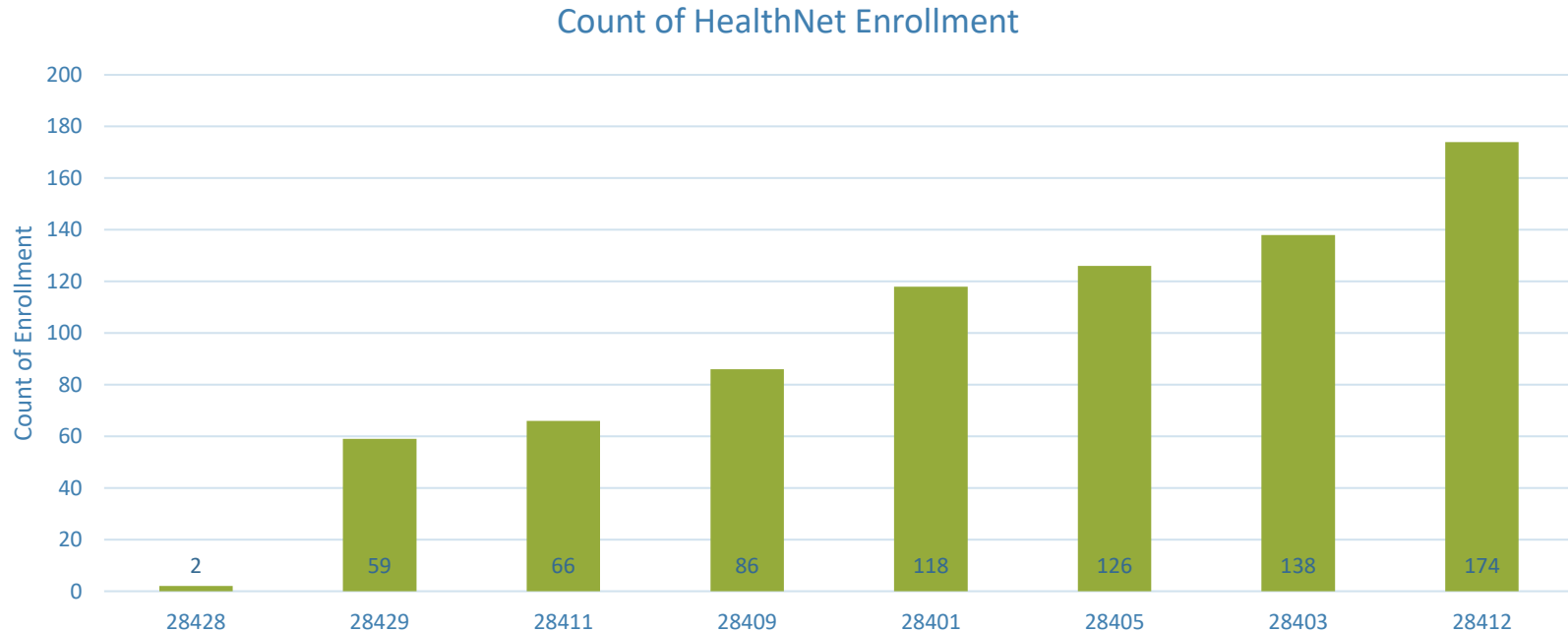
The largest counts of residents reporting disabilities appear in ZIP codes 28412, 28401, 28403, and 28409, with ambulatory, cognitive, and independent living difficulties representing substantial portions of the disability totals shown.

Demographic Snapshot – Insurance Profile



Uninsured rates span 0–12% across ZIPs, with the highest levels in 28428 and several mid-range ZIPs rather than the wealthiest or poorest areas, indicating complex patterns of coverage gaps.

Demographic Snapshot – HealthNet Enrollment



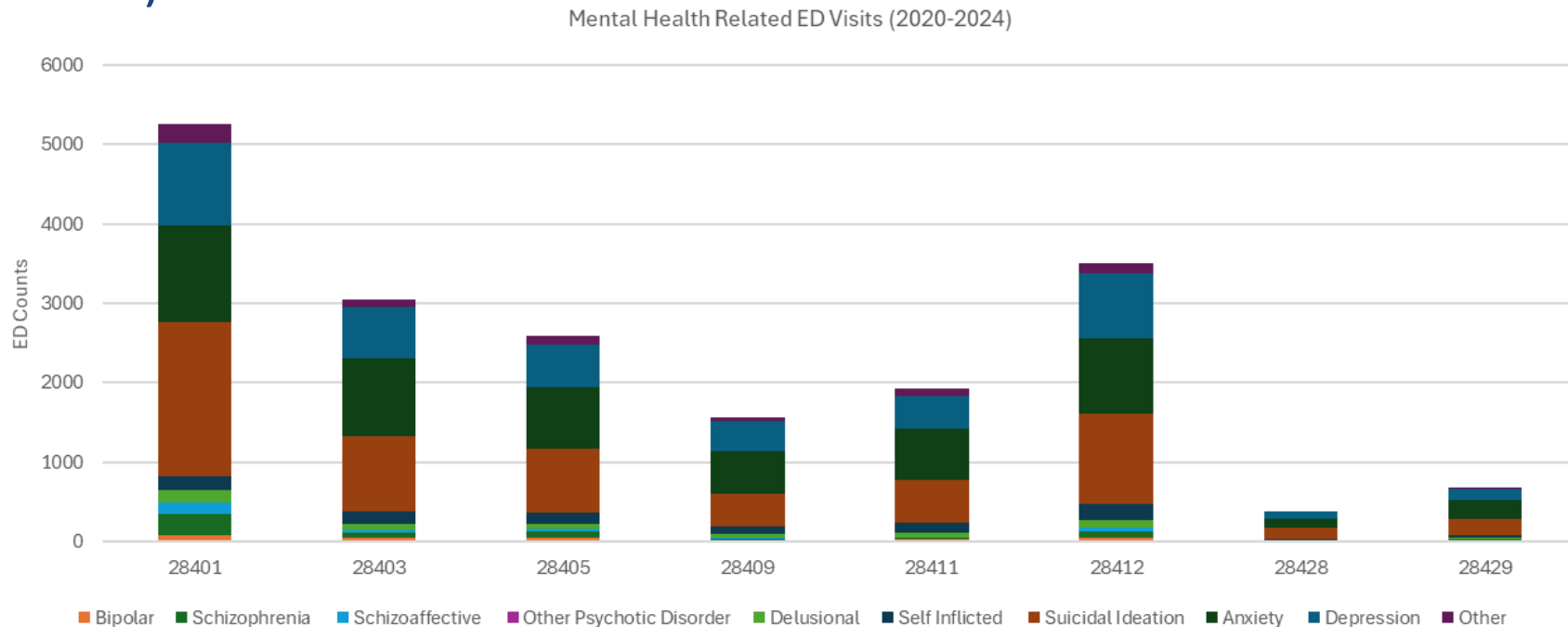
HealthNet enrollment is highest in 28412, 28403, 28405, and 28401, showing that uninsured or underinsured adults cluster in the same ZIPs that bear elevated behavioral health burden

Behavioral Health Burden Emergency Department Visits (2020-2024)

Key Patterns:

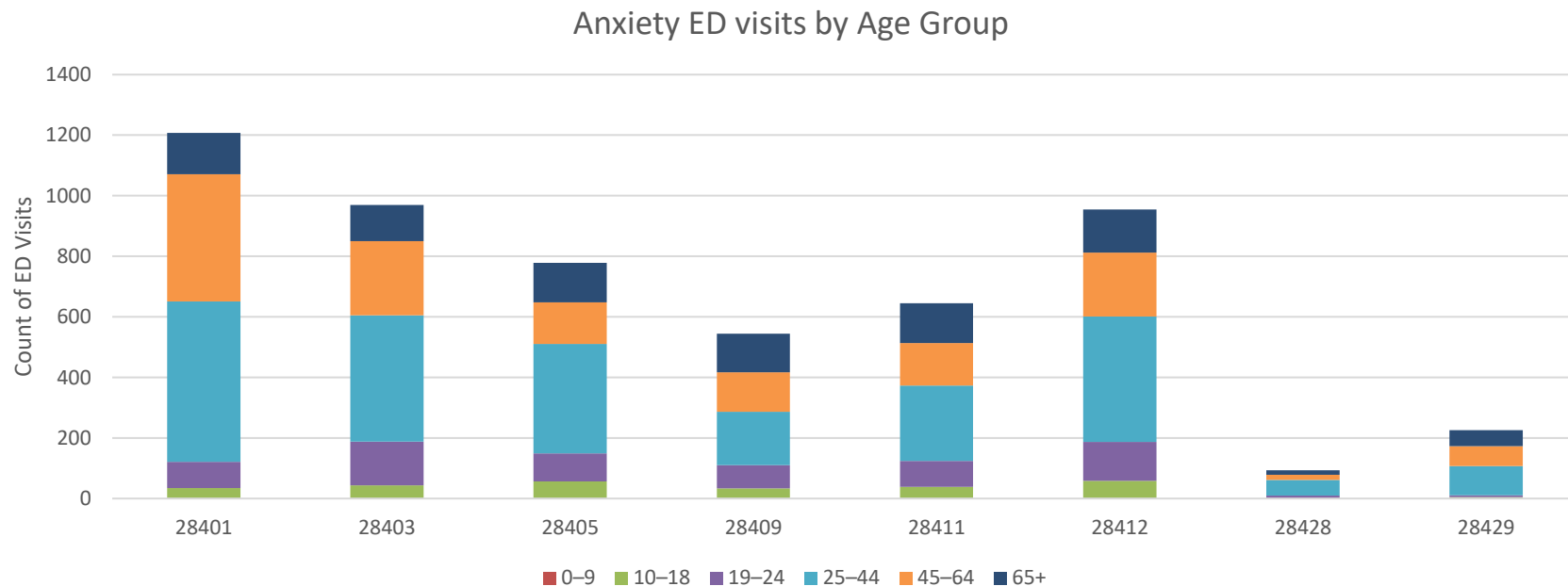
- Volume Leaders: 28401 (994 ED visits) and 28412 (754 ED visits) account for 38% of all county behavioral health ED visits
- Anxiety Dominance: Anxiety-related ED visits are the single largest category across all ZIP codes
- Co-occurrence: ZIP codes with high anxiety ED visits also show high depression ($r=0.98$ correlation)
- Geographic Concentration: Top 4 ZIP codes (28401, 28412, 28403, 28405) account for 68% of total behavioral health ED visits

Behavioral Health ED Utilization – Overall Landscape (2020-2024)



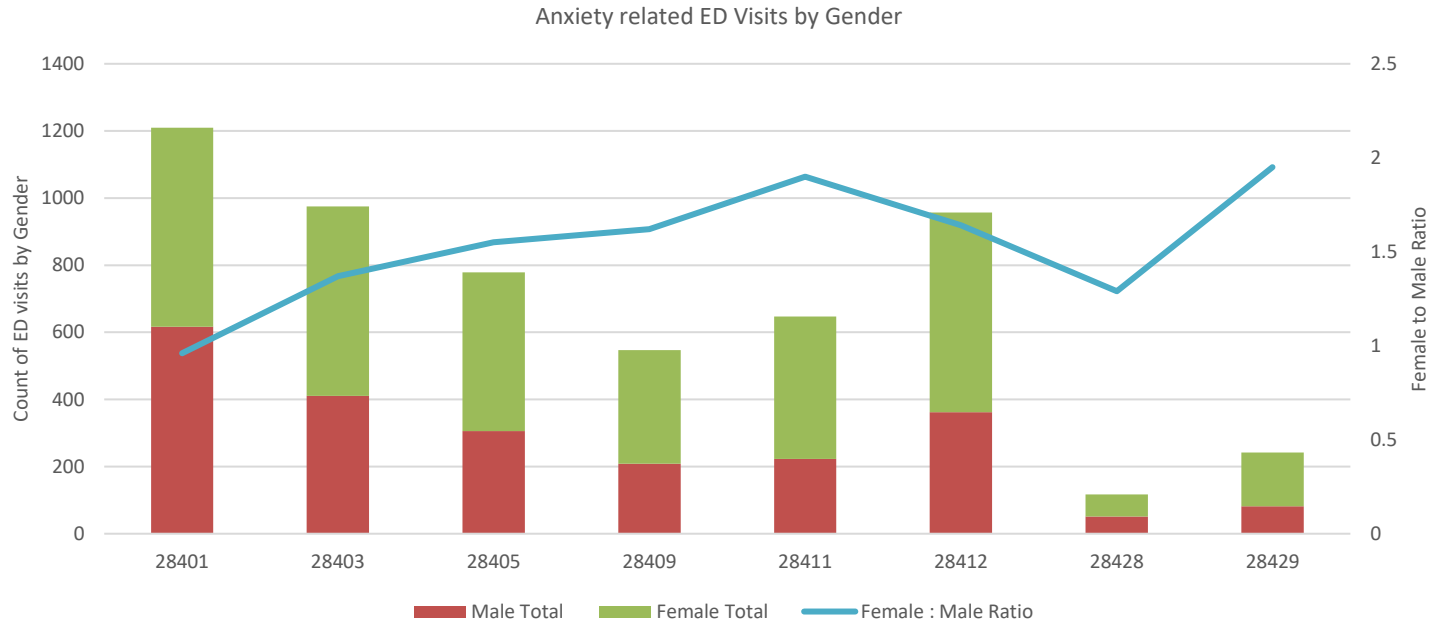
Mental health ED visits are concentrated in a small number of ZIP codes and are largely driven by crisis-related conditions such as suicidal ideation, anxiety, and depression, highlighting potential gaps in upstream behavioral health access.

Anxiety ED Visits – Age Patterns



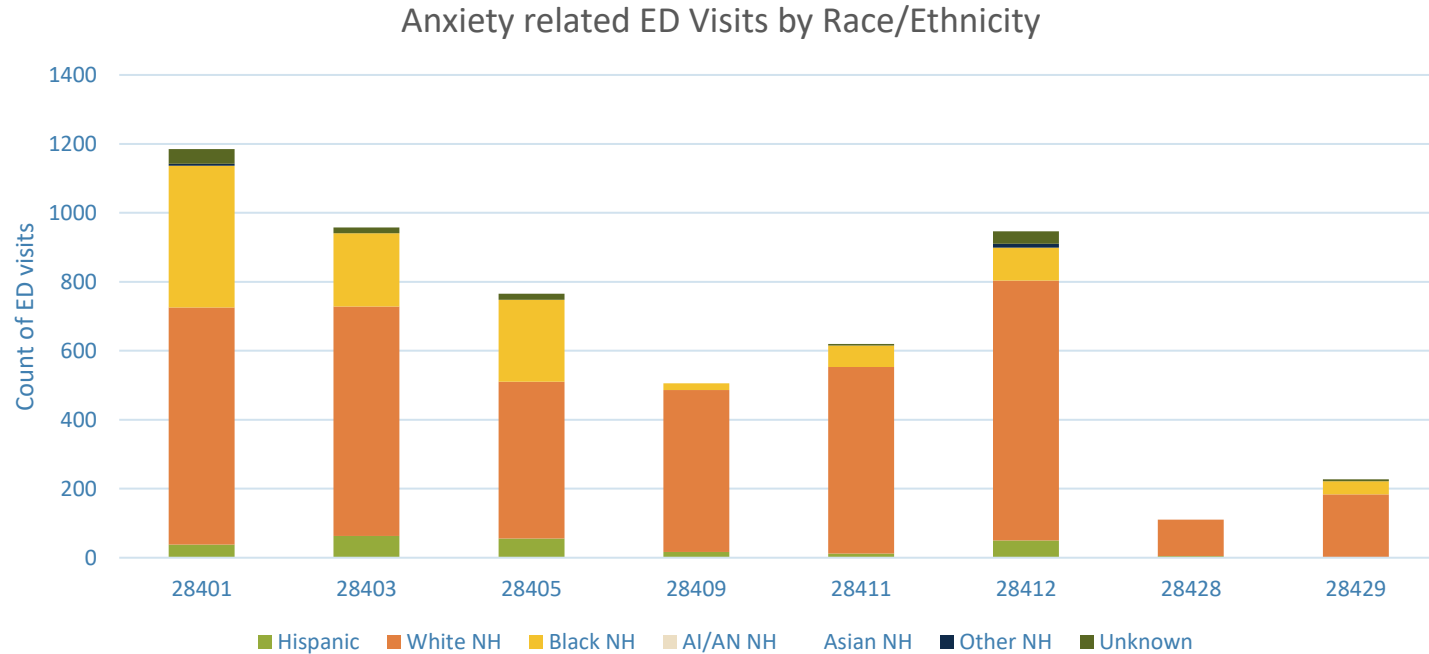
Anxiety-related ED visits concentrate among adults 25–64, with 25–44 and 45–64 age groups carrying the largest volumes, while pediatric and geriatric visits occur at lower but meaningful levels across ZIP codes

Anxiety- related ED Visits – Gender Patterns



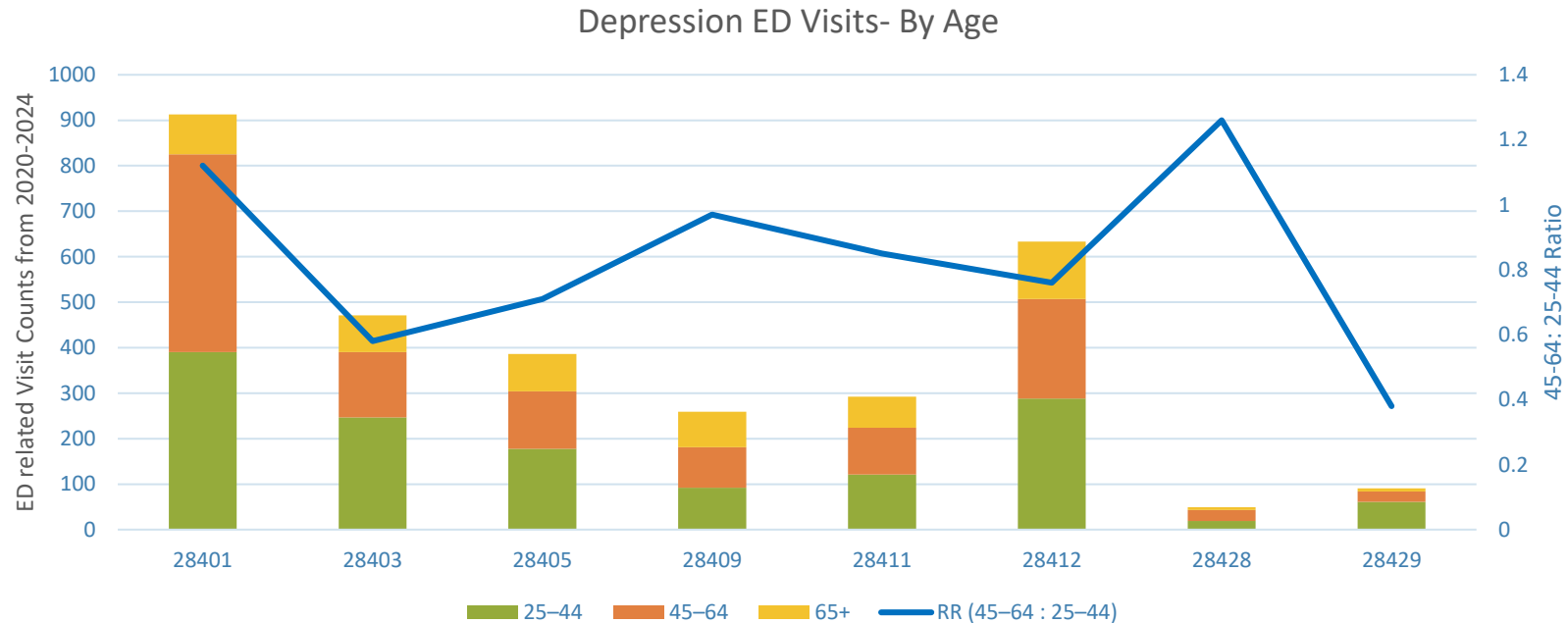
Females have higher anxiety-related ED visit counts than males in nearly all ZIP codes—with female-to-male ratios commonly between 1.3 and 2.0—while 28401 is close to gender parity, reflecting heavy burden on both sexes in the urban core.

Anxiety-related ED Visits – Racial Patterns



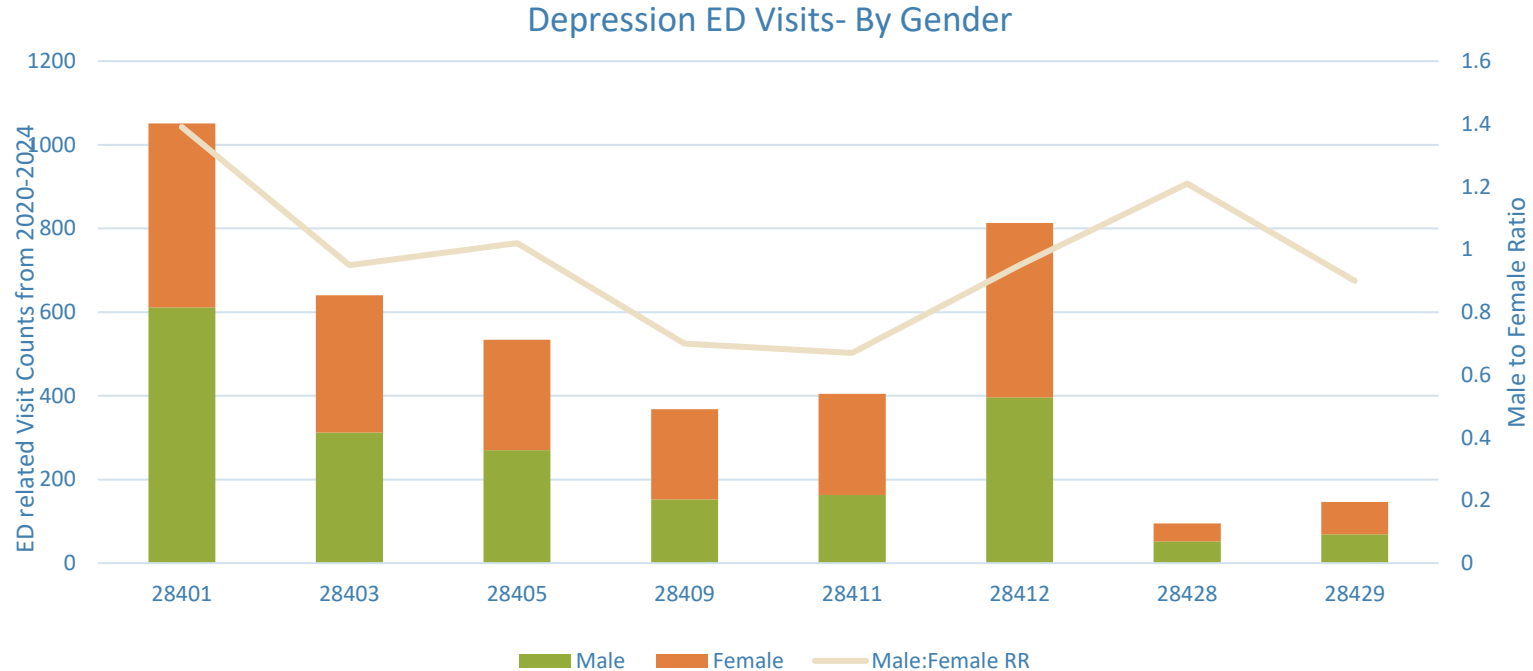
White non-Hispanic residents account for the largest share of anxiety-related ED visits in every ZIP, with Black non-Hispanic and Hispanic residents contributing smaller but non-trivial volumes, particularly in higher-burden ZIPs such as 28401 and 28405.

Depression related ED Visits - Age Patterns



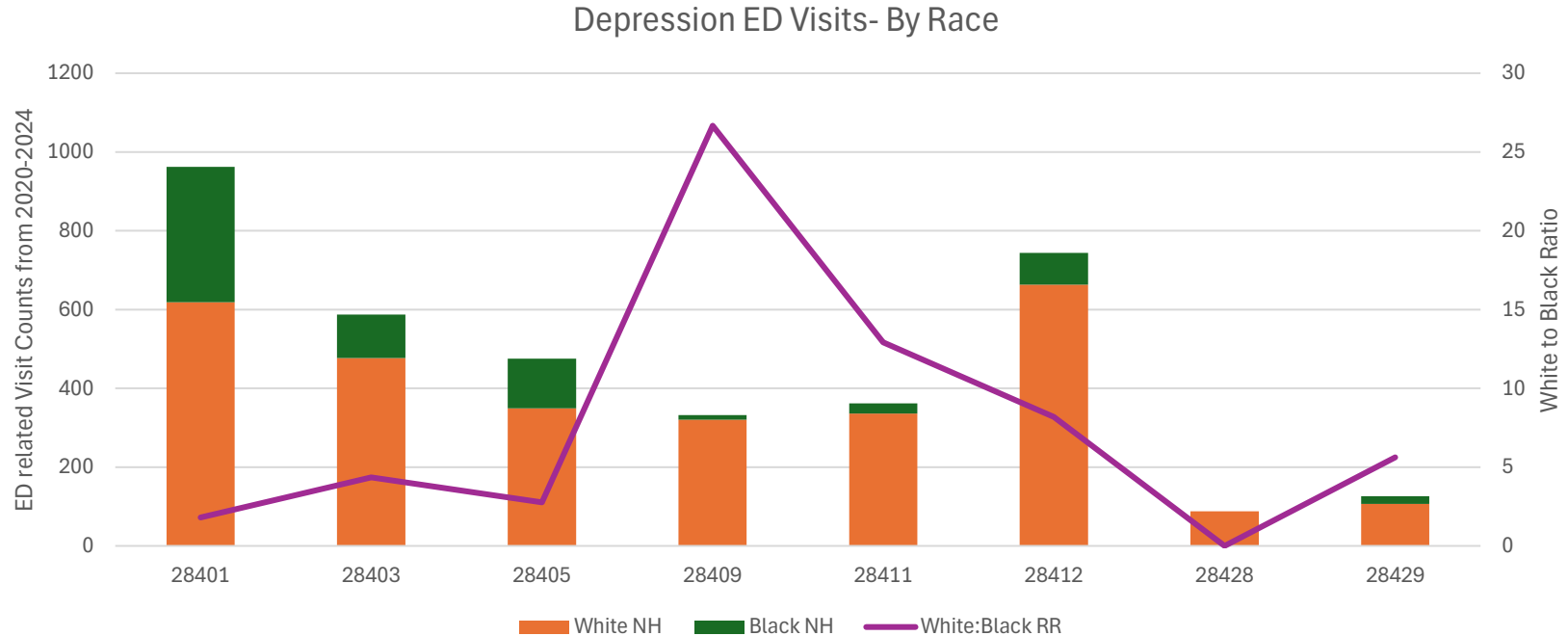
Across ZIP codes, adults ages 25–44 and 45–64 account for most depression-related ED visits, with 45–64 generally matching or exceeding 25–44, while visits among 65+ and younger adults are consistently lower

Depression related ED Visits - Gender Patterns



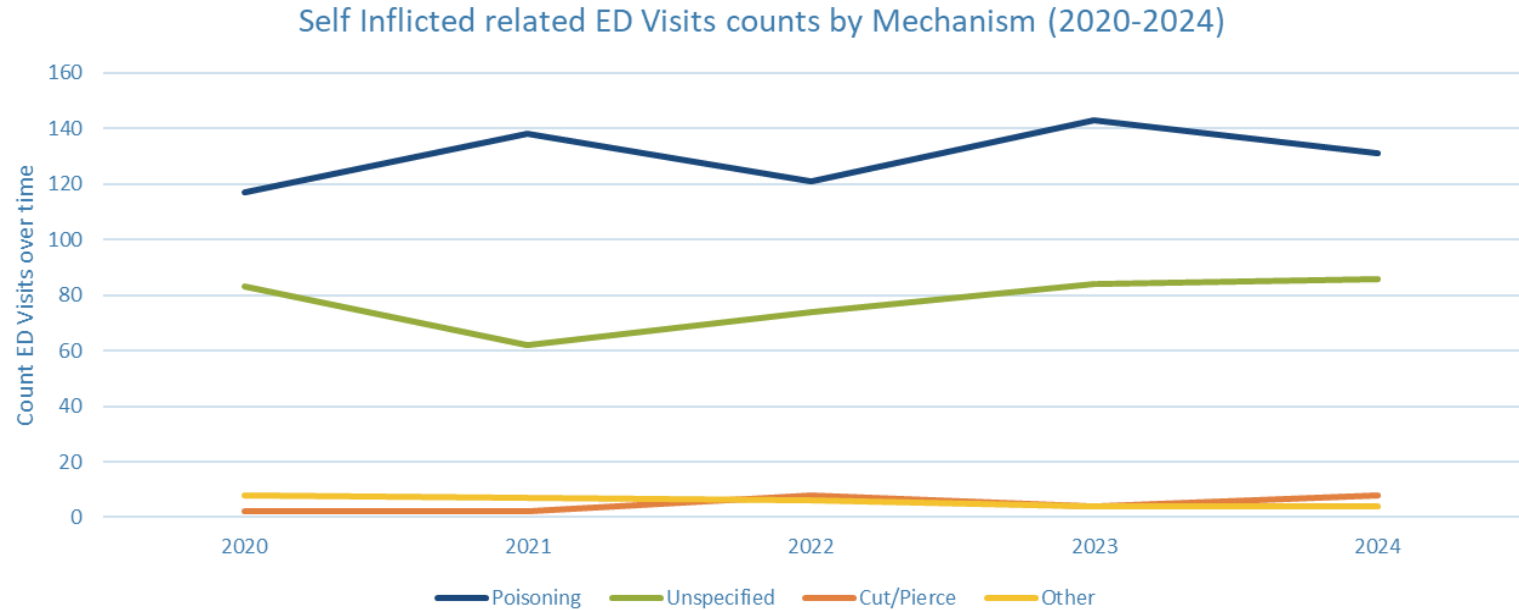
Males have higher depression-related ED visit counts than males in every ZIP, yet female volumes remain substantial, indicating that both genders contribute meaningfully to ED demand for depression.

Depression related ED Visits – Race Patterns



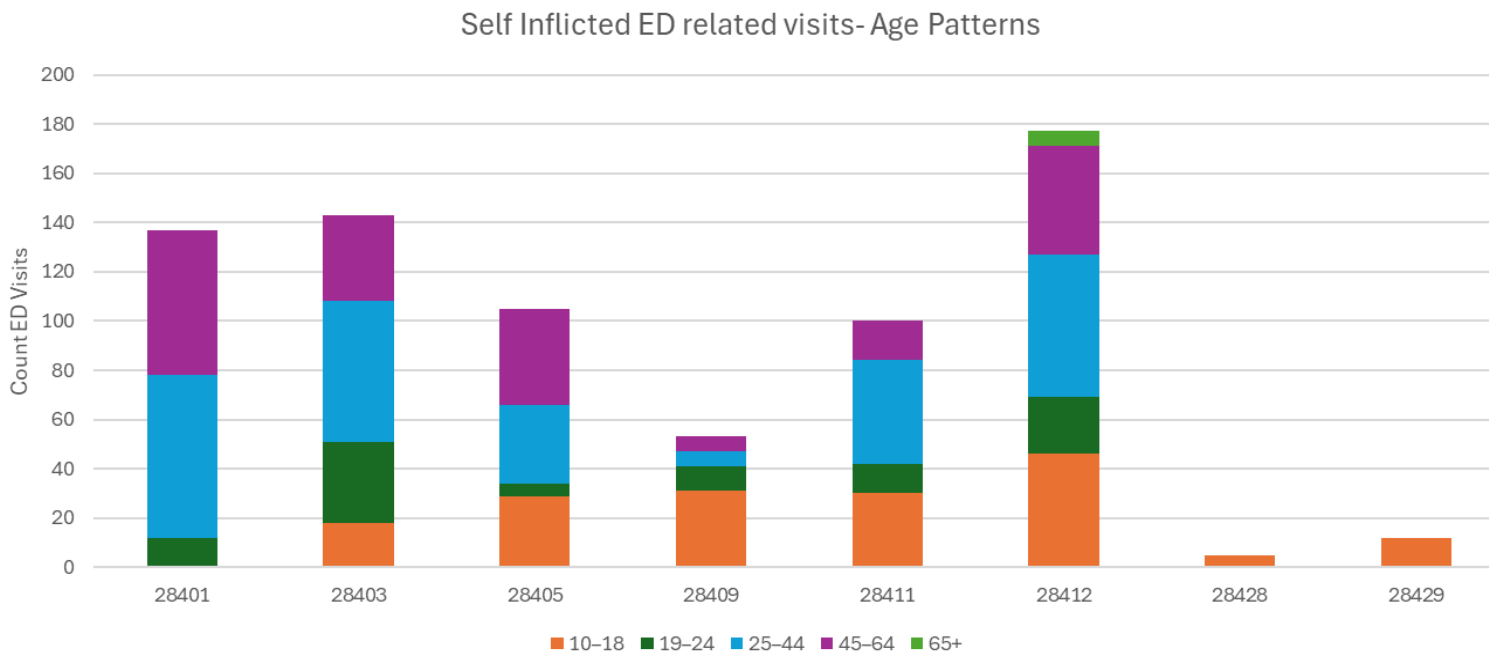
White non-Hispanic residents account for the majority of depression-related ED visits in all ZIPs, with White:Black rate ratios ranging from roughly 2:1 up to more than 20:1 in several suburban areas

Self-Inflicted Injury ED Visits – Mechanism Patterns over Time



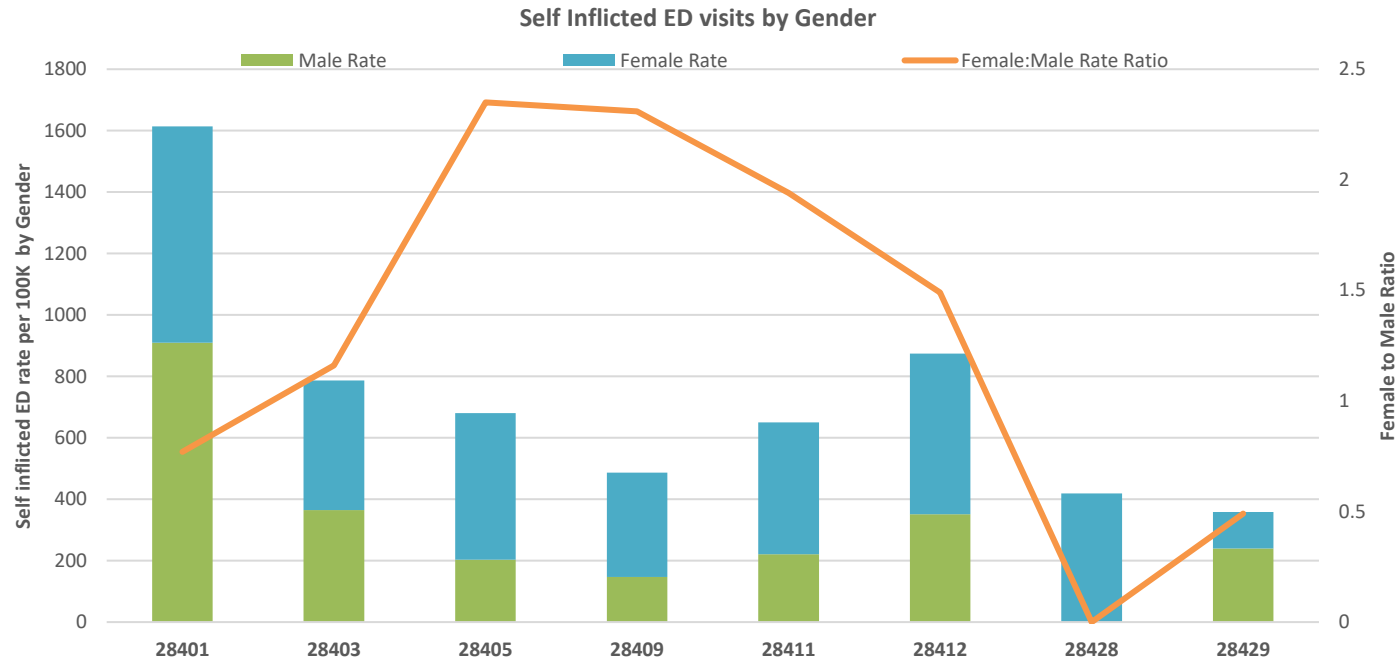
Poisoning is the most significant attributable mechanism for self-inflicted related ED visits over time

Self-Inflicted Injury related ED Visits – Age Patterns



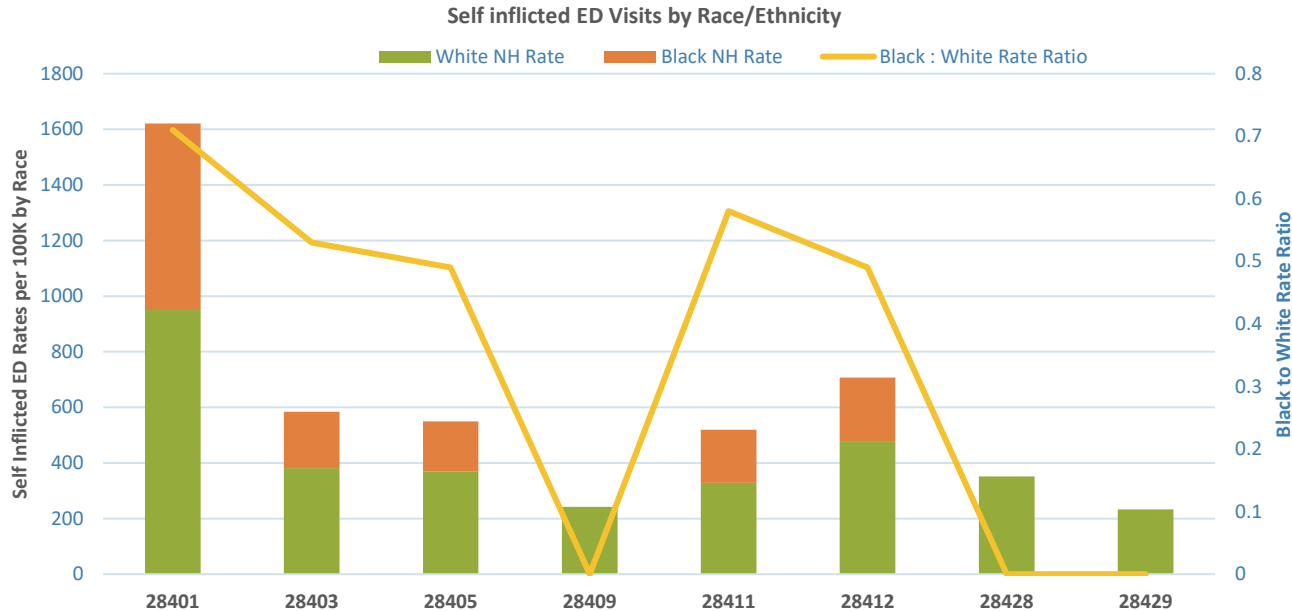
Across ZIP codes, adults ages 25–44 and 45–64 account for the majority of self-inflicted injury ED visits, while adolescents contribute a smaller but notable share and older adults appear only in isolated ZIPs such as 28412.

Self-Inflicted Injury ED Visits – Gender Patterns



Self-inflicted injury ED visit rates are higher among males in urban core 28401 but higher among females in most suburban and mixed- ZIPs, indicating that the dominant gender pattern varies by community context.

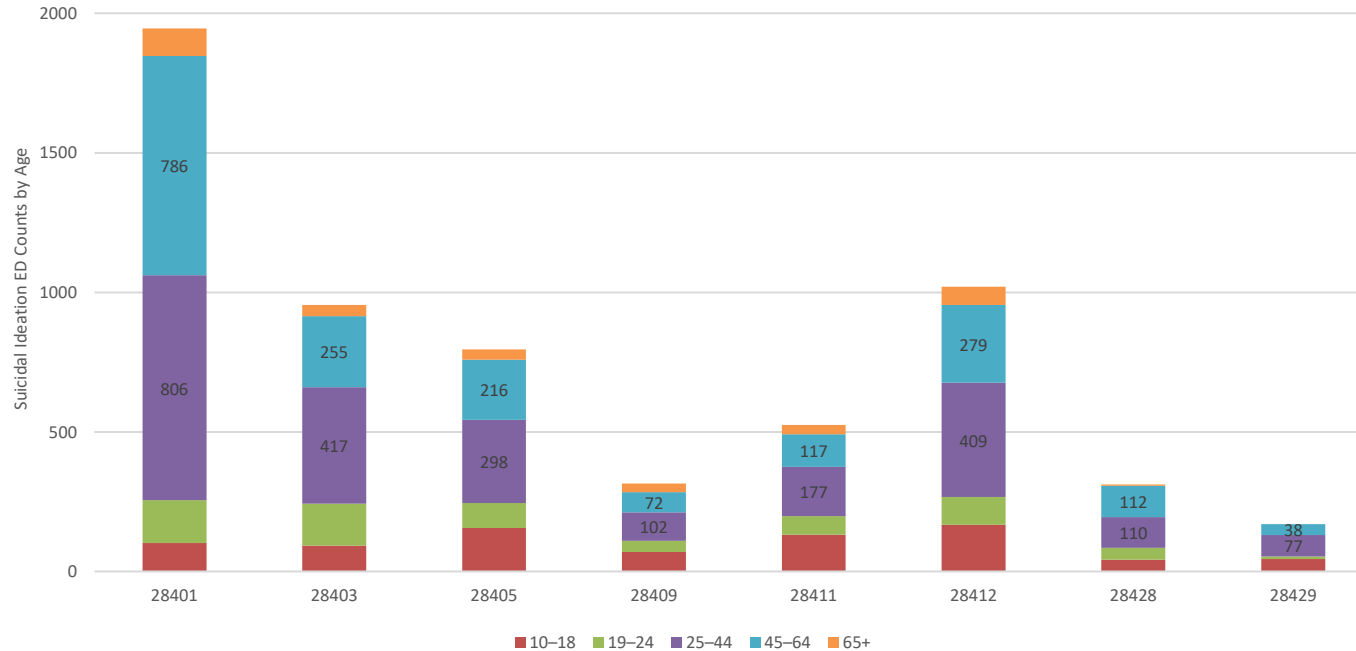
Self-Inflicted Injury ED Visits – Racial Patterns



Population-adjusted self-inflicted injury ED rates are consistently higher among White non-Hispanic residents than Black non-Hispanic residents across reportable ZIPs, with 28401 showing the smallest Black-to-White gap but the highest absolute rates for both groups.

Suicidal Ideation ED Visits – Age Patterns

Suicidal ideation ED Visits by Age

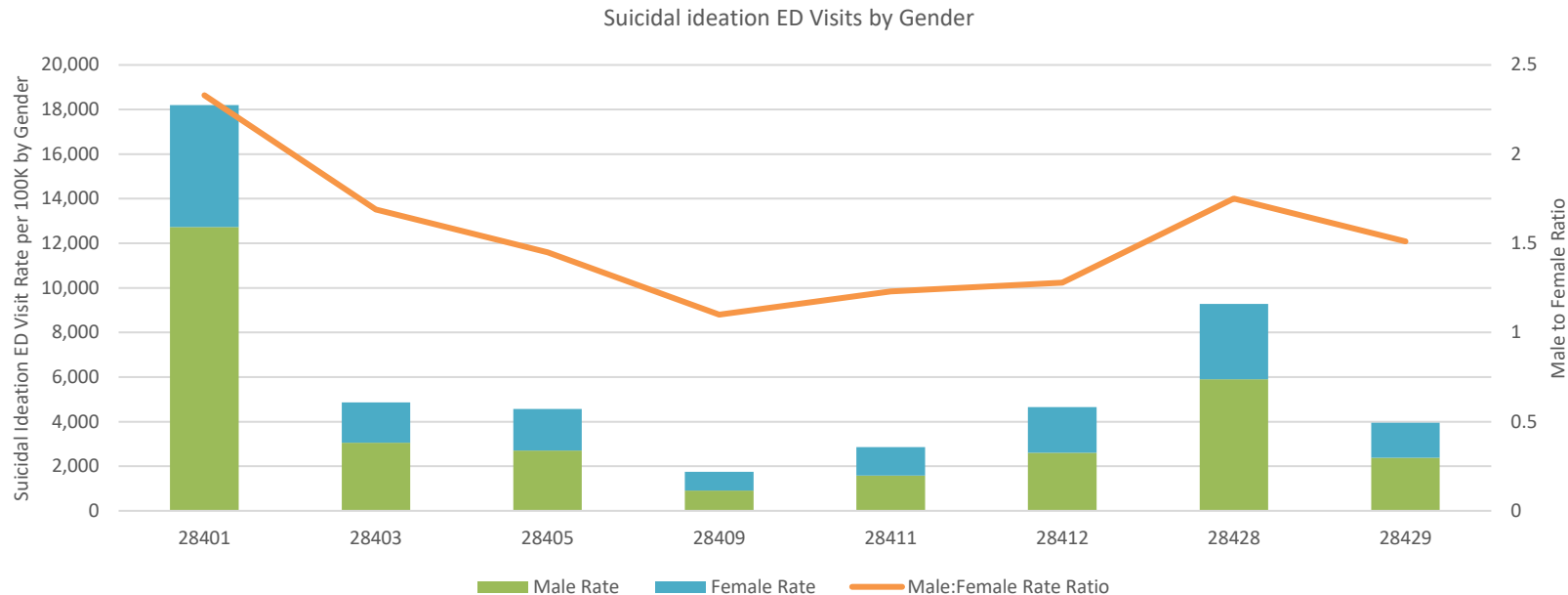


Age Distribution:

- Ages 25-44: 40% of all visits
- Ages 45-64: 34%
- Ages 19-24: 13%
- Ages 10-18: 3%
- Ages 65+: 12%

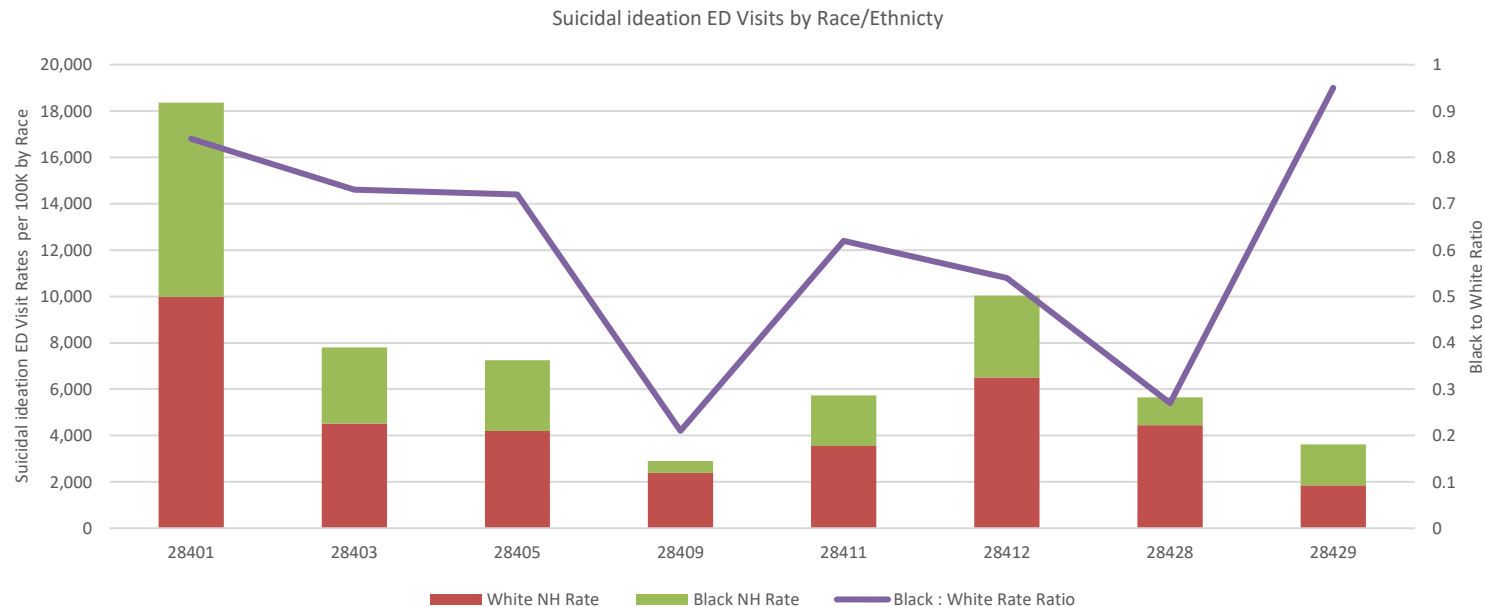
Suicidal ideation ED visits are dominated by adults 25–44 and 45–64, who together account for roughly three-quarters of visits, while youth and older adults represent smaller but persistent shares in every ZIP.

Suicidal Ideation ED Visits Rate – Gender Patterns



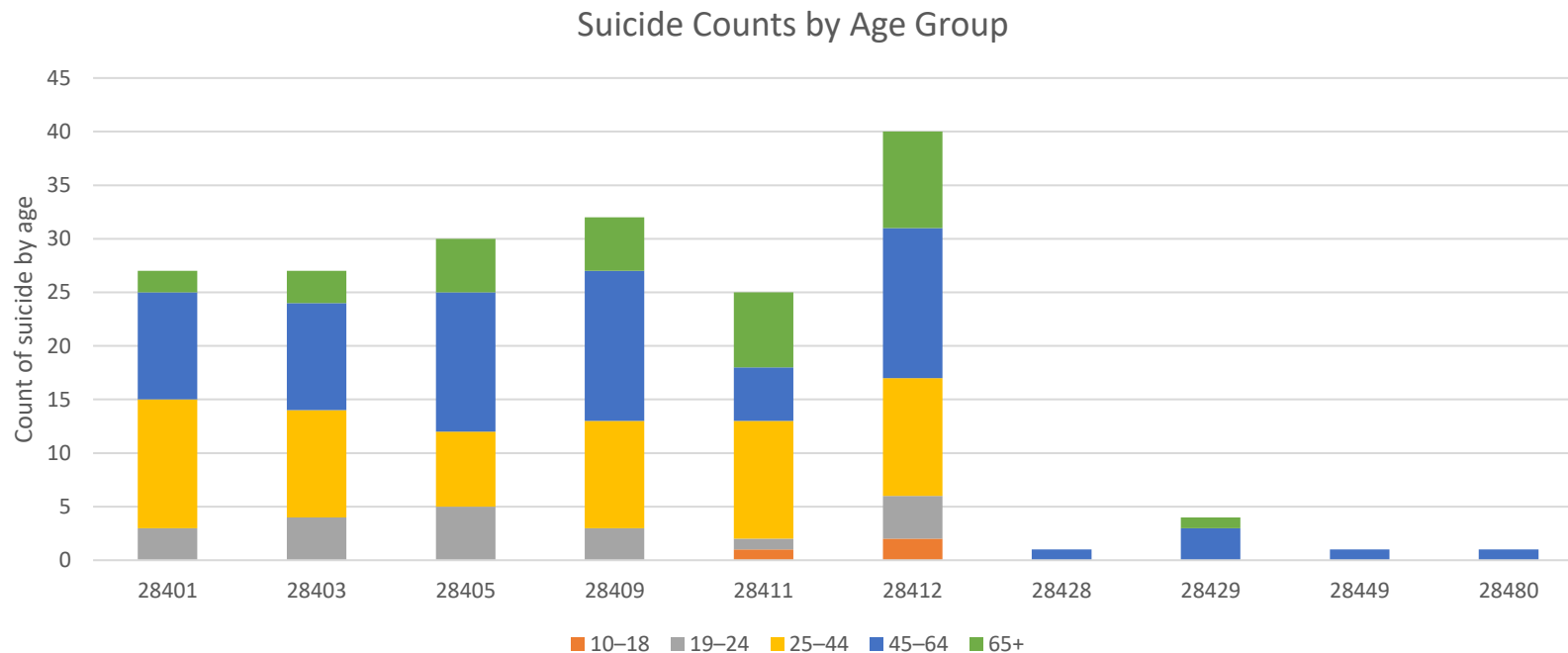
Across all major ZIP codes, males have higher suicidal ideation ED visit rates than females—with male-to-female rate ratios often exceeding 1.5 and peaking above 2.0 in 28401—indicating a consistent male predominance in crisis presentation.

Suicidal Ideation ED Visits – Racial Patterns



White non-Hispanic residents show higher suicidal ideation ED visit rates than Black non-Hispanic residents in every major ZIP, though 28401 has the smallest racial gap, suggesting more evenly distributed burden in the urban core than in suburban areas

Suicide ED Visits- Age Patterns



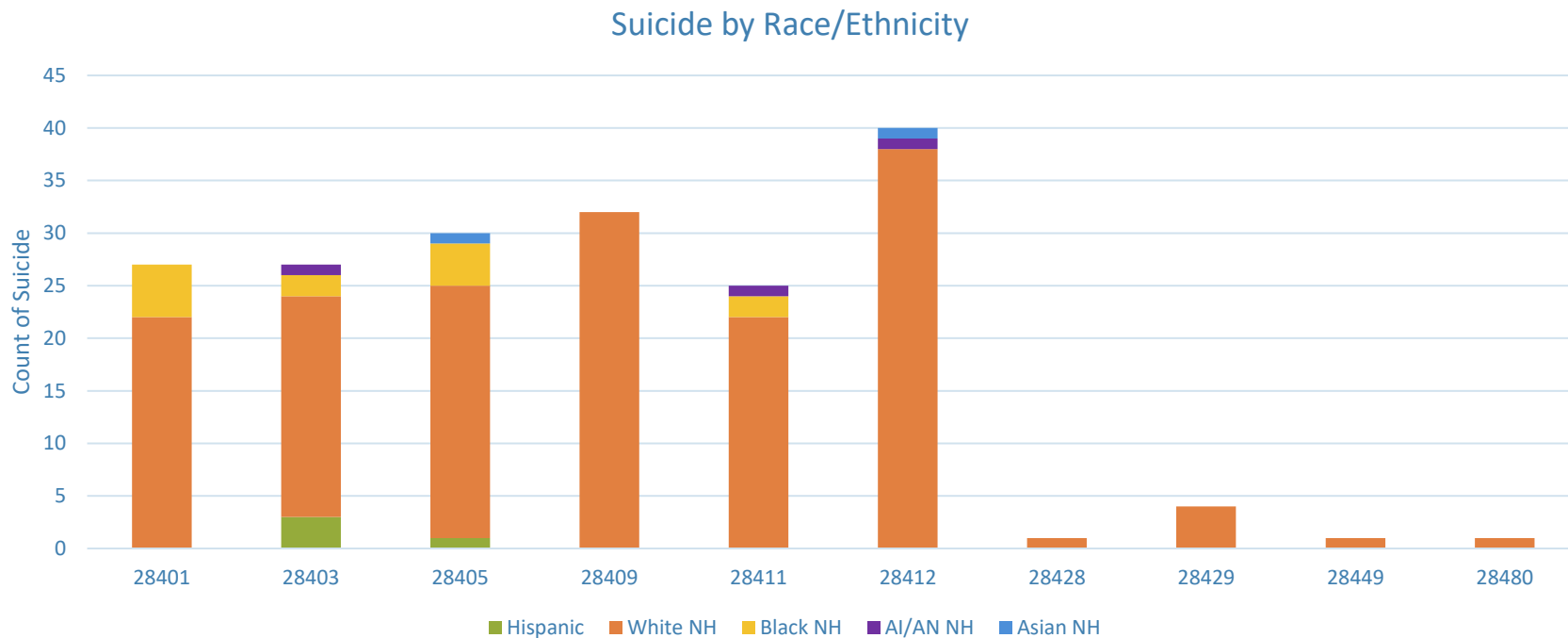
Suicides are concentrated among adults ages 25–64, with 45–64 emerging as the most affected group across multiple ZIP codes, while adolescents contribute minimally to overall burden.

Suicide ED Visits- Gender Patterns



males have suicide rates than females, often by a large margin (2–7 times higher), with the greatest absolute burden seen in ZIP 28412 and the largest gender disparity in 28409.

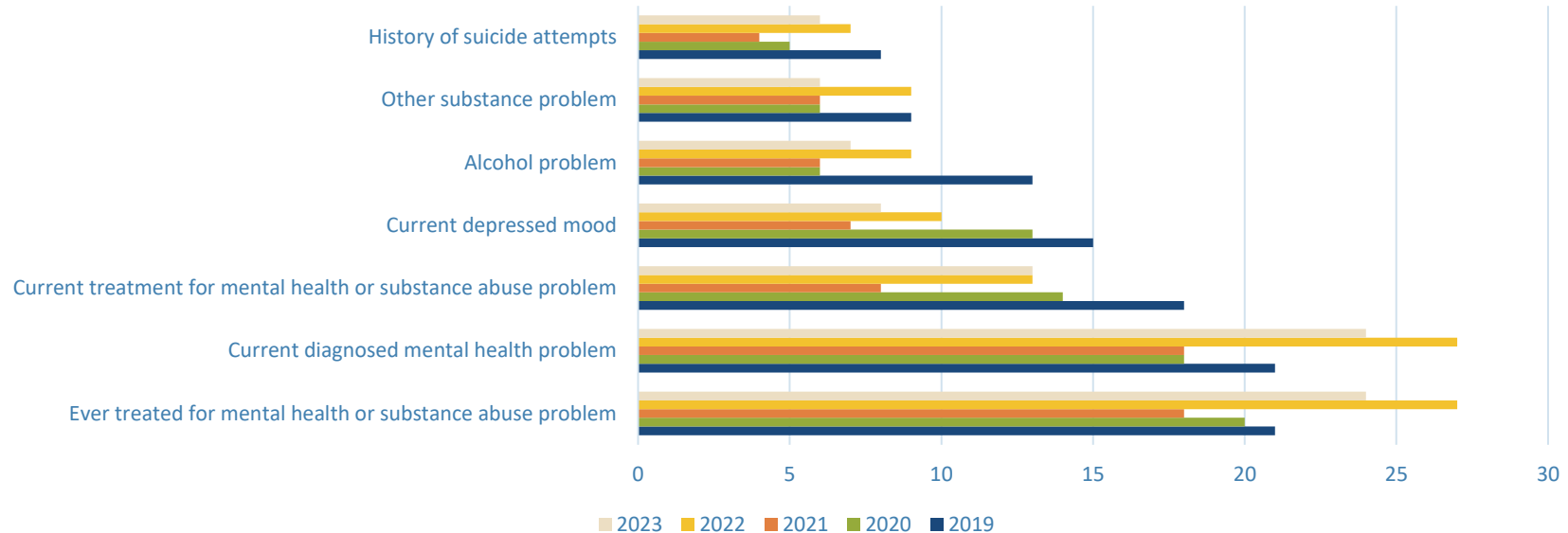
Suicide ED Visits- Race Patterns



Across every ZIP code, non-Hispanic White residents account for the overwhelming majority of suicide rates, with the highest absolute burden seen in ZIP 28412 and 28409

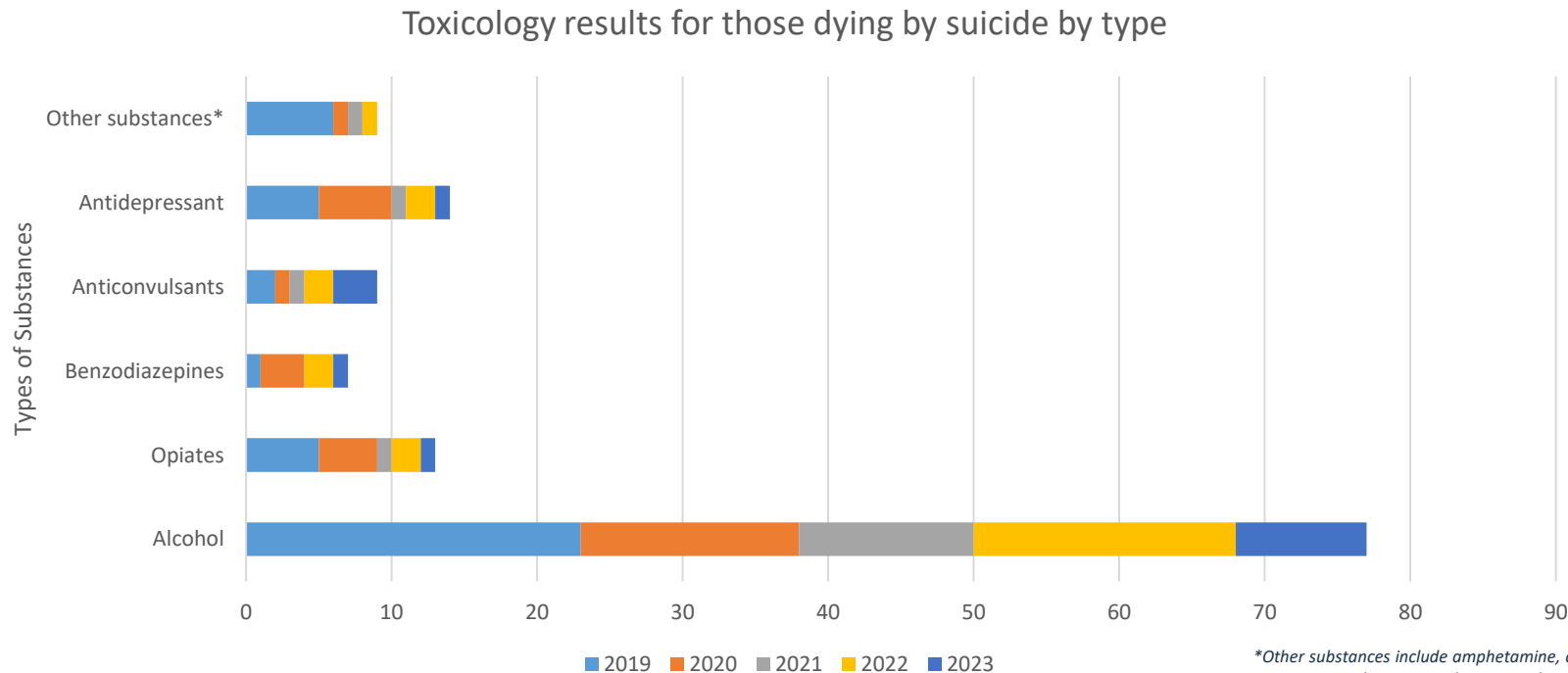
Suicide Circumstances

Suicide Circumstances among New Hanover residents



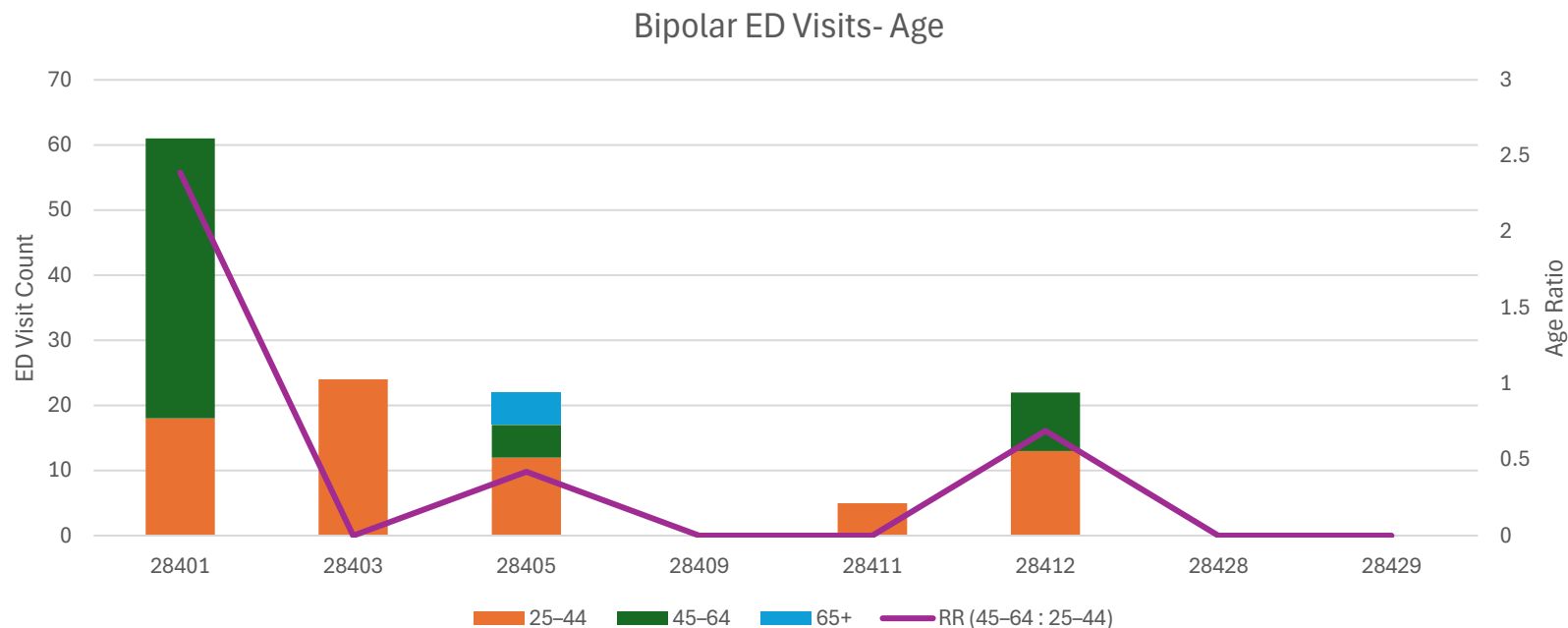
Mental health–related factors consistently dominate suicide circumstances among New Hanover residents (2019–2023), with the highest proportions reporting ever treated and currently diagnosed mental health problems, peaking in 2022 and remaining elevated in 2023.

Toxicology Testing and Results for Those Dying by Suicide



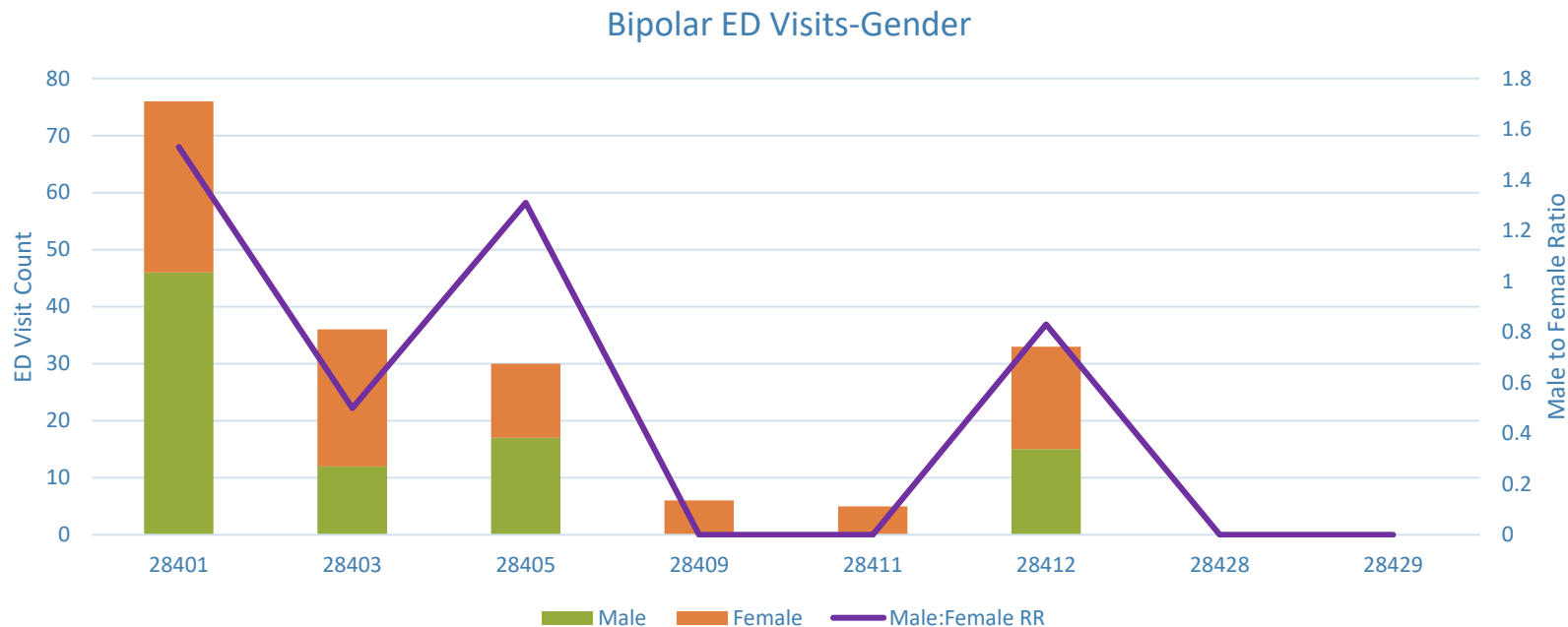
Alcohol is by far the most frequently detected substance in those dying by suicide across all years, substantially exceeding all other substance categories

Bipolar ED Visits- Age Patterns



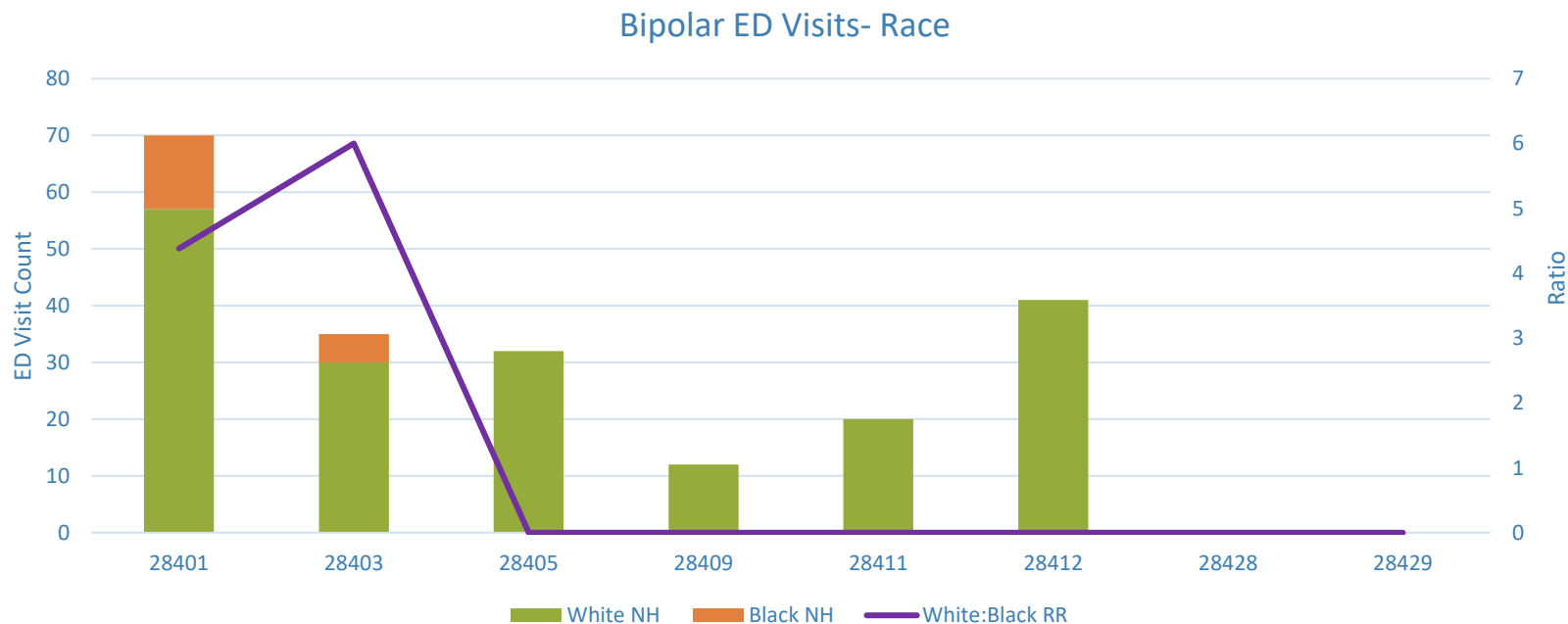
Bipolar-related ED visits are concentrated among adults 25–64, with 25–44 leading in several high-burden ZIPs and very few visits among youth or older adults. In 28401, individuals aged 45–64 are ~2.5 times more likely to experience an ED Visit related to Bipolar.

Bipolar ED Visits- Gender Patterns



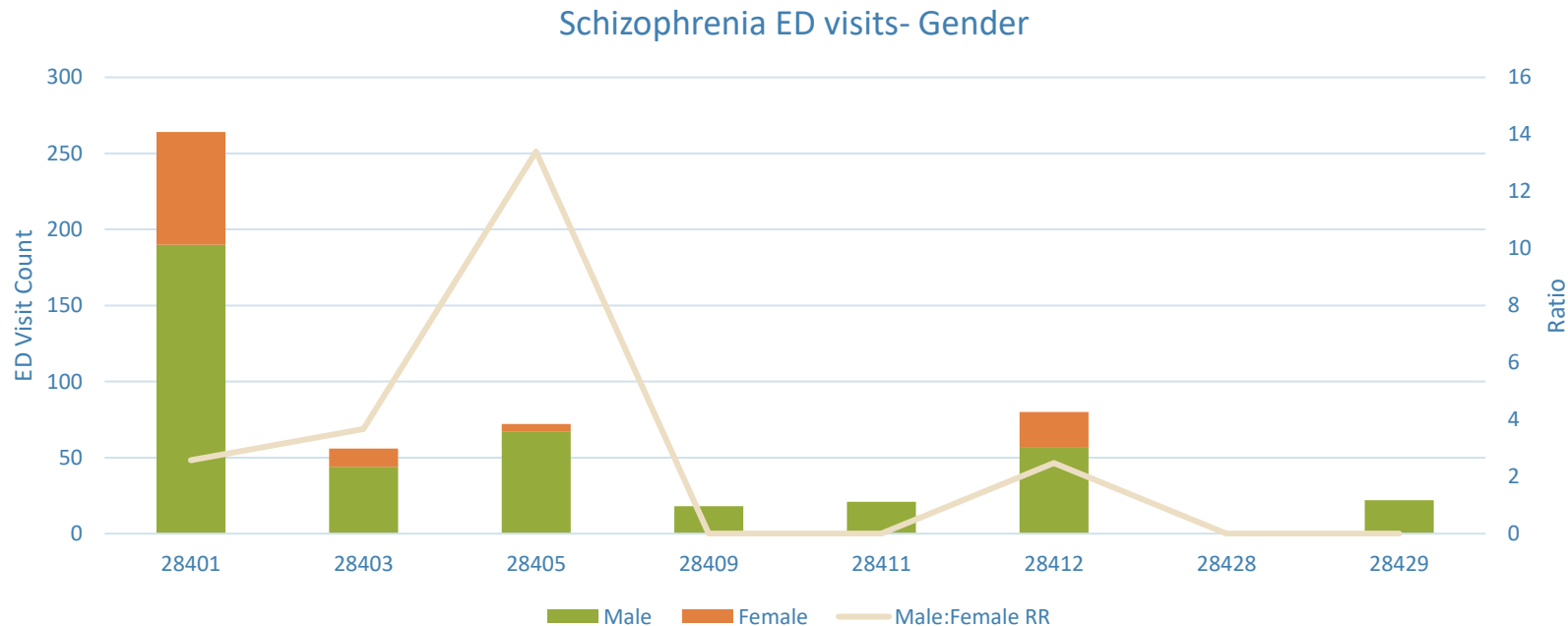
Bipolar-related ED visits show mixed gender patterns across ZIPs, but overall males and females contribute comparable volumes, unlike the clear female predominance seen for depression

Bipolar ED Visits- Race Patterns



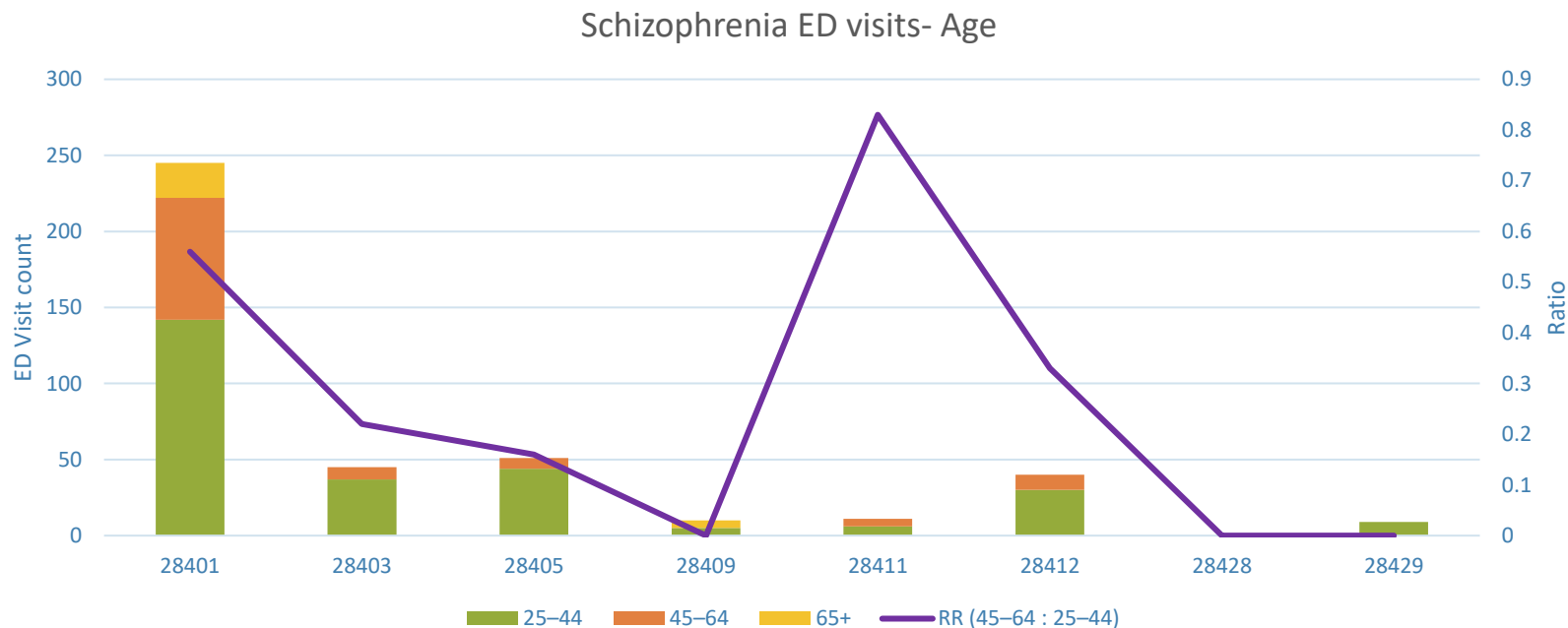
Most bipolar-related ED visits involve White non-Hispanic patients, with relatively few visits recorded among Black or Hispanic residents in any ZIP.

Schizophrenia ED Visits- Gender Patterns



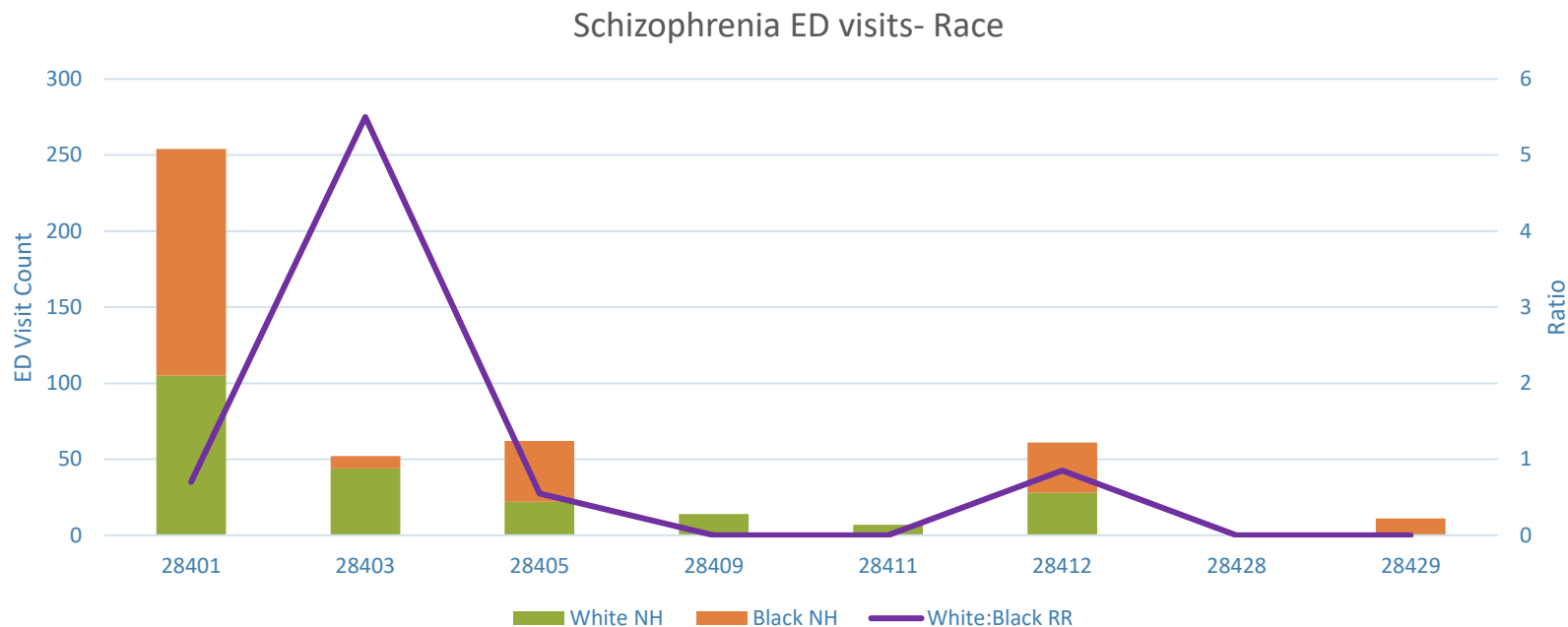
Schizophrenia-related ED visits are consistently male-predominant, with males accounting for more than twice as many visits as females in most ZIP codes

Schizophrenia ED Visits- Age Patterns



Schizophrenia-related ED visits are dominated by adults 25-44, with smaller but meaningful volumes among 45-64

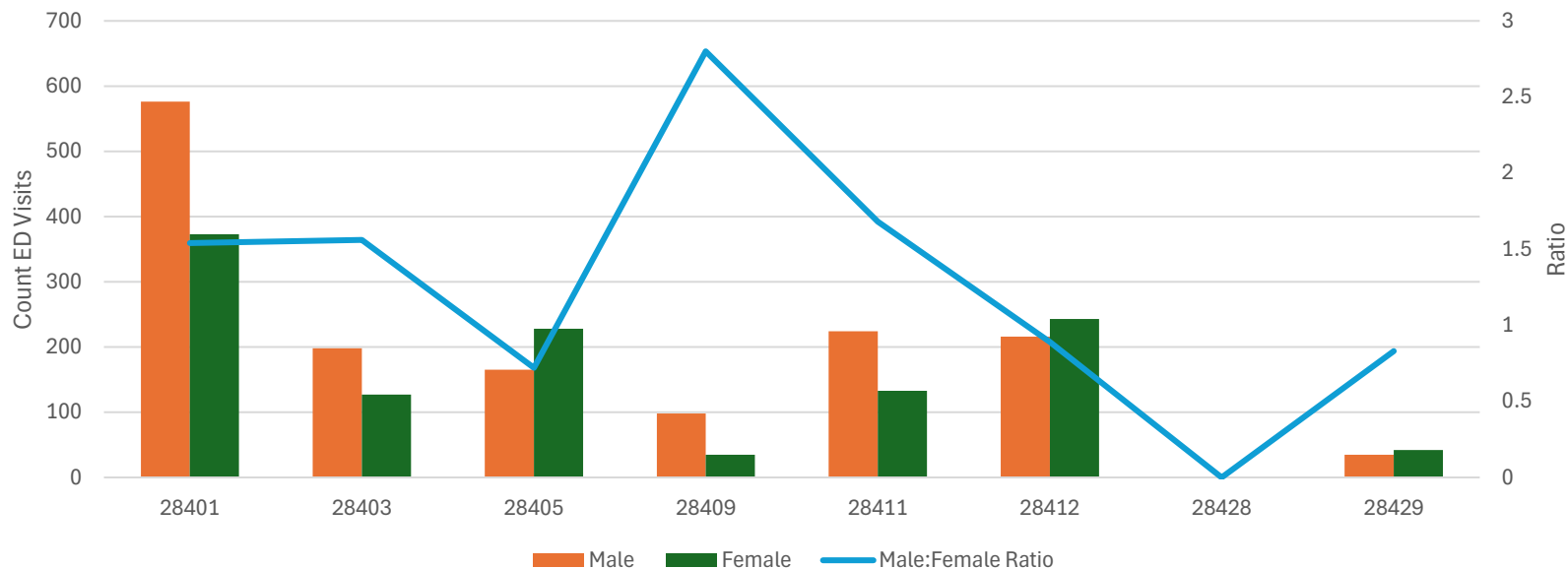
Schizophrenia ED Visits- Race Patterns



In several ZIPs, particularly 28401 and 28405, Black non-Hispanic residents have as many or more schizophrenia-related ED visits as White residents, highlighting localized racial inequities in severe mental illness burden.

Persistent mood + schizoaffective + unspecified mood disorder ED visits – Gender Patterns

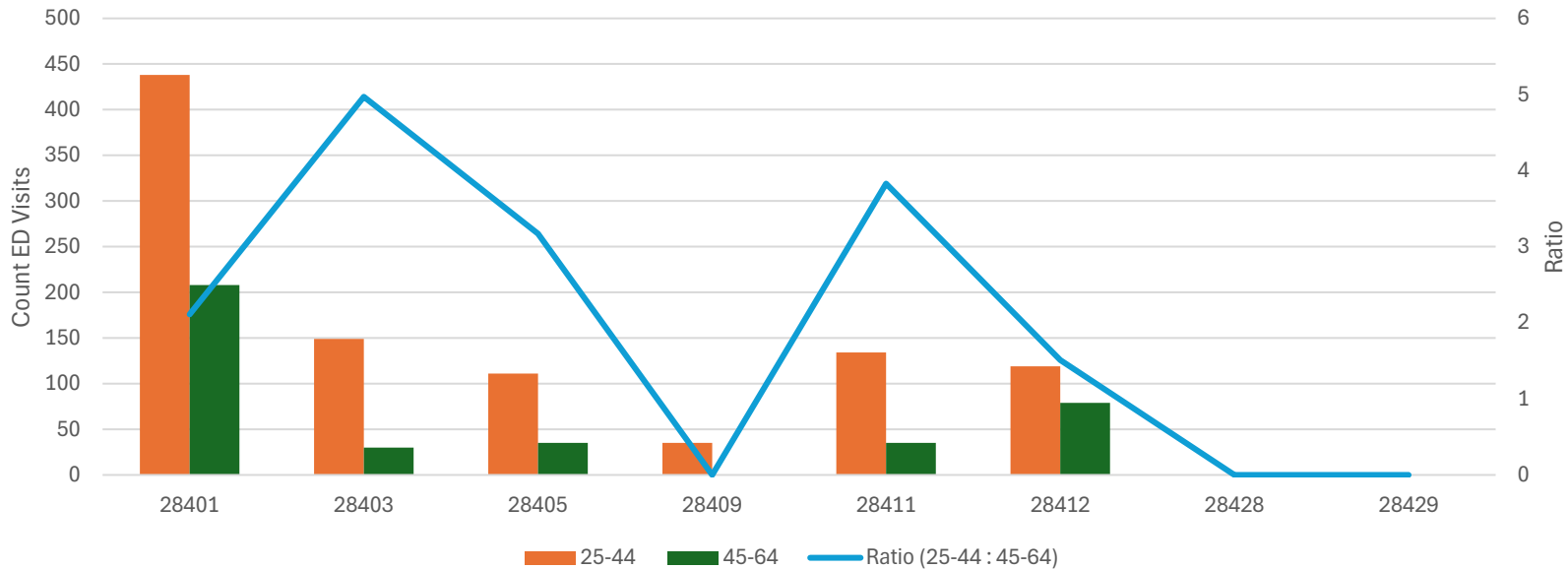
Combined Psychiatric Related ED Visits



Combined psychiatric ED visits are generally higher among males, though several ZIP codes show higher female utilization, particularly 28405 and 28412

Persistent mood + schizoaffective + unspecified mood disorder ED visits – Age Patterns

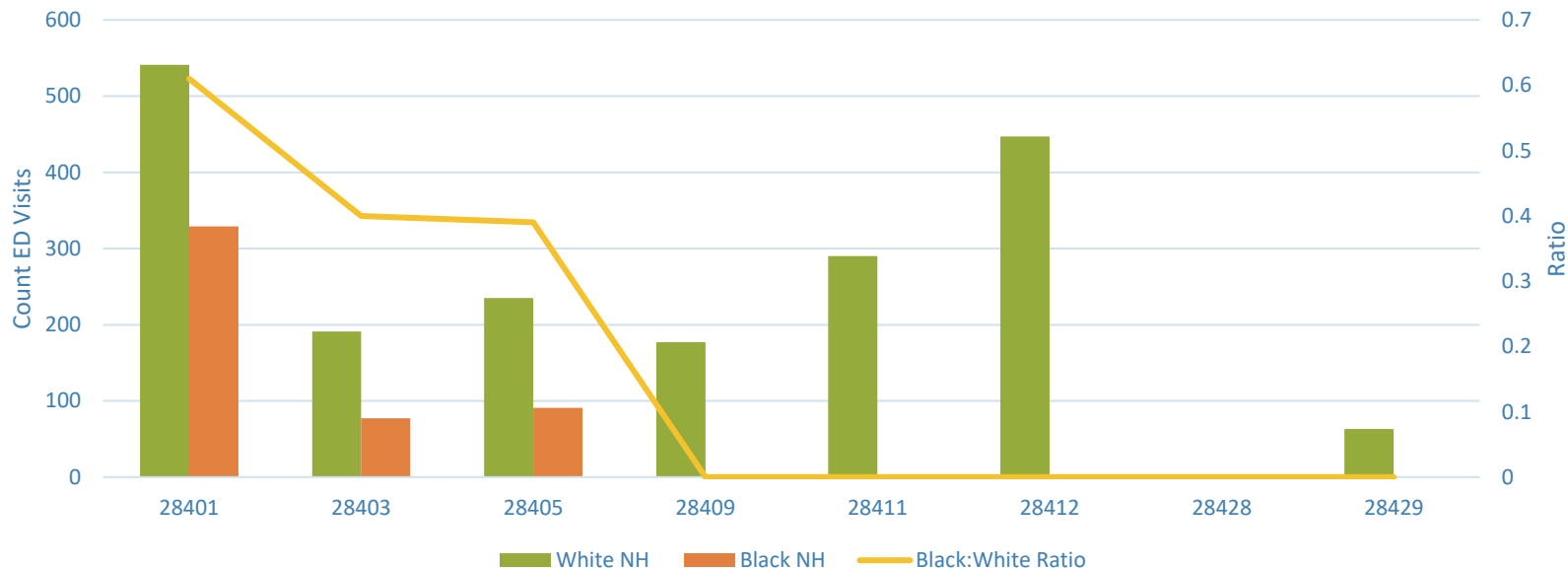
Combined Psychiatric Related ED Visits



Adults aged 25-44 dominate psychiatric ED visits in every ZIP code.
In some ZIP codes (28403 and 28411) this group has 4–5× more visits than 45-64.

Persistent mood + schizoaffective + unspecified mood disorder ED visits – Race Patterns

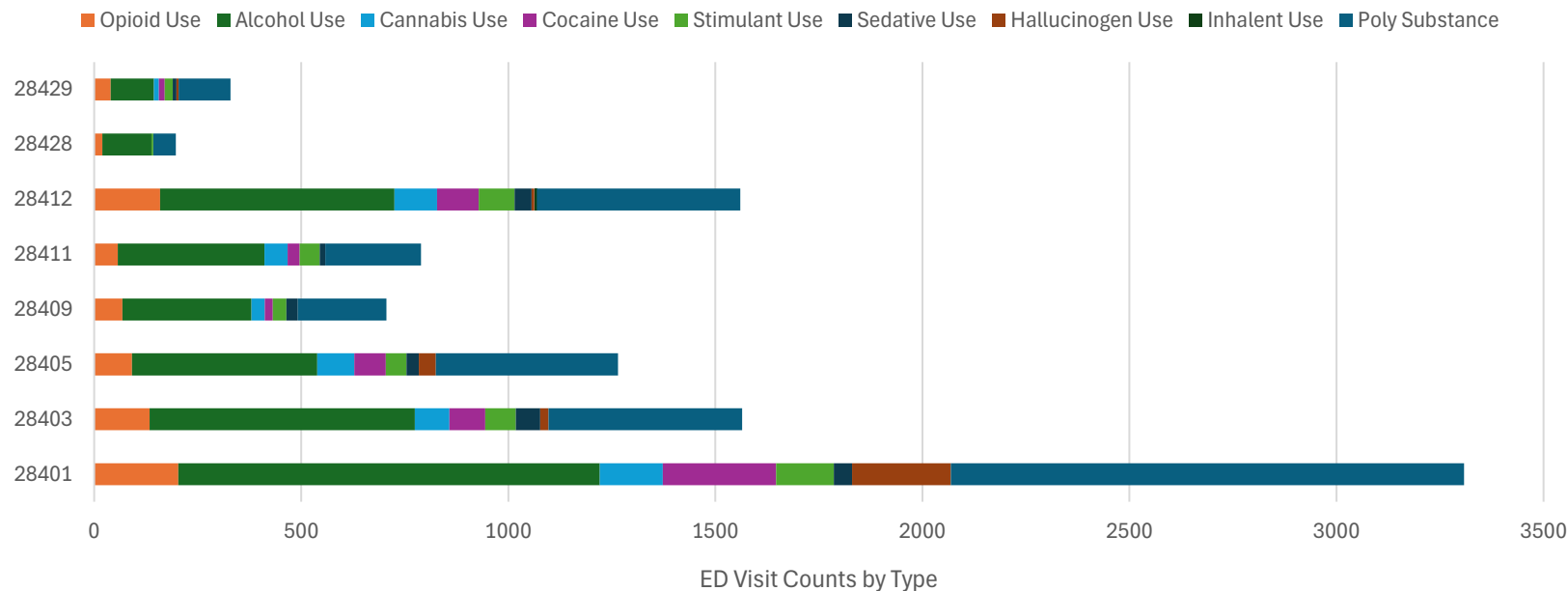
Combined Psychiatric Related ED Visits



White NH residents account for the majority of psychiatric ED visits across all ZIP codes

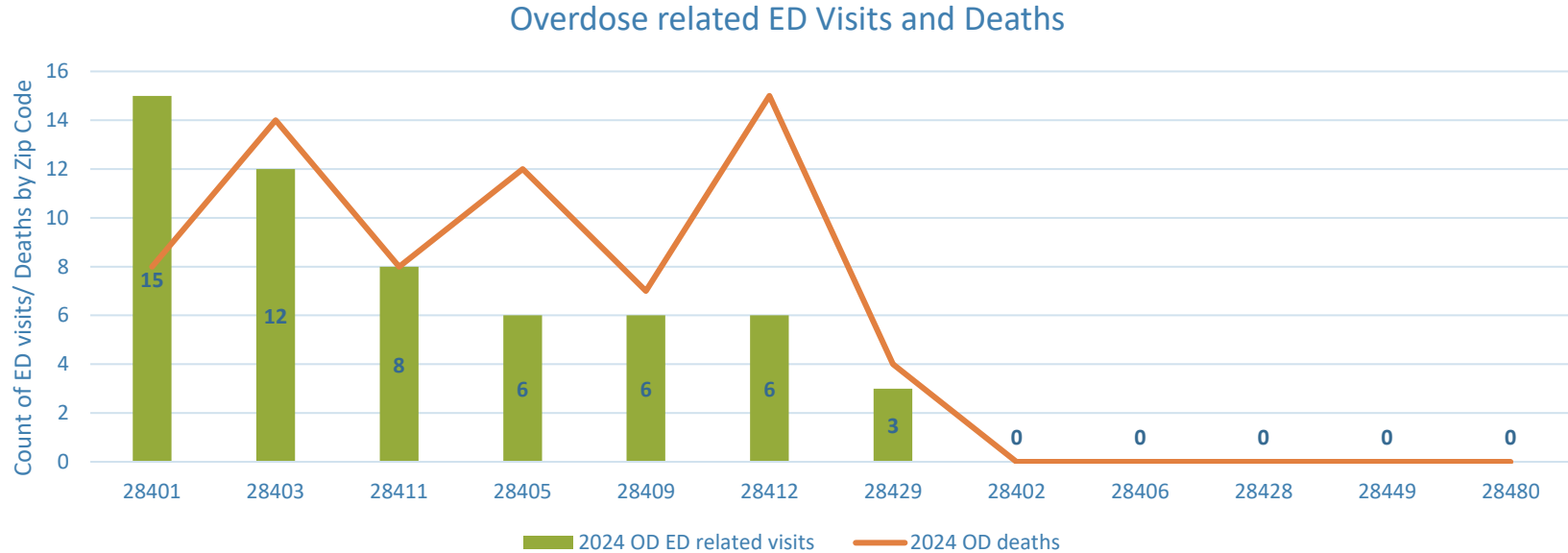
Substance Use related ED Utilization – Overall Landscape (2020-2024)

Overall Substance Related ED Visits from 2020-2024



substance-related ED visits are heavily concentrated in ZIPs 28401, 28403, 28405, and 28412, where alcohol, opioid, and Polysubstance use dominate volume

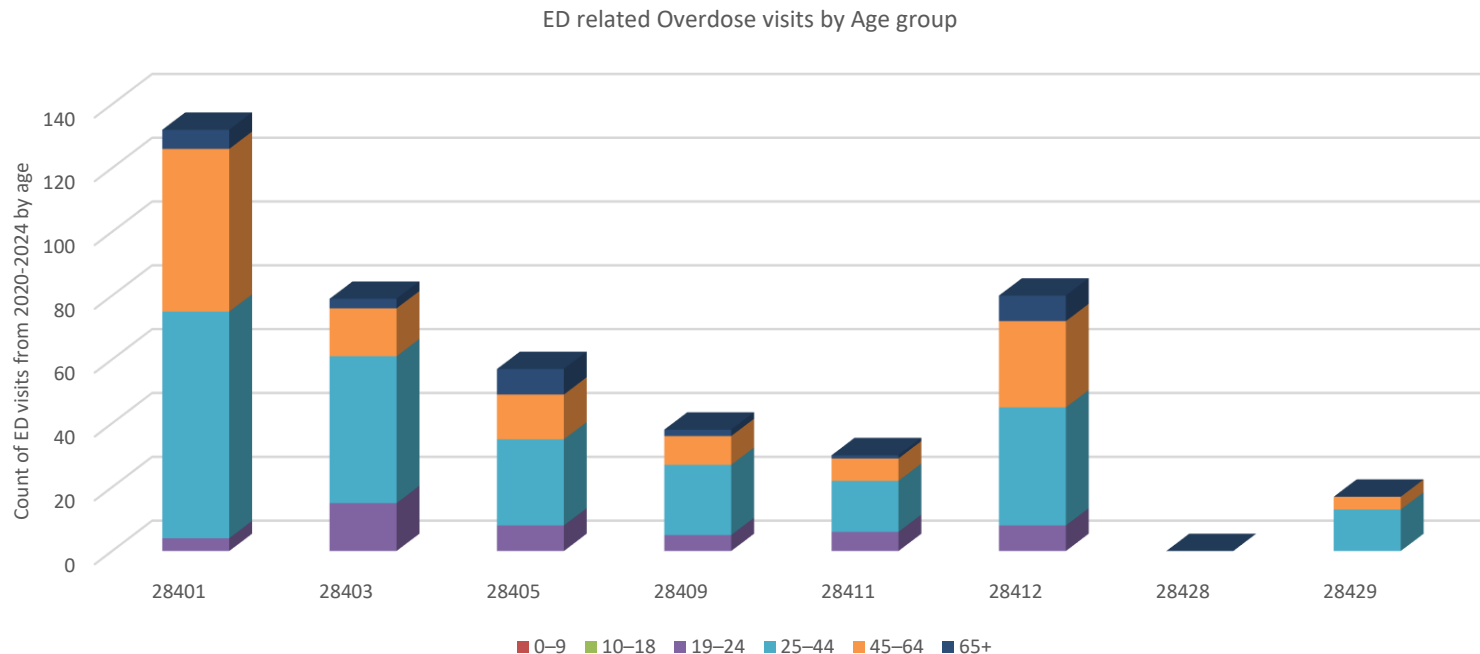
Overdose related ED visits and deaths patterns



Counts shown (not population-adjusted). ZIP codes with no observed ED visits or deaths during the period are omitted from visualization. Zip codes based on patient's documented address.

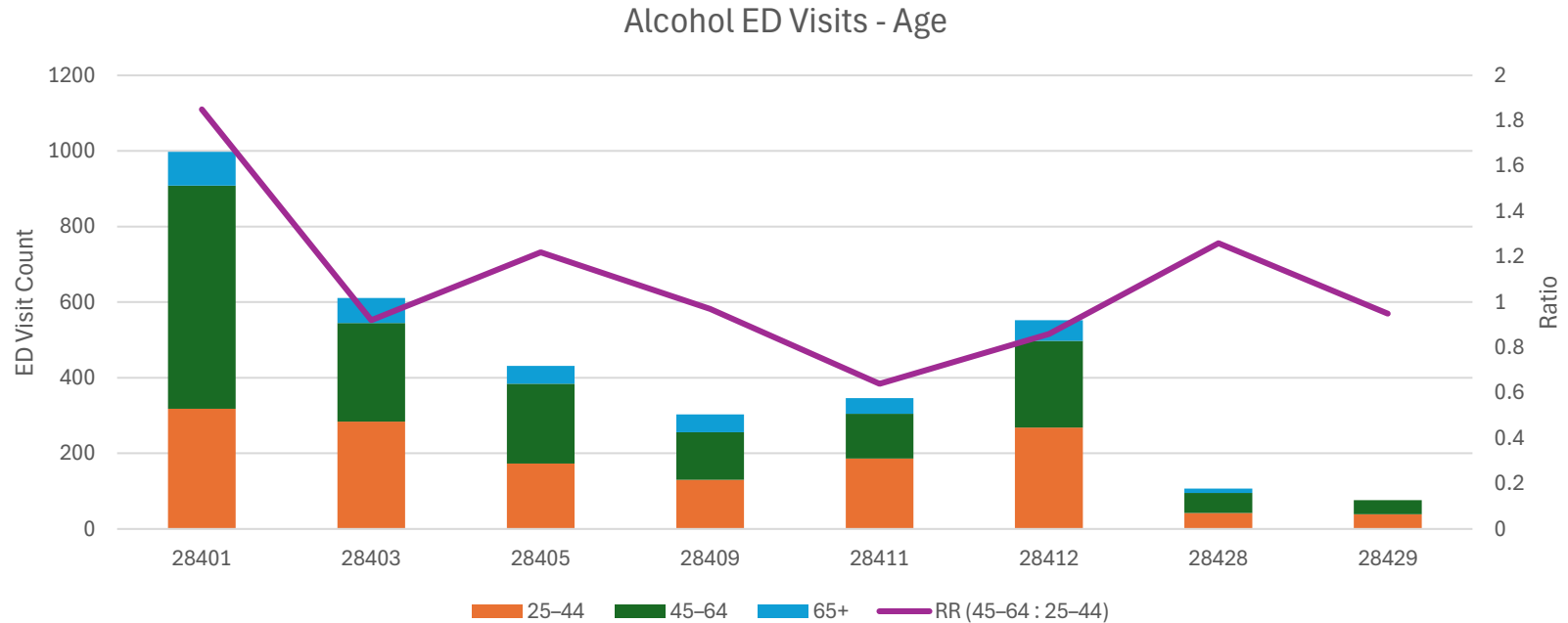
Overdose-related emergency department visits and deaths are highly concentrated in a small number of ZIP codes, with 28401 and 28412 experiencing both high ED utilization and elevated mortality. Several ZIPs with lower ED visit volume still demonstrate a high proportion of deaths

Overdose ED Visits Are Concentrated Among Working-Age Adults



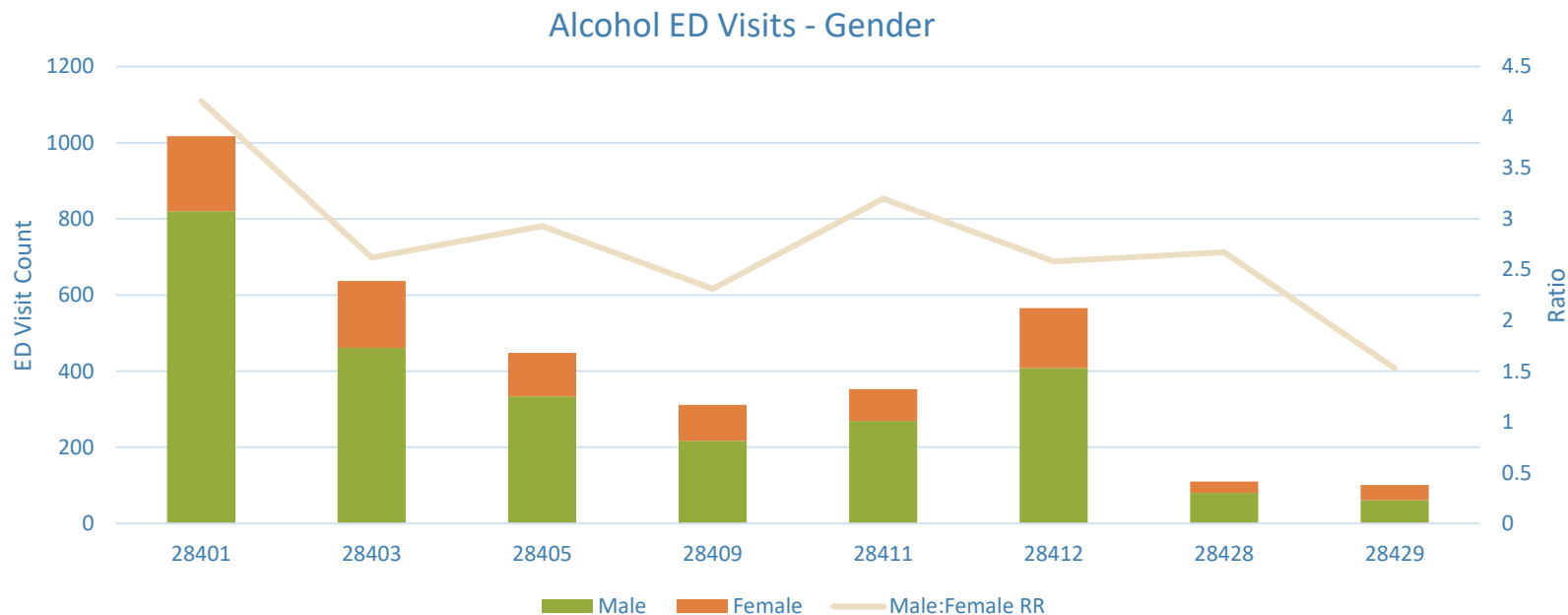
Nearly 80% of overdose ED visits occur among adults ages 25–64, with burden concentrated in 28401 and 28412.

Alcohol-Use ED Visits – Age Patterns



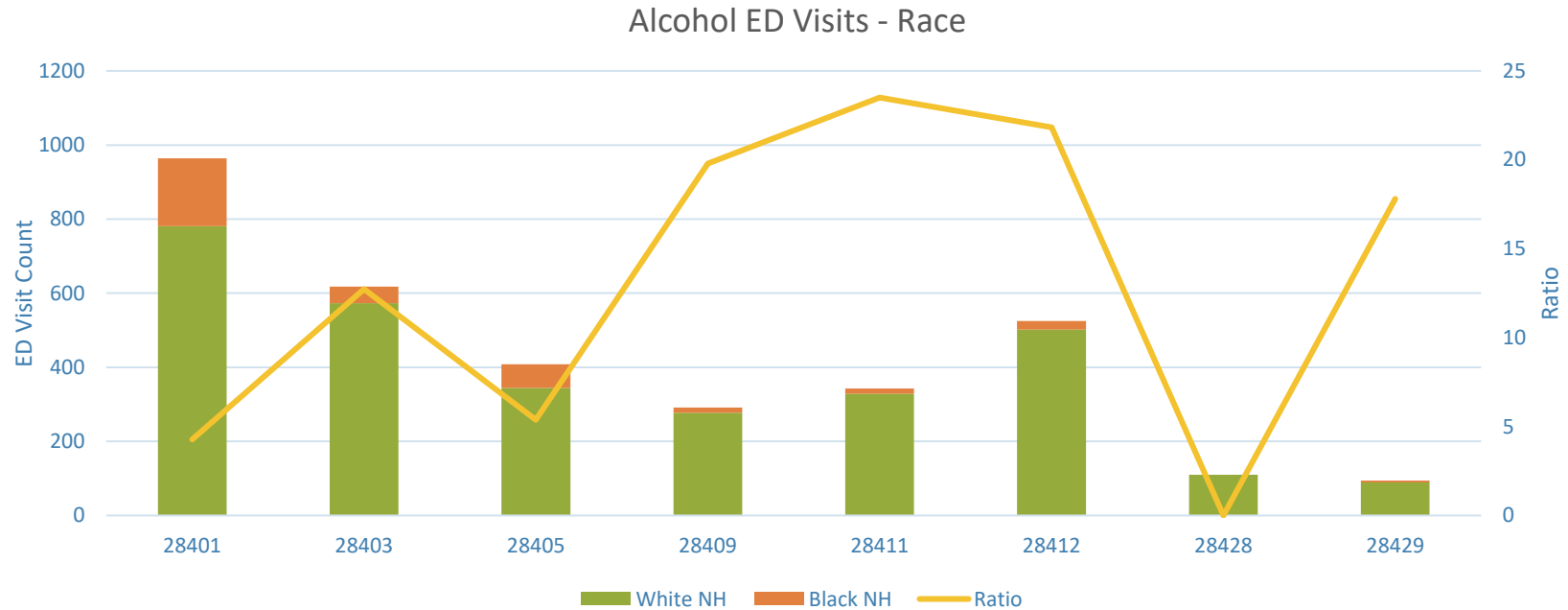
Alcohol-related ED visits are concentrated among adults 25–64, with 45–64 typically matching or exceeding 25–44, while younger adults and older-adult visits remain comparatively low

Alcohol-Use ED Visits – Gender Patterns



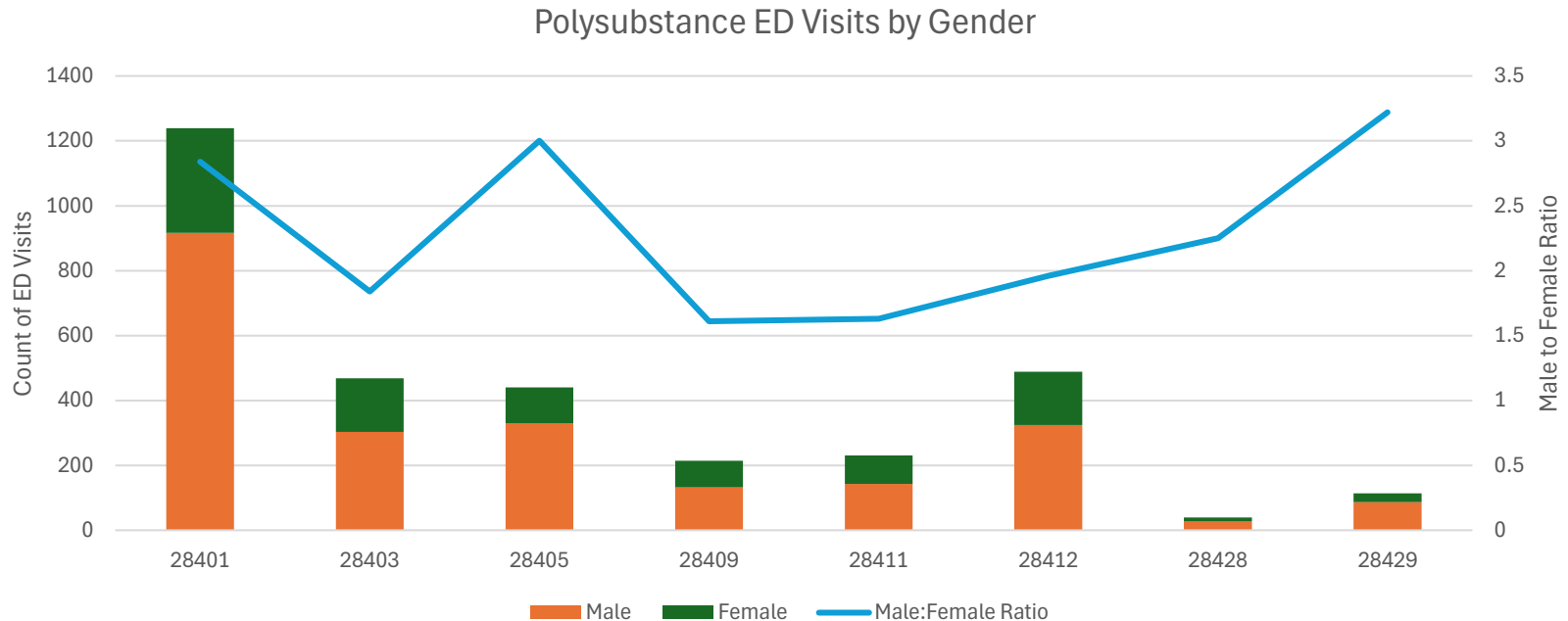
Men account for roughly 1.5–2.5 times as many alcohol-related ED visits as women in most ZIPs, indicating a consistent male predominance in acute alcohol-related crises.

Alcohol-Use ED Visits – Race/Ethnicity Patterns



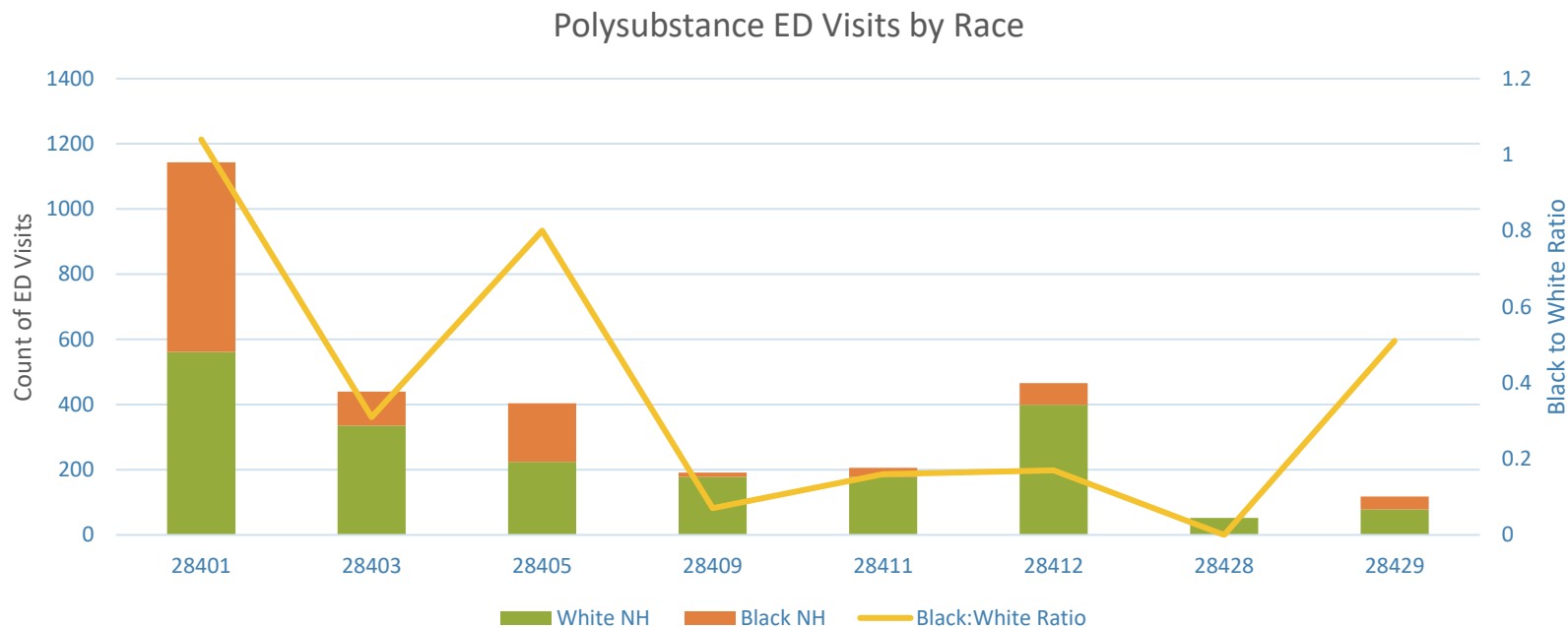
White non-Hispanic residents generate most alcohol-related ED visits across ZIPs, but Black residents contribute substantial volume in 28401 and 28405, where racial gaps are narrower than in more affluent ZIPs.

Polysubstance Use ED Visits – Gender Patterns



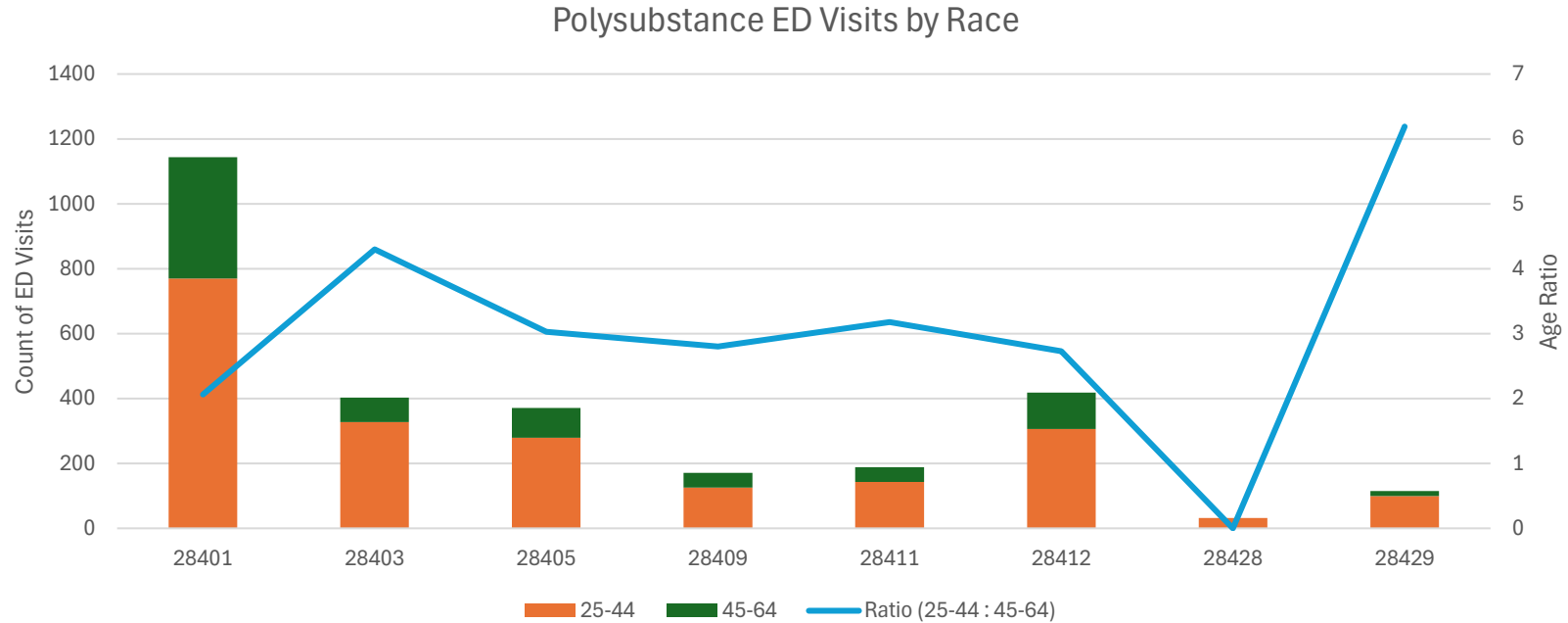
Men experience more polysubstance-related ED visits than women in nearly every ZIP, often by a factor of 1.5–2.0, paralleling gender patterns seen for other substance-related crises.

Polysubstance Use ED Visits – Race Patterns



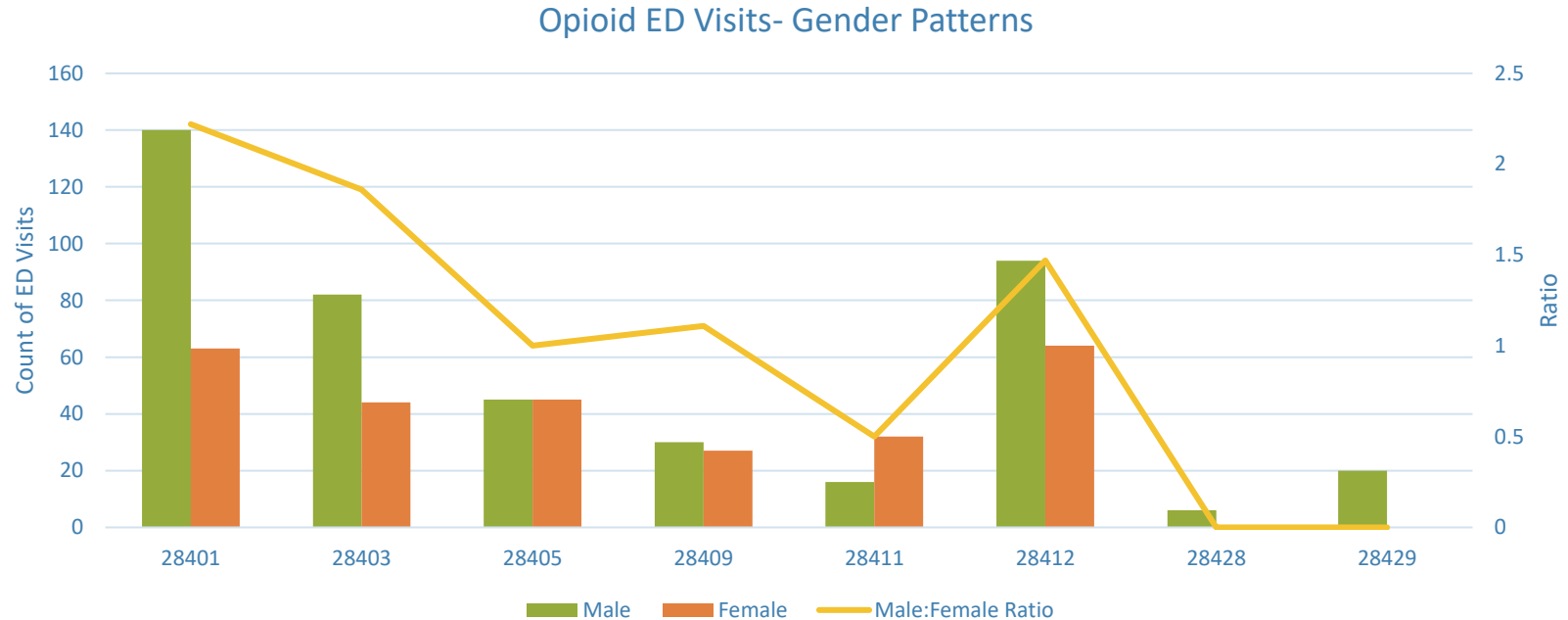
Polysubstance-related ED visits primarily involve White non-Hispanic residents, but in high-burden ZIPs such as 28401 Black residents also show elevated rates, indicating overlapping racial and geographic disparities

Polysubstance Use ED Visits – Age Patterns



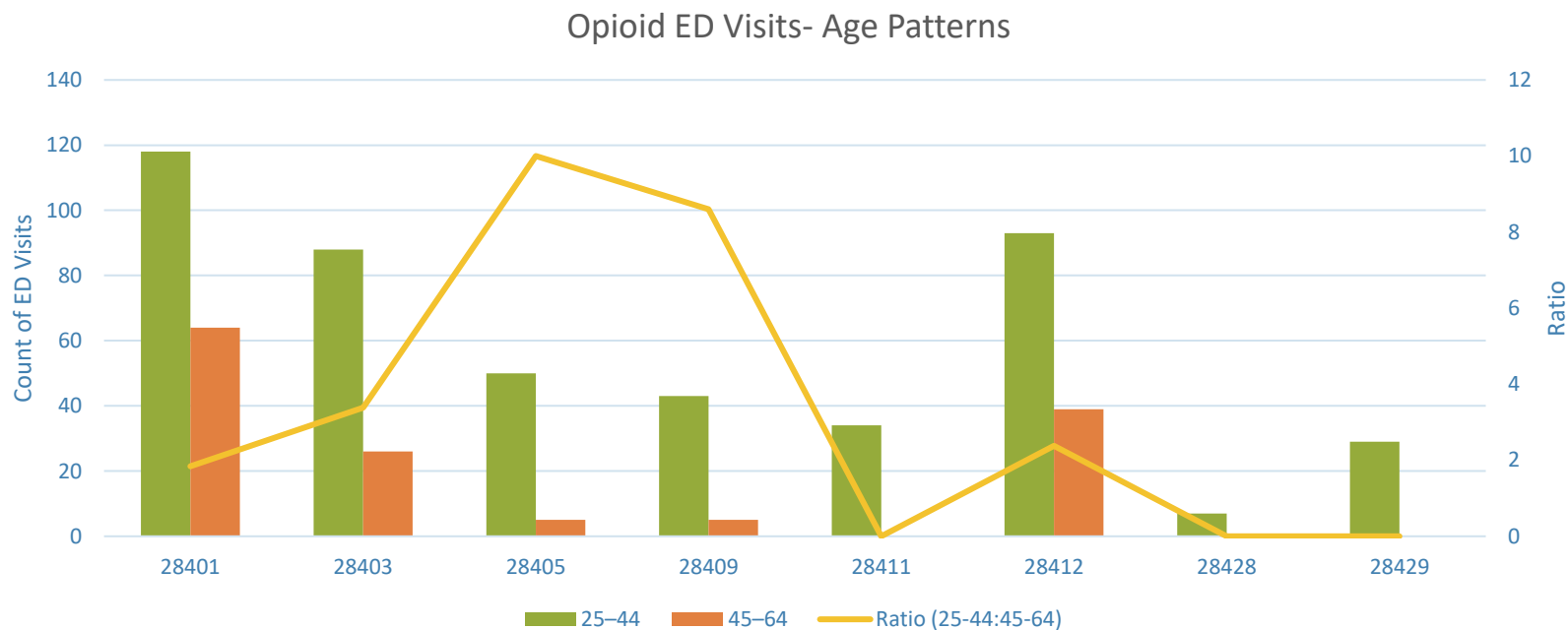
Polysubstance ED visits are dominated by adults 25–44 and 45–64, with very few visits among adolescents or older adults, underscoring working-age adults as the key risk group.

Opioid Use ED Visits – Gender Patterns



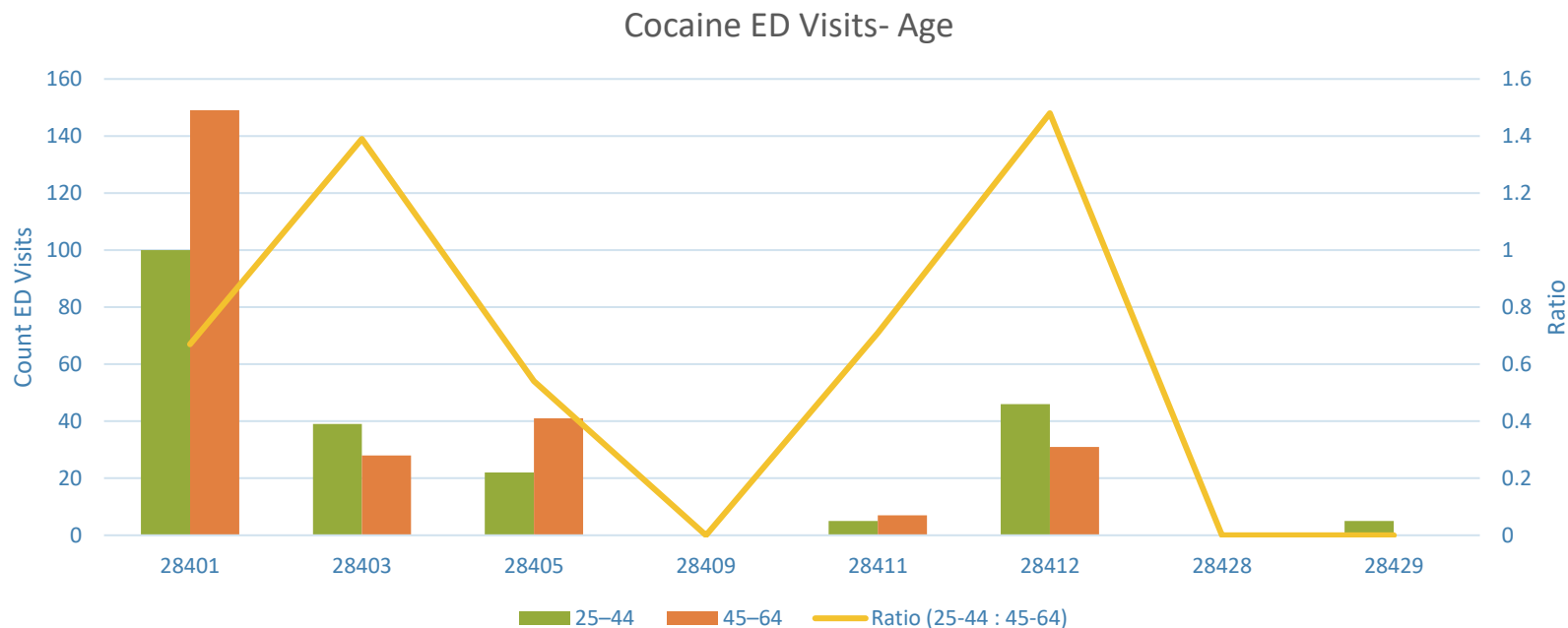
Opioid ED visits are generally male-dominated across New Hanover County ZIP codes, though 28411 shows a higher burden among females.

Opioid Use ED Visits – Age Patterns



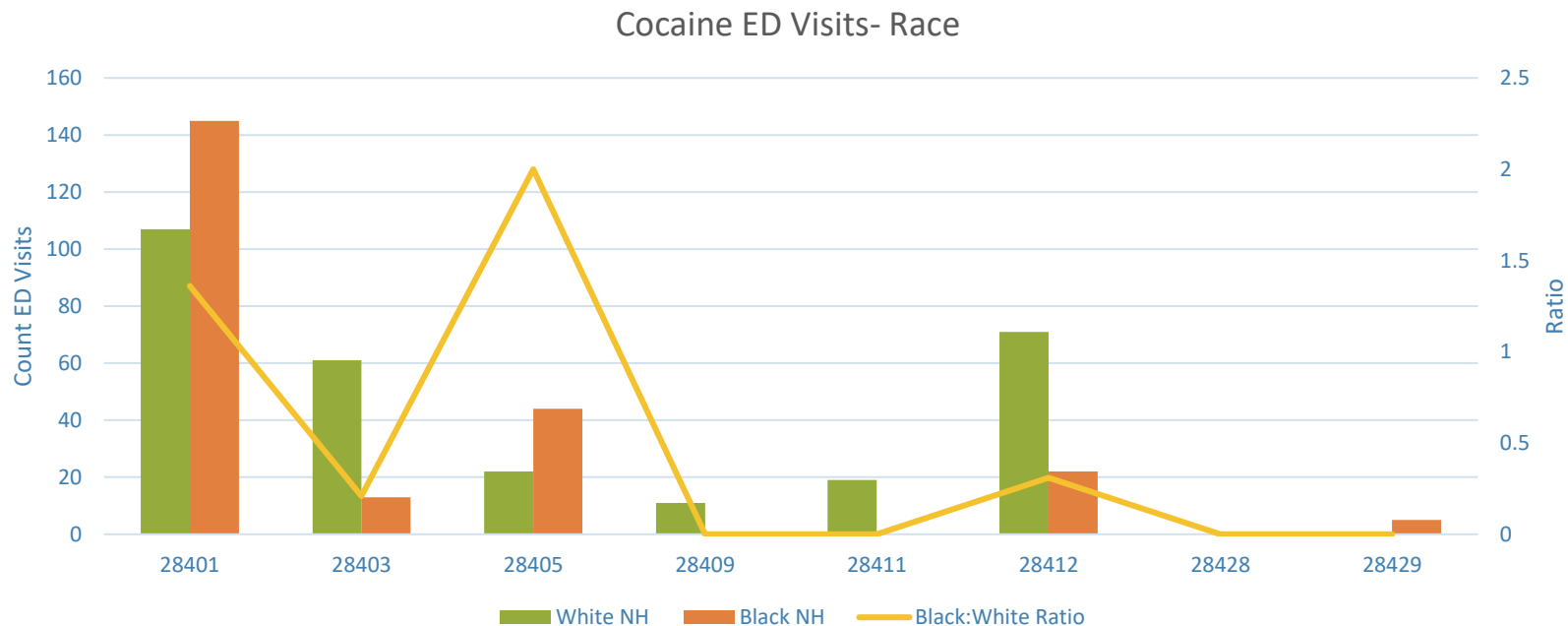
Adults aged 25–44 dominate opioid ED visits across every ZIP code, sometimes experience 8–10× more visits than individuals aged 45-64

Cocaine Use ED Visits – Age Patterns



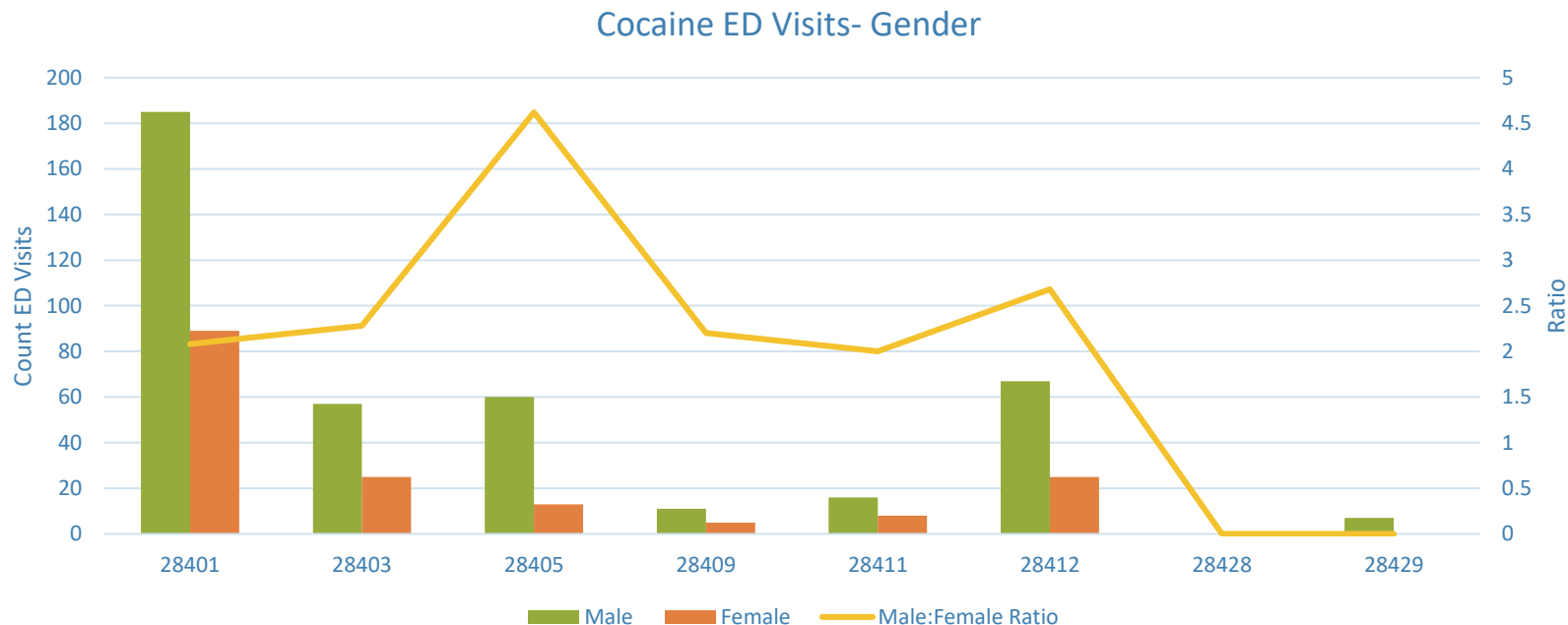
Unlike opioid or polysubstance visits, cocaine ED visits are often higher in the 45–64 age group in several ZIP codes.

Cocaine Use ED Visits – Race Patterns



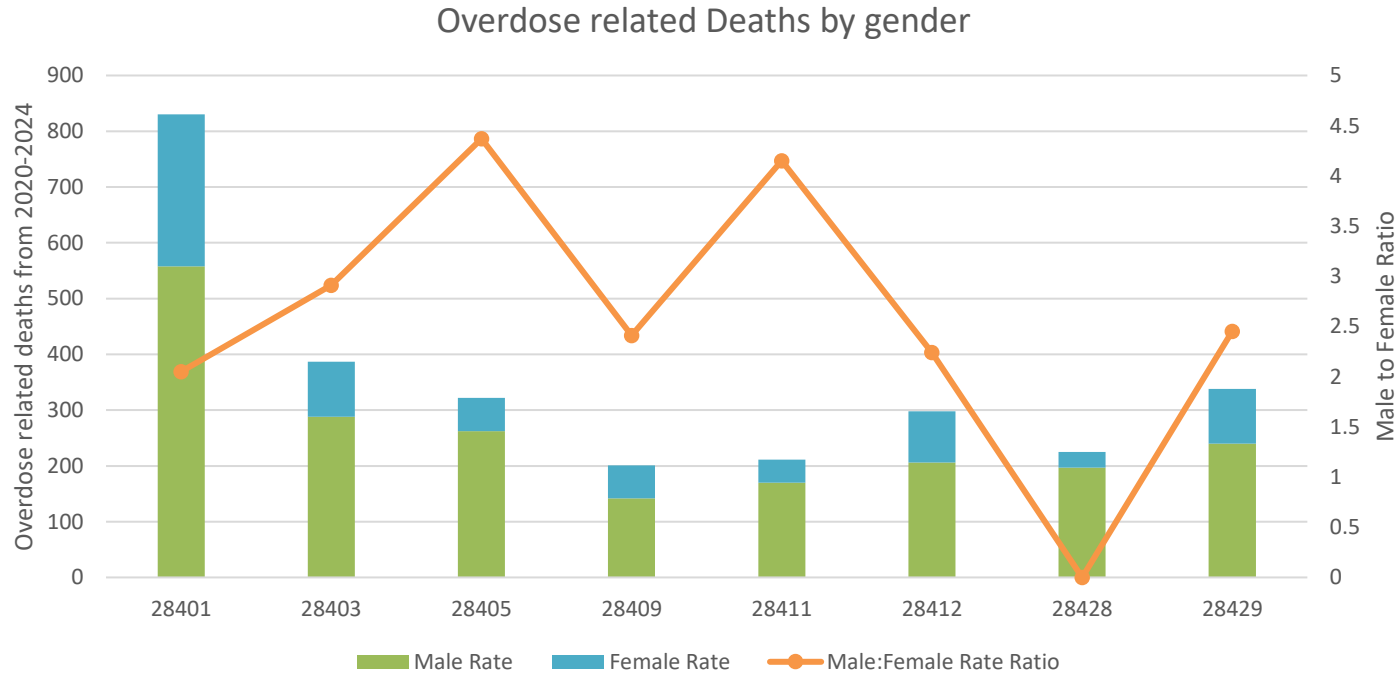
28401 shows the largest cocaine burden overall and disproportionately among Black residents.

Cocaine Use ED Visits – Gender Patterns



Cocaine-related ED visits are consistently male-dominated across all New Hanover ZIP codes, typically 2–4 times higher among males

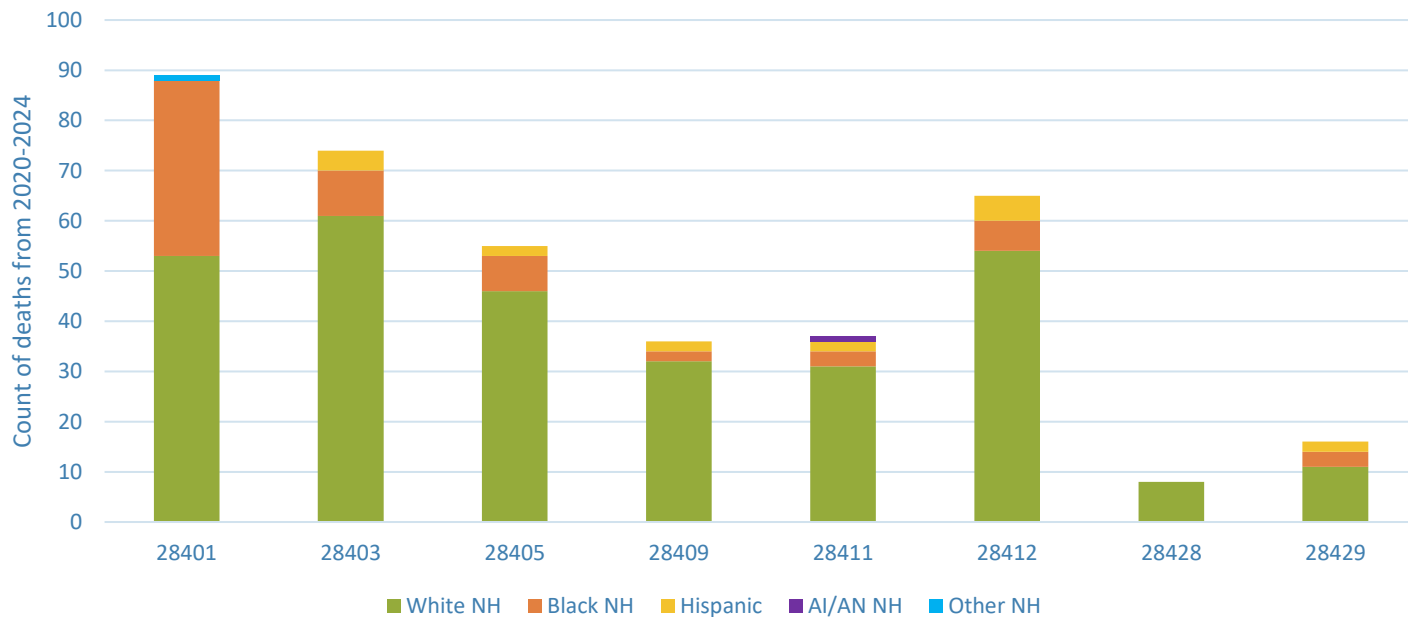
Overdose-Related Deaths by Gender



Across every major ZIP code, men experience substantially higher overdose mortality than women, with disparities reaching more than four times higher in select communities.

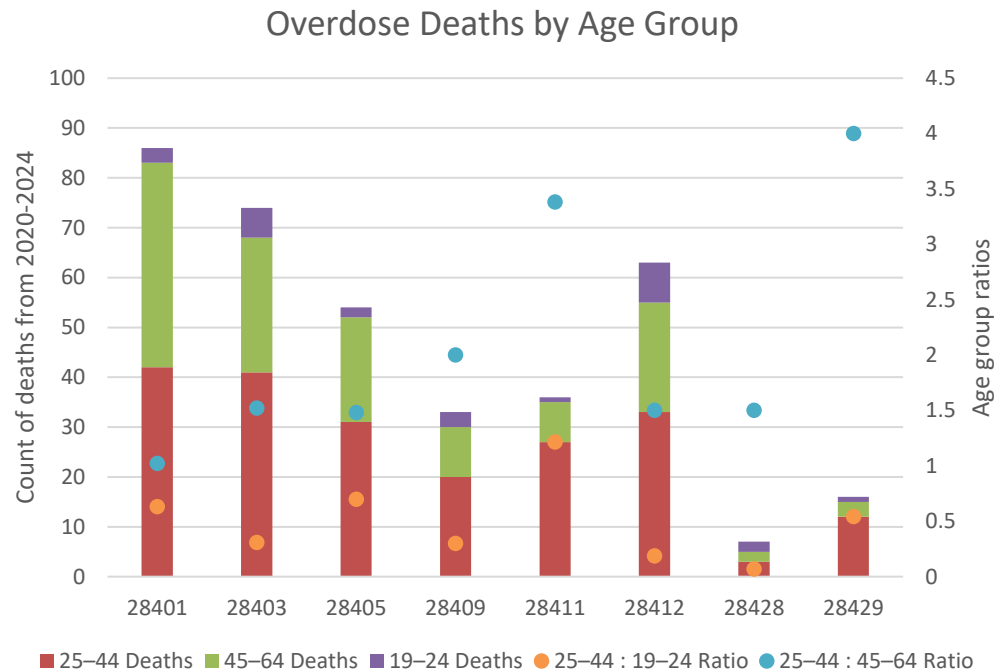
Overdose Deaths by Race/Ethnicity

Overdose related Deaths by Race/ethnicity



Overdose mortality is concentrated in majority-White ZIP codes by volume, but racial disparities are most pronounced in 28401, where Black non-Hispanic residents experience a disproportionate share of deaths.

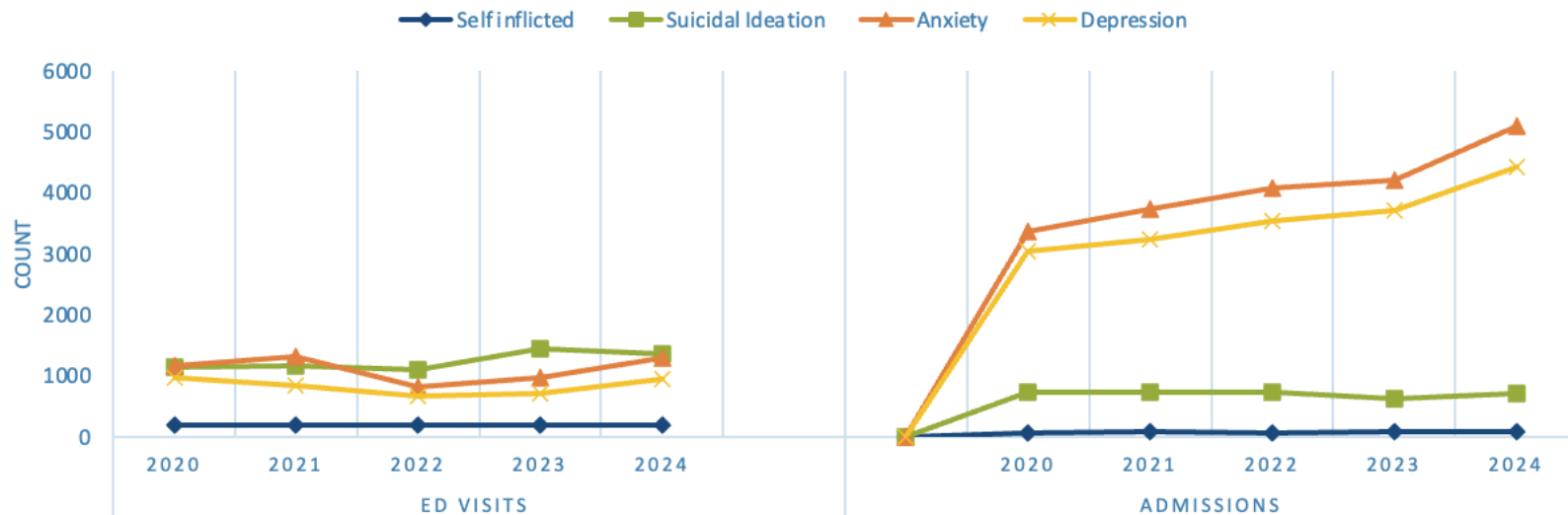
Overdose Deaths by Age



Overdose mortality in New Hanover County is geographically concentrated and disproportionately affects men, working-age adults, and residents in select high-burden ZIP codes.

Temporal Trend: ED Visits vs Hospitalizations – Behavior Health

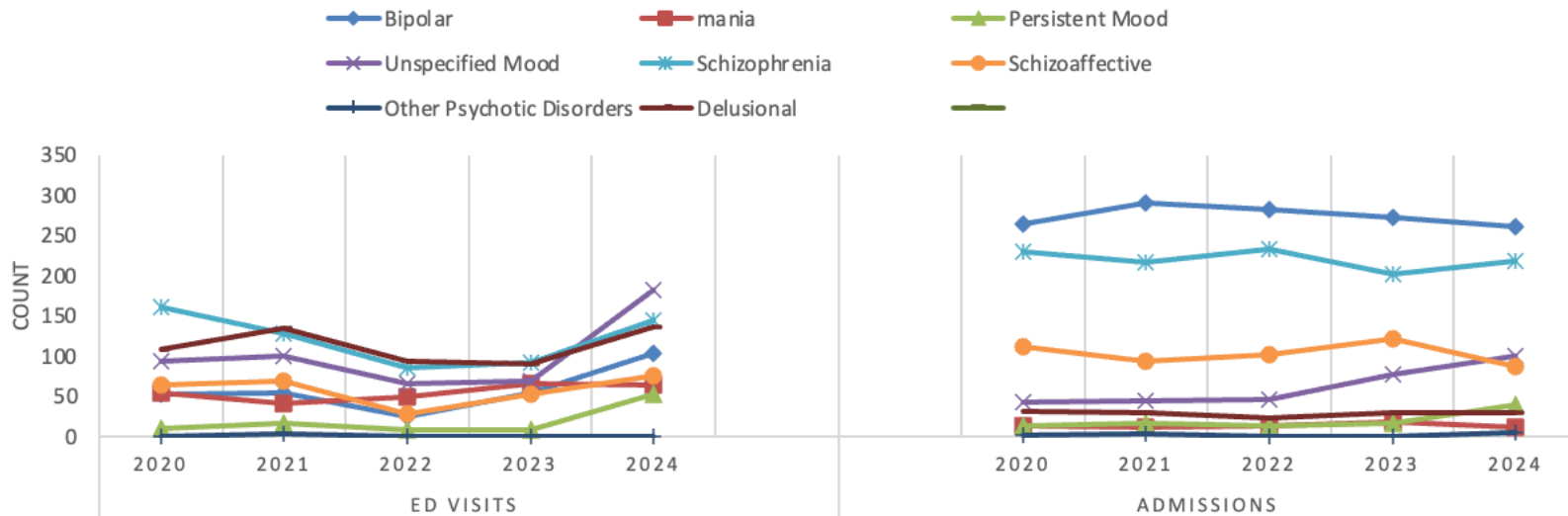
HOSPITALIZATIONS V ED VISITS FOR BEHAVIOR HEALTH CONDITIONS



Behavioral health hospitalizations, particularly for anxiety and depression, have increased steadily from 2020 to 2024, while ED visit volumes for these conditions remained relatively stable, suggesting greater severity or acuity among patients presenting for care.

Temporal Trend: ED Visits vs Hospitalizations – Psychiatric Related

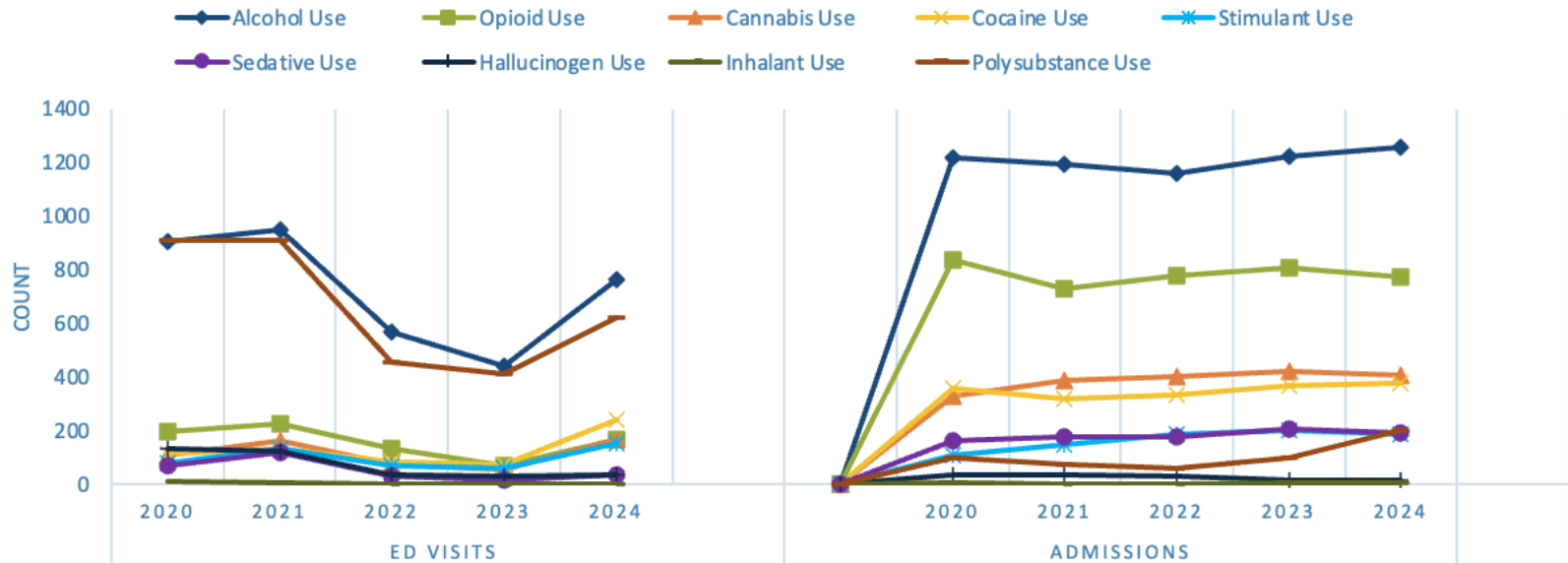
HOSPITALIZATIONS VS ED VISITS FOR PSYCHIATRIC RELATED DISORDERS



Bipolar disorder and schizophrenia generate the highest and most sustained hospitalization volumes, while ED visits show greater variability across psychiatric conditions.

Temporal Trend: ED Visits vs Hospitalizations – Substance Use

HOSPITALIZATIONS V ED VISITS FOR SUBSTANCE USE



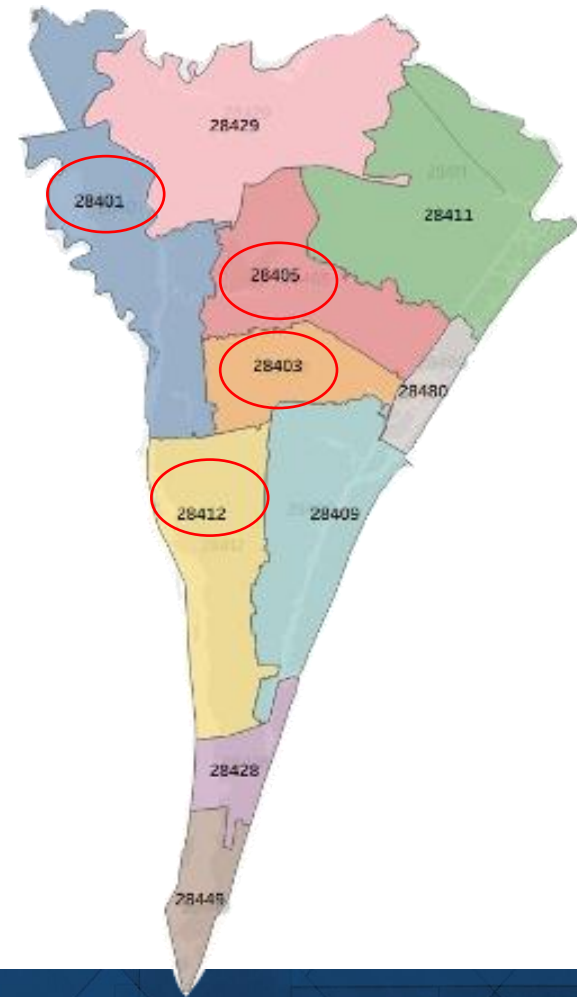
Alcohol and opioid use account for the largest share of both ED visits and hospitalizations, with admissions remaining persistently high across the study period

Synthesis of Behavioral Health ED Utilization and Hospitalization Patterns Across Populations and ZIP Codes

Domain	Age Pattern	Race/Ethnicity Pattern	Geographic (ZIP) Pattern	Temporal Pattern
Mood & Anxiety Disorders (Anxiety, Depression)	Predominantly adults 25–64; youth present but at lower volumes	Majority White Non-Hispanic reflecting population distribution; Black Non-Hispanic patients show elevated relative burden in select ZIPs	Concentrated in 28401, 28403, 28405, 28412	ED visits stable; hospitalizations increasing, suggesting rising acuity
Suicide Risk Conditions (Suicidal Ideation, Self-inflicted Injury)	Adult-dominant (25–64); minimal pediatric signal	Majority White Non-Hispanic where reportable; Black Non-Hispanic counts present in high-volume ZIPs	Most geographically concentrated, particularly 28401 and 28412	Low frequency but high acuity presentations
Substance Use Disorders (Alcohol, Opioids, Polysubstance, etc.)	Adult-driven; highest utilization among working-age adults	Racial distribution mirrors population but opioid and alcohol burdens dominate total visits	Similar high-burden ZIP clusters 28401, 28403, 28412	Alcohol and opioid admissions remain consistently high across years
Severe Psychiatric Disorders (Bipolar, Schizophrenia, Schizoaffective)	Primarily adult populations	Majority White Non-Hispanic where reportable	Distributed but overlapping with high behavioral health ZIPs	Hospitalizations consistently higher than ED visits, reflecting chronic care needs

Geographic Concentration of Behavioral Health Crisis Utilization

Behavioral health crisis utilization is geographically concentrated, with the highest burden in ZIP codes 28401 and 28412, while adjacent areas 28403 and 28405 show emerging demand, suggesting targeted placement of crisis services and diversion resources.





Quantitative Data Summary

- Behavioral health, substance use, and overdose utilization are geographically concentrated, with consistent clustering in ZIP codes 28401 and 28412
- Working-age adults (25–64) drive the majority of ED visits and hospitalizations across behavioral health and substance-related conditions, highlighting this group as the primary population experiencing crisis-level utilization.
- Hospitalizations for several behavioral health conditions (e.g., anxiety, depression, bipolar, schizophrenia) have increased more steadily than ED visits
- Alcohol and opioid use represent the largest contributors to substance-related ED visits and admissions, with polysubstance involvement appearing in a growing share of cases.
- Socioeconomic disadvantage and access barriers align with higher ED utilization, particularly in the same ZIP codes where behavioral health, substance use, and crisis presentations cluster.

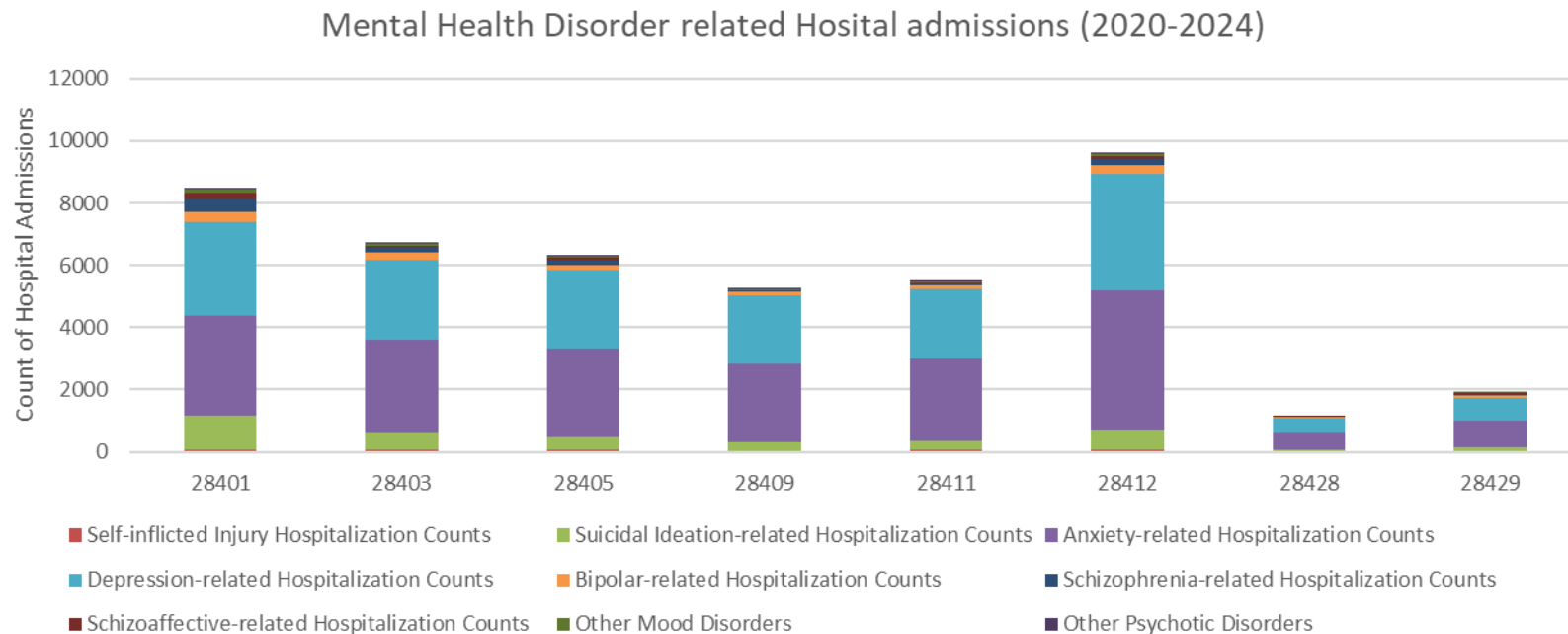
Behavioral Health Hospitalizations (2020-2024)

- Behavioral Health Hospital Admissions and Distribution Ratios
- Substance Use Hospital Admissions and Distribution Ratios

Key Finding:

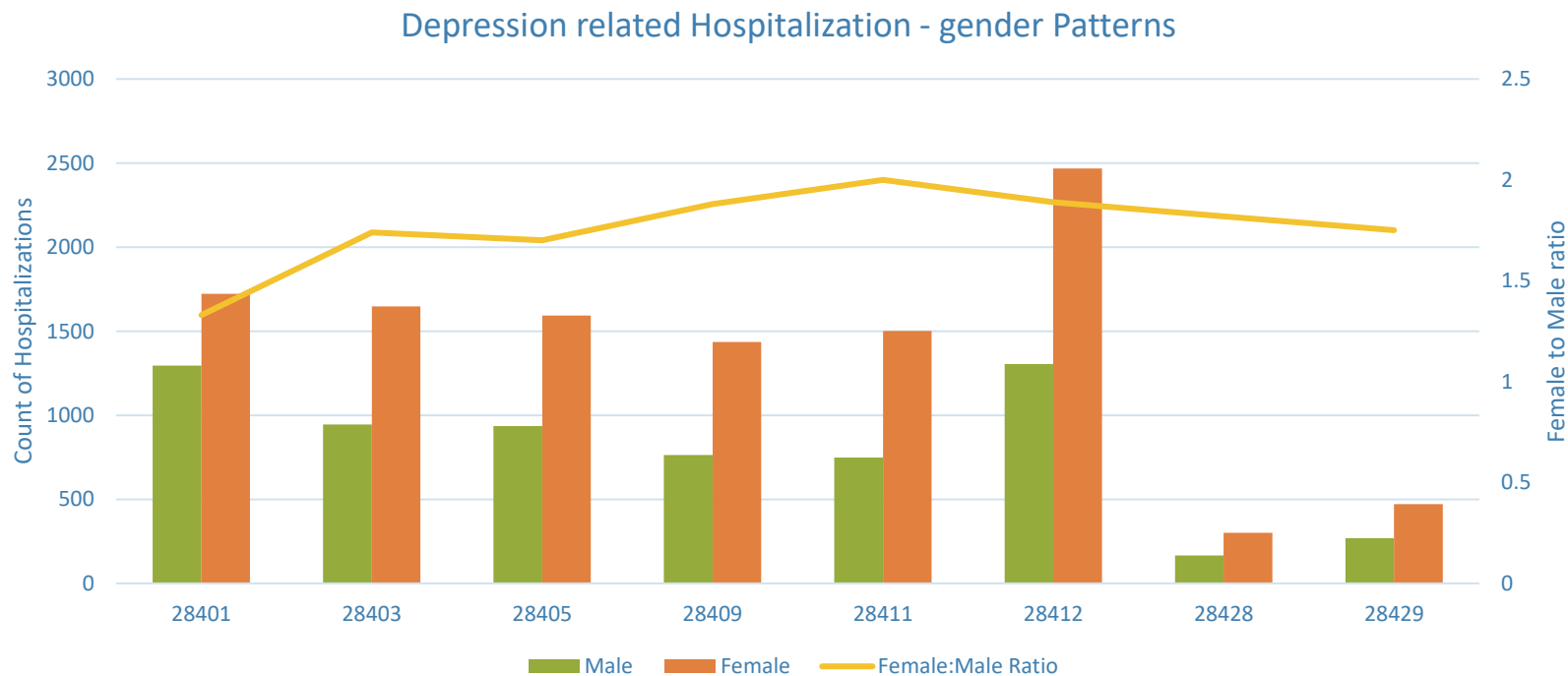
- From 2020-2024, four ZIPs (28401, 28412, 28403, 28405) consistently account for the majority of behavioral health hospitalizations

Mental Health Hospitalizations (5-Year Totals)



Anxiety and depression account for the overwhelming majority of psychiatric hospitalizations in every ZIP, with 28412 and 28401 each exceeding 9,000 cumulative admissions across conditions

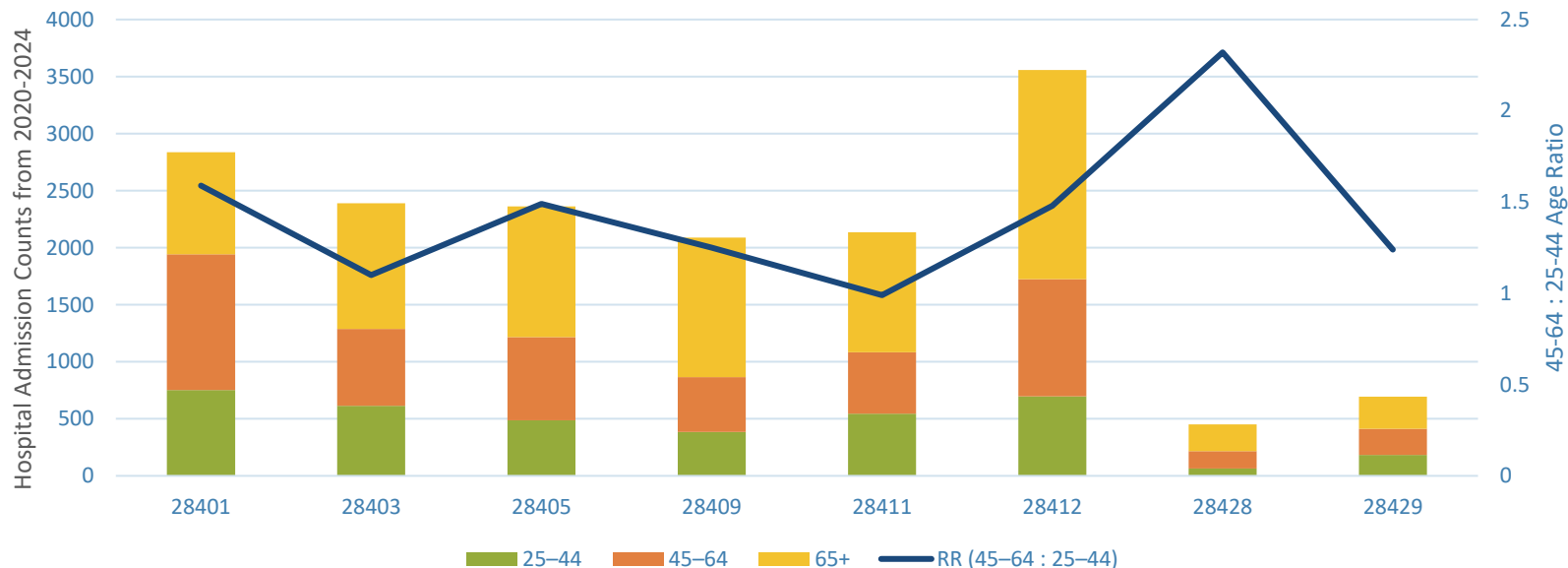
Depression-Related Admissions – Gender Patterns



Across all ZIPs, females account for 1.5–2.0 times as many depression-related hospitalizations as males, yet male volumes remain substantial in every community

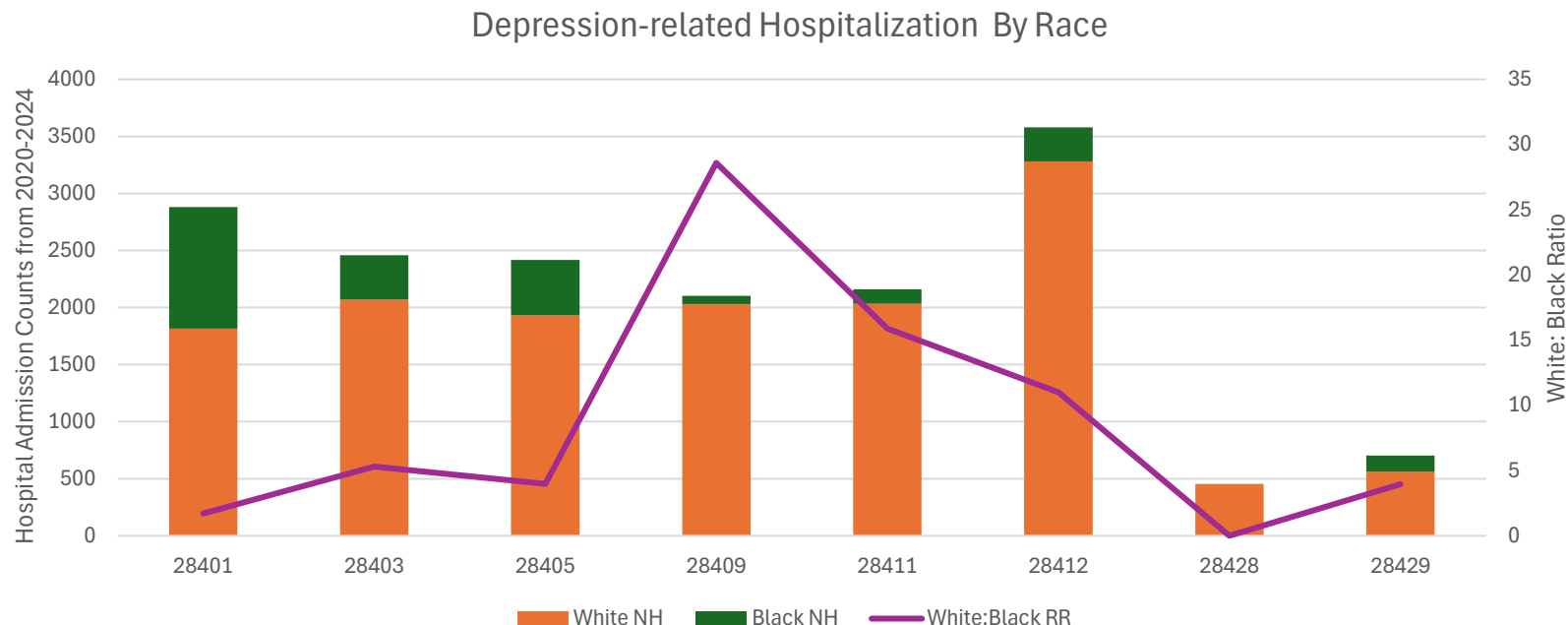
Depression-Related Admissions – Age Patterns

Depression-related Hospitalization By Age



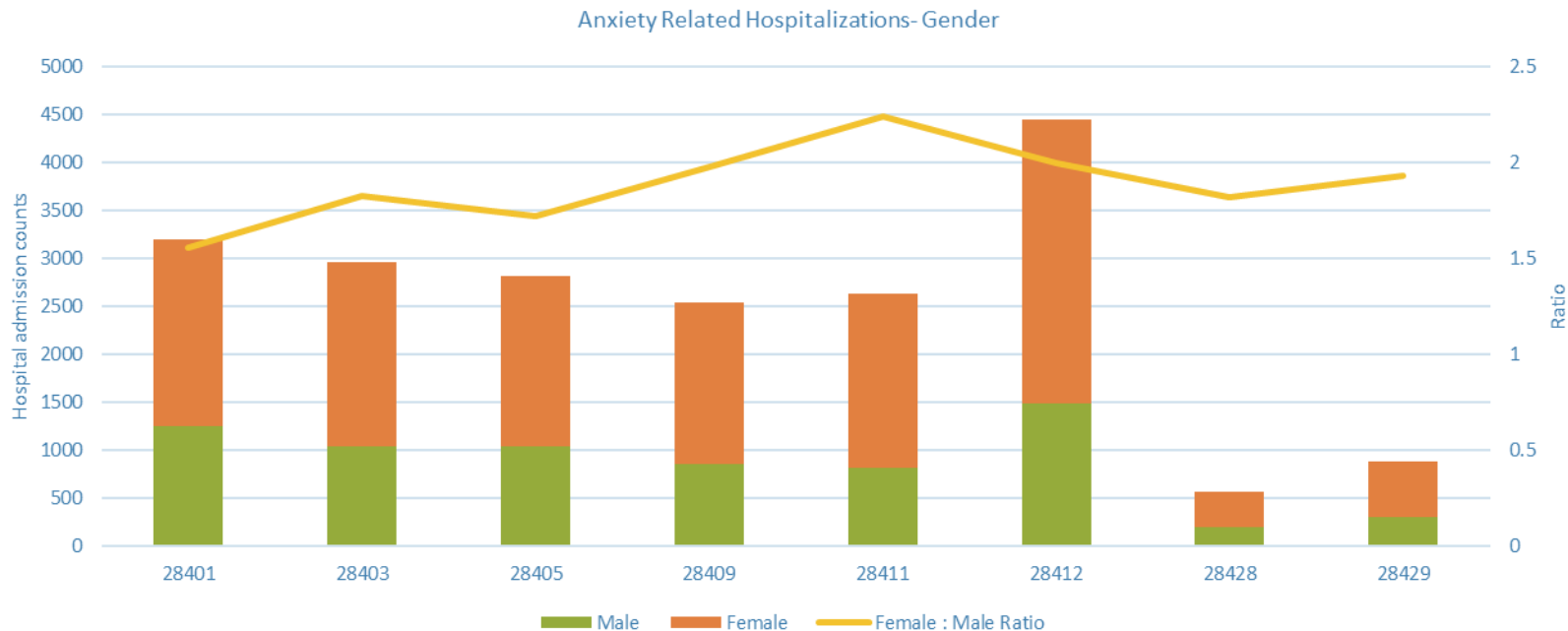
Depression-related hospitalizations are highest among adults 65+ in most ZIPs, but ages 45–64 also exceed 25–44 in nearly every area, indicating that middle-aged and older adults drive inpatient demand.

Depression-Related Admissions – Race Patterns



White non-Hispanic residents represent the majority of depression hospitalizations in every ZIP, with White:Black rate ratios ranging from ~1.7 to ~28.6, especially large in more affluent ZIPs

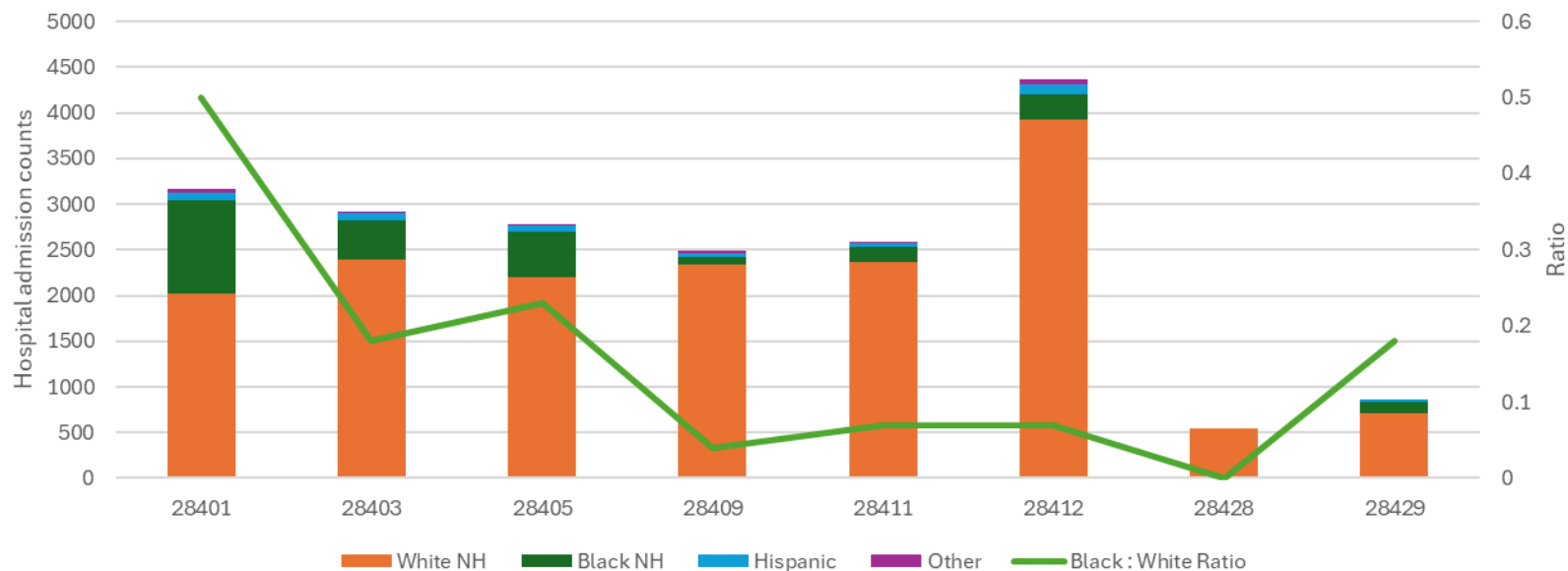
Anxiety-Related Admissions – Gender Patterns



Across every ZIP code analyzed, females experienced substantially higher anxiety-related hospitalization counts than males, with rates ranging from approximately 1.5 to 2.2 times higher.

Anxiety-Related Admissions – Race Patterns

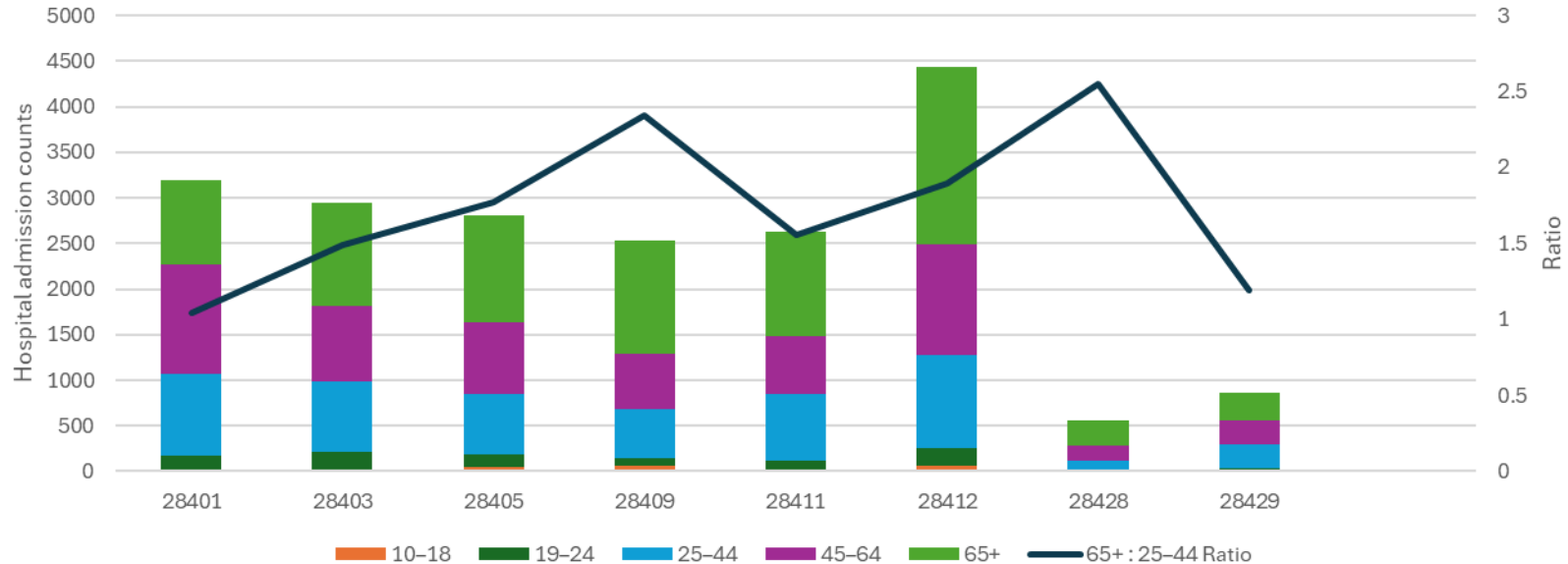
Anxiety Related Hospitalizations-Race/Ethnicity



Anxiety-related hospitalizations are heavily concentrated among White residents, representing approximately 83% of recorded hospitalizations, followed by Black residents at 13%, while other racial and ethnic groups account for comparatively smaller shares of total hospitalizations.

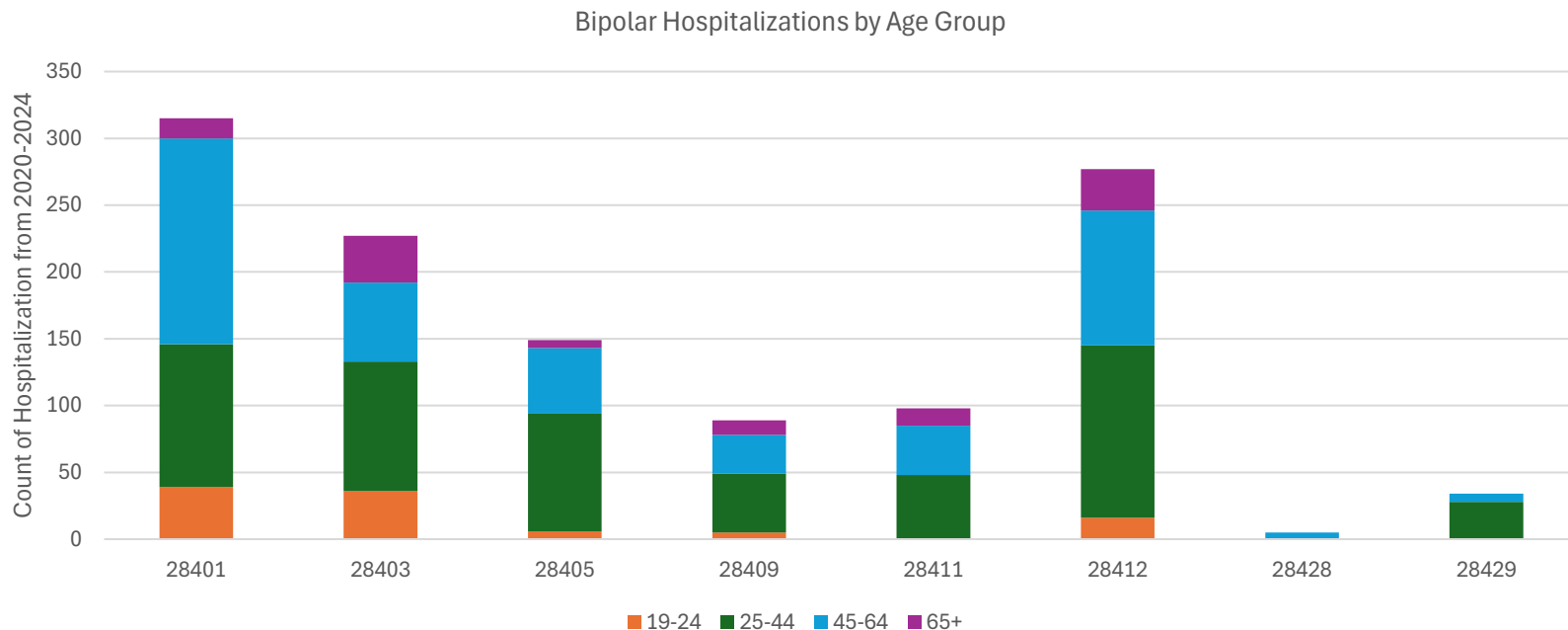
Anxiety-Related Admissions – Age Patterns

Anxiety Related Hospitalizations-Age



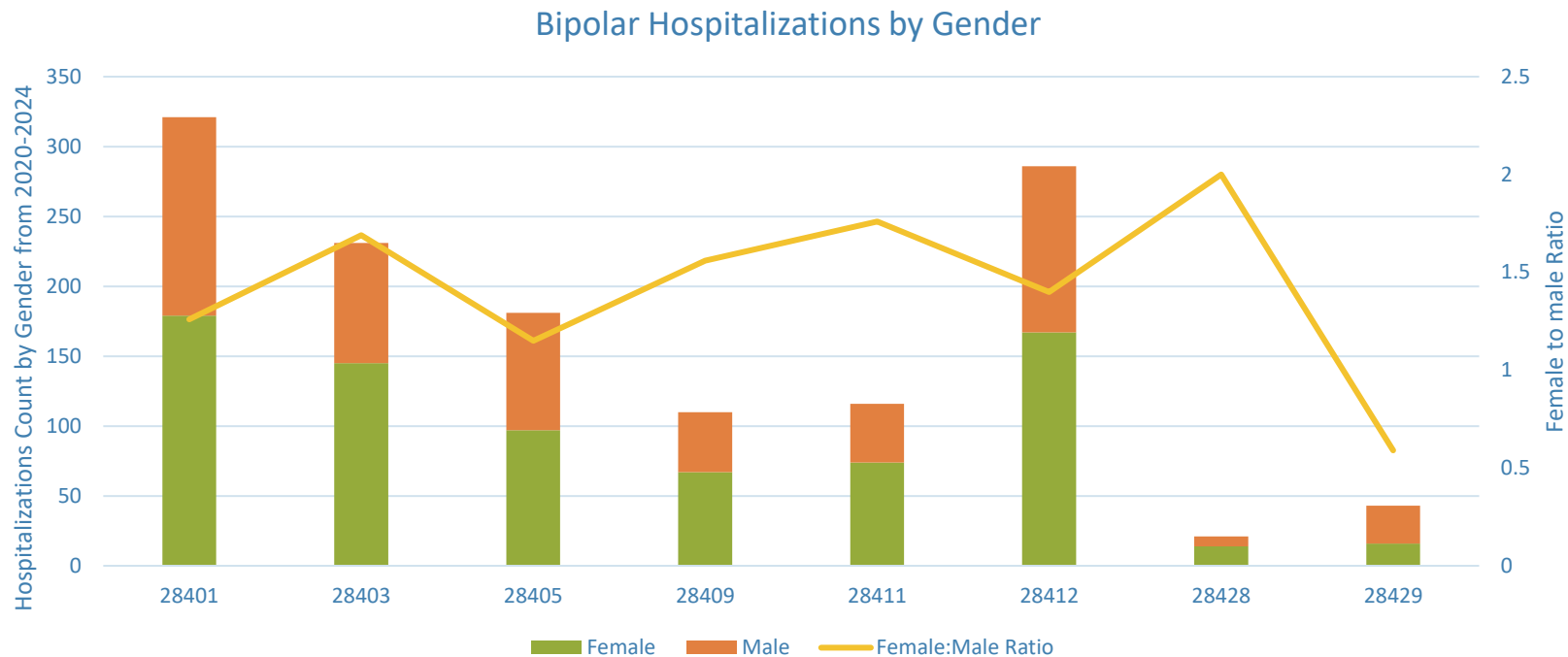
Anxiety-related hospitalizations increase substantially with age, with the highest counts observed among adults aged 65+ followed by those aged 45–64, while children and adolescents account for a very small proportion of hospitalizations.

Bipolar Disorder-Related Hospitalizations – Age Patterns



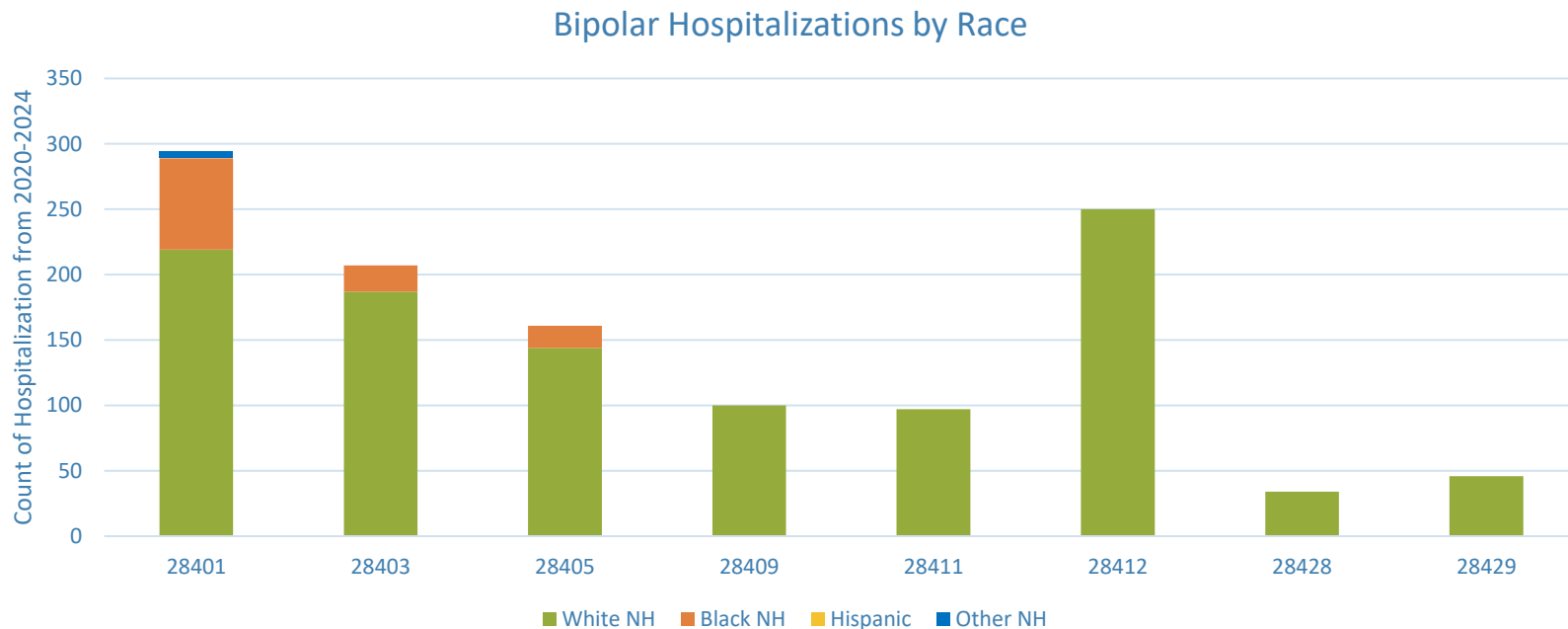
Bipolar hospitalizations are concentrated among adults 25–64, with 25–44 leading in 28401/28412 and 45–64 comparable or higher in several ZIPs; youth and 65+ contribute relatively few admissions

Bipolar Disorder-Related Hospitalizations – Gender Patterns



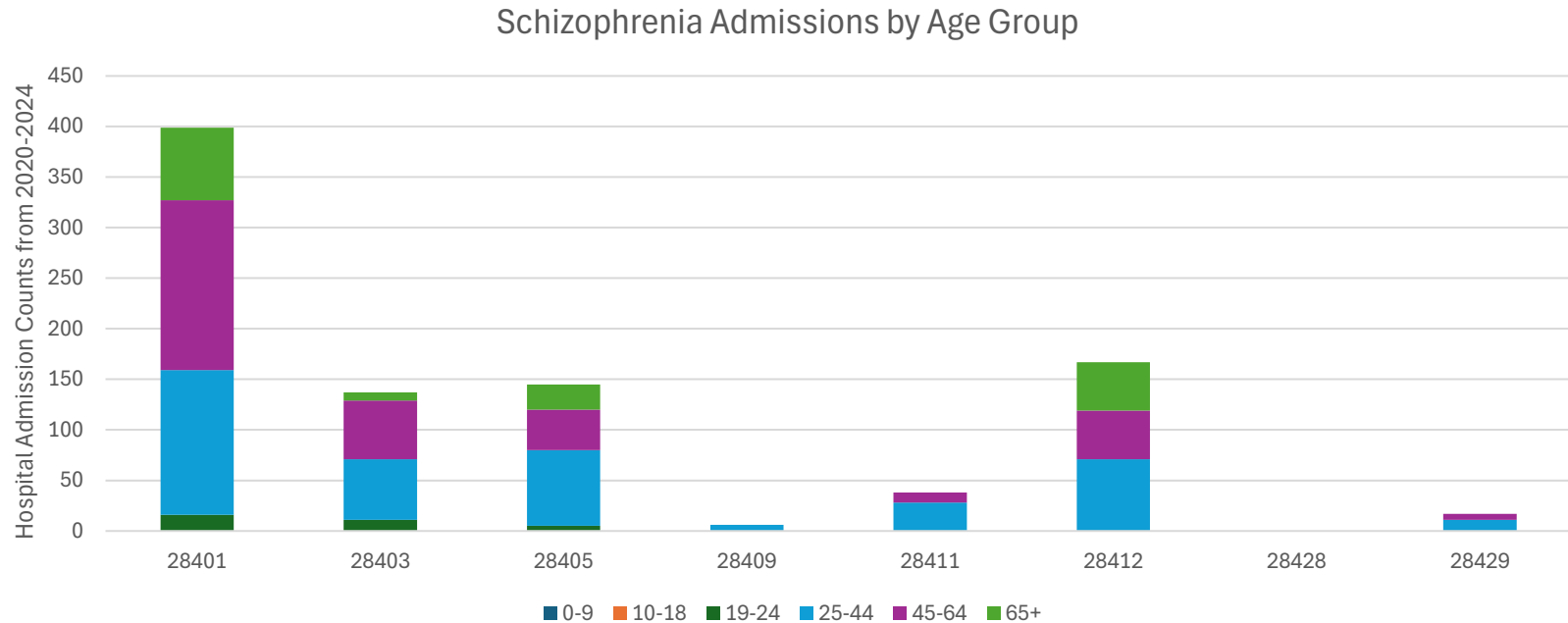
Females exceed males in bipolar hospitalizations in nearly every ZIP, with Female:Male ratios commonly between 1.2 and 1.7, despite high male volumes

Bipolar Disorder-Related Hospitalizations – Race Patterns



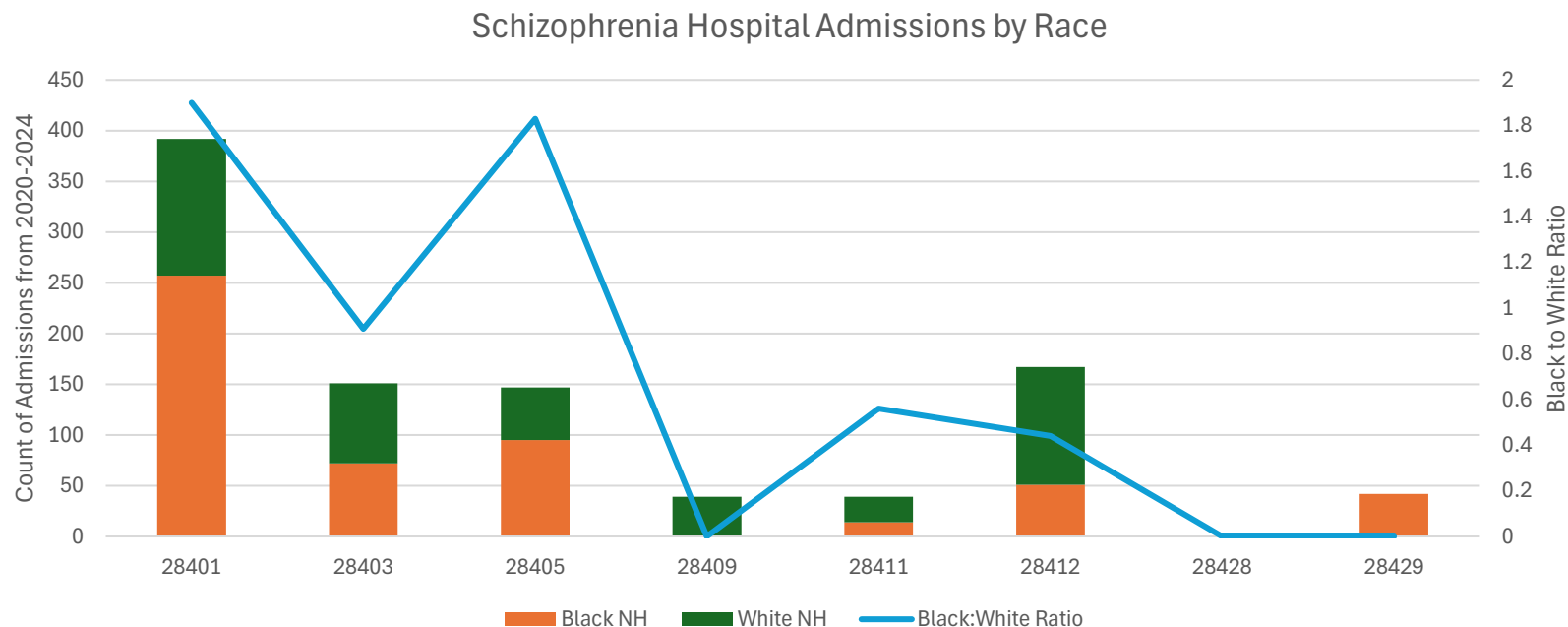
White non-Hispanic residents account for nearly all bipolar hospitalizations county-wide, while Black and Hispanic residents appear in much smaller numbers, raising equity questions about both burden and access.

Schizophrenia Disorder related Hospitalizations – Age Patterns



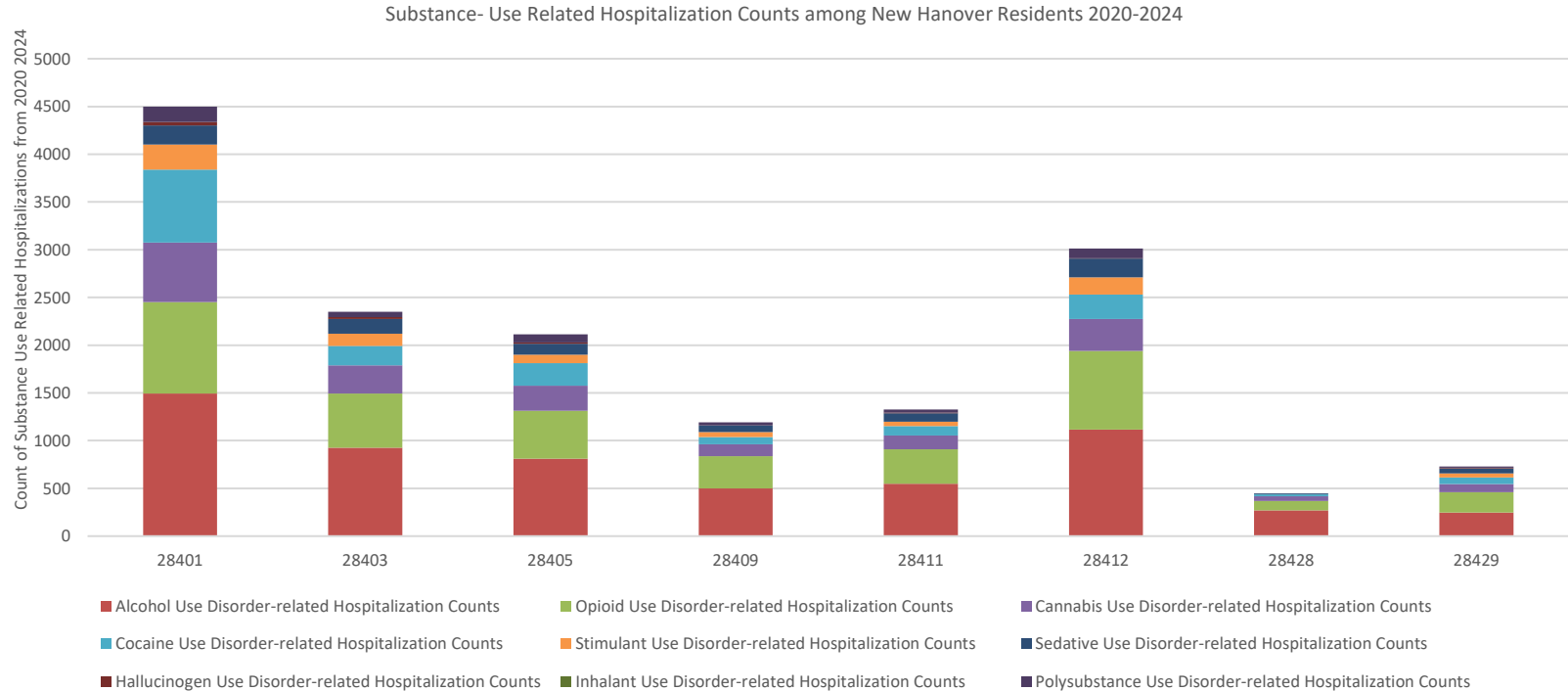
Schizophrenia hospitalizations are dominated by adults 25–64, with 25–44 slightly higher than 45–64 in most ZIPs and almost no pediatric cases

Schizophrenia Disorder related Hospitalizations – Race Patterns



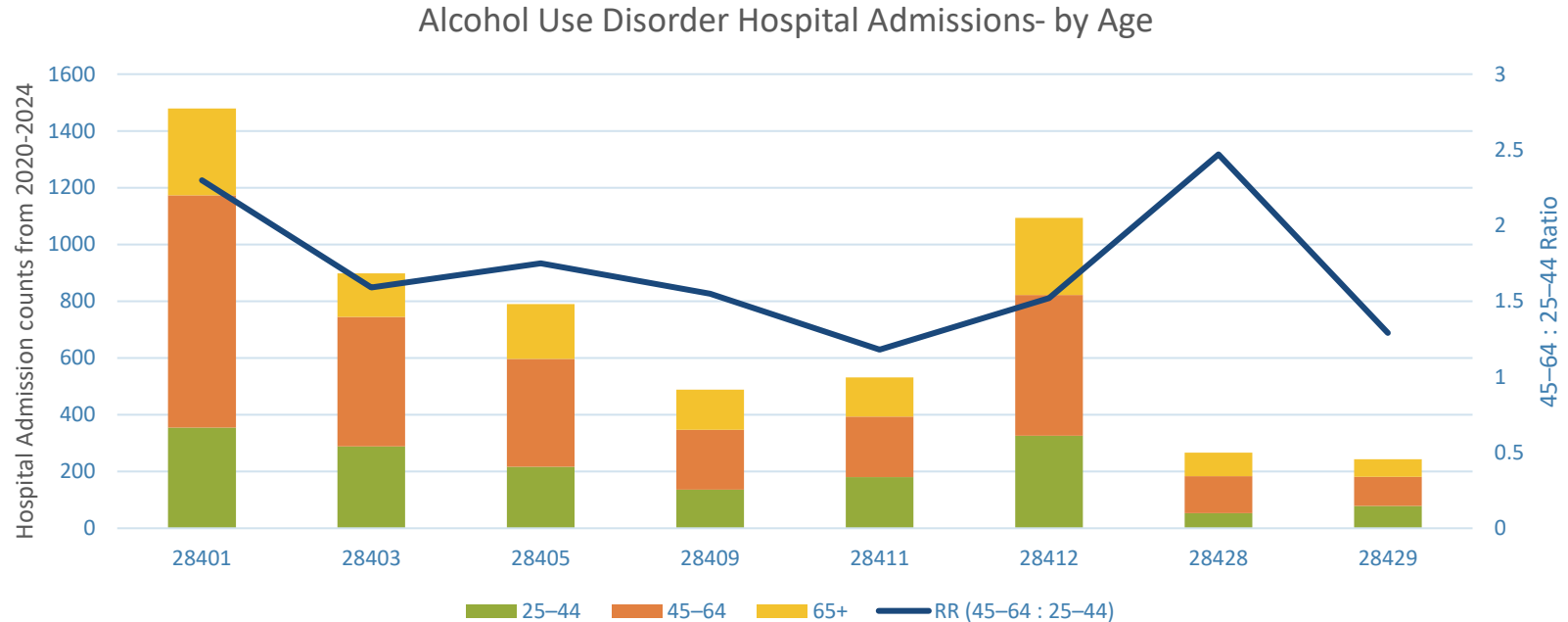
In 28401 and 28405, Black non-Hispanic residents experience higher schizophrenia hospitalization counts than White residents, whereas in several other ZIPs White volumes are comparable or higher

Substance Use Disorder (SUD) Hospitalizations (5-Year Totals)



Alcohol and opioid use disorders account for the largest share of SUD hospitalizations across all ZIPs, with 28401 alone recording nearly 4,000 SUD-Related admissions over five years

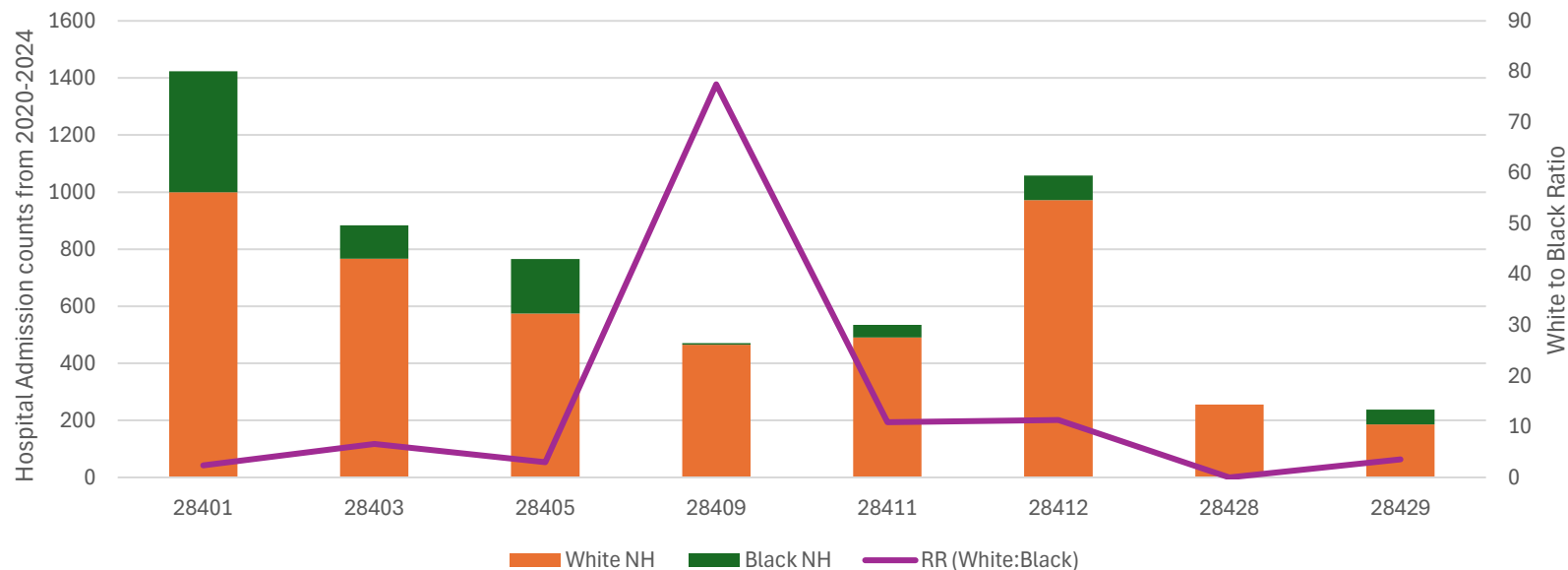
Alcohol Disorder Related Hospital Admissions-Age Patterns



Ages 45–64 consistently have the highest alcohol-related hospitalization counts, exceeding 25–44 in every ZIP and often more than double

Alcohol Disorder Related Disorder-Race Patterns

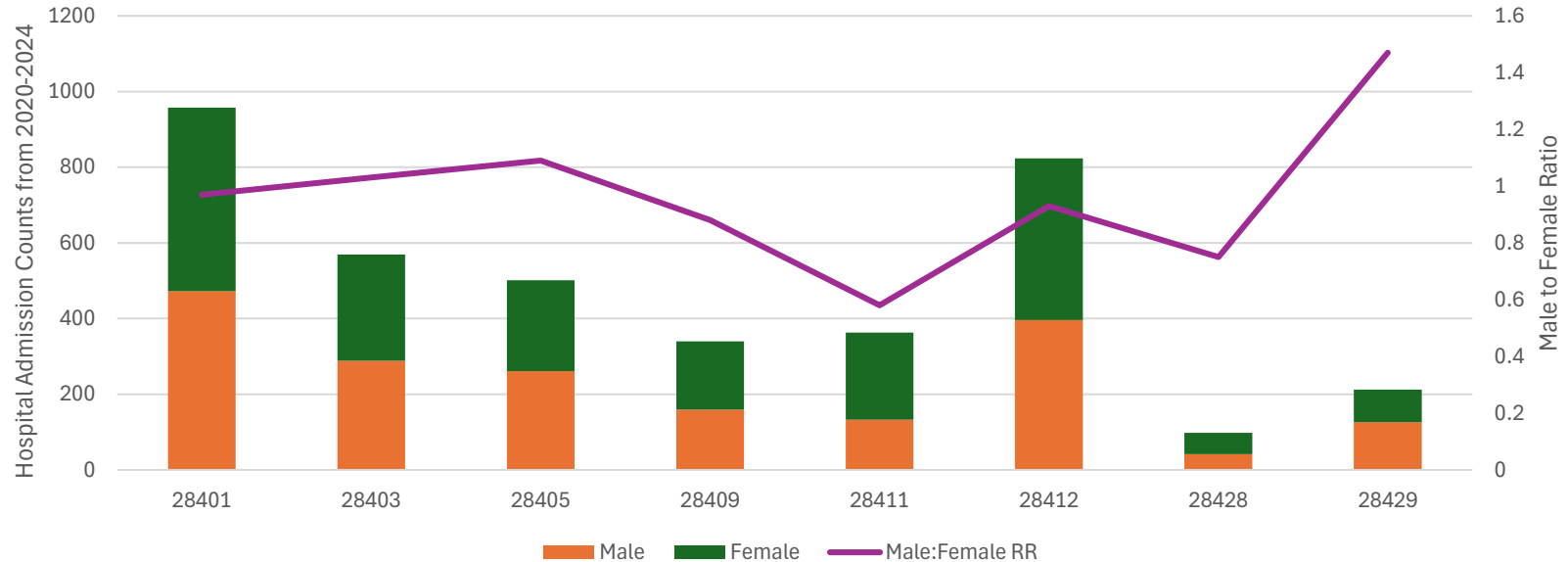
Alcohol Use Disorder Hospital Admissions- by Race



White non-Hispanic residents drive alcohol hospitalization volume in every ZIP, with rate ratios exceeding 6 in several suburban areas (e.g., 28403, 28409, 28412)

Opioid Related Disorder Hospital admissions – Gender Patterns

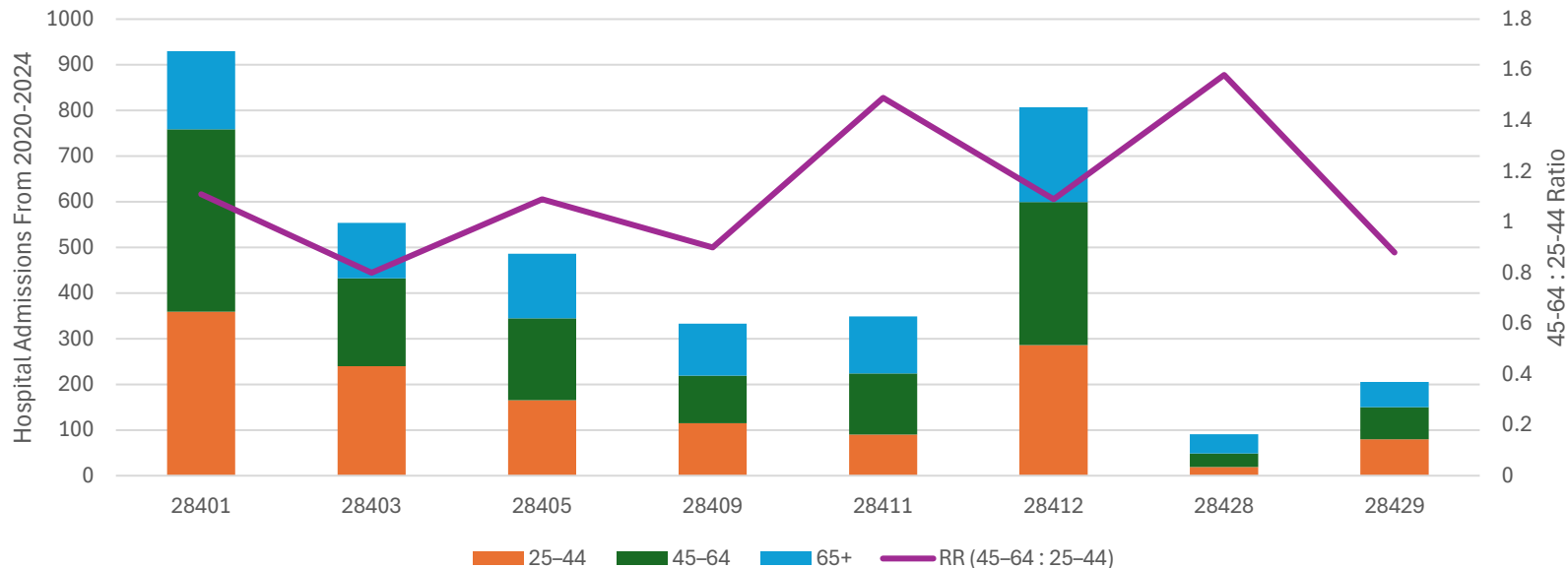
Opioid use Disorder Hospital Admissions



Unlike alcohol, opioid-related hospitalizations show near parity between men and women overall, with modest male predominance in some ZIPs and female predominance in others

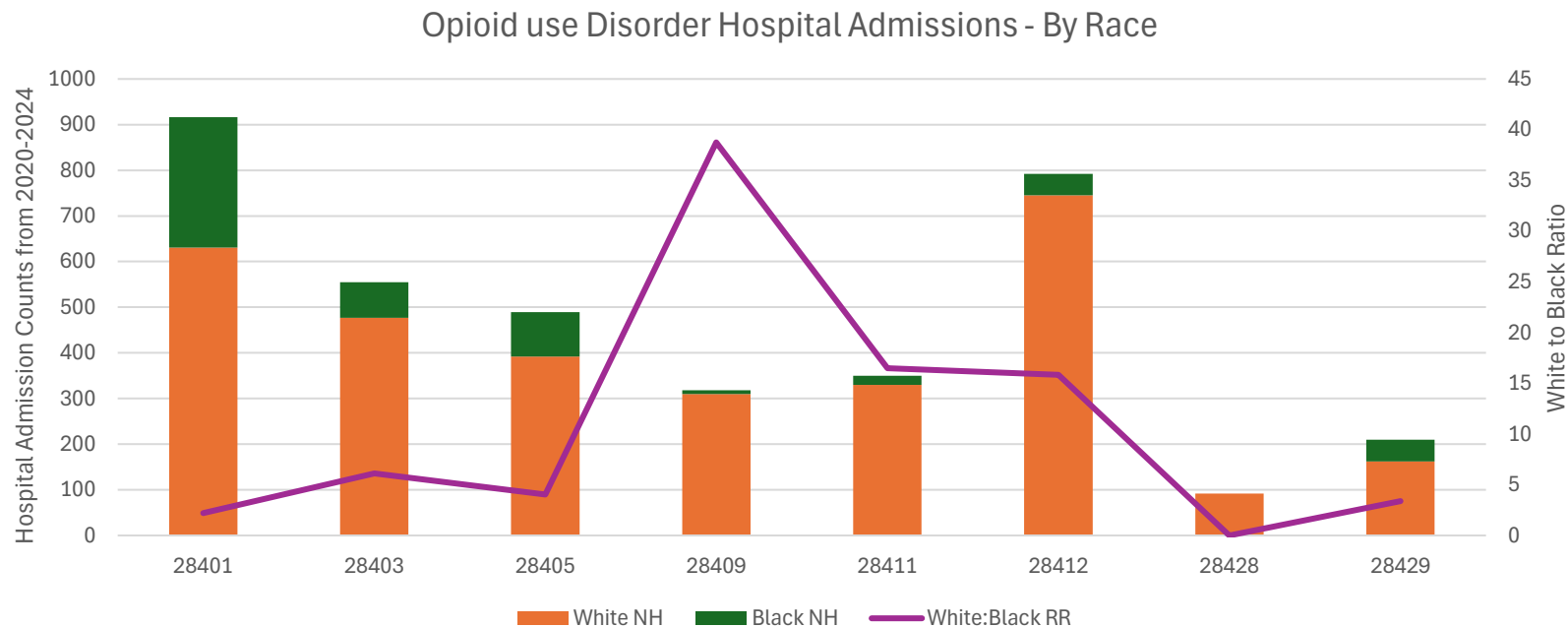
Opioid Related Disorder– Age Patterns

Opioid use Disorder Hospital Admissions - By Age



Opioid hospitalizations are spread across 25–44, 45–64, and 65+, with middle-aged adults leading in most ZIPs but older adults contributing a sizable share.

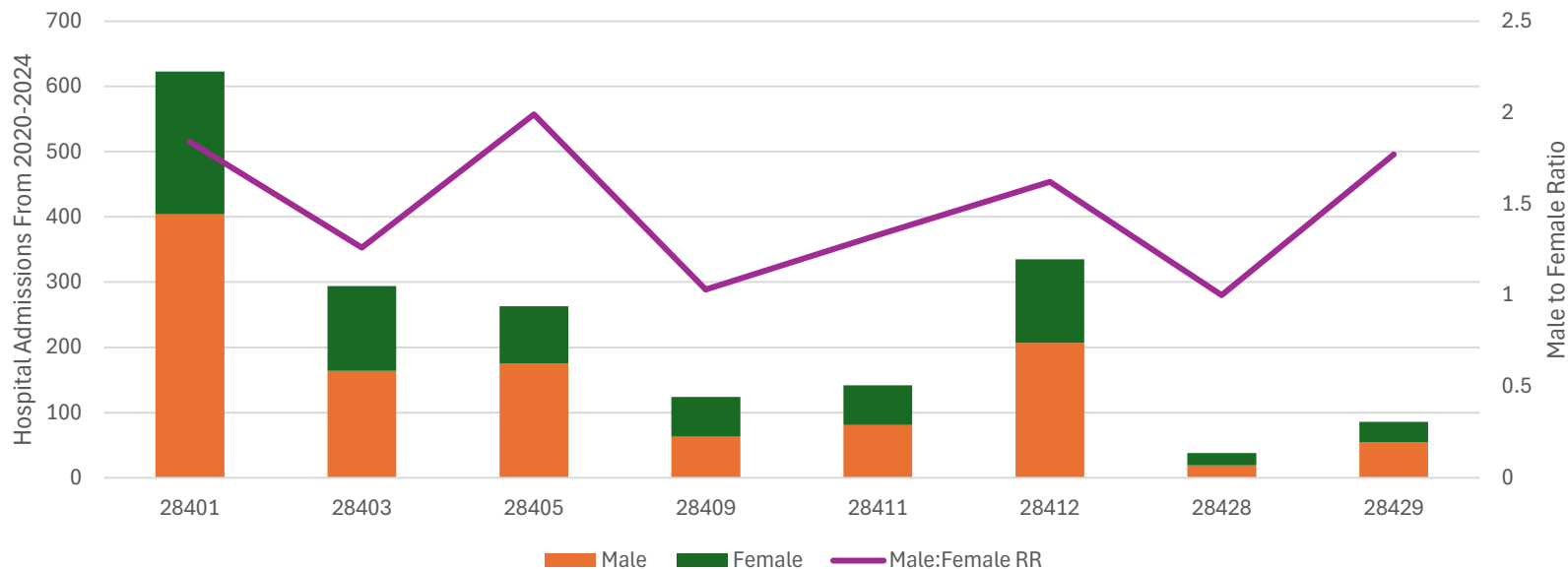
Opioid Related Disorder– Race Patterns



White non-Hispanic residents account for most opioid hospitalizations, sometimes with more than 4 times the likelihood, although Black residents still bear considerable burden in 28401 and 28405.

Cannabis Use Disorder- Gender Patterns

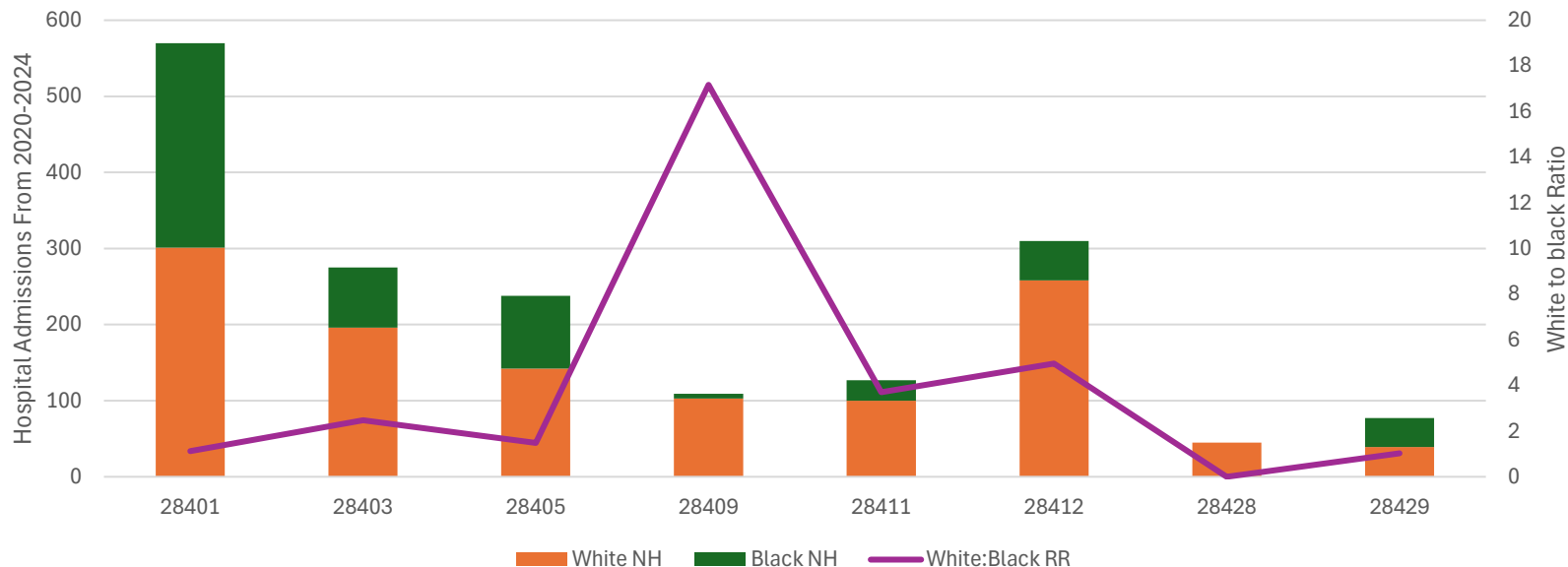
Cannabis Use Disorder-related Hospitalization Counts - By Gender



Men experience roughly 1.3–2.0x more cannabis-related hospitalizations than women across most ZIPs, though female counts are non-trivial, especially in 28403 and 28412

Cannabis Use Disorder- Age Patterns

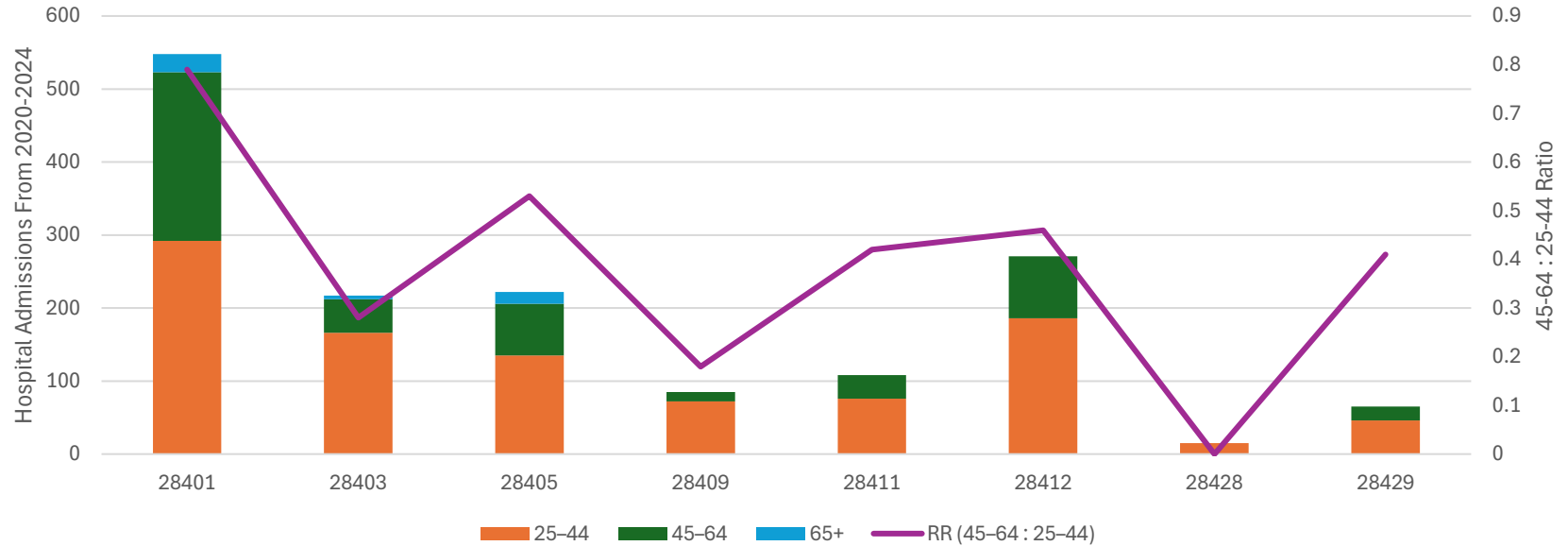
Cannabis Use Disorder-related Hospitalization Counts - By Race



Cannabis hospitalizations primarily affect adults 25–44, with sharply lower counts in older age groups and minimal volume among 65+.

Cannabis Use Disorder- Race Patterns

Cannabis Use Disorder-related Hospitalization Counts - By Age

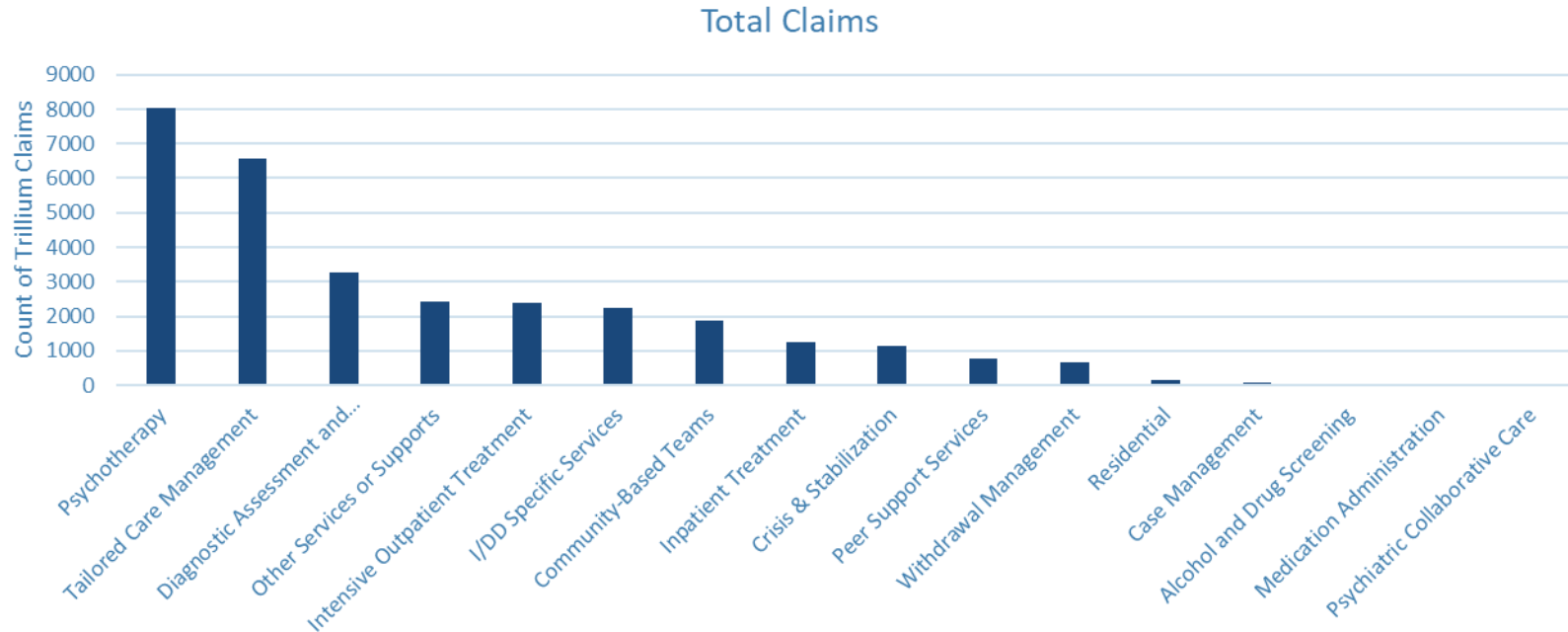


White non-Hispanic residents have slightly higher cannabis hospitalization counts than Black residents overall, but in some ZIPs (e.g., 28401, 28405) Black volumes approach or exceed White volumes

Trillium Claims Data

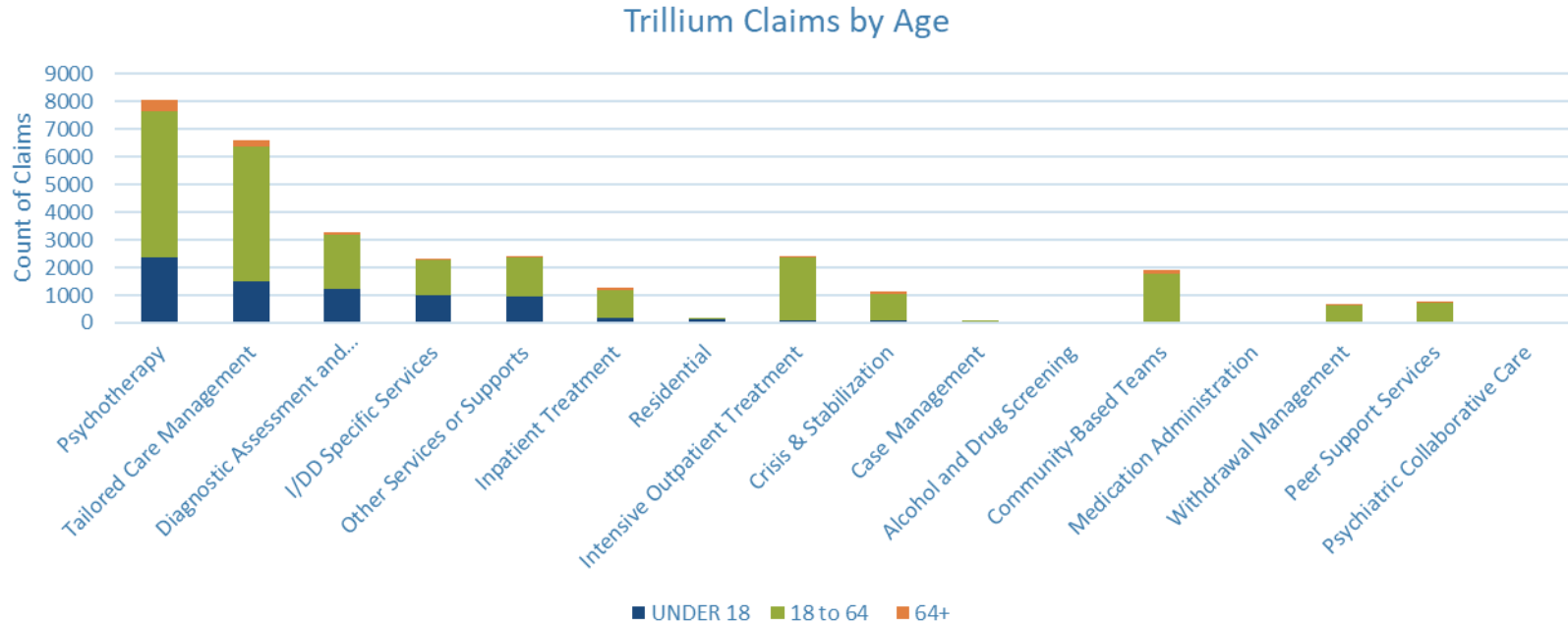
- Claims data Provided by Trillium Partners
- Aggregated data by Race/ethnicity, Age Groups, and Gender
- Claims groups into categories for purpose of analysis, based on knowledge and information on services/codes

Trillium Claims – Total Claims by Service Category



Psychotherapy represents the largest share of Trillium claims, followed by tailored care management, diagnostic assessment/evaluation, and other support services, while inpatient, crisis, and withdrawal management services represent substantially smaller volumes.

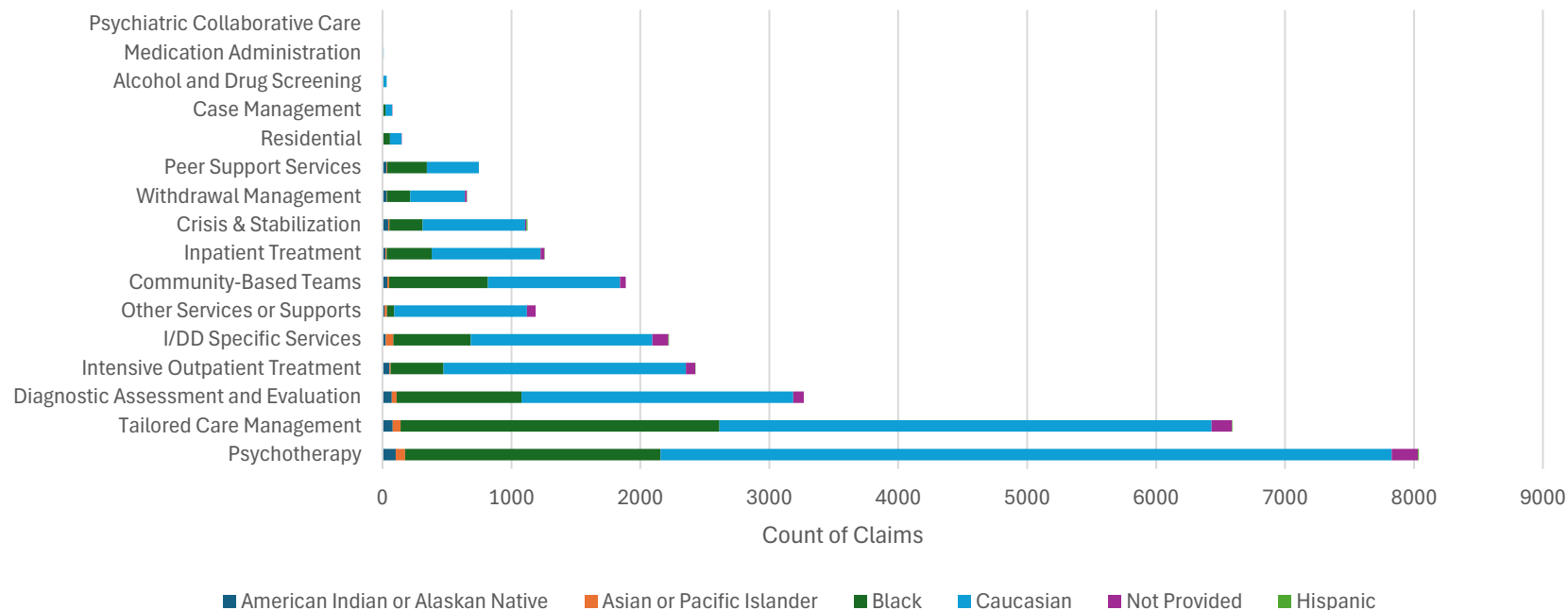
Trillium Claims – Service Categories by Age Group



Adults ages 18–64 generate the majority of Trillium claims across nearly all service categories, particularly psychotherapy, tailored care management, and diagnostic assessment, while youth and older adults represent substantially smaller shares of utilization.

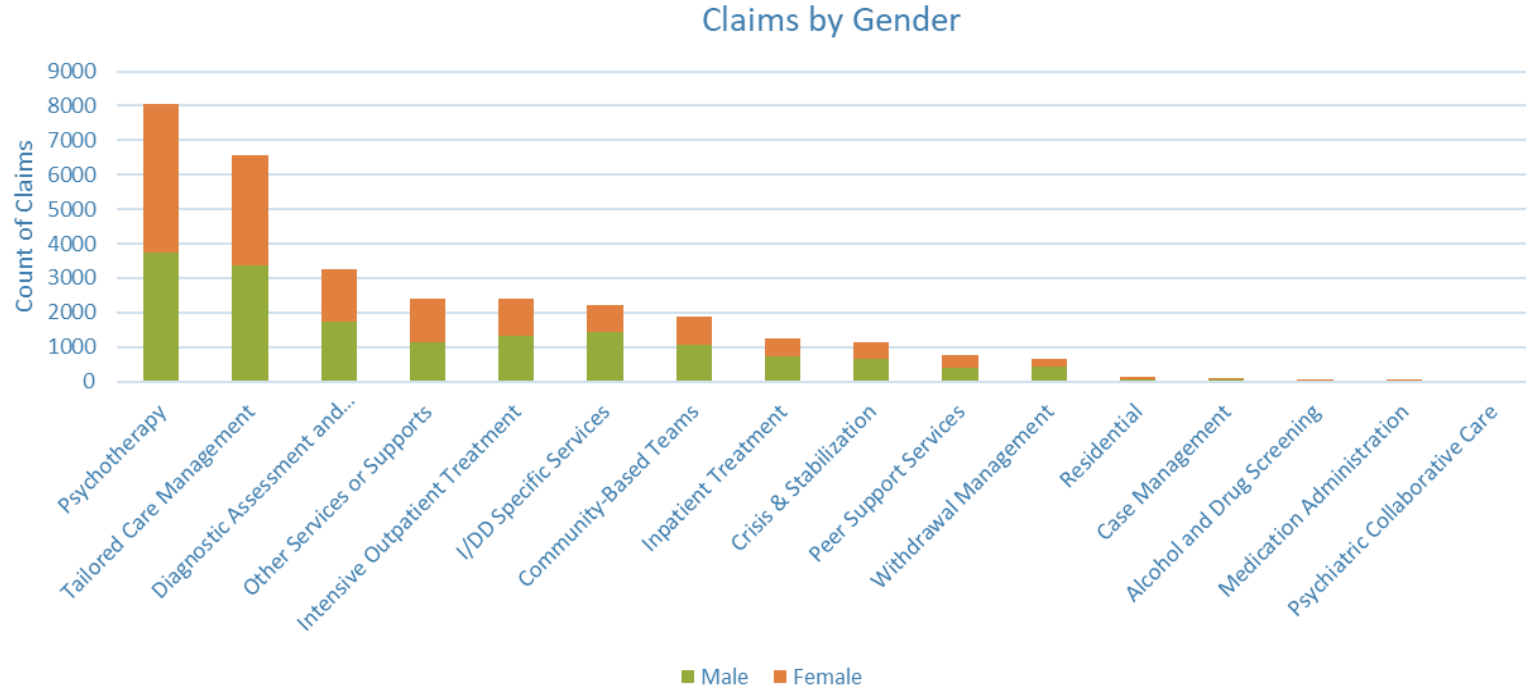
Trillium Claims – Service Categories by Race/Ethnicity

Claims by Race/Ethnicity



Psychotherapy, tailored care management, and diagnostic assessment account for the largest volumes of Trillium service use, with utilization primarily driven by White/Caucasian members, while Black members represent the largest minority share across most service categories.

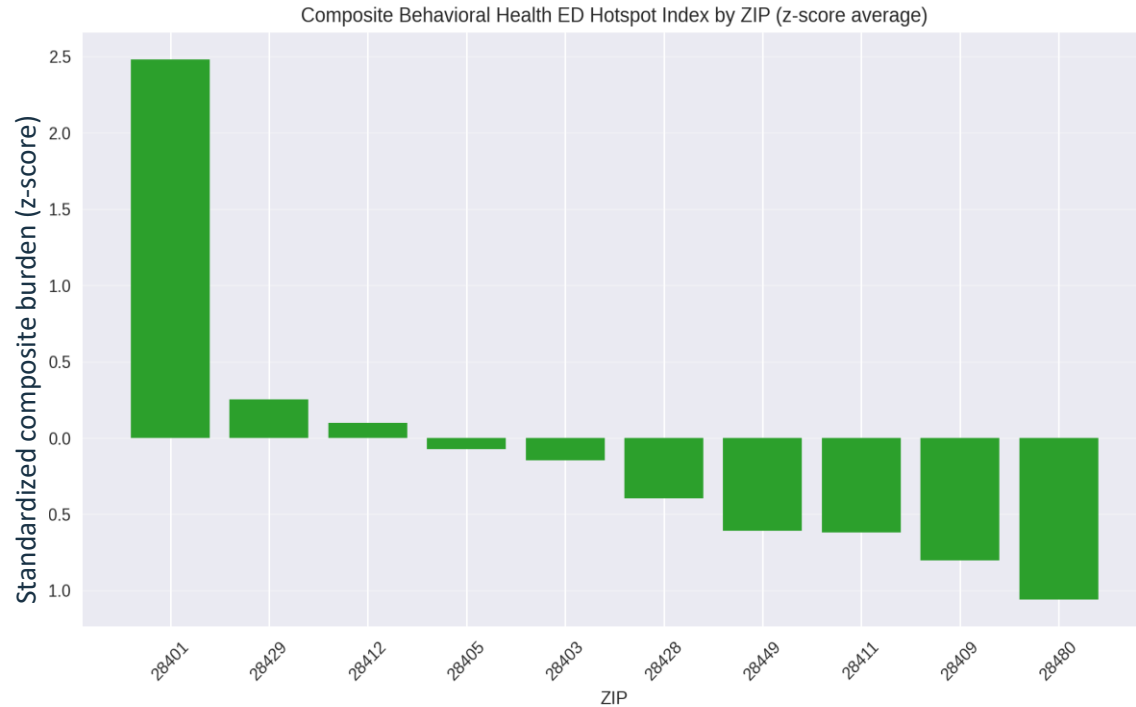
Trillium Claims – Utilization by Gender



Utilization is high across several service categories for both men and women, particularly Psychotherapy, Tailored Care Management, and Diagnostic Assessment and Evaluation, with women showing modestly higher claim volumes across most services.

Statistical Analysis

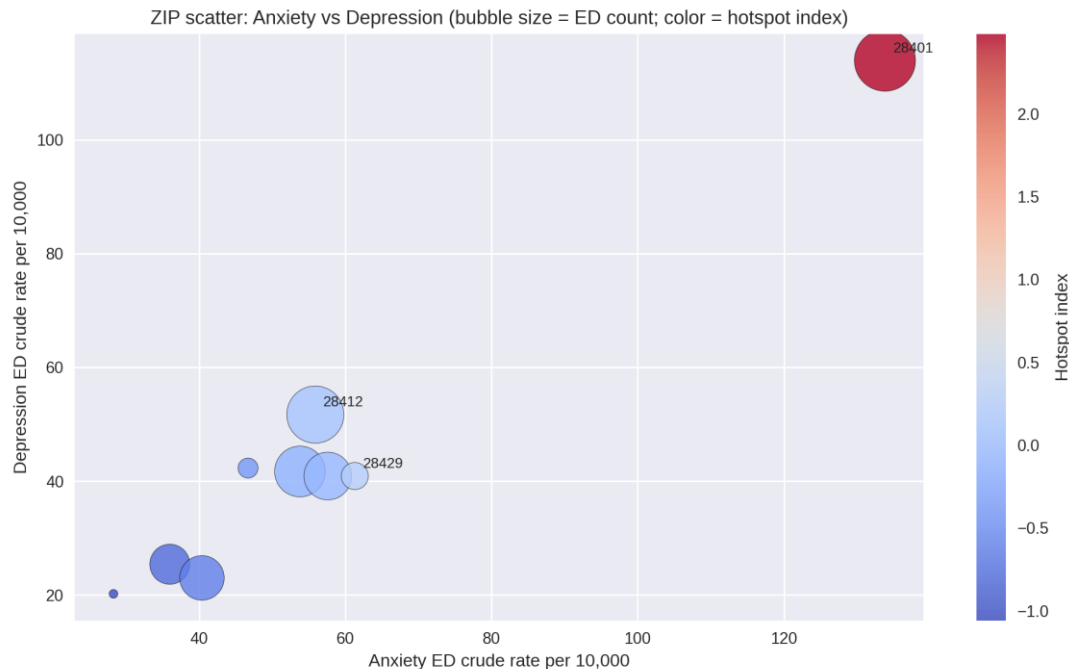
Composite Behavioral Health ED Hotspot Index by ZIP (z-score average)



Index constructed using standardized ZIP-level ED rates across multiple behavioral health indicators; intended for relative comparison, not precise estimation

ZIP 28401 exhibits the highest relative behavioral health ED burden across multiple indicators. A secondary tier of ZIPs (28412, 28403, 28405) contributes meaningfully to overall system demand through sustained utilization rather than extreme rates.

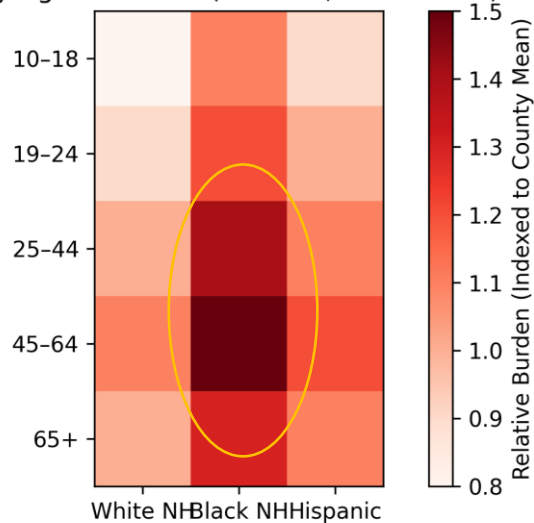
ZIP-Level Relationship Between Anxiety and Depression ED Utilization



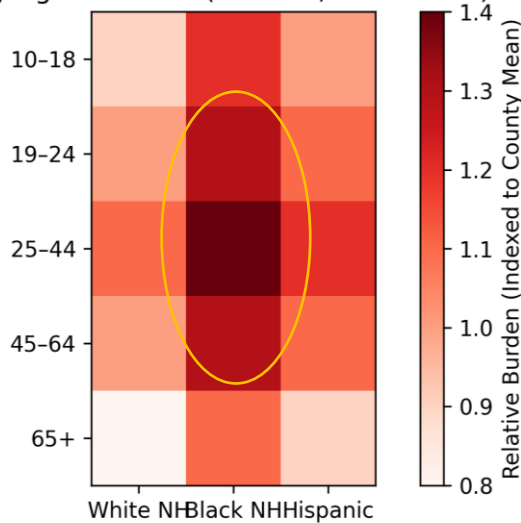
Anxiety and depression ED utilization increase together across ZIP codes, indicating strong co-occurrence and shared utilization patterns at the geographic level. **ZIP 28401** stands apart with both elevated rates and high absolute volume.

Indexed Relative ED Utilization by Age and Race/Ethnicity (County-Referenced)

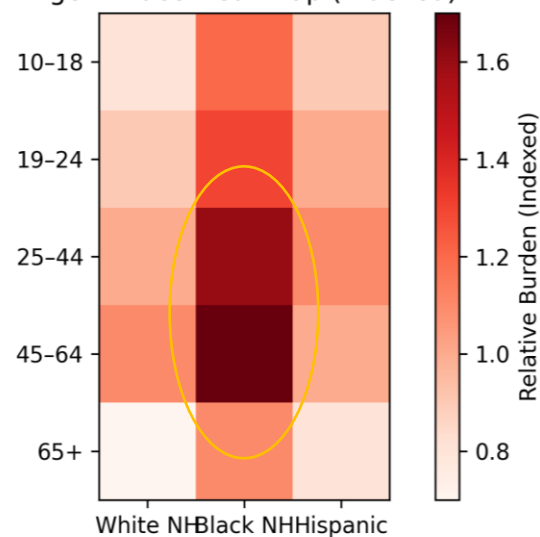
Depression-Related ED Visit Burden
by Age and Race (Indexed, 2020-2024)



Anxiety-Related ED Visit Burden
by Age and Race (Indexed, 2020-2024)



Suicidal Ideation ED Burden
Age x Race Heat Map (Indexed)



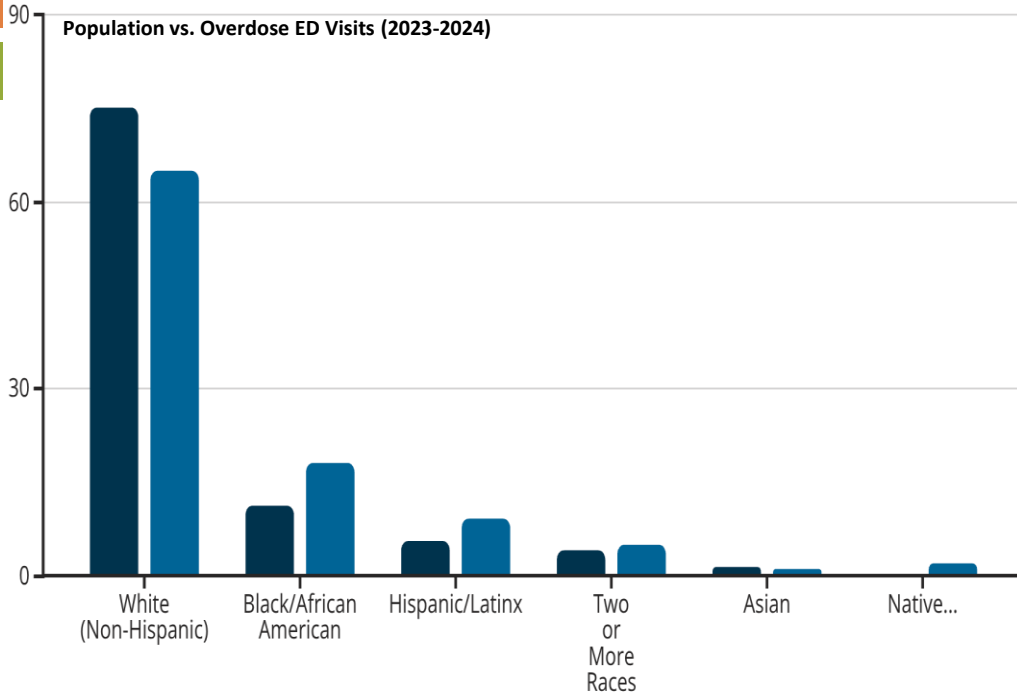
Values represent relative ED utilization indexed to the county mean (1.0). This visualization is descriptive and intended to highlight patterns, not estimate precise rate ratios.

Across behavioral health conditions, relative ED utilization is highest among working-age adults, with Black Non-Hispanic populations experiencing consistently elevated burden compared to the county average. These patterns reflect geographic and structural utilization dynamics rather than isolated demographic risk.

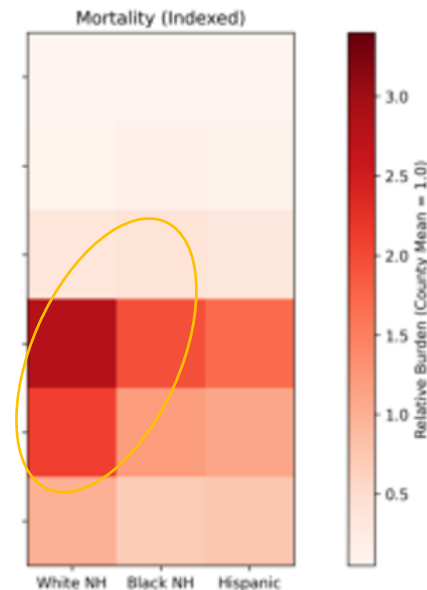
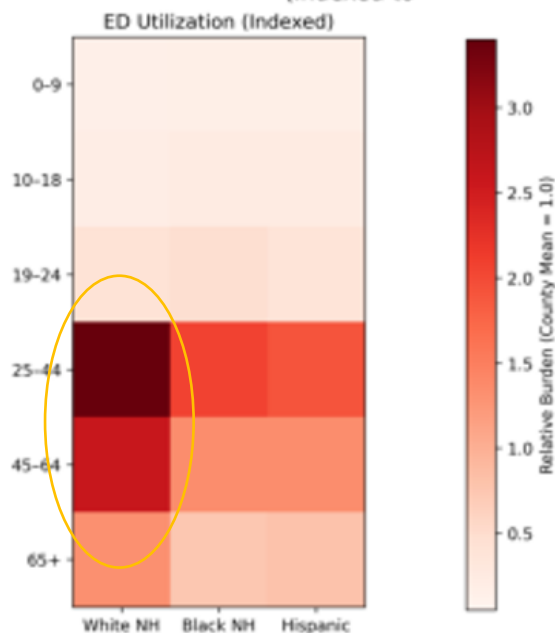
Racial & Ethnic Disparities with Drug Overdoses

This chart illustrates the proportional representation of each group in the general population compared to their share of opioid overdose emergency department visits.

Population (%) Opioid ED Visits (%)



Utilization vs Mortality: Medication & Drug Overdose Burden by Age and Race/Ethnicity (Indexed to County Mean)



Values represent relative burden indexed to the county mean (1.0).

Analyses are descriptive and intended to highlight patterns, not estimate causal or individual-level risk.

The data shows **two different patterns**: overdoses leading to **ED visits** are **concentrated among White adults**, while **overdose deaths** are **more evenly shared across racial groups**, indicating potential differences in access to care, response timing, or underlying risk.

Racial & Ethnic Disparities with Behavioral Health

Disproportionate Utilization Within High-Burden ZIPs

While White Non-Hispanic patients account for the largest share of behavioral health ED visits overall, Black Non-Hispanic population experience elevated utilization within the same high-burden ZIP codes (notably 28401 and 28412) across anxiety, depression, and suicidal ideation.

Age-Specific Disparities in ED Utilization

Across racial and ethnic groups, working-age adults (25–64) drive the majority of behavioral health ED utilization. Disparities by race and ethnicity are most visible within these adult age groups, rather than among children or older adults.

Socioeconomic Context of High-Burden ZIPs

ZIP codes with the highest behavioral health ED utilization also show lower median s, higher poverty rates, and lower insurance coverage, disproportionately affecting racial and ethnic minority population within these areas.

Implications for Access and System Design

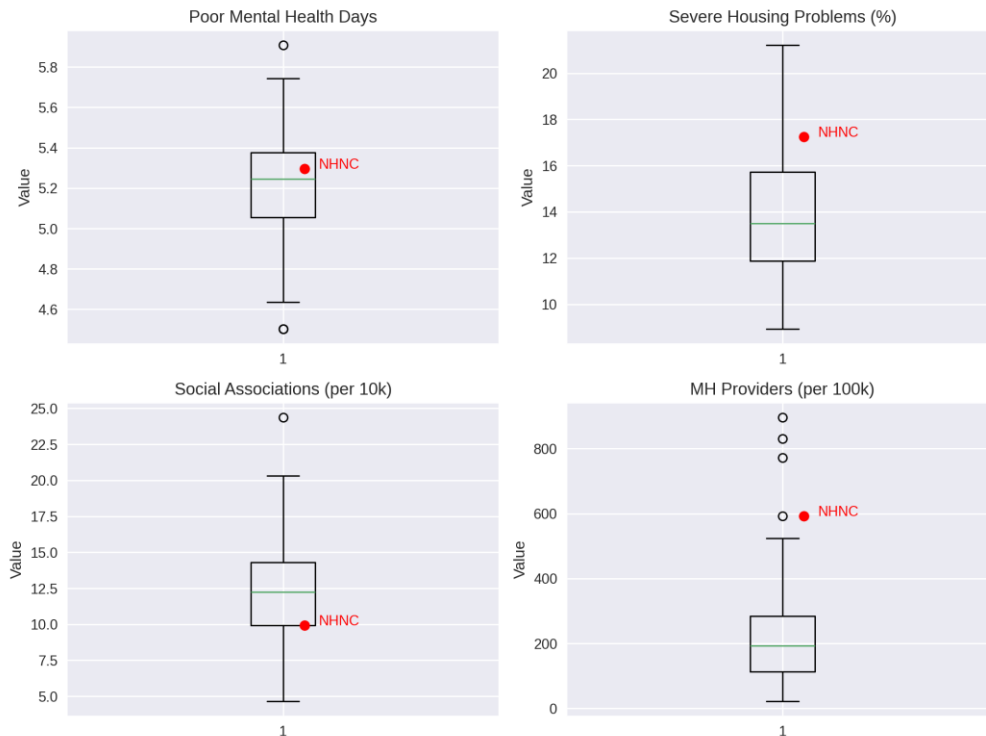
Persistent ED utilization among racial and ethnic minority adults in high-burden ZIP codes suggests barriers to timely outpatient and community-based behavioral health care, rather than isolated clinical need.

In ZIPs 28401 and 28412, Black Non-Hispanic patients account for a higher share of behavioral health ED visits than their share of the ZIP-level population, particularly among adults ages 25–64.

Structural Drivers of Behavioral Health Need in New Hanover County

- Poor Mental Health Days: NHNC ≈ 5.29 ; ~62nd percentile within NC
(Worse than the state median, indicating modestly elevated population-level mental health burden.)
- Severe Housing Problems: NHNC $\approx 17.24\%$; ~85th percentile
(Higher than most NC counties; a significant structural social determinant contributing to behavioral health risk.)
- Social Associations: NHNC ≈ 9.92 per 10,000; ~26th percentile
(Below-average social connectedness, reflecting a gap in protective community-level factors.)
- Mental Health Provider Rate: NHNC ≈ 592 per 100,000; ~97th percentile

County Health Rankings (NC): NHNC position within NC distribution



Behavioral health burden in New Hanover County appears driven more by structural determinants and system access barriers than by provider supply.

North Carolina Behavioral Health Access & Capacity Indicators

Indicator	NC Percentage	What it Means for Access
Mental health facilities accepting Medicaid	93%	Payment acceptance is high, but does not translate into timely access
Facilities offering psychiatric emergency walk-in services	29%	Fewer than 1 in 3 facilities provide same-day crisis access
Facilities offering integrated MH + SUD treatment	42%	Majority of facilities remain siloed, limiting care for co-occurring conditions
Facilities providing outpatient mental health services	64%	Outpatient care is common, but often scheduled and not crisis-responsive

North Carolina's behavioral health infrastructure is predominantly outpatient and fragmented, with limited same-day crisis access and integrated MH/SUD services, conditions that may contribute to ED reliance for acute behavioral health needs.

Substance Use Disorder Services (N-SSATS, North Carolina State Profile)

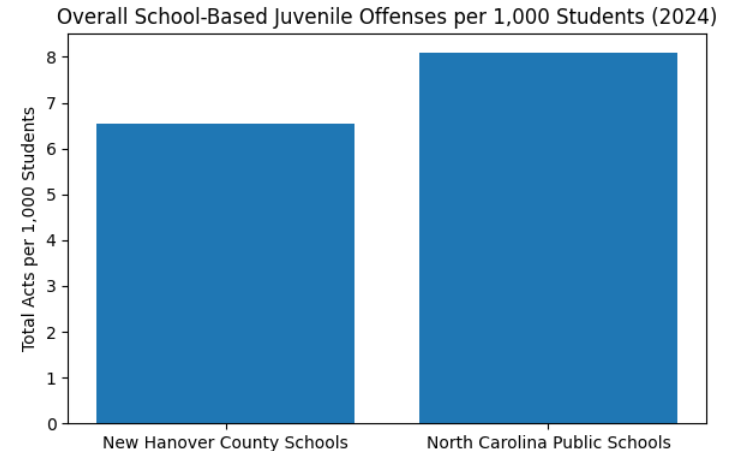
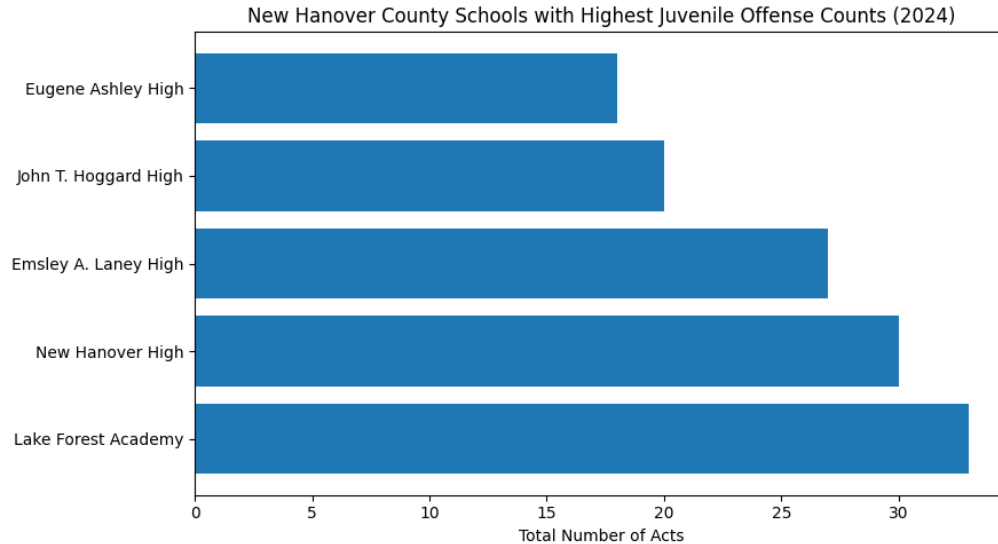
Indicator	NC Percentage	What it Means for Access
SUD treatment facilities offering any MAT (MOUD)	55%	Nearly half of SUD facilities do not offer evidence-based opioid treatment
Facilities accepting Medicaid	~75%	Payment access better than availability of evidence-based services
Facilities offering detoxification services	~16%	Very limited capacity for acute stabilization
Facilities offering residential treatment	~19%	Most care is outpatient, even for high-severity cases

Limited availability of MAT, detoxification, and residential treatment reduces access to timely evidence-based care, increasing reliance on emergency departments and other downstream systems for acute stabilization.

Upstream Community Level Indicators (2023-2024 data)

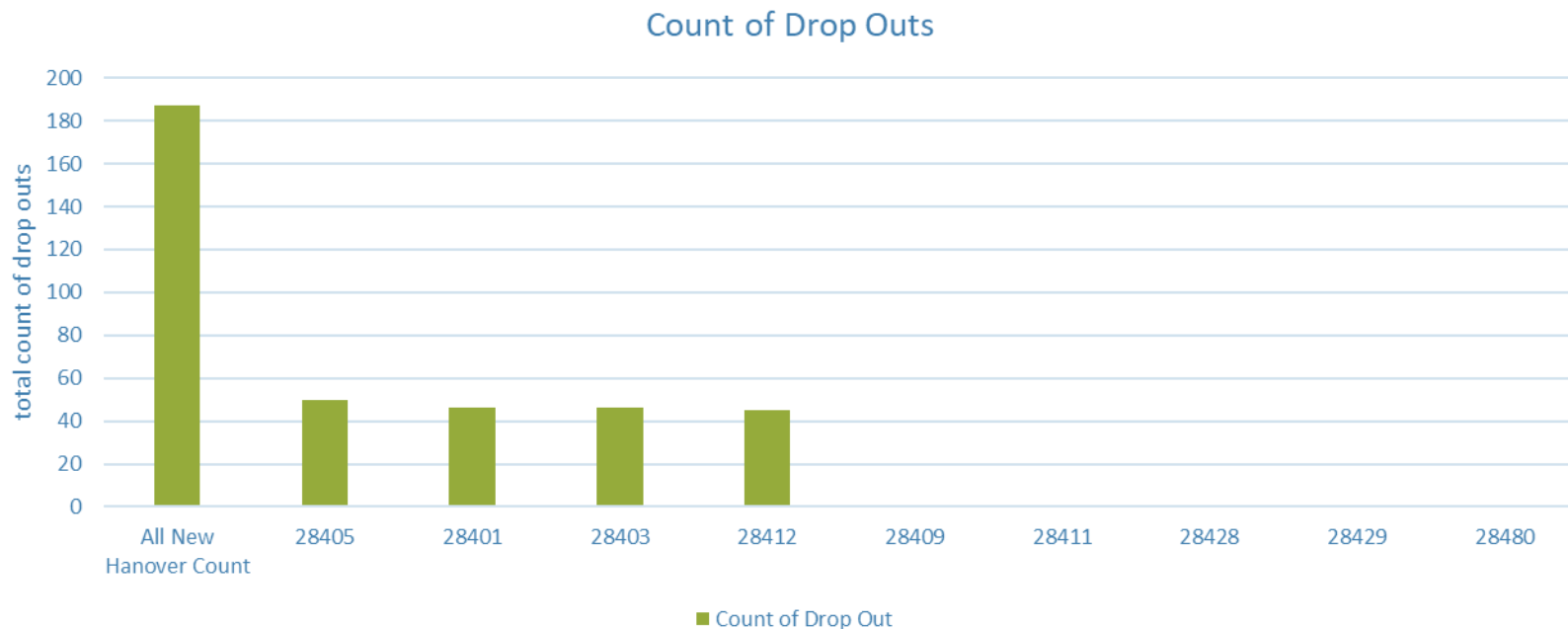
- General Crime Occurrence
- School based crime and Drop Out Counts
- Juvenile Crime
- Homeless Service Utilization (HMIS)

School-Based Juvenile Offenses



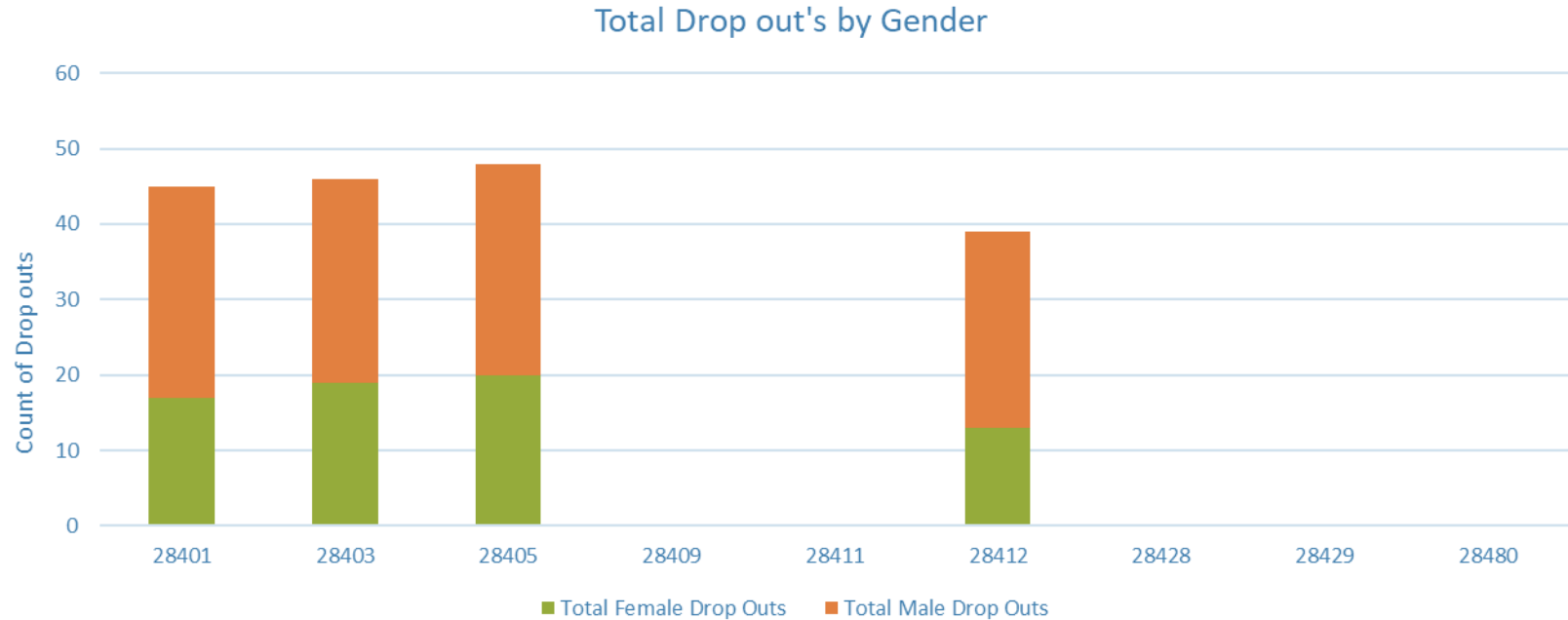
School-based juvenile incidents in New Hanover County are concentrated in substance-related offenses, weapons possession, and assaults on school personnel, patterns that are consistent with statewide distributions, though overall rates are lower than the North Carolina average.

Dropout Counts by Zip Code



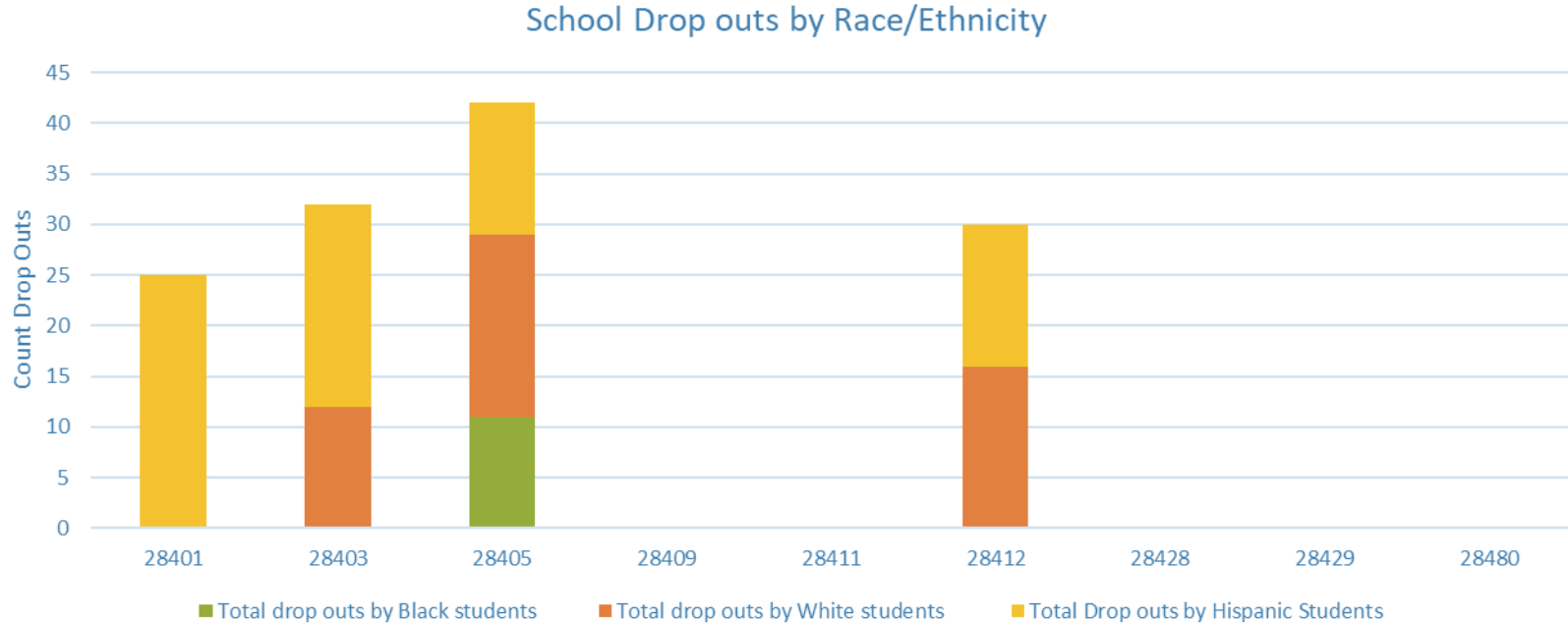
Student dropout counts in New Hanover County Schools are concentrated in ZIP codes 28405, 28401, 28403, and 28412, while the remaining ZIP codes in the dataset report no recorded dropouts in the 2023–2024 school year.

Total Drop Outs by Gender



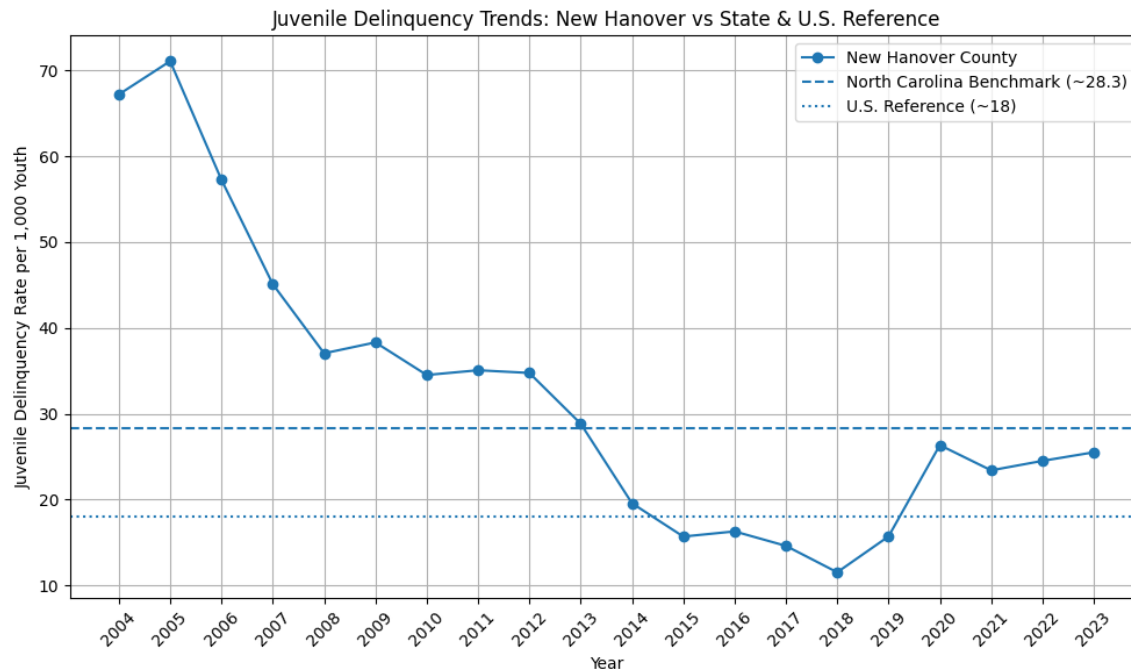
Across the ZIP codes with recorded dropouts (28401, 28403, 28405, and 28412), male students account for a larger share of dropouts than female students in each location, with the highest combined counts observed in ZIP code 28405.

School Drop Outs by Race/Ethnicity



Dropout counts across the ZIP codes shown are primarily concentrated among Hispanic and White students, with smaller counts among Black students, and the highest overall totals appearing in ZIP code 28405.

Juvenile Delinquency Trends: New Hanover County Benchmarked to State and U.S. Context



Juvenile delinquency rates in New Hanover County declined substantially from the mid-2000s through 2018, falling well below both the North Carolina statewide benchmark and national reference levels. Since 2020, rates have increased and now consistently exceed the national reference and approach the state benchmark, suggesting renewed youth risk and reinforcing the importance of upstream behavioral health and prevention strategies

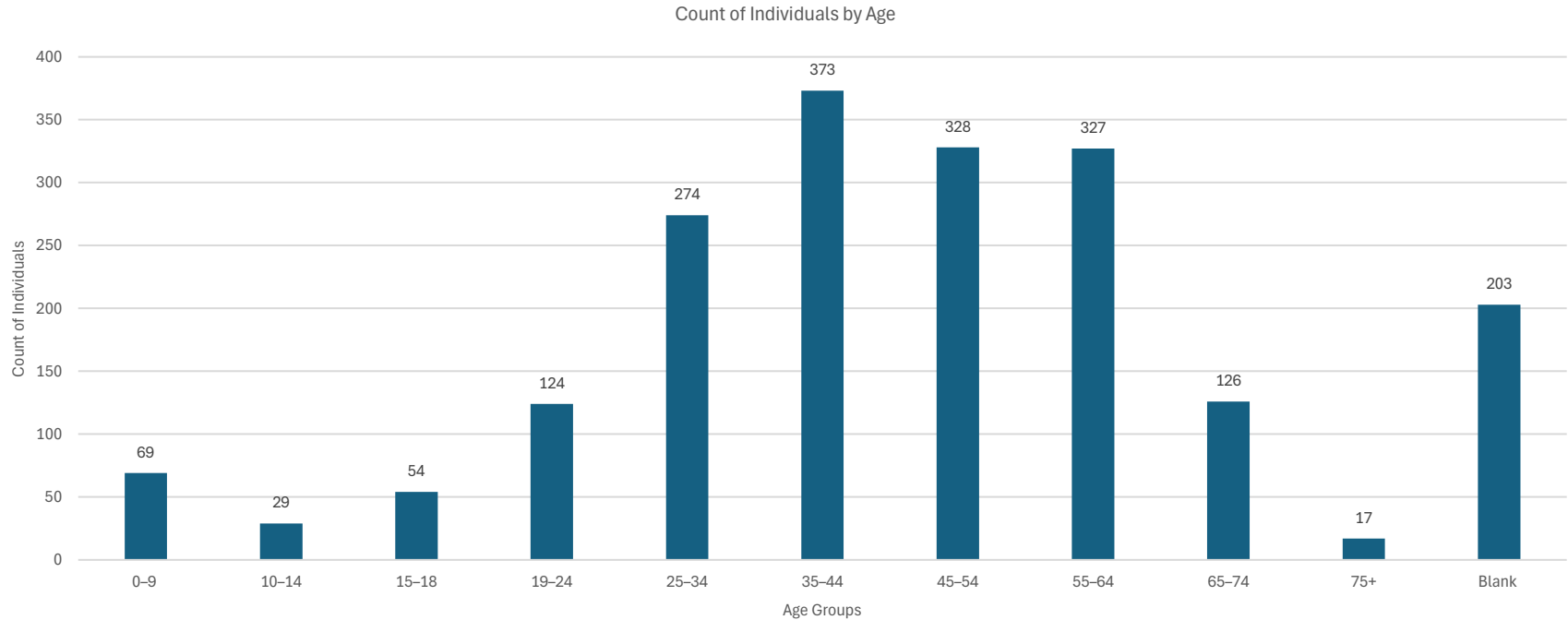
Crime Context Adds Risk, but Does Not Fully Explain ED Utilization Patterns

ZIP Code	Area	Crime Score	Assault	Robbery	Burglary	Larceny / Theft	Vehicle Theft
28401	Wilmington	B- (Average crime)	136 (36% ↑)	118 (18% ↑)	127 (27% ↑)	142 (42% ↑)	136 (36% ↑)
28402	Downtown Wilmington	D (Very high crime)	173 (73% ↑)	182 (82% ↑)	151 (51% ↑)	178 (78% ↑)	175 (75% ↑)
28403	Wilmington	A (Very low / no crime)	120 (20% ↑)	112 (12% ↑)	107 (7% ↑)	133 (33% ↑)	135 (35% ↑)
28405	Wilmington	A- (Very low crime)	87 (13% ↓)	122 (22% ↑)	115 (15% ↑)	119 (19% ↑)	111 (11% ↑)
28409	Wilmington	A+ (Very low / no crime)	46 (54% ↓)	87 (13% ↓)	81 (19% ↓)	63 (37% ↓)	57 (43% ↓)
28411	Wilmington	A+ (Very low / no crime)	55 (45% ↓)	46 (54% ↓)	65 (35% ↓)	57 (43% ↓)	61 (39% ↓)
28412	Wilmington	A (Very low / no crime)	69 (31% ↓)	76 (24% ↓)	100 (Avg)	98 (2% ↓)	87 (13% ↓)
28429	Castle Hayne	A (Very low / no crime)	50 (50% ↓)	98 (2% ↓)	155 (55% ↑)	69 (31% ↓)	72 (28% ↓)
28449	Kure Beach	A+ (Very low / no crime)	178 (78% ↑)	43 (57% ↓)	158 (58% ↑)	65 (35% ↓)	63 (37% ↓)
28480	Wrightsville Beach	A+ (Very low / no crime)	187 (87% ↑)	186 (86% ↑)	175 (75% ↑)	152 (52% ↑)	143 (43% ↑)

Crime risk varies substantially across ZIP codes, with downtown Wilmington (28402) and coastal/tourism areas (28449 and 28480) showing the highest levels of multiple crime categories, while several Wilmington residential ZIP codes show consistently lower crime levels relative to the county average.

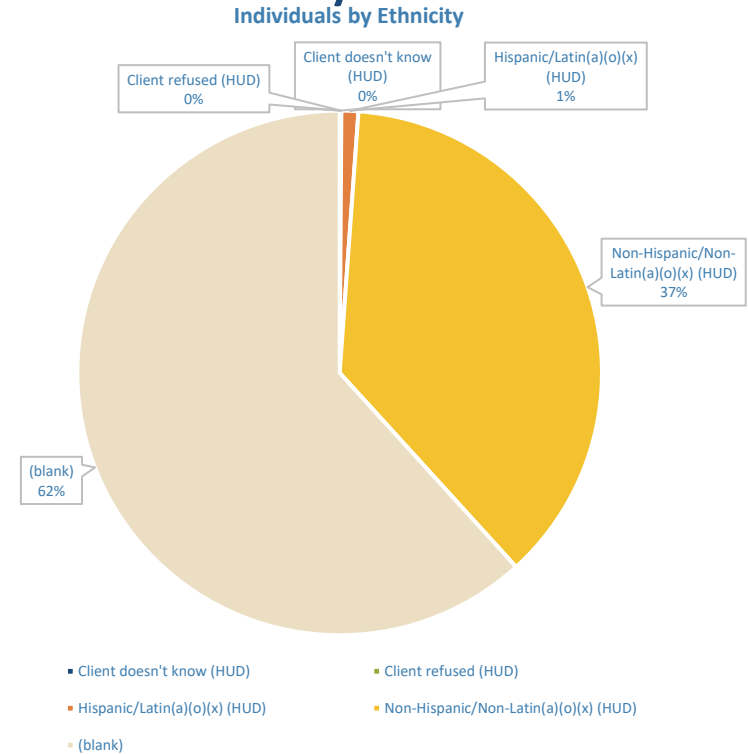
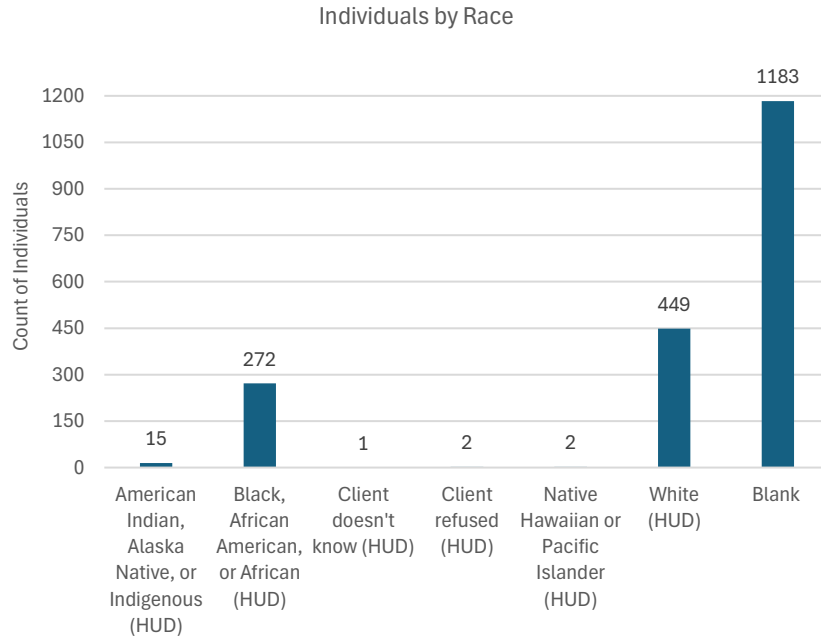
- Darker red = >50% above average
- Yellow = near average
- Green = below average

Homeless Individuals by Age in New Hanover County



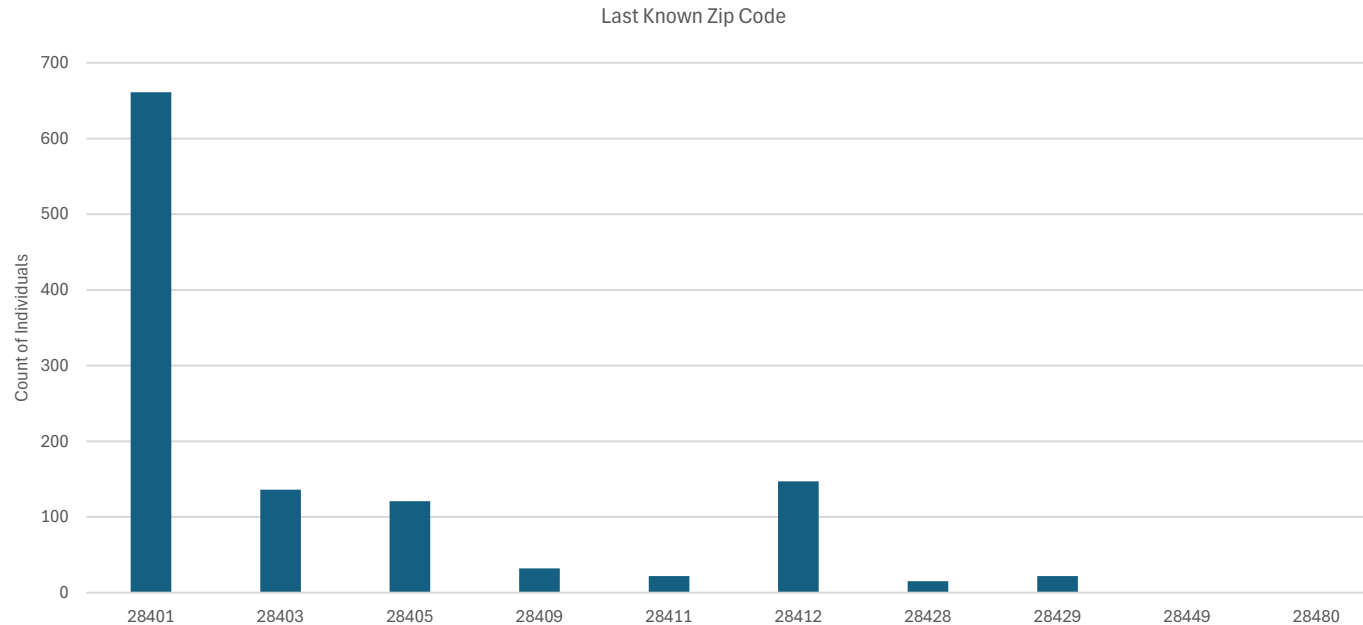
People experiencing homelessness in New Hanover County are predominantly adults ages 25–64, with relatively fewer children, youth, or older adults represented in HMIS

Homeless Individuals by Race and Ethnicity



Among HMIS-recorded clients in New Hanover County, Black residents represent a substantial share of known race data, while over half of records have race or ethnicity left blank, limiting precise disparity analysis

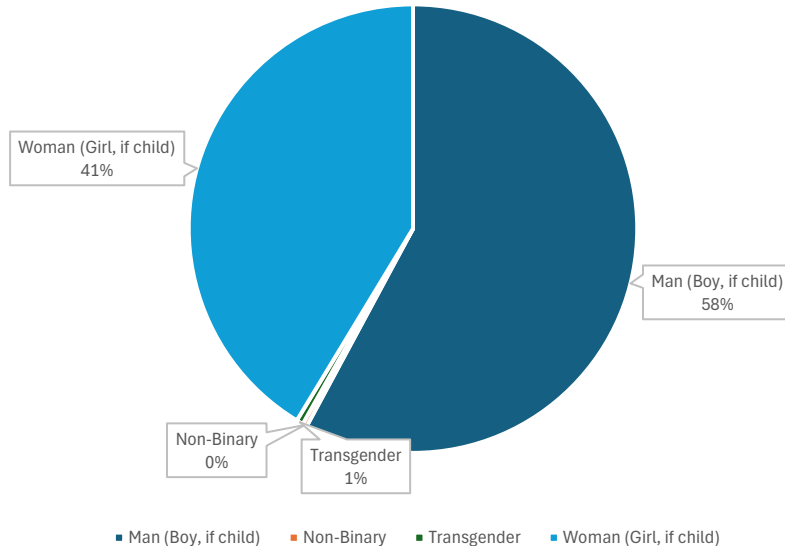
Homeless Individuals by Last Known ZIP Code



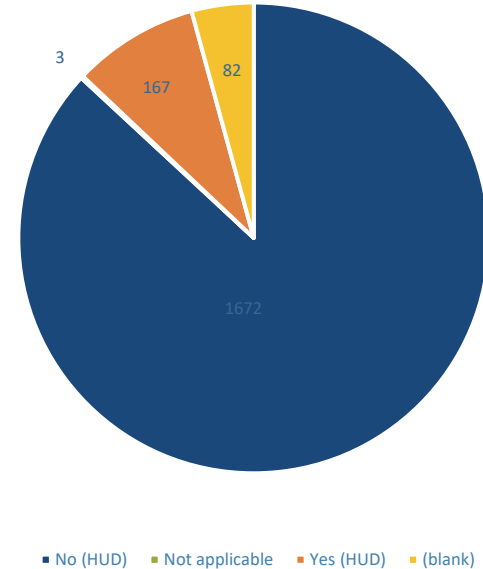
Most homeless service clients in New Hanover County report last known ZIPs 28401 and 28412, mirroring the same high-burden areas identified for behavioral health ED use and hospitalizations

Homeless Individuals by Gender and Veteran Status

Individuals by Gender Status

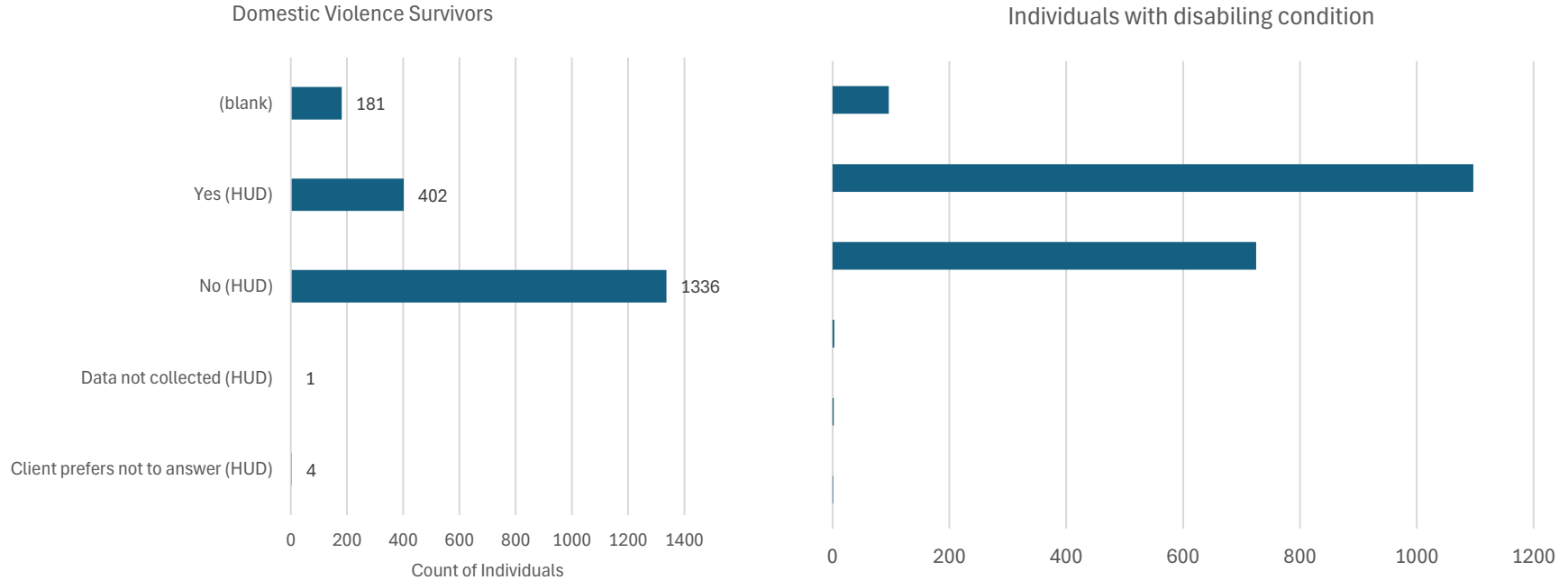


Individuals by Veteran Status



In New Hanover County's HMIS data, men and boys account for the majority of homeless clients, while only a small minority report veteran status, suggesting homelessness is more strongly tied to other vulnerabilities than to military service.

Domestic Violence and Disabling Conditions



Roughly one in five homeless clients in New Hanover County are recorded as domestic violence survivors, and a majority report a disabling condition, underscoring the intersection of trauma, disability, and housing instability.

Qualitative Analysis

Organized findings into three analytical buckets:

- Gaps & Needs
- Opportunities to Strengthen
- Transformational Priorities (“unlimited funding” framing)

Conducted cross-sector comparison and thematic co-occurrence analysis to identify structural drivers



Methodology – Qualitative Thematic Analysis

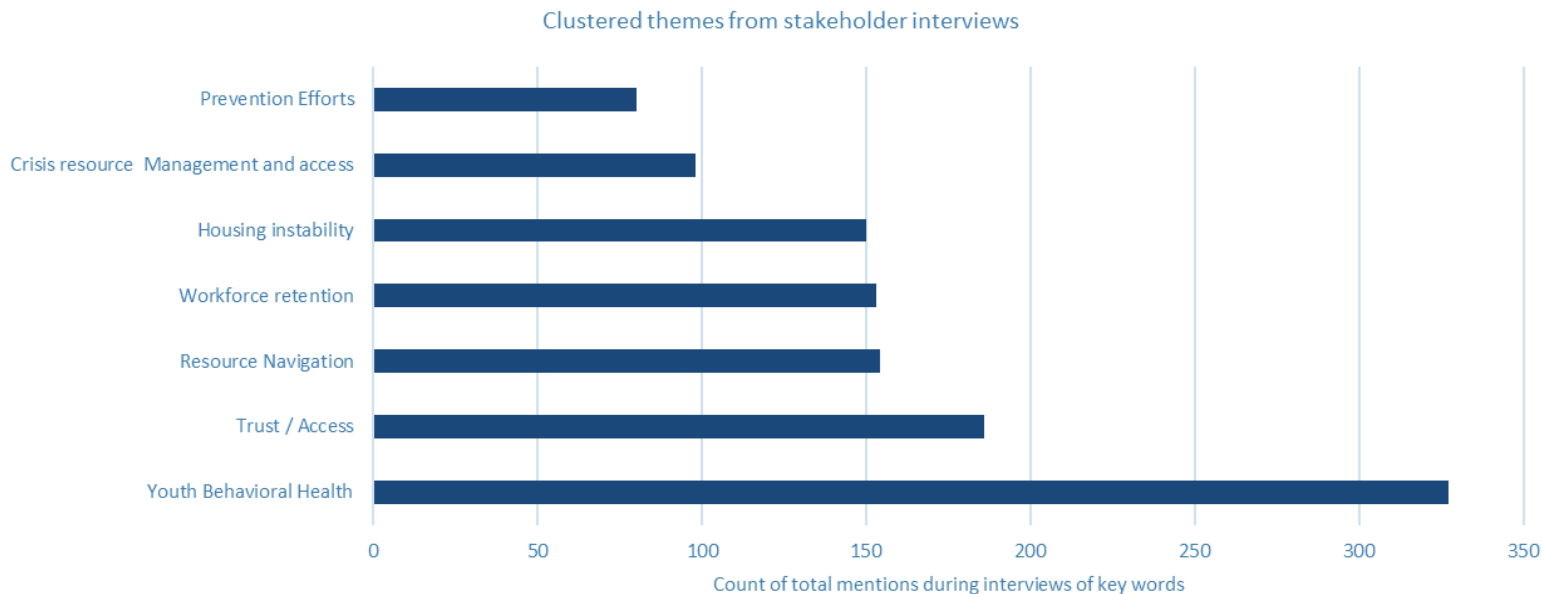
- Semi-structured stakeholder interviews across healthcare, public sector, and community organizations
- Inductive and deductive coding approach
- Keywords and phrases grouped into thematic clusters
- Frequency counts used to assess dominance and cross-sector alignment
- Co-occurrence analysis conducted to identify structural interdependencies
- Findings validated through iterative review of interview transcripts



Structural Themes identified Overall

- **Housing instability** functions as an upstream destabilizer affecting crisis utilization, workforce burden, and youth outcomes.
- **Workforce shortages and burnout** impair coordination, referral flow, and continuity of care.
- **Fragmented navigation systems** contribute to delays, duplication, and lost follow-up.
- **Youth system strain** reflects rising acuity, trauma exposure, and insufficient school-linked infrastructure.
- **Trust and cultural access barriers** shape engagement, particularly among community-based stakeholders.

Cross-Sector Theme Dominance of Gaps and Needs Across Stakeholder Interviews

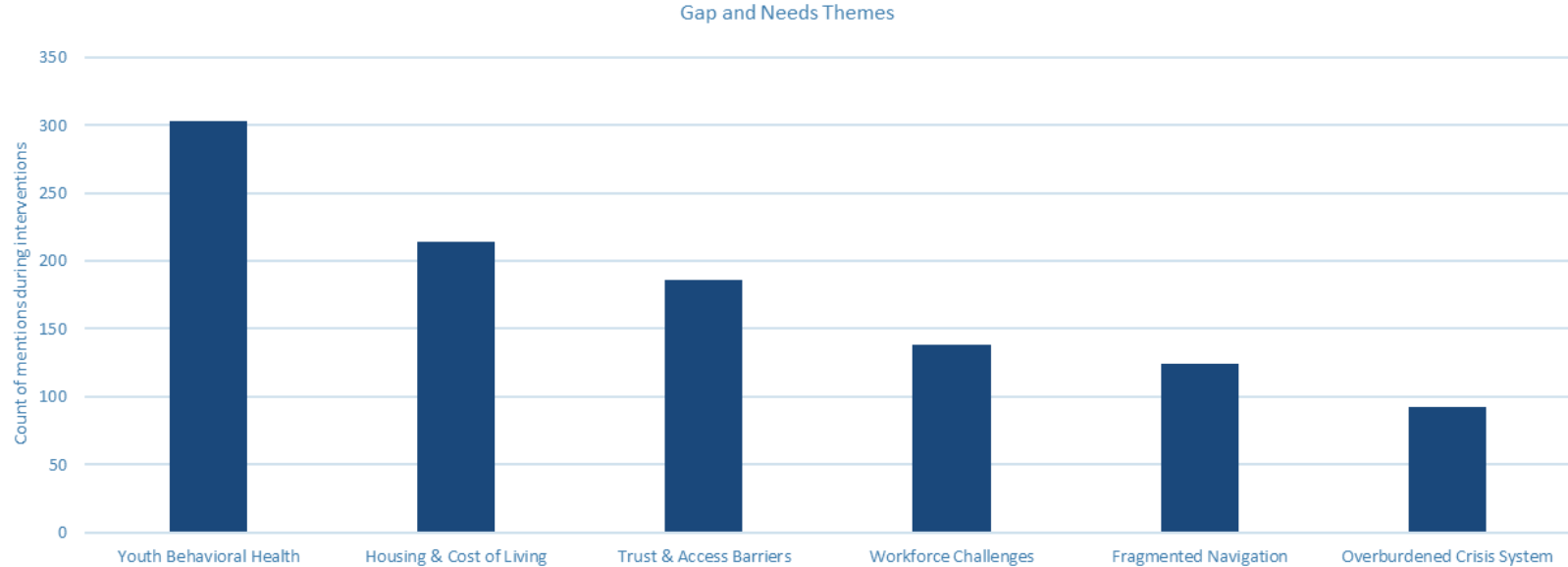


Across stakeholder groups, youth behavioral health, trust and access barriers, and housing instability dominate the narrative, signaling structural pressures rather than isolated service gaps.

Gaps and Needs Clusters

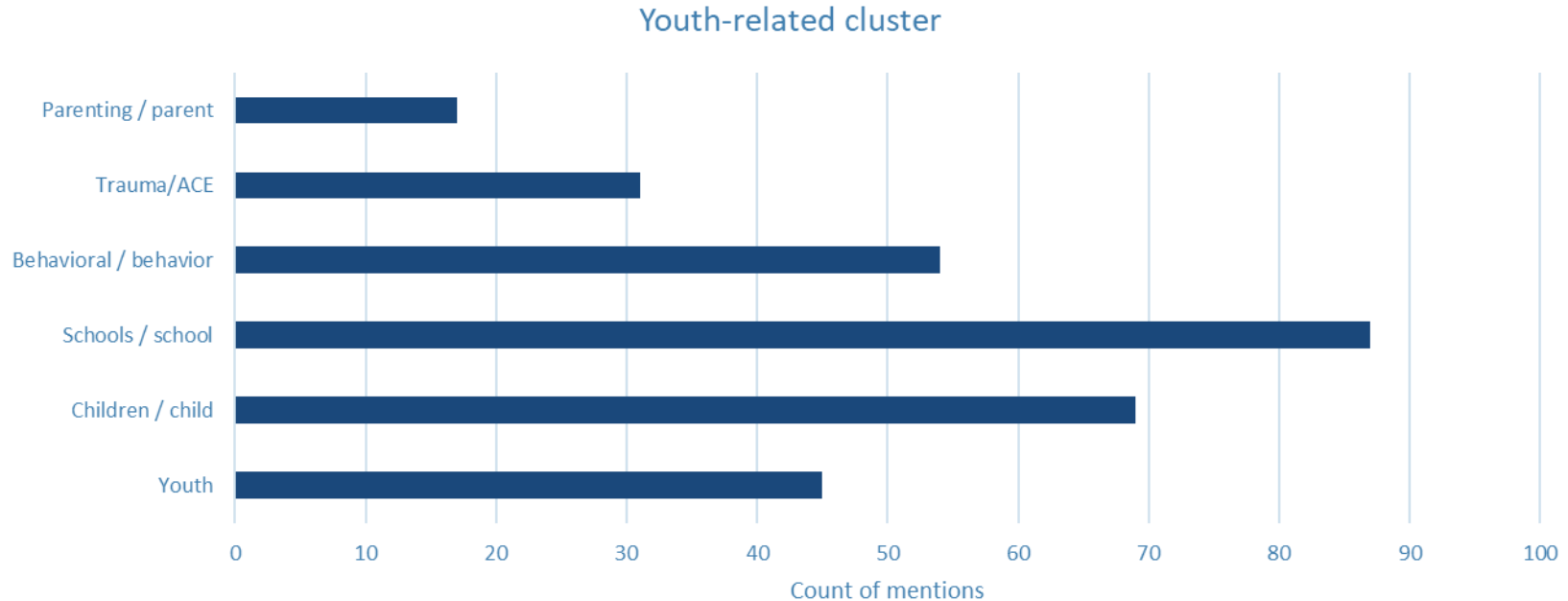
- Themes derived from systematic coding of stakeholder interviews
- Keywords grouped into structural domains (housing, workforce, navigation, youth, crisis, trust)
- Frequency and clustering used to identify dominant pressure points
- Emphasis reflects cross-sector convergence, not isolated opinions

Gaps & Needs: Structural Strain Concentrated in Youth and Housing



Stakeholders most frequently described youth behavioral health and housing instability as dominant gaps. Workforce challenges and navigation breakdowns follow closely, while crisis utilization appears as a downstream manifestation of these structural pressures.

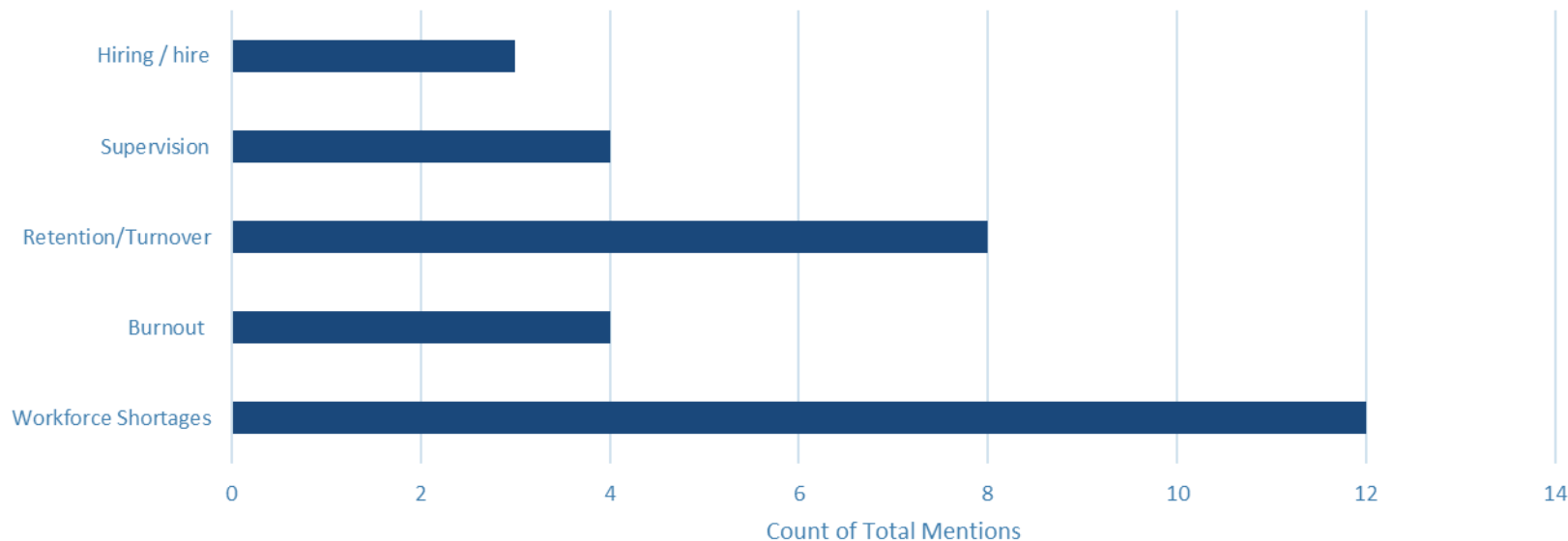
Youth System Strain Centers on Schools and Behavioral Complexity



Stakeholder language reveals schools as the primary stress point for youth behavioral needs, with trauma exposure and parenting strain contributing to rising complexity.

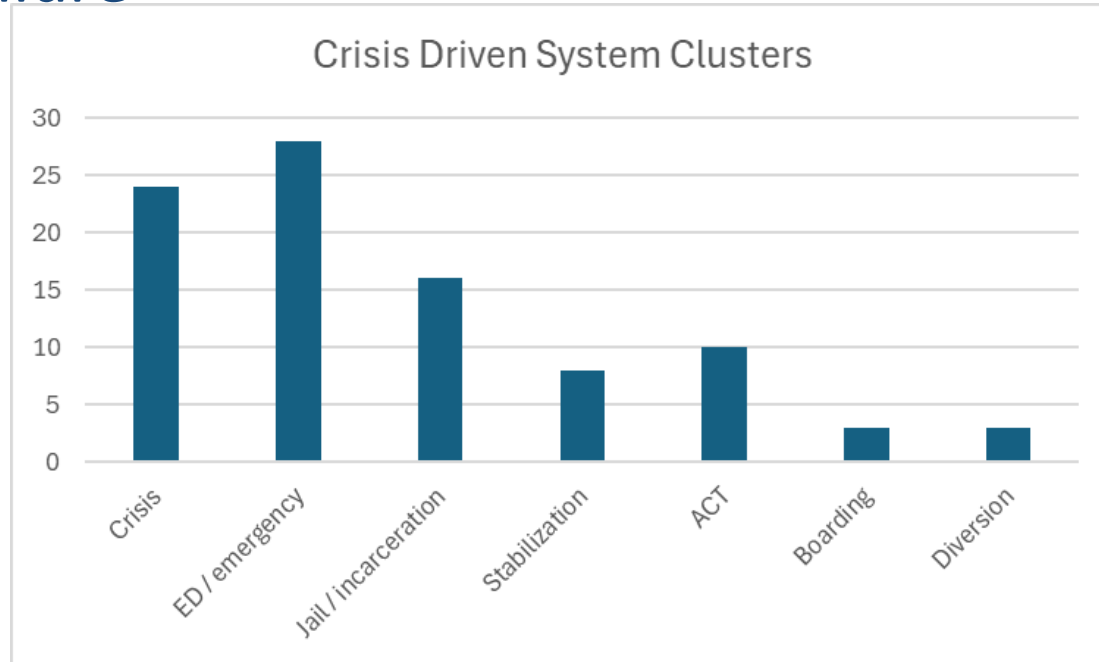
Workforce Fragility Driven by Staffing Gaps

Workforce shortage and Burnout Clusters



Stakeholder interviews indicate that staffing instability undermines system coordination and continuity of care.

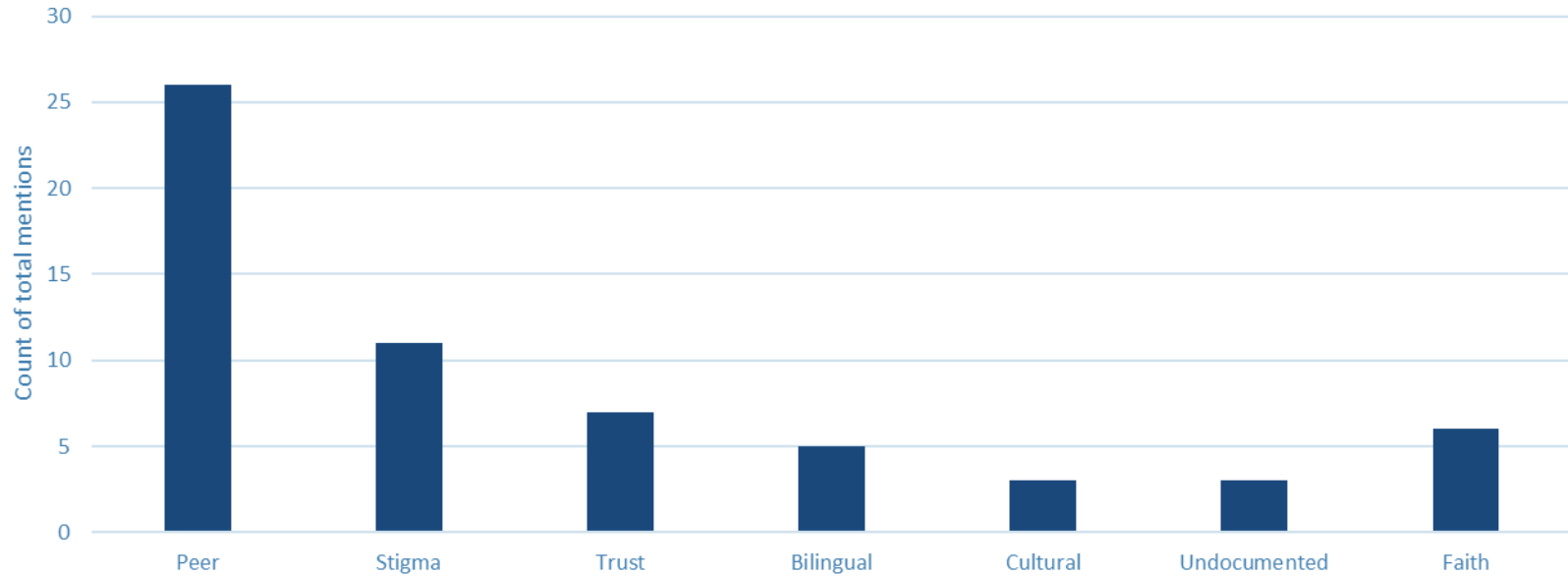
Crisis Utilization Reflects Downstream System Failure



Emergency department use and justice involvement appear repeatedly in interviews as default entry points into care, reflecting limited upstream stabilization capacity.

Trust and Community Connection Shape Access

Trust and Stigma Barriers Cluster

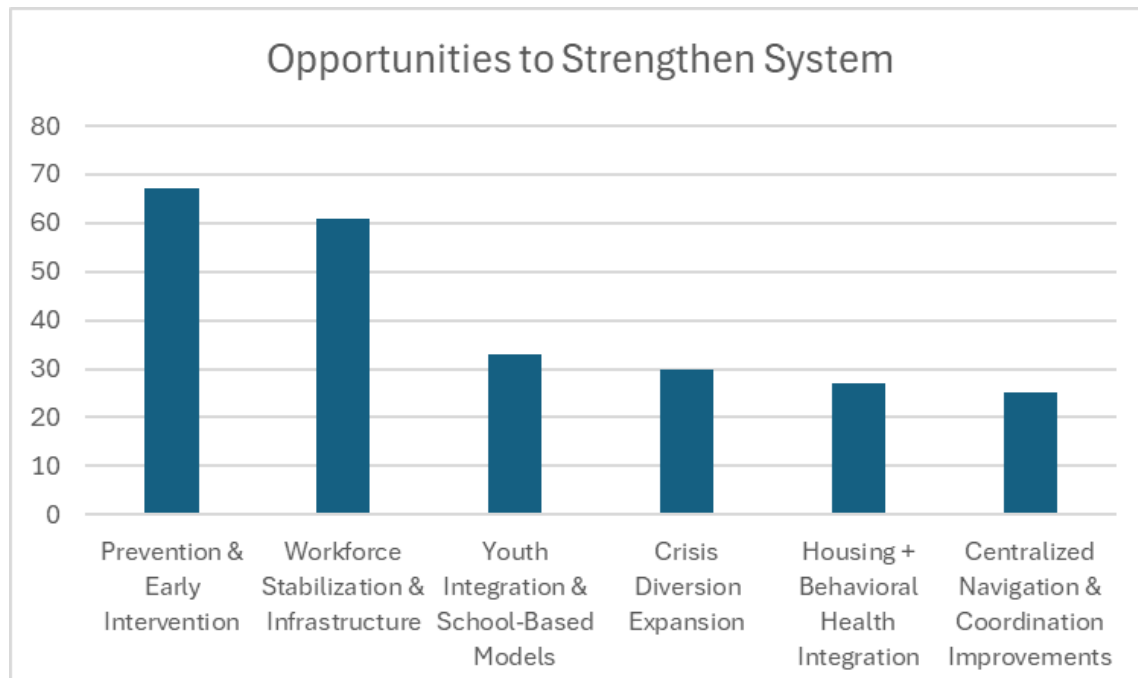


Community-based stakeholders emphasized that trust, peer connection, and cultural accessibility significantly influence whether services are utilized, particularly among immigrant and marginalized populations

Opportunities to Strengthen

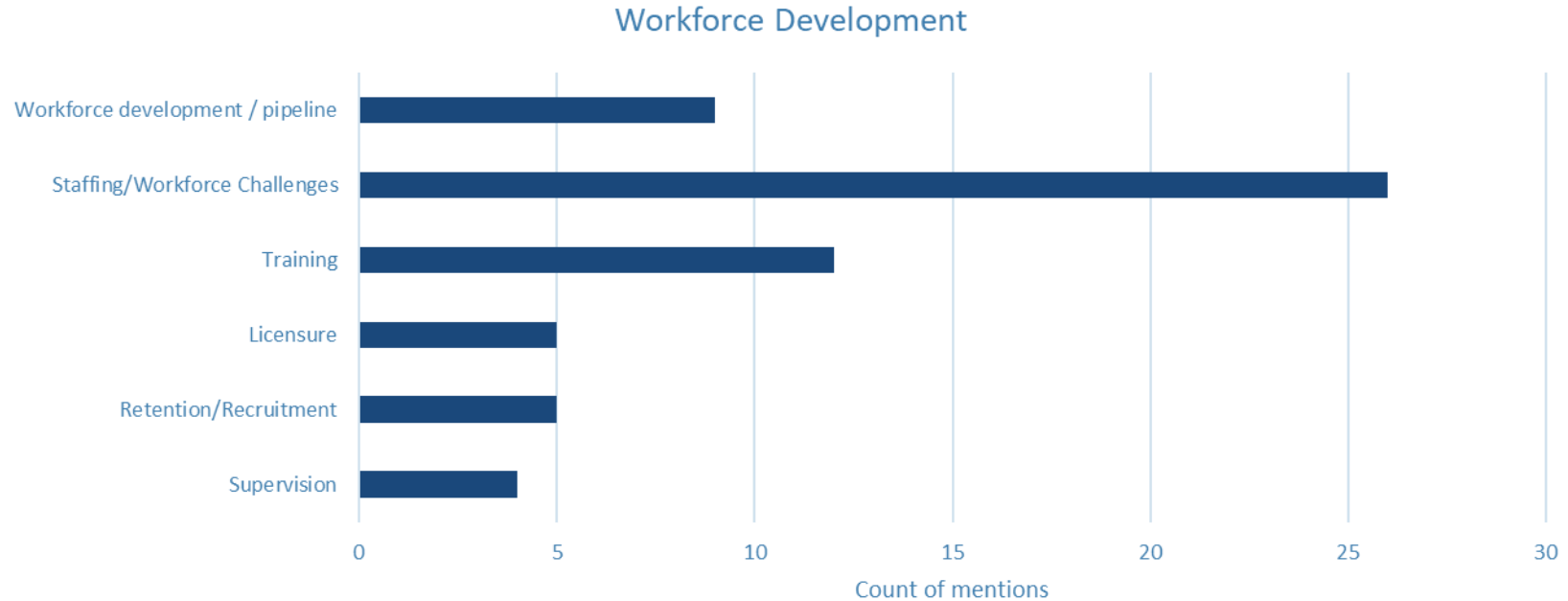
- Opportunity language analyzed separately from gap language
- Clusters reflect forward-looking solutions named across sectors
- Emphasis concentrated on prevention, workforce infrastructure, and system integration
- Signals readiness for targeted system investment

Stakeholders Emphasize Prevention and Workforce Stabilization as Top Leverage Points



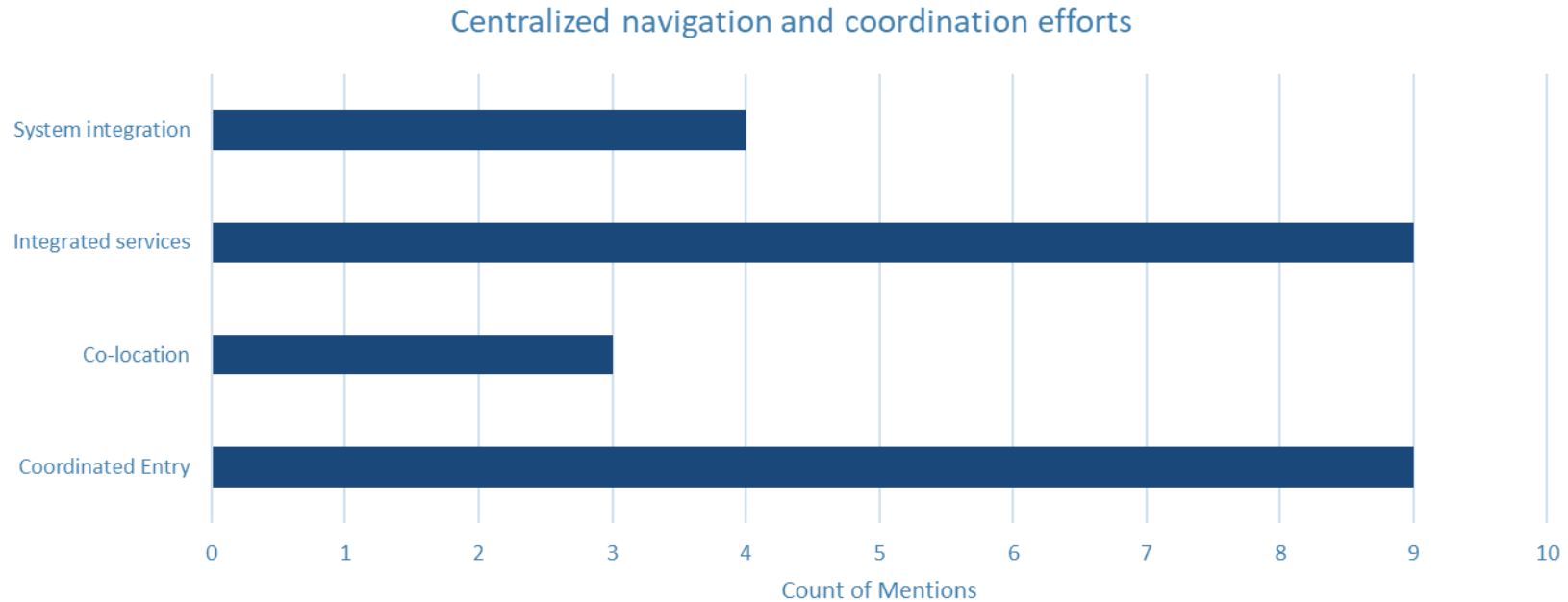
Across interviews, stakeholders most frequently identified prevention, early intervention, and workforce stabilization as the most actionable strategies to reduce downstream crisis demand and strengthen system capacity.

Workforce and Training Identified as Immediate Capacity Solutions



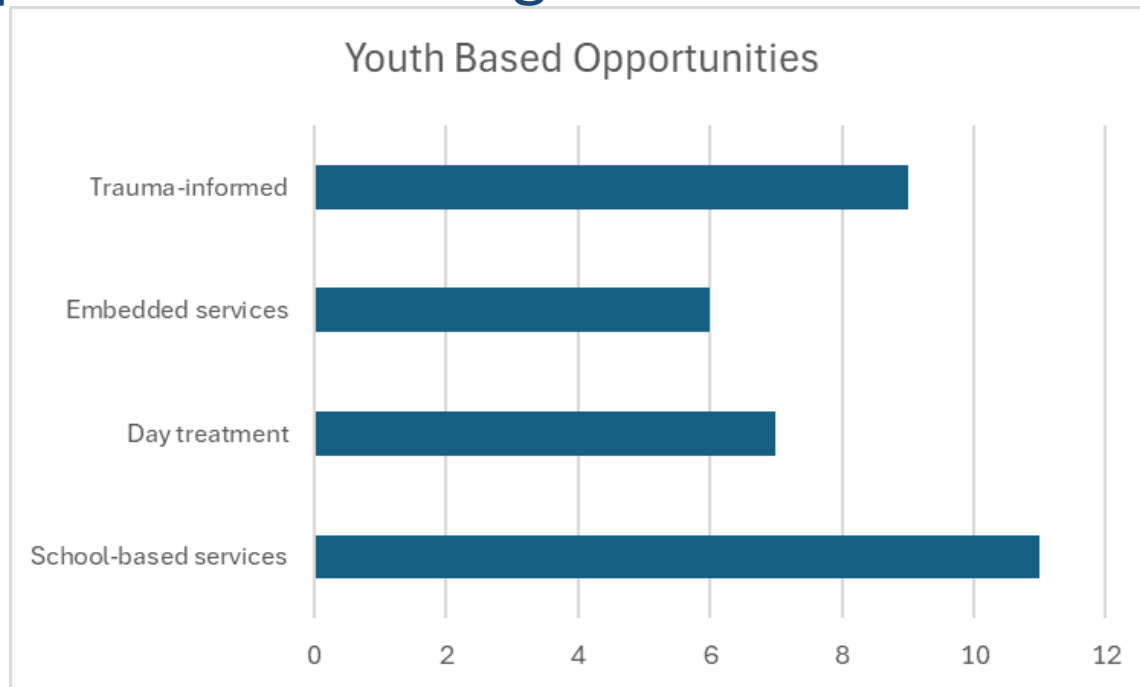
Stakeholders consistently pointed to expanding the workforce and strengthening training pipelines as practical, near-term strategies to address staffing shortages and improve system stability

Integrated Services and Coordination Viewed as Key to Reducing Fragmentation



Stakeholders emphasized that improved coordination and integrated services, particularly through centralized intake and co-location models, could significantly reduce referral loss and service duplication

School-Based and Trauma-Informed Models Identified as High-Impact Youth Strategies



Stakeholders consistently identified expanding school-based services and trauma-informed approaches as critical to stabilizing youth before behavioral needs escalate to crisis.

Transformational Themes

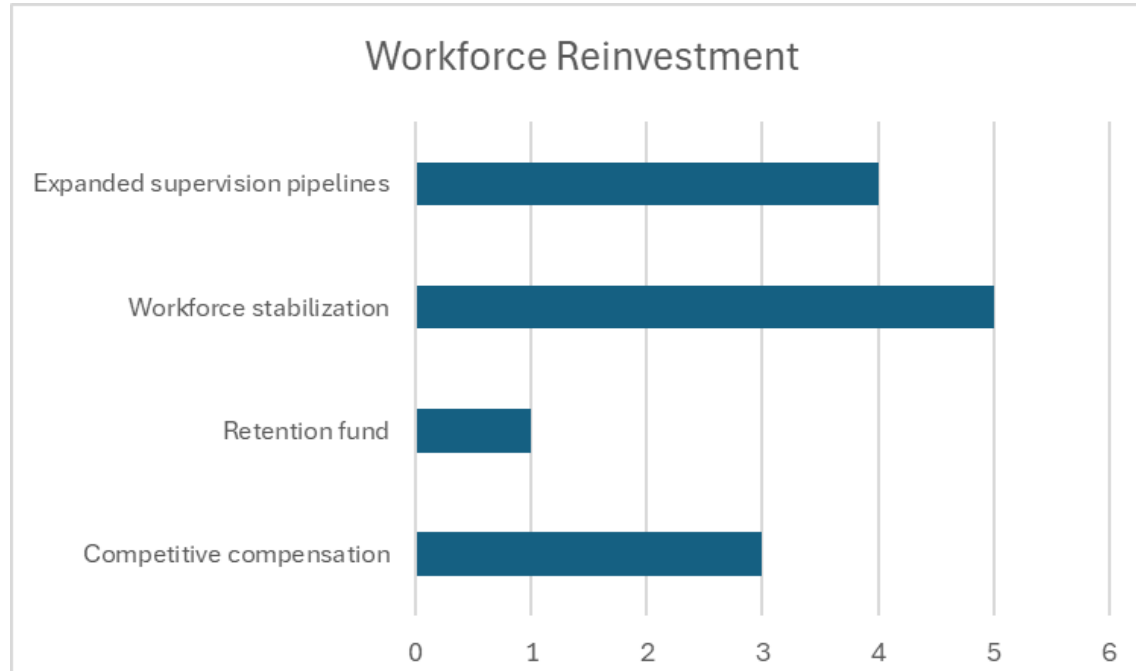
- “No-constraint” solutions coded as a distinct analytic category
- Captures long-term structural redesign ideas
- Themes include integrated hubs, housing scale, youth system redesign, crisis infrastructure
- Reflects shared vision for systemic transformation

Stakeholders Envision Structural Redesign When Resources Are Unconstrained



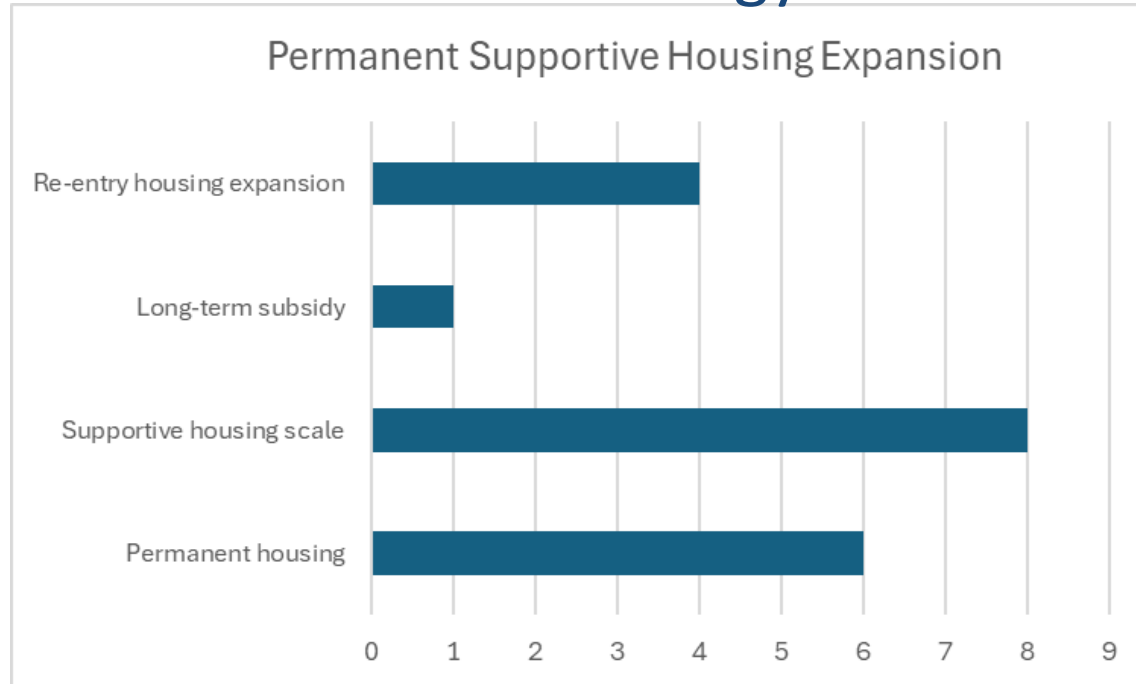
When asked to imagine unconstrained investment, stakeholders shifted to prioritizing supportive housing, youth system overhaul, crisis infrastructure expansion, and workforce reinvestment

Workforce Reinvestment Requires Structural Funding, Not Short-Term Hiring



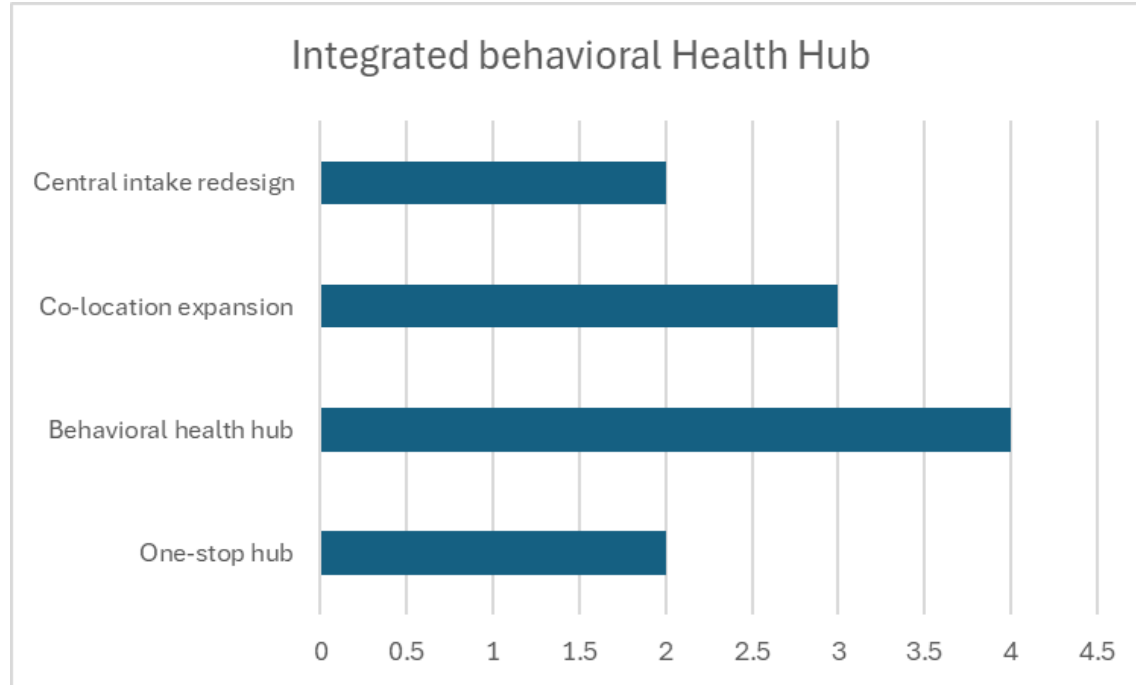
Stakeholders described workforce reinvestment as requiring expanded supervision pipelines, stabilization funding, and competitive compensation to rebuild long-term behavioral health capacity

Permanent Supportive Housing as Foundational Stabilization Strategy



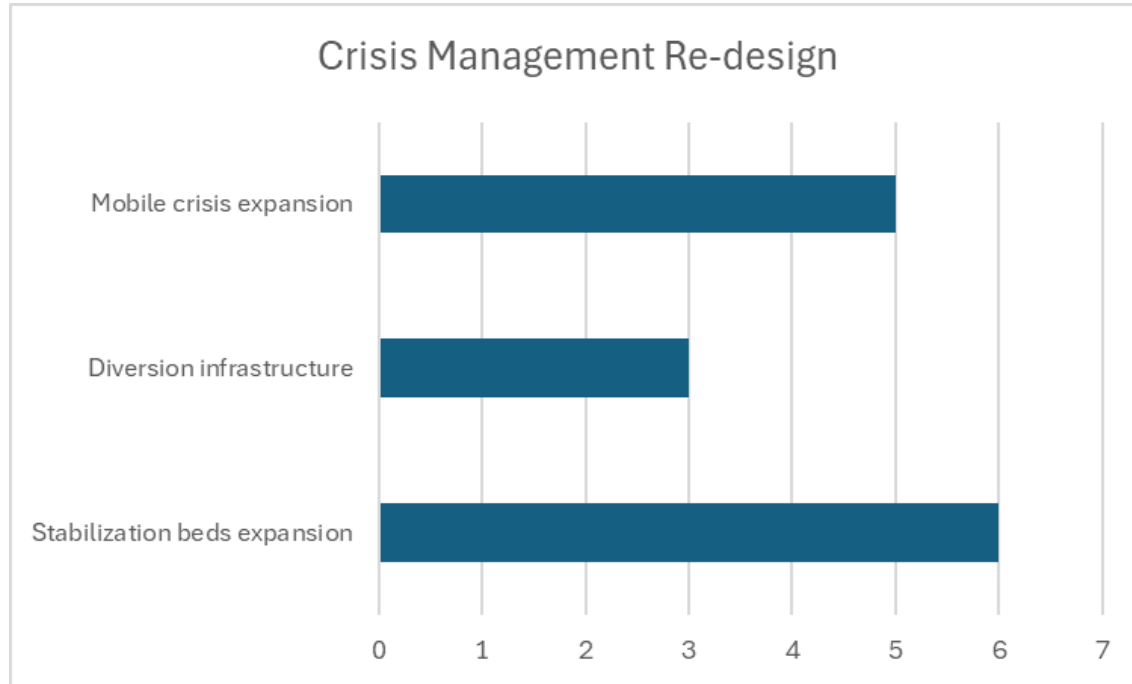
Stakeholders consistently identified scaling permanent supportive housing, including re-entry expansion, as the most transformative upstream intervention to reduce crisis cycling

Integrated Behavioral Health Hub as System Anchor



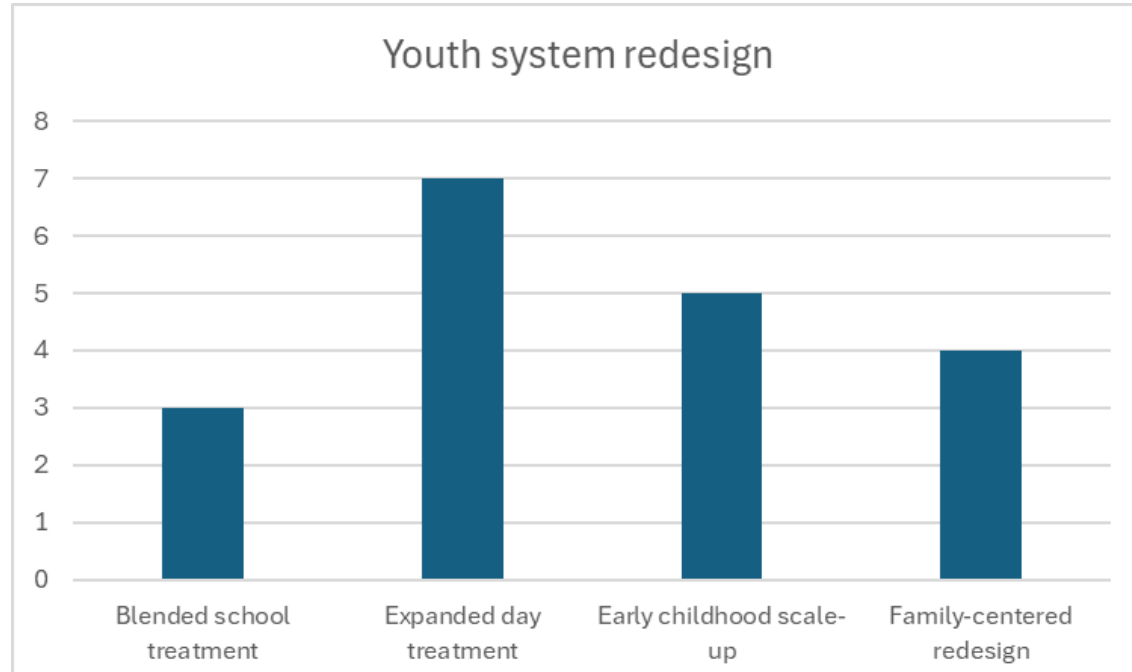
Stakeholders envisioned a centralized behavioral health hub, combining co-location, redesigned intake and one-stop access to reduce fragmentation and simplify entry into care.

Crisis Infrastructure Requires Capacity Expansion, Not Just Diversion



Stakeholders emphasized expanding stabilization beds and mobile crisis infrastructure as essential to shifting from emergency department reliance toward a community-based crisis continuum.

Youth System Redesign Focuses on Early Childhood and School-Based Continuum



In their aspirational framing, stakeholders prioritized expanding day treatment, scaling early childhood intervention, and strengthening family-centered models to prevent escalation into crisis.

Qualitative Analysis

Narrative Summary

- The qualitative analysis synthesizes cross-sector stakeholder interviews to identify dominant system pressures, shared priorities, and emerging themes across gaps, opportunities, and transformational ideas.



1. Housing Instability as a Structural Driver

- Housing emerged as the most structurally central theme across stakeholder groups.
- Healthcare stakeholders described housing instability as a driver of crisis utilization and workforce strain. Public sector leaders framed housing as foundational to stabilization and prevention. Community-based organizations emphasized its role in youth behavioral complexity and recurring system cycling. Even the community member interview linked housing insecurity directly to access barriers.
- Housing was not discussed as a parallel issue, it was repeatedly framed as upstream of emergency department utilization, justice involvement, school instability, and clinical burnout.



2. Workforce Fragility and System Capacity Constraints

- Healthcare and private organization stakeholders most strongly emphasized workforce shortages, burnout, and supervision pipeline gaps. However, workforce instability was also acknowledged by public sector and community-based organizations.
- Workforce challenges were frequently linked to navigation breakdowns, delayed referrals, limited follow-up, and reduced care continuity.



3. Youth Behavioral Complexity and Developmental Strain

- Youth-related themes were prominent across nearly all stakeholder groups. Public sector leaders emphasized prevention and school-linked instability. Community organizations described trauma exposure and family strain. Healthcare stakeholders referenced rising behavioral acuity and limited pediatric psychiatry access.
- Youth instability was often discussed alongside trust and access barriers, indicating that engagement challenges are relational as well as structural.



4. System Fragmentation and Navigation Barriers

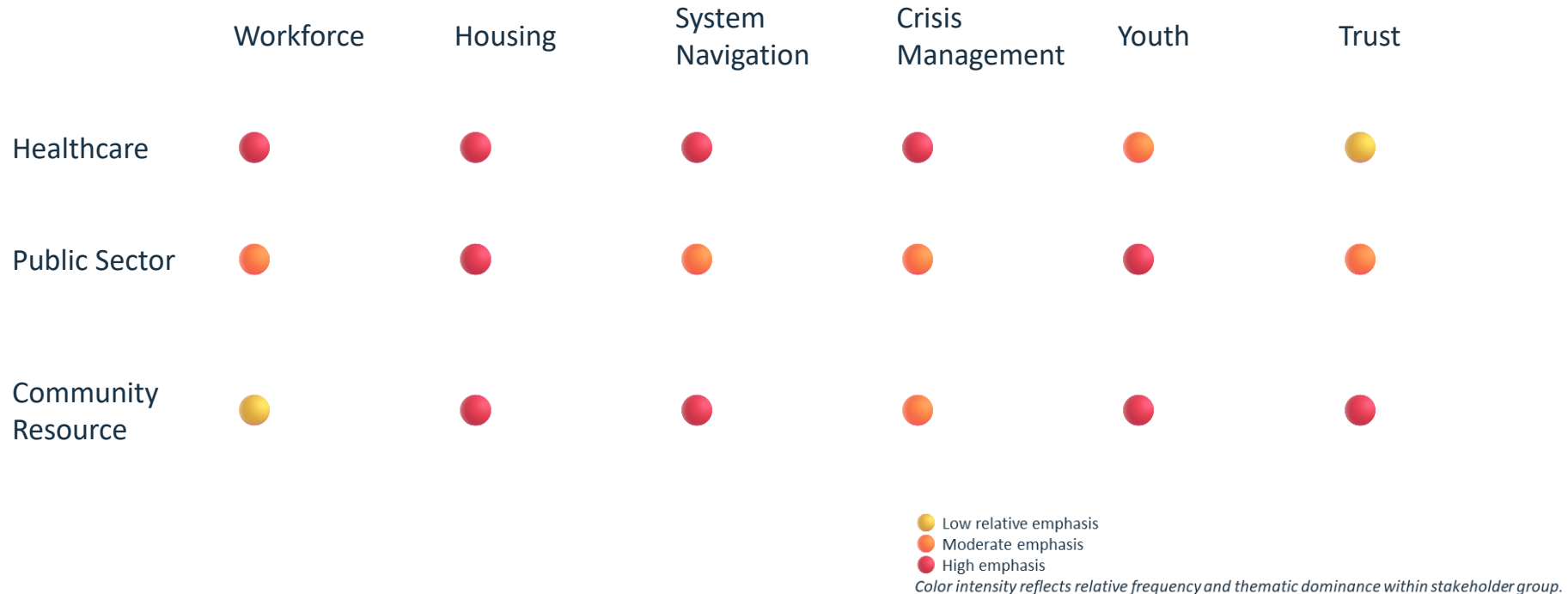
- Navigation challenges were most pronounced among healthcare and community-based organizations, though acknowledged across sectors.
- Stakeholders described siloed services, unclear referral pathways, discharge gaps, and absence of centralized intake infrastructure.
- Navigation was frequently discussed alongside workforce strain and housing instability, reinforcing its structural nature.



5. Trust and Cultural Access Gaps

- Community-based organizations most strongly emphasized trust and cultural access barriers, particularly for immigrant, bilingual, and historically marginalized populations.
- While less dominant in healthcare interviews, trust-related themes appeared across groups, especially when discussing youth and prevention.

Across stakeholder groups, housing and youth emerge as consistently high-priority themes, while workforce and system navigation pressures are most pronounced within healthcare voices and trust barriers are elevated among community-based stakeholders



Geo-Spatial Analysis

Asset Maps



A visual representation of a community's existing strengths, resources, and opportunities.

To access the maps, hold "control" and click the text below:

[The Endowment | Tableau - Public](#)

or "copy and paste" the following link:

[https://public.tableau.com/app/
profile/mosaicgroup/viz/
NewHanoverBehavioralHealthLands
capeAnalysis/WELCOME](https://public.tableau.com/app/profile/mosaicgroup/viz/NewHanoverBehavioralHealthLandscapeAnalysis/WELCOME)

Key Takeaways

- Emergency department utilization for behavioral health conditions continues to increase in New Hanover County, suggesting sustained demand for crisis and acute mental health services.
- Self-reported anxiety and depression exceed state benchmarks.
- Alcohol-related hospitalizations and mortality show sustained growth.
- Mental health crisis utilization is increasingly concentrated in specific ZIP codes.
- Youth behavioral health indicators and service patterns suggest growing demand for youth-focused prevention, early intervention, and treatment resources.

Overall Drivers and Key takeaways from Quantitative and Qualitative Analysis

Primary Drivers of Crisis Utilization (Ranked by Strength of Association)

- **Delayed and distant treatment access**
 - Long wait times, limited same-day withdrawal management (detox) and MOUD availability, and fragmented transitions from ED to treatment increase reliance on emergency departments and elevate overdose risk following discharge.
- **Housing instability and economic stress**

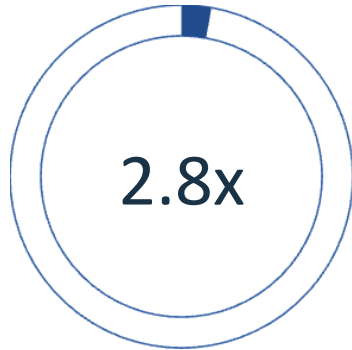
ZIP codes with higher deprivation show consistently higher ED utilization across MH, SUD, and alcohol outcomes.
- **Prior ED utilization (repeat crisis pathway)**

A small subset of patients accounts for a disproportionate share of visits, signaling missed intervention opportunities.
- **Socioeconomic deprivation (structural risk)**

Deprivation aligns closely with ED utilization, indicating systemic drivers of crisis care.

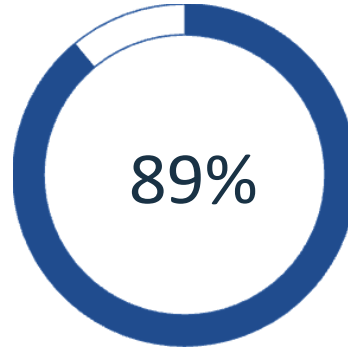
Despite a 97th-percentile mental health provider rate, New Hanover County experiences high ED utilization

Disproportionate Utilization of BH Services



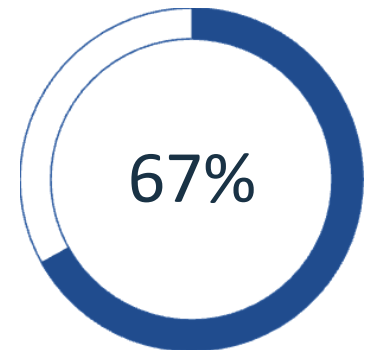
ED Visit Disparity

ZIP-level mental health ED utilization varies by up to ~2.8x across the county



Correlation Strength

Strong ZIP-level correlation between deprivation indicators and crisis utilization ($r \approx 0.89$), suggesting overlapping structural drivers.



Overdose Concentration

Approximately 67% of observed fatal overdoses in the study period occur within four ZIP codes (28401, 28403, 28412, 28405)

A small number of ZIP codes account for a disproportionate share of crisis events, indicating that place-based, integrated investment will outperform county-wide diffusion: Priority ZIPs: 28401, 28403, 28412, 28405

Zip Code Prioritization Matrix: Burden & Risk Assessment

ZIP Code	MH ED Burden	Substance Use ED Burden	Co-occurrence (MH+SUD)	Deprivation / HRSN	Access Gap	Overall Risk
28401	High	High	High	High	Medium	High
28412	High (volume)	Medium	High	Medium	High	High
28405	Medium	Medium	Medium	High	High	High
28403	Medium	Low–Medium	Medium	Medium	Low	Medium
28411	Medium	Low	Low–Medium	Low–Medium	Medium	Medium
28429	Low	Low	Low	Medium	High	Low–Medium
28409	Low	Low	Low	Low	Low	Low

1

Tier 1: Crisis Convergence

Zip Codes: **28401, 28412**

Multiple high-burden metrics (SUD ED utilization, MH ED burden, deprivation) and complex co-occurrence.

2

Tier 2: High leverage prevention

Zip Codes: **28403, 28405**

Significant burden in 2–3 key metrics (MH ED, SUD ED utilization, co-occurrence). Focused interventions for specific challenges.

3

Tier 3: Access Gap Risk

Zip Codes: **28429**

Emerging or moderate burden in specific areas. Proactive, preventative programs and general community support.

These ZIP codes function as crisis convergence zones where behavioral health burden, substance use ED utilization, deprivation, and access gaps intersect.



mosaic

GROUP

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for a healthier community

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Trillium Claims Data groups

Trillium Claims Service Categories

Alcohol and Drug Screening
80175 -DRUG SCREEN QUAN LAMOTRIGINE
80178 - LITHIUM
82075 ALCOHOL BREATH
80320 Drug Screen Alcohol Levels

Medication Administration
J0401 Injection, aripiprazole, extended release, 1 mg
J2315-INJECTION, NALTREXONE, DEPOT FORM, 1 MG
J2794 INJECTION, RISPERIDONE, LONG ACTING, 0.5 MG(RISPERDAL CONSTA)
J2426 INJECTION, PALIPERIDONE PALMITATE EXTENDED RELEASE, 1 MG (INVEGA SUSTENNA)

Withdrawal Management
0116-ROOM & BOARD-PRIVATE DETOXIFICATION
H0010 -Medically Monitored Inpatient Withdrawal Management

Trillium Claims Service Categories

Crisis & Stabilization

H2011 HH- Mobile Crisis Co-Responder
H2011 MOBILE CRISIS MANAGEMENT (MH/SA)
S9484 Facility Based Crisis

Community-Based Teams

H0040 Assertive Community Treatment Program
H0040 U1 ACTT Shadow Claim Code
H2015 HT HF Community Support Team Licensed Substance Abuse Professional
H2015 HT HM CST Paraprofessional
H2015 HT HN Qualified Professional
H2015 HT HO Community Support Team Licensed Team Lead
H2015 HT U1 CST Peer Support Specialist

Psychiatric Collaborative Care

99492-INITIAL PSYCHIATRIC COLLABORATIVE CARE MANAGEMENT, FIRST CALENDAR MONTH, FIRST 70 MINUTES
99493-FOLLOW-UP PSYCHIATRIC COLLABORATIVE CARE MANAGEMENT, SUBSEQUENT CALENDAR MONTH, FIRST 60 MINUTES

Tailored Care Management

T1017 HA- Tailored Care Management HOP Add ON
T1017 HT CG Tailored Care Management Innovations Add On
T1017 HT- Tailored Care Management
T1017 U4- Tailored Care Management- 1915i Add on

Trillium Claims Service Categories

Case Management

H0032 - Target Case Management (Mental Health/ Substance Abuse)
H0032 U5 High Fidelity Wraparound
H0036 HE - Intercept
H2020 Therapeutic Behavioral Services

Residential

H0019 HQ - Long Term Resid Lvl III(1-4 Beds)
H0019 HQ TL - Long Term Resid Lvl III(1-4 Beds);Residential Care & Youth Initiative
H0019 HQ TL U2 - Long Term Resid Lvl III(1-4 Beds);Residential Care & Youth Initiative; DJJ Involvement
H0019 HQ TL U6 - Long Term Resid Lvl III(1-4 Beds);Residential Care & Youth Initiative; Bonus Payment
H0019 TJ TL - Long Term Resid Lvl III(5+ Beds); Residential Care & Youth Initiative
H0019 TJ TL U1 - Long Term Resid Lvl III(5+ Beds); Residential Care & Youth Initiative; DSS Involvement
H0019 TJ TL U2 - Long Term Resid Lvl III(5+ Beds); Residential Care & Youth Initiative; DJJ Involvement
H0019 TJ - Long Term Resid Lvl III(5+ Beds)
H0019 UR - Long Term Resid Lvl IV(5+ Beds)
H0019 YA TL - Long Term Resid Lvl III(1-4 Beds) Sexually Aggressive Youth
H2034 Clinically Managed Low-Intensity Residential
S5145 TL U1 -Residential Treatment Level II- Residential Care and Youth Initiative; DSS Involvement
S5145HK TL U1-Intensive Alternative Family Services; Residential Care and Youth Initiative; DSS Involvement
S5145HK TL U6 -Intensive Alternative Family Services; Residential Care and Youth Initiative; Bonus Payment
S5145HK-Intensive Alternative Family Services
S5145 TL U3-Residential Treatment Level II ; Residential Care and Youth Initiative; DSS and DJJ Involvement
S5145TL U6 Residential Treatment Level II Residential Care and Youth Initiative; Bonus Payment

Peer Support Services

H0038 GT CR Peer Support
H0038 GT- Peer Support Telehealth
H0038 HQ Peer Support Group
H0038 KX- Peer Support - Telephonic
H0038 Peer Support
H0038 U4 Peer Support

Trillium Claims Service Categories

Intensive Outpatient Treatment
0912 Partial Hospitalization Less Intensive (Hosp.
0913 Partial hospitalization-Intensive
H0035 HE- Project Transition- Partial Hospital
H0035 DMH Part Hosp per diem -Child/Adults
H2012HA Day Treatment Child
H2035 SA Comprehensive Outpatient Treatment Program
H0015 Alcohol and/or Drug Intensive OP
0900 General - Psych Treatment
H0020 Opioid Treatment
H2033 HE U1 MST PSB Shadow Claim
H2033HA Multi-systemic Therapy (MST)
H2033HA U1 Multi-systemic Therapy (MST)

Inpatient Treatment
0114 Psychiatric (private room)
0124 Psychiatric (semi-private)
120 Inpatient Psychiatric -Room and Board
126 Inpatient Psychiatric -Semi Private Detox
911 PSYCHIATRIC RESIDENTIAL TREATMENT FACILITY (PRTF)
H0013 Medically Monitored Intensive Inpatient Services
0100 ICF/IDD Hospital Admission & General Hospital

Trillium Claims Service Categories

Diagnostic Assessment and Evaluation
90791 CR Psychiatric Diagnostic Evaluation(No Medical Services)
90791 Psychiatric Diagnostic Evaluation(No Medical Services)
90791HE GT Psychiatric Diagnostic Evaluation(No Medical Services) SOSE Eval
90791 TM Psychiatric Diagnostic Evaluation(No Medical Services) School Based Therapy
90791 59 Psychiatric Diagnostic Evaluation(No Medical Services) 59- distinct procedural svcs
90791 HH - Psychiatric Diagnostic Evaluation(No Medical Services); Preferred Provider
90791 HK GT- Psychiatric Diagnostic Evaluation Telehealth (No Medical Services)-TFCBT
90791 GT HH - Psychiatric Diagnostic Evaluation(No Medical Services); Telehealth Preferred Provider
90791 GT 59- Psychiatric Diagnostic Evaluation(No Medical Services)GT Interactive Telecommunications distinct procedural svcs
90791 GT Psychiatric Diagnostic Evaluation(No Medical Services)GT Interactive Telecommunications
90792 Psychiatric Diagnostic Evaluation with Medical Services (or E&M new patient codes)
90792 GT Psychiatric Diagnostic Evaluation with Medical Services (or E&M new patient codes)GT Interactive Telecommunications;
96112 GT DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, FIRST 60 MINUTES; Telemed
96112 DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, FIRST 60 MINUTES
96112 HH DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, FIRST 60 MINUTES; Preferred Provider
96113 DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, ADDITIONAL 30 MINUTES
96113 GT DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, ADDITIONAL 30 MINUTES; Telemedicine
96113 HH DEVELOPMENTAL TEST ADMINISTRATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, ADDITIONAL 30 MINUTES; PREFERRED PROVIDER
96116 GT Neurobehavioral Exam telemedicine
96116 HH Neurobehavioral Exam Preferred Provider
96116 Neurobehavioral Exam
96121 HH NEUROBEHAVIORAL STATUS EXAMINATION BY QUALIFIED HEALTH CARE PROFESSIONAL WITH INTERPRETATION AND REPORT, ADDITIONAL 60 MINUTES; PREFERRED PROVIDER
96127 GT - BRIEF EMOTIONAL/BEHAV ASSMT, Telehealth
96127-BRIEF EMOTIONAL/BEHAV ASSMT
96130 GT PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES; Telemedicine
96130 59 PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES; DISTINCT PROCEDURAL SERVICE

96130 HH PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES
96130 PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES
96131 GT PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, ADDITIONAL 60 MINUTES
96131 HH PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, ADDITIONAL 60 MINUTES; PREFERRED PROVIDER
96131 PSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, ADDITIONAL 60 MINUTES
96132 HH NEUROPSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES
96132 NEUROPSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, FIRST 60 MINUTES
96133 HH NEUROPSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, ADDITIONAL 60 MINUTES;PREFERRED PROVIDER
96138 PSYCHOLOGICAL OR NEUROPSYCHOLOGICAL TEST ADMINISTRATION AND SCORING BY TECHNICIAN, FIRST 30 MINUTES;
96133 NEUROPSYCHOLOGICAL TESTING EVALUATION BY QUALIFIED HEALTH CARE PROFESSIONAL, ADDITIONAL 60 MINUTES
96136 GT Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes; Telemedicine
96136 HH Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes; PREFERRED PROVIDER
96136 Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes
96137 HH Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; each additional 30 minutes; PREFERRED PROVIDER
96137 Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; each additional 30 minutes
96138 59 PSYCHOLOGICAL OR NEUROPSYCHOLOGICAL TEST ADMINISTRATION AND SCORING BY TECHNICIAN, FIRST 30 MINUTES; DISTINCT PROCEDURAL SERVICE
96139 59 PSYCHOLOGICAL OR NEUROPSYCHOLOGICAL TEST ADMINISTRATION AND SCORING BY TECHNICIAN, ADDITIONAL 30 MINUTES;DISTINCT PROCEDURAL SERVICE
96139 PSYCHOLOGICAL OR NEUROPSYCHOLOGICAL TEST ADMINISTRATION AND SCORING BY TECHNICIAN, ADDITIONAL 30 MINUTES;
97151-BEHAVIOR IDENTIFICATION ASSESSMENT BY QUALIFIED HEALTH CARE PROFESSIONAL, EACH 15 MINUTES
97151 GT -BEHAVIOR IDENTIFICATION ASSESSMENT BY QUALIFIED HEALTH CARE PROFESSIONAL, EACH 15 MINUTES; TELEHEALTH
T1023 Diagnostic Assessment
H0031 59 Mental Health assessment by provisionally licensed staff
T1023 GT Diagnostic Assessment; Telemedicine
YP830 Alcohol and/or Drug Assessment - non-licensed provider
90791 GT CR Psychiatric Diagnostic Evaluation(No Medical Services)
97152 -BEHAVIOR IDENTIFICATION ASSESSMENT BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL, EACH 15 MINUTES
97152 GT -BEHAVIOR IDENTIFICATION ASSESSMENT BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL, EACH 15 MINUTES; TELEHEALTH

Trillium Claims Service Categories

Psychotherapy
90832 59 Psychotherapy- 16-37minutes 59-distinct procedural services
90832 GT CR Psychotherapy 1637minutes
90832 GT TN Psychotherapy- 16-37minutes Interactive Telecommunications; Rural/outside providers customary service area
90832 Psychotherapy- 16-37minutes
90832 TM Psychotherapy- 16-37minutes-School Based Therapy
90833 GT Psychotherapy add on 16-37 min with E/M service listed separatelyGT Interactive Telecommunications
90834 CR Psychotherapy 3852 minutes
90832 KX Psychotherapy- 16-37minutes;Telephonic
90833 Psychotherapy add on 16-37 min with E/M service listed separately
90833 Q6 Psychotherapy add on 16-37 min with E/M service listed separately Q6 locum tenens for absence of a physician only
90834 Psychotherapy -38-52 minutes
90834 TM Psychotherapy -38-52 minutes School Based Therapy
90834 GT HK Psychotherapy -38-52 minutesGT Interactive Telecommunications TFCBT
90834 GT Psychotherapy -38-52 minutesGT Interactive Telecommunications
90834 GT TN Psychotherapy -38-52 minutesGT Interactive Telecommunications; Rural/outside providers customary service area
90834 KX- Psychotherapy 38-52 min; Telephonic
90836 Psychotherapy 38-52 minutes with E/M Service listed separately
90836 GT Psychotherapy 38-52 minutes with E/M Service listed separatelyGT Interactive Telecommunications
90837 59 Psychotherapy -53+minutes 59-distinct procedural services
90837 CR Psychotherapy 53+minutes
90837 GT TN Psychotherapy -53+minutes GT Interactive Telecommunications;Rural/outside providers customary service area
90837 GT HK Psychotherapy -53+minutes GT Interactive Telecommunications TFCBT
90837 GT Psychotherapy -53+minutes GT Interactive Telecommunications
90837 HK Psychotherapy -53+minutes TFCBT
90837 Psychotherapy -53+minutes
90837 XE Psychotherapy -53+minutes; Separate Encounter same date of service
90837 59 GT -Psychotherapy -53+minutes 59-distinct procedural services; Telehealth
90837 KX- Psychotherapy 53+ min;Telephonic

90837TM Psychotherapy -53+minutes School Based Therapy
90838 Psychotherapy add on 53+ mins with E/M service listed separately
90838 GT Psychotherapy add on 53+ mins with E/M service listed separately GT Interactive Telecommunications
90839 GT Psychotherapy for crisis first 30-74 minutes; Telemedicine
90839 KX- Psychotherapy for crisis first 30-74 minutes;Telephonic
90839 Psychotherapy for crisis first 30-74 minutes
90846 KX Family Therapy w/o patient; Telephonic
90840 Psychotherapy for crisis each additional 30 mins beyond initial 74 min
90840 GT Psychotherapy for crisis each additional 30 mins beyond initial 74 min; Telemedicine
90840 KX- Psychotherapy for crisis each additional 30 mins beyond initial 74 min;Telephonic
90846 GT Special Family Therapy w/o patient; Telemedicine
90846 CR Special Family Therapy w/o patient
90846 Special Family Therapy w/o patient
90846 TM Special Family Therapy w/o patient School Based Therapy
90847 Special Family Therapy w patient;
90847 GT Special Family Therapy w patient ;telemedicine
90847 GT CR Special Family Therapy w patient ;telemedicine
90847 XE Special Family Therapy w patient; Separate Encounter ; same date of service
90853 TM Special Group Therapy (non-multiple) School Based Therapy
90853 Special Group Therapy (non-multiple)
0914 Individual Therapy
0915 Group Therapy
H0004 - HQ - BH Counsel Group Setting
90832 GT Psychotherapy- 16-37minutes GT Interactive Telecommunications
90853 59- Special Group Therapy (non-multiple);DISTINCT PROCEDURAL SERVICE
90853 GT Special Group Therapy (non-multiple); Telehealth

Trillium Claims Service Categories

I/DD Specific Services
97153 ADAPTIVE BEHAVIOR TREATMENT BY PROTOCOL, ADMINISTERED BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL TO ONE PATIENT, EACH 15 MINUTES:
97153 GT-ADAPTIVE BEHAVIOR TREATMENT BY PROTOCOL, ADMINISTERED BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL TO ONE PATIENT, EACH 15 MINUTES; TELEHEALTH
97154-ADAPTIVE BEHAVIOR TREATMENT BY PROTOCOL, ADMINISTERED BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL TO MULTIPLE PATIENTS, EACH 15 MINUTES
97155-ADAPTIVE BEHAVIOR TREATMENT WITH PROTOCOL MODIFICATION ADMINISTERED BY QUALIFIED HEALTH CARE PROFESSIONAL TO ONE PATIENT, EACH 15 MINUTES
97155 GT-ADAPTIVE BEHAVIOR TREATMENT WITH PROTOCOL MODIFICATION ADMINISTERED BY QUALIFIED HEALTH CARE PROFESSIONAL TO ONE PATIENT, EACH 15 MINUTES;TELEHEALTH
97157-FAMILY ADAPTIVE BEHAVIOR TREATMENT GUIDANCE BY QUALIFIED HEALTH CARE PROFESSIONAL WITHOUT PATIENT PRESENT, EACH 15 MINUTES
97157 GT-FAMILY ADAPTIVE BEHAVIOR TREATMENT GUIDANCE BY QUALIFIED HEALTH CARE PROFESSIONAL WITHOUT PATIENT PRESENT, EACH 15 MINUTES; TELEHEALTH
97156 KX - FAMILY ADAPTIVE BEHAVIOR TREATMENT GUIDANCE BY QUALIFIED HEALTH CARE PROFESSIONAL (WITH OR WITHOUT PATIENT PRESENT), EACH 15 MINUTES;TELEPHONIC
97156 -FAMILY ADAPTIVE BEHAVIOR TREATMENT GUIDANCE BY QUALIFIED HEALTH CARE PROFESSIONAL (WITH OR WITHOUT PATIENT PRESENT), EACH 15 MINUTES;
97156 GT-FAMILY ADAPTIVE BEHAVIOR TREATMENT GUIDANCE BY QUALIFIED HEALTH CARE PROFESSIONAL (WITH OR WITHOUT PATIENT PRESENT), EACH 15 MINUTES;TELEHEALTH
H2023 U4- Supported Employment
H2023 Z1-IPS Milestone 1-Engagement
H2023 Z2-IPS Milestone 2 - Career Profile/Employment Plan
H2023 Z5-Milestone 5 - 90 Days of Employment
H2023 Z6-IPS Milestone 6 - Ongoing Follow-Along Supports
H2023-Individual Placement and Support(IPS)
H2023U3U4- I/DD Initial Supported Employment
H2025 Supported Employment
H2025 TS Supported Employment Long Term Follow Up
H2026 U4-I/DD Long Term Vocational Supports
H2026U3U4- I/DD Long Term Vocational Supports
T2012 U4 - Community Living and Supports-Community
T2012 - Community Living and Supports-Community
T2012 GC- Community Living and Supports-Live In Caregiver
T2012 GC U4- Community Living and Supports-Live In Caregiver-
T2012 HQ- Community Living and Supports-Community Group
T2012HQ U4- Community Living and Supports-Community Group;
T2013 In Home Skill Building - Individual
T2013 TF Community Living and Supports
T2013 TF HQ Community Living and Supports Group
T2013 TF HQ U4 Community Living and Supports Group

T2013 TF U4 Community Living and Supports
T2014CG Residential Supports Level 2 - AFL
T2016 U5 -Behavioral Health Crisis Assessment and Intervention Tier III
T2020CG Residential Supports Level 3 - AFL
T2016 U5 U1 Community Living Facilities and Support Level 1 In Lieu of Service
T2016 U5 U3 Community Living Facilities and Support
T2016 U5 U6 Community Living Facilities and Support
T2016 U5 U2 Community Living Facility and Supports Level 2
T2016 U6-Behavioral Health Crisis Assessment and Intervention Tier IV
T2016 U8-Behavioral Health Urgent Care (BHUC) Tier IV State Funded
T2020 Residential Supports Level 3
T2021 Day Supports-Individual
T2021HQ Day Supports-Group
T2033 Supported Living Level 1
T2033 TF Supported Living Level 3
T2041 U5- Family Navigator ILOS
T2041 Community Navigator
T2041U1 Community Navigator Training - Employer
YM590- Day Supports Group
YM846- Residential Supports Level 1 State Funded
YM851 U4- Community Living and Support Individual -State Funded- Summer Camp
YM851- Community Living and Support Individual -State Funded
YM852 U4- Community Living and Support Group- State Funded- Summer Camp
YP710 Supervised Living- Low
YM852- Community Living and Support Group- State Funded
YP720 Sup Living - Moderate
97153 XE-ADAPTIVE BEHAVIOR TREATMENT BY PROTOCOL, ADMINISTERED BY TECHNICIAN UNDER DIRECTION OF QUALIFIED HEALTH CARE PROFESSIONAL TO ONE PATIENT, EACH 15 MINUTES; Separate Encounter
T2033HI Supported Living Level 2
T2038 Community Transition Supports
YP760 - GROUP LIVING LOW
YP770 Group Living - Moderate
YP780 Group Living - High
YP620 ADVP-Adult Developmental Vocational Program
T1017 Targeted Case Management - DD
T1017HI Targeted Case Management - DD

Schools by ZIP code



Schools by Zip Code

28401

Lake Forest Academy
New Hanover High
Sunset Park Elementary
The International School at Gregory
Williston Middle
Wrightsboro Elementary

28405

A H Snipes Academy of Arts/Des
Career Readiness Academy at Mosley
PLC
Emma B Trask Middle
Emsley A Laney High
John J Blair Elementary
M C S Noble Middle
R Freeman Sch of Engineering

28403

College Park Elementary
Edwin A Alderman Elementary
Forest Hills Global Elementary
Isaac M Bear Early College High School
John T Hoggard High
Roland-Grise Middle
Winter Park Model Elementary

28409

Bradley Creek Elementary
Holly Tree Elementary
Masonboro Elementary
Myrtle Grove Middle



Schools by Zip Code

28411

Dr Hubert Eaton Sr Elem
Murrayville Elementary
Ogden Elementary
Porters Neck Elementary

28428

Carolina Beach Elementary

28429

Castle Hayne Elementary
Holly Shelter Middle
SEA-Tech
Wilmington Early College High

28412

Charles P Murray Middle
Dr John Codington Elem
Edwin A Anderson Elementary
Eugene Ashley High
Heyward C Bellamy Elem
J. C. Roe Center
Mary C Williams Elementary
Pine Valley Elementary

28480

Wrightsville Beach Elem

Key Stakeholder Interview List

Key Stakeholder Interview List

Better is Possible	Suprena Hickman, Executive Director
Blue Cross Blue Shield of North Carolina Foundation	Katie Eyes, Director; Shelia Reich, Youth Mental Health Director; Jenna Barnes, Youth/Mental Health/Early Childhood Director; Tiki Windley, Community Response and Engagement Director
Boys and Girls Club	Dawn-Michelle Blalock, Chief Executive Officer; Lisa Mondoro, Chief Operations Officer
Cape Fear Clinic	Dr. Kent Locklear
Cape Fear Collective	Tom Gomes, Associate Director of Strategic Partnership; Morgan Cooper, Director of Strategic Operations; Cara Stretch, CEO; Dante Haywood, Director of Data Science
Cape Fear Council of Governments	Holly Pilson, Area Agency on Aging; Andrea Stough, Homelessness Services, Continuum of Care
Cape Fear Health Net	Leslie Smiley, Executive Director
Cape Fear Memorial Foundation	Anna Erwin, President
Coastal Horizons	Margaret Stargell, President and Chief Executive Officer; Ryan Estes, Chief Operating Officer
Coastal Horizons	Jason Black, Adult Residential and Community Treatment Services Director; Rakhee Jethwa, Regional Adult Services Clinic Director
Coastal Horizons, WHAT Clinic	Cristen Williams, Regional Child and Family Services Clinical Director; Stephen Rieman, Intensive In-Home Services Manager; Rakhee Jethwa, Regional Adult Services Clinic Director
Communities in Schools	Louise Hicks; Mario Jeter
Community Care of the Lower Cape Fear	Angela Ives; Sarah Rideout
Community Counseling Center	Daniela Williams, Executive Director
Community Justice Center	Ben David
Dogwood Health Trust	April Bragg, Senior Program Officer; Channah VanRegenmorter, Program and Strategy Officer
Kate B. Reynolds Charitable Trust	Jason Baisden, Senior Program Officer; Madison Allen, Senior Program Officer for Health improvement

Key Stakeholder Interview List

Continued...

Keep Your Hands Off Me	Tracy Harrison
LINC	Frankie Roberts, Co-Director
LINC	Frankie Roberts, Co-Director; Michelle Gunn, Co-Director; LINC Residents (Listening Session)
Med North	Althea Johnson; Evie Nicklas
Navigational Studios	Malik Shabazz, Executive Director
New Hanover and Pender County District Attorney Office	Jason Smith, District Attorney
New Hanover Community Endowment	Leigh Quarles, Network Officer, Social and Health Equity; Mary Vail Ware, Director of Community Safety; Dr. David Stegall, Director of Education and Community Development; (Shannon Winslow) Board Chair; (Unknown) Board Member
New Hanover Community Endowment	Community Advisory Council (CAC)
New Hanover Community Endowment	Terri Burhans, Network Officer, Community Development
New Hanover County- Community Justice	Michelle Taylor
New Hanover County Government	Jennifer Rigby, Chief Strategy Officer
New Hanover County Government	Jennifer Rigby, Chief Strategy Officer; Eliza Baldwin
New Hanover County Government	Sean Dwyer, Program Manager, Adult Services
New Hanover County Government	Jonathan Campbell, Director, Public Health Jodi Walker, Manager, Clinical Therapy Services
New Hanover County Government	Rashad Gattison, Homeless Street Outreach
New Hanover County Government	Linda Thompson, Chief Civic Engagement Officer
New Hanover County Public Schools	Julie Varnam
New Hanover County Resiliency Task Force	J'vanete Skiba, Director
New Hanover County Senior Resource Center	Amber Smith
Novant Health	Dr. Lora Pacaldo, Clinical Physician Executive; Mary Williams, Operations Director; Dr. Edward Norris, Chief Novant Health Officer; Dr. Julia Triggs, Psychiatry Residency Director;

Key Stakeholder Interview List

Continued...

Novant Health	Dr. Lora Pacaldo, Clinical Physician Executive; Will Tobin, Nursing Director; Mary Williams, Operations Director; Paula Byrd, Vice President, Psychiatry Institute; Dr. Edward Norris, Chief Novant Health Officer; Lacy Jacobs, Director, Community Health and Wellness Primary Care; Nicholas Green, Clinic Administrator, Michael Jordan Clinics; Sarah Arthur, Director, Community Health and Engagement; Dr. Julia Triggs, Psychiatry Residency Director; Sarah Rivenbark, Manager, Mobile Integrated Health Program (Community Paramedics); Vanessa Van Gilder, Clinic Administrator, Pediatrics; Kristy Benfield, Manager, Medical Case Management; Zach Hockeram, Director, Emergency Services; Denise Rigobon, SANE Coordinator, Emergency Services; Laurie Whalin, President; Joshua Tucker, Vice President
Novant Health Care Management	Paula Byrd, VP, Nursing; Angela Carter, Systems Senior Director Acute Care Case Mgmt Teams; Meredith Rutledge, Manager of Case Management; Kristy Benfield, Manager of Case Management; Katrina King, VP, Nursing, System Case Management.
Port Health	Elizabeth Gaylord, Jade Knutson, Tristan Roberston
Pride in North Carolina	Jason Rutski, Chief Executive Officer
Quality Life Blueprint	Abdul Hafeedh bin Abdullah, Co-Founder and Executive Director
RHA	Joanna Wolozen, Behavioral Health Operations Director, Wilmington Office
Smart Start	Jane Morrow, Amy Cook, Family Services Manager
The Arc of North Carolina	Lisa Poteat, Chief Executive Officer; Kristy Myers, Director of Integrated Health
The Duke Endowment	Stacy Warren, Associate Director, Health Care; Lin Hollowell, Director of Health Care

Key Stakeholder Interview List *Continued...*

The Duke Endowment	Stacy Warren, Associate Director, Health Care; Lin Hollowell, Director of Health Care
The Healing Place	Brian Mingo
Tides	Debbie Leggett
Trauma Institute	Leigh Carter
Trillium Health Resources	Cecilia Peers
Trillium Health Resources	Cindy Ehlers; Senitria Goodman
UNC School of Pharmacy	Grace Marley, Clinical Pharmacist
United Way	Tommy Taylor
University of North Carolina, Wilmington	Brooke Nigro, NHHCP Project Director
University of North Carolina, Wilmington	Stacey Kolomer, Director, School of Social Work; Angie Vanderberg, Field Education Coordinator, School of Social Work; Dejah Terry, Assistant Education Coordinator, School of Social Work
Virginia Tech	Dr. Matthew Fullen, Faculty Researcher, Center for Gerontology Alexis Isaac, Graduate Student Researcher
Voyage	Genna Wirth, Executive Director
Wellness Without Walls	Buffy Andrews
Wilmington Chamber of Commerce	Steven Hill
Wilmington Chamber of Commerce	Steven Hill
Wilmington Chamber of Commerce	Various Community Behavioral Health Employers (Listening Session)
Wilmington Downtown, Inc.; and Block by Block	Jack Morris, Social Worker, Street Outreach Coordinator; Christina Haley, President, CEO; Zach Walsh, Downtown Business Outreach and Marketing Strategist.