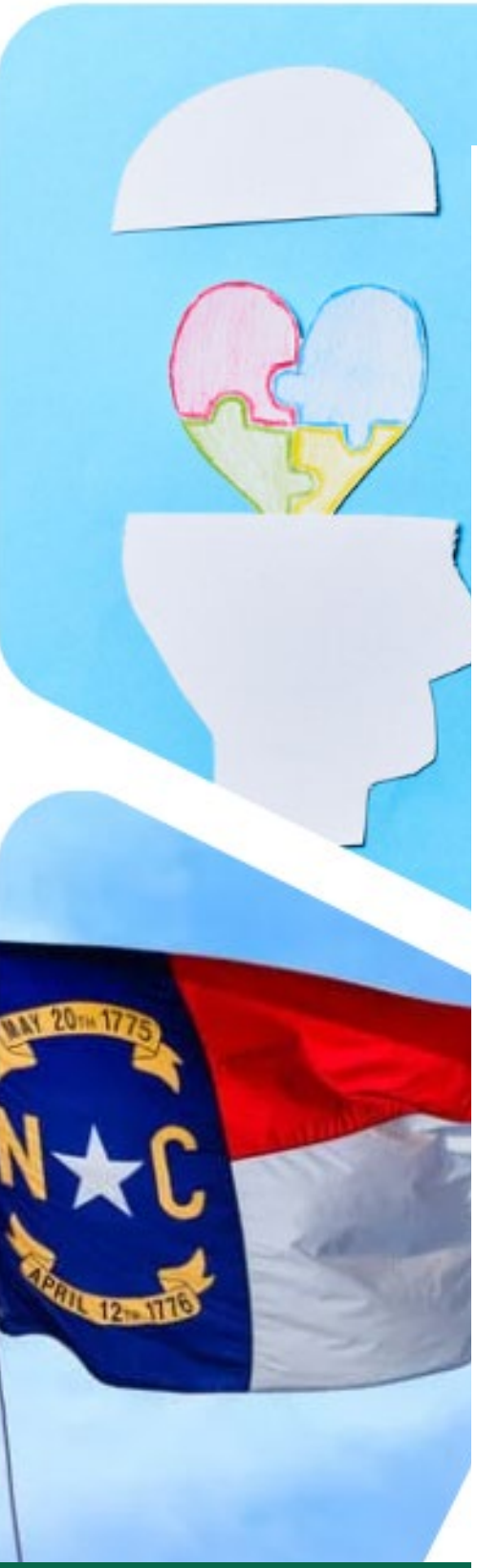

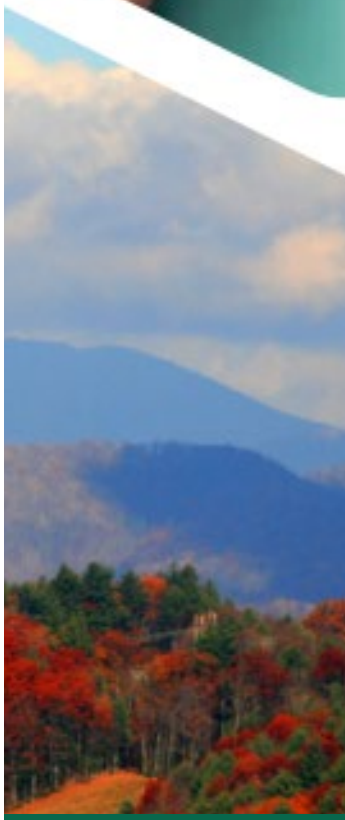

Rockingham County Behavioral Health Needs Assessment & Gaps Analysis

November

2023

About the Author

Crescendo Consulting Group is a woman-owned, Maine-based consulting firm specializing in community needs assessments and strategic plans for hospitals and health systems, health departments, FQHCs, CCBHCs, municipalities, community action agencies, area agencies for aging, and other non-profit organizations throughout the United States. **For more information please visit www.crescendocg.com.**

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Behavioral Health in America

Exacerbated by the social isolation, fears, and uncertainties of the recent COVID-19 pandemic coupled with behavioral health provider shortages and historic underfunding, the United States is facing a behavioral health crisis.

A 2022 KFF/CNN Mental Health in America Survey revealed that 90% of American adults think there is a mental health crisis in the United States with many agreeing that the opioid epidemic, mental health issues in youth, and severe mental illness are at crisis level.[1] According to the 2023 State of Mental Health in America published by Mental Health America, over 50 million Americans are experiencing a mental illness. Approximately 15% of adults had a substance use disorder in the past year and over 93% of them did not receive any form of treatment. [2]

The suicide rate, especially among persons of color, individuals of low-income, and younger people, has increased in several years. Over 5.5 million American adults with a mental health condition are uninsured. Of all adults with a mental health condition, 28% reported they were not able to receive the treatment they needed. The top reason was they could not afford the treatment.

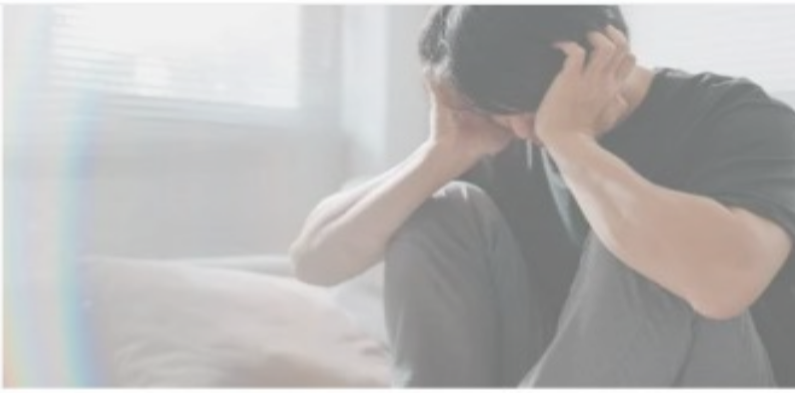
"There has been an increase in Oppositional Defiant Disorder in youth in general over the past few years, and acuity. We have a lot of difficulty getting a facility to accept them due to their behavior."

Youth Behavioral Health Provider

The United States is at a pivotal moment in history where addressing the behavioral health crisis in the country is paramount to the health and well-being of its residents and healthcare systems. Behavioral health care in America has historically been underfunded, underappreciated, and stigmatized, and the pandemic has exacerbated the unmet need for services and has led to heightened difficulties for individuals with behavioral health conditions in accessing care.

Over the past several years, Congress has enacted several significant laws designed to address the behavioral health care crisis, but many gaps remain today.

[1] KFF. KFF/CNN Mental Health in America Survey. https://www.kff.org/report-section/kff-cnn-mental-health-in-america-survey-findings/
[2] Mental Health America. 2023 State of Mental Health in America. https://mhanational.org/issues/state-mental-health-america



"If you are experiencing a mental health crisis, you will end up in a law enforcement vehicle and that's just wrong. It is traumatizing and causes stigma. It's the crime of having a mental health illness." – Community Member

History of Behavioral Health in North Carolina

In 1999, the United States Supreme Court held in *Olmstead v. L.C.* that *"unjustified segregation of persons with disabilities constitutes discrimination in violation of title II of the Americans with Disabilities Act."* [3] The federal decision required states to place people with mental health conditions in the least restrictive setting possible and in community settings rather than institutions. The *Olmstead* decision was just the start of a mental health reform across the United States.

North Carolina passed its mental health reform legislation, *An Act to Phase in Implementation of Mental Health System Reform*, in October 2001. Between 2001 and 2011, the number of persons served at the 14 inpatient facilities statewide declined from 17,000 to fewer than 6,000.[4] During the same 10-year period, the number of people served in community-based settings increased by 46%. To meet the growing demands in the community, a large network of private providers was built, but questions about provider quality became an issue.

The intent of the state mental health reform bill was to separate management functions from functions of providers of services for area programs providing community-based mental health services and to create local management entities (LMEs) with strong connections to county government. Prior to the 2001 legislation, these programs were called area mental health authorities and provided direct services and served as both the providers and payors. As they are programs changed in LMEs, they shredded their direct services and became local entities that manage both providers and public funds for local consumers.

Due to questions about provider quality, in 2009, the North Carolina Department of Health and Human Services created a new provider classification for mental health services called Critical Access Behavioral Health Agencies (CABHAs), which provide both mental health and substance use services. Soon after, the state implemented a new funding model – a federal Medicaid waiver – which allows states to operate programs outside normal Medicaid guidelines. The new model, which greatly impacted behavioral health services in the state, shifted from a fee-for-service model to a capitated model. Today, North Carolina has six remaining LME-MCOs down from the 39 area authorities in 2001.[5]

Over time, many LMEs began to merge and create large regional LMEs to help reduce administrative overlap and help cut costs. The former secretary of DHHS, Lanier Cansler, told

[3] ADA. Olmstead: Community Integration for Everyone. https://archive.ada.gov/olmstead/olmstead_about.htm
[4] North Carolina Insight. North Carolina's Mental Health System: Where We Have Been, Where We Are, and Where We Are Headed. https://nccppr.org/wp-content/uploads/2017/02/ncs_mental_health_system_where_we_have_been_where_we_are_and_where_we_are_headed.pdf
[5] NCDHHS LME-MCO Directory. https://www.ncdhhs.gov/providers/lme-mco-directory

the Carolina Public Press, *"The implementation ended up not being very good, so we lost a lot of services in some areas."*[6]

Unfortunately, the greatest impacts were felt mostly in the rural counties of the state. Shifting from a local to regional system of care also impacted many consumers of care as navigating providers and services became more difficult, which is evident today. On November 1, 2023, Rockingham County Health and Human Services received a Secretarial Directive from Secretary Kody Kinsley outlining the future reduction of LME/MCOs in North Carolina. The catchment areas of Sandhills Center, Eastpoint, and Trillium Health Resources will be combined with the exception of three counties, including Rockingham County. Rockingham County will align with Vaya Health. As of publication of this report, no additional information on the process is available.

On March 27th, 2023, Governor Roy Cooper signed Medicaid expansion into North Carolina law becoming the 40th state to expand Medicaid. The expansion is expected to provide health coverage to approximately 600,000 residents across the state (5,846 additional people in Rockingham County[7]), including many people with behavioral health conditions. The North Carolina Department of Health and Human Services is expected to start the implementation process of Medicaid expansion on December 1st, 2023, however, due to budget negotiations and other factors, the implementation may be delayed. [8]

With Medicaid expansion, North Carolina is set to receive federal incentives from the Biden Administration. Prior to Governor Cooper signing Medicaid expansion into law, he announced his plan to invest over one billion in behavioral health initiatives across the state largely paid for with the federal incentives.[9] However, with the Medicaid expansion rollout delay, North Carolina is at risk of losing millions of dollars of these incentives.

The future of North Carolina's behavioral health system is largely unknown, but its past is full of endless series of changes in policy, funding levels, and leadership. This report on Rockingham County will describe the current system and its impact on the local community. As evidenced by the data in the report, the system is failing its most vulnerable residents. System-level changes need to occur to create healthy communities for all residents in Rockingham County and North Carolina.

[6] Jessica Coates. Carolina Public Press. Navigating the Cyclone: 21st Century NC Mental Health Policy. https://carolinapublicpress.org/25478/navigating-cyclone-nc-mental-health/

[7] Care4Carolina. North Carolina County Level Data. https://care4carolina.com/resources/county-data-sheets/

[8] NCDHHS. State Takes Action to Start Medicaid Expansion Oct. 1. https://www.ncdhhs.gov/news/press-releases/2023/07/26/state-takes-action-start-medicaid-expansion-oct-1-launch-depends-general-assembly-acting-sept-1

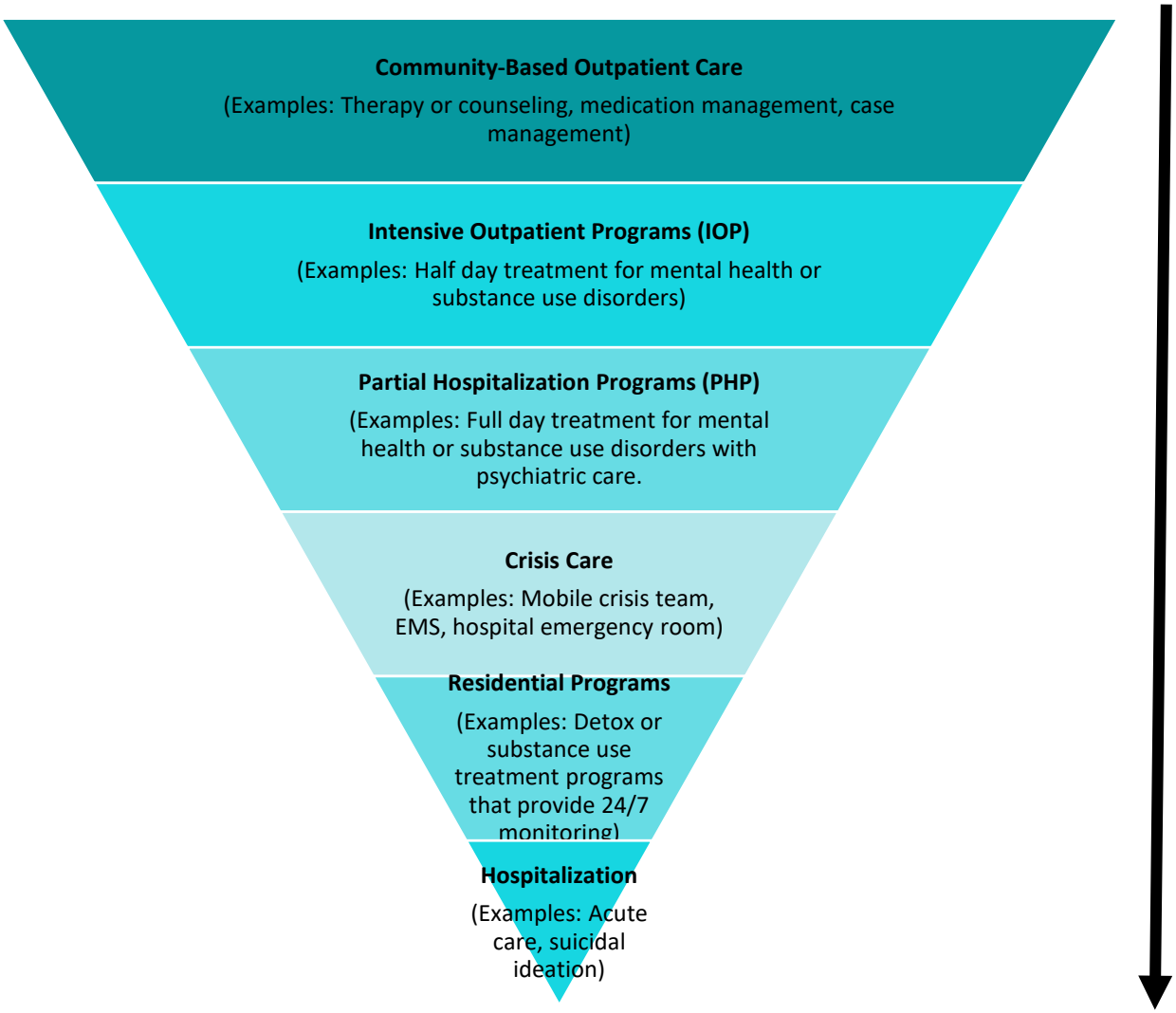
[9] Governor Cooper Releases Roadmap for $1 Billion in Behavioral Health and Resilience Investments. https://governor.nc.gov/news/press-releases/2023/03/08/governor-cooper-releases-roadmap-1-billion-behavioral-health-and-resilience-investments

Behavioral Health System Continuum of Care Model

In theory, there is an ideal continuum of care model for behavioral health, but it varies due to state regulations and an individual's diagnosis and needs. In a perfect world, the behavioral health system would include both inpatient, outpatient, and crisis services for both adults and children. The image below describes the ideal continuum of care organized by the level of care that most patients need based on the acuity of their behavioral health conditions.[10]

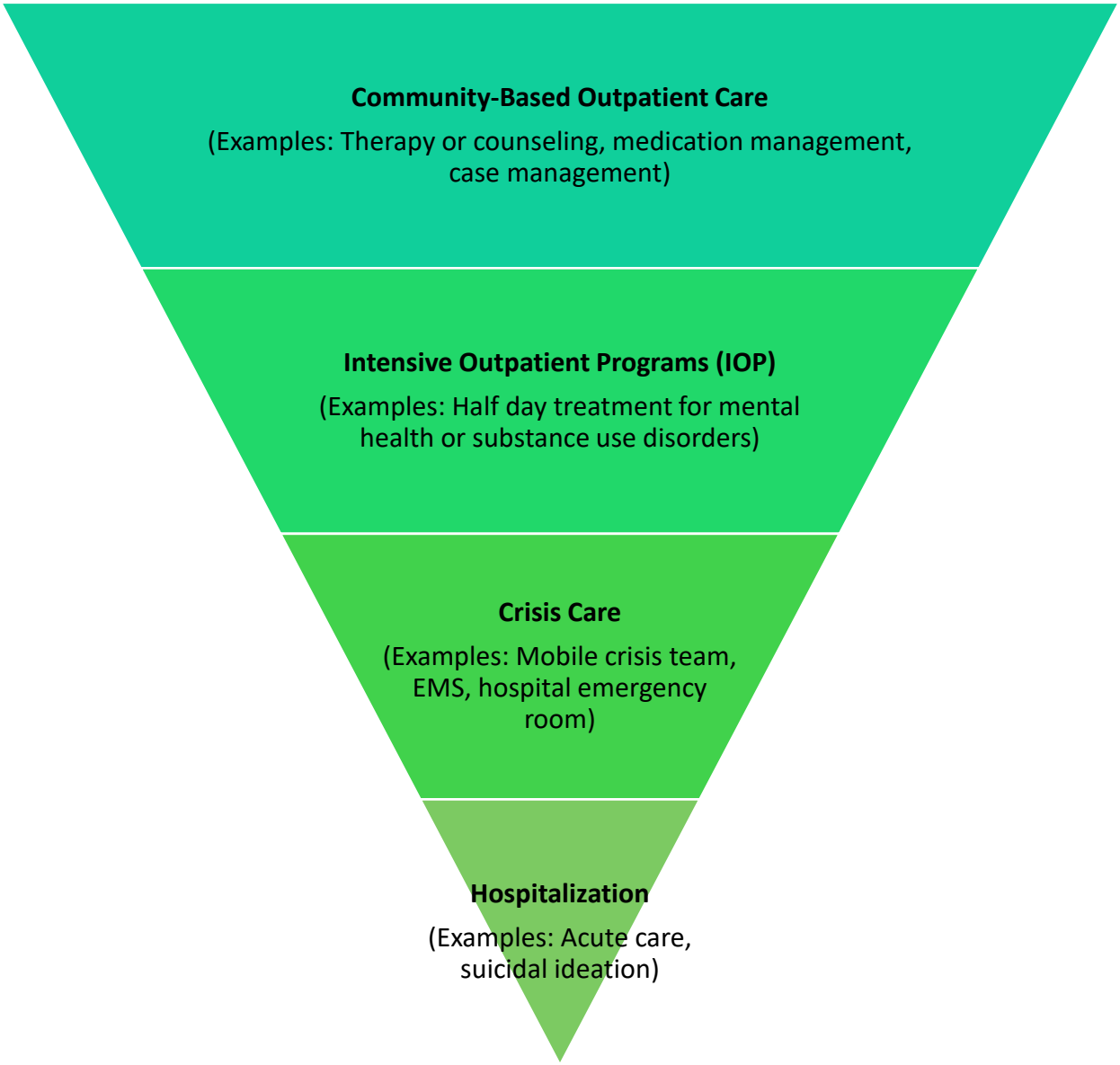
Not every community will have all levels of care in the continuum of care, but there should be services and providers in nearby communities, especially the higher level of care such as residential and hospitalization programs.

Exhibit 1: Ideal Behavioral Health Continuum of Care Model



[10] AACAP. Continuum of Mental Health Care. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/The-Continuum-Of-Care-For-Children-And-Adolescents-042.aspx

Exhibit 2: Current Rockingham County Continuum of Care Model



About the Assessment

Like national trends, Rockingham County, North Carolina is witnessing an increased demand for behavioral health services. In 2023, the Rockingham County Department of Health and Human Services (RCDHHS), Reidsville Area Foundation (RAF), Sandhill Center, and other community partners agreed that an assessment of the current system, as well as the impacts of COVID-19, is needed for the county. RCDHHS, in partnership with Reidsville Area Foundation, previously conducted a behavioral health services assessment in 2013. RCDHHS was largely able to implement all the recommendations from the 2013 assessment. However, the COVID-19 pandemic interrupted efforts and exacerbated an already strained system.

RCDHHS hired Crescendo Consulting Group, LLC to conduct the 2023 Behavioral Health Needs Assessment and Gaps Analysis.

Partners

The Rockingham County Behavioral Health Needs Assessment and Gaps Analysis was conducted in partnership with community partners across the county who participated in the research process in various ways.

Rockingham County Department of Health and Human Services (RCDHHS)	Youth Haven Services
Rockingham County Sheriff's Office	REMMSCO, Inc. Recovery Homes
Rockingham County Emergency Medical Services	Aging Disability & Transit Services of Rockingham County
Rockingham County Youth Services	Help, Incorporated: Center Against Violence
Rockingham County District Court, Officials District Attorney, Clerk, and Judges	Rockingham County Board of Commissioners
Sandhills Center LME-MCO	Daymark Recovery Services
Cone Health, Annie Penn Hospital	UNC Health Rockingham
Reidsville Area Foundation	Compassion Health Care, Inc.
Rockingham County School District	

Methodology

Between March 2023 and September 2023, Crescendo Consulting Group worked in collaboration with RCDHHS and community partners to implement a mixed methodology approach consisting of a combination of quantitative and qualitative research methods designed to evaluate the perspectives and opinions of community residents and providers, especially those from underserved and underrepresented populations. **The major sections of the methodology include the following:**

Stage 1: Environmental Analysis	**Purpose:** Organizational Profile of Rockingham County **Method:** Secondary Population Research, Service Use Data, Resource Guide & Mapping
Stage 2: Needs Assessment & Stakeholder Input	**Purpose:** Comprehensive Community-based Research **Methods:** Community Stakeholder Interviews, Focus Group Discussions, Community Survey & Access Audit
Stage 3: Prioritization & Reporting	**Purpose**: Prioritize Identified Community Needs **Methods:** Needs Prioritization, Reporting of Results, Strategy & Recommendations

Secondary Research Analysis provides critical insight into Rockingham County demographics, social determinants of health, and behavioral health-related measures, among many others.

Qualitative Research includes 25 one-on-one stakeholder interviews as well as 30 on-site and virtual focus group discussions.

A Community Survey was conducted via SurveyMonkey to evaluate and address behavioral health and other needs, gaps, and resources in the community. The survey included high-level themes that emerged from secondary research analysis, qualitative research, and other research activities. Over 600 responses were collected.

An Access Audit provided insights into access to care barriers and challenges experienced by county residents when accessing behavioral health providers, services, and resources.

The Needs Prioritization Process was held virtually with the project leadership and Crescendo to review the identified needs and prioritize the identified needs based on RCDHHS and community partner capacity and degree of control.

How to Read This Report

The following report contains quantitative and qualitative summary findings of behavioral health-related needs in Rockingham County. The main body of the report contains key secondary data findings, summary-level findings from the stakeholder interviews and focus groups, analysis of local deidentified service use data, and analysis of community survey data. Additional secondary data, access audit, and other data is located in the appendix of this report.

Built on the quantitative and qualitative findings, strategies and recommendations founded on evidence-based best practices and peer-reviewed literature are identified as possible strategies and solutions to improve overall access and capacity challenges for behavioral health services in Rockingham County. It is important to note that some strategies and recommendations may be difficult to implement in Rockingham County due to barriers such as state legislature and limited funding.

Research Bias

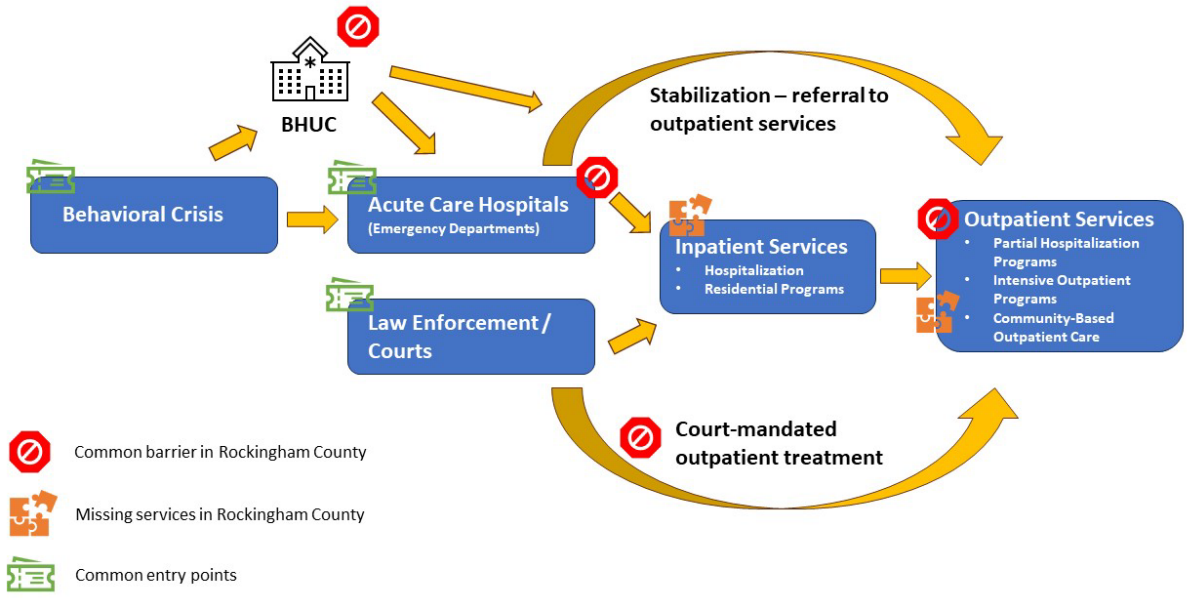
It is important to acknowledge that due to the methodology used in community-based participatory research that there may be some level of research bias. The research conducted was done voluntarily and participants had to opt-in to participate in stakeholder interviews, focus groups, and the community survey. There is likely some participant bias where participants might respond to the questions based on what they think is the right answer or what is socially acceptable rather than what they really feel.

"We have pediatric patients with mental health conditions that spend an average of three to four weeks in our Emergency Department. We have two right now and one has been here for over 100 days. The problem is statewide, but we feel it locally. About a third of our ED beds are always full of behavioral health patients." – Healthcare Provider

Understanding the Current System

The behavioral health system of care is a complex system with multiple components, entry, and exit points. While there is not necessarily a "correct" or "wrong" system of care for behavioral health, the below diagrams provide a high-level view of a typical behavioral health system for adults and youth with commonly identified barriers and missing services identified throughout the research in Rockingham County.

Exhibit 3: Ideal Behavioral Health System for Adults

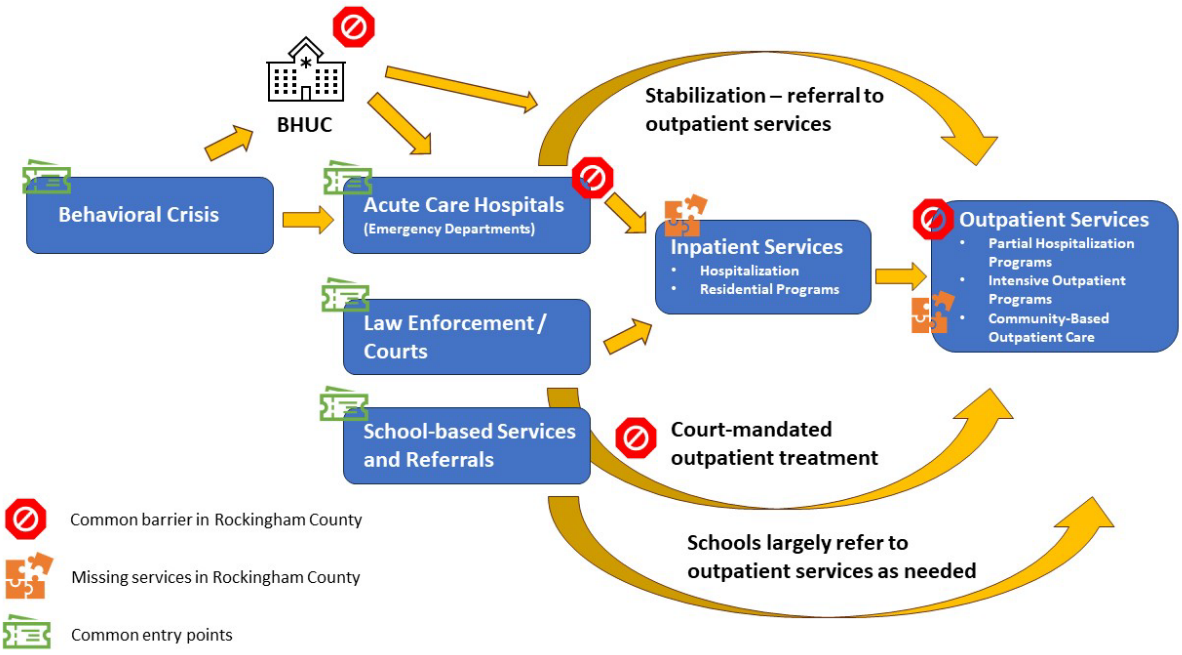


In the ideal behavioral health system for adults, high acuity patients typically enter care through a behavioral health crisis (i.e., emergency medical services), acute care hospital emergency department (ED), law enforcement, or court. For lower acuity persons with behavioral health conditions, such as generalized anxiety or depression, they may enter care through outpatient services or primary care. Like other North Carolina counties, Rockingham County is considering implementing a behavioral health urgent care (BHUC) model that will help divert people in a behavioral health crisis from the EDs to the BHUCs. There are many barriers to access to care in Rockingham County, however, it is important to note that many of the barriers are not unique to Rockingham County residents.

Common barriers include,

- Limited outpatient services and inpatient psychiatric beds to refer patients to after stabilization in the hospital ED or BHUCs, especially for youth.
- A national behavioral health workforce shortage, which limits the number of new patients a provider can accept and wait times can be weeks to months out.
- Rockingham County has limited behavioral health treatment services for people in the criminal justice system.

Exhibit 4: Ideal Behavioral Health System for Youth



The behavioral health system for youth is largely the same for adults with the addition of school-based services. School-aged youth may receive assessments and services within the school system. Rockingham County schools have an exceptional behavioral health program. However, school-based providers struggle finding adequate outpatient referrals for children in the community as there are not enough providers who specialize in youth and adolescences in Rockingham County. Additionally, Rockingham County has a substantial charter, private school, and home school population who are not eligible for in-county services.

While Rockingham County has many pieces of the behavioral health system, workforce shortages, limited funding, and limited capacity and resources are the three primary barriers that have created bottlenecks in the system.

Secondary Research

Research analysis provides an essential framework from which to better understand the fabric of the community. Secondary research highlights sociodemographic factors, social determinants of health, behavioral health risk factors, and other key indicators to further guide the development of effective strategies to meet evolving needs.

The secondary data highlighted in the following section are the key high-level summary findings. Additional secondary data tables are located in the report appendix.

Data Limitations

It is important to note that the COVID-19 pandemic has led to many data release delays at both a federal and state levels. In many instances, the most recently available data may be several years old. The true impact of the COVID-19 pandemic has yet to be reflected in the secondary data, but as the data is released publicly, it is important to analyze new data for any trends.

About the Data

Data gathered from the United States Census Bureau 2017-2021 American Community Survey (ACS) incorporated five-year data compared to one-year data. The United States Census Bureau American Community Survey Five-year estimates versus one-year estimates are intentionally utilized for this needs assessment as the five-year estimates represent data collected over some time and provide a more accurate estimate of the measures, especially among vulnerable populations or subgroups compared to one-year estimates. For example, one-year data for a particular sub-population may have too small of a sample size to produce notable data points, however, the five-year average will have enough observations to make an accurate, more reliable data point.

Since 2011, the U.S. Centers for Disease Control and Prevention (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) has created a database using 16 U.S. Census Bureau measures to help "emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event.[11]" This database is known as the Social Vulnerability Index (SVI). The SVI measures in this report are used to identify potential socially vulnerable populations within a larger population. Socially vulnerable populations typically include people with disabilities, older adults, and people without vehicles.

Social Vulnerability refers to the resilience of communities (the ability to survive and thrive) when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss.

The following three tables identify that almost one in five residents are Rockingham County live below the federal poverty line. Households below the federal poverty line may have limited resources and tools to access services, especially in a crisis.

[11] CDC ATSDR. Social Vulnerability Index (SVI). https://www.atsdr.cdc.gov/placeandhealth/svi/fact_sheet/fact_sheet.html

Exhibit 5: Social Vulnerability Index (SVI), Socioeconomic Status

	United States	North Carolina	Rockingham County
Total Population	329,725,481	10,367,022	90,903
Living in Poverty	12.6%	13.7%	18.2%
Unemployed (Age 16 and over)	3.5%	3.3%	3.8%
Unemployment Rate	5.5%	5.3%	6.7%
No High School Diploma	11.1%	10.9%	16.3%
Median Household Income	$69,021	$60,516	$46,993
Uninsured	8.8%	10.7%	9.8%
Cost-burdened Households[12]	30.3%	27.2%	24.4%
Ethnic/Racial Minority	40.6%	37.9%	28.5%
Limited or No English Proficiency	8.2%	4.5%	2.3%
Foreign-born[13]	6.6%	4.8%	2.5%
Living with a Disability	12.6%	13.2%	16.8%
65 and Over	16.0%	16.3%	20.4%
Under 18	22.5%	22.2%	20.4%
Single-parent Households	25.1%	28.3%	31.9%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[12] This dataset represents the count of occupied housing units whose selected monthly costs as a percentage of household income is greater than 30 percent.
[13] Not a U.S. citizen.

Exhibit 6: Social Vulnerability Index (SVI), Socioeconomic Status, (continued)

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Total Population	14,463	15,317	2,655	2,244	1,174	2,428
Living in Poverty	28.5%	19.8%	15.6%	11.8%	20.6%	21.2%
Unemployed (Age 16 and over)	4.6%	4.5%	3.1%	2.0%	6.4%	7.7%
Unemployment Rate	9.3%	7.8%	6.2%	3.7%	9.9%	14.5%
No High School Diploma	19.9%	16.1%	17.0%	15.6%	17.2%	21.5%
Median Household Income	$34,221	$41,746	$64,596	$45,160	$48,125	$31,546
Uninsured	9.6%	7.6%	7.2%	12.1%	4.9%	12.4%
Cost-burdened Households[14]	38.5%	30.7%	14.5%	23.0%	17.3%	26.5%
Ethnic/Racial Minority	48.0%	38.6%	30.3%	33.4%	25.5%	24.1%
Limited or No English Proficiency	1.9%	1.7%	0.9%	4.7%	2.5%	5.0%
Foreign-born[15]	1.9%	2.7%	1.5%	5.3%	2.0%	2.5%
Living with a Disability	20.2%	20.4%	15.0%	19.4%	18.6%	23.1%
65 and Over	22.9%	18.8%	18.9%	22.1%	15.8%	23.9%
Under 18	20.9%	23.0%	17.3%	14.1%	23.8%	18.1%
Single-parent Households	52.9%	40.5%	10.9%	26.3%	46.2%	44.9%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[14] This dataset represents the count of occupied housing units whose selected monthly costs as a percentage of household income is greater than 30 percent.
[15] Not a U.S. citizen.

Demographics

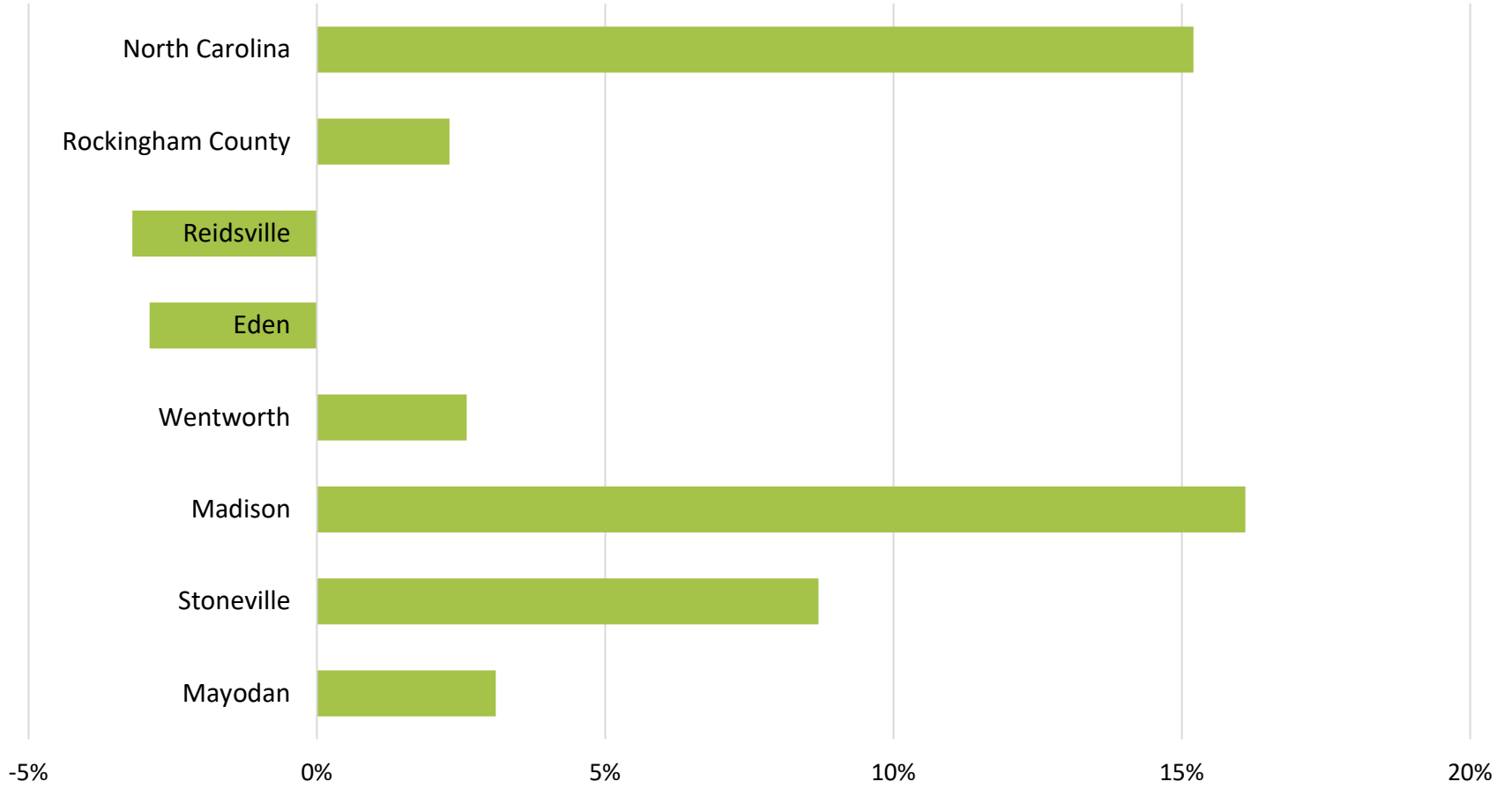
Rockingham County is home to approximately 91,000 residents with Reidsville and Eden being the most populous municipalities in the county. Over the next 10 years, Rockingham County is estimated to grow by 2.3%. Population growth, especially in a rural community, may lead to an increased need for resources and services in a community with already limited resources and services.

Exhibit 7: Projected Population, 2010 to 2031

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
2023	363,255,837	11,944,593	92,970	13,995	14,878	2,723	1,933	1,276	2,503
2021	329,725,481	10,367,022	90,903	14,463	15,317	2,655	2,244	1,174	2,428
2010	308,745,538	9,535,483	93,622	14,387	15,862	2,780	2,222	1,409	2,555

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 8: Projected Percent Change in Population, 2021-2031



United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
+10.2%	+15.2%	+2.3%	-3.2%	-2.9%	+2.6%	+16.1%	+8.7%	+3.1%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Compared to North Carolina, Rockingham County is an older community with a median age of 44.9. Approximately one in five residents of Rockingham County are 65 and older over with the highest percentage in Mayodan (23.9%), Reidsville (22.9%), and Madison (22.1%). As people age, their service and resource needs to change, especially with health care, income, housing, and transportation. Approximately 82% of older adults have at least one chronic disease that requires ongoing care and management and older adults with one chronic condition will visit an average of eight physicians a year.[16]

Additionally, vulnerability to mental health conditions tends to increase with age as older adults begin to experience stressful events, such as declines in their health and wellness, and loss of loved ones. It is estimated that approximately 20% of adults aged 55 or older have at least one mental health condition with the most common being anxiety disorders, severe cognitive impairment, and mood disorders.[17]

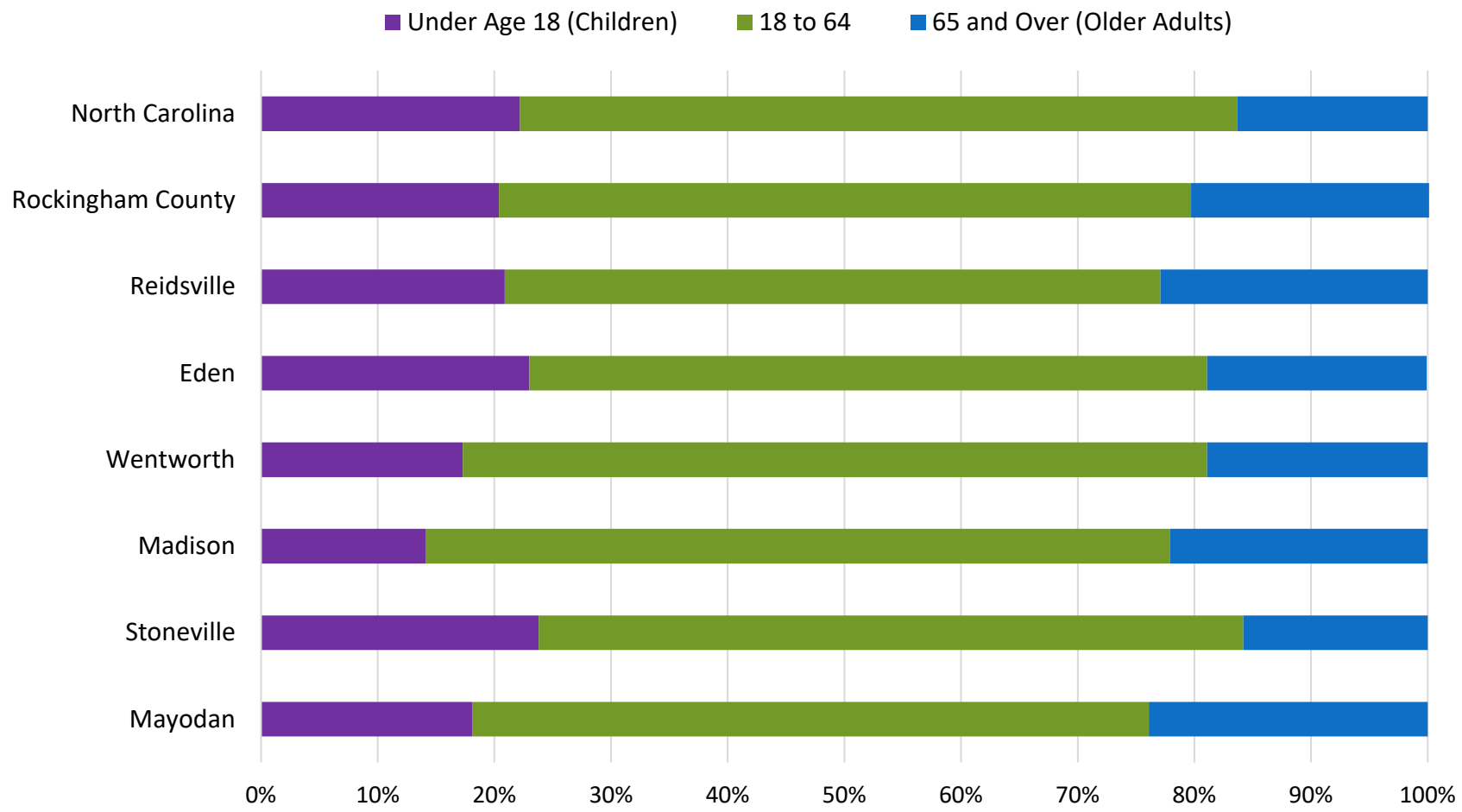
In addition to older adults, youth (under age 18) also may have unique resource and service needs. Hardships at an early age can have lifelong negative health effects. Severe or chronic stress during childhood can alter brain development and affect how children respond to stress. These experiences, known as Adverse Childhood Experiences (ACEs), are linked to health risk behaviors, such as smoking and heavy drinking and chronic health conditions such as depression, asthma, heart disease, and obesity in adulthood.[18]

Exhibit 9: Population by Age

	U.S.	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Median Age	38.4	39.0	44.9	45.4	40.2	44.3	50.3	38.1	50.5
Under Age 18	22.5%	22.2%	20.4%	20.9%	23.0%	17.3%	14.1%	23.8%	18.1%
18 to 64	61.4%	61.5%	59.3%	56.2%	58.1%	63.8%	63.8%	60.4%	58.0%
65 and Older	16.0%	16.3%	20.4%	22.9%	18.8%	18.9%	22.1%	15.8%	23.9%

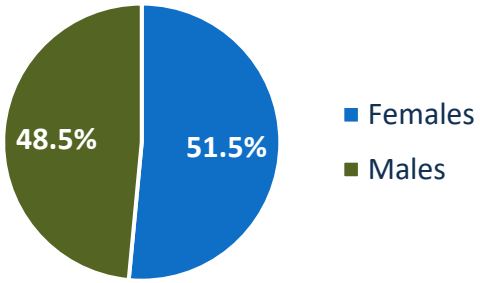
[16] Institute of Medicine (US) Committee on the Future Health Care Workforce for Older Americans. Retooling for an Aging America: Building the Health Care Workforce. Washington (DC): National Academies Press (US); 2008. 2, Health Status and Health Care Service Utilization. Available from: https://www.ncbi.nlm.nih.gov/books/NBK215400/
[17] Ibid.
[18] CDC. Adverse Childhood Experiences (ACEs). https://www.cdc.gov/policy/polaris/healthtopics/ace/index.html

Exhibit 10: Population by Age Group



Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 11: Rockingham County, Gender



Rockingham County is a predominantly White community with pockets of diversity in several municipalities. Reidsville is the most diverse with 38.5% of residents identifying as Black or African American followed by Eden (27.9%), and Madison (21.7%). Mayodan is home to the largest Asian population (5.2%). The highest percentage of Hispanic residents live in Stoneville and Wentworth. Rockingham County has slightly more (51.5%) females than males (48.5%).

Exhibit 12: Population by Race[19]

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
White	68.2%	66.2%	73.7%	52.1%	62.6%	70.1%	68.0%	82.1%	79.1%
Black or African American	12.6%	21.2%	18.4%	38.5%	27.9%	20.1%	21.7%	8.1%	12.6%
Asian	5.7%	3.0%	0.7%	0.3%	1.3%	0.0%	0.0%	0.8%	5.2%
American Indian and Alaska Native	0.8%	1.1%	0.4%	0.0%	1.5%	0.0%	0.1%	0.0%	0.0%
Native Hawaiian and Other Pacific Islander	0.2%	0.1%	0.1%	0.3%	0.3%	0.2%	0.0%	0.0%	0.0%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[19] People who responded to the question on race by indicating only one race are referred to as the race alone population, or the group who reported only one race. For example, respondents who reported a single detailed Asian group, such as "Asian Indian," would be included in the Asian alone population. Respondents who reported more than one detailed Asian group, such as "Asian Indian" and "Korean" would also be included in the Asian alone population. This is because the detailed groups in the example combination are part of the larger Asian race category. U.S. Census Bureau Glossary, “Race alone”

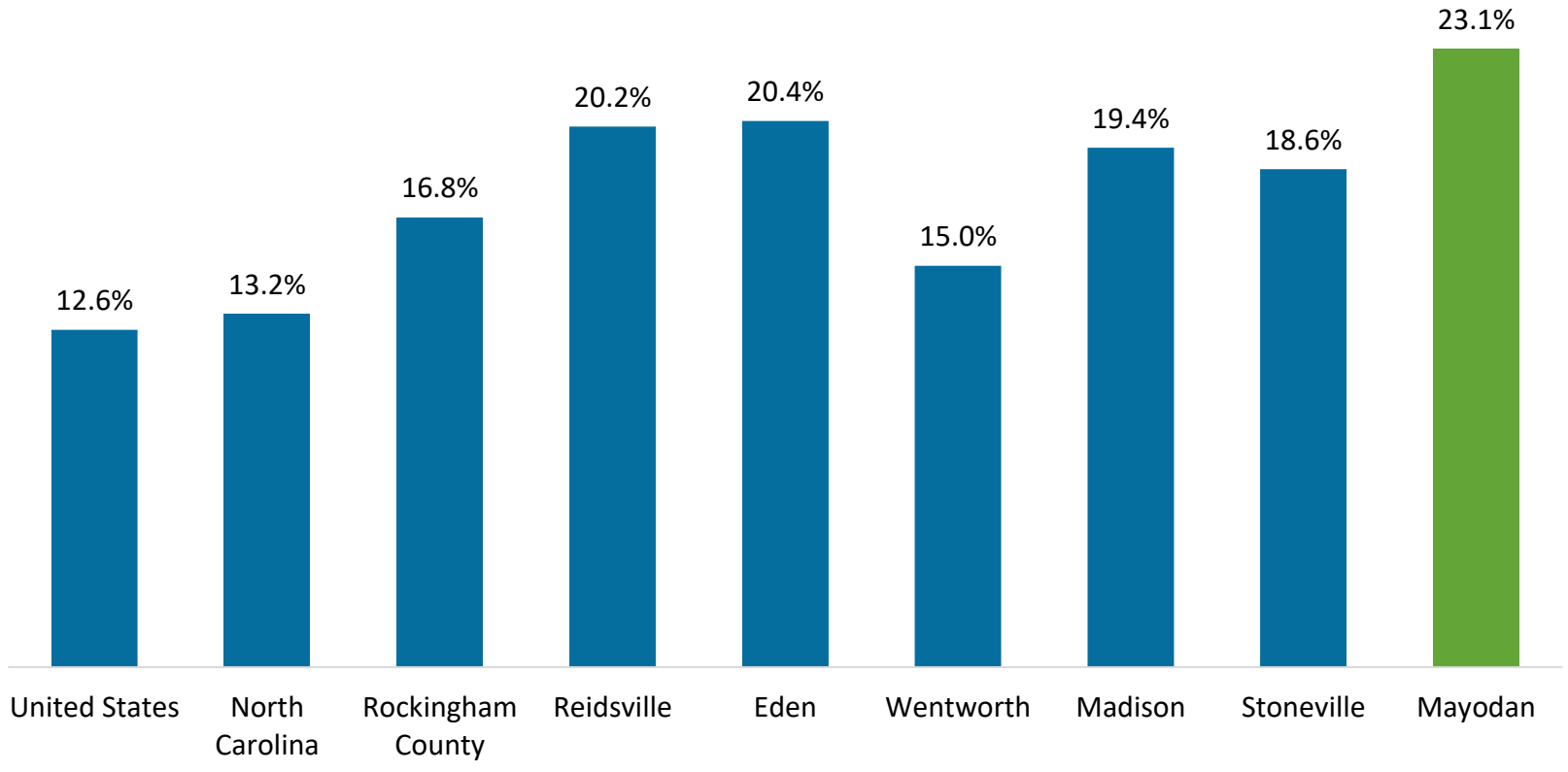
Exhibit 13: Population by Ethnicity

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Hispanic	18.4%	9.8%	6.3%	4.2%	6.7%	7.4%	10.0%	10.1%	3.3%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

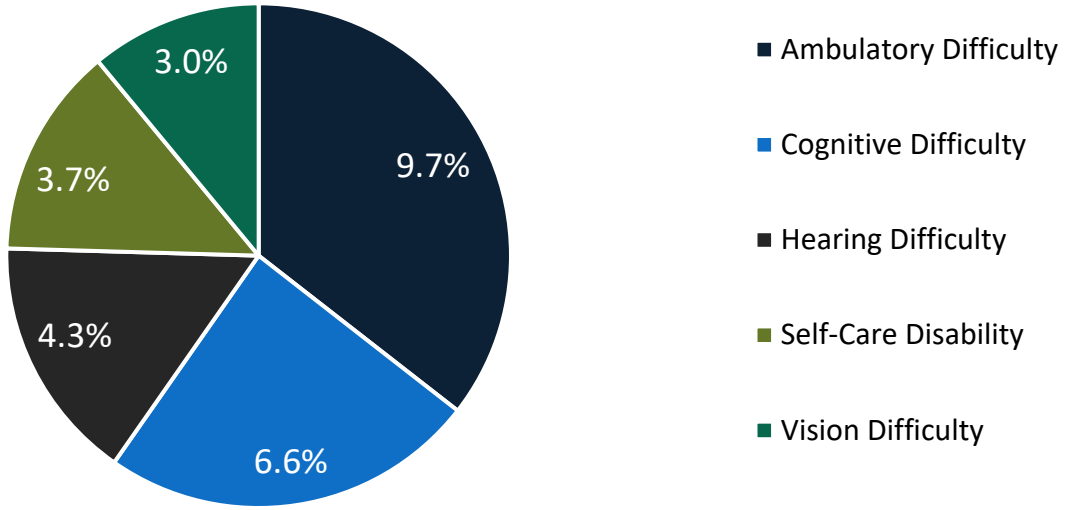
Approximately one in six Rockingham County residents are living with a disability. The number is higher in Mayodan (approximately one in four), and Reidsville and Eden (approximately one in five). Of the 16.8% of the population in Rockingham County with a disability, ambulatory difficulty (9.7%) and cognitive difficulty (6.6%) are the most common disabilities. This is likely due to approximately one in five residents in Rockingham County being 65 or older. Adults are more likely to develop a disability as they age.

Exhibit 14: Population Living with a Disability[20]



These functional limitations are supplemented by questions about difficulties with selected activities from the Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales, namely difficulty bathing and dressing, and difficulty performing errands such as shopping. Overall, the ACS attempts to capture six aspects of disability: (hearing, vision, cognitive, ambulatory, self-care, and independent living); which can be used together to create an overall disability measure, or independently to identify populations with specific disability types."

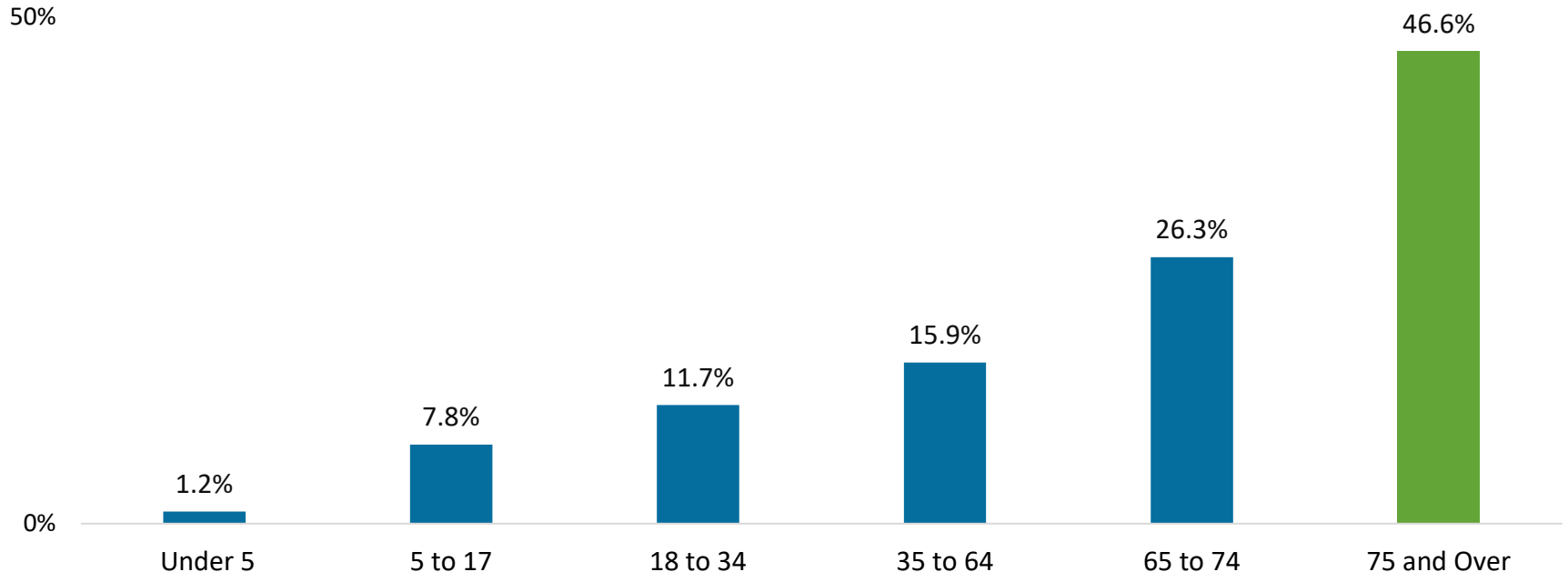
Exhibit 15: Population Living with a Disability, by Type



	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Population Living with a Disability	12.6%	13.2%	16.8%	20.2%	20.4%	15.0%	19.4%	18.6%	23.1%
Ambulatory Difficulty	6.3%	6.8%	9.7%	11.9%	12.0%	8.7%	11.0%	10.7%	11.4%
Cognitive Difficulty	4.8%	5.0%	6.6%	8.8%	9.3%	3.6%	5.9%	8.2%	12.5%
Hearing Difficulty	3.5%	3.7%	4.3%	4.7%	5.6%	2.6%	5.6%	5.5%	5.9%
Self-Care Disability	2.4%	2.5%	3.7%	4.6%	4.7%	1.7%	4.5%	6.5%	2.9%
Vision Difficulty	2.3%	2.5%	3.0%	3.0%	4.8%	3.5%	1.0%	3.6%	4.9%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 16: Population Living with a Disability by Age Group, Rockingham County



	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Age Under 5	0.7%	0.7%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Age 5 to 17	5.7%	5.7%	7.8%	9.0%	5.8%	11.5%	6.9%	23.7%	28.4%
Age 18 to 34	6.8%	6.7%	11.7%	20.9%	13.3%	9.2%	9.4%	10.9%	5.7%
Age 35 to 64	12.4%	13.5%	15.9%	17.9%	22.8%	11.7%	21.3%	12.8%	18.8%
Age 65 to 74	24.1%	25.2%	26.3%	27.1%	42.0%	30.2%	21.1%	45.9%	50.2%
Age 75 and Over	47.4%	47.9%	46.6%	45.8%	45.4%	32.3%	46.3%	60.0%	41.3%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 17: Children Living with a Disability

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Children 17 and Under	74,173,024	2,281,635	20,784	3,117	3,592	567	452	320	533
Children Under 18 with a Disability	4.4%	4.4%	5.5%	6.3%	4.2%	8.5%	3.5%	11.3%	17.1%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Social Determinants of Health

Select measures are found in the main report while additional data measures are found in the appendix.

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship, and grow older. These conditions contribute to wide health disparities and inequities. For example, people who don't have access to grocery stores with healthy foods are less likely to have good nutrition. That raises their risk of health conditions like heart disease, diabetes, and obesity, and even lowers life expectancy relative to people who do have access to healthy foods.

The result of the health barriers caused by social determinants are health disparities. Health disparities refer to the preventable differences that disadvantaged groups face in attaining optimal health outcomes. The SDoH across demographic, economic, neighborhood, and sociocultural characteristics cause significant variations in mortality, life expectancy, and mental illness between populations.

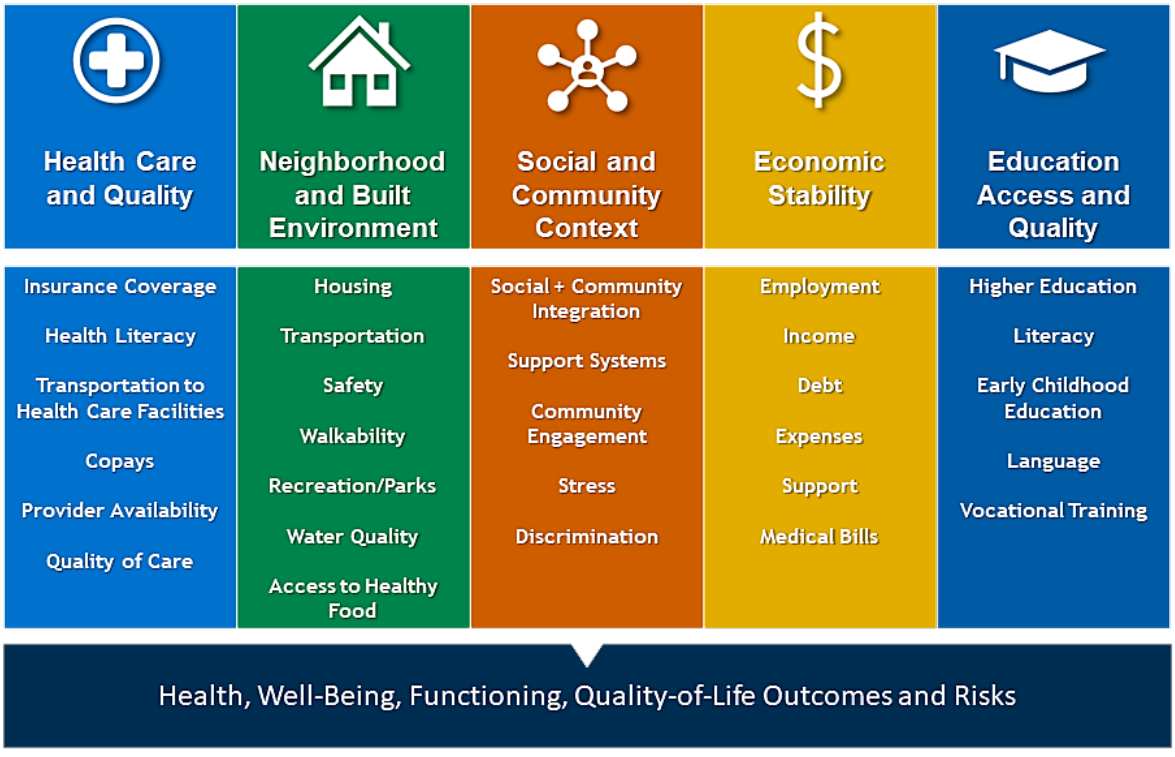
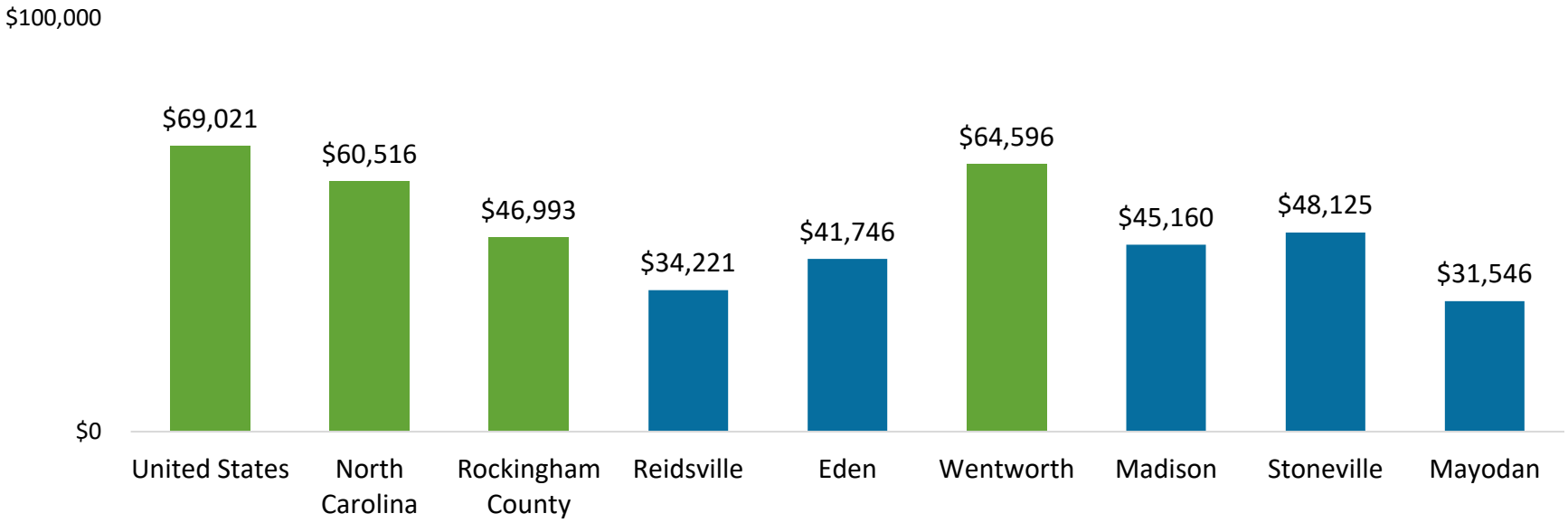


Image Source: Chess Health Solutions (2021)

Economic Wellbeing

People with steady employment are less likely to live in poverty and more likely to be healthy, but many people have trouble finding and keeping a job. People with disabilities, injuries, or conditions like some mental health conditions may be limited in their ability to work. In addition, many people with steady work still don't earn enough to afford the things they need to stay healthy. [21] The median household income in Rockingham County is $46,993. Within Rockingham County, median household income varies widely from $34,221 in Reidsville to $64,596 in Wentworth. Poverty is highest in Reidsville (29.0%) and Mayodan (23.5%). Exhibit 15 shows that poverty has increased significantly in some communities since 2010.

Exhibit 18: Median Annual Household Income



Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

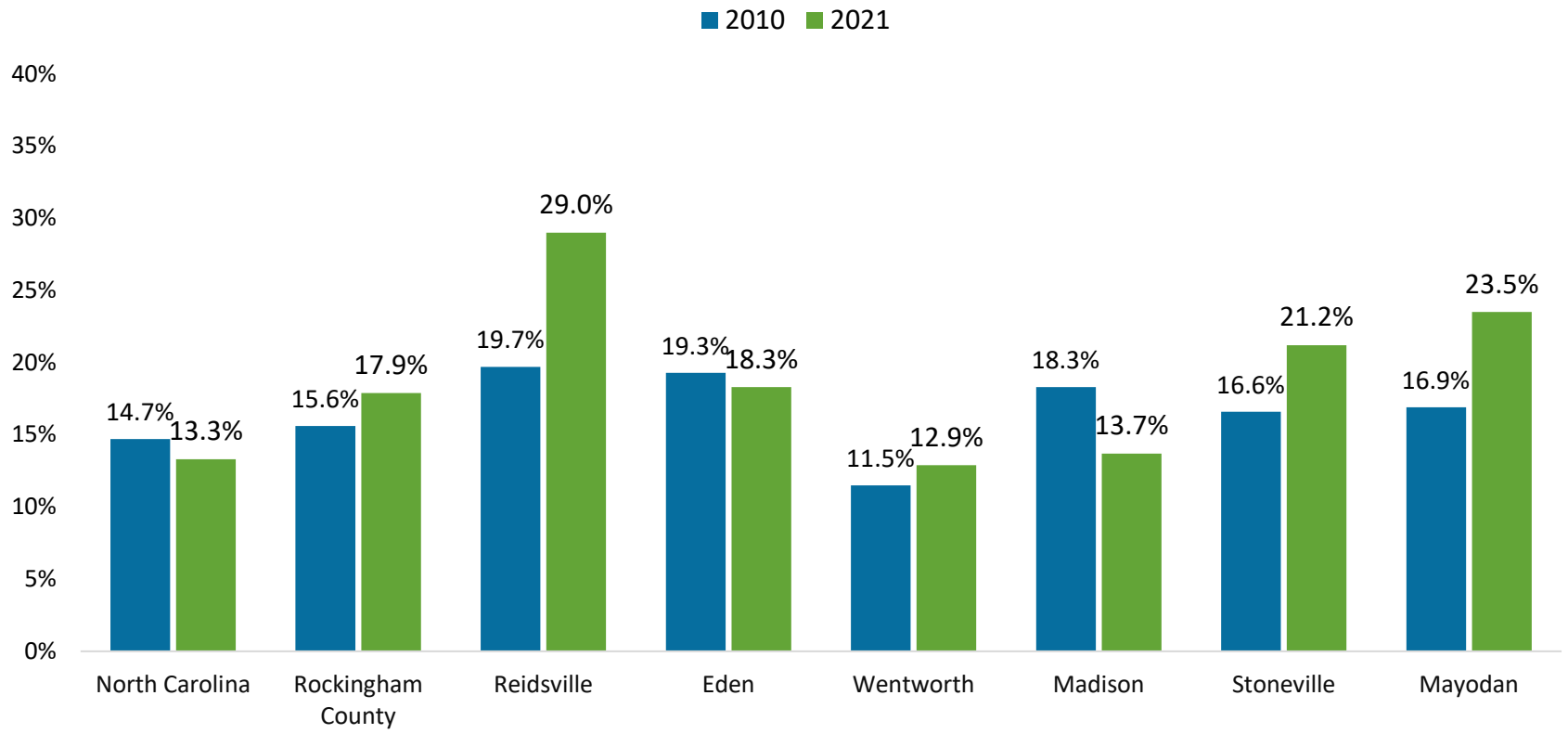
[21] Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary, U.S. Department of Health and Human Services. Healthy People 2023. Link: https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability

	United States	North Carolina	Rockingham County
$10,000 or less	5.5%	5.8%	7.2%
$10,000 to $14,999	3.9%	4.5%	7.4%
$15,000 to $24,999	7.8%	9.0%	11.2%
$25,000 to $34,999	8.2%	9.5%	11.4%
$35,000 to $49,999	11.4%	13.1%	15.2%
$50,000 to $74,999	16.8%	17.6%	18.1%
$75,000 to $99,999	12.8%	12.7%	11.7%
$100,000 to $149,999	16.3%	14.8%	12.0%
$150,000 to $199,999	7.8%	6.1%	3.3%
$200,000 or more	9.5%	6.9%	2.5%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
$10,000 or less	8.9%	7.2%	1.5%	5.0%	7.6%	13.6%
$10,000 to $14,999	15.6%	11.7%	0.5%	5.3%	6.0%	10.7%
$15,000 to $24,999	14.2%	12.2%	10.1%	13.3%	7.8%	20.8%
$25,000 to $34,999	12.1%	12.4%	15.1%	14.2%	11.9%	9.9%
$35,000 to $49,999	16.9%	14.1%	12.6%	18.0%	27.2%	12.0%
$50,000 to $74,999	11.4%	19.4%	20.1%	22.6%	11.7%	12.2%
$75,000 to $99,999	11.6%	12.0%	15.7%	11.4%	9.1%	6.3%
$100,000 to $149,999	8.0%	6.0%	16.2%	7.3%	15.6%	9.9%
$150,000 to $199,999	0.6%	2.2%	5.5%	0.8%	2.1%	2.4%
$200,000 or more	0.7%	2.6%	2.7%	2.1%	1.0%	2.1%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 19: Households Below Poverty Level



	United States	North Carolina	Rockingham County
2021	12.4%	13.3%	17.9%
2010	13.1%	14.7%	15.6%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
2021	29.0%	18.3%	12.9%	13.7%	21.2%	23.5%
2010	19.7%	19.3%	11.5%	18.3%	16.6%	16.9%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 20: Socioeconomic Measures

	United States	North Carolina	Rockingham County
Households Receiving Food Stamps/SNAP per household	11.4%	12.1%	16.5%
No Vehicle	8.3%	5.5%	6.7%
Children in Single-Parent Households	25.1%	27.2%	31.9%
Income Inequality (Gini Index) [22]	0.48	0.48	0.46

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Households Receiving Food Stamps/SNAP	26.7%	26.1%	13.2%	18.9%	18.1%	20.2%
No Vehicle	10.7%	8.3%	3.2%	6.8%	9.5%	12.1%
Children in Single-Parent Households	53.0%	40.5%	10.9%	26.3%	46.2%	44.9%
Income Inequality (Gini Index) [23]	0.45	0.48	0.37	0.41	0.42	0.49

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[22]Lower is better with the Gini Index, which measures the dispersion of income or distribution of wealth among the members of a population. A zero indicates a perfectly equal distribution of income or wealth within a population. "The Gini Index is a summary measure of income inequality. The Gini coefficient incorporates the detailed shares data into a single statistic, which summarizes the dispersion of income across the entire income distribution. The Gini coefficient ranges from 0, indicating perfect equality (where everyone receives an equal share), to 1, perfect inequality (where only one recipient or group of recipients receives all the income). The Gini is based on the difference between the Lorenz curve (the observed cumulative income distribution) and the notion of a perfectly equal income distribution." For additional guidance on income inequality and the Gini Index, see the following: Corporate Finance Institute - Gini Coefficient , US Census Bureau

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Education

Educational attainment has a strong correlation with lifetime income earnings for individuals. Individuals with higher education levels are more likely to earn more over the course of their lives than those with lower educational attainment. Unemployment also decreases with increased education.[24] Approximately 16% of Rockingham County residents do not have a high school diploma, which may limit their employment and ultimately income opportunities.

Exhibit 21: Educational Attainment

Age 25 and Over	United States	North Carolina	Rockingham County
Less than 9th Grade	4.8%	4.1%	5.3%
9th to 12th Grade, No Diploma	6.3%	6.8%	11.0%
High School Degree	26.5%	25.2%	33.9%
Some College No Degree	20.0%	20.8%	23.6%
Associate degree	8.7%	10.0%	10.7%
Bachelor's Degree	20.6%	20.9%	10.5%
Graduate Degree	13.1%	12.1%	5.0%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Less than 9th Grade	5.8%	6.9%	4.3%	6.2%	4.7%	8.9%
9th to 12th Grade, No Diploma	14.1%	9.2%	12.7%	9.4%	12.5%	12.6%
High School Degree	31.7%	37.1%	33.8%	28.9%	26.9%	28.6%
Some College No Degree	19.7%	22.5%	23.4%	26.8%	26.3%	29.0%
Associate degree	8.2%	8.2%	9.4%	11.6%	17.2%	9.7%
Bachelor's Degree	14.3%	10.4%	8.5%	9.8%	9.9%	8.3%
Graduate Degree	6.2%	5.7%	7.9%	7.2%	2.5%	2.9%

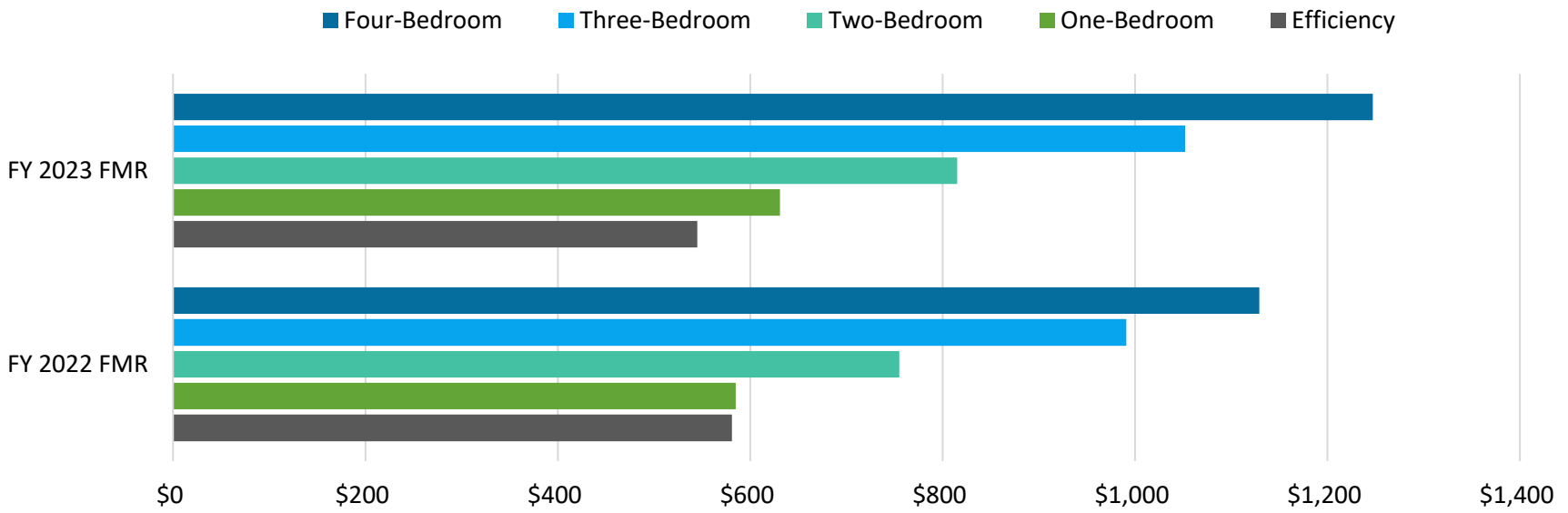
Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[24] Economic Research. Education, Income, and Wealth. https://research.stlouisfed.org/publications/page1-econ/2017/01/03/education-income-and-wealth

Neighborhood & Built Environment

Neighborhoods people live in have a major impact on their health and well-being. Many people across the United States live in neighborhoods with high rates of crime and violence, unsafe air or water, and other health and safety risks. The United States is currently in an affordable housing crisis due to multiple factors such as low investment in building new supply, COVID-19 impacts, low mortgage interest rates, record-high inflation, and rising rent prices. The National Low Income Housing Coalition estimates that there is a shortage of 7.3 million rental homes affordable and available to renters with extremely low incomes in the United States. Similar to the national and state, renters are disproportionately experiencing housing cost burden than homeowners. Cost burden households are at greater risk of becoming homeless and affording necessities like food, transportation, and health care.

Exhibit 22: Rockingham County Fair Market Rent



	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
FY 2023	$545	$631	$815	$1,052	$1,247
FY 2022	$581	$585	$755	$991	$1,129

Source: Department of Housing and Urban Development Fair Market Rent Documentation System

Housing Insecurity

Homelessness has been on the rise since 2017 in the United States. The State of Homelessness: 2023 Edition[25] reports that in 2022, the count of individuals and chronically homeless individuals reached record highs in the history of data collection. The U.S. Department of Housing and Urban Development requires communities reaching certain grant funding to conduct a Point-in-Time (PIT) count of sheltered and unsheltered people experiencing homelessness on a single night in January to better understand the extent of homelessness in a community. While the numbers are small, some people experience homelessness in Rockingham County. Unfortunately, the PIT count does not include individuals who may be couch surfing. It is also important to note that during the qualitative research, several community stakeholders identified the need for a more accurate count of people experiencing homelessness as the PIT Count does not highlight the growing homeless crisis in Rockingham County.

Exhibit 23: Rockingham County Point in Time Count

	Number
Families with Children Experiencing Homelessness	
Total Households	0
Total People	0
Children 17 & Under	0
Adults 18-24	0
Adults Age 25+	0
Adults without Children Experiencing Homelessness	
Total Households	8
Total People	8
Adults 18-24	1
Adults Age 25+	7
Total People Experiencing Homelessness	**8**
Living Situation	
Emergency Shelter	7
Transitional Housing	0
Unsheltered	1

Source: NC Coalition to End Homelessness, NC Balance of State Continuum of Care, 2022 Point in Time Count by County

[25] National Alliance to End Homelessness. State of Homelessness: 2023 Edition. https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness/

Social & Community Context

Social and community context refers to the connection between characteristics of the contexts within which people live, learn, work, and play, and their health and wellbeing. This includes topics like cohesion within a community, civic participation, discrimination, conditions in the workplace, and incarceration.[26]

Crime

Some children and youth become involved with the juvenile justice system because they are accused of committing a delinquent or criminal act. Other youth encounter the system for status offenses—actions that are illegal only because of a youth's age—such as truancy, underage drinking, and running away from home. However, not all of these cases are formally processed through the courts.

While many youth cases do not get processed formally through the court, the majority of youth that are processed through the juvenile court are declared by a judge to be delinquent, for most offenses. Youth of color are overrepresented within—and treated differently by—the juvenile justice system compared to their White peers. In response to the significant racial and ethnic disparities present at all stages in the juvenile justice process, many states have begun implementing reforms to make the system more equitable. Limiting incarceration as a punitive measure for youth when applicable has strong potential to mitigate some of these negative circumstances that occur in or are exacerbated by various out-of-home placement settings.[22]

The data below shows the rate of law enforcement referrals and arrests for youth in Rockingham County is much higher than North Carolina. Most complaints are for Minor Class 1-3 offenses. Of the total Rockingham County case load in 2021, most cases were for traffic-related misdemeanors.

[26] Centers for Disease Control and Prevention, Social Determinants of Health at CDC. Link: https://www.cdc.gov/about/sdoh/index.html#:~:text=Social%20and%20Community%20Context,in%20the%20workplace%2C%20and%20incarceration.

Exhibit 24: Rate of Law Enforcement Referrals & Arrests

	Undisciplined[27] Rate per 1,000 Ages 10 to 17	Delinquent Rate per 1,000 Ages 8 to 17[28]	Detention Admission Rate per 1,000 Ages 8 to 17[29]
North Carolina	1.7	26.2	2.0
Rockingham County	4.2	41.2	2.5

Source: North Carolina Department of Public Safety, Juvenile Justice and Delinquency Prevention 2022 County Databook

Exhibit 25: Rockingham County Complaints Against Juveniles

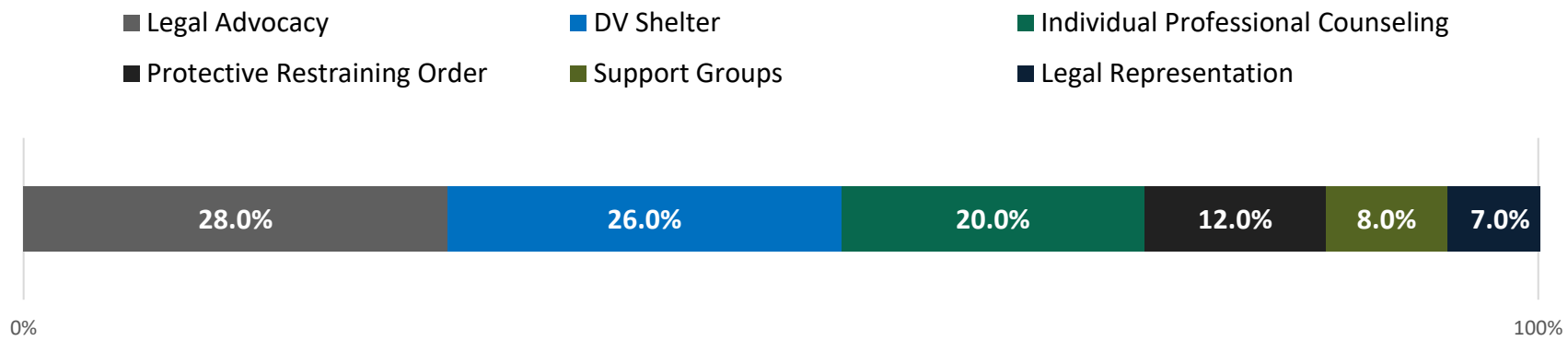
	Total
Juvenile Population Ages 8-17	10,149
Juvenile Population Ages 10-17	8,267
Complaints Received	
Violent Class A - E	28
Violent Class F – I, A1	68
Minor Class 1 - 3	319
Infraction	3
Status[30]	35
Total Delinquent Complaints	418
Total Complaints	453
Number of Juveniles Transferred to Superior Court	7

Source: North Carolina Department of Public Safety, Juvenile Justice and Delinquency Prevention 2022 County Databook

[27] Offenses that are not crimes if committed by adults, committed by youth ages 10 to 17 at offense (i.e., truancy, running away from home, ungovernable). The terms "status" and "undisciplined" are interchangeable.
[28] Prior to December 1, 2019, the Juvenile crime rate was the rate of delinquent offenses per 1,000 youth aged 6-15. In CYs 2020 and 2021, the Juvenile crime rate is defined as the rate of delinquent offenses per 1,000 youth aged 6-17. Post Raise the Floor (RtF) on December 1, 2021, the Juvenile crime rate is measured by the following: (# of delinquent complaints / youth population 8-17) * 1000.
[29] Number of times individual youths were placed in detention
[30] Offenses that are not crimes if committed by adults, committed by youth ages 10 to 17 at offense (i.e., truancy, running away from home, ungovernable). The terms "status" and "undisciplined" are interchangeable.

According to the National Domestic Violence Hotline, North Carolina ranks 10th in terms of contact volume to The Hotline, which provides crisis intervention, safety planning, referrals, and domestic violence (DV) and intimate partner violence (IPV) education for these contacts. [31] Being a victim of domestic violence is linked to an increased risk of post-traumatic stress disorder (PTSD), depression, and suicide[32]. It is important that domestic violence survivors have access to mental health services from providers that specialize in domestic violence. Additional domestic violence data for Rockingham County is found in the appendix.

Exhibit 26: Victim / Survivor Needs and Commonly Requested Services



Source: National Domestic Violence Hotline North Carolina State Report, 2020

Exhibit 27: Rockingham County Domestic Violence-related Homicides

2017	2018	2019	2020	2021
0	3	0	1	0

Source: North Carolina Department of Public Safety, Report on Domestic Violence Related Homicides for Calendar Year 2021

[31]National Domestic Violence Hotline North Carolina State Report 2020
[32] World Health Organization. 2013. Global and regional estimated of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence.

Health Care Access & Quality

Approximately one in 10 people in the United States don't have health insurance People without health insurance are less likely to have a primary care provider and they may not be able to afford the services and medications they need to remain healthy. Even if people do have health insurance, they may not seek care due to a variety of reasons such as high copays, lack of transportation, or because they live too far away from health care providers.[33]

In Rockingham County, 9.8% of residents are uninsured. The highest percentage of individuals who are uninsured are between the ages of 19 and 64. However, 5.1% of children under the age of 5 are uninsured. This is a critical age for children to receive health care, such as vaccines, which will build their immunity and help keep them healthy into adulthood.

Medicaid Expansion was approved in 2023 in North Carolina. The North Carolina Department of Health and Human Services is moving forward with the expansion which is anticipated to start on December 1, 2023. It is estimated that as many as 300,000 individuals across the state will become eligible for Medicaid.

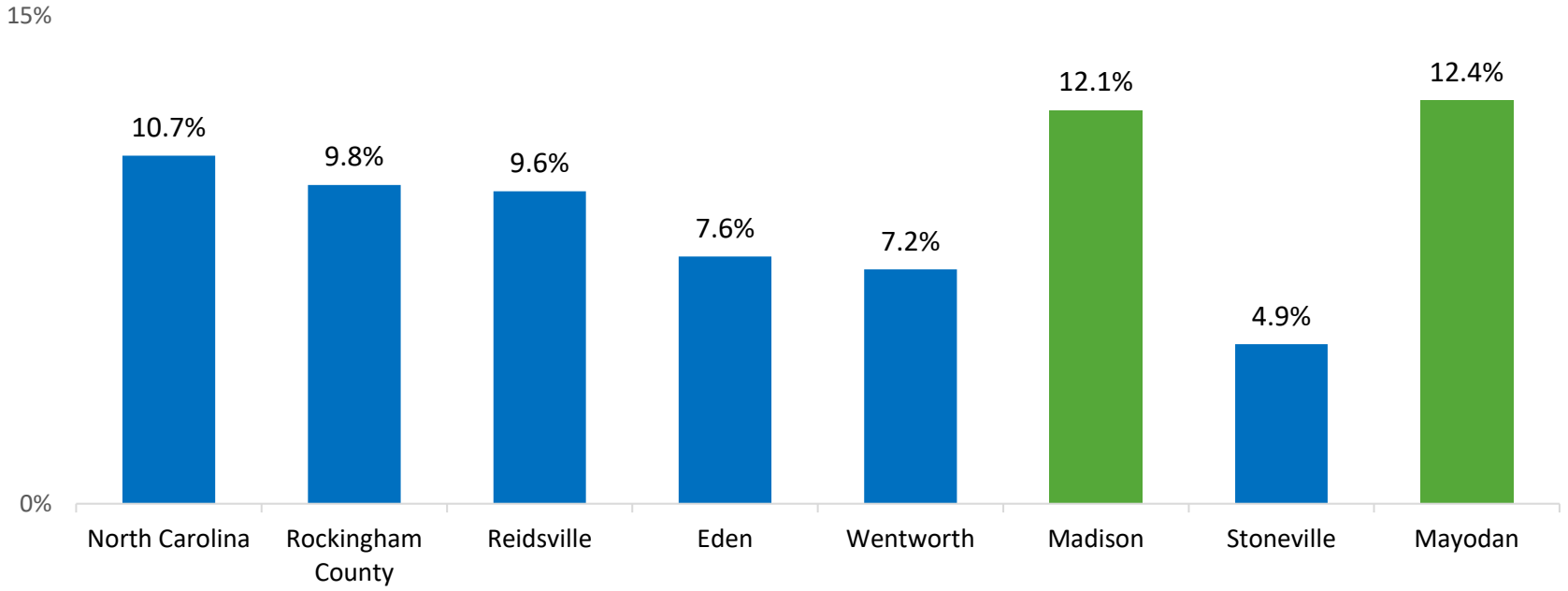
In North Carolina, over 160,000 people are living with Alzheimer's disease, a number projected to increase to more than 210,000 by 2025.

North Carolina Department of Health & Human Services

In Rockingham County, residents report having a higher number of poor mental health days (4.6) and poor physical health days (3.5) than North Carolina and United States. Approximately one in three county residents is obese (35.9%) and/or has high blood pressure (34.4%). Residents with chronic conditions may need more access to health care services to manage their conditions. The leading cause of death in Rockingham County is heart disease followed by cancer. It is important to note that Alzheimer's Disease is the eighth leading cause of death in the county and will likely continue to grow as the population continues to age. Additionally, special memory care facilities and providers may be needed to care for older adults in the community with cognitive conditions.

[33] Healthy People 2030. Health Care Access and Quality. https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality

Exhibit 28: Uninsured Population



	North Carolina	Rockingham County
Under 6	4.4%	5.1%
6 to 18	5.9%	3.0%
19 to 64	15.6%	15.4%
65 and Older	0.6%	0.3%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Under 6	7.6%	6.2%	0.0%	0.0%	1.4%	0.0%
6 to 18	0.0%	1.0%	6.3%	7.2%	10.9%	9.7%
19 to 64	15.4%	12.3%	10.5%	18.2%	5.6%	19.0%
65 and Older	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 29: Quality of Life

	United States	North Carolina	Rockingham County
Frequent Mental Distress	ND	13.8%	15.1%[34]
Poor Mental Health Days	4.4	4.1	4.6
Poor Physical Health Days	3.0	3.0	3.5

Source: County Health Rankings & Roadmaps, 2023, (Mental distress) BRFSS 2021 - Local Health Director Region 5

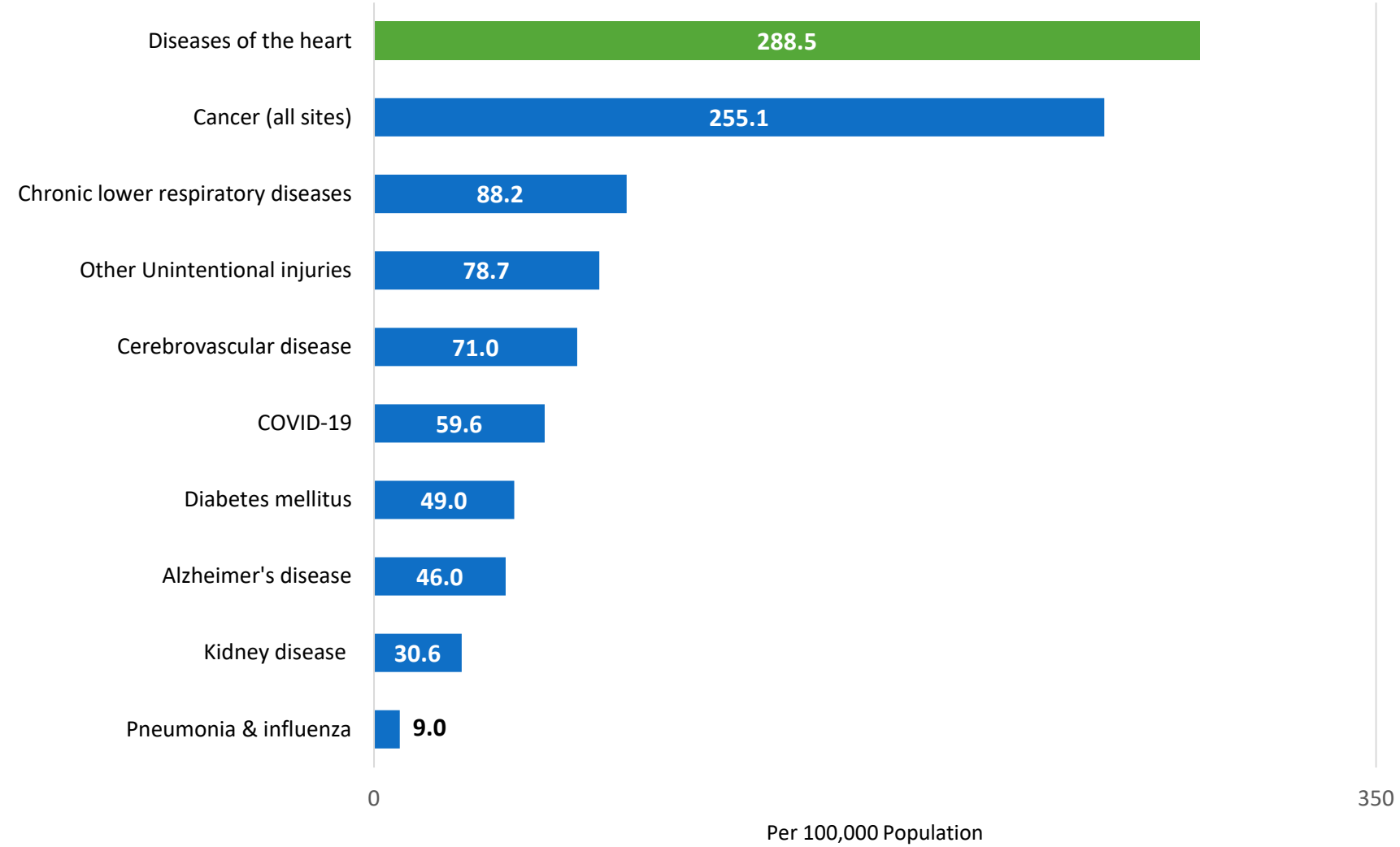
Exhibit 30: Life Expectancy (Years) at Age 65 in North Carolina

Total	Female	Male
18.0	19.2	16.7

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2020

[34] North Carolina Association of Local Health Directors Regions Region 5: Alamance, Caswell, Chatham, Durham, Guilford, Orange, Person, Randolph, and Rockingham Counties, NC SCHS: Statistics and Reports: BRFSS: Survey Results Technical Notes 2021 (ncdhhs.gov).

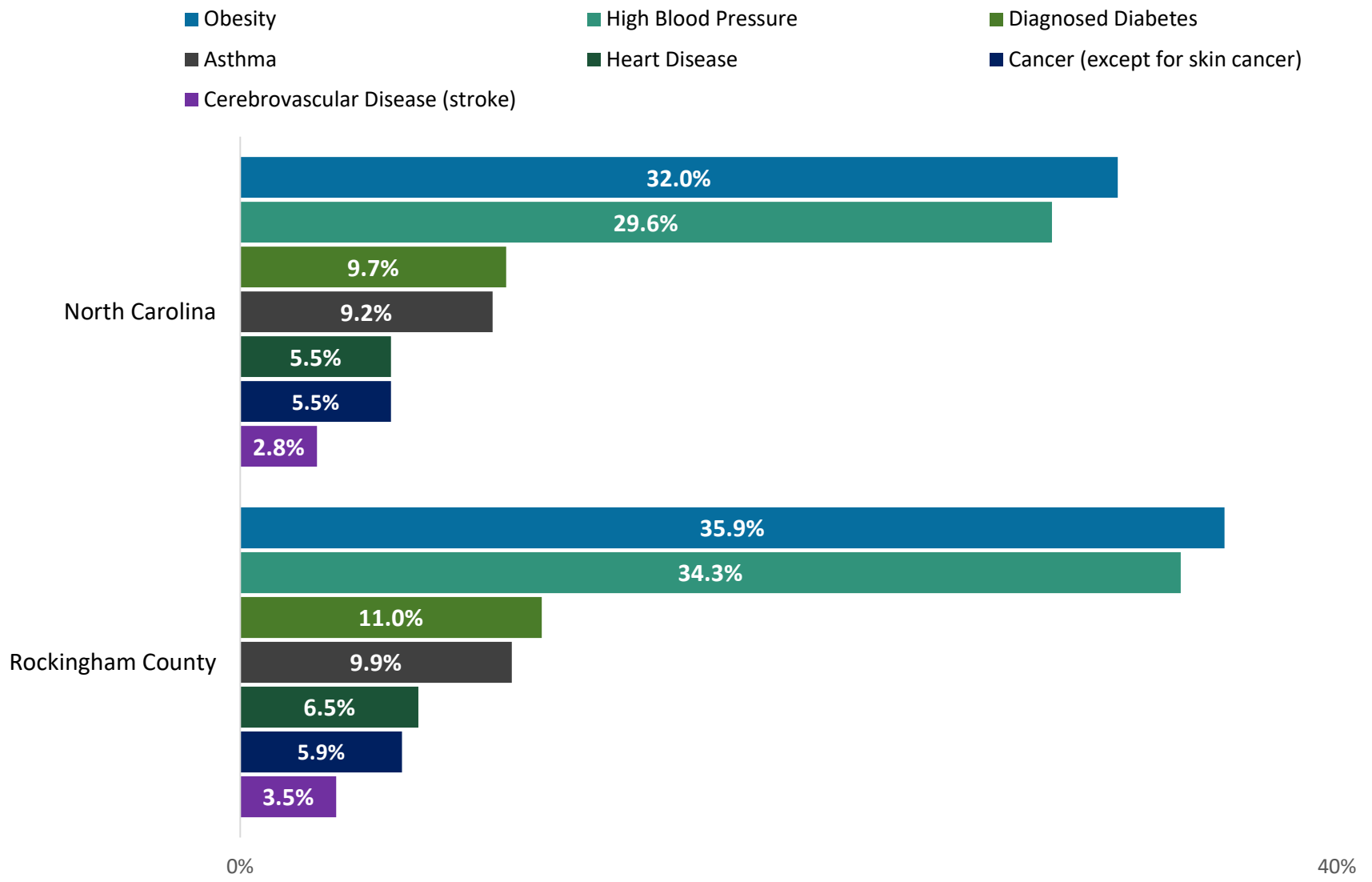
Exhibit 31: Rockingham County, Leading Causes of Death[35]



Source: North Carolina Department of Health and Human Services, North Carolina County Health Data Book, 2017-2021

[35] Crude rates.

Exhibit 32: Chronic Disease Incidence Among Adults Aged Over 18



Source: Centers for Disease Control and Prevention | Places: Local Data for Better Health, 2020

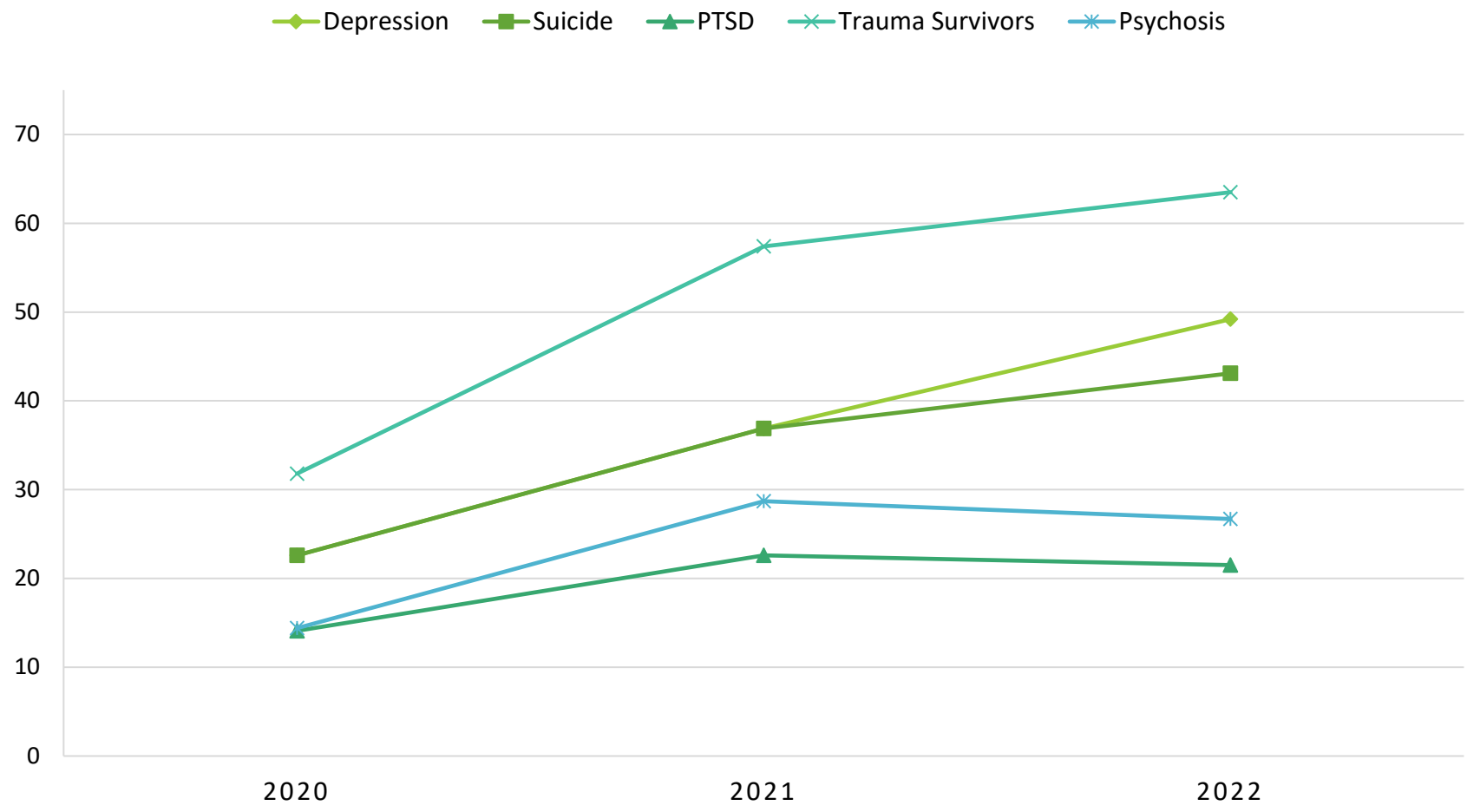
Behavioral Health in Rockingham County

The American Medical Association defines behavioral health as mental health and substance use disorders, life stressors and crises, and stress-related physical symptoms. The following section provides an in-depth review of behavioral health-related data for North Carolina and Rockingham County to provide a baseline of the behavioral health environment in the county and state. Whenever possible, qualitative data findings may be weaved through this section to provide additional insights and stories from real county residents.

Mental Health

The mental health data for Rockingham County reveals concerning trends similar to the national data in rising rates of depression, suicide, PTSD, and psychosis. The suicide rate in Rockingham County is especially alarming. Unfortunately, the most recently available data is 2020 from the North Carolina Violent Death Reporting System as there is a major backup of autopsies and reporting from the coroners' offices across the state. However, data from Mental Health America estimates that suicide is still on the rise in Rockingham County.

Exhibit 33: Trend of Rate of Population Scoring for Mental Health Risk, Rockingham County (Per 100,000 Population)



Source: County and State Data Map: Defining Mental Health Across Communities | Mental Health America

Exhibit 34: Trend of Population Scoring for Mental Health Risk, Rockingham County

Rate per 100,000	North Carolina[36]			Rockingham County		
	2020	2021	2022	2020	2021	2022
Depression	32.9	38.0	43.9	22.6	36.9	49.2
Suicide	34.7	39.3	46.0	22.6	36.9	43.1
PTSD	11.3	20.7	22.4	14.4	22.6	21.5
Trauma Survivors	41.8	68.7	87.5	31.8	57.4	63.5
Psychosis	19.2	27.4	24.7	14.4	28.7	26.7

Source: County and State Data Map: Defining Mental Health Across Communities | Mental Health America[37]

[37] Mental Health America (MHA) provides free, anonymous, clinically validated mental health screens on their website. MHA's County and State Data Map is a dashboard that geographically visualizes data from over 4.5 million mental health screens taken by U.S. users at MHAScreening.org in 2020-2023. Screenings focus on individuals who report experiencing thoughts of suicide, were severely impacted by depression, report experiencing trauma, were seeking support for post-traumatic stress disorder (PTSD) or experiencing a psychotic like experience. The voluntary data from users helps to identify data-driven population health efforts toward prevention and early intervention of mental illness, promotion of mental well-being, and equitable allocation of mental health treatment and support.

When individuals take a screen, they are asked optional demographic questions. MHA conducted analyses using only results from individuals who had reported living in the U.S. on the state demographic question. In response to that question, users either select the state they live in, "I live outside the U.S.," or "I live in a U.S. territory." All individuals who responded, "I live outside the U.S.," "I live in a U.S. territory," or who did not respond to the question were excluded from the dataset. U.S. Census 2020-2021 population estimates were used for state population totals. For analyses using race/ethnicity, U.S. Census 2020-2021 annual state resident population estimates for six race groups by Age, Sex, and Hispanic Origin[ii] were used for state population totals of each race/ethnicity category. MHA conducted county-level analyses using results from the ZIP Code demographic question, in which users can type in their ZIP Code. ZIP Codes were then consolidated into counties on Tableau Prep, using an online U.S. ZIP Code database. For county-level analyses, additional data cleaning was performed to ensure accurate counts. In some cases, users will enter their ZIP Code but will not report their state or will report a state that does not match the ZIP Code they entered. Where a user's response for state did not match the ZIP Code they provided in the demographic questions, or they did not answer the state demographic question, they were removed from the dataset. In some cases, zip codes may include areas across multiple counties. In these cases, zip codes were assigned to the county that included the majority of the zip code area. County population totals were then calculated by summing the populations for each of the zip codes assigned to the county, using the online U.S. ZIP Code database.[37]

Exhibit 35: Demographic Characteristics of People Served by State Mental Health Authority, North Carolina

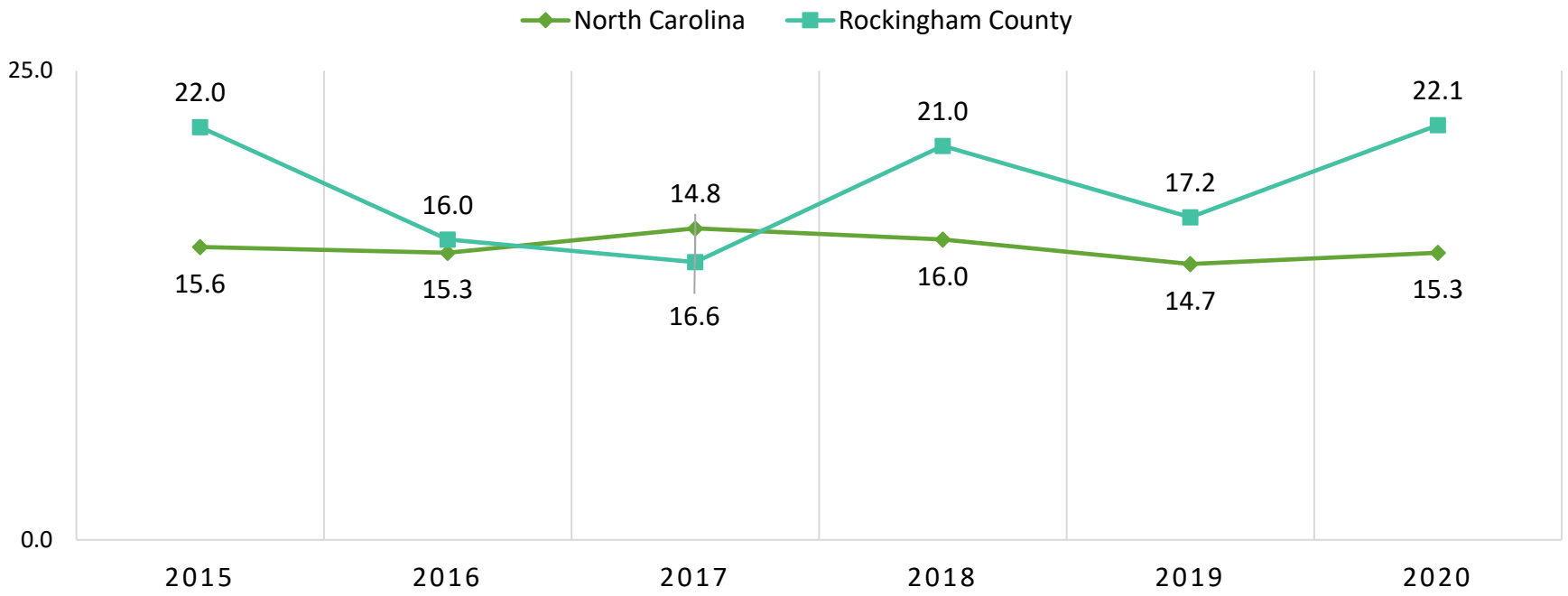
	2017	2018	2019	2020	Percent Change 2017-2020
Race					
American Indian or Alaska Native	2,465	1,765	1,778	1,785	**-38.1%**
Asian	705	559	539	539	**-23.5%**
Black or African American	44,329	32,235	33,841	34,139	**-23.0%**
Native Hawaiian or Other Pacific Islander	81	51	48	73	**-9.9%**
White	88,431	61,901	65,941	67,250	**-24.0%**
Other	6,031	4,230	4,556	4,892	**-18.9%**
Ethnicity					
Non-Hispanic	5,422	4,402	4,709	5,320	**-1.9%**
Hispanic	120,948	100,734	106,475	108,782	**-10.1%**
Specific Hispanic or Latino origin					
Mexican	1,913	1,350	1,390	1,525	**-20.3%**
Puerto Rican	506	384	427	451	**-10.9%**
Cuban	148	106	94	91	**-38.5%**
Other Specific	2,805	2,511	2,736	3,185	**+13.5%**
Total	5,372	4,351	4,647	5,252	**-2.2%**
Veteran Status					
Veteran	ND	1,680	1,785	1,650	-
Not a Veteran	ND	87,458	93,233	96,087	-
Total	ND	89,138	95,018	97,737	-

Source: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Mental Health Annual Report 2015-2020

Suicidality

In 2021, suicide was the 11th leading cause of death in the United States for all ages and the second leading cause of death in people aged 10 to 34 and fifth in people aged 35 to 54. Since 2001, suicide rates have increased most years for males and females and the suicide rate for males is three to four and half times the rate for females[38]. In Rockingham County, the suicide death rate (per 100,000) has remained relatively stable from 2015 to 2020. The rate is higher than the state. Most suicides are related to mental health conditions, with depression, substance use disorders, and psychosis being the most relevant risk factors[39]. A higher suicide death rate in Rockingham County may be correlated to the lack of mental health and substance use services available in the county.

Exhibit 36: Suicide Deaths Rate (Per 100,000 Population)



Source: NC Department of Health and Human Services, Division of Public Health | North Carolina Violent Death Reporting System

[38] CDC. Suicide Mortality in the United States, 2001-2021. https://www.cdc.gov/nchs/products/databriefs/db464.htm
[39] Brådvik L. Suicide Risk and Mental Disorders. Int J Environ Res Public Health. 2018 Sep 17;15(9):2028. doi: 10.3390/ijerph15092028. PMID: 30227658; PMCID: PMC6165520.

In 2021, almost 60% of female students experienced persistent feelings of sadness or hopelessness during the past year and nearly 25% made a suicide plan.

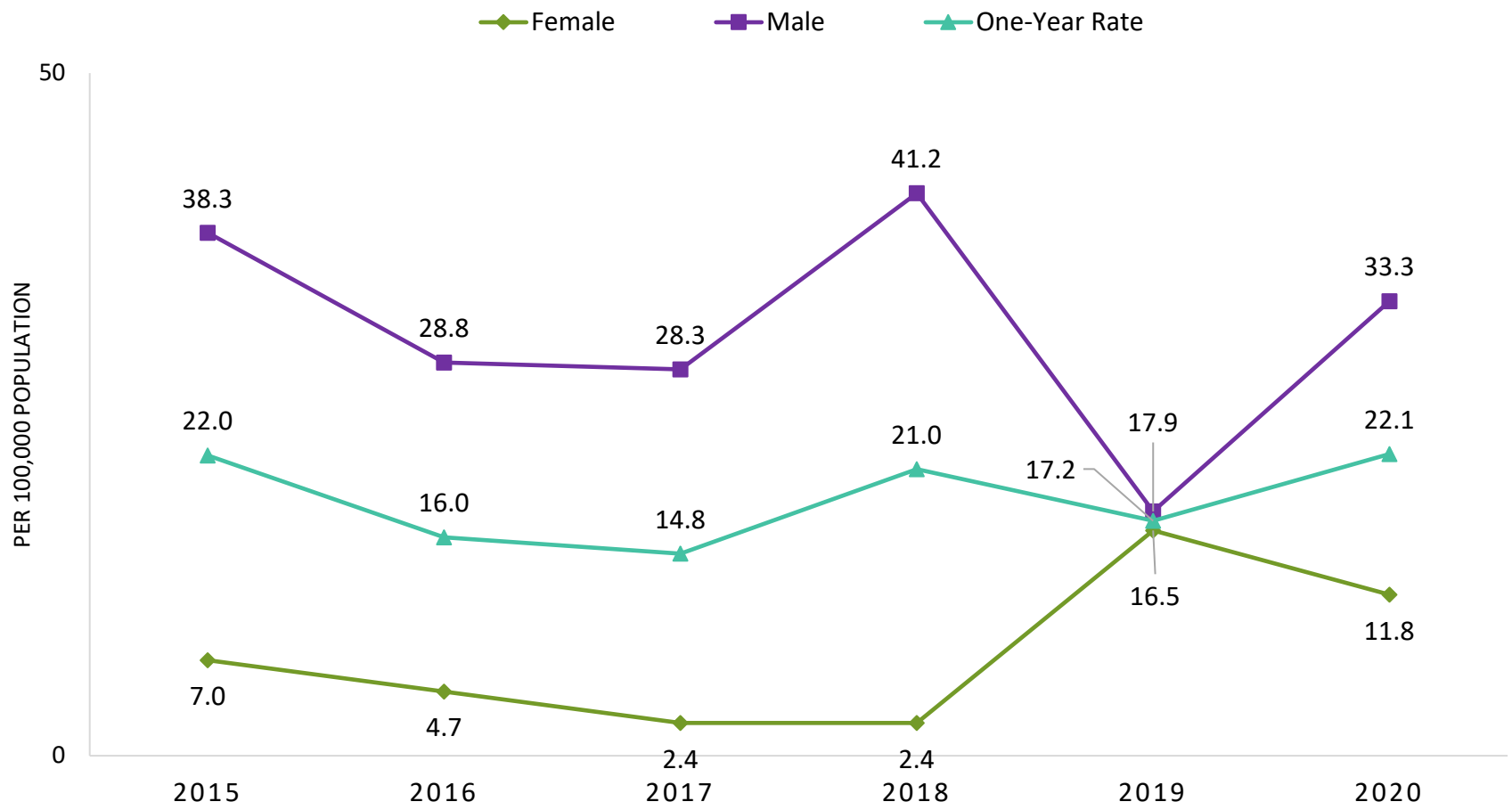
Similar to national trends, the suicide rate for males is significantly higher compared to females. However, it is important to note that the suicide rate for females has increased in Rockingham County in recent years. While more recent data is currently unavailable, a recent KFF report using provisional 2022 data from CDC WONDER indicates that 2022 shows a record high of suicide deaths in the United States. Suicide deaths are increasing the fastest among people of color, younger people, and those who live in rural areas with many groups seeing increases of 30% of more from 2011 to 2021.[40]

Additionally, the 2011-2021 Youth Risk Behavior Survey: Data Summary & Trends Report published by the CDC reveals alarming data on youth, especially young females. Across almost all measures of substance use, experiences of violence, mental health, and suicidal thoughts and behaviors, female students are faring more poorly than male students.

The increased suicide death rates in Rockingham County, especially for females, may be correlated to the lack of or inability to access mental health or substance use services in the county. Based on national data, suicide death rates in Rockingham County may be even higher over the past three years due to the COVID-19 pandemic and other impacts of the pandemic and social isolation.

[40] KFF. A Look at the Latest Suicide Data and Change Over the Last Decade. https://www.kff.org/mental-health/issue-brief/a-look-at-the-latest-suicide-data-and-change-over-the-last-decade/

Exhibit 37: Rockingham County Suicide Death Rate (Per 100,000 Population)



Source: NC Department of Health and Human Services, Division of Public Health | North Carolina Violent Death Reporting System

Exhibit 38: Rockingham County Suicide Death Rate by Race and Ethnicity

Rate per 100,000	2015	2016	2017	2018	2019	2020
White Non-Hispanic	29.5	19.7	16.5	22.7	21.6	26.5
Black Non-Hispanic	0.0	6.4	12.9	21.6	6.4	12.8
Hispanic	0.0	0.0	0.0	19.4	0.0	0.0
Asian Non-Hispanic	0.0	0.0	0.0	0.0	0.0	0.0
American Indian / Alaska Native Non-Hispanic	0.0	0.0	0.0	0.0	0.0	0.0

Rate per 100,000	2015	2016	2017	2018	2019	2020
Hispanic	0.0	0.0	0.0	19.4	0.0	0.0

Source: NC Department of Health and Human Services, Division of Public Health | North Carolina Violent Death Reporting System

Exhibit 39: Rockingham County Suicide Death Rate by Age

Rate per 100,000	2015	2016	2017	2018	2019	2020
10-14	17.7	0.0	0.0	18.6	0.0	18.7
15-19	18.3	18.6	0.0	18.9	0.0	0.0
20-24	18.5	0.0	20.2	41.7	20.9	0.0
25-34	20.6	20.3	20.0	19.8	38.5	0.0
35-44	9.3	28.7	9.9	10.2	30.8	62.0
45-54	44.2	29.7	15.1	15.5	15.8	32.5
55-64	14.3	14.1	14.1	28.1	14.0	14.0
65-74	40.4	9.8	19.0	37.2	9.0	35.2
75-84	0.0	0.0	18.2	0.0	17.2	0.0
85 and Older	0.0	0.0	47.6	0.0	0.0	46.6

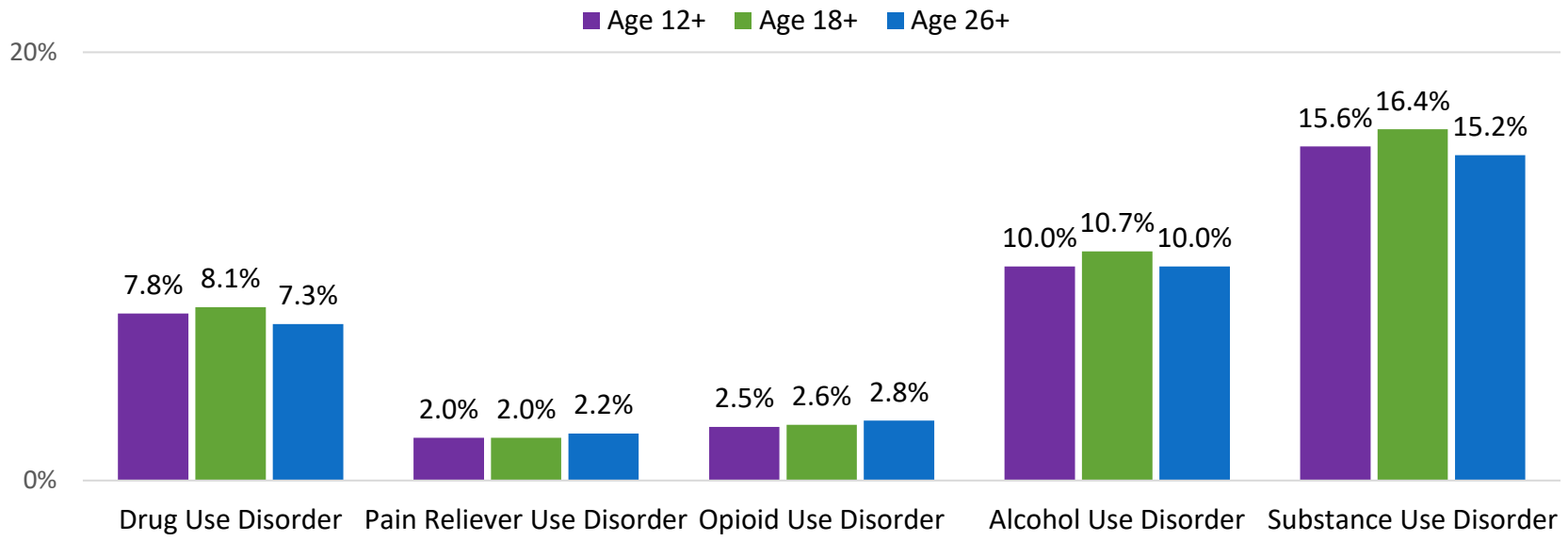
Source: NC Department of Health and Human Services, Division of Public Health | North Carolina Violent Death Reporting System

"We have been busy lately with a lot of overdose calls as there is another bad batch of drugs that just arrived in the county. We are seeing more and more of this. We are about to exceed the total number of overdose calls last year and it is only September." – Local EMS First Responder

Substance Use Disorder

A substance use disorder (SUD) is a treatable mental disorder that affects a person's brain and behavior, leading to their inability to control this use of substances like legal or illegal drugs, alcohol, or medications. People with SUD may also have co-occurring mental health conditions as well. The Opioid Crisis is prevalent in Rockingham County like many rural areas of the United States. While opioids and illicit drugs are commonly misused in the community, alcohol misuse is also very common in Rockingham County is approximately one in 10 residents over the age of 12 having alcohol use disorder. Over 13% of youth reported binge-drinking frequently in Health District Region 5. The data may indicate a need for alcohol-specific detox, treatment, and recovery programs for both adults and children within Rockingham County.

Exhibit 40: Substance Use Disorder and Treatment in the Past Year Among People Aged 12 and Older in North Carolina[41]



[41] Respondents were classified as needing substance use treatment if they met the DSM-5 criteria for an illicit drug or alcohol use disorder or received treatment for illicit drug or alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center). Substance use treatment questions are asked of respondents who used alcohol or illicit drugs in their lifetime. Respondents who used prescription drugs but who did not misuse prescription drugs in their lifetime may not receive these questions. Needing But Not Receiving Substance Use Treatment refers to respondents who are classified as needing illicit drug or alcohol use treatment but who did not receive illicit drug or alcohol use treatment at a specialty facility.

	Age 12+	Age 18+	Age 26+	Age 12-17	Age 18-25
Drug Use Disorder[42]	7.8%	8.1%	7.3%	5.6%	13.5%
Pain Reliever Use Disorder	2.0%	2.0%	2.2%	1.0%	1.2%
Opioid Use Disorder[43]	2.5%	2.6%	2.8%	1.0%	1.4%
Alcohol Use Disorder	10.0%	10.7%	10.0%	3.3%	15.8%
Substance Use Disorder	15.6%	16.4%	15.2%	7.7%	24.3%
Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug Use[44]	5.4%	5.5%	4.6%	4.5%	11.9%
Needing But Not Receiving Treatment at a Specialty Facility for Alcohol Use	10.1%	10.9%	10.2%	3.1%	15.0%
Needing But Not Receiving Treatment at a Specialty Facility for Substance Use	12.9%	13.6%	12.3%	5.9%	22.2%

Source: U.S. Department of Health & Human Services Substance Abuse and Mental Health Services Administration | 2021 NSDUH: State-Specific Tables | CBHSQ Data.

[42] Drug use includes the use of marijuana (including vaping), cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine in the past year or any use (i.e., not necessarily misuse) of prescription pain relievers, tranquilizers, stimulants, or sedatives in the past year.

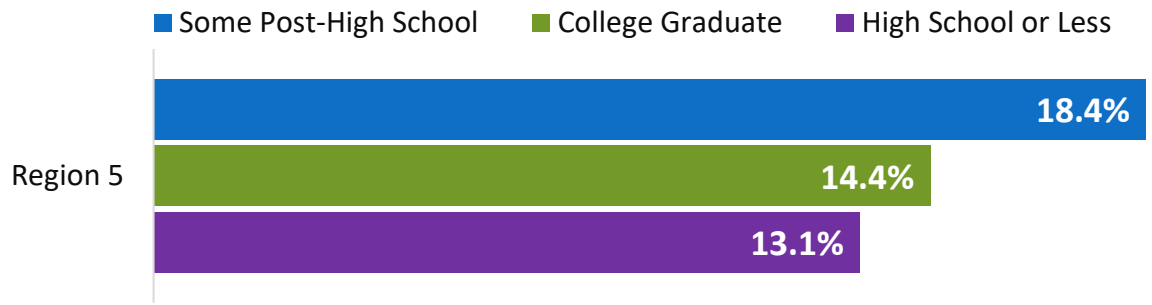
[3] Pain relievers are a type of prescription drug

[43] Opioid Use Disorder is defined as meeting the criteria for heroin or pain reliver use disorder.

[44] Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana (including vaping), cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine.

Alcohol

Exhibit 41: Adult Self-reported Binge-drinking[45]



Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Region

North Carolina Association of Local Health Directors Region 5 Counties

Alamance, Caswell, Chatham, Durham, Guilford, Orange, Person, Randolph, Rockingham

[45] Respondents who report they did drink in the past 30 days and who did have five or more drinks (for males) or four or more drinks (for females) on one or more occasions in the past month.

Exhibit 42: Adult Alcohol Use, Binge Drinking[46]

	Region 5
Binge Drinking	15.2%
Gender	
Male	18.8%
Female	11.9%
Race	
Non-Hispanic White	14.1%
Non-Hispanic Black	14.6%
Other	ND
Age	
18-44	24.1%
45-64	10.6%
65+	5.2%
Education	
High School or Less	13.1%
Some Post-High School	18.4%
College Graduate	14.4%
Household Income	
Less than $50,000	20.2%
$50,000+	15.3%
Don't Know / Not Sure	ND

Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Region

[46] **Binge Drinking:** Respondents who reported they did drink in the past 30 days and who did have five or more drinks (for males) or four or more drinks (for females) on one or more occasions in the past month.

Exhibit 43: Adult Alcohol Use, Heavy Drinking[47]

	Region 5
Heavy Drinking	5.9%
Gender	
Male	7.0%
Female	4.7%
Race	
Non-Hispanic White	5.9%
Non-Hispanic Black	ND
Other	ND
Age	
18-44	7.9%
45-64	ND
65+	ND
Education	
High School or Less	ND
Some Post-High School	ND
College Graduate	6.4%
Household Income	
Less than $50,000	ND
$50,000+	8.6%
Don't Know / Not Sure	ND

Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Region

[47] **Heavy Drinking:** Males having more than two drinks per day and females having more than one drink per day

Maternal Substance Use

Substance use is common during pregnancy and is linked to multiple obstetric and neonatal adverse outcomes. In the ideal world, all pregnant women should be screened for substance use and, if positive, should receive prompt diagnosis and treatment. Within North Carolina, approximately 50% of women of childbearing age report drinking alcohol. Data for pregnant women drinking is not available for North Carolina. However, national data estimates that 13.5% of pregnant women drink while pregnant and 5.2% report binge drinking. The percentage of pregnant women who drink while pregnant increases significantly if they do not have a health care provider or have frequent mental distress. The national data indicates that there are a percentage of pregnant women in Rockingham County that likely drink during pregnancy, which may result in adverse health effects of their child.

Exhibit 44: Alcohol Use Among Childbearing-Age Women, North Carolina

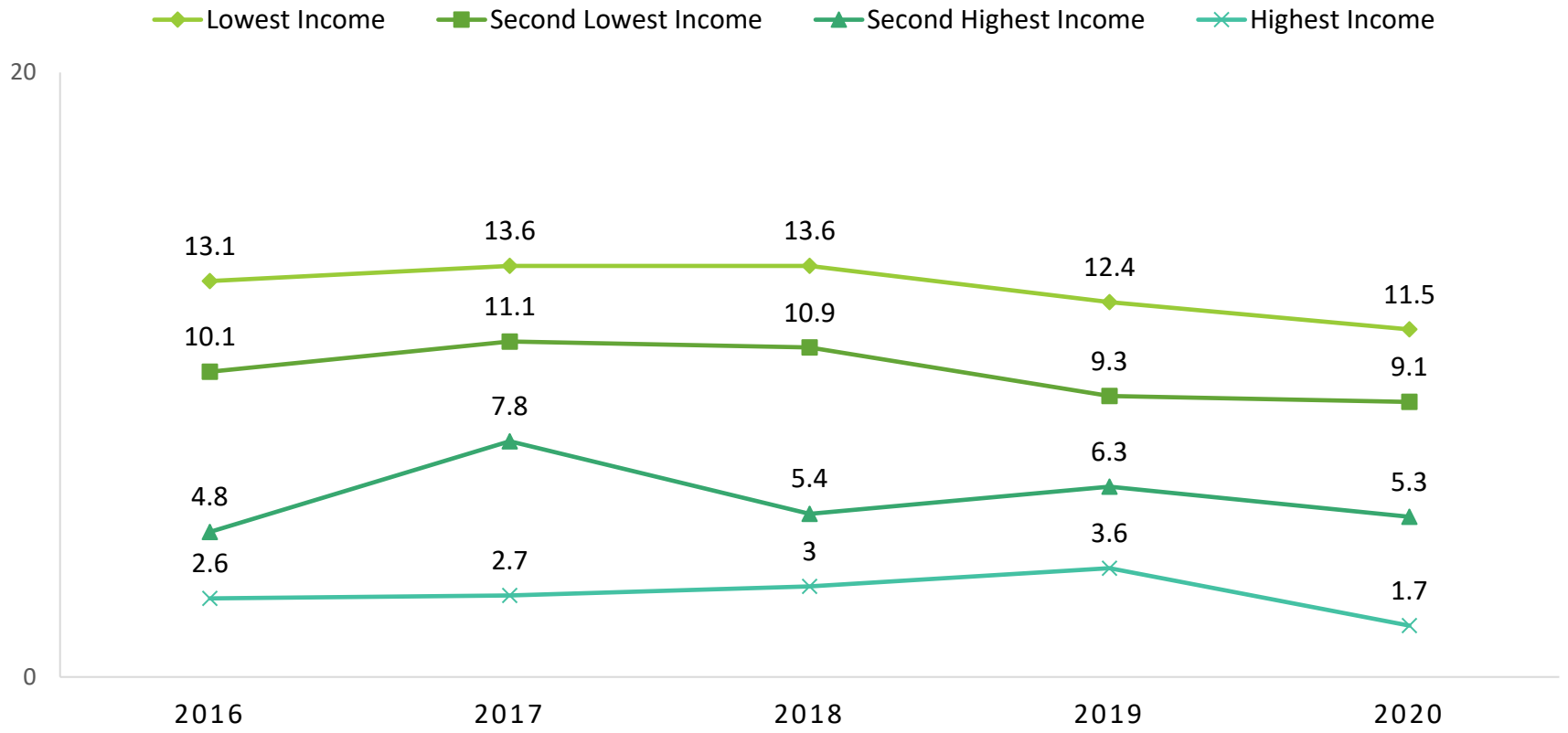
	North Carolina
Weighted Prevalence Estimates of Any Alcohol Use Among Women Aged 18 to 44[48]	51.5%
Weighted Prevalence Estimates of Binge Drinking Among Women Aged 18 to 44[49]	17.1%
Percent of Binge Drinking Among Women Who Reported Any Alcohol Use, Women Aged 18 to 44	33.3%

Source: State-level Estimates of Alcohol Use Among Women | CDC, Behavioral Risk Factor Surveillance System, 2019

[48] Any Alcohol Use: One or more drinks during the past 30 days
[49] Binge Drinking (among women): Four or more drinks on any one occasion during the past 30 days

Neonatal abstinence syndrome (NAS) can be difficult to quantify since the number of cases continues to increase each year. One study suggests there is one newborn diagnosed with NAS every 25 minutes, which equals between two to seven newborns out of every 1,000 births.[50]

Exhibit 45: Rate of Neonatal Abstinence Syndrome Among North Carolina Newborn Hospitalizations by Community Income-level (Per 1,000 Births)



Source: US Department of Health and Human Services | Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project (HCUP) Fast Stats, "Fast Stats Neonatal Abstinence Syndrome Among Newborn Hospitalizations 2008-2021"

[50] Neonatal Abstinence Syndrome: Symptoms & Causes (clevelandclinic.org)

Exhibit 46: Rate of Neonatal Abstinence Syndrome Among North Carolina Newborn Hospitalizations (Per 1,000 Births)

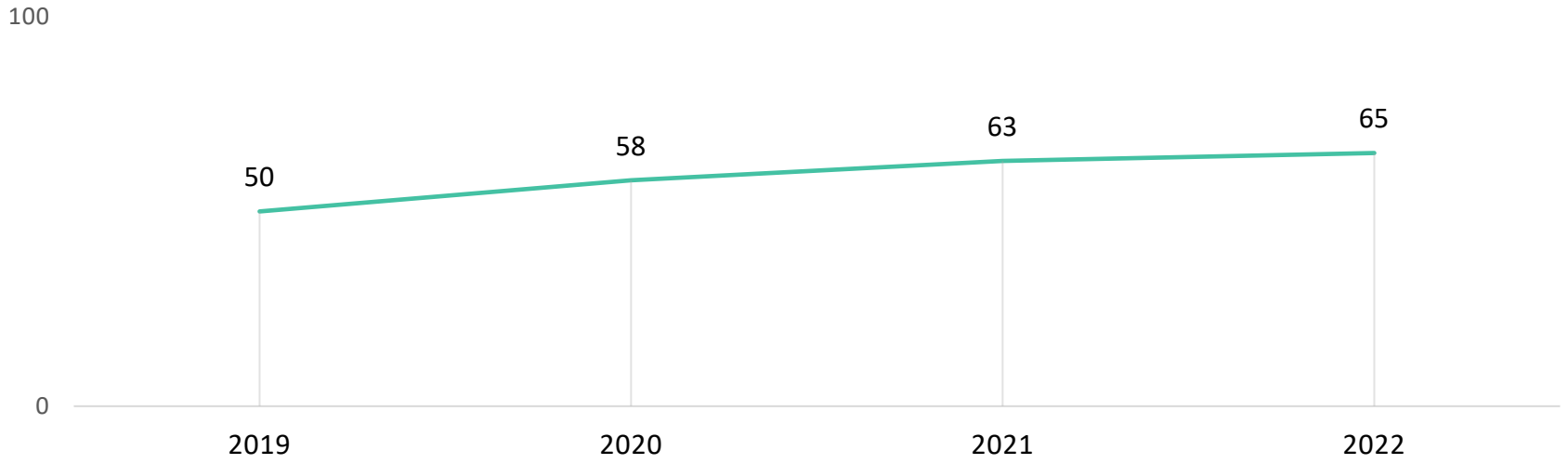
	2016	2017	2018	2019	2020
Number of NAS Newborn Hospitalizations	**1,087**	**1,210**	**1,140**	**1,029**	**911**
Rate per 1,000 Newborn Hospitalizations	9.4	10.5	10.1	9.2	8.3
Gender					
Males	9.4	10.5	9.9	9.2	8.9
Females	9.3	10.6	10.3	9.3	7.7
Expected Payer					
Medicaid	17.0	18.5	18.3	16.7	15.3
Private Insurance	1.2	1.7	1.1	1.3	1.0
Self-Pay/No Charge	10.0	10.5	9.8	8.0	7.4
Community-Level Income					
Lowest Income	13.1	13.6	13.6	12.4	11.5
Second Lowest Income	10.1	11.1	10.9	9.3	9.1
Second Highest Income	4.8	7.8	5.4	6.3	5.3
Highest Income	2.6	2.7	3.0	3.6	1.7
Patient Location					
Large Central Metropolitan	2.8	3.9	3.5	3.6	2.9
Large Fringe Metropolitan	8.2	10.0	10.3	8.6	6.9
Medium Metropolitan	12.5	13.5	12.0	11.6	10.2
Small Metropolitan	7.3	8.5	7.7	5.8	6.8
Rural	13.9	14.9	16.0	14.4	13.4
Large Central Metropolitan	2.8	3.9	3.5	3.6	2.9

Source: US Department of Health and Human Services | Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project (HCUP) Fast Stats, "Fast Stats Neonatal Abstinence Syndrome Among Newborn Hospitalizations 2008-2021"

A substance affected infant is "an infant who has a positive urine, meconium or cord segment drug screen with confirmatory testing in the context of other clinical concerns as identified by current evaluation and management standard; an infant that manifests clinically relevant drug or alcohol withdrawal; an infant affected by FASD with a diagnosis of Fetal Alcohol Syndrome (FAS), Partial FAS (PFAS), Neurobehavioral Disorder associated with Prenatal Alcohol Exposure (NDPAE), Alcohol-Related Birth Defects (ARBD), or Alcohol-Related Neurodevelopmental Disorder (ARND); or an infant has known prenatal alcohol exposure when there are clinical concerns for the infant per current evaluation and management standards. It can also be an infant whose mother has had a medical evaluation, including history and physical, or behavioral health assessment indicative of an active substance use disorder, during the pregnancy or at time of birth."[51]

The Rockingham County Department of Health and Human Services collects data on substance affected infants. From June 2018 through April 2023, there has been an increase in the number of substance affected infants born in the county.

Exhibit 47: Trend of Substance Affected Infant, June 2018 through April 2023[52], Rockingham County



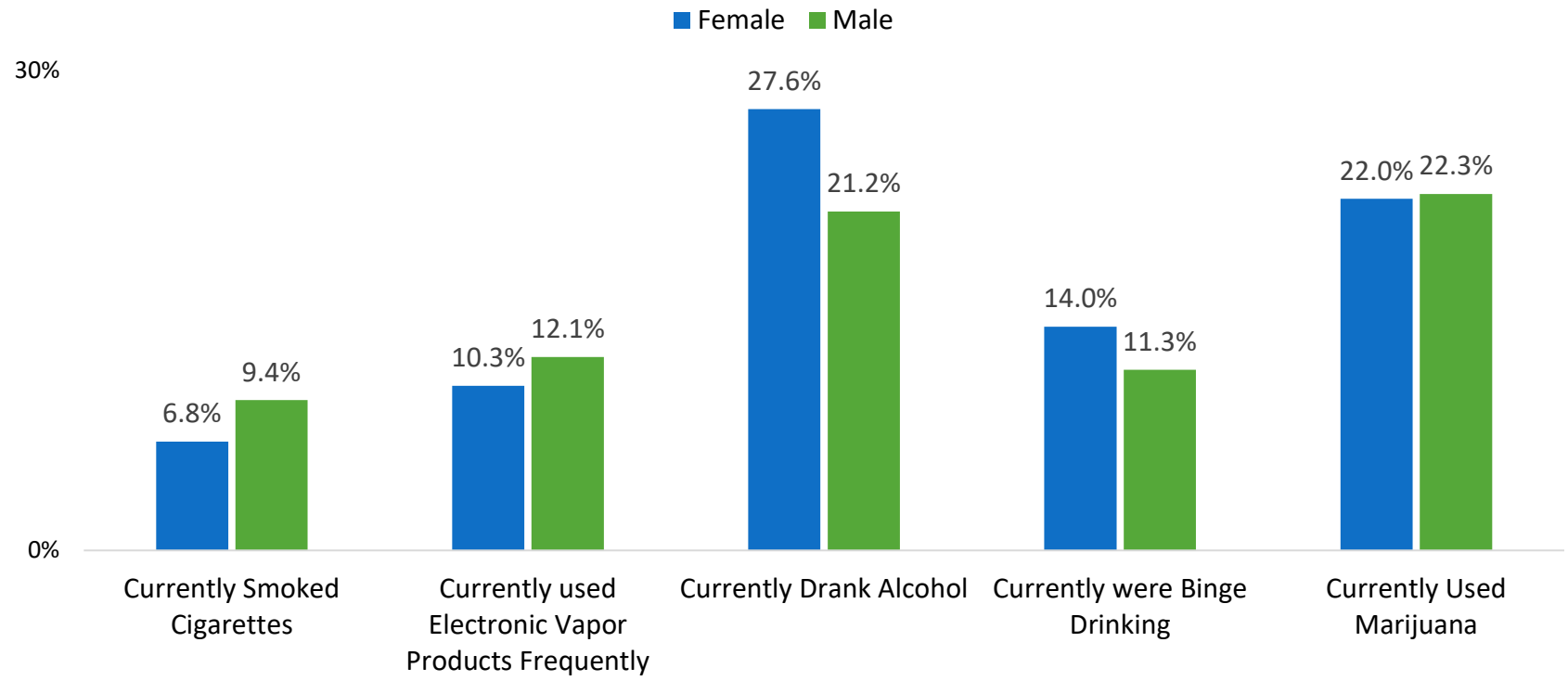
Source: Substance Affected Infant Data, Rockingham County Department of Health and Human Services

[51] Child Welfare Resources for Substance Affected Infants & Plan of Safe Care, *Child Welfare Policy Manual Resources*, March 2021
[52] Graph does not include 2018 or 2023 since they are partials.

Youth

Substance use in youth is on the rise. According to the 2020 SAMHSA National Survey on Drug Use and Health, 8.2% of adolescents aged 12 to 17 drank alcohol in the past 30 days, and 13.8% of adolescents aged 12 to 17 used illicit drugs in the past year[53]. In North Carolina, almost one in four high school students currently use marijuana and approximately one in three females and one in five males currently drink alcohol.

Exhibit 48: North Carolina High School Youth Substance Use[54]



Source: Youth Online: High School Youth Risk Behavior Survey – North Carolina 2019, 2021 Results | DASH | CDC

[53] SAMHSA. Youth Substance Use Prevention Month. https://www.samhsa.gov/blog/youth-substance-use-prevention-month#4
[54] Data for 2020 not available, Youth Online: High School YRBS - North Carolina 2021 Results | DASH | CDC

Exhibit 49: North Carolina High School Youth Substance Use by Gender

	Total	Female	Male
2021			
Currently Smoked Cigarettes	3.9%	2.6%	5.2%
Currently used Electronic Vapor Products Frequently	9.9%	11.3%	8.4%
Currently Drank Alcohol	19.4%	23.2%	15.6%
Currently were Binge Drinking	9.9%	11.1%	8.4%
Currently used Marijuana	16.3%	16.3%	16.1%
Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it	15.8%	16.7%	14.6%
Ever used cocaine	ND	ND	ND
Were offered, sold, or given an illegal drug on school property	13.9%	15.0%	12.8%
2019			
Currently Smoked Cigarettes	8.3%	6.8%	9.4%
Currently used Electronic Vapor Products Frequently	11.1%	10.3%	12.1%
Currently Drank Alcohol	24.2%	27.6%	21.2%
Currently were Binge Drinking	12.5%	14.0%	11.3%
Currently used Marijuana	22.1%	22.0%	22.3%
Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it	16.6%	17.1%	15.6%
Ever used cocaine	4.8%	3.1%	6.0%
Were offered, sold, or given an illegal drug on school property	22.2%	19.0%	24.8%

Source: Youth Online: High School Youth Risk Behavior Survey – North Carolina 2019, 2021 Results | DASH | CDC

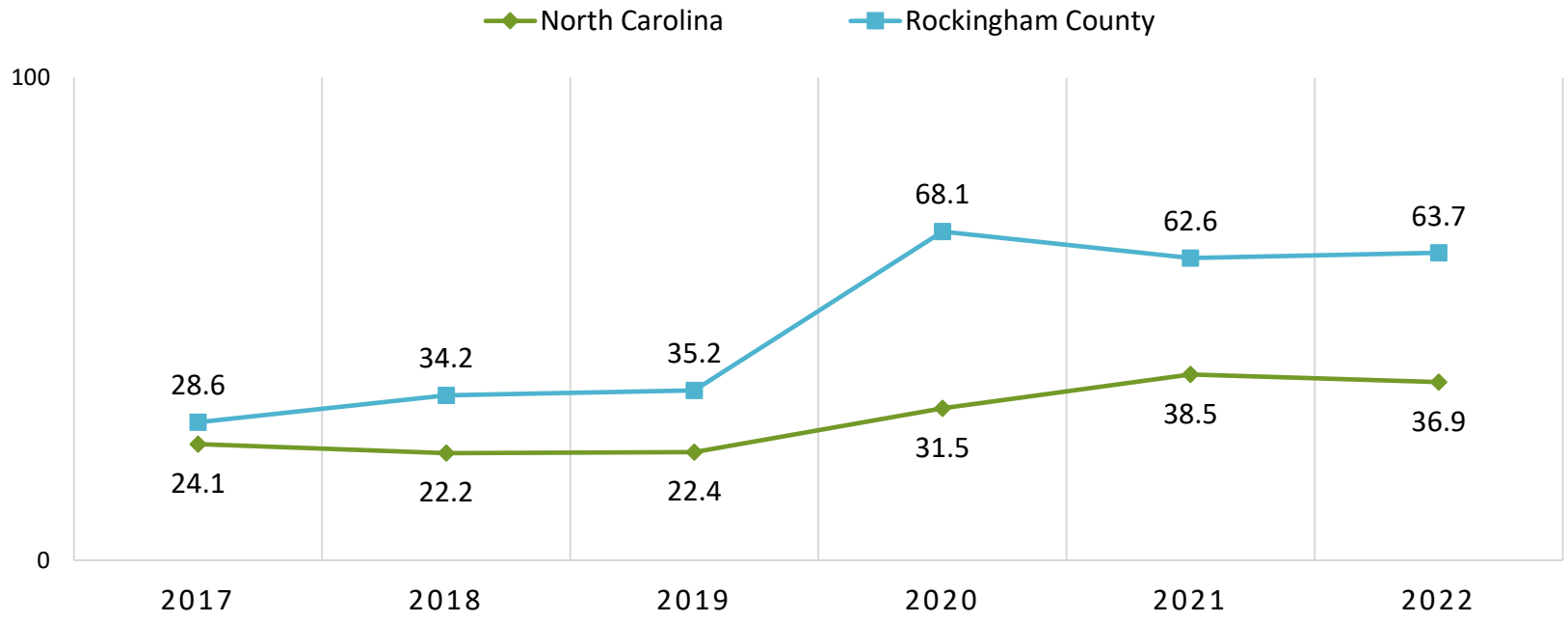
Mortality

The drug overdose death rate has increased significantly in Rockingham County since 2017. The sharp increase is likely associated with the increase of fentanyl found in other illicit drugs. Local law enforcement officers and EMS first responders have indicated in interviews and focus groups that they are seeing an increase in overdoses associated with recent "bad batches" of drugs coming into the county. Exhibit 54 shows a significant increase of overdoses from methamphetamine, stimulants, and fentanyl.

This metric includes deaths involving all types of medications and drugs: opioids (commonly prescribed opioids, heroin, synthetic narcotics like fentanyl and fentanyl-analogs), stimulants (cocaine, methamphetamine), benzodiazepines, and others.

Opioid & Substance Use Action Plan Data Dashboard (NCDHHS)

Exhibit 50: Trend of Drug Overdose Death Rates (Per 100,00 Population)



Source: Opioid and Substance Use Action Plan Data Dashboard | NCDHHS

Exhibit 51: Rockingham County Medication and Drug Overdose (All Intents)

	2017	2018	2019	2020	2021	Percent Change 2017-2021
Poisoning[55]	2,600	2,431	2,470	3,454	4,172	+60.4%
Medication or Drug[56]	2,474	2,301	2,352	3,304	4,041	+63.3%
Opioid[57]	2,006	1,817	1,895	2,771	3,395	+69.2%
Commonly Prescribed Opioid[58]	680	503	436	520	560	-17.6%
Methadone	105	78	79	110	102	-2.9%
Heroin	550	632	604	548	259	-52.9%
Fentanyl[59]	1,316	1,295	1,429	2,398	3,117	+136.9%
Stimulant[60]	879	938	1,095	1,556	2,217	+152.2%
Methamphetamine[61]	183	267	353	634	978	+434.4%
Cocaine	727	723	811	1,042	1,414	+83.8%
Benzodiazepine[62]	601	497	461	449	437	-27.2%
Antiepileptic[63]	279	305	299	437	482	+72.8%

Source: North Carolina Department of Health and Human Services | Injury and Violence Prevention Branch, Division of Public Health, County Overdose Slides, 2021

[55] Any poisoning overdose by medications, drugs, heavy metals, chemicals, or toxins
[56] Any overdose by medications, drugs, or biological substances
[57] Broadest category of opioid overdose; includes opium, prescription opioids, heroin, fentanyl, and other and unspecified narcotics
[58] Prescription opioid overdose; includes methadone and other prescription opioids
[59] Other synthetic narcotic overdose: most cases due to illicitly manufactured fentanyl and fentanyl analogs, this category may also include prescription fentanyl and other synthetic narcotics like Tramadol
[60] Cocaine, methamphetamine, ecstasy, and amphetamine such as Adderall and Ritalin
[61] Overdose by psychostimulants with abuse potential; includes psychostimulants like methamphetamine, amphetamines (Adderall, Ritalin, and others), and ecstasy
[62] Benzodiazepine overdose: familiar names include Valium and Xanax
[63] Overdose by antiepileptic and sedative-hypnotic drugs; familiar names include Ambien and Gabapentin

Exhibit 52: Medication & Drug Overdose (All Intents) ED Visits, Rockingham County

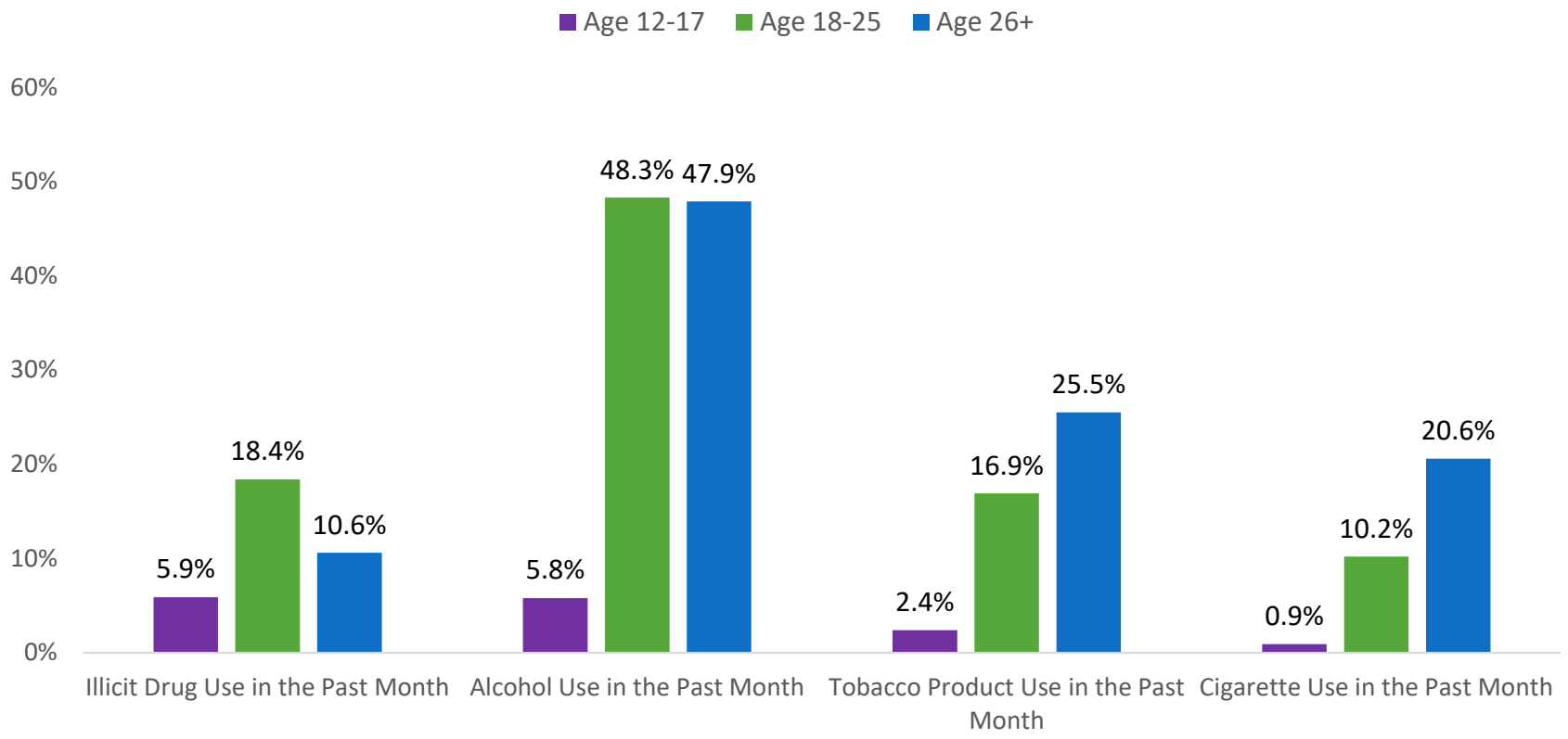
Rockingham County	2017	2018	2019	2020	2021	Percent Change 2017-2021
Poisoning[64]	472	555	507	456	460	-2.5%
Medication or Drug[65]	280	354	296	327	310	+10.7%
Opioid[66]	73	112	94	132	101	+38.4%
Commonly Prescribed Opioid[67]	14	28	26	33	22	+57.1%
Methadone	1	3	0	1	2	+100.0%
Heroin	47	61	47	70	46	-2.1%
Fentanyl[68]	5	7	2	3	7	+40.0%
Stimulant[69]	15	12	16	23	10	-33.3%
Methamphetamine[70]	6	6	5	10	4	-33.3%
Cocaine	9	6	11	13	6	-33.3%
Amphetamines	6	5	4	9	3	-50.0%
Benzodiazepine[71]	36	44	35	26	18	-50.0%
Antiepileptic[72]	14	15	13	7	7	-50.0%

Source: North Carolina Department of Health and Human Services | Injury and Violence Prevention Branch, Division of Public Health, County Overdose Slides, 2021

[64] Any poisoning overdose by medications, drugs, heavy metals, chemicals, or toxins
[65] Any overdose by medications, drugs, or biological substances
[66] Broadest category of opioid overdose; includes opium, prescription opioids, heroin, fentanyl, and other and unspecified narcotics
[67] Prescription opioid overdose; includes methadone and other prescription opioids
[68] Other synthetic narcotic overdose: most cases due to illicitly manufactured fentanyl and fentanyl analogs, this category may also include prescription fentanyl and other synthetic narcotics like Tramadol
[69] Cocaine, methamphetamine, ecstasy, and amphetamine such as Adderall and Ritalin
[70] Overdose by psychostimulants with abuse potential; includes psychostimulants like methamphetamine, amphetamines (Adderall, Ritalin, and others), and ecstasy
[71] Benzodiazepine overdose: familiar names include Valium and Xanax
[72] Overdose by antiepileptic and sedative-hypnotic drugs; familiar names include Ambien and Gabapentin

Perception of Harm

Exhibit 53: Substance Use, Perceptions of Great Risk, and Mental Health Measures Among People Aged 12 or Older in North Carolina



	12+	12-17	18-25	26+
Illicit Drugs				
Illicit Drug Use in the Past Month	11.1%	5.9%	18.4%	10.6%
Marijuana Use in the Past Year	13.7%	8.0%	27.6%	12.3%
Marijuana Use in the Past Month	9.7%	3.8%	17.6%	9.1%
Perceptions of Great Risk from Smoking Marijuana Once a Month	21.6%	25.2%	10.3%	22.8%
First Use of Marijuana in the Past Year among Those at Risk for Initiation of Marijuana Use	2.3%	4.1%	8.4%	0.8%
Illicit Drug Use Other Than Marijuana in the Past Month	2.9%	2.1%	3.3%	3.0%
Cocaine Use in the Past Year	1.5%	0.1%	2.7%	1.4%
Perceptions of Great Risk from Using Cocaine Once a Month	67.5%	50.3%	59.8%	70.7%
Heroin Use in the Past Year	ND	ND	0.3%	0.6%
Perceptions of Great Risk from Trying Heroin Once or Twice	82.1%	58.2%	78.2%	85.5%
Methamphetamine Use in the Past Year	0.8%	0.1%	0.4%	1.0%
Prescription Pain Reliever Misuse in the Past Year	3.3%	2.8%	2.7%	3.4%
Opioid Misuse in the Past Year	3.8%	2.8%	3.0%	4.0%
Alcohol				
Alcohol Use in the Past Month	44.1%	5.8%	48.3%	47.9%
Binge Alcohol Use in the Past Month	18.8%	2.8%	25.8%	19.7%
Perceptions of Great Risk from Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week	45.1%	43.3%	39.1%	46.2%
Alcohol Use in the Past Month8 (People Aged 12 to 20)	11.3%	ND	ND	ND
Binge Alcohol Use in the Past Month (People Aged 12 to 20)	6.0%	ND	ND	ND

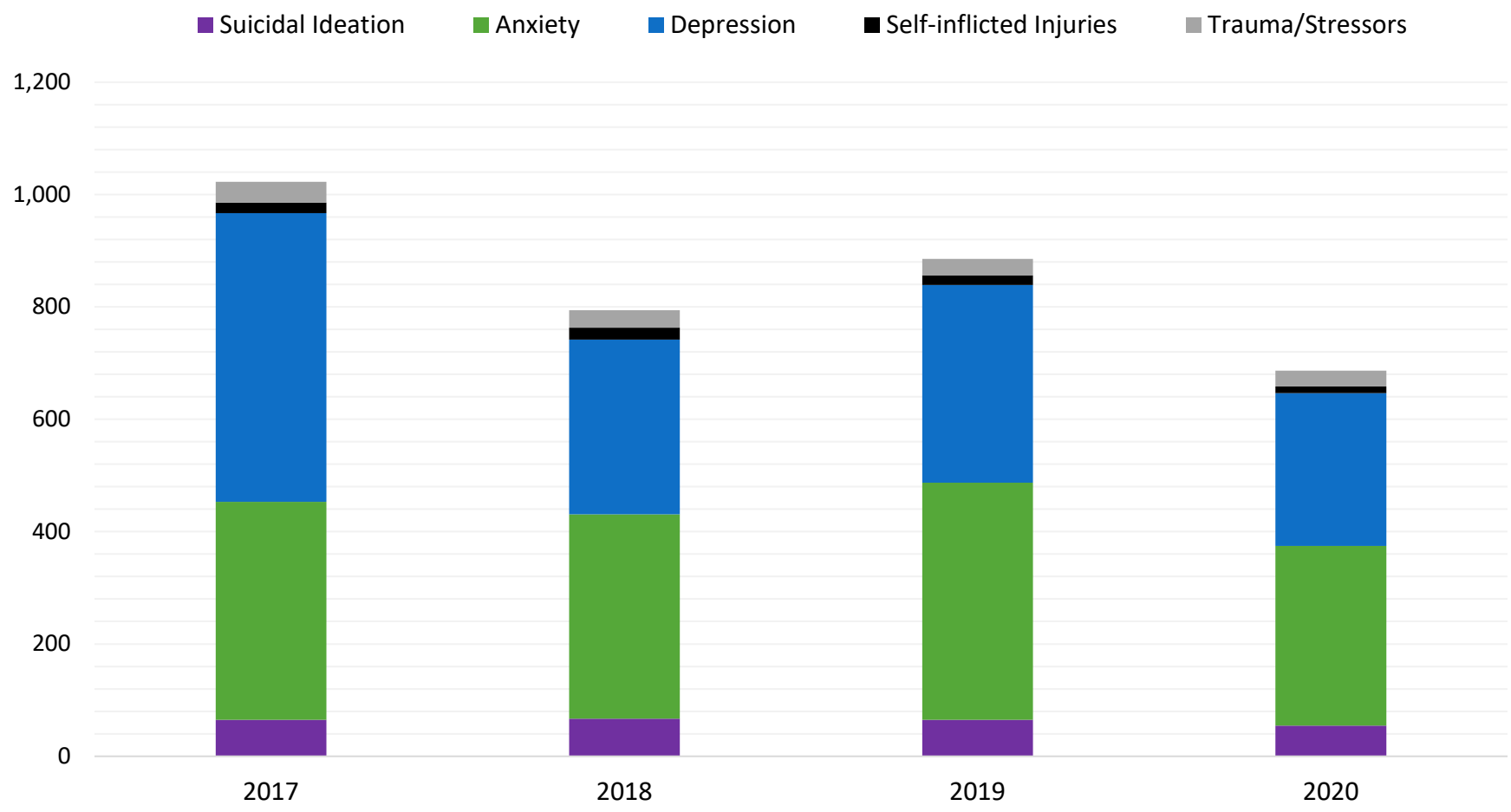
Exhibit 54: Substance Use, Perceptions of Great Risk, and Mental Health Measures Among People Aged 12 or Older in North Carolina (continued)

	12+	12-17	18-25	26+
Tobacco Products				
Tobacco Product Use in the Past Month	22.4%	2.4%	16.9%	25.5%
Cigarette Use in the Past Month	17.6%	0.9%	10.2%	20.6%
Perceptions of Great Risk from Smoking One or More Packs of Cigarettes per Day	66.1%	64.7%	64.1%	66.6%
Mental Health Measures in the Past Year				
Any Mental Illness	ND	ND	33.1%	20.9%
Serious Mental Illness	ND	ND	12.1%	4.2%
Received Mental Health Services	ND	ND	19.6%	18.0%
Major Depressive Episode	ND	17.7%	18.3%	6.8%
Had Serious Thoughts of Suicide	ND	ND	12.3%	3.1%
Made Any Suicide Plans	ND	ND	3.9%	0.9%
Attempted Suicide	ND	ND	2.4%	0.5%

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2021

Treatment

Exhibit 55: Rockingham County Emergency Department Visits by Cause



Source: NC Department of Health and Human Services, Division of Public Health | NC Detect, Mental Health Dashboard

Exhibit 56: Rockingham County Emergency Department Visits by Cause (continued)

	2017	2018	2019	2020
Suicidal Ideation				
Crude Rate per 10,000	65.1	66.8	65.0	54.4
ED Visit Count	591.0	605.0	592.0	495.0
Percentage of ED Visits	0.9%	1.0%	1.0%	1.1%
Anxiety				
Crude Rate per 10,000	388	364	422	320
ED Visit Count	3,525	3,299	3,844	2,916
Percentage of ED Visits	5.6%	5.7%	6.6%	6.3%
Depression				
Crude Rate per 10,000	514	311	352	272
ED Visit Count	4,667	2,822	3,203	2,473
Percentage of ED Visits	7.5%	4.9%	5.5%	5.3%
Self-Inflicted Injuries				
Crude Rate per 10,000	18.5	21.4	17.1	11.9
ED Visit Count	168.0	194.0	156.0	108.0
Percentage of ED Visits	0.3%	0.3%	0.3%	0.2%
Trauma/Stressors				
Crude Rate per 10,000	37.1	31.1	29.6	28.0
ED Visit Count	337.0	282.0	269.0	255.0
Percentage of ED Visits	0.5%	0.5%	0.5%	0.5%

Source: Mental Health Dashboard | NC DETECT

In October 2015, the Division of Mental Health, Developmental Disabilities and Substance Abuse Services and the Division of Medical Assistance were awarded a planning grant for Certified Community Behavioral Health Clinics (CCBHC) from the Substance Abuse and Mental Health Services Administration (SAMHSA). The planning grant will aid North Carolina Medicaid beneficiaries in obtaining integrated behavioral health and physical health care from qualified providers. Authorized under Section 223 of the Protecting Access to Medicare Act of 2014, the planning grants are part of a comprehensive effort to integrate behavioral health with physical health care, utilize evidence-based practices and improve access to high quality care.[73]

Exhibit 57: Certified Community Behavioral Health Clinics

Clinic	Location
Anuvia Prevention & Recovery Center (Charlotte)	Charlotte
B&D Integrated Health Services (Durham)	Durham
Cumberland County Community Mental Health Center (Fayetteville)	Fayetteville
Mountain Area Health Education Center (Asheville)	Asheville
Southlight Healthcare (Raleigh)	Raleigh

Source: NCDHHS Increases Access to Health Care Services; Five Community Behavioral Health Clinics Awarded Funds to Expand Community Services | NCDHHS

[73] NC DHHS: Certified Community Behavioral Health Clinics

Medication Assisted Treatment (MAT) combines medication, formal clinical treatment, and recovery support services. It is often the best approach for opioid addiction. All FDA-approved medications are available to participants, including naltrexone, buprenorphine and methadone. Each individual is assessed to determine which medication will best meet his or her needs. The clinical services in the program include group, family and individual counseling, as well as intensive outpatient treatment. The program is currently operating in Iredell and Wilkes counties and has assisted 294 individuals. Findings are presented below for 116 individuals who were interviewed six months following enrollment in the program.[74]

Exhibit 58: Changes in Substance Use Between Intake and Six Months with Medication-Assisted Treatment, North Carolina

Substance	Intake	Six Months	Percent Change
General Alcohol and Drug Use			
Any Alcohol	23.3%	9.5%	-66.3%
Binge Drinking (4/5+ drinks)	7.8%	0.0%	-100.0%
All Misused Drugs	92.2%	37.9%	-56.9%
Prescription Drugs Only	56.3%	10.3%	-81.7%
Marijuana	38.8%	24.1%	-37.9%
Oxycontin/Oxycodone	33.3%	2.6%	-92.6%
Benzodiazepines	22.4%	10.3%	-54.0%
Cocaine	18.1%	9.5%	-47.9%
Methamphetamine	21.6%	9.5%	-56.0%
Heroin	16.4%	2.6%	-84.4%
Percocet	12.9%	0.0%	-100.0%
Morphine	8.6%	0.9%	-89.5%
Codeine	4.3%	0.9%	-79.1%
Other Misused Drugs	64.7%	8.6%	-86.7%
Changes in Involvement with the Justice System			
Confined in Justice Facility	15.4%	1.9%	-87.7%
Committed Crime	941.2%	38.5%	-59.1%

Source: Medically Assisted Treatment (MAT): Helping to Kick the Habit of Drug Dependency | NC DPS.

[74] Medically Assisted Treatment (MAT): Helping to Kick the Habit of Drug Dependency | NC DPS.

Issue Spotlight: Harm Reduction

What is Harm Reduction?

Harm reduction is a way of preventing disease and promoting health that *"meets people where they are"* rather than making judgments about where they should be in terms of their personal health and lifestyle. Harm reduction is a key pillar in the U.S. Department of Health and Human Services' Overdose Prevention Strategy and builds trust with case workers that can potentially serve as a pathway to additional services including prevention, treatment, and recovery.

U.S. Department of Health and Human Services' Overdose Prevention Strategy:

https://www.hhs.gov/overdose-prevention/harm-reduction

Accepting that not everyone is ready or able to stop risky or illegal behavior, harm reduction focuses on promoting scientifically proven ways of mitigating health risks associated with drug use and other harmful behaviors, including condom distribution, access to sterile syringes, medications for opioid dependence such as methadone and buprenorphine, and overdose prevention.[75]

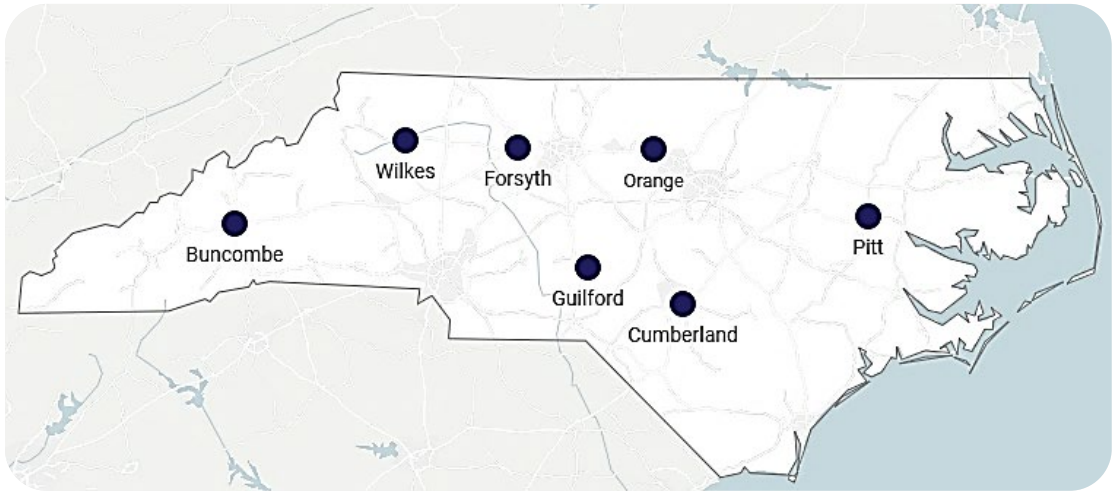
SAMHSA Harm Reduction Framework:

https://www.samhsa.gov/sites/default/files/harm-reduction-framework.pdf

[75] Human Rights Watch, We Know What to Do, Harm Reduction and Human Rights in North Carolina. Link: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.hrw.org/sites/default/files/related_material/us0911brochurewebwcover_0.pdf

Examples of Harm Reduction in North Carolina

- The North Carolina Harm Reduction Coalition helped identify seven counties interested in installing vending machines in their county jails (not including Rockingham County). The coalition fostered relationships with jail officials and community groups formed through years of providing overdose prevention education.



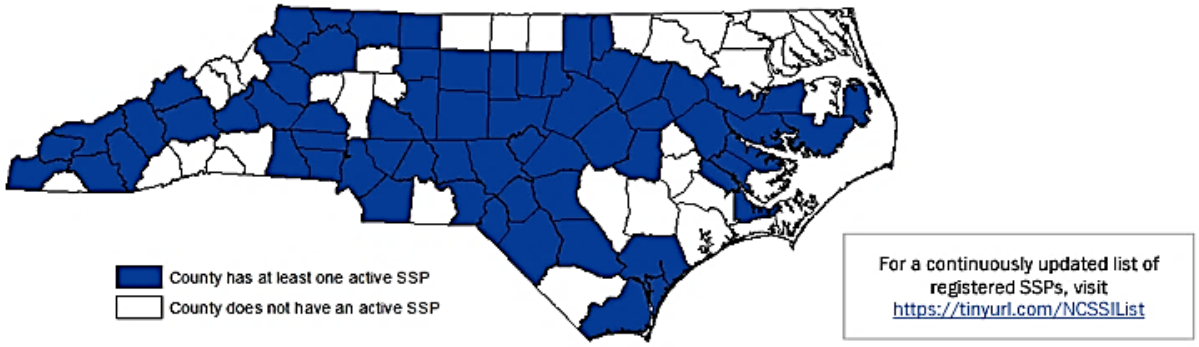
Naloxone Vending Machine Locations

Source: NC Health News, Vending machines dispensing free, life-saving medication (November 2022)

- The North Carolina Harm Reduction Coalition provides a broad range of programs services and interventions designed to improve the health and quality of life of individuals and communities, including Syringe Services Programs, Overdose Prevention, Post Overdose Response and Law Enforcement, and Law Enforcement Assisted Diversion.[76]

[76] The North Carolina Harm Reduction Coalition. Link: https://www.nchrc.org/

- In response to the opioid crisis, North Carolina passed several protections designed to alleviate some of the legal liability surrounding drug use in the interest of harm reduction and public health. One of those protections authorized needle exchange programs (alternatively known as safe syringes programs).[77]
- There are 47 Syringe Services Programs (SSPS) providing direct outreach in 63 counties and one federally-recognized tribe across North Carolina. Of these 47 SSPs, 29 operate using a fixed-site location, 31 operate using mobile services, 26 operate using peer-based distribution, 22 operate in an integrated space, and 15 operate using delivery services.

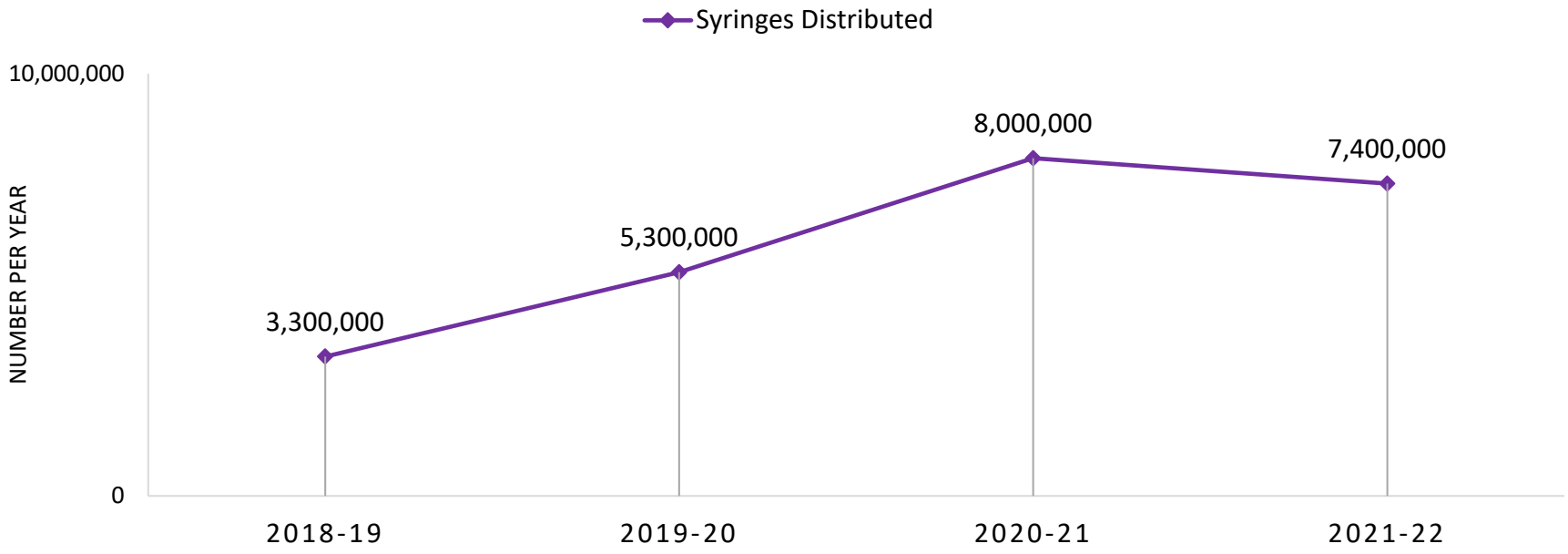


Safe Syringe Programs in North Carolina

Source: NC Safer Syringe Initiative Annual Report, 2021-2022

[77] G.S. 90-113.27: Needle and Hypodermic Syringe Exchange Programs Authorized; Limited Immunity.
Link: https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_90/GS_90-113.27.pdf

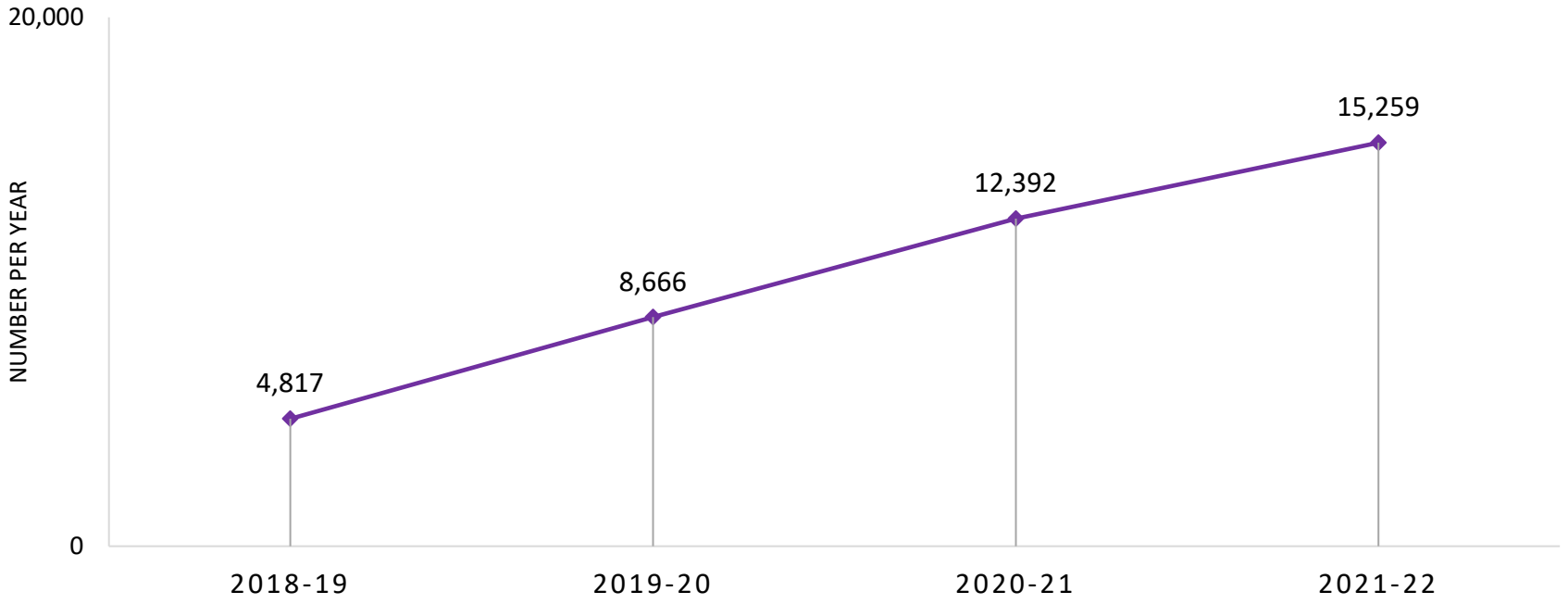
Exhibit 59: North Carolina Number of Syringes Distributed



North Carolina law (G.S. 90-113.27) allows for the legal establishment of hypodermic syringe and needle exchange programs. Syringe services programs (SSPs) are an evidence-based strategy to reduce overdose deaths, reduce transmission of blood-borne pathogens including HIV and hepatitis C (HCV), and connect participants to treatment and care. SSPs provide a variety of health and social services for people who use drugs, often serving as the primary avenue to meet their health needs. They offer sterile syringes and disposal services to remove biohazards from the community and reduce sharing and reuse of syringes. They also provide wound care, distribute naloxone, and offer many wraparound services.

NCDHHS, NC Safer Syringe Initiative Annual Report, 2021-2022

Exhibit 60: North Carolina Naloxone Kits Distributed



	2018-19	2019-20	2020-21	2021-22
Syringes Distributed	3.3M	5.3M	8.0M	7.4M
Naloxone Kits Distributed	4,817	8,666	12,392	15,259

Source: NCDHHS, NC Safer Syringe Initiative Annual Report, 2021-22

Exhibit 61: Naloxone Access

	Community Reversals Rate
North Carolina	39.6
Rockingham County	0.0

Source: Opioid and Substance Use Action Plan Data Dashboard | NCDHHS, 2021

Medically Assisted Treatment

Medication-assisted treatment is the use of FDA-approved medications, in combination with counseling and behavioral therapies, to provide a "whole-patient" approach to the treatment of substance use disorders.[78]

In February of 2023, Rockingham County Department of Health and Human Services announced the county is set to receive $350,000 to combat the opioid crisis that the nation faces. This funding comes from a federal grant intended to expand first responder and social worker efforts to help reduce the number of opioid overdose related deaths seen throughout the state of North Carolina.

Rockingham County was one of the eight counties chosen to expand an EMS-based Medication Assisted Treatment (MAT) Bridge program. Rockingham County initiated a Post Overdose Response Team (PORT) in 2020. This Initiative is a collaborative effort between the Eden and Reidsville Police Departments, Daymark Recovery Services, the County's DHHS Integrated Health Care Program along with other supportive community partners. The intent of this initiative is to follow up with individuals who have an unintended opioid overdose, within 24-72 hours when Narcan was administered but refuse transportation to the hospital.

In January 2023, Rockingham County Emergency Services responded to 19 suspected opioid overdose encounters, as compared to 21 in January 2022 (NC Injury and Violence Prevention, February 14th, 2023).

These funds will be utilized to expand the harm reduction efforts already being implemented by the PORT initiative. Community Paramedics with the Integrated Health Care Team will be allowed to administer Suboxone to patients who are interested in beginning treatment for their substance use disorder. This allows immediate access to treatment and reduces the chance of a future overdose event, while allowing staff to help them access ongoing treatment resources. During the past quarter, staff from the Integrated Health Care Program have contacted 50% of individuals who experienced an overdose, and 43.0% of those individuals accepted some type of assistance.

This federal money comes from the American Rescue Plan Act (ARPA) and will be allocated to the Integrated Health Program under Rockingham County's Health and Human Services umbrella. Funds will be reimbursed based on County reports and should be utilized, in full, by September 30, 2025, and enhance the work that has been ongoing since 2020.[79]

[78] SAMHSA, Medication-Assisted Treatment (Mat) In The Criminal Justice System: Brief Guidance To The States. Link: https://store.samhsa.gov/sites/default/files/d7/priv/pep19-matbriefcjs_0.pdf
[79] County to receive funding for EMS Bridge MAT Program. Link: https://www.rockinghamcountync.gov/newsview.aspx?nid=6371

Service Use Data Analysis

As part of the Behavioral Health Needs Assessment and Gap Analysis, regional behavioral health partners (Compassion Health Care and Sandhills Center) provided de-identified service use data for analysis, and Daymark Recovery Services and Rockingham County Emergency Medical Services (EMS) provided aggregated data on the services it provides.

Sandhills Center

Sandhills Center is a publicly funded Local Management Entity-Managed Care Organization (LME-MCO) that manages public mental health, intellectual/developmental disabilities and substance use disorder services for residents of Anson, Davidson, Guilford, Harnett, Hoke, Lee, Montgomery, Moore, Randolph, Richmond, and Rockingham counties. Sandhills Center does not provide services directly to consumers, however, they ensure residents within its region who seek services are able to access them through a network of contracted private providers. Sandhills Center is essentially the payor for Medicaid and indigent care for uninsured individuals in Rockingham County.

Compassion Health Care

Compassion Health Care is a patient-centered medical home (PCMH) with locations in Yanceyville and Eden. Each location provides primary care, urgent care, behavioral health, and lab services to residents regardless of their ability to pay. A sliding fee is available for those who do not have health insurance and may be low income. Compassion Health Care has several behavioral health providers on staff who diagnose and treat common mental health conditions, such as anxiety and depression, substance use evaluations and counseling, and NARCAN/Naloxone distribution.

Daymark Recovery Services

Daymark Recovery Services provides a variety of outpatient mental health and psychiatric services for mental health and substance use disorders. Daymark has locations throughout the state with a facility in Reidsville. The facility sees patients by appointment and walk-in. A sliding scale is available for people without insurance.

Rockingham County Emergency Medical Services

Date Ranges of Data

2021: 1/1/21 to 12/31/21

2022: 1/1/22 to 12/31/22

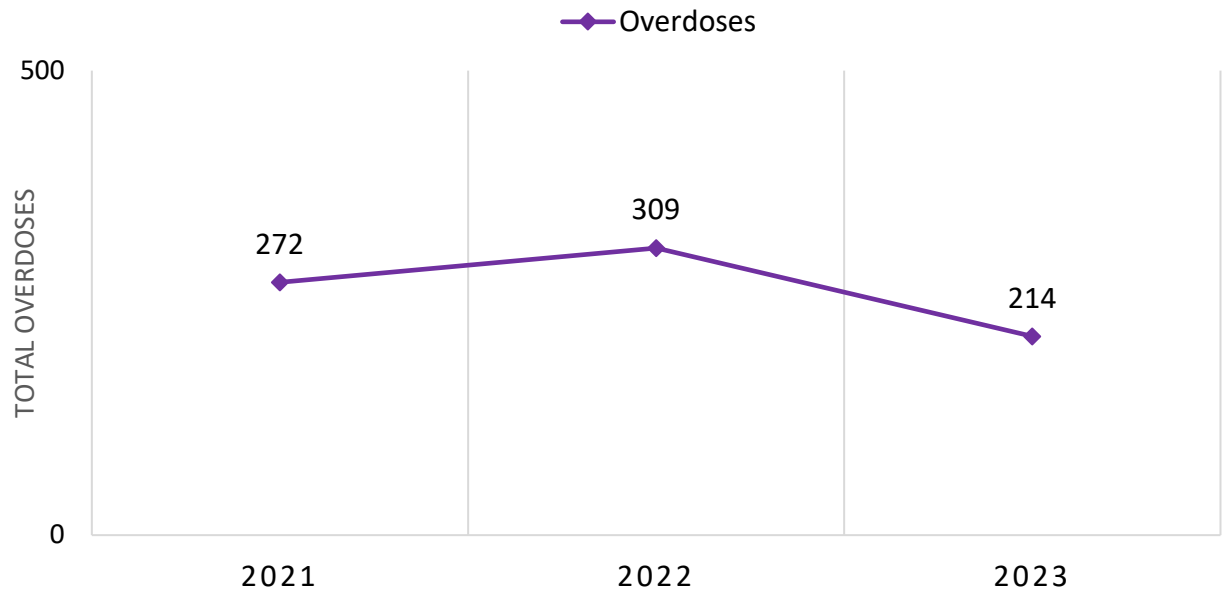
2023: 1/1/23 to 9/7/23

The Emergency Medical Services EMS) is operated by the county.

Overdose Surveillance

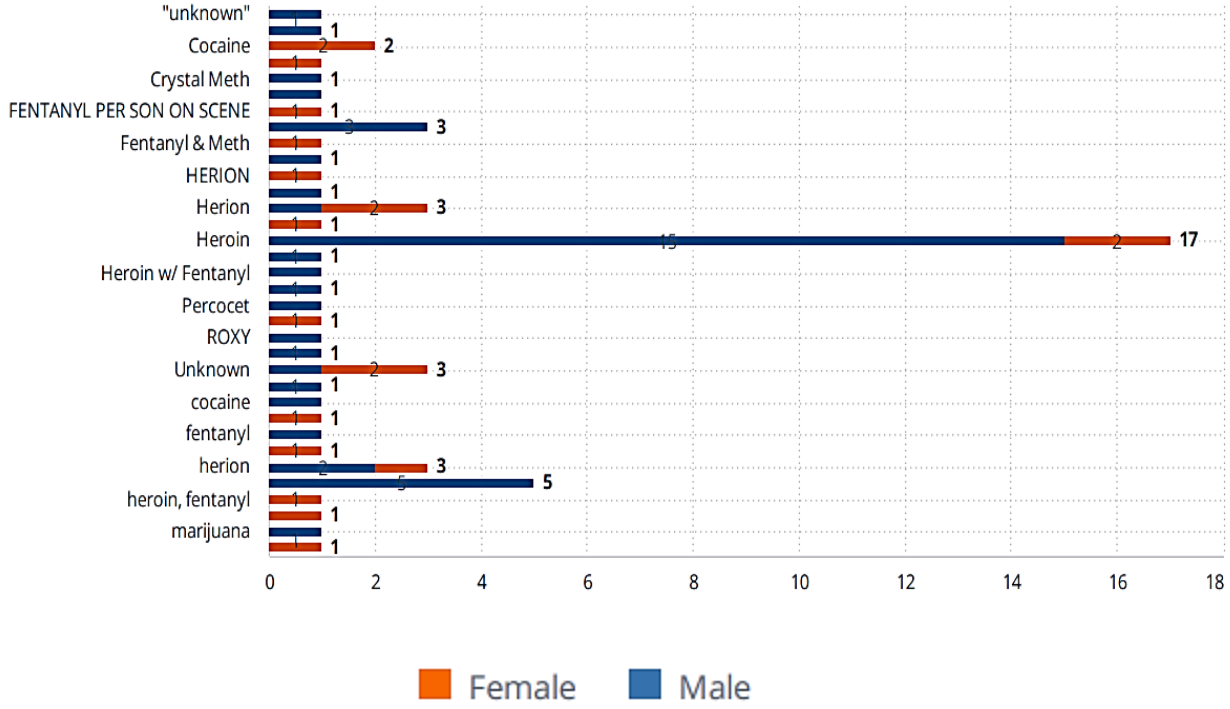
Rockingham County EMS uses ESO Electronic Health Record to record all its patient and call data. As part of its data collection, Rockingham County EMS reports a variety of data on overdose calls in the county. Three-year data trends show that there is an increase in overdoses in Rockingham County. As of September 7th, 2023, there were 214 recorded overdoses and with four months left in the calendar year, it is projected that the 2023 number will exceed the 2022 number.

Exhibit 62: Annual Overdoses, Rockingham County



While the three-year data trends on substances found at the scene vary, the most common substance is heroin. Fentanyl and drugs laced with fentanyl is becoming more common in Rockingham County (data not shown).

Exhibit 63: Rockingham County EMS, Substance Reported on the Scene, 2023



From June 1st, 2021, to September 7th, 2023, Rockingham County EMS reported 1,674 behavioral health-related calls. The most common primary impressions were altered mental status and behavioral/psychosis episode. Most patients are between the age of 28 and 50, but ages range from infants to 102 years old.

Exhibit 64: Rockingham County EMS, Primary Impression, Suspected Behavioral Health Calls

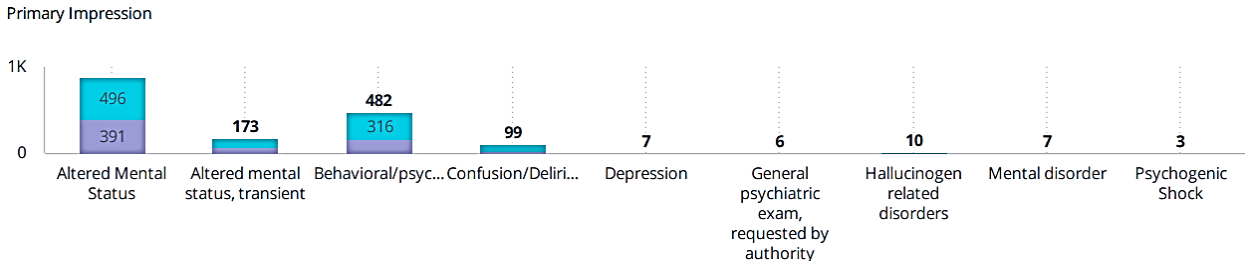
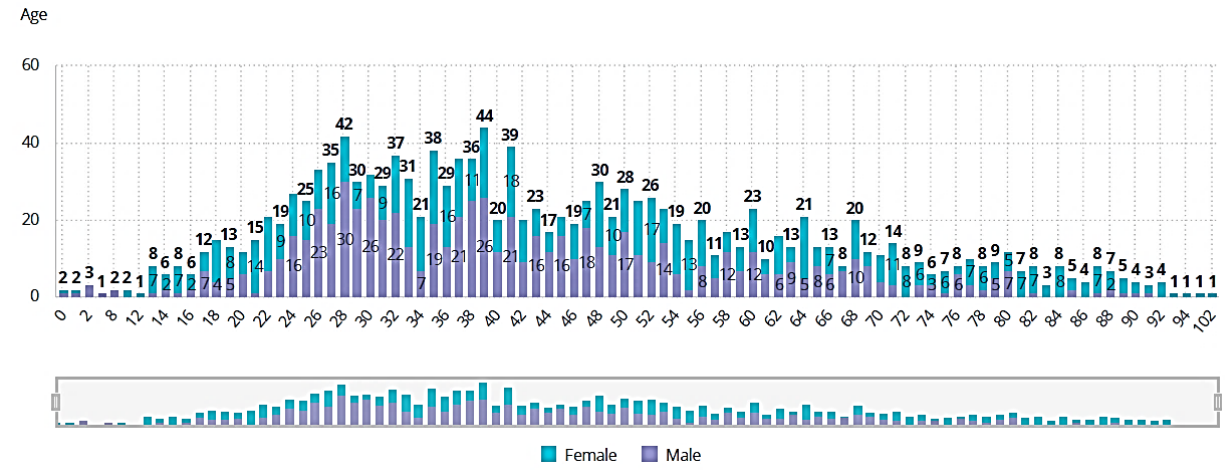


Exhibit 65: Rockingham County EMS, Age of Patients



Most calls originate in Eden and Reidsville, which are the two most populous municipalities in the county. Over the course of almost three years, more calls go to Annie Penn Hospital than UNC Rockingham Healthcare. This may be due to proximity to hospitals at the patient call locations. There are more calls that originate in Reidsville where Annie Penn Hospital is located than Eden where UNC Rockingham Hospital is located.

Exhibit 66: Rockingham County EMS Calls, Location of Behavioral Health-Related Calls

Scene City	# of unique Incident Number
Eden	450
REIDSVILLE	322
Reidsville	170
MADISON	114
Stoneville	110
Mayodan	88
STOKESDALE	34
Wentworth	32
Madison	25
SUMMERFIELD	23
RUFFIN	21
Stokesdale	10
Ruffin	8
PELHAM	6
Summerfield	5
BROWN SUMMIT	2
Pelham	2

Exhibit 67: Rockingham County EMS Calls, Behavioral Health-Related Transport Locations

Destination Location Name	# of unique Incident Number
N\A	578
Annie Penn Hospital	470
UNC Rockingham Healthcare	355
Moses Cone	6
Pelican Health Reidsville	4
Hospice of Rockingham County	2
Jacobs Creek Nursing Center and Rehab	2
Brian Center Eden	2
Brookedale Reidsville	1
Rockingham County Jail	1
North Pointe of Mayodan	1
Danville Regional Medical Center	1
Brian Center Yanceyville	1
Highway	1
Wesley Long Hospital	1
Cypress Valley	1
UNC Rehabilitation and Nursing Care Center	1

Date Ranges of Data

2021: 1/1/21 to 12/31/21

2022: 1/1/22 to 12/31/22

2023: 1/1/23 to 9/7/23

Of the 1,428 total reported EMS outcomes reported below, 23.2% (331) patients were treated and released against medical advice. Another 5.8% patients (83) refused evaluation and care without transport. While no other data is available about the patients' primary impressions, it is concerning that almost one in four patients with EMS calls for behavioral health-related issues are not seeking treatment. Understanding why patients refuse treatment and/or transport is important to understand the barriers to access to adequate care in Rockingham County.

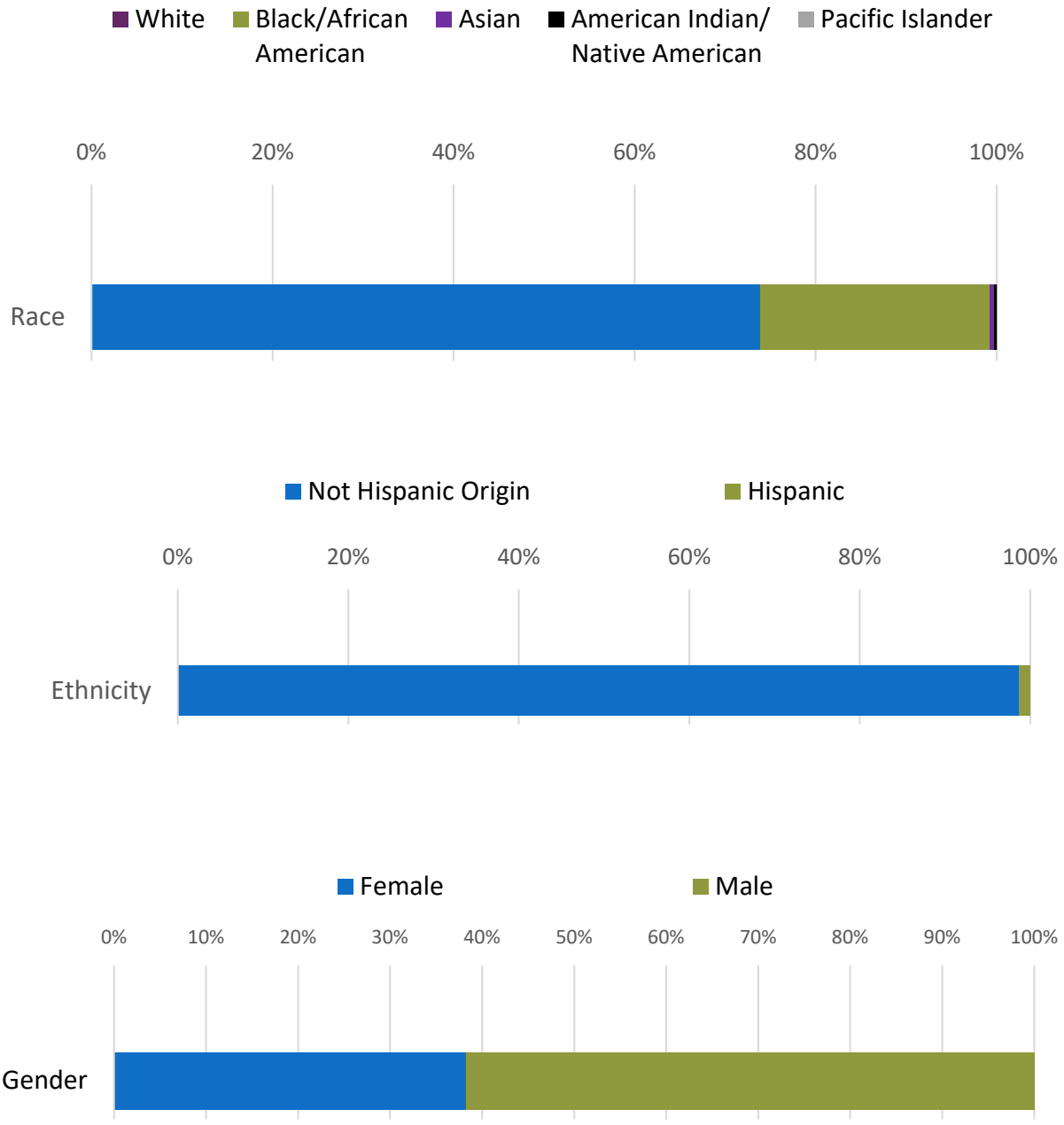
Exhibit 68: Rockingham County EMS Calls, EMS Outcome

Disposition	# of unique Incident Number
Transported No Lights/Siren	796
Patient Treated, Released (AMA)	331
Patient Evaluated, No Treatment/Transport Required	92
Patient Refused Evaluation/Care (Without Transport)	83
Patient Treated, Released (per protocol)	40
Transported Lights/Siren	39
Patient Treated, Transported by Law Enforcement	21
Cancelled (No Patient Contact)	5
Patient Treated, Transferred Care to Another EMS Professional/Unit	4
Patient Treated, Transported by Private Vehicle	4
N\A	3
Patient Dead on Scene - Resuscitation Attempted (Without Transport)	3
Transported No Lights/Siren, Upgraded	3
Patient Refused Evaluation/Care (With Transport)	1
Transported Lights/Siren, Downgraded	1
Assist, Public	1
Cancelled (Prior to Arrival at Scene)	1

Sandhills Center

Sandhills Center provided a dataset of 144,155 behavioral health Rockingham County resident patient encounters across 305 providers from November 2021 to July 2023. This population was majority White (73.9%), not of Hispanic origin (98.7%), and male (61.7%). One in four episodes of care (25.3%) were among individuals who identify as Black/African American.

Exhibit 69: Sandhills Center Encounters by Selected Demographics, November 2021 to July 2023



Among those identifying as Hispanic, the largest proportion (39.0%) reported being of a Hispanic origin other than Cuban, Mexican, or Puerto Rican, while more than one in three (37.6%) reported being of Puerto Rican origin. The largest proportions of zip codes represented were 27320 (29.5% of all episodes), 27288 (26.7%), 27320 encompasses Reidsville. The top three providers in terms of total encounters during the period were Therapeutic Alternatives, Inc., Youth Haven Services, Inc., and Daymark Recovery Services, Inc. It is important to note that

Exhibit 70: Sandhills Center Encounters by Zip Code (Top Five), November 2021 to July 2023

Zip Code	Encounters	Percentage of Total
27320	42,522	29.5%
27288	38,520	26.7%
27048	13,196	9.2%
27025	6,747	4.7%
27027	5,116	3.5%

Exhibit 71: Sandhills Center Encounters by Provider, November 2021 to July 2023

Rank	Provider	Encounters
1	Therapeutic Alternatives, Inc.	15,507
2	Youth Haven Services, Inc.	11,906
3	Daymark Recovery Services, Inc.	11,226
4	Lindley Habilitation Services, Inc.	7,405
5	ALEF Behavioral Group LLC Eden[80]	7,045
6	UMAR Services, Inc.	6,566
7	Bayada Home Health Care, Inc.	6,300
8	Crossroads Treatment Center of Greensboro	5,009
9	Rouses Group Home II, Inc.	4,210
10	Jewel Community Care LLC	4,102

Many of the top providers were not located in Rockingham County indicating many county residents needed to see care outside of the county and many encounters were for persons with intellectual or developmental disabilities (IDD). However, individuals with IDD may also have a co-occurring mental health or substance use disorder.

[80] ALEF Behavioral Group LLC Eden is now TruHealing Reidsville. Link: https://truhealingreidsville.com/

Among this population, the most common principal diagnoses were intellectual disabilities of varying degrees and opioid dependence, reflecting the breadth behavioral health service lines and specialties across the organization's network of providers. The bolded diagnoses reflect non-IDD diagnoses.

Exhibit 72: Sandhills Center Encounters by Principal Diagnosis, November 2021 to July 2023

Rank	ICD-10 Code	Principal Diagnosis	Encounters
1	F71	Moderate intellectual disabilities	21,618
2	**F11.20**	**Opioid dependence, uncomplicated**	**18,717**
3	F70	Mild intellectual disabilities	17,096
4	F84.0	Autistic disorder	12,084
5	F72	Severe intellectual disabilities	9,444
6	F73	Profound intellectual disabilities	8,217
7	**F43.10**	**Post-traumatic stress disorder, unspecified**	**3,986**
8	**F10.20**	**Alcohol dependence, uncomplicated**	**3,293**
9	**F91.3**	**Oppositional defiant disorder**	**2,935**
10	F90.2	Attention-deficit hyperactivity disorder, combined type	2,922
11	**F34.81**	**Disruptive mood dysregulation disorder**	**2,838**
12	**F20.9**	**Schizophrenia, unspecified**	**2,654**
13	G80.9	Cerebral palsy, unspecified	2,539
14	**F33.1**	**Major depressive disorder, recurrent, moderate**	**2,377**
15	F79	Unspecified intellectual disabilities	2,332
16	**F33.2**	**Major depressive disorder, recurrent severe without psychotic features**	**2,070**
17	**F41.1**	**Generalized anxiety disorder**	**1,734**
18	**F25.0**	**Schizoaffective disorder, bipolar type**	**1,688**
19	**F32.9**	**Major depressive disorder, single episode, unspecified**	**1,546**
20	**F43.89**	**Other reactions to severe stress**	**1,165**

Examination of the most common primary diagnoses at each Sandhills Center provider with the most encounters in the period revealed a range of intellectual disabilities, substance use issues, and youth-oriented conditions identified and treated.

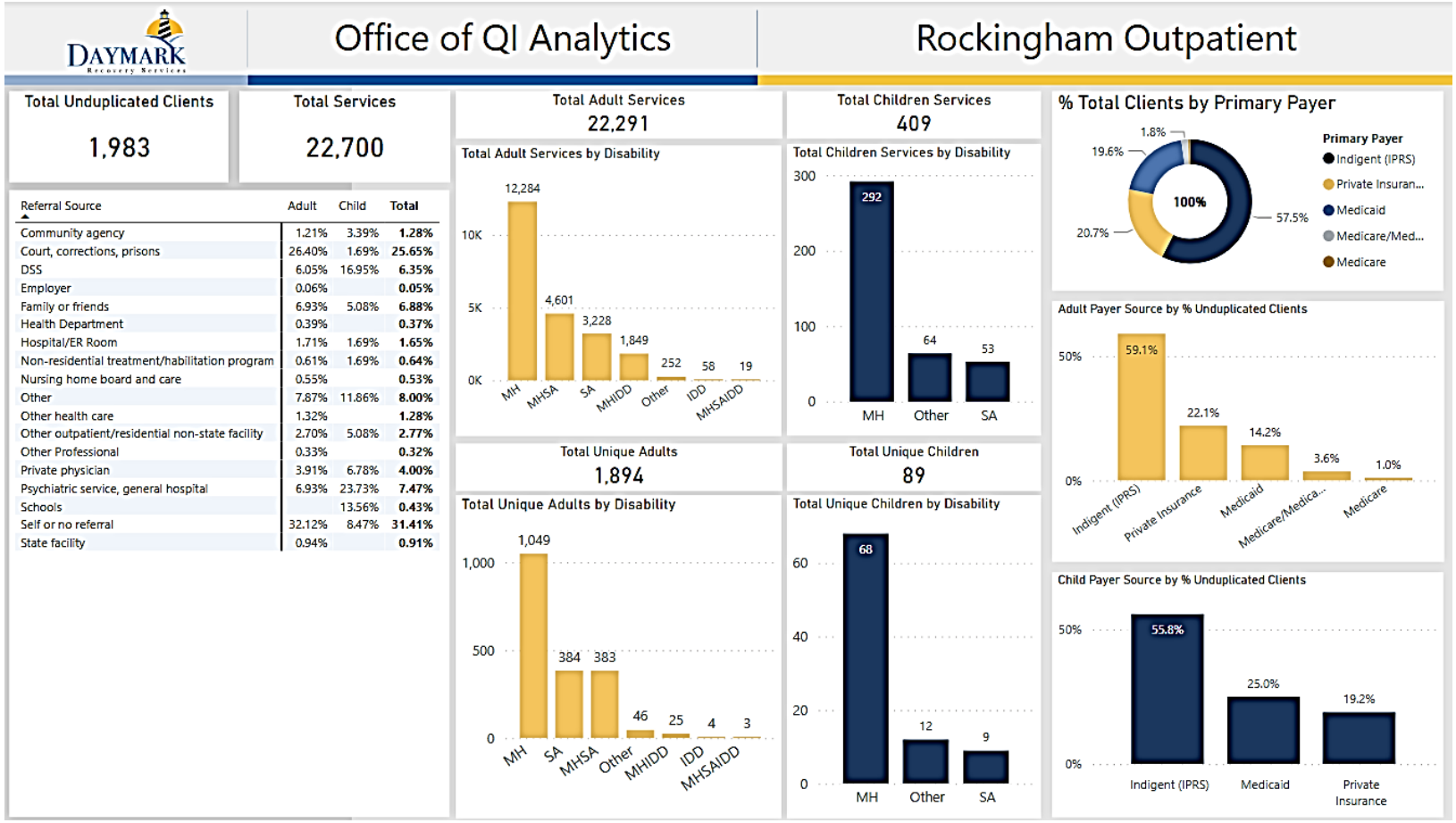
Exhibit 73: Top Primary Diagnoses Among The Most Commonly Utilized Sandhills Center Providers, November 2021 to July 2023

Therapeutic Alternatives Inc.	Youth Haven Services Inc.	Daymark Recovery Services Inc.	Lindley Habilitation Services Inc.	UMAR Services Inc.	Bayada Home Health Care, Inc.	Crossroads Treatment Center of Greensboro	Rouses Group Home II Inc.	Jewel Community Care LLC
Moderate intellectual disabilities	Oppositional defiant disorder	Schizophrenia, unspecified	Autistic disorder	Mild intellectual disabilities	Moderate intellectual disabilities	Opioid dependence, uncomplicated	Mild intellectual disabilities	Alcohol dependence, uncomplicated
Mild intellectual disabilities	Disruptive mood dysregulation disorder	Major depressive disorder, single episode, unspecified	Moderate intellectual disabilities	Moderate intellectual disabilities	Profound intellectual disabilities	Opioid dependence with other opioid-induced disorder	Moderate intellectual disabilities	Cocaine abuse with intoxication, uncomplicated
Profound intellectual disabilities	Post-traumatic stress disorder, unspecified	Opioid dependence, uncomplicated	Severe intellectual disabilities	Severe intellectual disabilities	Mild intellectual disabilities	Other schizoaffective disorders	Opioid dependence with other opioid-induced disorder	Cannabis abuse, uncomplicated
Autistic disorder	Attention-deficit hyperactivity disorder, combined type	Schizoaffective disorder, bipolar type	Profound intellectual disabilities	Unspecified intellectual disabilities	Autistic disorder	Cannabis use, unspecified with anxiety disorder	Other schizoaffective disorders	Cocaine dependence, uncomplicated
Severe intellectual disabilities	Other reactions to severe stress	Alcohol dependence, uncomplicated	Opioid dependence with other opioid-induced disorder	Opioid dependence with other opioid-induced disorder	Spastic quadriplegic cerebral palsy	Cannabis use, unspecified with intoxication with perceptual disturbance	Cannabis use, unspecified with anxiety disorder	Cocaine abuse, uncomplicated

Daymark Recovery Services

Daymark estimates that it accounts for 80% or more of the adult services market in Rockingham County, part of the larger healthcare system that Daymark operates. All patients go through its MU-certified EMR, allowing Daymark to address physical health conditions and concerns. The majority of Daymark's patients in Rockingham County are indigent (IPRS) or have Medicaid and/or Medicare.

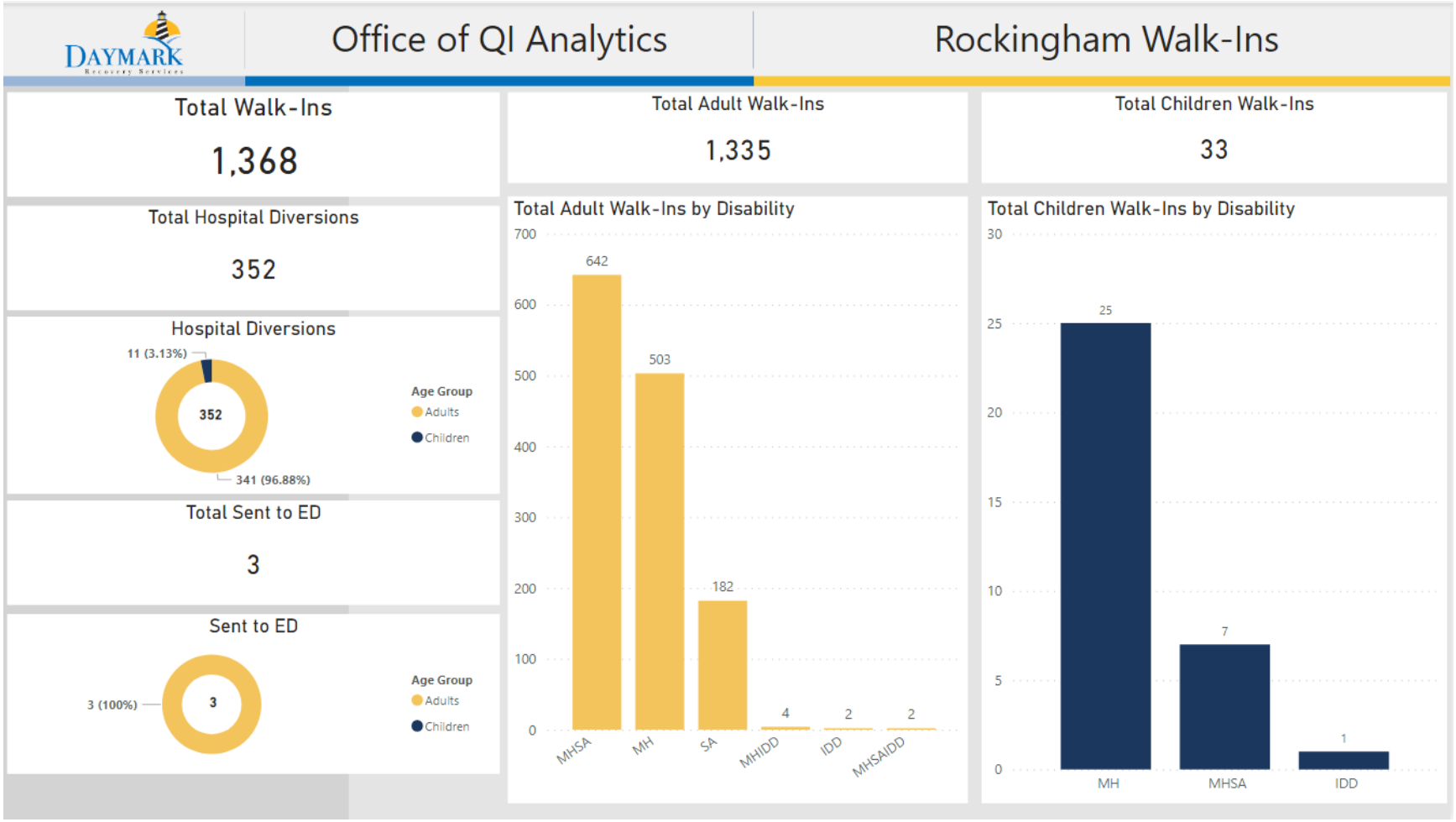
Exhibit 74: Daymark Recovery Services Overview of Patients, Payers, and Referrals, March 1, 2022 – March 31, 2023



Referral Source	Adult	Child	Total
Community agency	1.21%	3.39%	**1.28%**
Court, corrections, prisons	26.40%	1.69%	**25.65%**
DSS	6.05%	16.95%	**6.35%**
Employer	0.06%		**0.05%**
Family or friends	6.93%	5.08%	**6.88%**
Health Department	0.39%		**0.37%**
Hospital/ER Room	1.71%	1.69%	**1.65%**
Non-residential treatment/habilitation program	0.61%	1.69%	**0.64%**
Nursing home board and care	0.55%		**0.53%**
Other	7.87%	11.86%	**8.00%**
Other health care	1.32%		**1.28%**
Other outpatient/residential non-state facility	2.70%	5.08%	**2.77%**
Other Professional	0.33%		**0.32%**
Private physician	3.91%	6.78%	**4.00%**
Psychiatric service, general hospital	6.93%	23.73%	**7.47%**
Schools		13.56%	**0.43%**
Self or no referral	32.12%	8.47%	**31.41%**
State facility	0.94%		**0.91%**

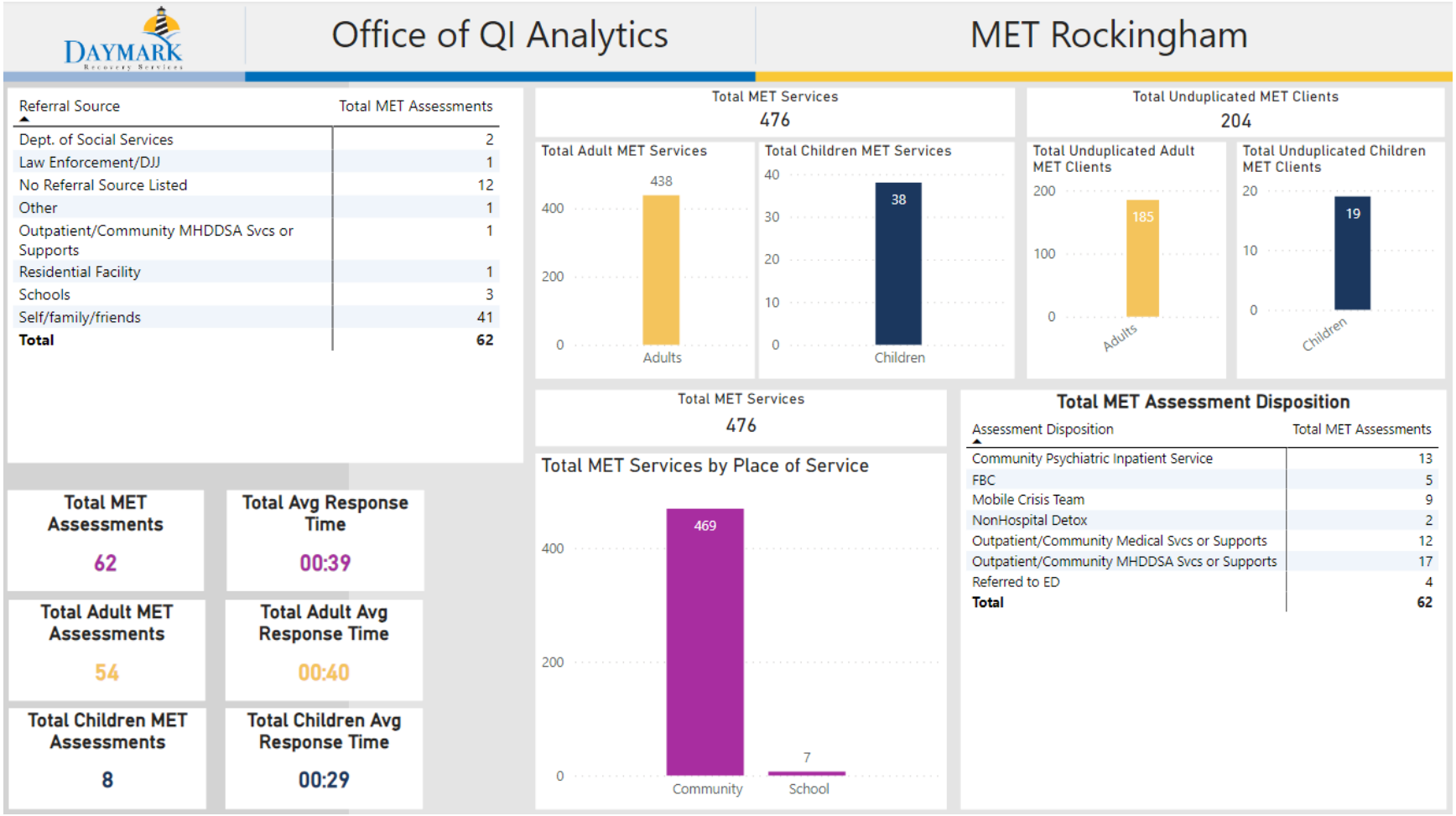
Among Daymark's adult walk-ins in Rockingham County, the largest proportion have co-occurring mental health and substance abuse diagnoses. Child walk-ins, a far smaller number of Daymark's total, most commonly have a mental health diagnosis alone.

Exhibit 75: Daymark Recovery Services Advance Access Clinic Data, March 1, 2022 – March 31, 2023



Daymark's Mobile Engagement Team (MET) provided 476 services to 185 unduplicated adult clients over the period from March 2022 to March 2023. The most common source of referral for MET assessments over this period was self, family, or friends. MET response times were less than 40 minutes per response, on average.

Exhibit 76: Daymark Recovery Services Mobile Engagement Team (MET) Services, March 1, 2022 – March 31, 2023

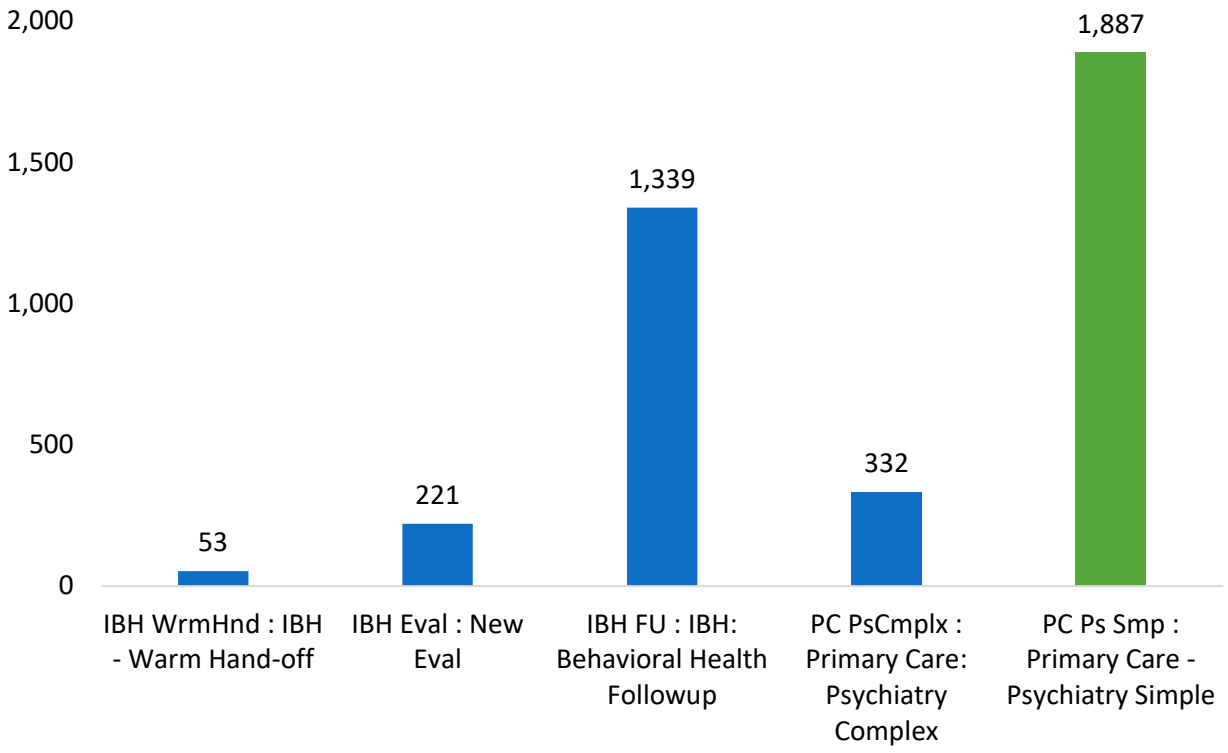


Compassion Health Care

Compassion Healthcare provided a deidentified dataset detailing 3,832 unique episodes of behavioral health care that occurred over the period from June 2021 through July 2023. Of these episodes, more than three in four (77.3%) occurred at the Caswell Family Medical Center (Yanceyville), with an additional 19.2% at James Austin Health Center (Eden). A small minority of episodes (3.5%) occurred via telehealth.

More than half of all episodes (57.9%) were primary care psychiatry visits, with the majority of these categorized as "psychiatry simple." Among integrated behavioral health (IBH) visits, the vast majority of these were categorized as behavioral health follow-ups, with small numbers of new evaluations and warm hands-offs.

Exhibit 77: Compassion Healthcare Behavioral Health Episodes of Care by Type, June 2021 to July 2023



Among patients who experienced these episodes of care, two in three (67.5%) identified as female. While the most common primary insurance was Blue Cross Blue Shield NC (10.7%), most of the remaining top ten most common primary insurance plans were Medicaid and/or Medicare plans.

Exhibit 78: Compassion Healthcare Behavioral Health Episodes of Care by Primary Insurance (Top Ten), January 1, 2021, to July 27, 2023

Rank	Primary Insurance	Plan Type	Number of Occurrences	Percentage of Occurrences
1	Blue Cross Blue Shield NC	Private	410	10.7%
2	NGS Medicare	Medicare	292	7.6%
3	Healthy Blue	Medicaid	264	6.9%
4	Self-Pay	-	232	6.1%
5	Medicaid of NC Core	Medicaid	227	5.9%
6	Humana Gold	Medicare	197	5.1%
7	Carolina Access Core	Medicaid	192	5.0%
8	UHC Community Plan of NC	Medicaid	149	3.9%
9	UHC Dual Complete	Medicaid/Medicare	130	3.4%
10	Wellcare of NC Medicaid	Medicaid	125	3.3%

Compassion Healthcare also provided an inventory of 542 diagnostic codes by frequency of occurrence over the period from January 1, 2021, through July 27, 2023, across its James Austin Health Center and Caswell Family Medical Center facilities, as well as its telehealth options.

The top 20 diagnostic codes, ranked in order of most frequent occurrence, are listed below. These codes account for more than half (51.7%) of the 171,463 total occurrences over the period.

Several behavioral health conditions were among the most frequent occurrences, including high risk medication use (4.6%), generalized anxiety disorder (3.5%) and anxiety (2.8%), and depression (3.1%) and major depressive disorders, either severe (1.3%) or moderate (1.1%) in nature. Together, these top behavioral health conditions accounted for more than 30,000 occurrences over the 2.5-year period.

Exhibit 79: Compassion Healthcare Diagnostic Codes by Occurrence, January 1, 2021, to July 27, 2023

Rank	Description (ICD-10 Code)	Number of Occurrences	Percentage of Occurrences
1	Essential (primary) hypertension - (I10)	12,764	7.4%
2	**High risk medication use - (Z79.899)**	**7,813**	**4.6%**
3	Mixed hyperlipidemia - (E78.2)	7,630	4.4%
4	Encounter for administration of COVID-19 vaccine - (Z23)	7,520	4.4%
5	**Generalized anxiety disorder - (F41.1)**	**5,977**	**3.5%**
6	Type 2 diabetes mellitus without complications - (E11.9)	5,506	3.2%
7	**Depression - (F32.9)**	**5,396**	**3.1%**
8	Vitamin D deficiency - (E55.9)	4,880	2.8%
9	**Anxiety - (F41.9)**	**4,807**	**2.8%**
10	Dietary counseling and surveillance - (Z71.3)	4,109	2.4%
11	Hyperlipidemia - (E78.5)	3,139	1.8%
12	GERD (gastroesophageal reflux disease) - (K21.9)	2,772	1.6%
13	**Post traumatic stress disorder (PTSD) - (F43.10)**	**2,639**	**1.5%**
14	Prediabetes - (R73.03)	2,543	1.5%
15	Tobacco abuse - (Z72.0)	2,272	1.3%
16	**Major depressive disorder, recurrent severe without psychotic features - (F33.2)**	**2,249**	**1.3%**
17	**Major depressive disorder, recurrent, moderate - (F33.1)**	**1,924**	**1.1%**
18	Hypothyroidism - (E03.9)	1,724	1.0%
19	Insomnia - (G47.00)	1,531	0.9%
20	**Bipolar disorder, unspecified - (F31.9)**	**1,504**	**0.9%**

Qualitative Research

To evaluate the gaps in behavioral health services, as well as identify the root causes of challenges within Rockingham County, a qualitative research approach was implemented comprising of both one-on-one stakeholder interviews and focus group discussions with a broad range of community members.

In total, approximately **150** community stakeholders from various sectors across Rockingham County participated in the qualitative research process, including **30** focus groups and community meetings and one-on-one Zoom/telephone interviews lasting 20 to 30 minutes. The qualitative research process provided the opportunity for in-depth conversations about the strengths of Rockingham County's behavioral health system, and most importantly the challenges in accessing care as well as gaps in services.

Sectors of the community involved in the research process included, but are not limited to:

- Church and pastoral programs
- Behavioral health providers
- Family members of community members experiencing behavioral health challenges
- First responders, emergency medical services, and law enforcement
- Non-profit organizations
- Health care professionals
- Nursing home, assisted living, and adult protective services staff and leadership
- Rockingham County District Attorney, attorneys, and judges
- Long-term recovery centers

Key Findings

The following sections highlight the behavioral health services gaps and needs in Rockingham County.

Community Assets & Strengths

It is important to showcase the many programs and initiatives that are working well in the county.

Emergency Medical Services

Rockingham County Emergency Medical Services (EMS) is leading the way in North Carolina, especially around behavioral health. RCEMS utilizes ESO Electronic Health Record that provides easy access to analytics, patient lookups, and specialty patient forms. In a matter of minutes, a variety of real-time reports can be published to show the current EMS utilization and the health of the community. Additionally, RCEMS is the first county in the state to connect to the state's health information exchange, NC HealthConnex, that provides EMS providers real-time access to a patient's health and medication information that can potentially save a patient's live. While the two systems are not perfect, and EOS needs more focus on mental health, there are several ERCEMS staff members who are real champions for mental health improvements in the technology and improved mental health-focused training for EMS providers.

Integrated Health Care Program

Rockingham County launched the Integrated Health Care Program in 2017. The program has a team of community paramedics, a community behavioral health specialist, social worker, and behavioral health peer support specialists who all work together to help adults and children who are primarily low-income or financially needy and have a chronic medical or mental health condition. In 2020, the team has added the Post Overdoes Response Team (PORT). As part of the Integrated Health Care Program, community paramedics will visit residents identified in needing the program to conduct a physical health assessment and better assess the person's living arrangements. Based on the findings of the assessment, our team members will help connect the residents to services and resources in the community.

In 2023, RCDHHS was awarded $350,000 to deploy an EMS Bridge Medication Assisted Treatment (MAT) which will utilize the community paramedics to administer MAT to individuals in treatment for seven days while they find a long-term MAT provider in their community. Buncombe County has been a leader in both the PORT and EMS Bridge MAT Program in North Carolina and may provide some best practices to Rockingham County as the county rolls out the new programs.

Rockingham County Schools Social Emotional-behavioral Health Model

With the leadership of Dr. Stephanie Ellis at Rockingham County Schools, RCS developed an award-winning Social Emotional-Behavioral Health Model that supports over 3,000 students in need of social emotional learning and mental health support. The program is designed to teach students five core competencies: self-management, self-awareness, responsible decision making, relationship skills, and social awareness.

In addition to the social emotional-behavioral health model, RCS also utilizes tools such as the Say Something Anonymous Report app and Gagle Safety Management to better identify students who may harm themselves or others. The RCS Day Treatment Program provides intensive mental health services in a public-school setting with a goal of integrating students back into traditional school by assisting students in developing behavior management skills, social skills and strategies to help them achieve social, behavioral, and academic success. The behavioral health focused programs that Rockingham County Schools developed have been deemed by the state as a model mental health program and frequently visited by state officials and other school districts.

Countywide Broadband Access

In January 2022, Rockingham County Board of County Commissioners approved a $3.985 million grant agreement with Spectrum to provide broadband internet access to the 3,250 Rockingham County known addresses that do not have high-speed internet access. Spectrum has invested another $10.4 million towards the expansion project as well. The project was the first of its kind in the state and will provide opportunities for economic advancement and other benefits to local businesses and families.

During the pandemic, internet access became recognized as a “super determinant” of health and the “digital divide” became a common topic of conversation among policymakers, health care and social service providers, educators, and businesses. Due to stay at home orders and other pandemic-related restrictions, telehealth became a popular method to interact with health care providers, especially behavioral health providers. Telehealth will likely continue to be more common ways to access health care going forward, but without broadband access, many people, especially of low-income and rural communities, do not have access to telehealth. Because of Rockingham County’s significant investment in broadband access, access to telehealth opportunities may increase access to behavioral health providers and better health outcomes.

High-level Action Areas

High-level Action Areas represent the most commonly discussed behavioral health challenges and frequently mentioned gaps in services in Rockingham County. The following section includes direct quotes from community members who participated in the qualitative research process, as well as pertinent research to inform and support identified challenges and gaps.

Please note that the Action Areas are in alphabetical, not prioritized, order.

ACTION AREA	FINDINGS
Awareness of Existing Behavioral Health Services	▪ Behavioral health services are often passively denied since people are not aware of existing programs. ▪ Behavioral health organizations are working in silos and are not aware of the services other organizations provide. ▪ There is a lack of information being disseminated at the community level about existing resources.

"There is no engagement. People simply do not know where to go and what is out there for help in Rockingham County."

Community Member

"There is no collaboration between hospitals and community programs. Whatever they are doing we may not know. We don't know about the quality of care. This is a siloed community. You have organizations doing this and that. If you put them together it would be more cohesive."

Health Care Provider

The qualitative research highlighted a general lack of awareness, not only for Rockingham County behavioral health services but in North Carolina as well.

Awareness of existing programs exists on two levels: individual and organizational.

Individuals often stated how long they needed services before they actually were made aware of them within the county, creating an unnecessary delay in care that can often be critical or at the crisis level. There are noticeable disparities regarding awareness of resources. For example, in the faith-based community, leaders shared that when congregants are struggling with mental health challenges, the resources they are aware of and trust the most are not local, although there may be helpful resources already existing in Rockingham County.

On the organizational level, there is seemingly limited communication between service providers providing behavioral health care resulting in a "siloed community." Local law enforcement officers shared frustration around not being able to refer those in need to services that are truly accessible to those who need it most and do not have the means to travel outside the county.

Voices from the Community

"If we advertised more of our services in the community, maybe it would make people more willing to get help." *Behavioral Healthcare Provider*

"We're designing a simplified placard card to give to patients who have overdosed with information for them with language on a 10th-grade reading level" *EMS Training Officer*

Potential Strategies

Many community residents spoke of the **lack of awareness of existing behavioral health services** and resources in Rockingham County. Possible strategies for addressing this issue include, but are not limited to, the following:

- Development of a community awareness campaign which includes evidence-based and culturally appropriate materials to share and promote existing behavioral health services throughout the county.
- Provide funded Mental Health First Aid Training to health care/behavioral health care professionals, law enforcement, and schools, among other community-wide organizations to inform the community of existing resources and services.
- Establish an ongoing coordinated behavioral health discussion group within Rockingham County to meet intermittently (monthly or quarterly) to network, discuss services, develop campaigns.

Case Study

A recent study followed the creation, implementation, and results of a marketing campaign for an outpatient mental health treatment facility specializing in offering clinical psychiatric, counseling, and addiction services to individuals in need. The main objectives were to,

- Reach and bring people to the website in need of specific mental health services including therapy, medication, and addiction treatment.
- Pinpoint target audiences within a target location.

A Google Ads approach allows for specific targeting of audiences depending on demographic characteristics including age, gender, recent searches, annual income, and more. This allows for specific marketing to people who may be more in need of specific services, including mental health treatment and therapy. Furthermore, Google Ads allow for the promotion of specific, industry-related keyword terms people may be searching for to find mental health services. Goggle Ads may be a marketing platform that mental health providers may find helpful to increase awareness of services.

More Information:

- Mental Health Practice SEO and PPC Case Study: https://www.dsquaredmedia.net/case-studies/mental-health-practice-seo-and-ppc-case-study/

ACTION AREA	FINDINGS
Navigation of Existing Behavioral Health Services	▪ Youth, in particular, are "falling through the cracks" within the county and local school system. ▪ Behavioral health patients struggle to navigate the current behavioral health system in Rockingham County and the region. ▪ Health literacy may be low in the community, which leads to challenges in navigating the health system.

Health care systems, especially the behavioral health system, are complex and confusing for consumers. Even providers find navigating the health system difficult. From the adult to the youth population, navigating the current behavioral health system in Rockingham County is difficult for two main reasons: awareness of services and limited continuum of care, both of which are described in more detail in the qualitative findings.

"In primary care education, providers receive training on basic mental health screenings. People are more complex than garden variety depression. An important solution is a psychiatric consultation in addition to the primary care providers."

Family Nurse Practitioner

Parents cannot navigate the existing behavioral healthcare system and find entities to coordinate the care their child needs. This lack of coordination often leads to families disengaging from the care system because they are not getting the help they are seeking. Similar challenges are seen in the adult population. Discussions held in the qualitative research process called for the integration of behavioral health within the primary healthcare system to increase or even eliminate the need for navigation/care coordination with multiple providers.

Voices from the Community

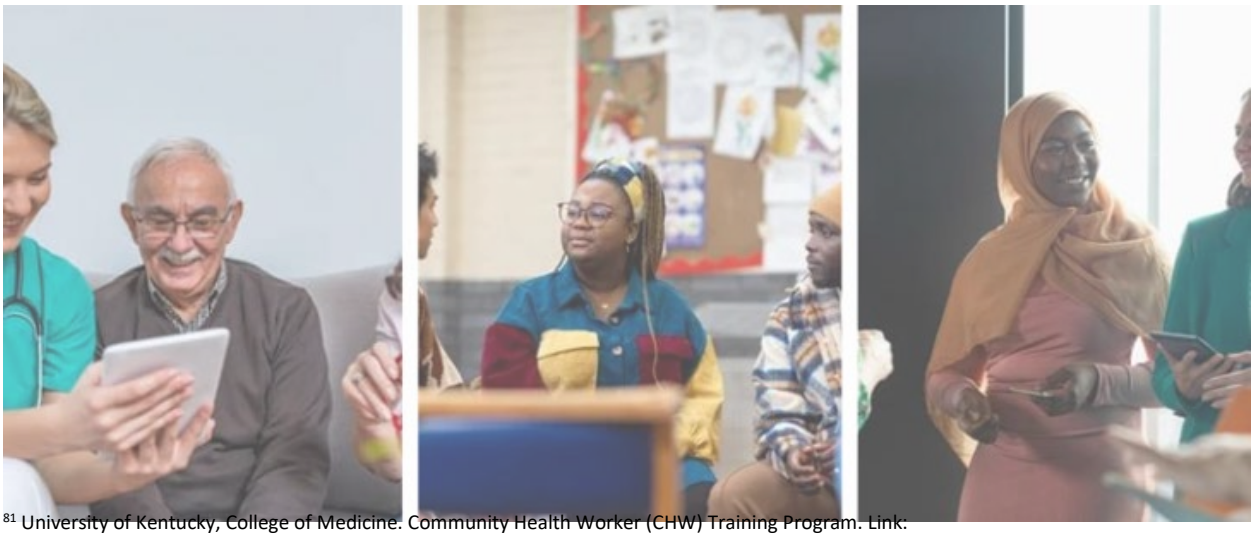
"I have one client that was going into the Community Living Program, and I applied for her to get into the program, and it was very difficult to get in touch with someone at the LME to coordinate this. When it was finally approved someone out of the blue called me saying they were a provider from Winston-Salem. They can't even get to the client." *Emergency Medical Service Provider*

"Some local providers kind of give the impression you get same-day service at some facilities but there is an intake process with all this paperwork and long waits. They don't understand because they are in a mental health crisis. You're told to let us get the paperwork processed then you get an appointment on a different day to see somebody." *Community Paramedic*

Potential Strategies

Navigation and coordination of existing behavioral health services is a gap in the Rockingham County behavioral healthcare system. Possible strategies for addressing this need include, but are not limited to, the following:

- Integrate behavioral health peer support specialists in local behavioral health services, including local emergency departments.
- Support certification for community health workers at local higher education institutions including community colleges.[81]
- Improve health literacy of community members through patient education, public health campaigns and other methods.



[81] University of Kentucky, College of Medicine. Community Health Worker (CHW) Training Program. Link: https://medicine.uky.edu/centers/ruralhealth/chw-training

Case Study

On May 1st, 2018, the North Carolina Healthcare Foundation awarded grants to six North Carolina hospitals to embed behavioral health peer support specialists within their emergency departments (ED) to target substance use. The main goals of the pilot were to:

- Engage with patients who are presented to the ED with substance use disorders.
- Connect patients to community resources while decreasing future ED and inpatient services utilization.
- Implement post-discharge handoff protocols.

At the end of the pilot program, a total of 4,166 patients were served by the peer support specialist for over 18 months. The program yielded a cumulative 35% reduction in ED visits, 38% reduction in hospitalizations, and a six percent reduction in 30-day readmissions. While the true impact on individuals can't be quantified, the authors noted *"the impact on individual lives, family integrity, and the community as a whole is beyond measure."*

More Information

- Frontline Reports: Emergency Department Peer Support Specialist Program. https://www.ncha.org/wp-content/uploads/2021/02/ED-Peer-Support-Specialist-Program.pdf
- NCHA. Building the Case for Emergency Department Peer Support: Implementation Guide. https://www.ncha.org/wp-content/uploads/2020/12/ED_Peer_Support_Program_Guide_2020.pdf
- North Carolina's Certified Peer Support Specialist Program. https://pss.unc.edu/

ACTION AREA	FINDINGS
FEDERAL & STATE LEGISLATION	▪ Changing LME-MCO model continues to add confusion for consumers and providers and long-term stability is unknown. ▪ The 2001 Mental Health Reform has largely failed consumers. ▪ More funding is needed to provide adequate services. ▪ Advocacy and education of local, state, and national elected officials are critical to driving positive change in the system.

Many behavioral health providers who have been practicing in North Carolina for decades have stated that the behavioral health system in Rockingham County was much better over 20 years ago. In October 2001, mental health care reform started across the state, which has resulted in many challenges for consumers and providers. Local behavioral health providers and counties have little control over available services and the quality of services today.

"Each county in North Carolina used to have its own mental health center. It's been 15 or so years since things were centralized into a state system and the contracts went out for local entities to provide services. Those entities tend to change every few years. It worked better when each county had its own mental health center, they would help with medication management, too."
District Court Judge

The LME-MCO model has had many challenges over the years since they were first mandated in 2001. Rockingham County has been a part of several different LME-MCOs and is currently part of Sandhills Center. On November 1, 2023, Rockingham County Health and Human Services received a Secretarial Directive from Secretary Kody Kinsley outlining the future reduction of LME/MCOs in North Carolina. The catchment areas of Sandhills Center, Eastpoint, and Trillium Health Resources will be combined with the exception of three counties, including Rockingham County. Rockingham County will align with Vaya Health.

Behavioral health reform is needed again in North Carolina to meet the growing demands of services in the state, especially in rural counties like Rockingham County. Many of the necessary changes that are needed to meet the needs of Rockingham County residents cannot feasibility

happen due to state, and sometimes federal, legislation. To truly improve and change the system, more funding is needed.

In March 2023, Governor Roy Cooper announced a plan to invest $1 billion in addressing mental health and substance use services in North Carolina. His plan outlines three main areas of investment: making behavioral health services more available when and where people need them, building strong systems to support people in crisis and people with complex behavioral needs, and enabling better health access and outcome with data and technology. The money will come from the $1.8 billion sign-on bonus the Biden administration has extended to the holdout states in Medicaid expansion. The North Carolina legislation voted in favor of Medicaid expansion in March. However, due to budget negotiations and other factors, Medicaid expansion will not begin on December 1st, 2023, and the State may lose millions of dollars from federal incentives that could help change the behavioral health system in the state.

Advocacy and education of local, state, and national elected officials and lawmakers is needed to start to move the dial in a positive direction for behavioral health in Rockingham County.

Voices from the Community

"When the Health Maintenance Organizations started the reform, and LMEs came in and evaluated group homes, not everyone got a contract. People we worked with for years and had relationships with were gone. They took away all of our community resources." *Licensed Clinical Social Worker*

"When we changed the system through reform, providers decided they would not do outpatient involuntary commitment anymore because of the pickup order. They have to track when the judge commits them and if they are getting the treatment. If they fail law enforcement gets involved. There is a lack of accountability in the system – does it fall with DHHS, LMEs, or the court system? There is just no quality assurance." *Behavioral Healthcare Provider*

"The state knows we can't do it. They know it all can't get done in a day or a month but to cover themselves they have to have all that jargon in the manual to tell social workers what to do to cover themselves. That burden is put on social workers. The frustration starts from day one." *Licensed Clinical Social Worker*

"There were plans for treatment court (drug court), but this was delayed by the pandemic, and we haven't been able to attract candidates who are qualified to run it. It would only be able to serve less than 10 people and funding an issue as well." *Judicial District Manager*

"Law enforcement spend a lot of man-hours at the hospital. The mental health system was better in 1995 than it is in 2023. There used to be places to take people to get help." *Law Enforcement*

Potential Strategies

Several discussions were held within different sectors of the community focusing on **federal and state-level policies** that have exacerbated behavioral health challenges in Rockingham County and North Carolina. Possible strategies for addressing this need include, but are not limited to, the following:

- Advocacy and education of local, state, and national elected officials and lawmakers.
- Increase annual state funding allocations for behavioral health services.
- Increase Medicaid reimbursement rates for behavioral health services for all providers.
- Invest in drug or recovery courts and other diversion programs.

Case Study

In 2019, a brainstorming workshop at the Oregon Association of Student Councils created the future House Bill 2191 in Oregon. [82] HB 2191 was designed to allow students to take "mental health days" in the same way they would physical sick days at school. Four high school students continued the efforts from the brainstorming session and lobbied at the Capitol in Salem with the help of Providence Health and Services lobbyists. The teens testified before the House Education Committee and other lawmakers to turn the proposed bill into law. Governor Kate Brown signed HB 2191 into law in 2019.

[82] GMS. We're the teens who fought to pass a new bill that gives mental health days to our fellow students. https://www.goodmorningamerica.com/gma/story/teens-fought-pass-bill-mental-health-days-fellow-64578428

ACTION AREA	FINDINGS
Limited Continuum of Care	▪ Case management and other behavioral health services provided by the local management entities are often not readily available due to high caseloads and staffing challenges leading to bottlenecks in care. ▪ There are little to no inpatient resources for individuals in the county, creating weeks to months-long stays in local emergency departments, and straining other community services such as law enforcement. ▪ There is a lack of accountability for local behavioral entities as the responsibility of providing care is passed from one service to another.

A continuum of care is an interconnected system that deflects and diverts people struggling with behavioral health challenges away from justice-system involvement and emergency room visits through an array of services that assist community members, regardless of their condition's severity level, or their gender, age, or cultural background. A recovery-oriented continuum can proactively address potential signs of an emergency, stabilize a person in distress, and equips them with tools to mitigate future emergencies.[83]

Behavioral health care providers expressed that local emergency departments have become a bottleneck for people seeking behavioral health services, as residents are frequently kept in the hospital for weeks at a time, primarily youth, while they wait for an inpatient facility, detox bed, or other type of treatment opportunity. Because of the lack of a pathway to care, individuals held in local emergency departments under involuntary commitment are often released back into the community with no follow-up treatment, creating a cycle of mental health crises and increased risk of safety incidents in the community. To maintain the safety of other patients and staff, local law enforcement is often dispatched to remain with the patient and must stay there until the patient leaves the facility. This leads to a myriad of other challenges such as improper utilization of overtime funds and annual budgets within departments. Hospitals have little information regarding what treatment centers have provided to patients with the quality of care the

> ***"It's important to close the loop. There is no follow-up. We don't have all the pieces of the puzzle. We chase our tail because there are no answers."***
>
> Law Enforcement Officer

[83] National Association of Counties, Promoting Health And Safety Through A Behavioral Health Continuum of Care (May 2022). Link: https://www.naco.org/resources/promoting-health-and-safety-through-behavioral-health-continuum-care

individual has received and where. Providers shared frustration around what they called, a "hot potato scenario" as there is little accountability within behavioral health entities to ensure they are providing quality treatment.

Voices from the Community

"Currently, in the emergency department, people are coming in for behavioral health services and EMS has to respond. But there are no means of getting people to help post-overdose, it is a repetitive cycle." Behavioral Health Care Provider

"Older adults sit in the hospital for months and the hospital calls the state and the state calls Aging, Disability, and Transit Services. You have these people who need protection and you have nowhere to put them. We're making a lot of referrals to Community Alternatives Program vocational rehab." Aging, Disability, and Transit Services

"Integrated Healthcare is part of a rotating calendar for overdose responses. We were trying to work something out with the local police department like someone would do a well check within 24 hours if we could find them. We are usually able to find that 50% of the people reported to us, as some were transient. Of those, 50% were interested in treatment, but it waxes and wanes. We would try to connect them to local services and in some cases, we saw success." Peer Support Specialist

"I personally know of three people that were deemed to be fine to go home from the local emergency department(s) and within days they took their lives." Attorney

Potential Strategies

Limited continuum of care plays a major role in preventing residents in Rockingham County from seeking care that they need to manage their behavioral health conditions. The lack of services is largely impacted by limited state funding and behavioral health workforce shortage. Possible strategies for addressing this need include, but are not limited to, the following:

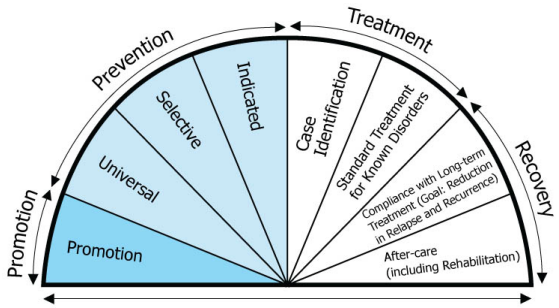
- Increase inpatient, including psychiatric beds, across the state, especially for youth, to ensure hospital EDs have placements for patients.
- Implement a care coordination program to help patients connect with resources and services in Rockingham County and the region.
- Identify opportunities to develop or recruit new providers or organizations that are missing in Rockingham County.

Issue Spotlight: Substance Use Prevention

Prevention activities work to educate and support individuals and communities to prevent the misuse of drugs and the development of substance use disorders. Substance use and mental disorders can make daily activities difficult and impair a person's ability to work, interact with family, and fulfill other major life functions. Mental and substance use disorders are among the top conditions that cause disability in the United States. Preventing mental and/or substance use disorders or co-occurring disorders and related problems is critical to behavioral and physical health.[84]

Prevention in North Carolina

Each year the Division of Mental Health, Developmental Disabilities and Substance Abuse Service submits a Substance Abuse Prevention and Treatment Block Grant (SABG) application to the Substance Abuse and Mental Health Services Administration (SAMHSA) for funds that will provide prevention, early intervention, treatment, and recovery supports to individuals at risk for or with a substance use disorder. These funds, which typically amount to more than $44 million per year, are integral to the development, maintenance, and expansion of services in North Carolina. They are intended to provide states with the flexibility to design and implement activities and services to address the complex needs of individuals, families, and communities impacted by substance use disorders and associated problems.



Source: Institute of Medicine, Continuum of Care Model (1994)

This continuum of care framework is applicable to intervening around substance misuse and substance use disorders, and with the addition of health promotion embraces much of what is important in the recovery support services movement.

Prevention initiatives focus on mitigating risk factors, or *"characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of negative outcomes."* Risk factors for substance use disorder include, but are not limited to, family history of addiction, exposure to trauma, environmental factors, and age of first use.

Learn more about Risk Factors: https://drugfree.org/article/risk-factors-for-addiction/

[84] SAMHSA, Prevention of Substance Use and Mental Disorders. Link: https://www.samhsa.gov/find-help/prevention

ACTION AREA	FINDINGS
Public & Institutionalized Stigma	▪ Historical trauma within the African-American community has shaped cultural norms that do not promote sharing personal information with healthcare providers and/or 'outsiders.' ▪ Providers with similar ethnic and cultural backgrounds would increase engagement in seeking behavioral health services. Provider diversity is a barrier to services. ▪ There is a lack of public campaigns to decrease stigma (e.g., suicide prevention, information dissemination strategies, public/free training)

Public stigma involves the negative or discriminatory attitudes that others have about mental illness, while institutional stigma, is more systemic, involving policies of government and private organizations that intentionally or unintentionally limit opportunities for people with mental illness. Examples include lower funding for mental illness research or fewer mental health services relative to other health care. Both public and institutionalized stigma were mentioned in nearly every focus group discussion.[85] There is a general apprehension about seeking community resources, especially from the Department of Health and Human Services. The African American/Black community especially shared historical context and experiences with family members interacting negatively with local law enforcement during a crisis.

"To minimize stigma people should have access points in their own community that say, 'mental health is important' and this is how you access these resources. If something is in the best part and all-white part of town, what's subliminally being said is 'this isn't for you.'"

Community Member

Notably, parents and youth indicated that there is less stigma found in adolescents, and high school student-age students are more accepting of seeking mental health and substance use disorder resources. Community members, primarily those in recovery, called attention to the need for incorporating those with direct experience with substance use disorder within outreach and treatment to decrease stigma.

[85] American Psychiatric Association, Stigma, Prejudice and Discrimination Against People with Mental Illness. Link: https://www.psychiatry.org/patients-families/stigma-and-discrimination

Voices from the Community

"There is stigma. We need to look people in the eye and tell them there are positive avenues. People are scared to reach back out and take the hand. The cemetery is full of people that needed one more." *Community Member*

"Stigma for the underserved population is huge. Our job is to go in and educate the community, but there is a strong stigma in hiring people in recovery, especially in the criminal justice system." *Community Member*

"I work with a lot of Hispanic and African American community members, and I ask them to get referred to mental health service and they look at me like I am crazy." *Healthcare Provider*

"Families go through trauma because they are ashamed of what's going on in their homes. Education can be an issue, the faith-based approach and mental health and what that means and what is appropriate can vary generationally and not align with traditions. Issues surrounding fear of being vulnerable and negativity around resources." *Faith-based Community*

Potential Strategies

Public and institutionalized stigma plays a major role in preventing Rockingham County from seeking behavioral health challenges. Possible strategies for addressing this need include, but are not limited to, the following:

- Design evidence-based culturally appropriate campaigns promoting behavioral health services for the Hispanic, Latino, African American/black, and other minority communities.
- Implement de-stigmatizing language within community initiatives (reclaiming lived coalition name instead of the opioid task force).

Case Study

In 2019, The Public Good Projects published an evaluation of Action Minded, a national campaign to reduce mental health stigma. Action Minded used three complementary digital campaigns designed to address stigma using a combination of education-, contact-, and advocacy-based strategies delivered through a digital media campaign. Each of the three digital campaigns used in Action Minded was integrated with one another, with complementary calls to action for differing levels of engagement.[86]

- The education-based and contact-based strategies for Action Minded relied on user-generated images and videos, which were paired with stigma reduction messaging, while the advocacy-focused strategy aimed to create a movement of advocates in the digital space.
- Campaign message themes changed month by month, starting with the basics and building knowledge incrementally and themes applied to content across each of the campaigns.
- The campaigns were complemented by a community engagement aspect, designed to strengthen and leverage existing partnerships among organizations working on mental health.

An evaluation of Action Minded showed significant improvements across key stigma-reduction metrics. Other digital mental health campaigns have shown promise in effectively producing stigma change across various contexts, both globally and within the United States. Results from this present study showed significant improvements over time across various dimensions of stigma, including willingness to live and work with someone with a mental health condition, and agreement that medication is an effective treatment. Respondents aware of the campaign showed significant differences in providing support to someone else with a mental health condition and taking steps to improve their own mental health in the past six months.

More Information:

- Mental Health Stigma Reduction in the Midwestern United States: Evidence from a Digital Campaign Using a Collective Impact Model: https://link.springer.com/article/10.1007/s10900-022-01130-3
- Case Study: MHC x Meta's Groundbreaking Impact on Mental Health:https://www.thementalhealthcoalition.org/case-study-mhc-meta/
- The Mental Health Coalition 2022 Impact. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.thementalhealthcoalition.org/wp-content/uploads/2022/12/MHC-2022-IMPACT.pdf

[86] Action Minded Model. Link: https://actionminded.org/

ACTION AREA	FINDINGS
Strained Behavioral Health Workforce	▪ Young professionals are not entering the behavioral health workforce and, in consequence, not replacing those aging out of the key positions such as psychiatrists, EMS, and LSCWs, among others. ▪ Compassion fatigue[87] is spreading within the workforce as a result of a lack of resources and high-burdened caseloads. ▪ Rockingham County has lower annual wages/salaries compared to surrounding counties, making it difficult to draw new behavioral health providers.

Rockingham County, like most communities in the United States, is experiencing a general lack of behavioral health providers. Behavioral healthcare professionals strongly suggested that the county simply may not have the resources to provide equal or competitive pay to surrounding counties, hurting retention and recruitment efforts.

"Compassion fatigue with staff is happening because they can't connect people to the resources. They recommend and refer but knowing whatever it is probably won't work."

Behavioral Health Provider

The pandemic undoubtedly has had a strong impact on the behavioral healthcare workforce. A February 2023 report shared that the North Carolina Department of Health and Human Services created a monitoring system over the past year that provided a report about the location of open mental health care beds available across the state, and found alarming results:

- DHHS found out through its new bed tracker that during the week of Feb. 20, **489** people were waiting to be admitted to one of the state's psychiatric facilities, with **253** of them waiting for a psychiatric hospital.
- Close to **3,700** positions were vacant, slightly more than triple the **1,230** vacancies reported in 2020.
- The state's three psychiatric hospitals have a capacity of **894** beds, but they were only able to serve, on average, a total of **667** patients.[88]

[87] Compassion fatigue. Link: https://www.apa.org/topics/covid-19/compassion-fatigue
[88] Crippling health workforce shortages mean hospitals can't admit mental health patients — even if beds are empty (February 2023). Link: https://www.northcarolinahealthnews.org/2023/02/28/worker-shortages-mean-hospitals-cant-admit-mental-health-patients/

Since early 2020, behavioral health care providers have seen a dramatic increase in the number and acuity of both mental health disorders and substance use. Many providers have left the workforce due to higher demand for care and low wages. Compassion fatigue, although not a formal diagnosis, occurs when a behavioral health care professional or others take on the suffering of patients who have experienced extreme stress or trauma. Behavioral health leaders expressed frustration around hiring qualified individuals who are passionate about others. There is a notable difference between those with education and those with education and compassion for those experiencing behavioral health challenges.

Voices from the Community

"A big part is that providers don't have a connection in the community. I can still go to the grocery store, and I have people I served that will still talk to me and how much they miss talking to me. It's called building bridges and making a way to bridge a system together BUT someone has to share the money to make that happen. County leadership needs to understand this." *Licensed Clinical Social Worker*

"A study revealed that salaries don't compare. Rockingham has lower compensation but a higher caseload. The disparities only grow; the gap is widening, not narrowing across all professions." *Youth Behavioral Health Provider*

"We don't have enough providers and we have a hard time finding people trained on how to offer services to students, this is across state as well. There is also a lack of funding." *Educator*

"I think that the salary, level of trust, and respect that communities across the country have right now for people in this field is not there. To gain respect, they should be compensated accordingly. They're on our pay schedule and I wish there was a way to compensate them better." *Educator*

"Staffing is a bottleneck for the number of children/youth that can be helped. There is a true lack of social workers and case managers. Providers are overbooked and have long wait times. Since the pandemic, there has been a shortage of EMS workers. The county can't pay as much as the hospitals and hospitals are recruiting EMS to cover the nursing shortage." *Non-profit Organization*

"There used to be money to be made for training people that care for people with mental health disorders and disabilities. We would create a curriculum around whatever diagnosis to educate the staff, then things swung the other way because of fraud built into the system. The services just fell off." *Aging, Disability & Transit Services*

"The people that worked in the old mental health system are aging out. It used to be a success. The state told us it was going to change, but it's about money." *Behavioral Healthcare Provider*

Potential Strategies

The **workforce challenge** is undoubtedly a broader national issue, however, leaders in the community shared potential ways to increase the robustness of the Rockingham County workforce that is within capacity. Possible strategies for addressing this need include, but are not limited to, the following:

- Implement student loan repayment programs in exchange for a specific number of years of service.
- Provide scholarships for years of service including teachers, nurses, and students who are committing in high school to attend early college programs for three years of service.
- Implement more peer support specialists, community health workers, or other non-licensed providers.
- Integrate and encourage Employee Assistance Programs (EAPs) to ensure retention and improve the mental health of the workforce.

Case Study

A 2019 systematic review aimed to collate, synthesize, and scrutinize existing empirical evidence investigating the role of work-related factors in the advancement and prevention of compassion fatigue in mental health professionals. Key findings included,

- Support from the supervisor or manager emerged as a job resource that can alleviate the symptoms of burnout and secondary traumatic stress.
- The provision of organizational resources and support emerged as the most frequently reported job resource assuaging the development of compassion fatigue in mental health professionals.
- Support from colleagues or co-workers in the form of congenial relationships, collaborative effort, emotional support, perceived competence (of staff) to cope with patient aggression, and a sense of belongingness in the workplace was found to be negatively associated with burnout.

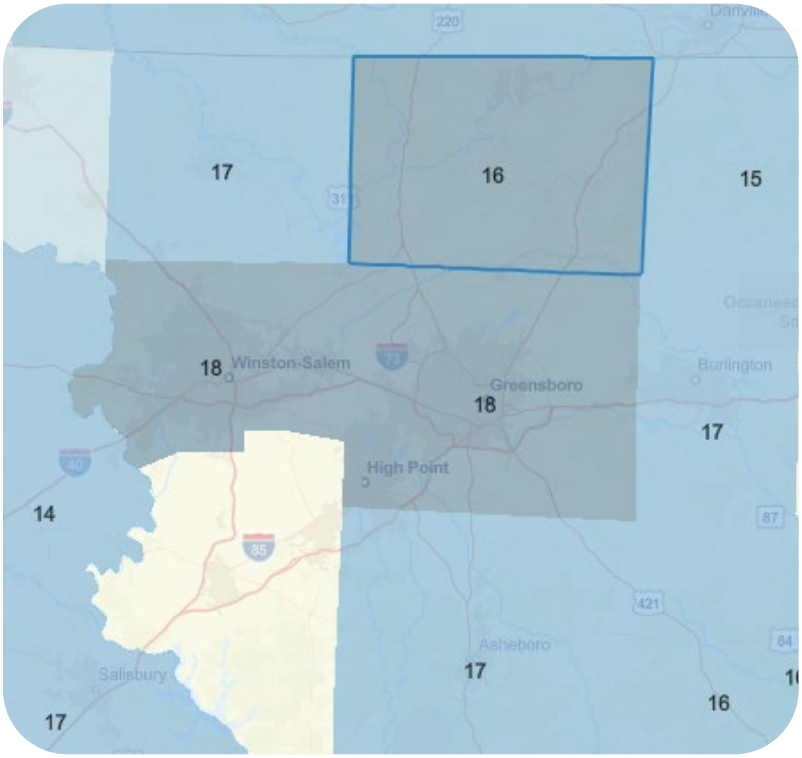
More Information

- A Systematic Review of Job Demands and Resources Associated with Compassion Fatigue in Mental Health Professionals. https://www.mdpi.com/1660-4601/17/19/6987
- Compassion fatigue in mental health nurses: A systematic review: https://onlinelibrary.wiley.com/doi/abs/10.1111/jpm.12812

Issue Spotlight: Behavioral Health Workforce & Capacity

Health Professional Shortage Area (HPSA) designations are used to identify areas and population groups within the United States that are experiencing a shortage of health professionals. The primary factor used to determine an HPSA designation is the number of health professionals relative to the population with consideration of high need. Federal regulations stipulate that, to be considered as having a shortage of providers, an area must have a population-to-provider ratio of a certain threshold. For mental health, the population-to-provider ratio must be at least 30,000 to 1 (20,000 to 1 if there are unusually high needs in the community).[89]

Exhibit 80: Mental Healthcare Professional Shortage Area



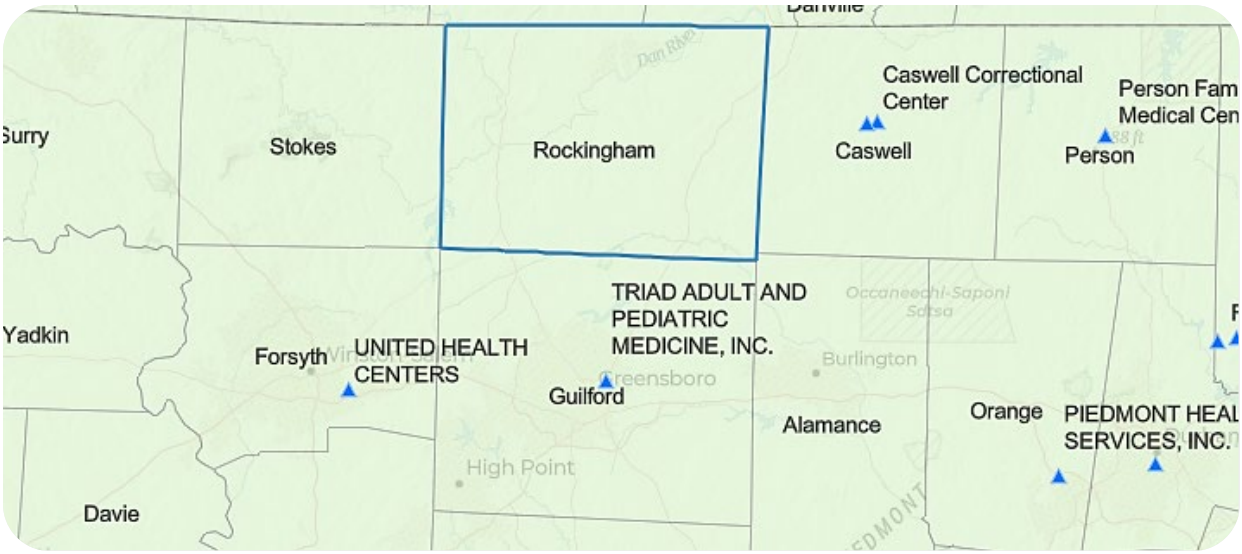
Shortage Area scores range from 0 to 26, with a higher score indicating a greater need. As of September 2023, Rockingham County presents a score of 16 – highlighting areas of need. It is also important to note that Greensboro and Winston-Salem present even greater levels of need with a score of 18 for each county.

Source: U.S. Department of Health & Human Services, Designated Health Professional Shortage Areas (9/18/2023)

[89] Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services, Designated Health Professional Shortage Areas Statistics: Designated HPSA Quarterly Summary, as of September 30, 2022 available at https://data.hrsa.gov/topics/health-workforce/shortage-areas.

Mental Health Facility Areas are facilities experiencing a mental health professional shortage. The maps below highlight the names and scores of each facility experiencing a shortage in the surrounding counties. The data indicates that while there are no mental health facilities within Rockingham County, surrounding counties may be experiencing shortages, exacerbating a lack of capacity and ability to care for Rockingham County residents.

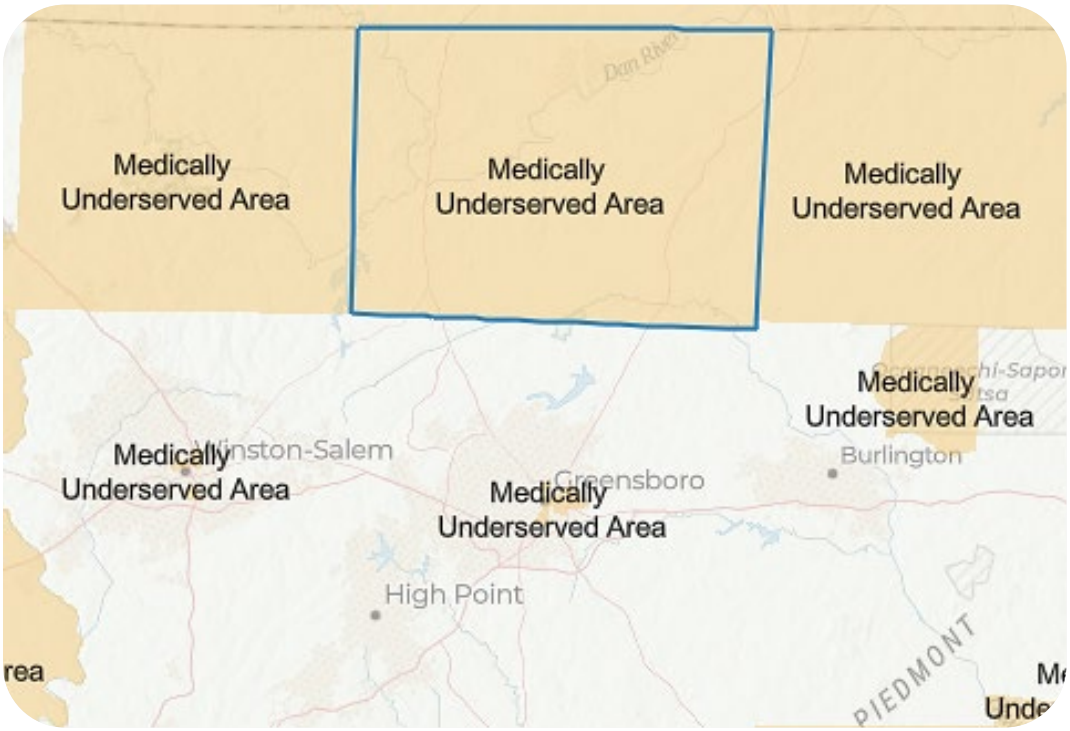
Exhibit 81: Mental Health Facility Health Professional Shortage Areas



Source: U.S. Department of Health & Human Services, Designated Health Professional Shortage Areas (9/18/2023)

Medically Underserved Areas (MUAs) may be a whole county or a group of contiguous counties, a group of county or civil divisions, or a group of urban census tracts in which residents have a shortage of personal health services.[90]

Exhibit 82: Medically Underserved Areas



Source: U.S. Department of Health & Human Services, 9/18/2023

[90] Bureau of Health Workforce, Health Resources and Services Administration (HRSA). Link: https://data.hrsa.gov/glossary#M

Issue Spotlight: Behavioral Healthcare Wages and Cost of Living

The average annual wage for select behavioral health care providers for Rockingham County indicates a range of various income levels.

Exhibit 83: Average Annual Wage in Rockingham County

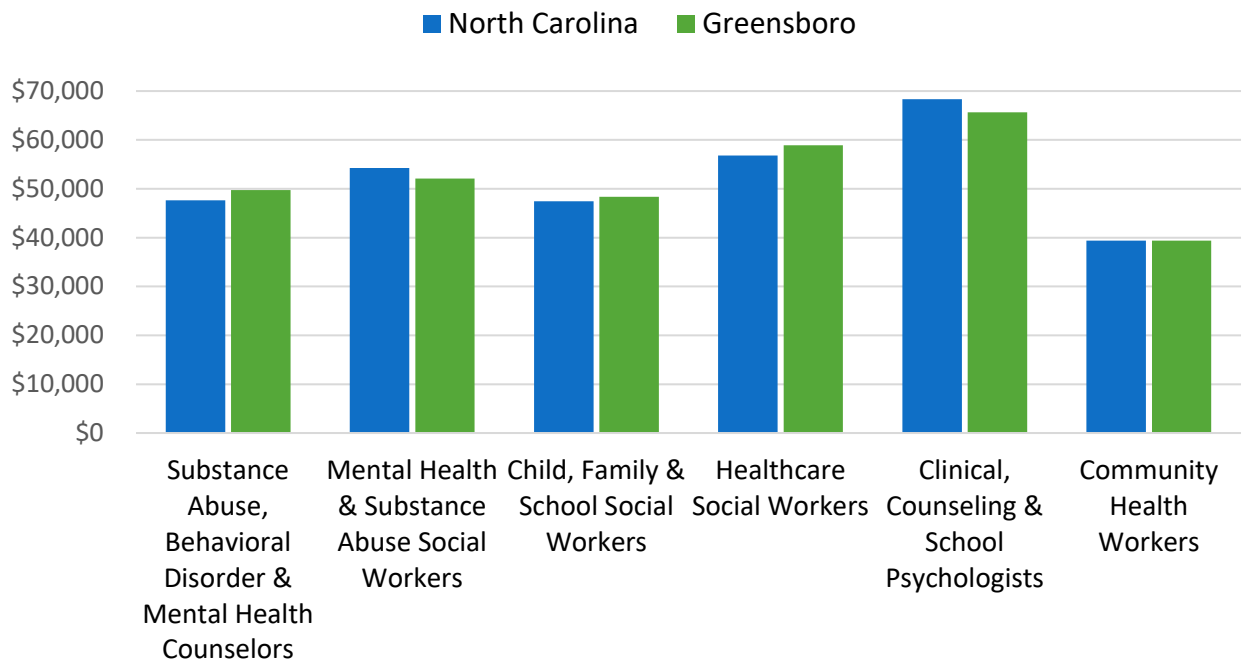
	Average Annual Wage	Entry Level	Experienced
Mental Health & Substance Abuse Social Workers	$47,300	$40,800	$50,500
Child, Family & School Social Workers	$47,800	$37,100	$53,200
Substance Abuse, Behavioral Disorder & Mental Health Counselors	$49,600	$33,800	$57,500
Social Workers	$50,600	$38,200	$56,800
Healthcare Social Workers	$58,200	$44,900	$66,000

Source: JobsEQ (Q1, 2023)

Although Rockingham County-specific data was not available through this data source, comparisons of the median annual wages for select behavioral health care providers in North Carolina and Greensboro indicate wages may be slightly higher in the Greensboro area.

The qualitative research reflects challenges expressed by behavioral healthcare providers specifically around non-competitive wages in Rockingham County.

Exhibit 84: Behavioral Health Workforce Annual Wage & Opportunities



North Carolina	Median Annual Wage	Annual Openings
Substance Abuse, Behavioral Disorder & Mental Health Counselors	$47,650	1,123
Mental Health & Substance Abuse Social Workers	$54,220	307
Child, Family & School Social Workers	$47,470	1,321
Healthcare Social Workers	$56,800	398
Clinical, Counseling & School Psychologists	$68,360	408
Community Health Workers	$39,360	112

Greensboro	Median Annual Wage	Annual Openings
Substance Abuse, Behavioral Disorder & Mental Health Counselors	$49,736	97
Mental Health & Substance Abuse Social Workers	$52,121	22
Child, Family & School Social Workers	$48,352	91
Healthcare Social Workers	$58,890	40
Clinical, Counseling & School Psychologists	$65,655	38
Community Health Workers	$39,390	10

Source: NC Careers.org (9/18/2023)

Cost of Living in North Carolina

The living wage shown is the hourly rate that an individual in a household must earn to support his or herself and their family. [91] The minimum wage for North Carolina is $7.25 and is not expected to increase. For individuals with no children, the living wage is over twice as high as the statewide minimum wage, highlighting a notable disparity between what is needed for basic needs and what is offered by many employers across the state.

The difference between individuals with no children living in poverty and earning the statewide minimum wage is $0.72 – indicating that minimum wage is not nearly meeting the costs of basic needs for those living in poverty.

Exhibit 85: Living Wage Calculation, Rockingham County

1 Adult				
	0 Children	1 Child	2 Children	3 Children
Living Wage	$15.13	$32.40	$41.28	$53.45
Poverty Wage	$6.53	$8.80	$11.07	$13.34

2 Adults, 1 Working				
	0 Children	1 Child	2 Children	3 Children
Living Wage	$25.05	$31.72	$36.70	$40.21
Poverty Wage	$8.80	$11.07	$13.34	$15.61

2 Adults, Both Working				
	0 Children	1 Child	2 Children	3 Children
Living Wage	$12.53	$18.15	$22.92	$26.96
Poverty Wage	$4.40	$5.54	$6.67	$7.81

Source: MIT, Cost of Living Calculator (2022-2023)

The poverty threshold is defined by the Department of Health and Services. It is an administrative threshold to determine eligibility for financial assistance from the federal government.

The assumption is the sole provider is working full-time (2,080 hours per year). This tool provides information for individuals and households with one or two working adults and zero to three children. In the case of households with two working adults, all values are per working adult, single, or in a family unless otherwise noted.

[91] Massachusetts Institute of Technology, Living Wage Calculator. Link: https://livingwage.mit.edu/states/37
Technical Documentation for Typical Expenses: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://livingwage.mit.edu/resources/Living-Wage-Users-Guide-Technical-Documentation-2023-02-01.pdf

The data below indicates individual expenses that went into the living wage estimate unique to Rockingham County.

Exhibit 86: Typical Expenses, Rockingham County

	1 Adult			
	0 Children	**1 Child**	**2 Children**	**3 Children**
Food	$3,926	$5,795	$8,707	$11,540
Child Care	$0	$7,613	$15,227	$22,840
Medical	$3,049	$10,543	$10,553	$10,478
Housing	$7,157	$9,301	$9,301	$12,208
Transportation	$5,477	$9,851	$12,045	$14,484
Civic	$3,074	$6,107	$6,821	$9,300
Other[92]	$4,253	$7,420	$8,755	$9,610
Required Annual Income After Taxes	$27,067	$56,761	$71,540	$90,592
Annual Taxes	$4,398	$10,639	$14,320	$20,593
Required Annual Income Before Taxes	$31,466	$67,400	$85,860	$111,184

	2 Adults, 1 Working			
	0 Children	**1 Child**	**2 Children**	**3 Children**
Food	$7,198	$8,966	$11,564	$14,071
Child Care	$0	$0	$0	$0
Medical	$7,544	$10,553	$10,478	$10,631
Housing	$7,207	$9,301	$9,301	$12,208
Transportation	$9,851	$12,045	$14,484	$15,530
Civic	$6,107	$6,821	$9,300	$7,395
Other	$7,420	$8,755	$9,610	$10,749
Required Annual Income After Taxes	$45,458	$56,573	$64,868	$70,716
Annual Taxes	$6,656	$9,404	$11,469	$12,925
Required Annual Income Before Taxes	$52,113	$65,977	$76,337	$83,641

	2 Adults, Both Working			
	0 Children	**1 Child**	**2 Children**	**3 Children**
Food	$7,198	$8,966	$11,564	$14,071
Child Care	$0	$7,613	$15,227	$22,840
Medical	$7,544	$10,553	$10,478	$10,631
Housing	$7,207	$9,301	$9,301	$12,208
Transportation	$9,851	$12,045	$14,484	$15,530
Civic	$6,107	$6,821	$9,300	$7,395
Other	$7,420	$8,755	$9,610	$10,749
Required Annual Income After Taxes	$45,458	$64,186	$80,095	$93,556
Annual Taxes	$6,656	$11,299	$15,261	$18,612
Required Annual Income Before Taxes	$52,113	$75,486	$95,355	$112,168

Source: MIT, Cost of Living Calculator (2022-2023)

[92] Other expenses include clothing, personal care items, and housekeeping supplies based on 2021 data by household size from the 2021 Bureau of Labor Statistics Consumer Expenditure Survey.

Following data from the 2022-2023 MIT Cost of Living Calculator and September 2023 Rockingham County wage figures, the average annual wages compared to living costs highlight disparities and potential challenges that may contribute to the workforce.

Please note, that MIT data reflects 2022-2023 statewide and county trends and does not account for the increasing costs of housing, food, and other expenses potentially impacted by nationwide inflation.

- The required annual income (after taxes) for an individual with no children is $27,067 while an **entry-level salary** for substance abuse, behavioral disorder, and mental health counselors is $33,800. This leaves approximately $6,733 (or $561.08 per month) for expenditures such as student loan repayments and emergencies.
- A family of two working adults with two children in Rockingham County spends around $15,227 per year for child care alone. If one adult earns the **average annual salary** of a social worker in Rockingham County, $50,600, approximately 30% of one parent's income would go specifically to child care.
- A single parent with a recent entry-level position as a mental health and/or substance abuse social worker may spend $9,301 or more a year on housing (the likely cost of rental housing as of **April 2022** using HUD Fair Market Rents estimates). This equates of 30% of their total annual income – the threshold for being considered cost-burdened.[93]

Student Loans & Behavioral Health

In 2020, the median salary for psychologists was $82,180 per year, less than half of the median debt burden of students seeking an advanced degree as a Doctor of Psychology. The median student loan debt for current psychology students is $110,000 - excluding undergraduate debt. For students pursuing a Doctor of Psychology graduate education, that number jumps to $160,000.[94]

The field of social work is growing with a projected nine percent growth in employment between 2021 and 2031, with a 2022 median annual pay of $55,350.[95] According to a 2021 survey by the Council on Social Work Education and the National Association of Social Workers, master's level social workers have on average between $68,000-$76,000 in student loan debt, creating challenges around paying down student loans.

[93] Household is cost-burdened when it spends more than 30% of its income on rent and utilities and severely cost-burdened when it spends more than 50% of its income on these expenses. Link: https://www.google.com/search?q=cost+burnded+defintion&rlz=1C1CHBF_enUS961US961&oq=cost+burnded+defintion+&aqs=chrome..69i57j0i22i30l6j0i15i22i30j0i22i30j0i15i22i30.3223j0j4&sourceid=chrome&ie=UTF-8

[94] Bureau of Labor Statistics, Job Outlook. Link: https://www.bls.gov/ooh/life-physical-and-social-science/psychologists.htm#tab-6

[95] Bureau of Labor Statistics, Job Outlook. Link: https://www.bls.gov/ooh/community-and-social-service/social-workers.htm

ACTION AREA	FINDINGS
Timely Access to Care	▪ Existing services, such as Mobile Crisis Management, are not meeting the needs of the community. [96] ▪ Timely access to care is exacerbated for those with intellectual, developmental, and/or physical disabilities as those enrolling in the statewide Innovations Waiver.[97] ▪ Primarily (but not exclusively) children and adolescents wait in emergency departments from weeks to months for inpatient services, which are outside of the county.

Having timely access to psychological services is critical for addressing the needs of those diagnosed with behavioral health challenges. Post-pandemic, there is a major need to support and expand the workforce, promote integrated behavioral health into primary care, improve mental health literacy, and use technology and innovation to expand reach and improve efficiency.[98]

"In my short eight years watching and monitoring the waiver, the waitlist has gone from three years to five years to now over 10 years. People are signing up at five years old, but the wait list is over 10 years. It's a broken system."

Faith-based Community

North Carolina residents living with disabilities are waiting 10 or more years to access necessary services under the federally funded Innovations Waiver, which includes key mental health and substance use disorder services administered by a local management entity/managed care organization (Sandhills Center) that facilitates services and oversees a network of community-based service providers. Existing resources in the community, such as Mobile Crisis Management, fail to meet the needs of Rockingham County. Services include telephone crisis intervention and face-to-face intervention that provides crisis intervention with diagnostic and de-escalation techniques, however, community members shared that to get to communities such as Eden and Reidsville, people in crisis are waiting for two or more hours because of low-staffing or geographic location.

[96] Daymark Recovery Services, Mobile Crisis Management. Link: https://www.daymarkrecovery.org/services/mobile-crisis-management

[97] The NC Innovations Waiver is a Federally approved 1915 C Medicaid Home and Community-Based Services Waiver (HCBS Waiver) designed to meet the needs of Individuals with Intellectual or Development Disabilities (I/DD) who prefer to get long-term care services and supports in their home or community, rather than in an institutional setting. Link: https://medicaid.ncdhhs.gov/providers/programs-and-services/behavioral-health-idd/nc-innovations-waiver

[98] American Psychological Association. Increased need for mental health care strains capacity (November 2022). Link: https://www.apa.org/news/press/releases/2022/11/mental-health-care-strains#:~:text=%E2%80%9CHaving%20timely%20access%20to%20psychological,of%20solutions%2C%20beyond%20individual%20therapy.

Voices from the Community

"Mobile crisis does a pretty good job trying to de-escalate issues but there's hesitation at times to go out to the homes of the people to meet them where they are at. If you're not in their environment it's hard to understand what they are dealing with. It's easier to talk to people on the phone. It's a big problem." *Peer Support Specialist*

"You really have to go outside of the community for help. More and more we see kids being put on waitlists for services." *Youth Behavioral Healthcare Provider*

"There are long waiting lists for services, there's nothing for crisis care except for going to the ER and calling for the LME. We are getting calls from therapists wanting to take on their patients pro bono." *Behavioral Healthcare Provider*

Potential Strategies

The **timely access to care challenge** is an issue directly linked to the limited resources and services and behavioral health workforce shortage. Possible strategies for addressing this need include, but are not limited to, the following:

- Improve care coordination between hospitals, EDs, primary care practices, community behavioral health providers, and schools may improve timely access to other providers in the community.
- Develop patient-centered tools to increase education around the behavioral health system and local provider and organization contacts.
- Increase access to behavioral health telehealth services in Rockingham County.
- Integrate behavioral health within primary care facilities.

Case Study

Beth Israel Deaconess Medical Center (BIDMC) in Boston, Massachusetts established a digital clinic using smartphone apps to augment and extend mental health care. The digital clinic-focused treatment reduced the need for information gathering and made clinical decision making and treatment planning a collaborative, iterative conversation between provider and patient. BIDMC leveraged mindLAMP, a digital platform built and designed with patient input, to aggregate patient data, guide reflection, and help inform treatment.

More Information

- Rodriguez-Villa, E et al. The Digital Clinic: Implementing Technology and Augmenting Care for Mental Health. General Hospital Psychiatry. Vol. 66, Sept/Oct 2020. https://www.sciencedirect.com/science/article/pii/S0163834320300852?via%3Dihub

Issue Spotlight: Behavioral Health Urgent Care

In SAMHSA's *National Guidelines for Behavioral Health Crisis Care – A Best Practice Toolkit*[99], the report outlines the three elements of "effective, modern, and comprehensive crisis care" as:

- Regional crisis call center
- Crisis mobile team response
- Crisis receiving and stabilization facilities.

In North Carolina, the *"crisis receiving and stabilization facility"* model is known as Behavioral Health Urgent Care (BHUC). BHUCs are designated services for persons four years or older experiencing a behavioral health crisis related to a substance use disorder, mental health disorder, and/or IDD diagnosis or any combination of the above. The BHUC is an alternative, but not a replacement for a community hospital emergency department. BHUCs provide triage, crisis risk assessment, evaluation and intervention to individuals whose crisis response needs are deemed urgent or emergent. There are two tiers of BHUCs based on the number of hours the facility is open. Rockingham County is investigating the feasibility of opening a Tier III BHUC to provide more robust crisis services within the county. Currently the closest BHUC facilities are Greensboro and Winston-Salem.

While in the ideal world, BHUCS are a critical component of the behavioral health system, however, in today's current environment of underfunding, staff shortages, and limited resources and services, the BHUC will not adequately address the demands for services in the community. While

Dorothea

Dorothea is a 40-year-old, life-long Rockingham County diagnosed with schizophrenia, alcohol, and substance use disorder. She stopped taking her medication over a month ago and is seeking treatment. She has Medicare, Medicaid, and disability.

Dorothea is experiencing a mild crisis and an Integrated Health Care program team member providers her with transportation to the BHUC in Forsyth County. Dorothea was placed in a chair unit where she underwent an assessment, and it was determined she needed an inpatient psychiatric bed.

The following morning, Dorothea was told that a bed became available for her. However, she waited in her chair for another five to six hours. The BHUC staff then told her that no bed was available, and she reached her 23-hour limit and could not remain at the BHUC. Dorothea was asked to contact Rockingham County Integrated Health Care team to pick her up and come back in four days.

[99] https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-care-02242020.pdf

the BHUC will help alleviate some pressure and resources of the two county hospital emergency departments and law enforcement officers, community residents will still struggle to find services and the cycle will likely continue. During the qualitative research, several behavioral health providers expressed their concern on the impact that the BHUC will have in Rockingham County without adequate staffing and sustainable funding source. As one provider said, "this is just a drop in the bucket."

Without early intervention and more outpatient services, it will be difficult to truly stabilize people in the community.

Voices from the Community

"The BHUC was supposed to be the answer to everything, and it ended up being nothing – we called several times we were told there was a bed and we got these, and the beds were full. We were promised initially they would be so many beds ready for Rockingham County."

"Early intervention is needed before crisis care, and outpatient is needed to keep people stable in the community."

"When a kid comes into an outpatient center or the BHUC and they're saying they are suicidal, I can do the assessments, but I can't get you a bed. Your best route is the ED – all the kids go to the ED and put on a bed bored list. And then you wait."

Issue Spotlight: Criminal Justice System & Behavioral Health

The qualitative research included one-on-one conversations and broader focus group discussions with law enforcement agencies, district judges, attorneys, and others who were able to speak directly to the relationship between the criminal justice system and behavioral health challenges. Through this research, several gaps in the existing behavioral health system in relation to the criminal justice system were made apparent. There are no drug courts in Rockingham County. The U.S. Department of Health and Human Services defines drug courts as *courts that "help to recover from use disorder with the aim of reducing future criminal activity. As an alternative to incarceration, drug courts reduce the burden and costs of repeatedly processing low-level, non-violent offenders through the nation's courts, jails, and prisons while providing offenders an opportunity to receive treatment and education. Drug court participants are required to abstain from substance use, to be accountable for their behavior, and to fulfill the legal responsibilities of the offenses they have committed."*[100] Observations offered that those who advocate for people in the county criminal justice system cite a lack of resources and lack of communication between entities since the mental health reform. Attorneys shared frustration around not knowing who to call for help with a client's mental health. Professionals within the county criminal justice system expressed that people in jail waiting to go to trial receive little to no mental health care but do receive services if they are transferred to state prisons.

"Drug Court is a band-aid that's for someone who's losing a limb. It seems to be that some of the mental health hospitals of the past need to be brought back from the 70's. They had a place for them to go and ever since they shut those down it's the jail. The jail officers are not equipped to deal with that."

Law Enforcement Officer

"Parents and grandparents beg for the longest sentence for drug users, but we have guidelines as judges. We can't do that. If there's a bed available somewhere we can sentence them to inpatient or outpatient facilities but that's it. You can't guarantee that person's insurance status and we can't put a financial burden on that barrier."

Attorney

[100] The U.S. Department of Health and Human Services, What Are Drug Courts? Link: https://www.hhs.gov/opioids/treatment/drug-courts/index.html

Additional research found the following pertinent data from the North Carolina Department of Public Safety.[101]

- In 2022, there were **13** prisoner suicides last year in North Carolina, the highest annual total since at least 1991, and **3,347** events that required a self-injury risk assessment last year, an increase from **3,099** in 2019.
- In 2019, about **31%** of new prisoners were referred for mental health services after their initial intake screening, a. That increased to **47%** in 2021.
- As of January 2023. The prison system had a **36%** vacancy rate for licensed mental health clinicians and a **40%** vacancy rate for correctional officers.
- Prison health care and pharmacy make up a substantial portion of the budget, **$288 million**. Of that, $41 million is dedicated to mental health.

Voices from the Community

"A substantial amount of crimes have mental health issues. It seems to me in the past 10 years its prefiltering. Attorneys are filing competency evaluations by mental health professionals; it has been increasing dramatically since when I first started."

The lack of behavioral health providers exacerbates the issue of inappropriate incompetency filings, deeming multi-disciplinary evaluations critical.

"We had four people kill themselves in the jail. We went 10 years without anyone doing that but four in a year and they were held on low level cases."

"I have a case right now – a man who has been in jail for a year because he is mentally ill. The judge is not comfortable letting him out. I have tried talking to people around the system. Different parties pass the buck to each other. There is a need for an ombudsman - someone you can explain the problem to who can identify where to go, like the VA. The Department of Social Services is strapped."

[101] North Carolina Public Radio, Advocates worry of looming mental health crisis inside North Carolina prisons (January 2023). Link: https://www.wunc.org/news/2023-01-31/advocates-worry-looming-mental-health-crisis-north-carolina-prisons

Community Survey

The Community Survey enabled a greater share of community residents across Rockingham County to share their perspectives on the unique challenges, barriers, and possible solutions to behavioral health care and social service access, and other community needs.

Methodology

The community survey was made available online in English and Spanish. The questionnaire included closed-ended, need-specific questions; open-ended questions; and demographic questions. Invitations to participate were distributed by project partners through channels including social media and email. There were 431 valid survey responses, the vast majority of which were to the English language survey.

"I have tried multiple times to find resources for my children who were adopted from foster care. Either I am told they are too busy and aren't taking new patients or I'm referred to Greensboro where the wait is three to six months. I've had to use the emergency department at Moses Cone in Greensboro due to one of my children threatening to commit suicide."

Community Survey Respondent

Special care was exercised to minimize the amount of non-sampling errors through assessment of design effects (e.g., question order, question wording, response alternatives). The survey was designed to maximize accessibility and comprehensively evaluate respondents' insights. Sub-questions included requests to rate community behavioral health needs on a five-point scale. See appendix for the survey instrument.

The survey served as a practical tool for capturing insights of individuals across Rockingham County. This was not a random sample, and findings should not be interpreted as representative of the full population. Additionally, sample sizes of demographic subpopulations are not large enough to consider samples to be representative of the broader populations from which responses were received. Differences in responses have not been tested for statistical significance as part of this assessment.

Respondent Demographics

Among respondents to the survey (n=431), two in five (42.2%) are between the ages of 35 and 54. Most respondents (80.1%) identify as White or Caucasian, with an additional one in five (19.6%) identifying as Black or African American. Fewer than one in ten (9.2%) identify as Hispanic, Latino, or other Spanish origin. One in ten respondents (10.6%) identify as members of the LGBTQIA+ community.

"I'm scared to go to the hospital for help. You can end up stuck in the emergency room for weeks, but their main goal is to get you stable and get you out of there. They pump you with many different medications and don't take time to see what is working and what you might actually need to remain stable. The goal is just to get you quiet and calm enough to push back out." *Community Survey Respondent*

Exhibit 87: Community Survey Respondent Demographics

DEMOGRAPHIC VARIABLE	PERCENT OF RESPONDENTS
AGE	
Under 18	0.0%
18-24	3.0%
25-34	19.9%
35-44	16.6%
45-54	25.6%
55-64	18.6%
65 and older	16.3%
RACE^	
White or Caucasian	80.1%
Black or African American	19.6%
Native American or Alaska Native	1.8%
Asian or Asian American	1.1%
Native Hawaiian or other Pacific Islander	0.7%
Another race	0.4%
ETHNICITY	
Hispanic, Latino, or other Spanish origin	9.2%
Not Hispanic Latino, or other Spanish origin	90.8%
LGBTQIA+ IDENTITY	
Yes	10.6%
No	89.4%

^ Percentages total more than 100%, as respondents were instructed to select all options that apply.

Nearly one in three respondents (30.2%) live in Reidsville (27320), with an additional one in five (22.5%) from Eden (27288). The median household income reported by respondents falls in the $50,000-$74,999 range, which is slightly greater than the median household income estimated for the population in Rockingham County ($46,993).[102] A majority of respondents (58.4%) reported having a bachelor's degree or higher.

Exhibit 88: Community Survey Respondent Demographics (continued)

DEMOGRAPHIC VARIABLE	PERCENT OF RESPONDENTS
ZIP CODE	
27320	30.2%
27288	22.5%
27025	7.9%
27048	6.5%
All other zip codes	32.9%
ANNUAL HOUSEHOLD INCOME	
Under $15,000	1.2%
$15,000-$29,999	7.1%
$30,000-$49,999	18.4%
$50,000-$74,999	25.1%
$75,000-$99,999	20.8%
$100,000-$150,000	19.6%
Over $150,000	7.8%
EDUCATIONAL ATTAINMENT	
Less than high school or GED	1.4%
High school diploma or equivalent	4.4%
Some college	15.9%
Technical or trades school	4.7%
Associate degree	15.2%
Bachelor's degree	33.1%
Graduate or professional degree (Masters, PhD, MD, etc.)	25.3%

[102] U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021.

Slightly more than half of respondents (52.2%) reported being residents of Rockingham County, and one in five (19.7%) reported being members of local/county government. Others reported being health care providers (12.1%) and/or employees of non-profit organizations (10.9%).

Exhibit 89: Community Survey Respondent Demographics (continued)

DEMOGRAPHIC VARIABLE	PERCENT OF RESPONDENTS
ROLE IN THE COMMUNITY^	
County Resident	52.2%
Local / County Government	19.7%
Health Care Provider	12.1%
Non-Profit Organization	10.9%
Community Health Worker	6.3%
Law Enforcement	6.0%
Parent / Family Member of Person(s) in Treatment	5.8%
Case Manager	4.9%
Clinical Social Worker / Therapist / Counselor	4.9%
Youth Services	3.5%
School-based Behavioral Health Provider	2.8%
Psychologist or Psychiatrist	2.1%

^ Percentages total more than 100%, as respondents were instructed to select all options that apply.

Key Findings

Occasions When Not Getting Needed Care

Among respondents, about one in three (34.7%) reported needing behavioral health care in the past two years but choosing not to get it.

Exhibit 90: In the past two years, has there been one or more occasions when you needed mental health care or substance use disorder treatment but chose NOT to get it?

	PERCENT
Yes	34.7%
No	65.3%

Reasons for Not Getting Needed Care

Among those who reported choosing not to get care in the past two years, common reasons for not getting needed care include **not being sure where to go for help** (32.2%) and **not feeling comfortable seeking help or being worried that others will find out about it** (29.5%). One in four respondents indicated that **they could not afford care even with insurance** (25.5%) and/or **having difficulty getting time off from work** (24.8%).

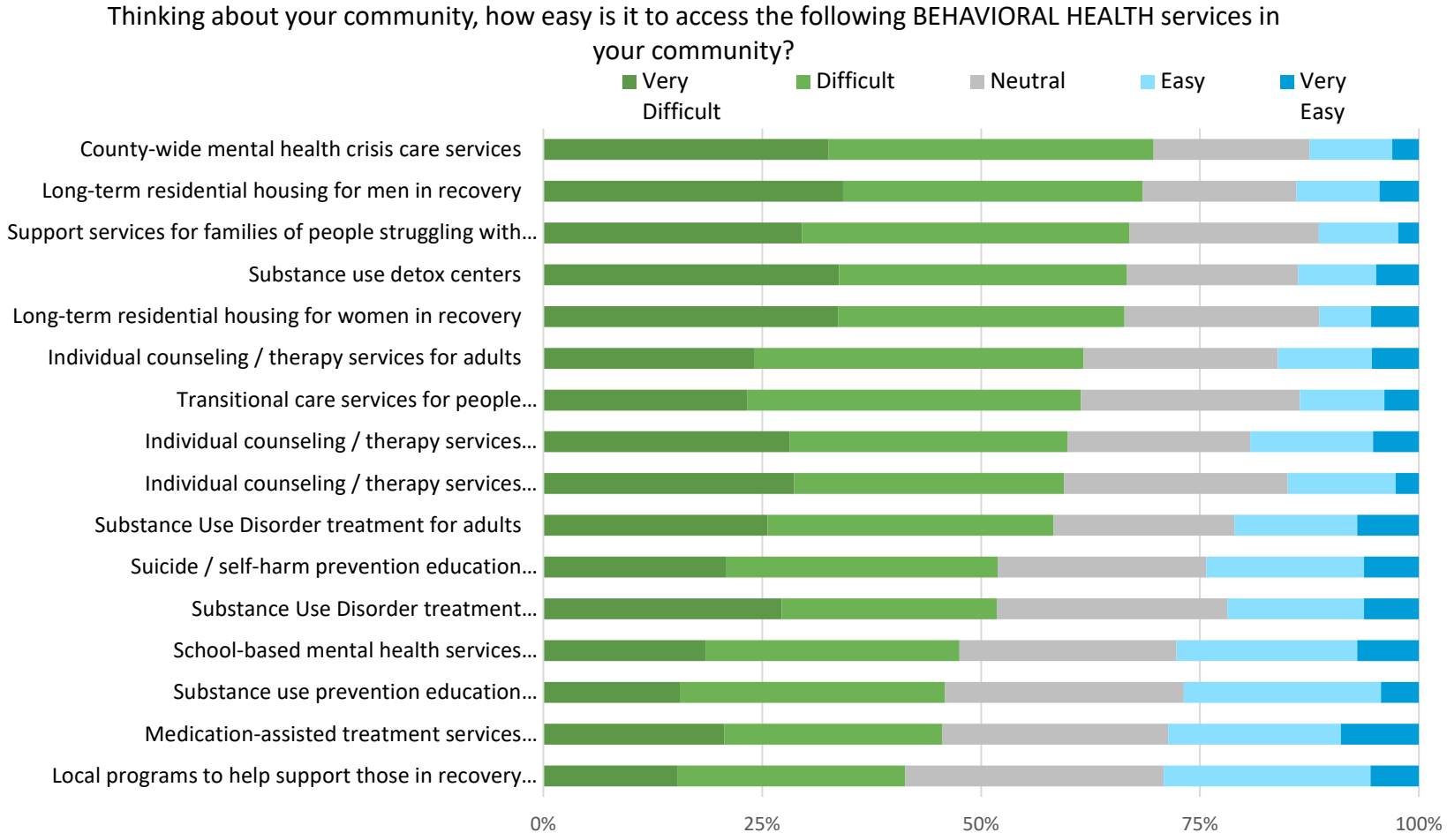
Exhibit 91: Reason for Not Getting Needed Care

	PERCENT
Not sure where to go for help	32.2%
Did not feel comfortable seeking help or worried that others will find out about it	29.5%
Could not afford it even with insurance	25.5%
Hard to get time off from work	24.8%
Did not feel comfortable with available providers	22.8%
Long wait times to see a provider	19.5%
Did not have insurance	17.4%
Providers did not take my insurance	15.4%
Lack of transportation	8.1%
Concern about my immigration status	6.7%
No childcare	5.4%
Providers did not speak my language	4.7%

Difficulty Finding Behavioral Health Services

More than half of respondents reported that most of the behavioral health services listed were 'difficult' or 'very difficult' to find in their community, with the largest proportions for **county-wide mental health crisis care services** (70.0%) and **long-term residential housing for men in recovery** (68.5%).

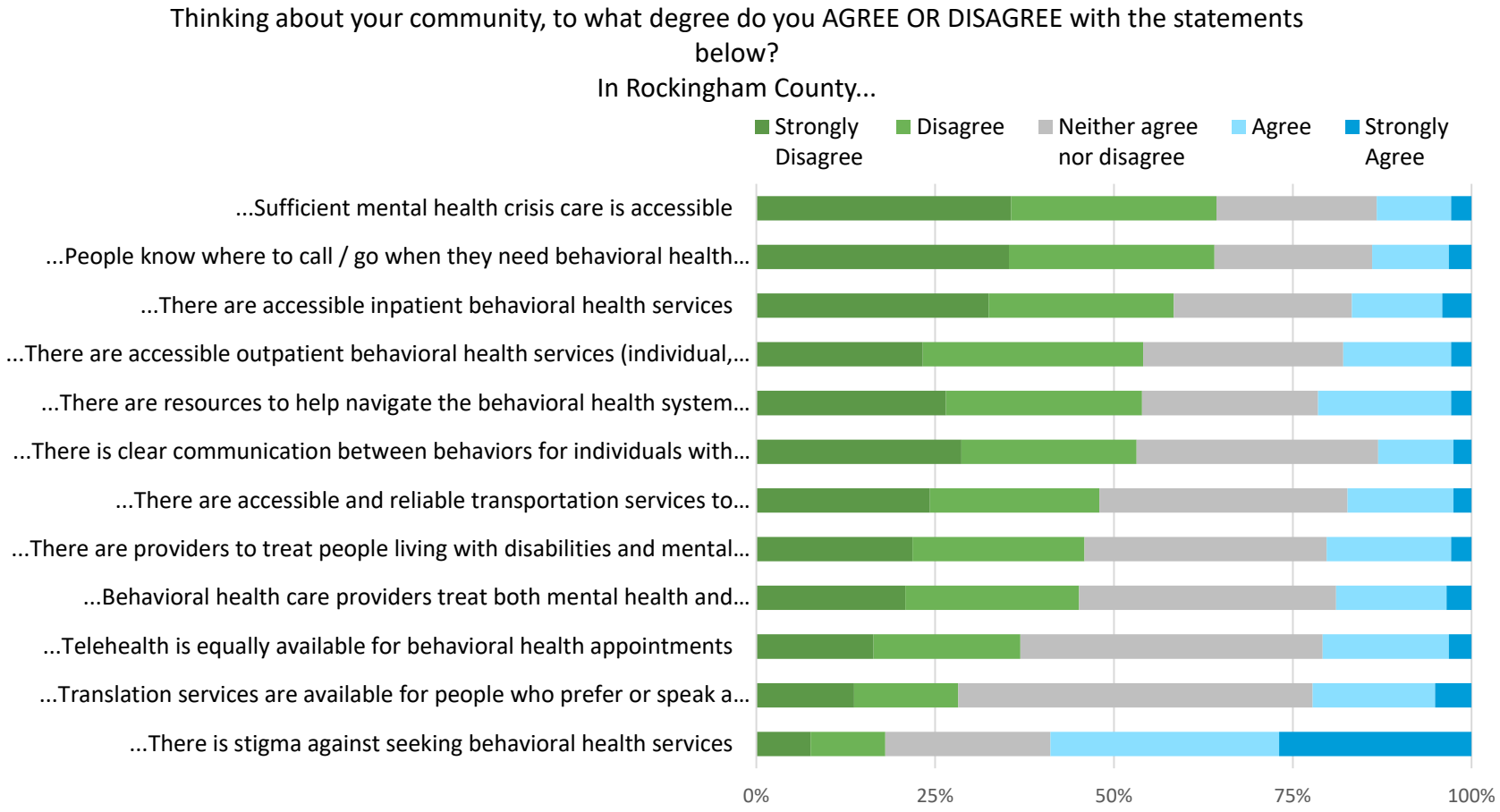
Exhibit 92: Reported Difficulty Finding Behavioral Health Services



Availability & Accessibility of Resources

More than half of respondents disagreed, or strongly disagreed, with six of the statements provided. The largest proportions disagreed or strongly disagreed that **sufficient mental health crisis care is accessible** (64.4%) and that **people know where to call/go when they need behavioral health services** (64.0%). Alternately, a majority of respondents agreed, or strongly agreed, that **there is stigma against seeking behavioral health care services** (58.9%).

Exhibit 93: Respondent Agreement with Statements about Availability and Accessibility of Resources



Vulnerable Populations

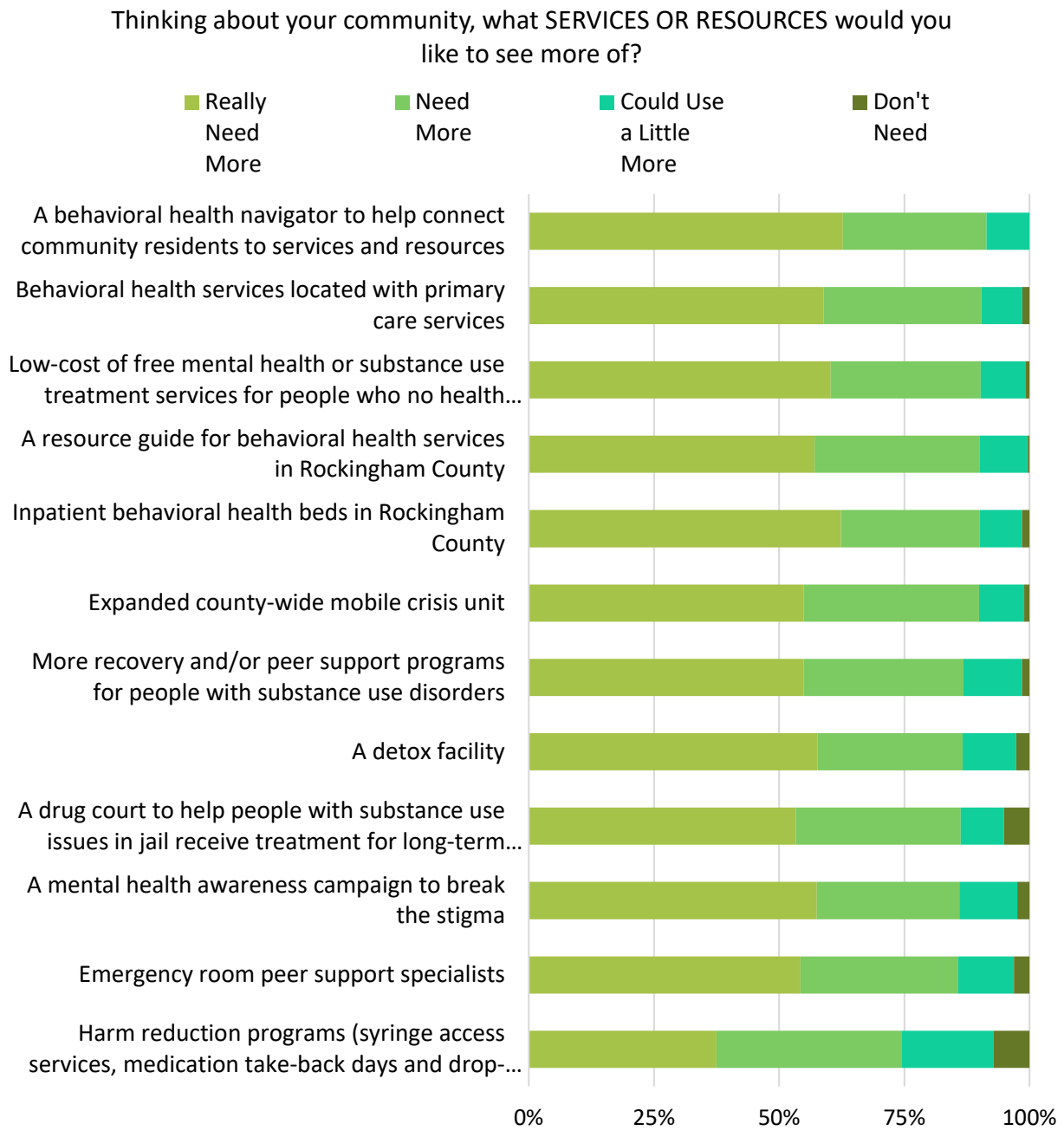
Most commonly, respondents disagreed (or strongly disagreed) that **there are behavioral health services for members of the LGBTQIA+ community** (46.5%) and that **there are behavioral health services for veterans** (44.6%). The largest proportion of respondents agreed (or strongly agreed) that **health care providers treat them equally with respect regardless of their race or ethnicity** (39.0%).

Exhibit 94: Respondent Agreement with Statements about Vulnerable Populations

Desired Services or Resources

The vast majority of respondents reported needing more (or really needing more) of most of the behavioral health services and resources listed, with the most popular needs including **behavioral health navigation to help connect community residents to services and resources** (91.4%), and **behavioral health services located with primary care services** (90.4%). The smallest proportion of respondents (74.5%) reported wanting to see **harm reduction programs**.

Exhibit 95: Additional Services or Resources Preferred by Respondents



Sources of Information

More than two in three respondents (68.2%) reported getting information about resources, services, and providers in Rockingham County from **the internet**, and more than half (55.1%) reported hearing via **word of mouth from friends and family**.

Exhibit 96: Sources of Information about Resources, Services and Providers in Rockingham County

	PERCENT OF RESPONDENTS^
The internet	68.2%
Word of mouth from friends and family	55.1%
Referral from another provider or organization	40.9%
From my employer	31.1%
From the schools	14.5%
From my church	9.8%
Newspaper	8.4%

^ Percentages total more than 100%, as respondents were instructed to select all options that apply.

Additional Behavioral Health Needs

Respondents offered a variety of comments regarding additional behavioral health needs in Rockingham County.

- *"As a school mental health provider, it is extremely difficult to connect families with mental health services, even if they are willing to use them (though they often aren't due to stigma).*
- *"We need a long-term facility in this county that will actually help the patients that need it, to take the strain off of the hospital emergency departments and local law enforcement."*
- *"Patients in the emergency room that need the help are the ones who are delusional or violent, but long-term facilities are reluctant to take these patients because of their behavior and potential for outbursts. This seems counterproductive."*
- *"Emergency and Involuntary Commitment patients take up a lot of space in our Emergency Rooms. Most of them wait long periods for placement in a long-term facility because we don't have a facility for them in this County."*
- *"Older adults are being overlooked for care. Those who are homebound do not have much interaction and do not receive an assessment or treatment, yet Rockingham is a county with a growing older adult population. We have a lack of qualified providers, likely due to a lack of reimbursement or quality rates.*
- *"These children in this county have no guidance and no outlets to potentially keep their minds off wanting to use or try drugs. As a single parent, my child plays baseball and it's hard for me to even afford the cost of it, but I have to put bills and everything else on the back burner, so he doesn't resort to the streets and be around the negative influences."*
- *"Student Health Centers are vital and serve as top resources for high school students. It is a great model, and it educates young people about the importance of f accessing mental health services thus is a front line in erasing stigma."*

Needs Prioritization Process

The Needs Prioritization Process brought together the summary of results from secondary research data, qualitative research themes, and the community survey. A detailed list of **29** needs were identified for Rockingham County. Each of the needs in the prioritization process directly links to data observations and/or qualitative feedback. The resulting list of needs represents the items participants were asked to evaluate in the Prioritization Process. (For full list see the Appendix).

Needs Prioritization Process Participants

Cone Health

Rockingham County Government

Rockingham County DHHS

Rockingham County Health Collaborative

Reidsville Area Foundation

MDC Rural Forward

Rockingham County Schools

Eden Police Department

UNC Health Rockingham

The Leadership Group utilized a modified Delphi Method to construct a prioritized list of needs for the region.[103] The three-round approach described for the participants in advance included:

- The first step asked participants to evaluate and comment on each need in a provided list via an online survey derived from primary and secondary research.
- The second step asked participants to evaluate the same list of needs, but this list showed their colleagues' deidentified comments. The purpose of this process is to provide participants with additional insight as they evaluate each need.
- The third step was an in-person meeting of the Leadership Group to discuss the results of the first two steps of the Prioritization Process along with any other observations that may have been missed along the way. The individual needs were also grouped to weigh the relative acuity of broad, high-level domains of need.

[103] Rand Corporation, Delphi Method. Link: https://www.rand.org/topics/delphi-method.html

The resulting data was analyzed from a variety of perspectives, with each of the metrics (i.e. feasibility, resources, community perspective from the survey, etc.) prioritized, in turn, to understand where there was commonality across modes of analysis. From this analysis, the Leadership Group determined the eight categories of need shown below as the top priority behavioral health-related needs for Rockingham County.

Strategies & Recommendations

The following pages provide high-level strategies and recommendations for the eight categories of needs identified in Rockingham County. The strategies and recommendations are based on evidence-based best practices and may improve access to behavioral health services in the county. However, not all strategies and recommendations may work for Rockingham County due to a variety of factors, such as limited funding, national behavioral health and head workforce shortage, and limited local control.

As the first step in addressing the behavioral health needs and service gaps, a workgroup of key behavioral health providers, elected and non-elected county officials, and community-based organizations should be created to investigate potential strategies and recommendations for implementation and drive strategic plans in Rockingham County.

Behavioral Health Advocacy & Policy Changes

- Advocacy and education of local, state, and national elected officials and lawmakers of the behavioral health system and funding challenges.
- Increase engagement of civic organizations, policymakers, and locally elected or non-elected county and town officials in community-led solutions.
- Support efforts to increase annual state funding allocations for behavioral health services, including prevention programs.
- Increase Medicaid reimbursement rates for behavioral health services for all providers.
- Invest in drug or recovery courts and other diversion programs.

Behavioral Health Awareness & Stigma Reduction

- Increase awareness of community resources and service options, including health education programs, among behavioral health and non-behavioral health providers, community organizations, and residents.
- Design evidence-based and culturally appropriate materials to promote existing behavioral health services throughout the county.
- Provide funded Mental Health First Aid Training to health care/behavioral health care professionals, law enforcement, and schools, among other community-wide organizations to inform the community of existing resources and services.

- Provide trauma-informed care (TIC) training for health professionals, school personnel, and other community organizations.
- Design evidence-based culturally appropriate campaigns promoting behavioral health services for the Hispanic, Latino, African American/black, and other minority communities.
- Implement de-stigmatizing language within community initiatives (reclaiming lived coalition name instead of the opioid task force).

Behavioral Health Prevention, Early Intervention & Harm Reduction

- Create public awareness campaigns for the new 988 Suicide and Crisis Lifeline.
- Train community residents on suicide prevention using programs such as Forefront Suicide Prevention LEARN program or others.
- Implement or expand “Drug Take Back” or other similar programs.
- Expand current mentoring program such as Big Brother / Big Sister between youth and adults.
- Expand recovery support programs in Rockingham County and include online options.
- Develop substance use prevention education programs for youth and adults, including smoking, vaping, and alcohol.
- Consider clean needle exchange programs.

Behavioral Health Services for People in the Criminal Justice System

- Invest in drug or recovery courts and other diversion programs.
- Provide regular and reliable treatment appointments within correctional facilities.
- Provide Mental Health First Aid and Trauma-Informed Care training to correctional facility staff to help identify behavioral health needs of inmates.
- Implement a similar mental health education program, such as Robert Morgan’s “Changing Lives and Changing Outcomes ” program for inmates who have been diagnosed with a mental illness in correctional facilities.
- Train correctional facility staff to identify potential warning signs of suicide in the inmate population.

Behavioral Health Workforce Shortage, Retention & Recruitment

- Implement student loan repayment programs in exchange for a specific number of years of service.
- Create a behavioral health support network or resources for providers to combat burnout and compassion fatigue.
- Provide youth with career pipelines to help increase the diversity of the healthcare workforce.
- Provide scholarships for years of service including teachers, nurses, and students who are committing in high school to attend early college programs for three years of service.
- Implement more peer support specialists, community health workers, or other non-licensed providers.
- Advocate for competitive salaries for behavioral health providers.

Continuum of Care & Service Gaps for Adults & Older Adults

- Integrate behavioral health peer support specialists in local behavioral health services, including local emergency departments.
- Support certification for community health workers at local higher education institutions including community colleges.
- Improve the health literacy of community members through patient education, public health campaigns, and other methods.
- Develop a “warm handoff” discharge process to promote treatment goals and facilitate access to other needed services.
- Increase and promote access to behavioral health telehealth services.
- Investigate and promote integrated care models, such as patient-centered medical homes or colocation of behavioral health and primary care.
- Increase service capacity through increased beds and staff shortages within Rockingham County and North Carolina.
- Invest in a mobile care unit similar to the Caroline County Health Department (Maryland) that provides evidence-based treatment and telehealth capabilities.
- Expand the PORT team and/or community paramedic program.

Continuum of Care & Service Gaps for Youth

- Expand preventive education and school-based counseling services that also use youth or young adult peer support.
- Develop and/or expand afterschool activities or programs that help children develop healthy lifestyle choices and other social skills.
- Support and encourage youth-led conversations about behavioral health challenges.
- Increase access to behavioral health providers who specialize in children. This may need to be done through telehealth services.
- Increase communitywide awareness and education on early warning signs of youth in crisis, especially self-harm and suicide.
- Advocate for more youth inpatient psychiatric beds and inpatient services in North Carolina.
- Improve post-discharge and care coordination between providers and schools.
- Integrate behavioral health peer support specialists in local behavioral health services, including local emergency departments.
- Support certification for community health workers at local higher education institutions including community colleges.
- Improve the health literacy of community members through patient education, public health campaigns, and other methods.

Social Determinants of Health

- Expand assistance programs to help households that make just over the income eligibility requirements.
- Invest in safe, affordable housing options in the community.
- Engage the business community in improving community health, including behavioral health.
- Provide education or workforce development opportunities for residents to encourage self-sufficiency.
- Increase opportunities for socialization for older adults in the community.
- Continue to improve access to transition for low-income residents.

Appendix

Appendix A: Asset Resource List

Appendix B: Literature Review

Appendix C: Access Audit Results

Appendix D: Additional Secondary Data

Appendix E: Stakeholder Interview & Focus Group Moderators Guide

Appendix F: Community Survey

Appendix G: Community Survey, Voices from the Community

Appendix A: Asset Resource List

FACILITIES	ABOUT
Alcohol and Drug Abuse Treatment Centers	The Alcohol and Drug Abuse Treatment Centers (ADATC) are charged with serving adults in need of substance use disorder treatment and psychiatric stabilization. They offer an array of specialized programs to meet the complex needs of their population such as evidence-based treatment for trauma survivors, veteran's treatment and statewide perinatal and opioid treatment programs.
Walter B. Jones ADATC	Walter B. Jones Center is one of three state operated North Carolina Alcohol and Drug Abuse Treatment Centers (ADATCs) specifically designed to provide medically monitored detoxification/crisis stabilization, and short-term treatment preparing adults with substance use and co-occurring disorders for ongoing community-based recovery services.
Developmental Centers	Developmental Centers provide residential, medical, habilitation (assistance in developing functional living skills) and other support services to promote independence and self-determination. Murdoch also provides short term, specialized programs for individuals in specific target populations.
Murdoch Developmental Center	Murdoch Developmental Center in Butner, NC is one of three state operated developmental centers, primarily serving 25 counties of the Central Region. Murdoch provides services and support to people with intellectual and developmental disabilities (IDD), complex behavioral challenges and or medical conditions whose clinical treatment needs cannot be supported in the community. Murdoch operates four specialty programs including children and adolescent programs which are available for individuals residing in all regions of the state.

FACILITIES	ABOUT
Neuro-Medical Treatment Centers	The Neuro-Medical Treatment Centers are specialized skilled nursing facilities certified by the Centers for Medicare and Medicaid Services under the Omnibus Budget Reconciliation Act long term care regulations. The three facilities serve adults with chronic and complex medical conditions that co-exist with neuro-cognitive disorders often related to a diagnosis of severe and persistent mental illness or intellectual disability. The health and physical status of these residents require 24-hour supervision, daily nursing care and assistance with activities of daily living.
O'Berry Neuro-Medical Treatment Center	O'Berry Neuro-Medical Treatment Center (OBNMTC) is a specialized skilled nursing facility (SNF) certified by the Centers for Medicare and Medicaid Services (CMS) under the Omnibus Budget Reconciliation Act (OBRA) long term care regulations. O'Berry supports residents from 65 counties in the Eastern and South-Central regions of North Carolina.
Longleaf Neuro-Medical Treatment Center	Longleaf Neuro-Medical Treatment Center is a specialized skilled nursing facility (SNF) certified by the Centers for Medicare and Medicaid Services (CMS) under the Omnibus Budget Reconciliation Act (OBRA) long term care regulations.
Central Regional Hospital	The hospital provides psychiatric and medical care to adults and adolescents in 25 counties in the central region of North Carolina. CRH also serves children ages 11 and under from all 100 counties of North Carolina.
Psychiatric Hospitals	The Division's psychiatric hospitals provide comprehensive inpatient mental health services to people with psychiatric illness who cannot be safely treated at a lower level of care. Treatment modalities utilized at the State hospitals include medication, psychosocial rehabilitation, counseling, educational sessions, group therapy, recreation therapy, work therapy, diet and occupational therapy. These facilities are accredited by the Joint Commission for Accreditation of Healthcare Organizations and are certified by the Centers for Medicare and Medicaid Services. All State hospitals provide treatment to adults and adolescents in their service area.

FACILITIES	ABOUT
Residential Programs for Children	Wright and Whitaker are residential schools for children and adolescents who have severe emotional and behavioral needs. Both schools employ a re-education model which prepares the child or adolescent to successfully return to his community. These schools serve the entire state.
Whitaker Psychiatric Residential Treatment Facility	Whitaker PRTF, located in Butner, NC is a secure, non-acute treatment program for males and females ages 13-17. Whitaker's mission is to provide comprehensive, evidenced-based services to North Carolina youth, who have emotional and behavioral challenges and need secure residential care. The vision of Whitaker PRTF is to be a model facility using evidenced-based interventions, education and community interactions to provide quality clinical and behavioral care in the safest environment. Our goal is to coordinate with community-based resources so that the youth can return to successful, productive lives in their home communities.
Wright School	Wright School provides best practice, cost-effective residential mental health treatment to North Carolina's children, ages 6 to 12, with serious emotional and behavioral disorders and supports each child's family and community in building the capacity to meet children's special needs in their home, school and local community.
Sandhills Center[104]	Sandhills Center is a publicly funded LME-MCO (Local Management Entity-Managed Care Organization) committed to helping people to receive the best care possible for their mental health, intellectual/developmental disabilities, and substance use disorders. We manage a network of service providers, we ensure the quality of services being provided, and we are a resource for behavioral health care information or assistance.

Source: NCDHHS State Operated Healthcare Facilities

[104] In North Carolina, Local Management Entities/Managed Care Organizations (LME-MCOs) coordinate care for mental health, substance use and developmental disabilities. NC Department of Health and Human Services, Treatment. Link: https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/treatment

Appendix B: Literature Review

CITATION	IMPORTANCE/VALUE	SUMMARY
DRUG COURT		
Cunningham, Ledgerwood. Juvenile Drug Treatment Court. Pediatric Clinics of North America. 66(6) (2019) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6938235/	This article shares that the effectiveness of JDTC has been mixed. Findings demonstrate that JDTCs are not universally effective at reducing recidivism and substance use.	Findings suggest that teens who receive multisystemic therapy and multisystemic therapy PLUS contingency management (CM) treatment conditions experience significantly greater drug abstinence than those assigned to JDTC alone.
IMPACT OF COVID-19		
Lanier, Paul. Rose, Roderick. Gibbs, Daniel. Hyman, Jacob. Kamdar, Neil. Konstanzer, Joseph. Hassmiller Lich, Kristen. Psychiatric Residential Treatment Facilities for Child Behavioral Health Services in North Carolina Medicaid (2022) https://www.medrxiv.org/content/medrxiv/early/2022/12/22/2022.12.21.22283789.full.pdf	Monitoring Psychiatric Residential Treatment Facilities (PRTF) utilization rates and trends is crucial to ensuring appropriate treatment is available to children, particularly those already in contact with the child welfare system. This data's recency also enabled us to examine whether the COVID-19 pandemic was associated with any substantial changes in children placed in PRTFs.	Current trends indicate ongoing overrepresentation of children in foster care placed in PRTFs and increased out-of-state PRTF placements. Coordinated efforts in future research, policy, and practice are needed to determine the cause of these trends and identify solutions.
Von Schulz J, Serrano V, Buchholz M, Natvig C, Talmi A. Increased behavioral health needs and continued psychosocial stress among children with medical complexity and their families during the COVID-19 pandemic. Infant Ment Health J.	Children with medical complexity (CMC) and their caregivers are at increased risk for multiple psychosocial stressors that can impact child and family well-being and health outcomes. During the COVID-19 pandemic, when access to supports	The purpose of this study is to characterize screening for SDOH and psychosocial adversity and provide integrated behavioral health (IBH) support during the medical visit at a primary care clinic for children with medical complexity

(2022) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9015624/	diminished, psychosocial screening and integrated behavioral health (IBH) services in the primary care setting were crucial in identifying and addressing the unique needs of this population.	(CMC) before and during the COVID-19 pandemic. Aims are to (1) compare levels of psychosocial stressors prior to and during the COVID-19 pandemic for CMC and their families, and (2) describe adaptations to psychosocial screening procedures and IBH supports for CMC before and during the COVID-19 pandemic.
Johns KN, Igboeli B, Ortiz-Cruzado E, Aase D, Stern S, Boxley L, Brunet D, Westbrook T, Gordish D, Jonas D, Carpenter K, Kasick D. Ready for the Long Haul: Rapid Creation and Deployment of a Proactive, Modified Collaborative Care Program for COVID-19 Survivors with Behavioral Health Needs. J Acad Consult Liaison Psychiatry (2022) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9296173/	Expanding the team-based framework of the CCM to incorporate neuropsychology, health psychology, and proactive screening can help psychiatrists meet the neuropsychiatric needs of COVID-19 survivors in primary care.	COVID-19 survivors will need consistent care access to manage chronic behavioral health and cognitive needs as they arise over time and across treatment settings. This interdisciplinary program based upon the CCM highlights the model's ability to flexibly leverage limited behavioral health resources to meet the needs of rapidly evolving populations. More targeted screening protocols, more reliable remote symptom measurement, and outreach to primary care providers can help build more effective CCM interventions.
Rice T, Reliford A, Calov C, Rodriguez J. The Behavioral Health Needs of Youth With Preexisting Psychiatric Disorders in the Aftermath of COVID-19. J Pediatr Health Care (2023)	While the capabilities of behavioral health resources to meet these youth's needs were already strained, the Coronavirus Disease 2019 (COVID-19) pandemic extended resource limitations just as this	In this article, we provide a brief narrative review of the factors' manifestations with an emphasis upon their disproportionate impact upon children of color and their families and particularly those from

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9579186/	subgroup of children and youth with special health care needs faced new stressors and potential exacerbations of their underlying psychiatric illnesses.	disadvantaged communities. We proceed to provide policy proposals for addressing these disparities.
Jeffers, Alexiss, Ashley A. Meehan, Jordan Barker, Alice K. Asher, Martha P. Montgomery, Greg Bautista, Colleen M. Ray, Rebecca L. Laws, Victoria L. Fields, Lakshmi Radhakrishnan, Susan Cha, Aleta Christensen, Brandi Dupervil, Jorge V. Verlenden, Cynthia H. Cassell, Alaina P. Boyer, Barbara DiPietro, Margaret Cary, Maria Yang, Emily Mosites and Ruthanne Marcus. "Impact of Social Isolation during the COVID-19 Pandemic on Mental Health, Substance Use, and Homelessness: Qualitative Interviews with Behavioral Health Providers." International Journal of Environmental Research and Public Health (2022) https://pdfs.semanticscholar.org/1bdf/ad9a2fbfcda66e027ef87c479a7cea095c03.pdf?_gl=1*1f2zr4w*_ga*MTM1NTIxMDkwOC4xNjg1NjE3NTQy*_ga_H7P4ZT52H5*MTY4ODU2Nzc5Mi4xMS4xLjE2ODg1NzAyMzkuMzguMC4w	Our findings provide additional evidence that the social isolation experienced during the pandemic has been detrimental to mental health and substance use outcomes, especially for people experiencing homelessness.	To evaluate these effects and support our understanding of mental health and substance use outcomes of the COVID-19 pandemic, we conducted a qualitative study where behavioral health providers serving people experiencing homelessness described the impact of COVID-19 among their clients throughout the United States. Behavioral health providers shared that experiencing social isolation worsened mental health conditions and caused some people to return to substance use and fatally overdose.
Cimino, Silvia, Paola Di Vito and Luca	The COVID-19 pandemic has considerably	This study aimed at longitudinally

Cerniglia. "The impact of COVID-19 pandemic on psychopathological symptoms in mothers and their school-age children before, during and after the COVID-19 pandemic peak." Current Psychology (New Brunswick) (2022) https://pubmed.ncbi.nlm.nih.gov/35789629/	affected the mental health of mothers and their offspring. The mental health of most mothers worsened during the pandemic. In particular, depressive and somatization symptoms significantly increased during the lockdown.	exploring whether the psychopathological symptoms of a sample of mothers and their children increased, decreased, or remained the same at three assessment points: before the COVID-19 outbreak, during the first wave of the pandemic, and in the current situation, when most restrictions have been lifted but the impact of the pandemic on people's lives is still high.
Spencer, Andrea E., Rachel Oblath, Rohan Dayal, J. Krystel Loubeau, Julia A. Lejeune, Jennifer Sikov, Meera Savage, Catalina Posse, Sonal Jain, Nicole Zolli, Tithi D. Baul, Valeria Ladino, Chelsea Ji, Jessica Kabrt, Lillian Mousad, Megan Rabin, J. Michael Murphy and Arvin Garg. "Changes in psychosocial functioning among urban, school-age children during the COVID-19 pandemic." Child and Adolescent Psychiatry and Mental Health (2021)	There is concern about the effect of the COVID-19 pandemic on psychosocial functioning among school-age children, who have faced unusual stressors during this time. Our goal was to assess mental health symptoms and social risks during COVID-19, compared to before the pandemic, for urban, racial and ethnic minority school-age children, and investigate the relationship between mental health and social risks.	The COVID-19 pandemic has led to a dramatic increase in depression/anxiety problems and social risks among urban, racial and ethnic minority school-age children compared to before the pandemic. More research is needed to understand if these changes will persist.
Deoni, Sean C. L.. "Impact of the COVID-19 Pandemic Environment on Early Child Brain and Cognitive Development." Biological Psychiatry (2022) https://www.biologicalpsychiatryjournal.c	Results highlight that even in the absence of direct SARS-CoV-2 infection and COVID-19 illness, the environmental changes associated COVID-19 pandemic is negatively affecting infant and child development.	We find that children born during the pandemic (Since July 2020) have significantly reduced verbal, motor, and overall cognitive performance compared to children born pre-pandemic; and that skills have continued to decline as the

om/article/S0006-3223(22)00169-X/pdf		pandemic has progressed. Moreover, we find that children from lower socioeconomic families have been most affected.
Xue, Yajiong, Sy Atezaz Saeed, Huigang Liang, Kathrine Jones and Kalyan Muppavarapu. "Investigating the Impact of Covid-19 on Telepsychiatry Use Across Sex and Race: A Study of North Carolina Emergency Departments." Telemedicine journal and e-health : the official journal of the American Telemedicine Association (2022)	The objective of this study is to evaluate the impact of COVID-19 on telepsychiatry consultations in North Carolina (NC) and analyze the differences across sex and race.	It seems that the COVID-19 crisis has led to a heightening demand for telepsychiatry consultations in NC, and there is a possible race disparity in these demands between black and white mental health patients. These findings underscore the need to further develop telepsychiatry services and enhance access to black patients.
McEwen, Sara. "Impact of COVID-19 on Excessive Alcohol Use in North Carolina." North Carolina Medical Journal (2022) https://ncmedicaljournal.com/article/55433	Despite a loosening of earlier lockdown measures and isolation, in June 2021 40% of surveyed US adults reported struggling with symptoms of mental or substance use disorder, including anxiety/depressive symptoms (31%); starting or increasing substance use (13%); trauma/stressor-related disorder symptoms (26%); and seriously considering suicide (11%).	Excessive alcohol use, already problematic in North Carolina, has increased markedly during COVID-19. Alcohol-related morbidity and mortality have also increased.
North, Steve. "Addressing Students' Mental Health Needs via Telehealth." North Carolina Medical Journal (2020) https://ncmedicaljournal.com/article/552	Presents the argument for creating a sustainable statewide mental health network.	Children and adolescents face a wide variety of mental health challenges, ranging from coping with the death of a loved one to major depression with suicidal ideation. The use of telehealth to

45		provide mental health services in schools is gaining national attention due to increased focus on school violence and increased adolescent suicide rates ... North Carolina has the potential to develop a statewide school-based mental health program accessed through telehealth.
Kaniuka, Andrea R., Robert J. Cramer, Corrine N. Wilsey, Jennifer Langhinrichsen-Rohling, Annelise M. Mennicke, Alexandra Patton, Meagan Zarwell, Carmen P. McLean, Yu-Jay Harris, Sharon Sullivan and Glori Gray. "COVID-19 Exposure, Stress, and Mental Health Outcomes: Results From a Needs Assessment Among Low Income Adults in Central North Carolina." Frontiers in Psychiatry (2022)	Findings from this study suggest possible avenues for a regional public health strategy to address the adverse mental health effects of the pandemic in the Charlotte, NC region.	This study focuses on identifying COVID-19 related exposure, stress, and mental health concerns in the larger Charlotte, North Carolina region, an area with many low-income and under resourced communities.
North Carolina Institute of Medicine and The Duke Endowment. Impact of COVID-19 on Excessive Alcohol Use in North Carolina. North Carolina Medical Journal (2022)	The article recognizes the increase in alcohol use statewide since the onset of the pandemic resulting in an increased strain on emergency departments as well as other societal impacts such as domestic violence, child maltreatment, among others.	North Carolina emergency department utilization dropped markedly early in the pandemic, but the proportion of visits for substance use and mental health issues increased from 2019 to 2020. Data from the Alcohol/Drug Council of North Carolina indicate that there was an uptick in calls to its information and referral

		phone line for individuals inquiring about treatment. For alcohol use disorder alone, there was an 18% increase between 2019 and 2020 (3,513 versus 4,148) and an additional 8% increase between 2020 and 2021 (4,148 versus 4,500).
Garcia GP, Stringfellow EJ, DiGennaro C, Poellinger N, Wood J, Wakeman S, Jalali MS. Opioid overdose decedent characteristics during COVID-19. Annals of Medicine. (2022)	Findings can inform state-specific public health interventions and highlight the need for timely and comprehensive fatal opioid overdose data, especially amidst concurrent crises such as COVID-19.	Comparing 2020 vs. 2019, there has been a significant increase in the proportion of opioid-related overdose deaths involving cocaine in North Carolina (15.6% vs. 21.8%) and increase in psychostimulants in North Carolina (17.2% vs. 12.7%). Study findings found significant increases in opioid-related overdose death rates North Carolina (30.5%).
SUBSTANCE USE DISORDER (GENERAL)		
Schultz, Brandon K., Deanna Al-Hammori, Karlie M. Mirabelli and Lauren Gaither. "Mental Health Services in North Carolina's Public Schools." North Carolina Medical Journal (2020) https://ncmedicaljournal.com/article/55246	This article describes current school mental health efforts in North Carolina, as well as policy initiatives that could shape those practices in the coming years.	The future of Mental Health Servicesin North Carolina appears promising,
Alemu, Brook T, Bethany Young, Hind A. Beydoun and Olaniyi Olayinka. "Substance Use Disorder among Hospitalized	The literature reflects the connection between adolescent use and the propensity for diagnosis with a SUD in	Individuals who began using alcohol or other drugs before the age of 15 are 17 times more likely to develop a substance

Adolescents in North Carolina." Southern Medical Journal (2022) https://sma.org/southern-medical-journal/article/substance-use-disorder-among-hospitalized-adolescents-in-north-carolina/	adulthood; it is evident that this is a growing public health crisis.	use disorder (SUD) in adulthood. This study sought to determine the common characteristics of SUD-related hospitalizations and patterns of discharge diagnoses among adolescents in North Carolina.
Shover, Chelsea L.., Falasinnu, Titilola O.., Dwyer, Candice L.., Benitez, N., d, S., Cunningham, Nicole J.., Freedman, Rohan B.., Vest, Noel A. & Humphreys, K.Steep increases in fentanyl-related mortality west of the Mississippi River: Recent evidence from county and state surveillance. Drug & Alcohol Dependence (2020) https://www.sciencedirect.com/science/article/pii/S0376871620304798	Article has findings indicating that synthetic narcotic mortality is increasing. Increasing access to naloxone and expanding addiction treatment are needed to address growing problem of fentanyl-related mortality.	Overdose deaths from synthetic opioids (e.g., fentanyl) increased 10-fold in the United States from 2013 to 2018, despite such opioids being rare in illicit drug markets west of the Mississippi River. Public health professionals have feared a "fentanyl breakthrough" in western U.S. drug markets could further accelerate overdose mortality. We evaluated the number and nature of western U.S. fentanyl deaths using the most recent data available.
Mannelli, Paolo, Marla F. Wald and Marvin S. Swartz. "Pregnant Mothers With Substance Use Problems and Their Treatment in North Carolina." North Carolina Medical Journal (2023) https://ncmedicaljournal.com/article/67784-pregnant-mothers-with-substance-use-problems-and-their-treatment-in-north-carolina	A few shared recommendations for the treatment of SUD in pregnancy may help streamline the treatment pathway.	The management of SUD in pregnancy is a complex clinical challenge. We have highlighted the increasing numbers of effective treatment options for pregnant women with SUD but must recognize that the social stigma they suffer often leads to hopelessness and guilt, and may serve to prevent attainable results. In a preliminary survey regarding patients receiving

		MOUD, medical students and medical residents agreed that women with OUD, compared to women with bipolar disorder or diabetes, should not try to get pregnant, due to the particular challenges associated with OUD.[16] These stigmatizing biases among both patients and providers are a reminder that a continuing education process must accompany the clinical treatment effort.
Kadakia, Aditi, Maryaline Catillon, Qing-xiang Fan, G. Rhys Williams, Jessica R Marden, Annika Anderson, Noam Kirson and Carole Dembek. "The Economic Burden of Schizophrenia in the United States." The Journal of Clinical Psychiatry (2022) https://pubmed.ncbi.nlm.nih.gov/36244006/	The economic burden of schizophrenia in the United States (US) was estimated at $155.7 billion in 2013. Since 2013, the US experienced significant health care reforms and treatment advances.	The estimated burden of schizophrenia in the US doubled between 2013 and 2019 and was $343.2 billion in 2019, highlighting the importance of effective strategies and treatment options to improve the management of this difficult-to-treat patient population.
Ranapurwala, Shabbar I., Mary C. Figgatt, Molly Remch, Carrie L. Brown, Lauren Brinkley-Rubinstein, David L. Rosen, Mary Elisabeth Cox and Scott K. Proescholdbell. "Opioid Overdose Deaths Among Formerly Incarcerated Persons and the General Population: North Carolina, 2000–2018." American Journal of Public	While nationwide OOD rates declined from 2017 to 2018, OOD rates among North Carolina FIPs increased by about a third, largely from fentanyl and its analogs.	To compare opioid overdose death (OOD) rates among formerly incarcerated persons (FIPs) from 2016 to 2018 with the North Carolina population and with OOD rates from 2000 to 2015.

Health (2022) https://pdfs.semanticscholar.org/1777/ad685412e59fa91cc573ac1e7949759f9811.pdf?_gl=1*183azl8*_ga*MTM1NTIxMDkwOC4xNjg1NjE3NTQy*_ga_H7P4ZT52H5*MTY4NzQzMDE1Mi43LjEuMTY4NzQzMTQwMS41NS4wLjA.		
Cabello-De la Garza, Ana, Chase Harless, Bayla M. M. Ostrach and Blake Fagan. "Increasing North Carolina's Workforce Capacity for Prescribing Buprenorphine Products." North Carolina Medical Journal (2022)	Inadequate access to opioid use disorder (OUD) treatment is a public health concern. Rates of opioid-related poisoning deaths are increasing in North Carolina and access to OUD treatment is especially sparse in rural areas. DEA-X-waivered providers that can prescribe buprenorphine as a medication for opioid use disorder (MOUD) play an essential role in treating OUD. Increased workforce capacity to treat OUD in an evidence-based, equitable, and patient-centered way is needed. Gaps persist in continuing professional education and academic training.	This project highlights a successful and potentially replicable approach to offering structured MAT capacity-building training in combination with technical assistance (TA) within medical education programs.
Patel, Shweta, Sahar Khan, Saipavankumar M and Pousette Hamid. "The Association Between Cannabis Use and Schizophrenia: Causative or Curative? A Systematic	Schizophrenia is a chronic illness affecting approximately 20 million people worldwide. Schizophrenia and cannabis seem to have a close relationship, and we	We can conclude that the tetrahydrocannabinol (THC) component of cannabis can be the main culprit causing psychosis and schizophrenia in the at-risk

Review." Cureus (2020)	want to explore this. We want to know if marijuana is causing, exacerbating, or treating schizophrenia. This systematic review explores this question.	population. THC can also be the one exacerbating symptoms and causing an adverse prognosis in already diagnosed patients. Even though CBD shows therapeutic effects and THC opposing effects, the data is minimal and low safety and efficacy warrants more research. The relation between cannabis and schizophrenia needs further investigation.
BACKGROUND OF BEHAVOIRAL HEALTH, ROCKINGHAM COUNTY		
Brathwaite, Danielle, Anna E. Waller, Bradley Neil Gaynes, Rachel Stemerman, Tracy M. Deselm, Jason J. Bischof, Judith Tintinalli, Jane H. Brice and Montika Bush. "A 7 Year Summary of Emergency Department Visits by Patients With Mental Health Disorders." Frontiers in Psychiatry (2022)	This investigation seeks to understand the mental health-related ED burden in North Carolina (NC) by describing trends in ED visits associated with a mental health diagnosis (MHD) over time.	Similar to national trends, the proportion of ED visits associated with a MHD in NC has increased over time. This indicates a need for continued surveillance, both stateside and nationally, in order to inform future efforts to mitigate the growing ED burden.
2014 Rockingham County Behavioral Health Services Assessment Draft Report	Provides an overview of behavioral health needs and services in Rockingham County in 2014.	The most significant data relates to exceptionally long stays in the County's two emergency departments for those experiencing mental health and/or substance abuse acute episodes. The average length of stay for those with behavioral health issues admitted to the emergency departments is significantly higher (18.5 hours at Annie Penn) than the

		lengths of stay for those presenting with physical health emergencies (3.5 hours at Annie Penn). More alarmingly, a number of individuals in acute behavioral emergencies are spending days, sometimes weeks in the emergency departments.
2020 Rockingham County Community Needs Assessment Report	Provides an overview of community health needs and services in Rockingham County in 2020.	NC is experiencing an opioid epidemic due to decades of prescribing more opioids at higher doses; more people in NC die from opioid overdoses than car crashes. Rockingham County Commissioner Reece Pyrtle and Felissa Ferrell, Director, Rockingham County Department of Health and Human Services were both appointed by the county manager to oversee the Rockingham County Opioid Task Force, which began in 2017.
2022 Rockingham County Community Health Needs Assessment	Provides an overview of 2022 community health needs & services in the Cone Health service area with a primary focus on the counties (Alamance, Guilford and Rockingham counties are the locations of Cone Health's six hospitals and many of our facilities. Residents of these communities make up the majority of our patient population.) where the health	During 2020, efforts devoted to mental health and substance use, especially as it relates to opioid use, succeeded on several fronts. The Rockingham County Opioid Task Force was formed, with the mission to reduce misuse, overdose, and deaths in Rockingham County through community education, prevention, and collaboration. Additionally, the Reidsville

	system has multiple facilities.	Police Department partnered with organizations throughout Rockingham County to implement a Post Overdose Response Team (PORT) as a response to the rise in the opioid crisis. Through PORT, participating law enforcement agencies connect overdose victims with local mental health resources.
Ellis, L., Stephanie. Rockingham County Schools Behavioral Health and Social Emotional Annual Report (2022)	Provides an overview of the state of Rockingham County Schools Behavioral Health Department as part of Rockingham County Schools Behavioral Health Department - selected as part of the North Carolina's Project ACTIVATE (Advancing Coordinated and Timely Interventions, Awareness, Training, and Education).	This full report provides an overview of progress, accomplishments, and opportunities for further growth of behavioral health and social emotional implementation for Rockingham County Schools.
Rosen, David L. and Debbie A. Travers. "Emergency department visits among patients transported by law enforcement officers." (2021)	The relatively common occurrence of law enforcement transports suggests the need for greater research to understand factors influencing law enforcement transport decisions, the impact of these transports on patient health and safety, and the repercussions on patient care of a growing officer presence in emergency departments.	Law enforcement officers frequently encounter people with health conditions. We sought to estimate the rates, diagnoses, and characteristics of emergency department (ED) visits among patients transported directly by law enforcement. We analyzed statewide North Carolina Emergency Department data for adults, aged 18+ years, from 2009 to 2016. We estimated transport rates

		using census data; categorized primary ED diagnoses into 13 major and 8 substituent categories; compared county transport rates by rurality; and examined patient characteristics.
Kuhns, Peter. "Mental Health and Substance Use in the Juvenile Justice Population of North Carolina." North Carolina Medical Journal (2019) https://ncmedicaljournal.com/article/55081	Youth with mental and behavioral health issues are overrepresented in the juvenile justice system and this prevalence increases as the youth's interaction with the system goes deeper.	This article describes the mental health/substance use issues of justice-involved youth, highlights the role that trauma and adverse childhood experiences (ACEs) have in the development of these issues, discusses what services are offered at the highest levels of confinement, identifies the service gaps and needs for this vulnerable population, and briefly examines the anticipated effects of the upcoming North Carolina Raise the Age legislation.
Sheitman, Brian, and Joseph B. Williams. "Behavioral Health Services in North Carolina's State Prison System: Challenges and Opportunities." North Carolina Medical Journal (2019) https://ncmedicaljournal.com/article/55077	Provides overview of challenges of providing healthcare & mental health care in prison system & progress being made to address those challenges.	There has been a dramatic increase in the number of individuals incarcerated in the United States during the past several decades. Providing behavioral health care services to incarcerated people within North Carolina's prison system presents several challenges, and progress is being made to deliver care that is consistent with accepted community standards.

HEALTH LITERACY

Rafferty, Ann P., Huabin Luo, N. Ruth Gaskins Little, Satomi Imai, Nancy L. Winterbauer, and Ronny A. Bell "Self-Reported Health Literacy Among North Carolina Adults and Associations with Health Status and Chronic Health Conditions." North Carolina Medical Journal (2020) https://ncmedicaljournal.com/article/55239	A notable segment of the North Carolina adult population has low health literacy, and those who do are particularly vulnerable to ahave dverse health status. Targeted efforts are needed to identify strategies to improve health literacy and decrease health disparities.	Low health literacy is a recognized contributor to health disparities. Significant proportions of the adult population, especially the underserved, have low health literacy. The purpose of this study was to examine health literacy and its associations with health status and chronic health conditions among North Carolina adults.
Naumann, Rebecca B., Stephen W Marshall, Jennifer L. Lund, Asheley Cockrell Skinner, Christopher L. Ringwalt and Nisha C. Gottfredson. "Health Care Utilization and Comorbidity History of North Carolina Medicaid Beneficiaries in a Controlled Substance "Lock-in" Program." North Carolina Medical Journal (2019) https://ncmedicaljournal.com/article/55125	Medicaid "lock-in" programs (MLIPs) are a widely used strategy for addressing potential misuse of prescription drugs among beneficiary populations. However, little is known about the healthcare needs and attributes of beneficiaries selected into these programs. Our goal was to understand the characteristics of those eligible, enrolled, and retained in a state MLIP.	North Carolina's MLIP appears to be successful in identifying subpopulations that may benefit from provision and coordination of services, such as substance abuse and mental health services. However, there are challenges in retaining this population for the entire MLIP duration.
Franklin, Michelle S., Bush, Christopher MPH, Jones, Christopher MPH, Kelley, A., Davis, Naomi Ornstein PhD, French, Alexis PhD, Howard, Jill PhD, Greiner, Melissa A. and Maslow, Gary R. "Inequities in Receipt of the North Carolina Medicaid Waiver	These findings highlight the need for policy reform to address inequities in access to the Waiver for individuals with I/DD.	We examined characteristics associated with receiving the North Carolina Home and Community-Based Services Waiver for intellectual and developmental disabilities (I/DDs) and its association with emergency department (ED) utilization.

Among Individuals with Intellectual Disability or Autism Spectrum Disorder." Journal of Developmental & Behavioral Pediatrics (2022) https://journals.lww.com/jrnldbp/Fulltext/2022/09000/Inequities_in_Receipt_of_the_North_Carolina.3.aspx		
Maenner, Matthew J., Kelly A. Shaw, Jon Baio, Anita Washington, Mary E. Patrick, Monica Dirienzo, Deborah L. Christensen, Lisa D. Wiggins, Sydney Pettygrove, Jennifer G. Andrews, Maya Liza C. Lopez, Allison Hudson, Thaer Baroud, Yvette D. Schwenk, Tiffany White, Cordelia Robinson Rosenberg, Li Ching Lee, Rebecca A. Harrington, Meg Huston, Amy S Hewitt, Amy N. Esler, Jennifer A Hall-Lande, Jenny N. Poynter, Libby Hallas-Muchow, John N. Constantino, Robert T. Fitzgerald, Walter M. Zahorodny, Josephine Shenouda, Julie L Daniels, Zachary Warren, Alison C. Vehorn, Angelica Salinas, Maureen S. Durkin and Patricia Dietz. “Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network (2016)	These findings highlight the variability in the evaluation and detection of ASD across communities and between sociodemographic groups. Continued efforts are needed for early and equitable identification of ASD and timely enrollment in services.	The Autism and Developmental Disabilities Monitoring (ADDM) Network is an active surveillance program that provides estimates of the prevalence of ASD among children aged 8 years whose parents or guardians live in 11 ADDM Network sites in the United States Arizona, Arkansas, Colorado, Georgia, Maryland, Minnesota, Missouri, New Jersey, North Carolina, Tennessee, and Wisconsin). The prevalence of ASD varied considerably across sites and was higher than previous estimates since 2014. Although no overall difference in ASD prevalence between black and white children aged 8 years was observed, the disparities for black children persisted in early evaluation and diagnosis of ASD. Hispanic children also continue to be identified as having ASD less frequently

https://pdfs.semanticscholar.org/adab/bd95761cb32fda4d12a53f2c174c4960fcda.pdf?_gl=1*w19yj7*_ga*MTM1NTIxMDkwOC4xNjg1NjE3NTQy*_ga_H7P4ZT52H5*MTY4NzM3NjA0My41LjEuMTY4NzM3NzIyMi41Ni4wLjA.		than white or black children.
Bougeard, Clémence, Françoise Picarel-Blanchot, Ramona Schmid, Rosanne Campbell, and Jan Buitelaar. "Prevalence of autism spectrum disorder and co-morbidities in children and adolescents: a systematic literature review." Frontiers in Psychiatry (2021) https://www.frontiersin.org/articles/10.3389/fpsyt.2021.744709/full	Our research provides a descriptive review of the prevalence of ASD and its co-morbidities which can be valuable for clinicians as well as parents/guardians of children with ASD.	We describe the prevalence of ASD and frequently observed co-morbidities in children and adolescents (<18 years) in the United States and five European countries. Prevalence of ASD has increased over time while co-morbidities bring additional heterogeneity to the clinical presentation, which further advocates for personalized approaches to treatment and support. Furthermore, these findings are supportive of a global increase in ASD prevalence independent from regions and healthcare systems and call for stronger awareness within populations and healthcare policies.
Wang, Xin, Xuchu Weng, Ning Pan, Xiuhong Li, Lizi Lin and Jin Jing. "Prevalence of Autism Spectrum Disorder in the United States is Stable in the COVID-	Although the United States (US) have been monitoring the autism spectrum disorder (ASD) prevalence, whether the prevalence has continued to increase, decrease,	Our findings shed lights on the need for the implementation of validated telehealth (i.e., standardized online diagnostic process), which could reach a

19 Era." Journal of Autism and Developmental Disorders (2023)	fluctuate or reached a stable level remained unclear during the COVID-19 pandemic.	wide range of families to monitor ASD prevalence during the COVID-19 era.
Howard, J., Copeland, J.N., Gifford, E.J. et al. Brief Report: Classifying Rates of Students with Autism and Intellectual Disability in North Carolina: Roles of Race and Economic Disadvantage. J Autism Dev Disorder (2021) https://link.springer.com/article/10.1007/s10803-020-04527-y	ASD and ID special education classifications among students in NC public schools vary county in prevalence and in county-level ratios of ID vs ASD classifications.	Variability was unlikely related to biological incidence, and more likely related to district/school practices, or differences in resources.
MEDICAID EXPANSION		
Tipirneni, Renuka, Minal R. Patel, Susan D Goold, Edith C Kieffer, John Z. Ayanian, Sarah J Clark, Sunghee Lee, Corey Bryant, Matthias Kirch, Erica Solway, Jamie E. Luster, Maryn Lewallen and Kara Zivin. "Association of Expanded Medicaid Coverage With Health and Job-Related Outcomes Among Enrollees With Behavioral Health Disorders." Psychiatric Services (2020) https://ps.psychiatryonline.org/doi/pdf/10.1176/appi.ps.201900179	The study objective was to assess the impact of Medicaid expansion on health and employment outcomes among enrollees with and without a behavioral health disorder (either a mental or substance use disorder).	Enrollees with behavioral health diagnoses were less likely than enrollees without behavioral health diagnoses to be employed but significantly more likely to report improvements in health and ability to do a better job at work. In adjusted analyses, both enrollees with behavioral health diagnoses and those without behavioral health diagnoses who reported improved health were more likely than enrollees without improved health to report that Medicaid expansion coverage helped them do a better job at work and made them better able to look for a job.
Torres, Maria E, Benjamin D Capistrant	Medicaid expansion has been shown to	After adjusting for demographics,

and Hannah E. Karpman. "The Effect of Medicaid Expansion on Caregiver's Quality of Life." Social Work in Public Health (2020)	improve access to care, health, and finances in general populations. Until now no studies have considered how Medicaid expansion may affect informal family caregivers who are the backbone of the long term supports and services infrastructure.	socioeconomic status, and health behaviors, caregivers in Medicaid expansion states had a significantly fewer number of poor mental health days in the previous month than caregivers in non-expansion states (ß = -0.528, CI -1.019, -0.036, p < .01). Study findings indicate that Medicaid expansion state status was protective for caregiver's mental health.
Ammula, Meghana. Guth, Madeline (2021). Building on the Evidence Base: Studies on the Effects of Medicaid Expansion, February 2020 to March 2021 Report https://www.kff.org/medicaid/report/building-on-the-evidence-base-studies-on-the-effects-of-medicaid-expansion-february-2020-to-march-2021/	This literature review builds on a prior report and summarizes new evidence on more specific outcomes for certain populations.	These findings suggest that Medicaid expansion could help mitigate adverse impacts of the coronavirus pandemic at the patient, provider, and state level; although research to date on Medicaid expansion and COVID-19 remains limited, future studies will likely further consider these impacts. Additionally, continued research cited in this report demonstrating positive economic impacts may help inform states still debating whether to adopt the expansion, particularly given the new ARPA financial incentive that would more than offset state expansion costs for two years (after which states would continue to bear 10% of the cost).
McBain RK, Cantor JH, Kofner A, Stein BD,	We found that state Medicaid expansion	Utilizing health workforce data from the

Yu H. Brief Report: Medicaid Expansion and Growth in the Workforce for Autism Spectrum Disorder. J Autism Dev Disorder (2022) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8605030/	was associated with a 9% increase in BCBAs per 100,000 children one year after enactment, a 5% increase in child psychiatrists, and was not associated with growth in pediatricians. Results indicate the importance of new policies that directly address a shortage of providers for children with ASD.	Health Resources and Services Administration, we examined workforce growth (2008–2017) among three types of health providers for children with ASD as a result of Medicaid expansion: child psychiatrists, board-certified behavioral analysts (BCBAs) and pediatricians.
Hutchison, Shari L., Irina O. Karpov, Amy D. Herschell, Deborah S. Wasilchak, Matthew O. Hurford and James Schuster. "Increased likelihood of psychiatric readmission with Medicaid expansion vs legacy coverage." The American Journal of Managed Care (2021) https://www.ajmc.com/view/increased-likelihood-of-psychiatric-readmission-with-medicaid-expansion-vs-legacy-coverage	Individuals with coverage through Medicaid expansion compared with legacy coverage have an increased risk of psychiatric readmission and may warrant targeted interventions that also address service utilization and co-occurring SUD.	To compare patterns of psychiatric hospitalization and readmission within 30 days for Medicaid expansion (expansion) vs previously insured (legacy) samples.
Winkelman, Tyler N. A. and Virginia W. Chang. "Medicaid Expansion, Mental Health, and Access to Care among Childless Adults with and without Chronic Conditions." Journal of General Internal Medicine (2018) https://link.springer.com/content/pdf/10.1007/s11606-017-4217-5.pdf	To examine the association between Medicaid expansion and changes in mental health, physical health, and access to care among low-income childless adults with and without chronic conditions.	Medicaid expansion was associated with substantial improvements in mental health and access to care among low-income adults with chronic conditions. These positive trends are likely to be reversed if Medicaid expansion is repealed.

Ortega, Alberto. "Medicaid Expansion and mental health treatment: Evidence from the Affordable Care Act." Health Economics (2022) https://onlinelibrary.wiley.com/doi/10.1002/hec.4633	This study uses a difference-in-differences design within an event-study framework to examine how state decisions to expand Medicaid following the passage of the Affordable Care Act (ACA) affected mental health treatment.	The findings suggest that expansion states experienced increased admissions to mental health treatment facilities and Medicaid-reimbursed prescriptions for medications used to treat common forms of mental illness. The results also indicate an increase in admissions with trauma, anxiety, conduct, and depression disorders. There is also suggestive evidence of an increase in the number of mental health treatment facilities accepting Medicaid as a form of payment.
Creed, Jamie O, Julianne M. Cyr, Hillary Owino, Shannen E Box, Mia Ives-Rublee, Brian B Sheitman, Beat Steiner, Jefferson G. Williams, Michael W. Bachman, José González Cabañas, J. Brent Myers and Seth W. Glickman. "Acute Crisis Care for Patients with Mental Health Crises: Initial Assessment of an Innovative Prehospital Alternative Destination Program in North Carolina." Prehospital Emergency Care (2018) https://www.cpc.mednet.ucla.edu/uploads/mih/library/6%20Acute%20Crisis%20Care%20for%20Patients%20with%20Mental%20Health.pdf	Emergency Departments (ED) are overburdened with patients experiencing acute mental health crises. Prehospital transport by Emergency Medical Services (EMS) to community mental health and substance abuse treatment facilities could reduce ED utilization and costs. Our objective was to describe characteristics, treatment, and outcomes of acute mental health crises patients who were transported by EMS to an acute crisis unit at Wake Brook, a North Carolina community mental health center.	This pilot intervention, led by specially trained paramedics, allowed a significant volume of patients with acute mental health crises to be treated at a dedicated community mental health center in a more appropriate setting for this patient population rather than an ED.

HARM REDUCTION & INTERVENTIONS		
Booth, Caroline S., Paige N. Dunlap and Yudan Wang. “Aggie Disaster Response Mental Health Recovery Network: Hurricane Disaster Recovery in North Carolina.” International Journal of Social Science Studies (2022)	Given the quick succession of hurricanes in North Carolina in 2018 with Hurricanes Florence (September 2018) and Michael (October, 2018), over half of the state was subsequently declared a Federal Disaster Area by The Federal Emergency Management Agency (FEMA, 2021). ... Many families were impacted by both disasters in a matter of weeks creating acute crisis and trauma, as well as longer term behavioral health implications.	As the number of natural disasters and the population of the world continues to increase, it is extremely important that new models of community response and recovery are developed, particularly related to longer-term mental health recovery. To that end and given the need to address behavioral health concerns within North Carolina (NC) for those impacted by Hurricanes Florence and Michael, the Aggie Disaster Response Mental Health Recovery Network (ADRMHRN) was created to support those in post-disaster mental health distress. ... Preliminary results and implications for future effective disaster response are also shared.
Zibbell, Jon E., Nicholas C. Peiper, Sarah E. Duhart Clarke, Zach R. Salazar, Louise B Vincent, Alex H. Kral and Judith Feinberg. “Consumer discernment of fentanyl in illicit opioids confirmed by fentanyl test strips: Lessons from a syringe services program in North Carolina.” The International Journal on Drug Policy (2021) https://www.sciencedirect.com/science/a	The current study examined the accuracy of sensory discernment strategies by measuring study participants’ descriptions of the last opioid injected and checked with a fentanyl test strip (FTS) by that test's positive/negative result. The primary objective was to determine associations between FTS results and descriptions of the illicit opioid's physical appearance and	Between September-October 2017, a total of 129 PWID were recruited from a syringe services program in Greensboro, North Carolina and completed an online survey about their most recent use of FTS. Participants were instructed to describe the appearance and effects associated with the most recent opioid they injected and tested with FTS.

rticle/abs/pii/S0955395921000268?via%3Dihub	physiological effects.	
Dasgupta, Nabarun. "History and Future of Harm Reduction in North Carolina: Pragmatism and Innovation." North Carolina Medical Journal (2022) https://ncmedicaljournal.com/article/55427	Harm reduction is a practice-oriented approach to reducing harms from drug use, including overdose and injection-related infections. North Carolina has a legacy of harm reduction innovation, yet our history includes sustained racist and harmful drug policies. People with lived experience are central to the creation of next-generation strategies for prevention.	Provides overview of harm reduction history in NC and how to use that history moving forward.
Marley, Grace Trull, Bayla M. M. Ostrach and Delesha M. Carpenter. "North Carolina pharmacists' willingness to sell fentanyl test strips: a survey study." Harm Reduction Journal (2023) https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-023-00739-4	Pharmacist distribution of FTS could increase access to FTS at the community level and has the potential to change drug use behavior and reduce overdose deaths.	Although fentanyl test strips (FTS) can accurately determine the presence of fentanyl in unregulated substances, access to FTS remains limited. This study aimed to examine North Carolina community pharmacists' attitudes and willingness to engage in various behaviors related to FTS sales and distribution.
Hughes, Phillip M., Sheri A. Denslow, Bayla M. M. Ostrach, Carriedelle Wilson Fusco and Casey R Tak. "Exploration of the STOP Act and Opioid Deaths in North Carolina, 2010-2018." American journal of public health (2020) https://pubmed.ncbi.nlm.nih.gov/328165	Future policies designed to reduce the availability of opioids may benefit from encouraging and increasing the availability of evidence-based treatment of opioid use disorder.	North Carolina's STOP Act was associated with a reduction in opioid deaths in the year following enactment. The changes in opioid overdose death trends coinciding with the STOP Act were similar to outcomes seen with previous opioid policies.

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Appendix C: Access Audit Key Findings

Access audits calls are an effective way to evaluate the community's access to healthcare services within the Rockingham County service area – not to profile any site. The goal of conducting access audits is to understand practical access to healthcare and other services and barriers experienced by community members seeking care. Results provide insight into access gaps, improvement strategies, and service variations. The service sites were called on the telephone by Crescendo, seeking to schedule an appointment or to learn about other factors that potentially impact community member's access to services.

Calls were in the morning in August 2023. Approximately 14 calls were attempted across the service area, 8 (57%) of which resulted in the caller being connected to a staff person. The remaining calls went to voicemail boxes.

Ability of the site or facility to accept new patients

Of the 14 sites, two are accepting new patients. Two other sites are taking referrals but are waiting for them or making the caller aware of severe staffing shortages. One facility is not accepting new patients at all because of staffing shortages. Another facility does not serve Rockingham County and transferred the caller elsewhere. One facility does not accept patients but provides information and referrals. One facility with an automated answer provided the caller with options to schedule an appointment or call a crisis phone number. The remaining six facilities went to voicemail, two of which returned calls within 24-48 business hours.

Ability of the facility to answer questions and refer the caller elsewhere when the desired services are unavailable

Several sites offered the names of different facilities along with contact information, and most of the sites had helpful, nice people answering the phone. One facility made the caller aware that they would not qualify for a grant because of their location; a receptionist at a different facility was very kind, extremely informative, and spent 15 minutes with the caller answering questions. One facility that is not accepting new patients did not ask any questions to the caller to identify prospective client needs, though they provided a phone number for a different facility. Two of the facilities directly transferred the caller to the recommended site.

How staff asks questions to define prospective patient's needs

Most of the sites did not ask the caller about insurance. Sites with age limits or requirements asked the caller who they were calling for and how old the prospective client was. One facility told the caller that in order to be admitted to the facility, the client needs to be in the ER or inpatient at another facility that makes the referral. One facility offered the caller a provider

directory and explained to the caller how to use it. One facility that was not accepting patients did not ask the caller any questions.

Ease of speaking with a person

Accessing a person at most of the facilities was easy: five of the 14 sites had a person answer the phone. The remaining sites had an efficient automated answer with a phone tree, though none of the facilities offered other language options. Sites with a phone tree offered the option to speak with a caller or stay on the line, which was very easy in all instances. One site went straight to a voicemail box after the phone tree, and another site provided the caller with options to schedule an appointment or call a crisis center, but there were no options to speak with a live person. There were some instances where the person answering the phone was unable to answer the caller's questions, at which point the receptionist transferred the caller to speak with a helpful person. The caller left a voicemail at six of the 14 facilities, two of which returned a call within 24-28 business hours.

Healthcare Facilities Calls were made to 14 healthcare facilities across Rockingham County service area. Healthcare facilities included in the access audit calls included the following:

Healthcare Facility	
Walter B. Jones ADATC	Wescare Professional Services
Greenville Treatment Center	Daymark Recovery Services Rockingham County Psychosocial Rehabilitation facility
Murdoch Developmental Center	Youth Haven Services
O'Berry Neuro-Medical Treatment Center	Booker T. Washington Learning Center Day Treatment Program partnered with Youth Haven Services
Longleaf Neuro-Medical Center	Vaya Health
Central Regional Hospital	Whitaker Psychiatric Residential Treatment Facility
Sandhills Center / MCO for Vaya as well	Cone Health Outpatient Behavioral Health at Reidsville

Appendix D: Additional Secondary Data

Demographics

Exhibit 97: Population by Gender

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Females	50.5%	51.1%	51.5%	55.6%	53.7%	49.9%	51.7%	53.9%	50.2%
Males	49.5%	48.9%	48.5%	44.4%	46.3%	50.1%	48.3%	46.1%	49.8%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 98: Population by Age Group

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Under 5	5.9%	5.7%	5.0%	5.8%	5.8%	1.2%	3.7%	10.8%	4.9%
5 to 9	6.1%	6.1%	5.6%	5.9%	5.8%	4.8%	4.2%	2.6%	4.4%
10 to 14	6.6%	6.5%	6.0%	4.6%	7.8%	7.1%	3.6%	6.3%	7.3%
15 to 19	6.6%	6.7%	5.9%	6.2%	6.5%	8.7%	4.5%	8.9%	2.1%
20 to 24	6.5%	6.6%	5.2%	5.1%	3.8%	5.0%	6.5%	6.6%	5.1%
25 to 34	13.8%	13.3%	11.1%	12.9%	12.7%	13.9%	12.3%	10.5%	9.3%
35 to 44	12.9%	12.6%	11.3%	9.4%	13.9%	11.6%	7.8%	14.6%	9.3%
45 to 54	12.6%	13.1%	13.7%	14.3%	11.9%	14.5%	14.3%	10.3%	14.3%
55 to 59	6.7%	6.7%	8.1%	6.7%	4.9%	5.8%	12.9%	8.9%	12.0%
60 to 64	6.3%	6.4%	7.8%	6.3%	8.0%	8.4%	7.9%	4.7%	7.2%
65 to 74	9.6%	9.9%	12.1%	11.0%	10.6%	13.0%	10.8%	9.5%	10.5%
75 to 84	4.5%	4.6%	6.1%	9.6%	5.4%	4.7%	7.4%	4.8%	9.9%
Over 85	1.9%	1.7%	2.2%	2.4%	2.8%	1.3%	4.0%	1.6%	3.5%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

People Living With a Disability

Exhibit 99: Population Living with a Disability by Sex & Age Group

	United States	North Carolina	Rockingham County
Females			
Children Age under 18 with a Disability	0.8%	0.7%	1.3%
Adults Aged 18 to 64 with a Disability	6.2%	6.7%	8.8%
Seniors Aged 65 and Over with a Disability	5.8%	5.9%	7.2%
Males			
Children Age under 18 with a Disability	1.3%	1.3%	1.2%
Adults Aged 18 to 64 with a Disability	6.4%	6.8%	8.5%
Seniors Aged 65 and Over with a Disability	4.8%	5.1%	6.5%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Females						
Children Age under 18 with a Disability	1.2%	0.8%	1.0%	0.6%	4.7%	3.2%
Adults Aged 18 to 64 with a Disability	9.6%	11.7%	4.9%	14.8%	6.2%	9.5%
Seniors Aged 65 and Over with a Disability	9.6%	8.9%	4.9%	7.3%	7.1%	10.2%
Males						
Children Age under 18 with a Disability	1.6%	1.3%	3.2%	0.8%	1.1%	4.5%
Adults Aged 18 to 64 with a Disability	12.2%	11.4%	8.3%	7.2%	8.7%	8.7%
Seniors Aged 65 and Over with a Disability	6.1%	6.5%	8.3%	7.7%	9.4%	10.2%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 100: Minority Population[105]

United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
40.6%	37.9%	28.5%	48.0%	38.6%	30.3%	33.4%	25.5%	24.1%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 101: Foreign-Born Population

	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Naturalized U.S. Citizen	3.4%	1.3%	1.3%	0.8%	0.2%	0.1%	1.4%	1.7%
Not U.S. Citizen[106]	4.8%	2.5%	1.9%	2.7%	1.5%	5.3%	2.0%	2.5%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 102: Language Spoken at Home per Capita Over Age Five

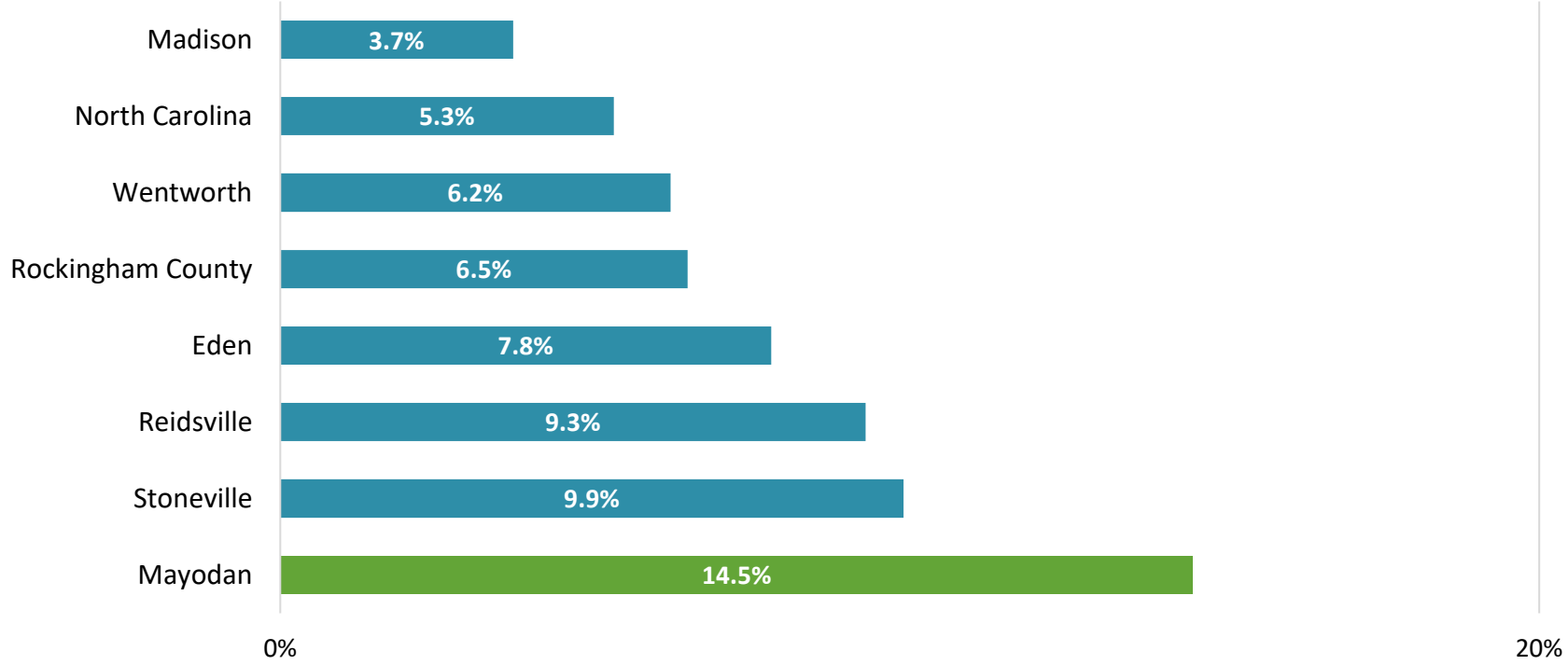
	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Speak English Less Than Very Well	4.5%	2.3%	1.9%	1.7%	0.9%	4.7%	2.5%	5.0%
Language Spoken at Home								
English Only	87.9%	93.7%	95.1%	94.1%	94.6%	90.8%	91.7%	91.4%
Spanish	7.7%	5.5%	4.3%	4.9%	5.4%	8.3%	7.4%	3.5%
Asian-Pacific Islander	1.8%	0.5%	0.1%	0.7%	0.0%	0.0%	0.9%	5.0%
Other Indo-European	1.9%	0.2%	0.3%	0.2%	0.0%	0.3%	0.0%	0.1%
Other	0.7%	0.1%	0.2%	0.1%	0.0%	0.5%	0.0%	0.0%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

[105] Minority Population: The data values were calculated by taking the total population minus the white (not Latino, not Hispanic) population.
[106] The U.S. Census Bureau uses the term foreign born to refer to anyone who is not a U.S. citizen at birth. This includes naturalized U.S. citizens, lawful permanent residents (immigrants), temporary migrants (such as foreign students), humanitarian migrants (such as refugees and asylees), and unauthorized migrants.

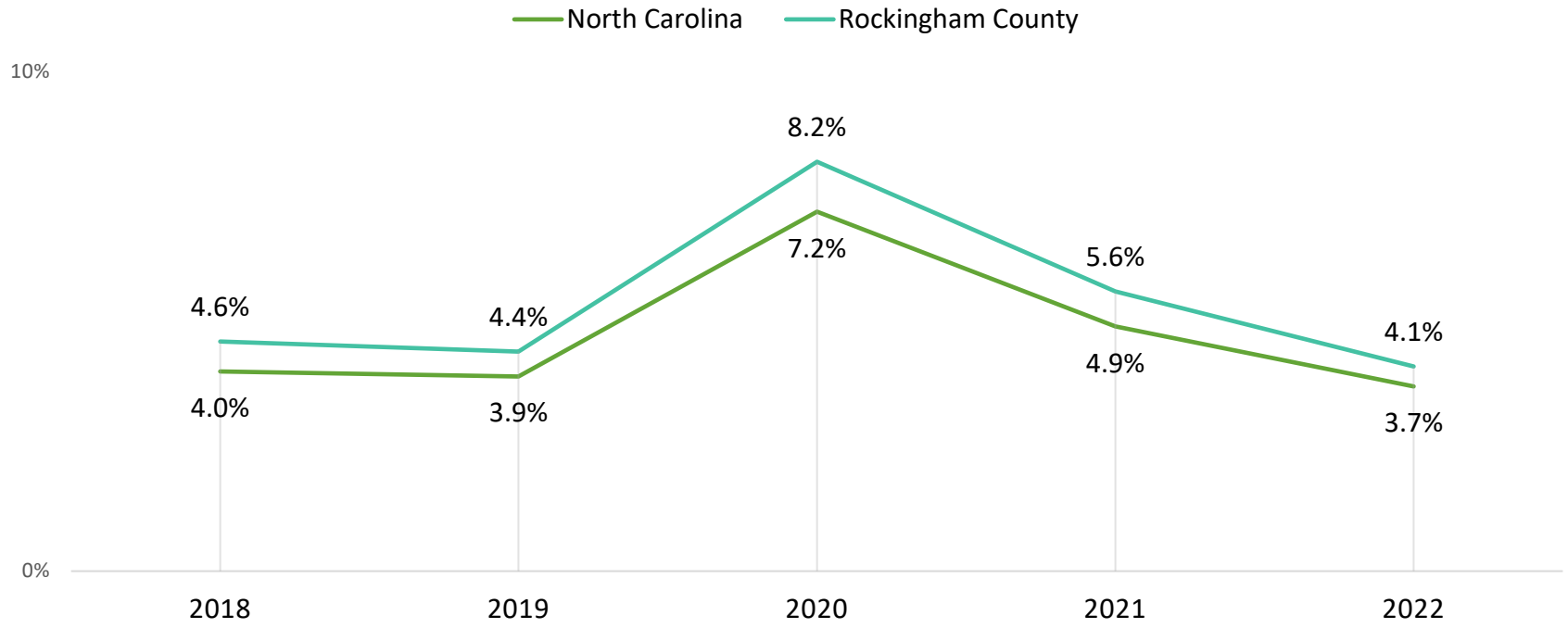
Economic Wellbeing

Exhibit 103: Unemployment Rate



Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 104: Unemployment Rate Trend (Not Seasonally Adjusted)



Source: U.S. Bureau of Labor Statistics 2021 Annual Averages

Exhibit 105: Employment by Occupation

	United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Office and Administrative Support	11.1%	10.3%	11.7%	12.6%	9.5%	11.3%	12.7%	9.1%	18.9%
Management	10.8%	10.9%	8.1%	5.8%	7.7%	11.8%	7.0%	9.5%	9.1%
Construction and Extraction	5.0%	5.1%	6.4%	6.0%	6.1%	9.8%	1.3%	4.8%	8.2%
Installation, Maintenance, and Repair	3.1%	3.4%	5.5%	3.9%	6.8%	7.5%	1.1%	5.1%	5.6%
Food Preparation and Serving	5.4%	5.5%	5.0%	9.6%	3.4%	4.9%	6.1%	8.4%	4.2%
Education, Training and Library	6.2%	6.3%	4.8%	5.1%	4.8%	8.1%	5.4%	2.7%	3.2%
Material Moving	3.8%	3.9%	4.8%	5.3%	5.5%	4.3%	8.5%	5.1%	3.2%
Building, Grounds Cleaning, and Maintenance	3.6%	3.6%	4.7%	4.3%	6.3%	1.6%	4.1%	2.0%	0.9%
Health Diagnosis and Treating Practitioners	4.2%	4.2%	3.4%	5.8%	2.6%	2.8%	1.3%	3.7%	1.5%
Healthcare Support	3.3%	2.9%	3.3%	5.9%	5.6%	2.7%	4.1%	0.4%	5.1%
Business and Finance	5.7%	5.6%	3.0%	1.5%	2.7%	4.4%	2.6%	2.4%	2.4%
Health Technologist and Technicians	2.0%	2.2%	2.7%	0.8%	4.3%	1.9%	4.4%	0.4%	0.5%
Personal Care and Service	2.6%	2.4%	2.5%	2.8%	3.5%	1.4%	0.9%	11.0%	3.7%
Computer and Mathematical	3.4%	3.4%	1.5%	0.5%	0.9%	0.5%	1.6%	0.0%	3.5%
Law Enforcement	1.0%	0.9%	1.2%	1.3%	1.3%	0.0%	0.7%	0.0%	0.0%
Architecture and Engineering	2.1%	1.8%	1.1%	3.6%	0.6%	0.4%	1.6%	1.6%	0.8%
Community and Social Service	1.8%	1.9%	1.1%	1.6%	0.4%	2.8%	1.4%	2.7%	3.5%
Arts, Design,	2.0%	1.7%	1.0%	1.2%	1.6%	0.9%	1.3%	0.0%	0.9%

Entertainment, Sports, and Media									
Fire Fighting and Prevention	1.2%	1.0%	1.0%	0.2%	2.3%	0.0%	1.8%	2.9%	0.5%
Farming, Fishing and Forestry	0.6%	0.5%	0.9%	0.5%	0.2%	0.0%	2.9%	3.3%	0.8%
Life, Physical, and Social Science	1.0%	1.0%	0.5%	1.2%	0.1%	0.0%	0.6%	0.0%	0.0%
Legal	1.2%	0.9%	0.2%	0.0%	0.5%	0.8%	0.6%	0.0%	0.0%
Production	5.5%	6.8%	10.7%	6.9%	9.6%	13.4%	14.4%	13.0%	10.8%
Sales	9.8%	10.3%	9.7%	5.7%	11.3%	5.5%	8.7%	8.6%	7.0%
Transportation	3.8%	3.5%	4.9%	7.9%	2.4%	3.1%	5.1%	3.3%	5.6%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 106: Poverty Rate

	United States	North Carolina	Rockingham County
Poverty Rate	12.6%	13.7%	18.2%
By Age Group			
Under 18 years	17.0%	19.3%	29.0%
Under 5 years	18.5%	21.3%	36.3%
5 to 17 years	16.5%	18.6%	26.8%
18 to 64 years	11.8%	12.8%	17.2%
18 to 34 years	14.9%	16.3%	21.3%
35 to 64 years	10.0%	10.8%	15.3%
60 years and over	9.9%	10.0%	12.2%
65 years and over	9.6%	9.4%	10.7%
Race & Ethnicity			
White alone			
Black or African American alone	10.3%	10.4%	14.3%
American Indian and Alaska Native alone	21.7%	21.1%	25.1%
Asian alone	23.4%	24.0%	3.9%
Native Hawaiian and Other Pacific Islander alone	10.3%	9.6%	18.9%
Some other race alone	16.7%	24.1%	45.2%
Two or more races	19.1%	24.2%	57.6%
Hispanic or Latino origin (of any race)	14.9%	18.6%	32.4%
White alone, not Hispanic or Latino	17.7%	23.4%	40.5%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 107: Poverty Rate Continued

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Poverty Rate	28.5%	19.8%	15.6%	11.8%	20.6%	21.2%
By Age Group						
Under 18 years	39.7%	33.1%	36.1%	16.1%	37.1%	12.7%
Under 5 years	41.2%	64.9%	33.3%	4.8%	48.0%	4.8%
5 to 17 years	39.2%	23.7%	36.3%	20.2%	28.3%	15.4%
18 to 64 years	29.7%	17.2%	13.3%	13.7%	16.2%	22.7%
18 to 34 years	35.0%	25.3%	24.7%	11.8%	26.8%	41.8%
35 to 64 years	26.8%	13.2%	7.8%	14.6%	10.2%	15.9%
60 years and over	15.8%	14.5%	4.0%	7.0%	15.4%	27.1%
65 years and over	15.3%	12.5%	3.4%	3.6%	12.9%	23.8%
Race & Ethnicity						
White alone						
Black or African American alone	20.5%	15.6%	7.2%	7.1%	23.8%	17.3%
American Indian and Alaska Native alone	38.5%	20.3%	9.9%	7.6%	13.7%	20.8%
Asian alone	0.0%	0.0%	0.0%	0.0%	-	-
Native Hawaiian and Other Pacific Islander alone	0.0%	0.0%	-	-	0.0%	91.3%
Some other race alone	100.0%	0.0%	0.0%	100.0%	-	-
Two or more races	35.2%	90.7%	92.4%	77. 2%	0.0%	0.0%
Hispanic or Latino origin (of any race)	23.9%	62.8%	56.7%	5.2%	0.0%	1.5%
White alone, not Hispanic or Latino	37.0%	38.7%	95.0%	51.3%	61.3%	0.0%

Education

Exhibit 108: Dalton McMichael High, Graduation Rate[107]

2021-2022 School Year	Denominator	Percent
All Students	189	82.0%
Male	101	83.2%
Female	88	80.7%
Black	13	69.2%
Hispanic	33	78.8%
White	134	84.3%
Economically Disadvantaged	64	65.6%
English Learner	10	80%
Students With Disabilities	29	75.9%
Academically Gifted	51	94.1%

Source: North Carolina Department of Public Instruction 4-Year Cohort Graduation Rate Report: 2018-19 Entering 9th Graders Graduating in 2021-22 or Earlier

Exhibit 109: Dalton McMichael High, Graduation Rate

2021-2022 School Year	Denominator	Percent
All Students	190	86.3%
Male	108	82.4%
Female	82	91.5%
Black	39	87.2%
Hispanic	37	86.5%
White	105	86.7%
Economically Disadvantaged	80	83.8%
English Learner	15	80.0%
Students With Disabilities	29	86.2%
Academically Gifted	35	>95.0%

Source: North Carolina Department of Public Instruction 4-Year Cohort Graduation Rate Report: 2018-19 Entering 9th Graders Graduating in 2021-22 or Earlier

[107] Subgroup information is based on data collected when a student is last seen in the cohort. ND Indicates that the student population in the subgroup is too small to report the value. Subgroups with no data are not shown in the table above.

Exhibit 110: Reidsville High, Graduation Rate

2021-2022 School Year	Denominator	Percent
All Students	179	81.6%
Male	98	78.6%
Female	81	85.2%
Black	80	86.3%
Hispanic	27	74.1%
Two or More Races	14	78.6%
White	58	79.3%
Economically Disadvantaged	69	79.7%
Students With Disabilities	32	68.8%
Academically Gifted	25	92.0%

Source: North Carolina Department of Public Instruction 4-Year Cohort Graduation Rate Report: 2018-19 Entering 9th Graders Graduating in 2021-22 or Earlier

Exhibit 111: Rockingham County High School, Graduation Rate

2021-2022 School Year	Denominator	Percent
All Students	218	87.2%
Male	113	82.3%
Female	105	92.4%
Black	16	93.8%
Hispanic	17	88.2%
White	175	88.6%
Economically Disadvantaged	37	81.1%
Students With Disabilities	44	68.2%
Academically Gifted	60	>95.0%

Source: North Carolina Department of Public Instruction 4-Year Cohort Graduation Rate Report: 2018-19 Entering 9th Graders Graduating in 2021-22 or Earlier

Exhibit 112: North Carolina State Testing Results[108,109]

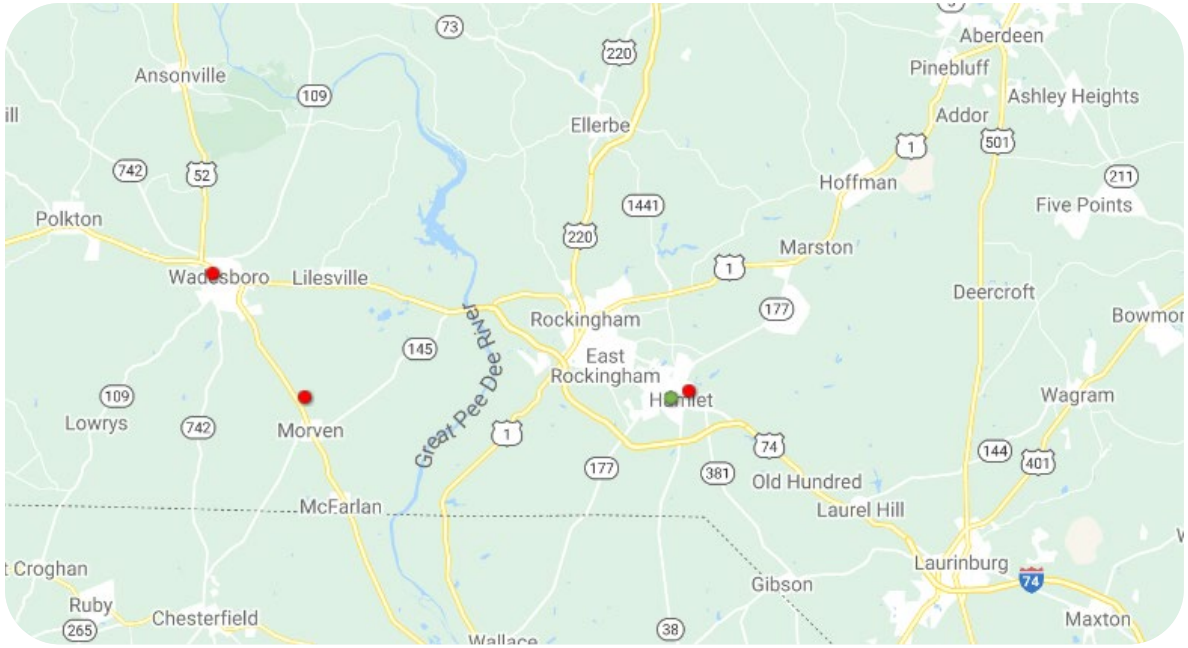
	General Test
Students in Grades 3-8 at or Above Level 3 in Both Reading and Mathematics	
North Carolina	36.5%
American Indian	21.6%
Asian	69.1%
Black	19.1%
Hispanic	25.2%
Two or More Races	35.5%
Native Hawaiian / Pacific Islander	33.1%
White	50.0%
Students in Grades 3-8 at or Above Level 4 in Both Reading and Mathematics	
North Carolina	19.9%
American Indian	9.0%
Asian	50.1%
Black	<=5%
Hispanic	11.0%
Two or More Races	14.9%
Native Hawaiian / Pacific Islander	17.1%
White	29.4%

Source: North Carolina Department of Public Instruction - Office of Accountability and Testing, The North Carolina State Testing Results 2021-22

[108] The North Carolina State Testing Results, 2021-22 Report NC State Testing Results.pdf

[109] The "Percent At or Above Level 3 in Both Reading and Mathematics" is calculated by dividing the number of students passing both reading and mathematics tests at or above Achievement Level 3 by the number of students with valid scores in both reading and mathematics; therefore, the data do not include students tested only in reading or mathematics. *Performance data are not reported when membership is fewer than ten. Performance data that are less than or equal to 5.0 percent, or greater than or equal to 95.0 percent, are not displayed. Prepared by the North Carolina Department of Public Instruction-Office of Accountability and Testing Figure 1. 2021–22 End-of-Grade General Test and Alternate Assessment Results Statewide Percent of Students At or Above Level 3 in Both Reading and Mathematics Grades 3–8 by Test Type and Ethnicity Notes: Data received from Public School Units after October 6, 2022 are not included in this table., The North Carolina State Testing Results, 2021-22 Report NC State Testing Results.pdf

Exhibit 113: Head Start Locations in Rockingham County[110]



Source: U.Sthe . Department of Health & Human Services, Early Childhood Learning & Knowledge Center Head Start Center Locator

Exhibit 114: Child Care Cost Burden

United States	North Carolina	Rockingham County
27.0%	32.0%	32.0%

Source: County Health Rankings & Roadmaps, 2023

[110] The average household in Rockingham County with two children spends 32% of its income on child care.

Health Care

Exhibit 115: County & National Health Status Among Adults

2020	United States	Rockingham County
All teeth lost among adults aged 65+ years	13.9%	15.2%
Arthritis among adults aged 18+ years	21.3%	25.5%
Binge drinking among adults aged 18+ years	16.7%	16.3%
Cancer (excluding skin cancer) among adults aged 18+ years	5.5%	5.9%
Cervical cancer screening among adult women aged 21-65 years	83.7%	83.0%
Cholesterol screening among adults aged 18+ years	86.0%	84.8%
Chronic kidney disease among adults aged 18+ years	2.7%	3.1%
Chronic obstructive pulmonary disease among adults aged 18+ years	5.6%	7.4%
Coronary heart disease among adults aged 18+ years	5.5%	6.5%
Current asthma among adults aged 18+ years	9.2%	9.9%
Current lack of health insurance among adults aged 18–64 years	13.5%	20.9%
Current smoking among adults aged 18+ years	14.6%	22.0%
Depression among adults aged 18+ years	18.5%	23.8%
Diagnosed diabetes among adults aged 18+ years	9.7%	11.0%
Fair or poor self-rated health status among adults aged 18+ years	13.7%	15.8%

Source: BRFSS Places County Data, 2020

Exhibit 116: County & National Health Status Among Adults Continued

2020	United States	Rockingham County
Fecal occult blood test, sigmoidoscopy, or colonoscopy among adults aged 50–75 years	70.6%	71.2%
High blood pressure among adults aged 18+ years	29.6%	34.3%
High cholesterol among adults aged 18+ years who have been screened in the past 5 years	28.7%	30.6%
Mammography use among women aged 50–74 years	77.8%	72.6%
Mental health not good for 14+ days among adults aged 18+ years	13.9%	15.9%
No leisure-time physical activity among adults aged 18+ years	22.9%	25.1%
Obesity among adults aged 18+ years	32.0%	35.9%
Older adult men aged 65+ years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening	44.0%	45.6%
Older adult women aged 65+ years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening, and Mammogram past 2 years	37.4%	40.1%
Physical health not good for 14+ days among adults aged 18+ years	9.4%	11.6%
Sleeping less than 7 hours among adults aged 18+ years	33.3%	34.7%
Stroke among adults aged 18+ years	2.8%	3.5%
Taking medicine for high blood pressure control among adults aged 18+ years with high blood pressure	56.3%	58.4%
Visits to dentist or dental clinic among adults aged 18+ years	64.5%	59.0%
Visits to doctor for routine checkup within the past year among adults aged 18+ years	73.0%	77.5%

Source: BRFSS Places County Data, 2020

Exhibit 117: North Carolina Medicare Enrollment

	Total
State Population	10,551,162
Total Medicare Enrollment	2,077,983
Total Medicare Enrollment Percent of Resident Population	0
Original Medicare Enrollment	1,148,967
Original Medicare Enrollment Percent of Total Enrollment	1
Medicare Advantage and Other Health Plan Enrollment	929,015
Medicare Advantage and Other Health Plan Enrollment Percent of Total Enrollment	0
Total Enrollment Metropolitan Residence	1,584,183
Total Enrollment Micropolitan Residence	337,512
Total Enrollment Non-Core-Based Statistical Area	156,287

Source: Centers for Medicare & Medicaid Services, CMS Program Statistics – Medicare Total Enrollment | Data.CMS.go

Maternal Health

Exhibit 118: North Carolina Birth Rate & Infant Mortality

	Total		White Non-Hispanic		African American Non-Hispanic		Hispanic	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Live Births	116,755	11.0	61,815	9.2	28,545	12.2	19,449	18.5
Infant Mortality	803	6.9	297	4.8	366	12.8	112	5.8

Source: North Carolina Department of Health & Human Services, Division of Public Health | Selected Vital Statistics for 2020 and 2016-2020

Exhibit 119: Trend of Pregnancy Rates by Race & Ethnicity

	White Non-Hispanic	African American Non-Hispanic	American Indian Non-Hispanic	Other Non-Hispanic	Hispanic
2020	57.0	80.7	68.1	68.3	96.6
2019	58.9	78.9	70.2	71.4	96.7
2018	60.3	78.4	71.5	74.3	95.0
2017	61.2	79.1	72.1	78.6	98.2
2016	62.8	79.1	70.3	79.8	100

Source: Centers for Disease Control and Prevention | Places: Local Data for Better Health, 2020; (Birth rate)

Exhibit 120: Trend of Fertility Rates by Race & Ethnicity

	White Non-Hispanic	African American Non-Hispanic	American Indian Non-Hispanic	Other Non-Hispanic	Hispanic
2020	51.0	55.9	57.4	59.1	82.2
2019	52.7	57.1	60.3	61.8	83
2018	53.8	57.0	61.3	65	82
2017	54.6	57.9	60.8	68.7	85.2
2016	56	57.2	60.2	69.5	87.4

Source: Centers for Disease Control and Prevention | Places: Local Data for Better Health, 2020; (Birth rate)

Exhibit 121: Teen Births[111]

	Rockingham County
Number of births per 1,000 female population ages 15 to 19	25
By Race	
Black or African-American	27
Hispanic or Latino	26
White	25

Source: County Health Rankings & Roadmaps, 2022

Exhibit 122: AIDS Prevelance & Mortality in North Carolina[112]

	2018		2019		2021	
	Cases	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**
AIDS classifications	509	5.8	514	5.8	514	5.7
AIDS deaths	363	4.0	355	4.0	5.0	
AIDS prevalence	14,150	161.7	14,571	164.4	14,903	166.7

Source: Centers for Disease Control and Prevention | National Center for HIV, Viral Hepatitis, STD, and TB Prevention Atlas Plus

[111] Years of data used: 2014-2020
[112] Rates per 100,000

Neighborhood & Built Environment

Exhibit 123: Housing, & Transportation

	United States	North Carolina	Rockingham County
Multi-unit housing structures	26.4%	18.3%	10.2%
Mobile homes	5.9%	11.9%	17.9%
No vehicle	8.3%	5.5%	6.7%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Multi-unit housing structures	26.0%	21.5%	10.3%	23.9%	9.9%	19.9%
Mobile homes	3.6%	3.8%	18.7%	5.1%	20.8%	3.0%
No vehicle	10.7%	8.3%	3.2%	6.8%	9.5%	12.1%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 124: Housing Occupancy

United States	North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
139,647,020	4,673,933	43,464	7,409	7,508	1,108	1,108	591	1,249

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 125: Summary of HUD Programs in North Carolina

Subsidized Units Available	Percent Occupied	Percent Reported	Percent Moved in Past Year	Number of People Total	Household Income per Year	Percent with Disability among all Persons in Household	Percent Minority
128,701	84%	100%	11%	231,964	$13,833	21%	70%

Source: Assisted Housing: National and Local | HUD USER (2023)

Exhibit 126: Summary of HUD Programs In Rockingham County

Subsidized Units Available	Percent Occupied	Percent Reported	Percent Moved in Past Year	Number of People Total	Household Income per Year	Percent with Disability among all Persons in Household	Percent Minority
868	89%	98%	13%	1,549	$11,791	18%	61%

Source: Assisted Housing: National and Local | HUD USER (2023)

Exhibit 127: Cost-burdened Households

	United States	North Carolina	Rockingham County
Owners			
Cost-Burdened (30% or more of income)	6.7%	5.9%	4.2%
Severely Cost-Burdened (35% or more of income)	20.5%	18.0%	18.9%
Renters			
Cost-Burdened (30% or more of income)	9.1%	9.1%	13.4%
Severely Cost-Burdened (35% or more of income)	40.3%	38.1%	34.9%

	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Owners						
Cost-burdened (30% or more of income)	1.7%	2.5%	7.1%	11.9%	0.0%	4.5%
Severely Cost-Burdened (35% or more of income)	33.4%	16.1%	10.3%	16.7%	23.7%	24.6%
Renters						
Cost-burdened (30% or more of income)	19.0%	12.1%	5.1%	4.9%	7.8%	15.6%
Severely Cost-Burdened (35% or more of income)	37.8%	39.5%	40.5%	27.4%	6.3%	28.6%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Exhibit 128: Number of North Carolina Public School Students Experiencing Homelessness[113]

	SY 2018-2019	SY 2019-2020	SY 2020-2021
Subgroups of Homeless Children/Youth	34,721	27,037	22,644
Children with disabilities (IDEA)	5,682	4,742	4,015
Limited English Proficient (LEP) students	2,076	2,008	2,036
Migratory children/youth	169	175	184
Unaccompanied homeless youth	3,321	2,757	2,319
Percentage of homeless children/youth enrolled in public schools by type of primary nighttime residence			
Shelters, transitional housing	9.6%	8.3%	6.6%
Doubled-up (e.g., living with another family)	72.6%	72.4%	70.7%
Unsheltered (e.g., cars, parks, campgrounds, temporary trailer, or abandoned building)	3.5%	3.3%	4.1%
Hotels/Motels	14.3%	16.0%	18.6%

Source: National Center for Homeless Education, North Carolina State Summary Page

[113] Note: Data includes all enrolled homeless children and youth in grades PK through 12. COVID-19 operations impacted the identification of eligible students. Please use the data with caution. The subgroups are not mutually exclusive. It is possible for homeless students to be counted in more than one subgroup.

Exhibit 129: Computers & Internet Use

	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
Total households	37,926	6,582	6,316	915	1,005	486	1,137
With a computer	83.1%	77.2%	82.7%	87.7%	90.7%	80.7%	78.5%
With a broadband Internet subscription	74.9%	65.9%	77.2%	82.8%	83.3%	77.6%	66.5%

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

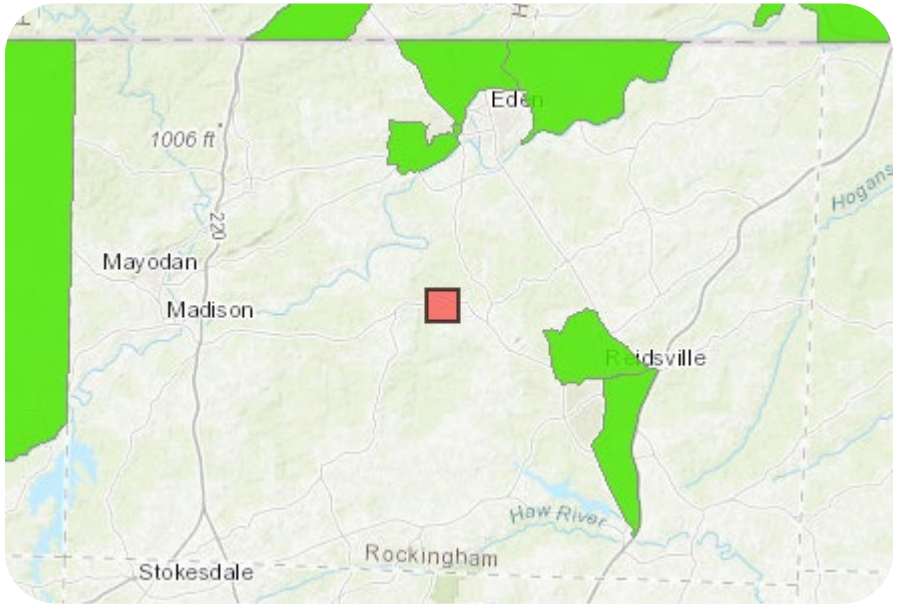
Exhibit 130: Commute Mean Travel Time (Minutes)

North Carolina	Rockingham County	Reidsville	Eden	Wentworth	Madison	Stoneville	Mayodan
25.0	25.9	22.1	23.3	26.1	22.7	24.5	31.1

Source: U.S. Census Bureau. American Community Survey Five-Year Estimates, 2017-2021

Food Insecure Communities

Exhibit 131: Food Access Research Atlas[114]



Source: U.S. Department of Agriculture Food Access Research Atlas

Exhibit 132: Food Insecurity Rates

	2019		2020		2021	
	North Carolina	Rockingham County	North Carolina	Rockingham County	North Carolina	Rockingham County
Overall (all ages)	13.5%	15.3%	12.0%	15.5%	11.8%	14.0%
Children (less than age 18)	18.2%	21.3%	17.1%	22.6%	15.4%	19.3%

Source: Feeding America, Map the Meal Gap

[114] The Food Access Research Atlas indicates low-income census tracts where a significant number or share of residents is more than one mile (urban) or 10 miles (rural) from the nearest supermarket. The green shaded areas within the map indicate areas of potential food deserts within Rockingham County.

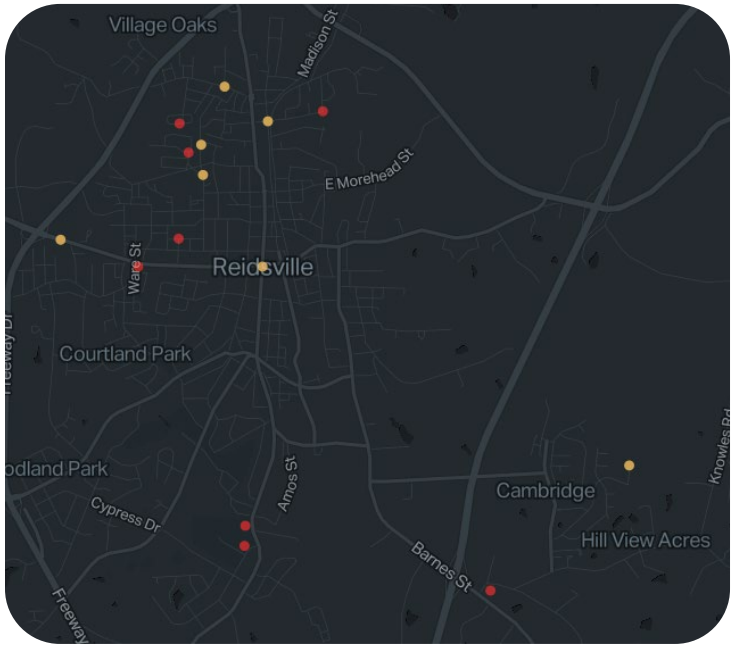
Social & Community Context

Exhibit 133: North Carolina Mass Shootings in 2023

City or County	Number of Victims Injured	Number of Victims Killed	Number of Subjects-Suspects Injured	Number of Subjects-Suspects Killed	Number of Subjects-Suspects Arrested
Winston Salem (Winston-Salem)	4	1	0	0	0
Fayetteville	3	1	0	0	2
Goldsboro	5	1	0	0	0
Fayetteville	4	1	0	0	0
Williamston	5	0	0	0	0
Laurinburg	4	0	0	0	0
Elizabeth City	4	0	0	0	0
Durham	2	2	0	0	0
Greensboro	6	1	0	0	1
Red Springs	1	3	0	0	1
High Point	0	4	0	1	0
Durham	5	0	0	0	0

Source: Gun Violence Archive

Exhibit 134: Gun Violence in Rockingham County, 2019-2022



Source: Gun Violence Archive , Atlas of American Gun Violence Map (9/22/2023)

Exhibit 135: Most Frequent Crimes of North Carolina Offenders Entering Prison

Crime	Total	Percentage
Non-trafficking Drug Offenses	3,159	18%
Larceny	1,770	10%
Breaking and Entering	1,687	10%
Assault	1,428	8%
Weapons Offense	1,136	6%
Robbery	967	5%
Habitual Felon	907	5%
Drug Trafficking	894	5%
Fraud	889	5%
Driving While Impaired	664	4%

Source: North Carolina Department of Public Safety Bureau 2021 Research Bulletin

Exhibit 136: Counts and Rates of Reported Acts of Crime & Violence 2021-2022[115]

	2017-18	2018-19	2019-20	2020-21	2021-22
Total					
Total Acts	9,747	9,554	7,158	1,535	11,170
Rate (per 1,000)	6.41	6.29	4.69	1.04	7.51
High School					
Total Acts	5,466	4,850	3,665	650	5,991
Rate (per 1,000)	11.88	10.73	8.08	1.46	13.16

Source: North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22

[115] In response to the COVID-19 pandemic, starting in March of the 2019-2020 school year and continuing through the 2020-2021 school year, public school units across the state employed unprecedented methods to ensure continued student learning by utilizing various modes of instruction and student outreach. As such, caution should be taken when comparing data reported for the 2019-2020 and 2020-2021 school years to data reported for prior and subsequent years, North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22.

Exhibit 137: Complaints Against Juveniles Trend[116]

	2017	2018	2019	2020	2021
Total Complaints	28,165	23,580	24,294	30,185	29,001
Delinquent Complaints	25,737	21,279	22,113	28,643	27,100
Status Complaints	2,428	2,301	2,181	1,542	1,901
Delinquency Rate	19.58	16.18	16.82	18.08	17.53

Source: North Carolina Department of Public Safety, Juvenile Justice and Delinquency Prevention 2021 Annual Report

Exhibit 138: North Carolina Counts and Rates of Reported Acts of Crime Grade Level, 2021-2022

	Number of Crimes	Rate per 1,000 Students
All Offenders	11,170	7.51
Elementary Grades	1,427	2.12
Middle Grades	3,747	10.44
High School Grades	5,991	13.16

Source: North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22

Exhibit 139: Most Prevalent Diagnostic Categories by Percentage of 2021 YDC Population, North Carolina

	Males	Females
Disruptive, Impulse-Control, and Conduct Disorder	88%	100%
Substance-Related and Addictive Disorders	49%	75%
Neurodevelopmental Disorders	45%	25%
Trauma and Stress-Related Disorders	48%	100%
Depressive Disorders	18%	0%
Anxiety Disorders	17%	25%

Source: North Carolina Department of Public Safety, Juvenile Justice and Delinquency Prevention 2021 Annual Report

[116] A complaint is a written allegation that a juvenile is delinquent or undisciplined, which is submitted to a juvenile court counselor for evaluation. Most complaints are for minor offenses. Status offenses are offenses that are based on the youth's age (e.g., runaway, truancy, etc.). The statewide delinquency rate for the juvenile justice system in 2021 was 17.53, down from 18.08 in 2000, the baseline year for a delinquency rate that included the population of juveniles aged 6 to 17 following implementation of "Raise the Age" at the end of 2019. When comparing the pre-Raise the age group of 6 to 15-year-olds, the juvenile delinquency rate decreased from 12.05 in 2020 to 11.16 in 2021, the lowest juvenile delinquency rate on record by far. North Carolina Department of Public Safety Juvenile Justice and Delinquency Prevention 2021 Annual Report: open (ncdps.gov)

Exhibit 140: North Carolina Complaints against Juveniles by Demographics

	Total	Percentage
Total Complaints	29,001	100%
Male	22,724	78%
Female	6,269	22%
Unknown	8	0.03%
By Age Group		
Less than 10	576	1.9%
11	587	2.0%
12	1,581	5.4%
13	2,880	9.9%
14	4,291	14.7%
15	5,902	20.3%
16	6,426	22.1%
17	6,758	23.3%
Race & Ethnicity		
Black or African-American		
White	15,839	54.6%
Hispanic / Latino	8,962	30.9%
Two or More Races	2,782	9.5%
Unknown	732	2.5%
American Indian or Alaska Native	300	1.0%
Asian	252	0.8%
Native Hawaiian or Other Pacific Islander	120	0.4%

Source: North Carolina Department of Public Safety, Juvenile Justice and Delinquency Prevention 2021 Annual Report

Exhibit 141: Rate of Suspensions

	Number of Short-Term Suspensions	Rate per 1,000 Students
Short-Term Suspensions		
All Students	217,928	146.57
Female	66,612	90.69
Male	151,316	196.66
American Indian	3,874	242.84
Asian	1,139	19.81
Black	113,621	303.78
Hispanic	29,291	98.42
Two or More Races	14,107	178.96
Native Hawaiian / Pacific Islander	259	119.46
White	55,637	82.08
Students with Disabilities	52,601	249.79
Long-Term Suspensions		
All Students	693	46.61
Female	196	26.69
Male	4997	64.60
American Indian	2	12.54
Asian	4	6.96
Black	385	102.93
Hispanic	87	29.23
Two or More Races	36	45.67
Native Hawaiian / Pacific Islander[117]	3	138.38
White	176	25.96
Students with Disabilities	86	40.84

Source: North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22

[117] Note: The long-term suspension rate per 100,000 students enrolled will be alarming for Pacific Islander students considering there were approximately 2,200 Pacific Islander students enrolled in North Carolina public schools in 2021-2022 school year, North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22.

Exhibit 142: Number of Expulsions in North Carolina[118]

2017-18	2018-19	2019-20	2020-21	2021-22
24	23	21	6	48

Source: North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22

Exhibit 143: North Carolina Domestic Violence Overview January-June 2020

Total Contacts (via Phone or Chat)	**2,542**
Contact Type	
Victim / Survivor IPV	69.0%
Helper	14.0%
Other	9.0%
Victim / Survivor Non-IPV	6.0%
Healthy Relationships	2.0%
Abusive Partner	1.0%
Contact Age	
Under 18	3.0%
19-24	13.0%
25-33	30.0%
34-45	25.0%
46-51	8.0%
52-63	9.0%
64 and Over	4.0%
Contact Race or Ethnicity	
White	50.0%
Black or African-American	30.0%
Other Race	11.0%
Latino or Hispanic	9.0%

[118] In response to the COVID-19 pandemic, starting in March of the 2019-2020 school year and continuing through the 2020-2021 school year, public school units across the state employed unprecedented methods to ensure continued student learning by utilizing various modes of instruction and student outreach. As such, caution should be taken when comparing data reported for the 2019-2020 and 2020-2021 school years to data reported for prior and subsequent years, North Carolina Department of Public Instruction Discipline, ALP and Dropout Annual Consolidated Data Report, 2021-22.

Source: National Domestic Violence Hotline North Carolina State Report 2020

Exhibit 144: North Carolina Domestic Violence Overview January-June 2020 Continued

Top 10 Cities by Contact Volume	
Charlotte	18.0%
Raleigh	9.0%
Greensboro	6.0%
Fayetteville	5.0%
Durham	4.0%
Winston Salem	3.0%
Wilmington	3.0%
Asheville	2.0%
Jacksonville	2.0%
Cary	1.0%
What Victims are Experiencing[119]	
Total Disclosed Experiences	2,209
Emotional / Verbal Abuse	98.0%
Physical Abuse	71.0%
Economic / Financial Abuse	29.0%
Digital Abuse	20.0%
Sexual Abuse	12.0%
Most Commonly Disclosed Factors by Victims / Survivors	
Children	38.0%
Strangulation	22.0%
Firearms	17.0%
Custody	11.0%
Stalking	7.0%
Divorce	6.0%
Pregnant	3.0%
Immigrant	3.0%
Rural	2.0%

Source: National Domestic Violence Hotline North Carolina State Report 2020

[119] Note: Contacts may report one or more types of abuse.

Exhibit 145: North Carolina Domestic Violence Overview January-June 2020 Continued

Victim / Survivor Needs and Commonly Requested Services	
Legal Advocacy	28.0%
DV Shelter	26.0%
Individual Professional Counseling	20.0%
Protective Restraining Order	12.0%
Support Groups	8.0%
Legal Representation	7.0%

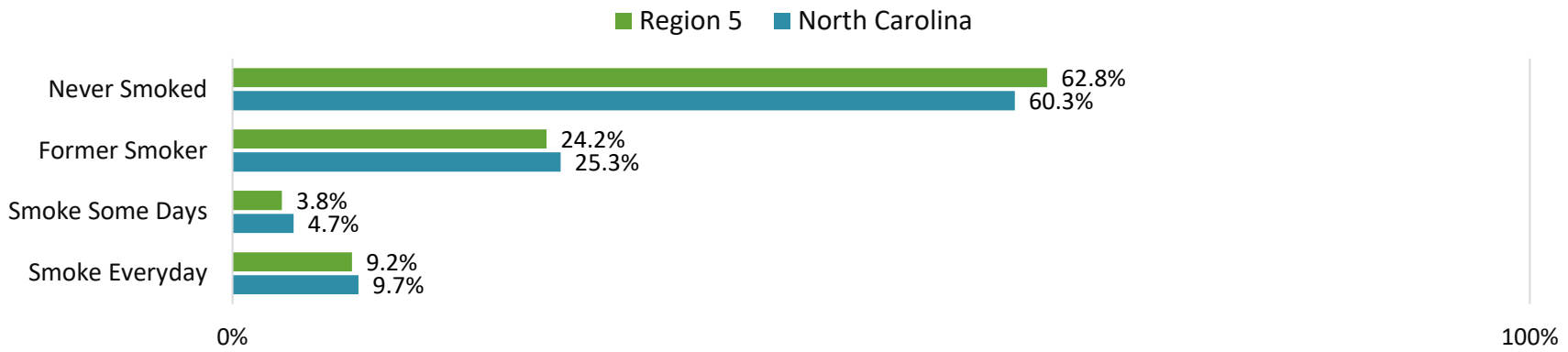
Source: National Domestic Violence Hotline North Carolina State Report 2020

Exhibit 146: Rockingham County Domestic Violence Overview

County Agency: Help, Incorporated: Center Against Violence	
County Population	91,077
Hotline Calls	1,364
Crisis or Support Chats	14
Number of Clients Served	1,392
Client Race	
White	859
Black / African American	264
Indian / Alaska Native	0
Asian	0
Native Hawaiian/Other Pacific Islander	0
Two or More Races	17
Some Other Races	57
Unknown	195
Client Ethnicity	
Hispanic/Latino	57
Not Hispanic/Latino	1,140
Unknown	195
Client Gender	
Female	1,103
Male	265
Other	0
Unknown	24
Clients by Other Demographics	
LGBTQ+ individuals	11
Homeless or Housing Insecure Clients Served	36
Military Service Members and/or Veterans Served	0

Source: North Carolina Department of Administration Statewide Statistics 2020-2021

Exhibit 147: Adult Self-reported Tobacco Use



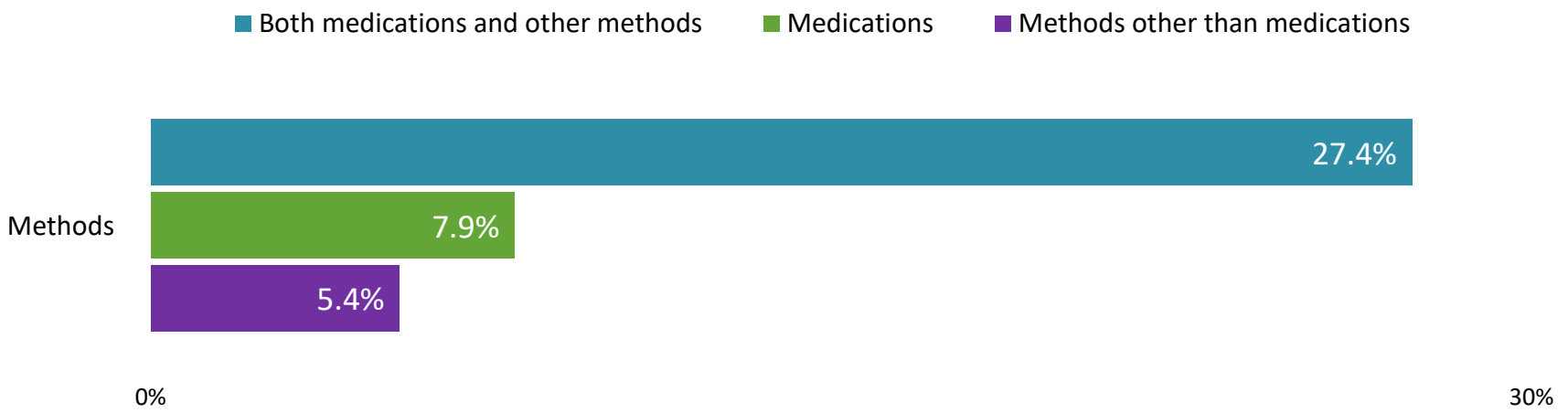
Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Regions

Exhibit 148: Adult Self-reported Tobacco Use, Region 5

	Percent "Yes"
E-Cigarette / Vaping Status	
Never Used	79.0%
No Longer Used	17.6%
Use Some Days / Use Everyday	3.4%
Smoking Status	
Smoke Everyday	9.2%
Smoke Some Days	3.8%
Former Smoker	24.2%
Never Smoked	62.8%
Use of Any Tobacco Product	
No Use	82.9%
Use at Least One Product	17.1%
Use of Multiple Tobacco Products	
No Use	82.9%
Use Single Product	14.3%
Use Multiple Products	2.8%

Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Regions

Exhibit 149: Methods Discussed or Recommended by Health Provider in North Carolina



	Percent
In the past 12 months, did any doctor, dentist, nurse, or other health professional advise you to quit smoking cigarettes or using any other tobacco products?	56.6%
Did your doctor or health provider recommend medications and/or discuss methods and strategies other than medication (such as referrals to Quitline, counseling opportunities, or educational materials such as booklets or pamphlets) to assist you to quit smoking?	
Yes, medications	7.9%
Yes, methods other than medications	5.4%
Yes, both medications and other methods	27.4%
During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?	48.8%

Source: NCDHHS, NC State Center for Health Statistics, 2021 BRFSS Survey Results: North Carolina Regions

Exhibit 150: Trend of Substance Affected Infant, June 2018 through April 2023 by Month, Rockingham County

Month	Number of Substance Affected Infants
2018	
June	2
July	3
August	4
September	1
October	5
November	3
December	1
2018 Partial Total	**19**
2019	
January	ND
February	2
March	4
April	4
May	7
June	5
July	4
August	8
September	8
October	3
November	3
December	2
2019 Total	**50**

Exhibit 151: Trend of Substance Affected Infant, June 2018 through April 2023 by Month, Rockingham County Continued

2020	
January	6
February	3
March	8
April	10
May	9
June	4
July	3
August	2
September	2
October	2
November	6
December	3
2020 Total	**58**
2021	
January	8
February	5
March	9
April	4
May	2
June	3
July	5
August	3
September	7
October	3
November	6
December	8
2021 Total	**63**

Exhibit 152: Trend of Substance Affected Infant, June 2018 through April 2023 by Month, Rockingham County Continued

2022	
January	7
February	1
March	1
April	4
May	5
June	3
July	9
August	4
September	5
October	7
November	8
December	11
2022 Total	**65**
2023	
January	8
February	5
March	3
April	2
Preliminary 2023 Total	**18**

Source: Substance Affected Infant Data, Rockingham County Department of Health and Human Services

Exhibit 153: LGBTQ+ Community Resources

Organization	Location	About
Equality North Carolina	Statewide	Oldest statewide organization in the country dedicated to securing rights and protections for the LGBTQ community.
NC is Ready	Statewide	NC is Ready™ is a project of Equality North Carolina and the Campaign for Southern Equality, which work toward LGBTQ dignity and equality in North Carolina and beyond.
Youth OUTright	Asheville – Youth oriented	Youth OUTright engages in intersectional and intergenerational dialogue with a focus on gender and racial justice. Our work includes programming for youth ages 11-24, training for youth-serving organizations, and advocacy for policies that protect Queer and Trans youth.
Carolinas LGBT+ Chamber of Commerce	Charlotte	"Our mission is to foster equity, inclusion and economic prosperity for the LGBTQ community through strategic policy, professional enrichment, ally partnerships and economic development."
The Plus Collective	Charlotte-Mecklenburg's LGBTQ+ Community Fund	The Plus Collective is a giving program and foundation that awards grants to organizations that support the lesbian, gay, bisexual, transgender and queer community in the Charlotte, North Carolina region while also cultivating partnerships with community allies.
Time Out Youth	Charlotte	Time Out Youth Center is a place where you can experience a sense of belonging and community. Whether you are lesbian, gay, bisexual, transgender, queer, questioning, a straight ally – or just don't want to be labeled, you will be welcomed here.
Transcend Charlotte	Charlotte - Mecklenburg	Pursuing Social Justice & Equity for Trans & Gender Expansive Communities Supporting folks (ages 18±) in Charlotte Mecklenburg and the adjoining counties in North & South Carolina At Transcend, we believe that everyone has the right to live their authentic truth and a fulfilled life free from oppression. To reach this mission, we provide free and/or low-cost mental health, social support and education services to trans and gender-expansive folks (ages 18±) in Mecklenburg, and the adjoining counties in North and South

		Carolina.
Inside OUT	Statewide	We build safer spaces for queer youth in the Triangle of North Carolina. We believe all youth deserve a place where they can be themselves. We hold regular events and programs with youth ages 13 and up (InsideOUT) as well as youth 12 and younger (UpsideDown).
LGBTQ+ Youth Center of Durham	Durham	The LGBTQ Center of Durham commits to centering the experiences of those who are the most marginalized among us. With the Host Home Program, LGBTQ+ Youth Center, a re-centered Pride, and other gender inclusive support programs, we are aligned with the promise of serving QTPOC. Our services are open to the entire community and seek to make room for all people.
Guilford Green Foundation	Greensboro	Guilford Green Foundation & LGBTQ Center seeks to courageously unite our community through meaningful participation and by fostering organizations that advance LGBTQ persons and issues.
Crape Myrtle Festival	Triangle Area	A nonprofit that raises funds for HIV / AIDS & LGBTQ support organizations.
LGBT Center of Raleigh	Triangle & Beyond	Program Initiatives, Community Events, Community Resources, LGBT Library, HIV / STI Testing
The LGBTQ Center of the Cape Fear Coast	International	The LGBTQ center of the Cape Fear Coast is a Centerlink Member! Centerlink is an international nonprofit organization and member-based association of LGBTQ centers and other LGBTQ organizations serving their local and regional communities. Our mission is to strengthen, support, and connect LGBTQ community centers.

Source: Equality NC, NC is Ready, Youth OUTright, Carolinas LGBT+ Chamber of Commerce, The Plus Collective, Time Out Youth, Transcend Charlotte, Inside OUT, LGBTQ+ Youth Center of Durham, Guilford Green Foundation, Crape Myrtle Festival, LGBT Center of Raleigh, The LGBTQ Center of the Cape Fear Coast

Appendix E: Stakeholder Interview & Focus Group

Moderators Guide

Community Behavioral Health Needs Assessment & Gap Analysis

Directions for Moderator / Interviewer

Identify what target sector the individual is part of before the interview. If you don't know, use the first question to identify what types of questions should be asked. For the target sectors, ask the questions under the appropriate target section first and then move on to asking select questions from the general interview guide that are relevant to the conversation and the person's expertise.

The discussion will include questions from a few broad categories and will take less than 30 minutes.

Community Group Category:

- ☐ Hospital ED and Frontline Staff, including social workers
- ☐ Behavioral Health Providers (MH + SUD) - Outpatient
- ☐ First Responders
- ☐ Criminal Justice System, including Law Enforcement
- ☐ Education
- ☐ General - Social Service, Faith Community, Elected Officials, Business, etc
    - (please specify) _____

Discussion or Interview Type:

- ☐ Focus Group
- ☐ Telephone
- ☐ In person

Introduction and Objective

Good morning [or afternoon]. My name is [consultant name] from Crescendo Consulting Group. We are working with the Rockingham County Department of Health and Human Services to evaluate behavioral health (including substance use disorder) needs, gaps, and barriers to care for youth and adults in the community. The purpose of this call is to learn more about your insights regarding currently available resources, services that are working well, service gaps, and ways to better meet community needs.

Do you have any questions for me before we start?

Hospital ED and Frontline Staff, including social workers

1. To start with, please tell me a little about ways that you interact with people in Rockingham County that may be experiencing behavioral health challenges, such as mental health conditions, substance use disorders, or an intellectual or developmental disability.

2. What types of behavioral health services does your organization provide? What types of facilities do you have where these services are provided (i.e., # of beds, # of providers, type of provider licenses, etc.)

3. How many patients with behavioral health conditions do you see annually?
    a. In the ED
    b. Admitted to for medical issue
    c. Referred to Psych units
    d. Most common DX?

4. When a patient with behavioral health conditions come through your emergency department, how do they typically arrive (i.e., ambulance, law enforcement, family, self-admin, etc.)?

5. What typically happens next in the process after you treat a patient in the emergency department with behavioral health conditions?
    a. What types of services are offered? What types of providers will the patient see in the ED?

    b. How many patients are typically stabilized and discharged? Are they provided with a referral for outpatient services? If so, where?

6. Do you have many providers in Rockingham County that you refer patients to? If so, who are they? If not, where are the closest providers? If the patient needs specialized inpatient behavioral health services, what options do you have in Rockingham County? If there are no options in Rockingham County, where are the closest options? Do you provide transport there?

7. Are there crisis care services available within the county? If so, what do they look like?

8. What are some of the common barriers to treatment for patients with behavioral health conditions have (i.e., insurance/payor, lack of transportation, socioeconomic status, lack of support, lack of stable housing, etc.?

9. As part of this gap analysis project, we are trying to create “journey maps” or stories of typical patients you might see in the “system.” For example, a young adult with suicide ideation. What are some common scenarios that you see in the ED?

10. What recovery supports are available for people in Rockingham County?

11. If there was one thing that you could personally change regarding behavioral health services in the county, what would it be?

Behavioral Health Providers (MH + SUD) - Outpatient

1. To start with, please tell me a little about ways that you interact with people in Rockingham County who may be experiencing behavioral health challenges, such as mental health conditions, substance use disorders, or an intellectual or developmental disability.

2. What types of behavioral health services does your organization provide? What types of facilities do you have where these services are provided (i.e., # of beds, # of providers, type of provider licenses, etc.)

3. How many patients with behavioral health conditions do you see annually?

4. How does a patient enter your facility or your services (i.e., referral from another provider)?

5. What typically happens next in the process after initial treatment? Do you have many providers in Rockingham County that you refer patients to? If so, who are they? If not, where are the closest providers?

6. If the patient needs specialized inpatient behavioral health services, what options do you have in Rockingham County? If there are no options in Rockingham County, where are the closest options? Do you provide transport there?

7. Are there crisis care services available within the county? If so, what do they look like?

8. What are some of the common barriers to treatment for patients with behavioral health conditions have (i.e., insurance/payor, lack of transportation, socioeconomic status, lack of support, lack of stable housing, etc.?

9. As part of this gap analysis project, we are trying to create “journey maps” or stories of typical patients you might see in the “system.” For example, a young adult with suicide ideation. What are some common scenarios that you see in your facility?

10. What recovery supports are available for people in Rockingham County?

11. If there was one thing that you could personally change regarding behavioral health services in the county, what would it be?

First Responders

1. To start with, please tell me a little about ways that you interact with people in Rockingham County who may be experiencing behavioral health challenges, such as mental health conditions, substance use disorders, or an intellectual or developmental disability.

2. What types services does your organization provide? What types of facilities do you have where these services are provided (i.e., # of integrated medicine; MAT; type of provider licenses, etc.)

3. How many patients with behavioral health conditions do you see annually?
    a. Do you see more substance use related conditions or mental health?

4. How are BH patients identified, or dispatched to your service?
    a. How are you able to "treat" patients displaying behavioral health conditions in the field?

5. What typically happens next in the process after you transport patients? What are some of the challenges to transporting patients?

6. Approximately How many individuals do your see on a recurring basis for a BH related problem?

7. Are there crisis care services available within the county? If so, what do they look like?

8. What are some of the common barriers to treatment for patients with behavioral health conditions have (i.e., insurance/payor, lack of transportation, socioeconomic status, lack of support, lack of stable housing, etc.?

9. As part of this gap analysis project, we are trying to create "journey maps" or stories of typical patients you might see in the "system." For example, a young adult with suicide ideation. What are some common scenarios that you see in the field?

10. ***Are there certain areas of the county that tend to have more calls than others?***

11. If there was one thing that you could personally change regarding Behavioral Health services in the county, what would it be?

Criminal Justice System, including Law Enforcement

1. To start with, please tell me a little about ways that you interact with people in Rockingham County that may be experiencing behavioral health challenges, such as mental health conditions, substance use disorders, or an intellectual or developmental disability.

2. What types of behavioral health services does your organization provide, e.g. counselling for incarcerated individuals.

3. How many people with behavioral health conditions do you see annually? (SUD & MH)

4. Are there BH diversion programs that you are able to access, e.g. drug court, veterans court?

5. What typically happens next in the process after you able to manage or "treat" patients displaying behavioral health conditions?

6. How often do you see the same individuals for similar offenses with a related BH condition?

7. Are there crisis care services available within the county? If so, what do they look like?

8. What are some of the common barriers to treatment for patients with behavioral health conditions have (i.e., insurance/payor, lack of transportation, socioeconomic status, lack of support, lack of stable housing, etc.?

9. As part of this gap analysis project, we are trying to create "journey maps" or stories of typical patients you might see in the "system." For example, a young adult with suicide ideation. What are some common scenarios that you see in the field?

10. Are there certain areas of the county that tend to have more BH related calls than others?

For Jails

    a. How many people do you see annually in the jails with behavioral health conditions?

    b. Are there any behavior health services in the jail? What options do people have?

11. If there was one thing that you could personally change regarding Behavioral Health services in the county, what would it be?

Education

1. To start with, please tell me a little about ways that you interact with people in Rockingham County that may be experiencing behavioral health challenges, such as mental health conditions, substance use disorders, or an intellectual or developmental disability.

2. What types of behavioral health services does your organization provide? What types of facilities do you have where these services are provided (i.e., school clinics, # of providers, type of provider licenses, etc.)

3. How many children with behavioral health conditions do you see annually?
    a. How has the acuity of behavioral health conditions changed in the past five years?

4. How are they typically identified or referred?
    a. How do you provide services for children at the various schools in the county?

5. What typically happens next in the process after you see a child in the school?
    a. Do you have many providers in Rockingham County that you refer patients to? If so, who are they? If not, where are the closest providers?

6. If the child needs specialized behavioral health services, what options do you have in Rockingham County? If there are no options in Rockingham County, where are the closest options? Do you provide transport there?

7. Has the number of cases been increasing?

    a. What are some of the underlying factors or root causes of behavioral health conditions in the county?

8. What are some of the common barriers to treatment for patients with behavioral health conditions have (i.e., insurance/payor, lack of transportation, socioeconomic status, lack of support, lack of stable

9. As part of this gap analysis project, we are trying to create “journey maps” or stories of typical patients you might see in the “system.” For example, a young adult with suicide ideation. What are some common scenarios that you see?

10. Are teachers provided any training on working with children with behavioral health conditions?

11. If there was one thing that you could personally change regarding BH services in the county, what would it be?

General - Social Service, Faith Community, Elected Officials, Business, etc.

Do you have any questions for me before we start?

1. To start, please tell me a little bit about yourself.
   PROBE: How long have you worked for your organization? How long have you been in Rockingham County?
2. How do you and your organization interact with the community and the populations your organization serves?
3. Thinking broadly about health, please tell me what first comes to mind when I say "behavioral health"?

Access, Availability, and Delivery of Services

This series of questions involve needs, the current availability and adequacy of supports, services, and facilities to meet the need for behavioral health services, based on your experiences.

4. In general, how often do you come across someone who requires, or seems to require, services to address behavioral health or substance use concerns?
   - To what degree do you think that people who have had personal experience in the behavioral health and/or substance use disorder treatment system will discuss related issues differently?
   - (For consumers, if needed): Knowing who to call when someone needs mental health and/or substance use help or services; finding a provider or agency with an available appointment; financial aspects and insurance coverage; other access to care issues; integrated addiction services for mental health and physical / medical care.
5. What's your overall perception of Behavioral Health and Substance Use Disorder treatment and referral services in Rockingham County?
   PROBE:
6. At a high level, how would you describe the current ability to refer people for behavioral health and substance use prevention and treatment services in the County?
   PROBE:
   - Prevention and education services
   - Aftercare services and care coordination post discharge
   - Outpatient services for general psychiatric and substance use disorder treatment
   - Recovery programs and supports
   - Social and related community support or guidance
   - Transitional services for adolescents such as intensive outpatient and transitional housing

- Integrated care for co-occurring disorders

7. When you think of "crisis care services" what comes to mind?

8. What are the three biggest behavioral health or substance use disorder barriers facing your community, your friends, or your family?

   PROBE: Transportation, insurance / financial, language or cultural, wait times to see a provider

9. As part of this gap analysis project, we are trying to create "journey maps" or stories of typical people with mental health challenges.

10. What are some common challenges that you've seen? (see Prompts below as needed)

Challenge Areas (possible answers; not inclusive)

Behavioral Health

- Depression treatment services
- Anxiety disorders service
- Schizophrenia
- Bipolar disorder
- Other mood disorders
- Trauma related conditions
- ADHD

Note / query differences between services for children / adolescents / adults; also, note issues of prevention / education, treatment, and post-treatment services.

(Within Behavioral Health) Substance Use Disorders

- Education and prevention
- Early intervention
- Treatment / Access / Stigma
- Post-treatment support / care
- MAT for Opioid Addiction

(Within Behavioral Health) Alcohol Use Disorders

- Education and prevention
- Early intervention
- Treatment / Access / Stigma
- Post-treatment support / care

Autism Spectrum Services

Eating Disorders

- Education, Early intervention, Treatment, Access, Stigma
- Post-treatment support / care

Intellectual or Developmental Disability

Challenge Areas (possible answers; not inclusive)
Integrated Care – addiction services, mental health, and physical / medical care

Senior Care, including Alzheimer's Disease and Dementia

Magic Wand Question

11. If there was one thing that you could personally change regarding Behavioral Health services in the county, what would it be?

Thank you very much again for your time and thoughtful responses to our questions. If you think of any other information that you'd like to share, please don't hesitate to contact me.

Appendix F: Community Survey

Rockingham County

Behavioral Health Needs Assessment & Gap Analysis Community Survey

Hello! Thank you for your interest in our survey. This survey is being conducted on behalf of the Rockingham County Department of Health and Human Services and community partners to learn more about behavioral health (mental health and substance use) challenges within the county, available resources, gaps in resources, and ways to meet community needs better.

All survey responses will be kept confidential.

This survey will close on Friday, August 25, 2023, at 5:00 PM.

By completing this survey, you may be entered for a chance to win one or two $100 Visa gift cards.

If you have any questions about the survey or community assessment, please contact our research partner, Crescendo Consulting Group, at Katelynm@Crescendocg.com

What zip code do you live in? _____

What is your role in the community? (Check all that apply)

- ☐ County Resident
- ☐ Case Manager
- ☐ Clinical Social Worker / Therapist / Counselor
- ☐ Psychologist or Psychiatrist
- ☐ School-based Behavioral Health Provider
- ☐ Educator
- ☐ Community Health Worker
- ☐ Law Enforcement
- ☐ Non-profit Organization
- ☐ Youth Services
- ☐ Local / County Government
- ☐ Health Care Provider
- ☐ Parent / Family Member of Person(s) in treatment

Other (please specify): _____

In the past year, have there been one or more occasions when you or family member needed mental health care or substance use disorder treatment but chose NOT to get it? (Skip to next page if NO)

- ☐ Yes
- ☐ No

If yes, what prevented you from accessing care when you needed it? (Check all that apply)

- ☐ Did not have insurance
- ☐ Could not afford it even with insurance
- ☐ Providers did not take my insurance
- ☐ No childcare
- ☐ Not sure where to go for help
- ☐ Hard to get time off from work
- ☐ Did not feel comfortable with available providers
- ☐ Providers did not speak my language
- ☐ Concern about my immigration status
- ☐ Lack of transportation
- ☐ Did not feel comfortable seeking help or worried that others will find out about it
- ☐ Long wait times to see a provider

Other (please specify):

Thinking about your community, how easy is it to access the following BEHAVIORAL HEALTH services in your community?

BEHAVIORAL HEALTH	1 Very Difficult	2 Difficult	3 Neutral	4 Easy	5 Very Easy	I Do Not Know
Individual counseling / therapy services for adults						
Individual counseling / therapy services for adolescents and / or children						
Individual counseling / therapy services for older adults (65+)						
County-wide mental health crisis care services						
Support services for families of people struggling with mental health disorders such as support groups						
School-based mental health services for adolescents and / or children						
Substance use prevention education for adolescents and / or children						
Suicide / self-harm prevention education for adolescents and / or children						
Substance Use Disorder treatment for adults						
Substance Use Disorder treatment for adolescents and / or children						
Medication-assisted treatment services (Suboxone, Subutex, Buprenorphine, Methadone, etc.)						
Substance use detox centers						
Local programs to help support those in recovery (AA, NA meetings, faith-based programs, etc.)						
Transitional care services for people moving from one level of care to another						
Long-term residential housing for men in recovery						
Long-term residential housing for women in recovery						

Thinking about your community, to what degree do you AGREE OR DISAGREE with the statements below?

IN ROCKINGHAM COUNTY,	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
There are accessible outpatient behavioral health services (individual, group therapy, Intensive Outpatient, Partial Hospitalization)					
There are accessible inpatient behavioral health services					
There are resources to help navigate the behavioral health system (resource guide, website, community health worker)					
Behavioral health care providers treat both mental health and substance use disorder treatment (integrated care)					
There are accessible and reliable transportation services to behavioral health appointments					
There are providers to treat people living with disabilities and mental health and / or substance use disorder					
People know where to call / go when they need behavioral health services					
Telehealth is equally available for behavioral health appointments					
Translation services are available for people who prefer or speak a language other than English					
Sufficient mental health crisis care is accessible					
There is clear communication between behaviors for individuals with more than one provider					
There is stigma against seeking behavioral health services					

Thinking about VULNERABLE POPULATIONS in your community, rate the statements below.

IN ROCKINGHAM COUNTY,	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
There are behavioral health services for veterans					
There are behavioral health services for members of the LGBTQIA+ community					
There are behavioral health services for people with physical, intellectual, or developmental disabilities					
There are culturally competent behavioral health services for Hispanic / Latino / Spanish-speaking people					
Health care providers treat me equally with respect regardless of my race or ethnicity.					
There are programs that provide financial support for low-income or uninsured people seeking behavioral health services					

Thinking about your community, what SERVICES OR RESOURCES would you like to see more of?

IN ROCKINGHAM COUNTY,	1 Don't Need	2 Could Use a Little More	3 Need More	4 Really Need More	5 I Don't Know
Behavioral health services located with primary care services					
Low-cost of free mental health or substance use treatment services for people who no health insurance					
Expanded county-wide mobile crisis unit					
Harm reduction programs (syringe access services, medication take-back days and drop-off boxes)					
Emergency room peer support specialists					
A resource guide for behavioral health services in Rockingham County					
A behavioral health navigator to help connect community residents to services and resources					
A detox facility					
Inpatient behavioral health beds in Rockingham County					
A mental health awareness campaign to break the stigma					
A drug court to help people with substance use issues in jail receive treatment for long-term recovery					
More recovery and/or peer support programs for people with substance use disorders					

Where do you get information about resources, services, and providers in Rockingham County?

- ☐ The internet
- ☐ Word of mouth from friends and family
- ☐ Referral from another provider or organization
- ☐ From my employer
- ☐ From the schools
- ☐ Newspaper
- ☐ From my church
- ☐ Other (please specify)

Are there any additional Behavioral Health needs in Rockingham County that you think are important for us to know?

About You

The following questions are used to sort and compare groups of responses. All responses are confidential.

1. **How old are you?**
   - ☐ Under 18
   - ☐ 18 to 24
   - ☐ 25 to 34
   - ☐ 35 to 44
   - ☐ 45 to 54
   - ☐ 55 to 64
   - ☐ 65 and over

2. **What is your highest level of education?**
   - ☐ Less than high school or GED
   - ☐ High school diploma or equivalent
   - ☐ Some college
   - ☐ Technical or trades school
   - ☐ Associate degree
   - ☐ Bachelor's degree
   - ☐ Graduate or professional degree
   - ☐ I prefer not to share

3. **What is your race?** (check all that apply)
   - ☐ White or Caucasian
   - ☐ Black or African American
   - ☐ Asian
   - ☐ Native American or Alaska Native
   - ☐ Native Hawaiian or other Pacific Islander
   - ☐ Another race
   - ☐ I prefer not to answer

4. **Are you of Hispanic, Latino, or another Spanish origin?**
   - ☐ Yes
   - ☐ No
   - ☐ I prefer not to answer

5. **Are you a member of the LGBTQIA+ community?**
   - ☐ Yes
   - ☐ No
   - ☐ I prefer not to answer

6. **Which of the following best describes your total annual household income in the past year?**
   - ☐ Under $15,000
   - ☐ Between $15,000 and $29,999
   - ☐ Between $30,000 and $49,999
   - ☐ Between $50,000 and $74,999
   - ☐ Between $75,000 and $99,999
   - ☐ Between $100,000 and $150,000
   - ☐ Over $150,000
   - ☐ I prefer not to share

If you have any questions about the survey or community assessment,

please contact our research partner, Crescendo Consulting Group at Katelynm@Crescendocg.com

Appendix G: Community Survey, Voices from the Community

Respondents offered a variety of comments regarding additional behavioral health needs in Rockingham County. The following are direct responses from community members.

- *"We need a one-stop shop to provide the community with connections to resources and services within Rockingham County."*
- *"Abused children and adults are bullied, which causes behavioral problems. Behavioral problems can be caused by a multitude of things by not having essential resources in the home thus causing youth especially to have complexes and emotional problems when dealing with others."*
- *"Access to mental health services, including counseling, therapy, and psychiatric care, is crucial for individuals facing mental health challenges in the community."*
- *"All the behavioral health needs are needed in Rockingham County. It is entirely under-served. There are very few resources available for all age ranges. People sit in our ED for months waiting for services and for transfers to appropriate facilities."*
- *"An advocate or navigator to help people connect with whatever services are available and help find services in the area when none are present in the surrounding communities."*
- *"As a school mental health provider, it is extremely difficult to connect families with mental health services, even if they are willing to use them (though they often aren't, due to stigma)."*
- *"As a teacher I have so many students battling mental health issues and they can't get in to a see therapist."*
- *"Behavioral health services located within primary care services are desperately needed. This model allows people to seek help with privacy, with very little or no external stigma attached. Also, people in need of mental health services are far more likely to seek it from their primary care provider than anywhere else, yet primary care providers are not equipped to provide these types of services."*
- *"Rockingham County is desperately in need of behavioral health services and providers. Stephanie Ellis did an amazing job of obtaining access to services for our schools - it's the best thing this county has going for it in the behavioral health realm and far exceeds what most other counties our size have available for its students. But for adult residents,*

there is next to nothing - although it is far easier to access substance abuse-related services here than services that are strictly behavioral health-related."

- *"County residents lack timely access to behavioral health providers as well as primary care providers due to severe shortages of qualified providers."*
- *"Crisis situations cause difficulties in tying up beds in emergency rooms for days and weeks at a time."*
- *"There is no individual therapy offered. Some group therapy that I participated in was very uncomfortable. Mostly addicts are forced by the court to attend. Doctors are condescending and judgmental."*
- *"We desperately need local resources for women who are pregnant or are still in the post-partum period, up to one year after delivery of their child. Rockingham County has very little to offer in terms of counseling for these moms that are easily accessible for them to utilize."*
- *"Emergency and Involuntary Commitment patients take up a lot of space in our emergency rooms. Most of them wait long periods for placement in a long-term facility because we don't have a facility for them in this County. Also, the patients who actually need the help are the ones who are delusional or violent, but long-term facilities are reluctant to take these patients because of their behavior and potential for outbursts. This seems counterproductive because they need Behavioral Health treatment but can't get seen because of their 'behavior'. We need a long-term facility in this county, that will actually help the patients that need it, to take the strain off of the hospital emergency departments and local law enforcement."*
- *"Methadone clinics and easy access to Narcan are enabling the community and drug users!"*
- *"Faith-based mental health coaching that can bridge the gap between professional and patient."*
- *"I feel it is vital that programs and services can be put in place to deal with suicide prevention and provide support for those at risk of suicide. This includes training for mental health professionals, community members, and educators."*
- *"Ensuring that individuals have access to affordable and geographically accessible mental health services is critical. This includes the availability of psychotherapists, psychiatrists, and other mental health professionals."*
- *"I believe most county residents are unaware of available mental health services offered locally."*

- *"It's not that we don't have a need for inpatient beds, it's the inability to appropriately staff them with the multi-disciplinary care team. Early outpatient intervention and substantial resources directed toward that is more realistic."*
- *"I feel like giving away Narcan to drug addicts is just saying it's okay when it's not. Our society as a whole has gone way over the line."*
- *"I feel the citizens of Rockingham County would utilize services needed to help with behavioral and mental health if they knew who to reach out to. Services are not accessible unless you are in a crisis. Then, you go to Annie Penn and they send you to get treatment. Now for anxiety or minor dilemmas, I was told you can contact your family doctor. I have not had to tap into mental health services as of today. I would like to know who to contact if need be."*
- *"I have tried multiple times to find resources for my children who were adopted from foster care. Either I am told they are too busy and aren't taking new patients or I'm referred to Greensboro where the wait is 3-6 months. I've had to use the emergency department at Moses Cone in Greensboro due to one of my children threatening to commit suicide. A teleconference was held where she was deemed not a threat and she was sent home with no follow-up. During this time, I tried to find follow-up care and was unsuccessful unless I could afford to pay out of pocket, which I could not afford. I have also tried several times to use the Youth Services program and have been unsuccessful every single time. I am told they are short-staffed and cannot accept any more patients. Finding resources in Rockingham County is nonexistent. I have asked for help from social workers, school counselors, teachers, clergy, and law enforcement with no help due to no or limited resources."*
- *"I really worry about the mental health of this county. For some people, the stress, embarrassment (from providers, the community, and others), and the complication of getting any kind of care often stops people from seeking help."*
- *"I think it is very important that all mental health providers in this county be made aware or contacted when making these decisions for the county. When it was decided for Rockingham County to go under Sandhills LME, the largest and longest child and adolescent mental health agency in Rockingham County was never contacted to ask about their experience working with Sandhills. People need to know that!"*
- *"I think it's important to know about social interaction, humans are social animals and need to connect and interact with others. Understanding the social events and organizations in your local community, as well as people's needs for social interaction, can help provide appropriate support and resources."*

- *"I think mental health needs to be provided, understanding the social environment in Rockingham County to identify possible risk factors and possible interventions. Rockingham County needs to provide resources such as mental health agencies, community organizations, and volunteer organizations to identify available resources and possible partners."*
- *"I think substance abuse and addiction can be significant issues in many communities. Resources to provide prevention, treatment, and rehabilitation support are critical."*
- *"I think we can give mental health support to vulnerable people. Because it is important to identify and address the unique behavioral health needs of vulnerable groups such as children, seniors, veterans, and the homeless."*
- *"I think we can increase the focus on culture and diversity. Understanding the views and needs of different cultural and ethnic groups on behavioral health in order to provide inclusive and culturally sensitive services."*
- *"I think we can pay more attention to child and adolescent mental health and understand the mental health needs of children and adolescents, including school mental health support, bullying prevention, and mental health education."*
- *"In Eden, it seems most of the counseling is church-based. Young people, LGBTQ+ people, and addicts are not always treated fairly by these groups. We need a nonbiased group who can treat the person while trying to get them to go to church."*
- *"In-person therapies and mental health professionals online service for populations of aging or disability is not acceptable. they need one on one face contact."*
- *"Inpatient behavioral health centers are desperately needed in this community. More events to heighten the awareness of mental health and what resources are available in the community. More AA buildings for support."*
- *"Instead of just treating the drug problem we need to treat the underlying cause, trauma! Getting medications filled on time instead of being told you can't get them. And definitely a psychiatric hold hospital. There are typically 8-10 psych. patients held in each hospital which delays care for other patients and delays offloading for EMS even if EMS has critical patients that need a room immediately."*
- *"I love the idea of a mobile crisis unit! I would love to see more education in schools, police, and teachers. The more we normalize and educate mental health the more people will be willing to talk about it and seek services."*

- *"Mainly for the youth we have access to places if the child is in trouble with the law or breaking laws. But the children who have no involvement with law enforcement get no help."*
- *"We need more mental health support for foster children and/or their families."*
- *"More individual and group health behaviors and more MAT in the county."*
- *"More mental health care providers are needed. I have given names of therapists to people I work with and most of the time those therapist's offices are not accepting new patients or have a very long waitlist."*
- *"More services for children under the age of 12 as there is a lack of services for younger children for inpatient hospitalization, DJJ involvement, group homes, outpatient treatment, etc. We are seeing more and more children under the age of 12 needing access to services."*
- *"More substance abuse and mental health services for youth involved in the juvenile system."*
- *"More substance use counseling for juveniles and crisis centers that are trained to handle aggressive behaviors."*
- *"We need more psychiatric care at UNC hospital."*
- *"We need more services, especially for people without insurance."*
- *"We need somewhere for people in crisis to go and get help without staying in an emergency room. Help for senior citizens who are not able to come to a counselor maybe phone services."*
- *"There are not enough providers that accept Medicaid."*
- *"Older adults are being overlooked for care. Those who are homebound do not have much interaction and do not receive an assessment or treatment, yet RoCo is a county with a growing older adult population."*
- *"We have children on waitlists for services for three or more months. We have a lack of qualified providers, likely due to a lack of reimbursement or quality rates."*
- *"The Opioid epidemic is awful and nothing is being done about it."*
- *"Pediatric mental health resources are extremely minimal. Pediatric psychiatric patients wait for placement into a psychiatric facility for months."*
- *"Pediatric Mental Health Services!!! Working at UNC Rockingham Hospital, we see every day how ineffectual behavioral health is in our area and even the state. We hold many of*

our behavioral health patients in the emergency department for days, weeks, or MONTHS. During this time, they are only able to be seen by a telepsychiatry provider when there is an acute change whether negative or positive. If we have a pediatric patient, it's almost guaranteed that they'll be in our department for 3 weeks or more. Behavioral health patients in our department only receive the most basic care due to our census and lack of support from behavioral health providers and experts. We follow the recommendations of the offsite psychiatrists but they don't receive the care that they need. They can stay there for an extended period with no concrete treatment because the few facilities in our area have incredibly strict criteria for their admissions. This is disheartening for the patients as well as us as health care providers. A lack of insurance is also an issue and leads to extremely extended stays in our department. I'd like to see a smoother process for the transfer of behavioral health patients and fully believe that we need to see our local government officials from the DHHS in the department. We wholeheartedly feel that we have no support from anyone and are meant to just deal with the issues that arise from this lack of support."

- *"People do not know where to go. There are very little resources in Rockingham County."*
- *"Recently a family member was suicidal and we chose to go to the Greensboro emergency room due to everyone in Rockingham County knowing everyone else's business. Even with HIPAA in place, you still hear about so and so going to the hospital, or this girl got her kids taken. We didn't need everyone in the county to know about my daughter's mental health crisis, which is why we chose to go to Greensboro, for at least a little bit more privacy."*
- *"Rockingham County has very few resources for the general public, but specifically pediatric behavioral health patients. We need a better avenue for these patients rather than the local emergency room. Also, when treating pediatric inpatients for behavioral health (especially for elongated periods of time), we need a person or place for them to learn and run and play. These patients WILL NOT get better stuck in a white box of a room with little to no stimulation and therapy."*
- *"Rockingham County needs an in-county mental health hospital and a task force to help and assist in drug rehabilitation and treatment."*
- *"Rockingham County needs to use the Opioid Settlement to create a drug awareness and treatment facility in our county. Far too many deaths!!!"*
- *"Rockingham County really needs a mental health facility for our people in crisis, especially where veterans are concerned. The wait in the emergency room is ridiculous! It's not uncommon to have 7-10 people holding for transfers to other facilities for mental health. Our Veterans are forced to wait and be sent to Salisbury to the VA. If we had a*

facility here in Rockingham County, there wouldn't be such a long wait. These waits can be detrimental to the patients. Not only does this affect the patient, but it also affects the families of the same."

- *"Sending mental health patients to other facilities so far away from Rockingham County has to stop."*
- *"Severe mental health in children needs to be addressed. There should not be children staying in emergency rooms in any hospital anywhere because of the lack of facilities for children. As far as substance abuse shouldn't be in this survey because they have more resources than mental health already and most choose not to use them."*
- *"Since there is a way for drug abusers to get an alternative drug for their addiction there should be places for people to get heart, diabetes, asthma, cancer, and other serious medical conditions free treatment and medication!!!!!!"*
- *"Student Health Centers are vital and serve as top resources for high school students. It is a great model and it educates young people about the importance of f accessing mental health services and thus is a front line in erasing stigmas."*
- *"The courts need to place substance abusers in jail for at least a year while they detox. Returning substance abusers to the streets too early when they are most craving drugs is cruel and inhumane."*
- *"The emergency room is not the place for treatment….it disrupts everything when medical staff is trying to treat sick people*
- *The police officers need to be trained to deal with mental health and substance abuse or have workers with them. We had many officers come to the house and refuse to do anything to help us with our son who was obviously strung out on drugs."*
- *"Therapists are needed in the schools. I think it is vital that behavioral health needs are addressed in early childhood programs so that children and educators can then focus on the educational needs of students. We need a 'whole-child' approach to learning. Mental, emotional, and physical health are interconnected."*
- *"There is a lack of qualified mental health providers. Psychiatrists, LCSWs, peer support counselors, certified drug and alcohol counselors, and addiction specialists in our county. Support college programs at RCC to train some individuals to help with the crisis."*
- *"There are homeless with severe mental health problems on the streets, they are a danger to themselves mostly and at times to others."*

- *"There are not enough trained individuals within the county. In order to attract them, we need to compensate them accordingly but it must be subsidized in order for those with low income and/or no health insurance can afford it."*
- *"There is a high need for support/services in this county, but I don't think supply meets demand. I also think it is still difficult to overcome the stigma attached to receiving help."*
- *"There is so much need for behavioral health in the schools right now. There are not enough resources or personnel to support behavioral health in our schools. There are not enough resources for our students and parents to seek support outside of the school. We need support and help in our schools regarding behavioral health. please!!!!!!!!"*
- *"There should be a gathering where those in need could meet and talk to providers before the appointments are set up such as a neutral information session to inform them of what will take place. Allow them an opportunity to ask questions in a non-judgmental setting. This group should include a group of people to share concerns and experiences and not just one individual."*
- *"These children in this county have no guidance and no outlets to potentially keep their minds off wanting to use or try drugs. As a single parent, my child plays baseball and it's hard for me to even afford the cost of it, but I have to put bills and everything else on the back burner, so he doesn't resort to the streets and be around the negative influences."*
- *"Children do not have a place to go outside of school for guidance and support when they reach middle school. There are no leaders in the community who can talk to the children without judging them or looking at their background. If you are not rich in this county, then I feel that you can't get far. Not only for parents but adults as well."*
- *"Training for local government employees and law enforcement about the behavioral health challenges that community members may face and how to approach them with empathy."*
- *"There are virtually no programs for Medicare/Medicaid recipients without a very lengthy waiting list."*
- *"We do need a detox facility and the jail needs to have a better detox protocol to give them Suboxone to help them through withdrawal. I was told that if they don't have a prescription for Suboxone within three months they can't give it to them. My daughter is in there now, deathly sick, and needs Suboxone. They only give a few things to help with nausea, etc."*
- *"We need any and every behavioral health service. It's nearly impossible to get any services, and impossible to get unbiased, appropriate, and specific services."*

- *"We need every single mental health service. Services are nearly nonexistent in this county."*
- *"We need more locally based mental healthcare facilities and caregivers."*
- *"We need more people who can teach the understanding and notice the signs to look for when their level is going up and how to react. To protect all involved."*
- *"We need more residential facilities with more funding for individuals with behavioral health needs."*
- *"Opioid addiction is serious and must be dealt with. But the presence of a casino will also cause addiction. I have known many to be pulled in by this addiction, so much so that it caused them to neglect their families. Casinos are a magnet for many types of sin. Alcohol, drugs, prostitution, etc. The Cherokee people have had many lives destroyed by the placement of a casino. So, don't pretend to be concerned about opioid addiction and turn right around and vote for something just as damaging to lives if not worse. This country needs to turn back to God if we want to protect our children."*
- *"The hospitals need to stop discharging drug addicts in withdrawal on foot. I have had two wander upon me recently after leaving the hospital and both were delusional in withdrawal. It is unsafe for them to just be sent walking home like that. It is not safe for them or the community. The hospital needs to ensure they have a ride home and they have access to follow-up care before they discharge them."*
- *"Young pediatric (age less than 12 years) mental/behavioral health needs are almost impossible to obtain, especially inpatient treatment. These children are falling through the cracks in this county. It is disheartening to witness this as a Healthcare provider with little control over the situation. This is an ongoing issue and must be addressed ASAP to ensure the psychological as well as the physical well-being of our youth. There is an emergent need for more inpatient and outpatient resources for the younger children in this county."*