Community Health Needs Assessment

Chowan County

2025

ECU HEALTH
Chowan Hospital

ACKNOWLEDGEMENTS

This Community Health Needs Assessment (CHNA) represents the culmination of work completed by multiple individuals and groups. Health ENC – a group of stakeholders who help find ways to collaborate and share resources to improve the health of the population in eastern North Carolina – served an integral role in making this comprehensive assessment possible. To provide focused guidance throughout the assessment process, Health ENC convened a smaller decision-making group, which will be referred to as the Health ENC Steering Committee throughout this CHNA. The Health ENC Steering Committee would like to extend its gratitude to all the focus groups participants, health leaders, and community members who provided information used in the development of this assessment.

The Health ENC Steering Committee

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Chowan County CHNA Leadership

In addition to the Health ENC Steering Committee, the Chowan County 2025 CHNA was developed in partnership with representatives from the following organizations:

- ARHS
- Sentara Albemarle Medical Center
- ECU Health Chowan Hospital
- ECU Health Bertie Hospital
- Healthy Carolinians of the Albemarle
- Gates Partners for Health
- Three Rivers Healthy Carolinians

Chowan County CHNA Stakeholders

The Chowan County 2025 CHNA was also developed in partnership with input from the following individuals and organizations who participated in the prioritization process:

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In addition, the Health ENC Steering Committee and Chowan County CHNA Leadership would like to thank Kathryn Dail, Director of Community Health Assessment at the NCDHHS Division of Public Health, for her valuable guidance throughout the development of this assessment, as well as Ascendient Healthcare Advisors for directing the CHNA process and producing this report.

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EXECUTIVE SUMMARY

ECU Health Chowan Hospital

ECU Health Chowan Hospital is a critical-access facility located in Edenton, NC that provides quality care to over 100,000 people in Chowan County and the surrounding area. The hospital's specialty services include emergency care, surgery, intensive care, an expanded labor and delivery suite, and bone density screening. Through a telemedicine link with the Brody School of Medicine at East Carolina University, ECU Health Chowan Hospital is able to connect patients with providers and resources to meet a full range of health care needs.

ECU Health Chowan is one of nine hospitals that comprise ECU Health. ECU Health is a regional health system serving more than 1.4 million people in 29 counties throughout rural eastern North Carolina. Most of the counties served by ECU Health are ranked in the top 40 most economically distressed areas in the state with Chowan County being ranked a Tier 2 (67% of ECU Health's counties are classified as Tier 1 counties; 33% of the counties are classified as Tier 2 counties[1]). The system consists of ECU Health Medical Center (an academic medical center), eight community hospitals, an ambulatory surgery center, wellness and rehabilitation facilities, home health agencies, and other independently operated health services. ECU Health is also affiliated with the Brody School of Medicine at East Carolina University. The mission of ECU Health is to improve the health and well-being of eastern North Carolina. The system's vision is to become a national model for rural health and wellness by creating a premier, trusted health care delivery and education system. Integral to the mission is the commitment to be responsive to the community's needs and to provide high quality, cost-effective health care services.

CHNA Overview

A Community Health Needs Assessment (CHNA) helps health leaders evaluate the health and wellness of the community they serve and identify gaps and challenges that should be addressed through new programs, services and policy changes. This report was developed as part of the Health ENC coalition's collaborative, regional 2024-2025 CHNA process. Health ENC -- a group of stakeholders who help find ways to collaborate and share resources to improve the health of the population in eastern North Carolina -- served an integral role in making this comprehensive assessment possible. The report adheres to North Carolina Local Health Department Accreditation standards, as well as Internal Revenue Service requirements for not-for-profit hospitals.

Vision Statement

Through collaboration between the Health ENC Steering Committee, Albemarle Regional Health Services and ECU Health Chowan Hospital, the CHNA process aspires to create a healthier eastern North Carolina where collaborative action, shared resources, and community engagement converge to eliminate health disparities and build resilient, connected communities that support wellbeing for generations to come.

[1] Source: North Carolina Department of Commerce (2024). County Distress Rankings (Tiers), retrieved from https://www.commerce.nc.gov/grants-incentives/county-distress-rankings-tiers

Chowan County CHNA Leadership

Chowan County had leadership representation from a variety of healthcare organizations for its 2024 CHNA process including Albemarle Regional Health Services (ARHS), ECU Health Chowan Hospital, Sentara Albemarle Medical Center (SAMC), Healthy Carolinians of the Albemarle, Gates Partners for Health, and Three Rivers Healthy Carolinians.

Chowan County CHNA Partnerships

The CHNA process for Chowan County included a variety of different stakeholders who assisted with community engagement activities, provided feedback, and participated in the prioritization process. A summary of the partner organizations who participated in the process is below.

Type of Partner Organization	Number of Partners
Public Health Agency	3
Hospital/Health Care System(s)	1
Healthcare Provider(s)	2
Behavioral Healthcare Provider(s)	2
EMS Provider(s)	1
Community Organizations	5
Business(es)	1

The Health ENC Steering Committee and Chowan County CHNA Leadership contracted with Ascendient Healthcare Advisors to coordinate the regional CHNA process, including primary and secondary data analysis, relevant trainings for county partners and development of the contents of this report.

Chowan County CHNA Process

The process formally began with a collaborative meeting of all participating counties in February 2024. This included discussions on secondary data and primary data collection methods, such as surveys and focus groups. Subsequent priority-setting meetings were held to determine upcoming priorities, culminating in the delivery of a final report.

Secondary (existing) data came from various public sources related to demographics, social determinants of health, environmental health, disease trends, behavioral health trends, and individual health behaviors. Data was evaluated using the Robert Wood Johnson Foundation's population health framework and compared to state or national benchmarks to identify areas of concern. Top community needs identified through secondary data analysis included health concerns related to physical and behavioral health, and

social or environmental concerns such as community safety, employment and income, and food access and security, among others.

Primary (new) data were collected through focus groups and a web-based survey for community members, and included feedback from 230 people who live, work or receive healthcare in Chowan County. A total of two in-person focus groups were conducted, with a variety of community members from different backgrounds, age groups and life experiences. Primary data identified behavioral health (specifically substance use), employment and income, environmental quality, food access and security, healthcare access and quality, and physical health (chronic diseases, cancer, obesity) as top needs that impact the health and well-being of people living in Chowan County.

Chowan County representatives collaborated to identify four priority areas to focus on over the next three years, evaluating data based on scope, severity, ability to impact, health disparities, and community importance. The three priority health needs selected (in alphabetical order) are: (Access to Care, Healthy Living, Mental Health/Substance Misuse, and Sexual Health).

Chowan County also compiled a Health Resources Inventory, which describes a variety of resources available to help Chowan County residents meet their health and social needs.

Following completion of this report, health leaders throughout Chowan County will use its findings to collaborate with community organizations and local residents to develop effective health strategies, new implementation plans and interventions, and action plans to improve the communities they serve.

INTRODUCTION

Background

ECU Health Chowan Hospital and the Albemarle Regional Health Services with guidance from the Health ENC Steering Committee, local leaders, and community residents completed the assessment to document the greatest health needs. The CHNA process helps local leaders continuously evaluate how best to improve and promote the health of the community. It builds upon formal collaborations between the community partners to proactively identify and respond to the needs of Chowan County residents.

This report was created in compliance with Internal Revenue Service (IRS) requirements for not-for-profit hospitals to complete a CHNA every three years to maintain their tax exemption.[2] Specifically, the IRS requires that hospital facilities do the following:

- Define the community it serves.
- Assess the health needs of that community.
- Through the assessment process, take into account input received from people who represent the community's broad interests, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report and adopt an implementation strategy to meet the community health needs identified through the CHNA that is reviewed and adopted by the hospital facility's authorizing body; and
- Make the CHNA widely available to the public.

Process Overview

A significant amount of information has been reviewed during this planning process. Both existing (secondary) data and new (primary) data were collected directly from the community throughout this process. It is also important to note that, although unique to Chowan County, the sources and methodologies used to develop this report comply with the current NCLHDA and IRS requirements for health departments and not-for-profit hospital organizations.

The purpose of this study is to better understand, quantify, and articulate the health needs of Chowan County residents. Key objectives of this CHNA include:

- Identify the health needs of Chowan County residents.

[2] Source: *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501®(3)* (2024). Internal Revenue Service. https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3.

- Identify disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges;
- Understand the challenges residents face when trying to maintain and/or improve their health;
- Understand where underserved populations turn for services needed to maintain and/or improve their health;
- Understand what is needed to help residents maintain and/or improve their health; and
- Prioritize the needs of the community and clarify/focus on the highest priorities.

There are ten phases in the CHNA process, as described in **Figure 1** below. Results of the first seven phases are discussed throughout this assessment and the development of community health action plans and subsequent phases will take place after the completion of the CHNA report.

Figure 1: The CHNA Process[3]

Report Structure

The outline below provides detailed information about each section of the report.

1) *Methodology* – The methodology chapter provides an overall summary of how the priority health need areas were selected as well as how information was collected and incorporated into the development of this CHNA, including study limitations.

2) *County Profile* – This chapter details the demographic (such as age, gender, and race) and socioeconomic data of Chowan County residents.

3) *Priority Health Need Areas* – This chapter describes each identified priority health need area for Chowan County and summarizes the new and existing data that support these prioritizations. This chapter also describes the impact of health disparities among various sub-groups in Chowan County.

4) *Health Resource Inventory* – This chapter documents existing health resources currently available to the Chowan County community.

5) *Next Steps* – This chapter briefly summarizes the next steps that will occur to address the priority health need areas discussed throughout this document.

[3] Source: NCDHHS Division of Public Health (2024). *North Carolina Community Health Assessment Guidebook.* Accessed April 7th, 2025 from https://schs.dph.ncdhhs.gov/units/ldas/docs/chaguidebook/NC-CHA-GuidebookOnlineRev1.pdf

In addition, the appendices discuss all of the data used during the development of this report in detail, including:

1) *State of the County Health Report* – Detailed information about actions taken to address the priority health needs identified in previous CHNAs are presented in **Appendix 1**.

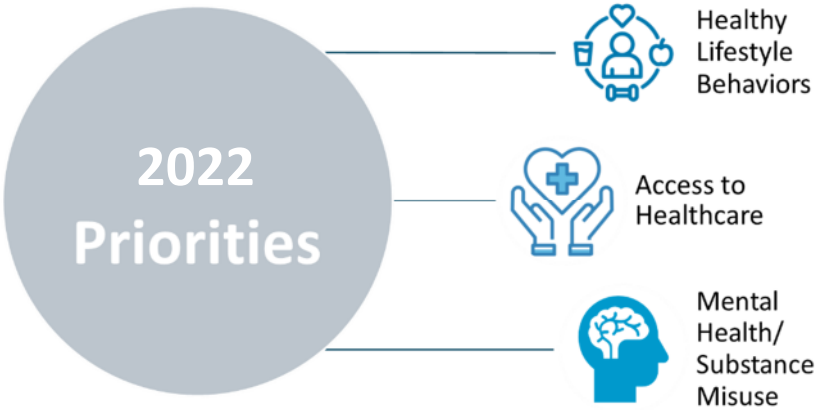
2) *Detailed Summary of Secondary Data Measures and Findings* – Existing data measures and findings used in the prioritization process are presented in **Appendices 2-3.**

3) *Detailed Summary of Primary Findings* – Summaries of new data findings from community member surveys as well as focus groups are presented in **Appendices 4-5.**

Evaluation of Prior CHNA Implementation Strategies

A CHNA is an ongoing process that begins with an evaluation of the previous CHNA. In 2022, Chowan County completed its previous assessment. Associated implementation strategies focused on three priority areas, as listed below:

Figure 2: Chowan County 2022 Priority Need Areas



Previous CHNA Priority: Access to Healthcare

- **Community-Based Wellness Screening**: ECU Health Chowan Hospital's community health improvement coordinator organizes health screenings across the community. In FY 2023, 26 events were held with 381 people screened. This increased in FY 2024 to 26 events and 455 people screened. In the first half of FY 2025, 15 events were held, and 345 individuals were screened.
- **Community Cancer Screening**: ECU Health Chowan Hospital's provides cancer awareness education regarding early detection and prevention as well as provide opportunities for

uninsured residents to receive recommended cancer screenings. 23 individuals were screened in FY 23 and 16 in FY 24. In the first half of FY 25, 15 individuals were screened.

- **Stroke Support Group**: ECU Health Chowan Hospital provides a stroke support group to the community for education and support for patients, caregivers and the public.
- **Increase Specialty Care**: ECU Health Chowan implemented a focused strategy to expand access to specialty care locally, aiming to reduce the need for patients to travel outside the community by enhancing service availability and utilization within its outpatient specialty clinics.
    - In FY 2023, there were 9,679 patient encounters in specialty clinics, with high volumes in Oncology, Wound Care, and Cardiology.
    - In FY 2024, there were 9,228 patient encounters in specialty clinics, with high volumes in Oncology, Wound Care, and Cardiology.
- **Advance Care Planning (ACP)**: ECU Health's Advance Care Planning program helps individuals document their future medical care preferences through an Advance Directive, ensuring care aligns with their values if they can't speak for themselves. In FY23, 27 community members were educated on ACP, increasing to 72 in FY24.
- **Community-Based Education**: ECU Health Chowan Hospital's community outreach coordinator organized health education across the community. In FY 2024, 9 events were held educating 815 people. In the first half of FY 2025, 6 events were held educating 351 individuals.

Previous CHNA Priority: Healthy Lifestyle Behaviors

- **Athletic Training Program:** Athletic Training Program is a partnership between the hospital and the school system. The Athletic Trainers collaborate closely with the physician to prevent and treat injuries and sports.
- **Free Flu Shot Clinic:** The ECU Health Development Council funds the Free Flu Shot Clinic, which provides free influenza vaccinations and educational resources to the community to help reduce the severity and spread of the flu. In fiscal year 2023, the clinic administered 25 flu vaccines. This number increased to 33 in fiscal year 2024, and in fiscal year 2025, 30 vaccines were given.
- **Book Bag Buddies:** This program provides food to Edenton Chowan Schools to address food insecurity. The number of students served increased from 176 in the 2023-2024 school year, to 206 in the 2024-2025 school year.
- **Childbirth Classes:** ECU Health Chowan offers free childbirth classes to the community. In FY 2023, six childbirth classes were held with a total of 35 participants. In FY 2024, the same number of classes were offered, with 16 participants attending.
- **Prenatal Breastfeeding Classes:** ECU Health Chowan offers free breastfeeding classes to the community. The classes offer education and support groups for breastfeeding. In FY 2023, 13 prenatal breastfeeding classes were held, and 24 patients were advised on the benefits and management of breastfeeding. In FY 2024, 12 classes were conducted, with 13 patients receiving breastfeeding education.
- **Teddy Bear Fair:** ECU Health Chowan educates elementary school students about healthy lifestyles and the importance of positive health behaviors. In FY 2023, three Teddy Bear Fair events were held, reaching 322 students. In FY 2024, the number of events increased to eight, with a total of 529 students participating. In the first half of 2025, there have been 3 events with a total of 312 students participating.

- **Farmer's Market Food Voucher Initiative:** Funded by ECU Health Chowan Community Benefit Grants, this program helps lower-income families buy fresh produce at half the cost, making healthy food more affordable and accessible.
- **Safe Kids:** ECU Health Chowan Hospital partners with the Safe Kids Coalition to provide education to the public on child safety and prevention. This partnership also provides car seats and car seat safety checks in the community.

Previous CHNA Priority: Mental Health/Substance Misuse

- **Drug Disposal Program:** ECU Health Chowan Hospital partnered with the Chowan County Sherriff's Department to educate the community members about the appropriate ways to dispose of medications.
- **Tobacco Free Living Coalition:** ECU Health Chowan Hospital participates in the coalition to educate the community on the health risk of vaping and tobacco products.

Information about previous county-level Community Health Improvement efforts, as referenced in the NCLHDA State of the County Health (SOTCH) report, can be found in **Appendix 1**.

Summary Findings: Chowan County 2025 Priority Health Need Areas

To achieve the study objectives in the 2025 assessment, both new and existing data were collected and reviewed. New data included information from web-based surveys of adults (18+ years) and focus groups; various local organizations, community members, and health service providers within Chowan County participated. Existing data included information regarding the demographics, health and healthcare resources, behavioral health, disease trends, and county rankings. The data collection and analysis process began in February 2024 and continued through July 2024.

Throughout Chowan County, significant variations in demographics and health needs exist within the county. At the same time, consistent needs are present across the whole county and serve as the basis for determining priority health needs at the county level. This document will discuss the priority health need areas for Chowan County, as well as how the severity of those needs might vary across subpopulations based on the information obtained and analyzed during this process.

Through the prioritization process, the CHNA Stakeholders identified Chowan County's priority health need areas from a list of over 100 health indicators. Please note that the final priority needs were not ranked in any order of importance, and county health leaders will engage in each of the four priority need areas. After looking at all relevant data and feedback, the Chowan focus areas identified as countywide priorities for the 2025 CHNA are Access to Healthcare, Behavioral Health, Healthy Living, and Sexual Health, as seen in **Figure 3**.

Figure 3: Chowan County 2025 Priority Health Needs[4]

Health, healthcare and associated community needs are very much interrelated, and often impact each other. Although this CHNA process considered these areas separately, their impact on each other should be considered when planning programs or services to address community needs.

Many health needs are also related to underlying societal and socioeconomic factors. Research has consistently shown that income, education, physical environment, and other such demographic and socioeconomic factors affect the health status of individuals and communities. This CHNA acknowledges that link and focuses on identifying and documenting the greatest health needs as they present themselves today. As plans are developed to address these needs, the goal is to work with other community organizations to address underlying factors that could drive long-term improvements to the county's population's health.

For additional discussion of current priority needs and the data that supports those priorities, please see **Chapter 3**.

[4] Note: All graphics in this image were licensed from Adobe Stock

CHAPTER 1 | METHODOLOGY

Study Design

The process used to assess Chowan County's community needs, challenges, and opportunities included multiple steps. Both new and existing data were used throughout the study to paint a more complete picture of Chowan County's health needs. While the CHNA Stakeholders largely viewed the new and existing data equally, there were situations where one provided clearer evidence of community health need than the other. In these instances, the health needs identified were discussed based on the most appropriate data gathered. Data analysis, community feedback review, and stakeholder engagement were all used to identify key areas of need.

Specifically, the following data types were collected and analyzed:

New (Primary) Data

Public engagement and feedback were received through a web-based community member survey along with community focus groups and significant input and direction from the CHNA Stakeholders. The Health ENC Steering Committee worked together to develop the survey questions for the web-based survey, and county leaders were provided with a set of target numbers based on their county population's race, ethnicity and age distribution to encourage recruitment of a representative sample of the community. Community members were asked to identify the most significant health and social needs in their community, as well as asked questions about topics specific to Chowan County, including access to care, healthy lifestyle, housing and homelessness, mental health, physical health, substance use disorders, and transportation and transit. Focus group participants were asked a standard set of questions about health and social needs, in order to identify trends across various groups and to highlight areas of concern for specific populations. Through this process, input was gathered from numerous Chowan County residents and other stakeholders. This included web survey responses from 230 community members and two focus groups that included local community members and other people who live, work or receive healthcare in Chowan County.

For more information regarding specific questions asked as part of the focus groups and surveys, please refer to **Appendix 4.**

Existing (Secondary) Data

The primary source for existing data on Chowan County was the North Carolina Data Portal. This website is a joint effort by NCDHHS and the University of Missouri Center for Applied Research and Engagement Systems (CARES), which includes over 120 data indicators focused on demographics, health status and social determinants of health. In addition to information from the North Carolina Data Portal, a variety of other sources were leveraged in this assessment process, including:

- *County Health Rankings*, developed in partnership by Robert Wood Johnson Foundation (RWJF) and University of Wisconsin Population Health Institute

- *The Opportunity Atlas*, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University
- *Food Access Research Atlas*, published by the U.S. Food and Drug Administration
- *Social Vulnerability Index*, developed by the CDC and the Agency for Toxic Substances and Disease Registry (ATSDR)
- *Environmental Justice Index*, developed by the CDC and the ATSDR
- *American Community Survey*, as collected and published by the U.S. Census Bureau
- Community Health Assessments from Chowan County.

For more information regarding data sources and data time periods, please refer to **Appendix 2.**

Comparisons

To understand the relevance of existing data collected throughout the process, each measure must be compared to a benchmark, goal, or similar geographic area. In other words, without being able to compare Chowan County to an outside measure, it would be impossible to determine how the county is performing. For this process, each data measure was compared to outside data as available, including the following:

- *County Health Rankings* Top Performers: This is a collaboration between the RWJF and the University of Wisconsin Population Health Institute that ranks counties across the nation by various health factors.
- State of North Carolina: The Health ENC Steering Committee determined that comparisons with the state of North Carolina were appropriate.

For all available data sources, state and national averages were compared. The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than 5 percent worse = High need
- If the data were within or equal to 5 percent (better or worse) = Medium need
- If the data were more than 5 percent better = Low need

When viewing the secondary data summary tables in this report, please note that the following color shadings have been included to identify how Chowan County compares to North Carolina and the national benchmark. If both statewide North Carolina and national data was available, North Carolina data was preferentially used as the target/benchmark value.

Secondary Data Summary Table Color Comparisons

Color Shading	Priority Level	Chowan County Description
	Low	Represents measures in which Chowan County scores are **more than five percent better** than the most applicable target/benchmark and for which a low priority level was assigned.
	Medium	Represents measures in which Chowan County scores are comparable to the most applicable target/benchmark scoring **within or equal to five percent**, and for which a medium priority level was assigned.
	High	Represents measures in which Chowan County scores are **more than five percent worse** than the most applicable target/benchmark and for which a high priority level was assigned.

Please note that to categorize each metric in this manner and identify the priority level, the Chowan County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

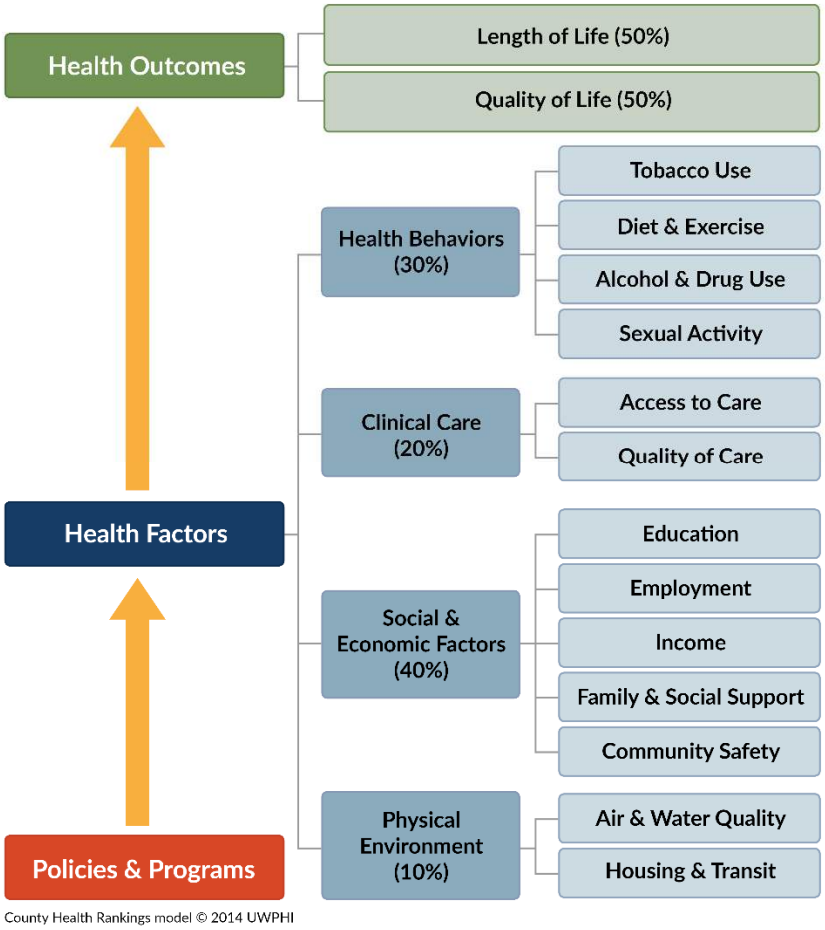
(Chowan Co Value – Benchmark Value)/(Benchmark) x 100 = % Difference Used to Identify Priority Level.

Population Health Framework

This assessment was developed in alignment with the RWJF population health framework, originally developed by the University of Wisconsin's Population Health Institute. Population health focuses on health status and outcomes among a specific group of people, and can be based on geographic location, health diagnoses or common health providers. The population health framework recognizes that the issues that affect health in a community are complex; there are many factors that have the potential to impact health outcomes, including both length and quality of life, within a population. Broadly, these factors include the clinical care available to community members, individual health behaviors, the physical environment, and the social and economic conditions in the community.

Using the population health framework as a guide for the CHNA process helps categorize many individual pieces of data in a way that connects the dots between health status and social drivers of health, in a way that helps local leaders better understand and address the health and well-being of the communities they serve. This understanding is critical in identifying potential interventions to address priority needs in the community, and to helping develop partnerships across sectors that can help drive these interventions forward. **Figure 4** below illustrates the broad categories and sub-categories within the population health framework.

Figure 4: Population Health Framework[5]



[5] Source: University of Wisconsin Population Health Institute (2024). County Health Rankings & Roadmaps. www.countyhealthrankings.org.

Throughout the process, the Health ENC Steering Committee also considered *Healthy People 2030*'s "Social Determinants of Health and Health Equity." The CDC defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. These factors can include healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality, as outlined in **Figure 5**.[6]

Recognizing that SDoH have an impact on health disparities and inequities in the community was a key point Chowan County leaders considered throughout the CHNA process. **Figure 6** describes the way various social and economic conditions may affect health and well-being.

Figure 5: Social Determinants of Health[1]

Figure 6: SDoH and Health Disparities[7]

[6] Source: CDC (2022). Social Determinants of Health at CDC. Accessed March 7th, 2024 via https://www.cdc.gov/about/sdoh/index.html

[7] Source: Kaiser Family Foundation (2024). Disparities in Health and Health Care: 5 Key Questions and Answers. Accessed December 30, 2024 via https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/

Prioritization Process Overview and Results

The process of identifying the priority health needs for the 2025 CHNA began with the collection and analysis of hundreds of new and existing data measures. In order to create more easily discussable categories, all individual data measures were then grouped into six categories and 20 corresponding focus areas based on "common themes" that correspond to the Population Health Model, as seen in **Figure 4**. These focus areas are detailed further in **Appendix 2.**

Since a large number of individual data measures were collected and analyzed to develop these 20 focus areas, it was not reasonable to make each of them a priority. The Steering Committee considered which focus areas had data measures of high need or worsening performance, priorities from the primary data, and how possible it is for health departments or hospitals to impact the given need to help determine which health needs should be prioritized.

The Steering Committee utilized the multi-voting technique to determine Chowan County's priority need areas, while considering the following factors:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Whether possible interventions would be possible and effective;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

Group discussion was held to assemble a list of priority areas. After discussion, all Steering Committee participants voted to identify top three priority areas. Once the votes were tallied, another discussion was held to finalize the priority need areas.

The final priority need areas were not ranked in any particular order of importance, and each will be addressed by the Steering Committee. The following four focus areas (Access to Healthcare, Behavioral Health: Mental Health/Substance Misuse, Healthy Living, and Sexual Health) were identified as Chowan County's top priority health needs to be addressed over the next three years, as seen in **Figure 7** below:

Figure 7: Chowan County 2025 Priority Health Needs

The list of organizations below had members that participated in the prioritization voting process.

- Albemarle Pregnancy Resource Center
- Albemarle Regional Health Services
- Bertie Cooperative Extension
- Bertie County Schools
- Chowan County Cooperative Extension
- Chowan/Perquimans Smart Start
- Department of Social Services
- ECU Health, including ECU Health Roanoke Chowan
- Edenton Chowan Chamber
- Edenton Chowan Recreation Department
- Northeastern NC Partnership for Public Health
- Roanoke Chowan Community Health Center

Study Limitations

Developing a CHNA is a long and time-consuming process. Because of this, more recent data may have been made available after the collection and analysis timeframe. Existing data typically become available between one and three years after the data is collected. This is a limitation, because the "staleness" of certain data may not depict current trends. For example, the U.S. Census Bureau's American Community Survey is a valuable source of demographic information, however data for a particular year is not published until late the following year. This means 2022 data on community characteristics, such as languages spoken at home, did not become available until late fall 2023. To account for these limitations, new data was collected, including focus groups and web-based surveys. Another limitation of existing data is that, depending on the source, it may have limited demographic information, such as gender, age, race, and ethnicity.

Given the size of Chowan County in both population and geography, this study was limited in its ability to fully capture health disparities and health needs across racial and ethnic groups. Resource limitations meant that county leaders relied on convenience sampling to engage with the community via the web-

based survey. This method of survey sampling may fail to capture a truly representative cross-section of the community, resulting in overrepresentation of some demographic groups and underrepresentation of others. This can lead to findings that don't accurately reflect the health needs and perspectives of the entire community, particularly those from underrepresented or marginalized groups. While efforts were made to include diverse community members in survey efforts, approximately 58% of all respondents identified as White, which was similar compared to 60% of the Chowan County population reported as being White. Another 38% of respondents were Black or African American, exceeding the 32% of the county population reported as being Black or African American. Only 1% of respondents identified as Hispanic, which is less than the reported county population level of 4%. Although survey respondents could choose from multiple race or ethnicity categories, limited responses were received from these groups. This made it difficult to assess health needs and disparities for other racial/ethnic minority groups in the community.

In addition, there are existing gaps in information for some population groups. Many available datasets are not able to isolate historically underserved populations, including the uninsured, low-income persons, and/or certain minority groups. Despite the lack of available data, attempts were made to include underserved sub-segments of the greater population through the new data gathered throughout the CHNA process. For example, the Health ENC Steering Committee chose to focus on Spanish-speaking members of the community by providing a Spanish language version of the web-based community survey. Paper surveys were also distributed in an effort to reach as much of the community as possible. To increase future survey responses, members of the Steering Committee should consider working directly with partner organizations in the community who can connect directly with populations who are hard to access through traditional outreach methods, including people with disabilities, the uninsured and people who are disengaged.

In the future, assessments should make efforts to include other underserved communities whose needs are not specifically discussed here because of data and input limitations during this CHNA cycle. Of note, residents in the disabled, blind, deaf, and hard-of-hearing communities can be a focus of future new data collection methods. Using a primarily web-based survey collection method might have also impacted response rates of community members with no internet access or low technological literacy. Additionally, more input from both patients and providers of substance use disorder (SUD) services would also be helpful in future assessments.

Finally, parts of this assessment have relied on input from community members and key community health leaders through web-based surveys and focus groups. Since it would be unrealistic to gather input from every single member of the community, the community members that participated have offered their best expertise and understanding on behalf of the entire community. As such, the CHNA Leadership Team has assumed that participating community members accurately and completely represented their fellow residents.

CHAPTER 2 | COUNTY PROFILE

Geography

Chowan County is located in the Outer Coastal Plain region of North Carolina, characterized by the presence of large sounds, bays, and river mouths. It covers a total of 233 square miles, including 172 square miles of land and 61 square miles of water. Chowan County is comprised of four townships: Wardville, Rocky Hock, Edenton, and Yeopim. The majority (68%) of Chowan County's population resides in rural areas.

Population

Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

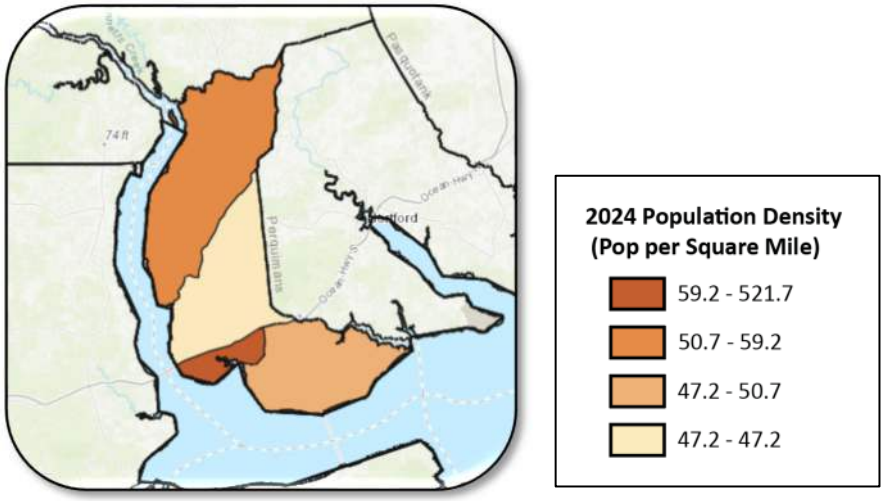
With a population of nearly 13,500, Chowan makes up less than 1% of the state's population.

Table 1: Total Population, 2023[8]

	Chowan County	North Carolina	United States
Population	13,484	10,765,678	337,470,185

Chowan County has a population density of 78.7 persons per square mile, which is lower than the population density for North Carolina (214.7 persons per square mile). Edenton is the most densely populated area in the county.

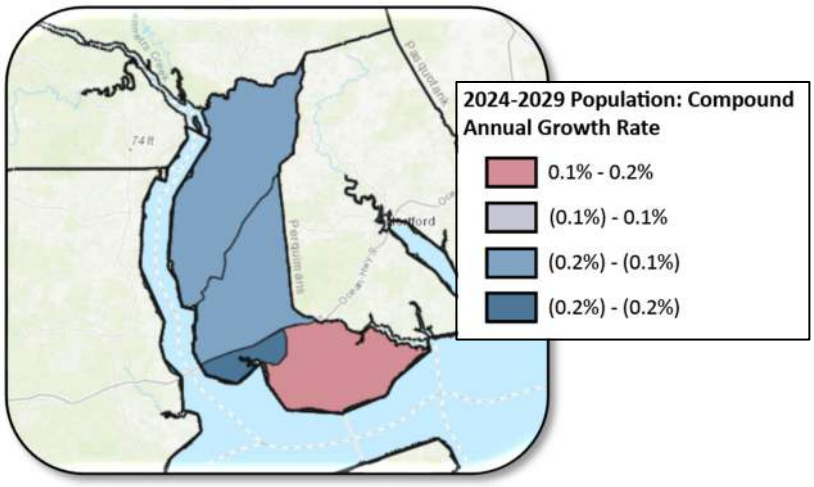
Figure 8: Chowan County Map: Population Density[8]



[8] Throughout this report, maps and demographic estimates (unless otherwise noted) were developed using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved. For more information about Esri® software, please visit www.esri.com.

In total, the population of Chowan County is projected to decline 0.12% annually between 2024 and 2029. Areas in the northern and central parts of the county are experiencing greater declines.

Figure 9: Chowan County Map: Population Growth[8]



Age and Sex Distribution

Data on age and sex helps health providers understand who lives in the community and informs planning for needed health services. The age distribution of Chowan County skews older than that of the state and the county, with over a quarter of the population being older than 65. This indicates that there may be an increasing demand for healthcare services to meet the specific needs of older adults, such as treatment for cancer or chronic illnesses.

Table 2: Age Distribution, 2023[8]

	Chowan County	North Carolina	United States
Percentage below 15	16.7 %	17.9 %	18.1%
Percentage between 15 and 44	32.1 %	39.3 %	39.5 %
Percentage between 45 and 64	25.2 %	25.1 %	24.6 %
Percentage 65 and older	26.0 %	17.7 %	17.8%

In Chowan, there is a slightly higher proportion of females compared to males, similarly to the distributions of North Carolina and the U.S.

Table 3: Sex Distribution, 2023[8]

	Chowan County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Female	7,025	52.1%	5,489,419	51.0%	170,118,720	50.4%
Male	6,459	47.9%	5,276,259	49.0%	167,351,465	49.6%

Race and Ethnicity

Data on race and ethnicity help us understand the need for healthcare services as well as cultural factors that can impact how care is delivered. Nearly one-third of Chowan County's population (32.4%) identifies as non-Hispanic Black, which is significantly higher than both the state (20.4%) and national (12.5%) averages. The majority of the county's population (60.2%) identifies as non-Hispanic White, which is comparable to the state (61.2%) and national (60.6%) figures. Chowan County has notably lower proportions of residents who identify as Asian, American Indian & Alaska Native (AIAN), and Native Hawaiian and Pacific Islander (NHPI) compared to both state and national averages, as well as residents identifying as Some Other Race Alone or Two or More Races. This data indicates that Chowan County has a distinctly different racial composition compared to North Carolina, with less overall racial diversity and a significantly larger Black population.

Table 4: Racial Distribution, 2023[8]

	Chowan County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Black (Non-Hispanic)	4,369	32.4 %	2,199,488	20.4 %	42,132,758	12.5 %
White (Non-Hispanic)	8,122	60.2 %	6,590,161	61.2 %	204,562,590	60.6 %
Asian	44	0.3 %	379,374	3.5 %	21,088,177	6.2 %
AIAN	47	0.3 %	133,820	1.2 %	3,831,126	1.1 %
NHPI	1	0.0 %	9,214	0.1 %	712,229	0.2 %
Some Other Race Alone	318	2.4 %	677, 338	6.3 %	29,432,586	8.7 %
Two or More Races	583	4.3 %	776,283	7.2 %	35,710,719	10.6 %

By ethnicity, just over 4% of Chowan County’s population is Hispanic, nearly half the state and one-fifth the national statistic.

Table 5: Ethnic Distribution, 2023[8]

	Chowan County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Non-Hispanic	12,928	95.9 %	9,465,874	88.6 %	271,934,049	80.6 %
Hispanic	556	4.1 %	1,299,804	11.4 %	65,536,136	19.4 %

The proportion of foreign-born individuals residing in Chowan County is significantly lower than the state and national figures at 2.3%.

Table 6: Foreign Born Population, 2022[9]

	Chowan County	North Carolina	United States
Foreign Born	2.3%	9%	13.9%

The diversity of Chowan County is reflected in the languages that residents speak at home. According to the most recent American Community Survey (ACS), nearly 4% of Chowan County residents speak a language other than English at home, compared to around 13% of North Carolina and 22% U.S. residents. Less than 3% of county residents speak Spanish at home, suggesting a lower level of linguistic diversity and a strong predominance of English speakers.

Table 7: Language Spoken at Home, 2022[9]

	Chowan County	North Carolina	United States
English Only	96.3%	87.3%	78%
Spanish	2.4%	7.9%	13.3%
Indo-European Languages	1.0%	2.1%	3.8%
Asian and Pacific Islander Languages	0.1%	1.9%	3.6%
Other Languages	0.2%	0.8%	1.2%

Disability Status[10]

Data on disabilities helps us understand how to create fair and equal opportunities for everyone in the county. In addition, individuals with disabilities may require targeted services and outreach by health and

[9] Source: U.S. Census Bureau. "Selected Social Characteristics in the United States." *American Community Survey, ACS 5-Year and 1-Year Estimates Data Profiles, Table DP02*, 2022, https://data.census.gov. Accessed on April 1, 2024.

[10] Disability status is classified in the ACS according to yes/no responses to questions about six types of disability concepts. For children under 5 years old, hearing and vision difficulty are used to determine disability status. For children between the ages of 5 and 14, disability status is determined from hearing, vision, cognitive, ambulatory, and self-care difficulties. For people aged 15 years and older, they are considered to have a disability if they have difficulty with any one of the six difficulty types.

other service providers. The percentage of the population in Chowan County with a disability (16.5%) is higher than both the state (13.3%) and national (12.9%) averages. This higher prevalence of disability in the county suggests a greater need for accessible healthcare services and support programs compared to North Carolina overall.

Table 8: Disability Status, 2022[9]

	Chowan County	North Carolina	United States
Population with a Disability	16.5%	13.3%	12.9%

Veteran Status

Military veterans often need special services and support, so it is important to collect data about them to be better able to meet their specific needs. In Chowan County, the percentage of the population (9.7%) that are veterans is higher compared to both the state (7.8%) and the national (6.2%) figures.

Table 9: Veteran Status, 2022[9]

	Chowan County	North Carolina	United States
Veterans	9.7%	7.8%	6.2%

Economic Indicators

In addition to demographic data, socioeconomic factors in the community such as income, poverty, and food scarcity play a significant role in identifying health-related needs. The median household income in Chowan County is $51,445, which is lower than both the state and the country.

Table 10: Median Household Income, 2023[8]

	Chowan County	North Carolina	United States
Median Household Income	$51,495	$64,316	$72,603

In 2023, over 15% of Chowan County households were below the federal poverty level (FPL). Poverty has a significant impact on health. Across the lifespan, people who live in impoverished communities have a higher risk of poor health outcomes, including mental illness, chronic diseases, higher mortality and lower life expectancy. Poverty is a concern across the lifespan; children who live in poverty are at risk for developmental delays, toxic stress and poor nutrition, and are likely to live in poverty as adults as well. Unmet social needs, including having low or no income, can also limit people's ability to access healthcare when they need it, or to provide for basic necessities needed to live healthy lives, such as safe housing or healthy food.

Table 11: Percent of Households Below the Federal Poverty Level, 2023[8]

	Chowan County	North Carolina	United States
Percent Below FPL	15.4 %	10.1 %	9.5 %

Similar to the percentage of households below the FPL, nearly a quarter of Chowan County households received Food Stamps/SNAP (Supplemental Nutrition Assistance Program) in 2022. This rate is over ten percentage points higher than the state and national averages, indicating a significantly higher level of food insecurity among county households.

Table 12: Households Receiving Food Stamps/SNAP, 2022[11,12]

	Chowan County	North Carolina	United States
Number of Households Receiving Food Stamps/SNAP	1,437	575,860	16,072,733
Total Number of Households	5,833	4,299,266	129,870,928
Percentage of Households receiving Food Stamps/SNAP	24.6 %	13.4 %	12.4 %

Chowan County has lower levels of higher education compared to state and national averages, with only 13.5% holding a bachelor's degree and 8.2% holding a graduate degree. The county also has a higher dropout rate, with 10% of residents not completing high school, and 6.2% with less than a ninth grade education. This data suggests that students in Chowan County face potential barriers to accessing or completing higher education.

[11] Source (for County): North Carolina Department of Health and Human Services. FNS Cases and Participants (March 2024). https://www.ncdhhs.gov/divisions/social-services/program-statistics-and-reviews/fns-caseload-statistics-reports. Note: county household estimate is from Esri (2023).

[12] Source (for North Carolina and United States): U.S. Census Bureau. "Food Stamps/Supplemental Nutrition Assistance Program (SNAP)." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2201,* 2022, https://data.census.gov/table/ACSST1Y2022.S2201?q=s2201&g=010XX00US_040XX00US37&moe=false. Accessed on April 1, 2024.

Table 13: Educational Attainment, 2020[13,14]

	Chowan County	North Carolina	United States
Less than 9th Grade	6.2%	6.0%	3.5%
Some High School/No Diploma	10.0%	5.5%	5.3%
High School Diploma	27.8%	21.2%	28.5%
GED/Alternative Credential	4.8%	4.3%	*[15]
Some College/No Diploma	19.2%	21.1%	14.6%
Associate's Degree	10.3%	9.9%	10.5%
Bachelor's Degree	13.5%	20.4%	23.4%
Graduate/ Professional Degree	8.2%	11.6%	14.2%

Chowan County's overall unemployment rate (4.3%) is slightly lower than the state but higher than the national average. Unemployment among residents aged 25 to 54 is notably higher (6.9%) compared to both North Carolina and the U.S, suggesting younger and middle-aged adults face challenges in securing work. However, unemployment rates among older age groups, 55 and older, are significantly lower than state and national figures.

Table 14: Unemployment, 2022[16,17]

	Chowan County	North Carolina	United States
Percentage unemployed ages 16 to 24	3.9%	12.4%	11.0%
Percentage unemployed ages 25 to 54	6.9%	4.7%	3.4%
Percentage unemployed ages 55 to 64	0.0%	3.3%	2.7%
Percentage unemployed ages 65 or more	0.0%	3.0%	2.9%
Total unemployment	4.3%	5.1%	3.9%

Chowan County has a lower overall uninsured rate (10.1%) compared to both North Carolina and the national average. However, nearly one-fifth of residents aged 19 to 34 are uninsured, exceeding state and

[13] Source (for County and North Carolina): U.S. Census Bureau. "Educational Attainment for the Population 25 Years and Over." *American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B15003,* 2020, https://data.census.gov/table/ACSDT5Y2020.B15003?q=b15003&g=040XX00US37,37$0500000&moe=false. Accessed on April 1, 2024.

[14] Source (for United States): U.S. Census Bureau. "Educational Attainment in the United States: 2022." Table 1, All Races. https://www.census.gov/data/tables/2022/demo/educational-attainment/cps-detailed-tables.html.

[15] U.S Totals combine GED with High School Diploma

[16] Source (for County and North Carolina): U.S. Census Bureau. "Employment Status." *American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2301,* 2022, https://data.census.gov/table/ACSST5Y2022.S2301?q=S2301&g=040XX00US37,37$0500000&moe=false. Accessed on April 1, 2024.

[17] Source (for United States): Federal Reserve Bank of Saint Louis. Federal Reserve Economic Data - FRED (March 2024). https://fred.stlouisfed.org/

national rates, which may highlight a gap in coverage for younger adults. Notably, the county has no uninsured residents under 18, reflecting strong coverage for children.

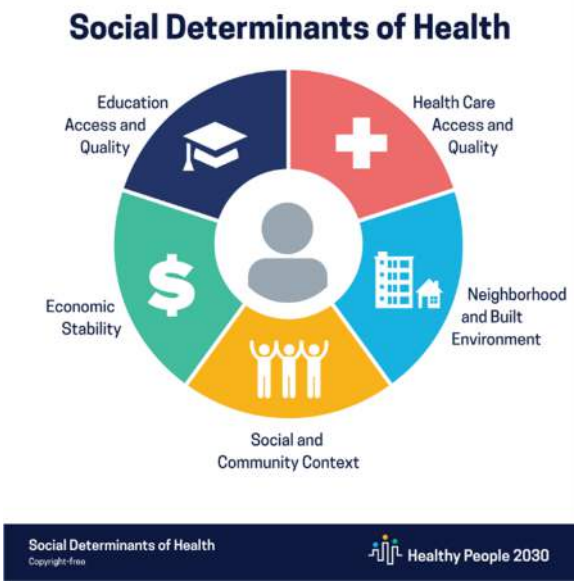
Table 15: Health Insurance Status, 2022[18]

	Chowan County	North Carolina	United States
Percentage uninsured ages 18 or below	0.0%	5.2%	5.4%
Percentage uninsured ages 19 to 34	18.8%	15.5%	13.6%
Percentage uninsured ages 35 to 64	10.3%	12.5%	9.9%
Total % Uninsured	10.1%	15.0%	12.0%

Social Determinants of Health

In addition to the considerations noted above, there are many other factors that can positively or negatively influence a person's health. The CHNA Leadership Team recognizes this and believes that, to portray a complete picture of the county's health status, it first must address the factors that impact community health. The Centers for Disease Control and Prevention (CDC) defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. According to the CDC's "Social Determinants of Health" from its *Healthy People 2030* public health priorities initiative, factors contributing to an individual's health status can include the following: healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality.

Figure 10: Social Determinants of Health



As seen in **Figure 10**, many of the factors that contribute to health are hard to control or societal in nature. As such, health and healthcare organizations need to consider many underlying factors that may impact an individual's health and not simply their current health conditions.

It is widely acknowledged that people with lower income, social status and levels of education find it harder to access healthcare services compared to people in the community with more resources. This lack of access is a factor that contributes to poor health status. Further, people in communities with fewer

[18] Source: U.S. Census Bureau. "Selected Characteristics of Health Insurance Coverage in the United States." *American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2701,* 2022, https://data.census.gov/table/ACSST5Y2022.S2701?q=s2701&g=010XX00US_040XX00US37,37$0500000&moe=false. Accessed on April 1, 2024.

resources may also experience high levels of stress, which also contributes to worse health outcomes, particularly related to mental or behavioral health.

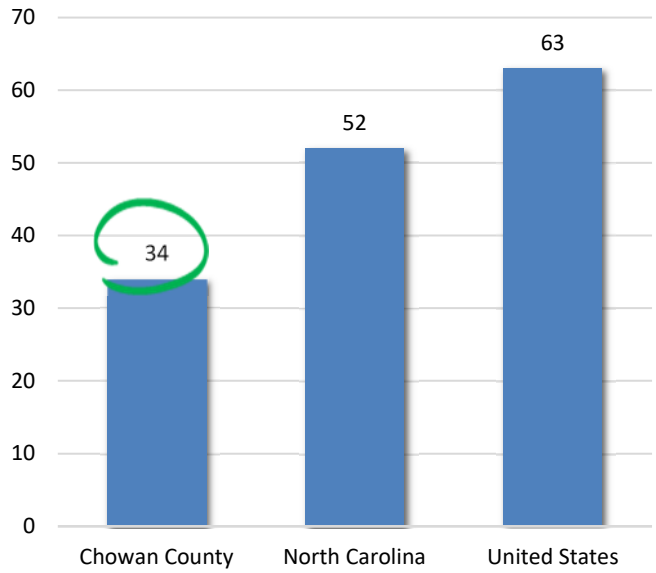
An analysis of the racial and geographic disparities that emerged in the information obtained and analyzed during this process is detailed below. The CHNA Leadership Team also collected new data via focus groups and surveys to ensure that residents and key community health leaders could provide input regarding the needs of their specific communities. This information will be presented in detail later in this report.

Disparities

Recognizing the diversity of Chowan County, as discussed above, the CHNA Stakeholders evaluated factors that may contribute to health disparities in its community. These included racial equity; racial segregation; financial barriers; nutrition; social, behavioral, and economic factors that influence health; and English language proficiency.

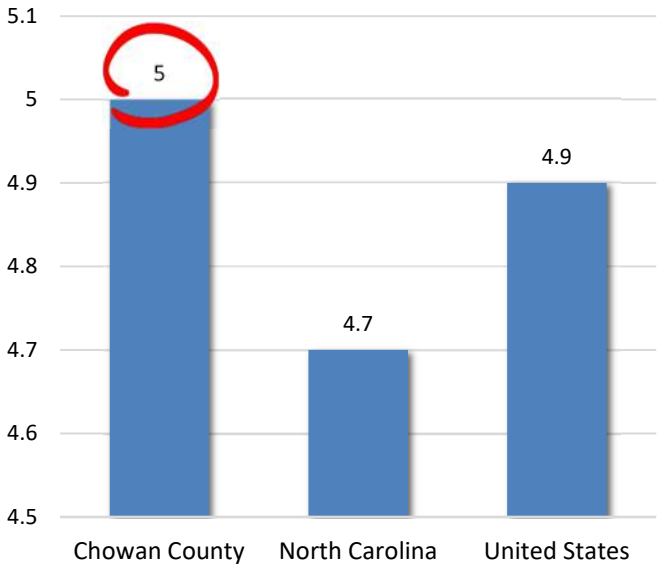
Residential segregation is measured by the index of dissimilarity, a demographic measure ranging from 0 to 100 that represents how evenly two demographic groups are distributed across a county's census tracts. Lower scores represent a higher level of integration. Compared to the state and the country, Chowan has less residential segregation, as seen in **Figure 11**.

Figure 11: Residential Segregation[5]



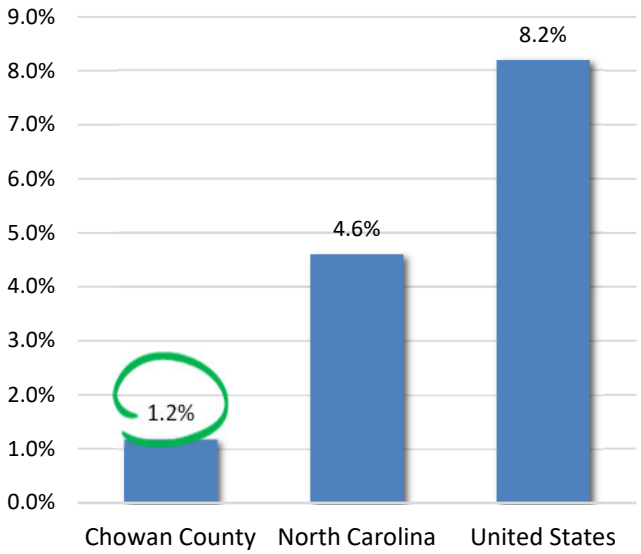
Income inequality is measured as the ratio of household income at the 80th percentile to household income at the 20th percentile. Communities with greater income inequality may have worse outcomes on a variety of metrics, including mortality, poor health, sense of community, and social support. As seen in **Figure 12**, there is a higher rate of income inequality compared to the state and country.

Figure 12: Income Inequality Ratio[5]



People with limited English proficiency (LEP) may face challenges accessing care and resources that fluent English speakers do not. Language barriers may make it hard to access transportation, medical, and social services as well as limit opportunities for education and employment. Importantly, LEP community members may not understand critical public health and safety notifications, such as safety-focused communications during the COVID-19 pandemic. Significantly fewer residents in Chowan have limited English proficiency compared to rates in North Carolina and the United States overall, as seen in **Figure 13**.

Figure 13: Percent of Population with Limited English Proficiency[9]

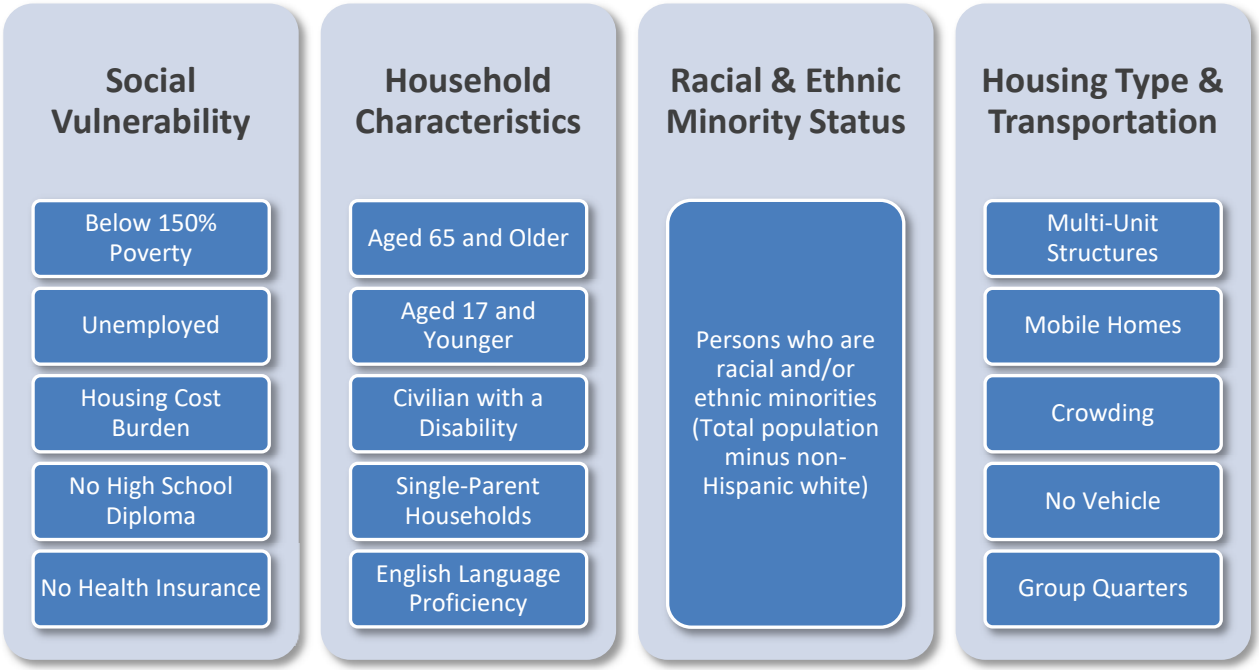


Social Vulnerability Index

One resource that can help show variation and disparities between geographic areas is the Social Vulnerability Index (SVI), which was developed by the CDC and the Agency for Toxic Substances and Disease Registry (ATSDR). Social vulnerability refers to negative effects communities may experience due to external stresses that impact human health, like natural or human-caused disasters, or disease outbreaks. Socially vulnerable populations are at especially high risk during public health emergencies.

The SVI uses 16 U.S. Census variables to help local officials identify communities that may need support before, during, or after a public health emergency.[19] Communities with a higher SVI score are generally at a higher risk for poor health outcomes. Instead of relying on public health data alone, the SVI accounts for underlying economic and structural conditions that affect overall health, including SDoH. SVI scores are calculated at the census tract level and based on U.S. Census variables across four related themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type/transportation. **Figure 14** outlines the variables used to calculate SVI scores.

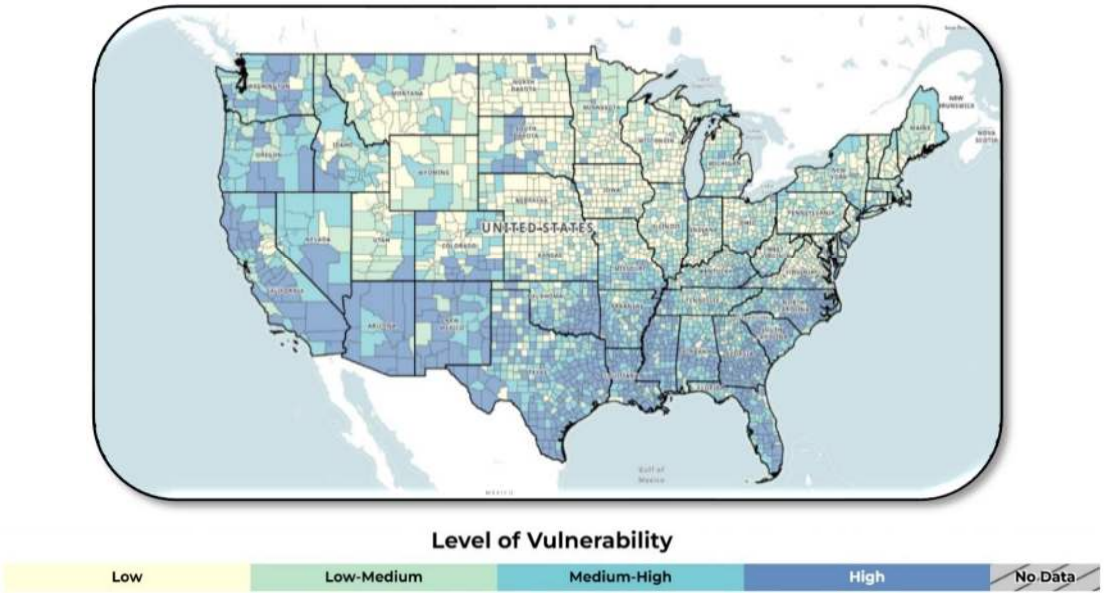
Figure 14: SVI Variables



The United States SVI by county is shown in **Figure 15** below. As shown, a lot of variation exists across the country, and even within individual states.

[19] CDC/ATSDR Social Vulnerability Index (SVI). Retrieved from https://www.atsdr.cdc.gov/placeandhealth/svi/index.html.

Figure 15: United States SVI by County, 2022



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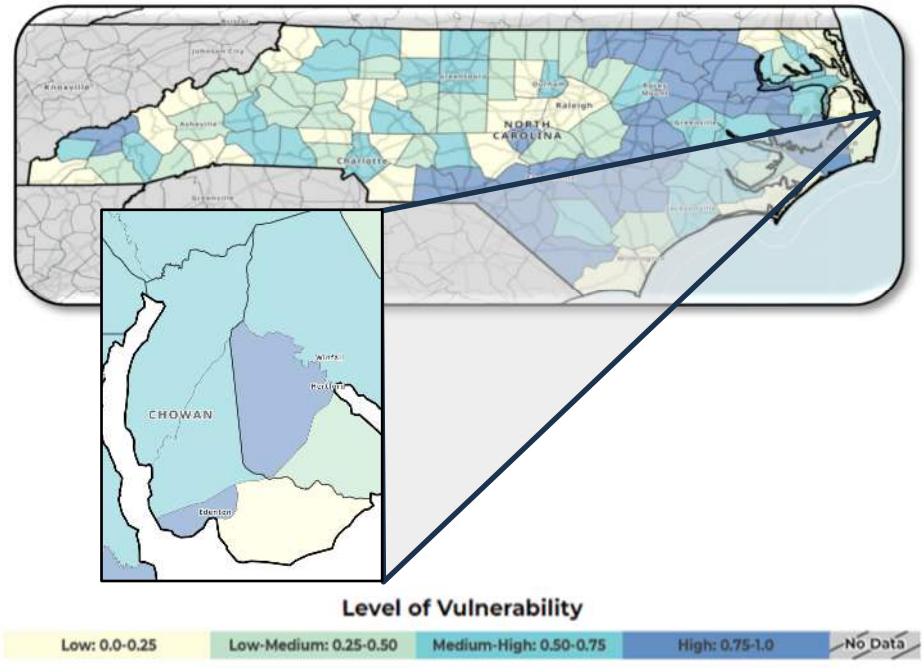
The 2022 SVI scores for Chowan County are shown in **Figure 16** below. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), and these scores show a relative comparison with other counties and census tracts in North Carolina. The vulnerability of Chowan County overall is slightly higher than average compared to the state. Levels of vulnerability are variable across the county with the average being 0.51.

Figure 16: Chowan County SVI by Census Tract, 2022



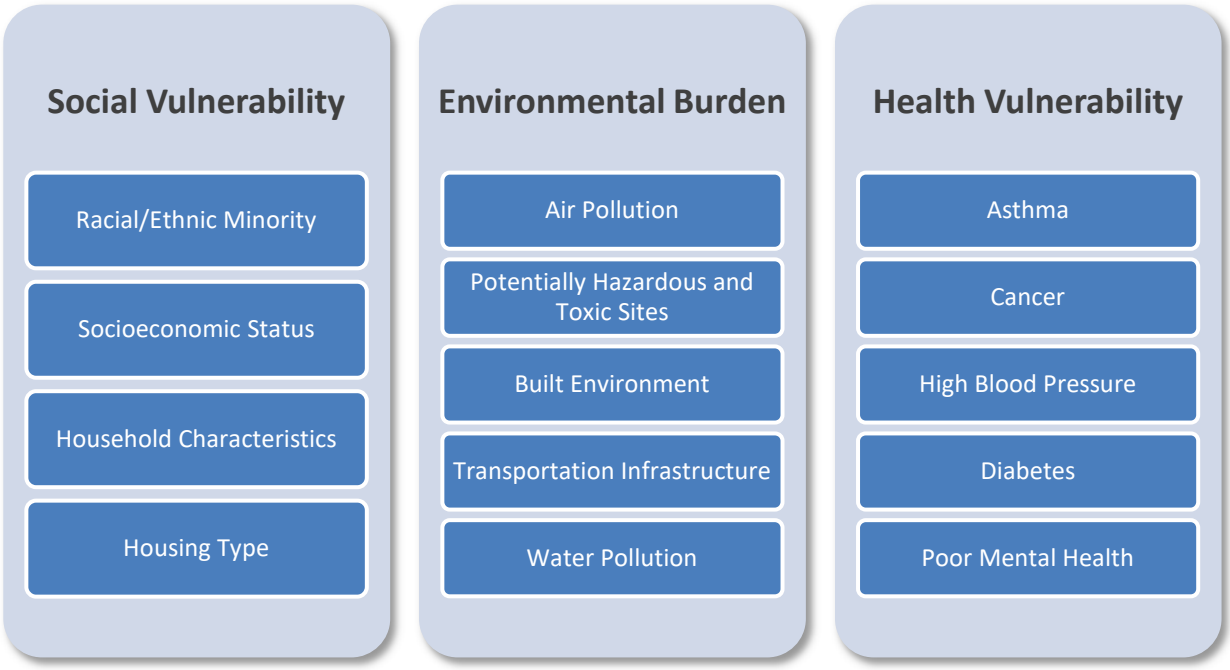
Environmental Justice Index

Environmental justice means the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment. It aims to protect everyone from disproportionate health and environmental risks, address cumulative impacts and systemic barriers, and provide equitable access to a healthy and sustainable environment for all activities and practices.[20]

The CDC/ATSDR EJI is a database that ranks the impact of environmental injustice on health. It uses data from the U.S. Census Bureau, the U.S. Environmental Protection Agency, the U.S. Mine Safety and Health Administration, and the U.S. Centers for Disease Control and Prevention. The Index scores environmental burden and injustice at the census tract level in the U.S. based on multiple social, environmental, and health factors.

Over time, communities with a higher EJI score are generally shown to experience more severe impacts from environmental burden than communities in other census tracts. **Figure 17** outlines the variables used to calculate EJI scores.

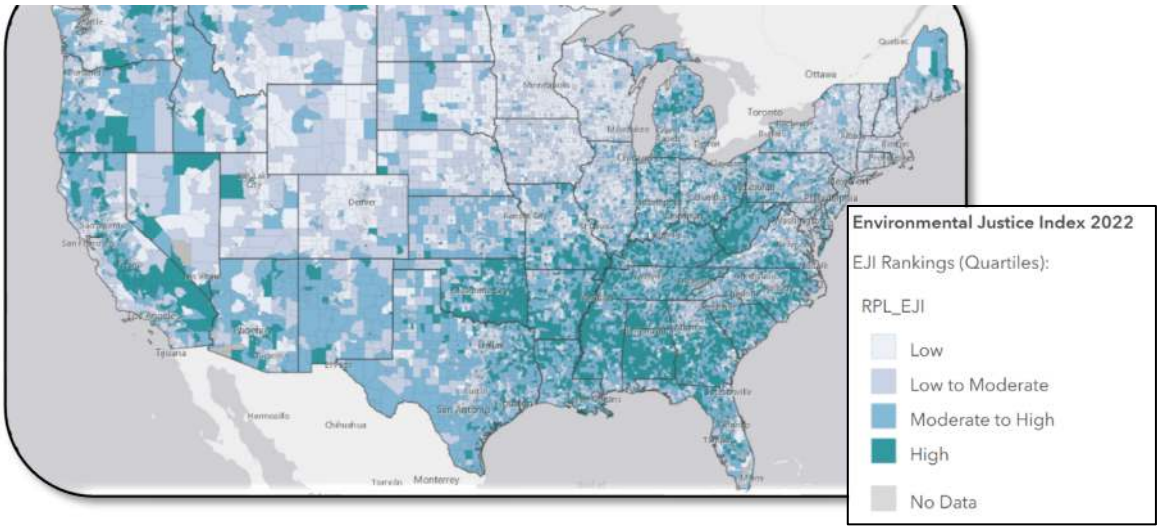
Figure 17: EJI Variables



The United States EJI by county is shown in **Figure 18** below. As shown, a lot of variation exists across the country, and even within individual states.

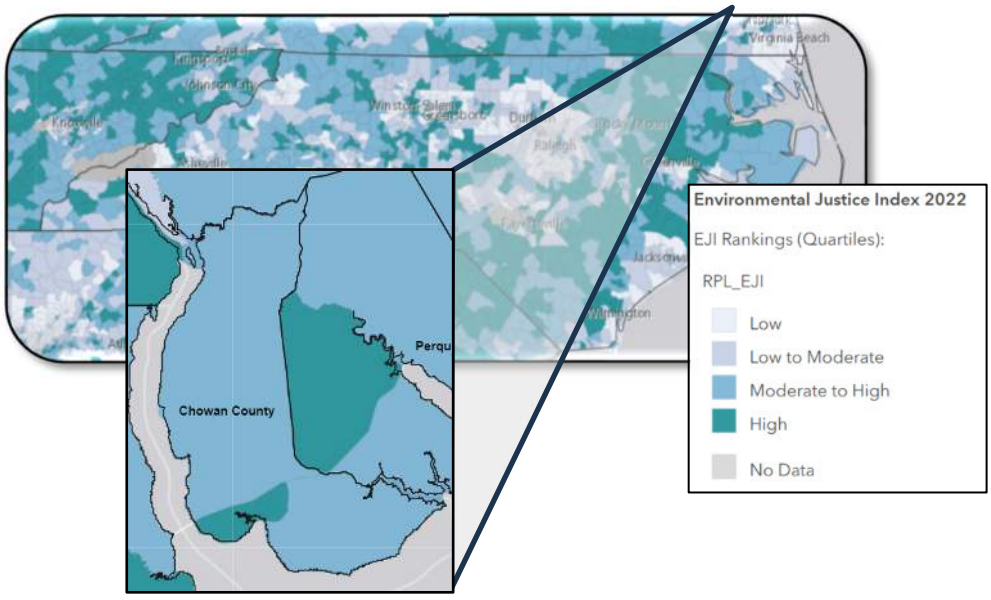
[20] U.S. Environmental Protection Agency (2024). Retrieved from https://www.epa.gov/environmentaljustice

Figure 18: United States EJI by Census Tract, 2022



The 2022 EJI scores for Chowan County are shown in **Figure 19** below. EJI scores use percentile ranking which represents the proportion of census tracts that experience environmental burden relative to other census tracts in North Carolina. The index ranges from 0-1 with higher scores indicating more environmental burden compared to other census tracts. Levels of environmental burden are variable across the county with the average being 0.67.

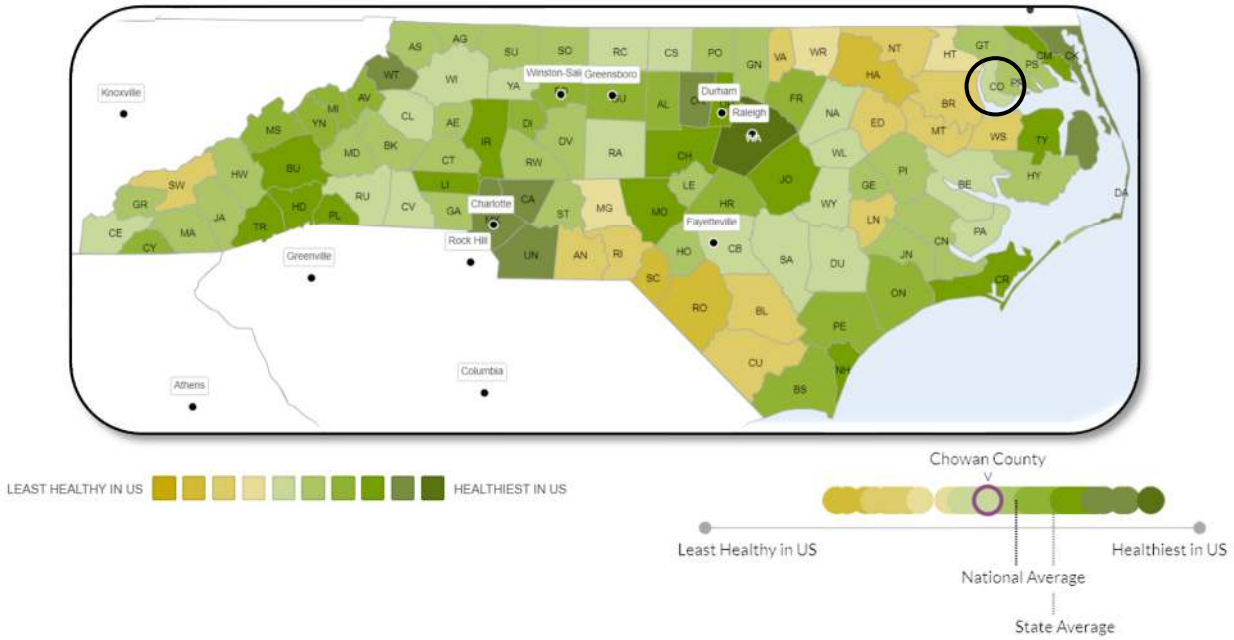
Figure 19: Chowan County EJI by Census Tract, 2022



Health Outcome and Health Factor Rankings

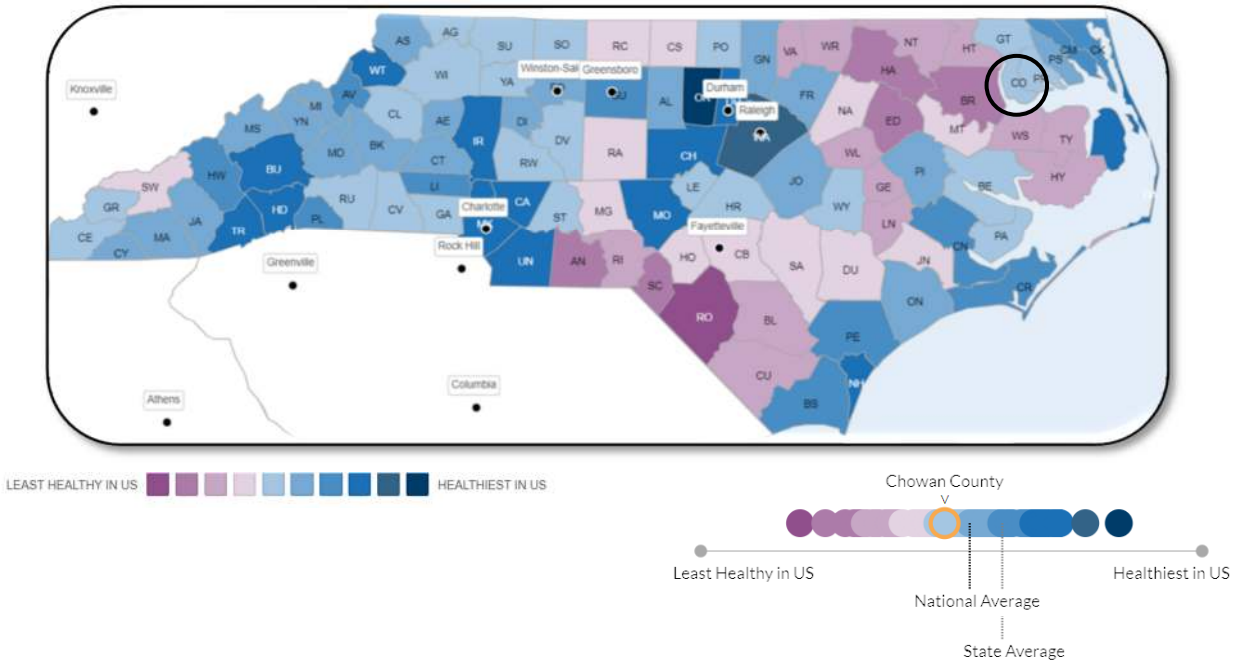
CHNA Stakeholders also reviewed and analyzed data from the Robert Wood Johnson Foundation and the University of Wisconsin County Health Rankings for the year 2024. The Health Outcomes measure looks at how long people in a community live and how physically and mentally healthy they are. These categories are discussed further in **Appendices 2** and **3**. Chowan is behind the average for the country and the state, which means people there may be less healthy on average.

Figure 20: State Health Outcomes Rating Map[5]



The Health Factors measure looks at variables that affect people's health including health behaviors, clinical care, social & economic factors, and the physical environment they live in. More details about these indicators can be found in **Appendices 2** and **3**. Similarly to the Health Outcome measure, Chowan falls behind the average for the country and the state.

Figure 21: State Health Factors Rating Map[5]



CHAPTER 3 | PRIORITY NEED AREAS

This chapter describes each of the four priority areas in more detail and discusses the data that supports each priority. The information in this section includes context and national perspective, secondary data findings, and primary data findings (including the community member survey and focus groups). As previously described in **Chapter 1: Methodology**, secondary data was primarily sourced using the North Carolina Data Portal. For additional descriptive information on data sources and methodology, please see **Appendix 2**.

On August 28, 2024, community leaders and representatives from various organizations gathered at the Chowan Cooperative Extension in Edenton, North Carolina to participate in a prioritization meeting for the 2025 CHNA. Participants included representatives from Bertie County Schools, Albemarle Regional Health Services, Edenton Chowan Chamber, Edenton Chowan Recreation Department, Albemarle Pregnancy Resource Center, ECU Health, Northeastern NC Partnership for Public Health, Roanoke Chowan CHC, Chowan/Perquimans Smart Start, and the Department of Social Services.

A multi-voting technique was employed to determine the priority areas. After thorough discussion to compile a list of potential priorities, each participant voted on their top three choices. The votes were tallied, and further discussion took place to ensure the selected priorities were feasible for the community to address.

As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by the Chowan County leaders in health improvement plans guided by this CHNA. As noted in Chapter 1, CHNA Stakeholders leadership considered the following factors when determining the priority needs reported in this assessment:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Estimated feasability and effectiveness of possible interventions;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

PRIORITY NEED: ACCESS TO CARE

Context and National Perspective

Access to care means patients are able to get high quality, affordable healthcare in a timely fashion to achieve the best possible health outcomes. It includes several components, including coverage (i.e. insurance), a physical location where care is provided, the ability to receive timely care, and enough providers in the workforce. The CHNA Steering Committee identified access to care as a high priority need for residents of Chowan County

From a national perspective, according to Healthy People 2030, approximately one in ten people in the U.S. do not have health insurance, which means they are less likely to have a primary care provider or to be able to afford the services or medications they need.[21] Access is a challenge even for those who are insured.[22]

The availability and distribution of health providers in the U.S. contributes to healthcare access challenges. According to the Association of American Medical Colleges (AAMC), there is estimated to be a shortage of 13,500 to 86,000 physicians in the U.S. by 2036, which will impact both primary and specialty care.[23] Access issues are anticipated to increase in coming years. Growing shortages of both nurses and doctors are being driven by several factors, including population growth, the aging U.S. population requiring higher levels of care, provider burnout (physical, mental and emotional exhaustion) made worse by the COVID-19 pandemic, and a lack of clinical training programs and faculty – particularly for nurses.[24] The aging of the current physician workforce is also driving anticipated personnel shortages. In North Carolina, 30.6% of actively practicing physicians were over the age of 60 in 2020.[25] Access is also impacted by the number of actively practicing physicians overall. In 2020, there were just 9,211 primary care physicians in North Carolina, with 27,650 physicians actively practicing overall.[26]

The ability to access healthcare is not evenly distributed across groups in the population. Groups who may have trouble accessing care include the chronically ill and disabled (particularly those with mental health or substance use disorders), low-income or homeless individuals, people located in certain geographical areas (rural areas; tribal communities), members of the LGBTQIA+ community, and certain age groups – particularly the very young or the very old.[27] In addition, individuals with limited English proficiency (LEP) face barriers to accessing care, experience lower quality care and have worse outcomes for health concerns. LEP is known to worsen health disparities and can make challenges related to other SDoH (access to housing, employment, etc.) worse.[28] Both primary and secondary data resources analyzed for this report highlight the need for greater access to health services within Chowan County.

[21] Source: U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion (2023). *Healthy People 2030: Health Care Access and Quality*. Retrieved September 9th, 2024 from https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality.

[22] Source: Phillips, K.A., Marshall, D.A., Adler, L., Figueroa, J., Haeder, S.F., Hamad, R., Hernandez, I., Moucheraud, C., Nikpay, S. (2023). Ten health policy challenges for the next ten years. *Health Affairs Scholar*. Retrieved from: https://academic.oup.com/healthaffairsscholar/article/1/1/qxad010/7203673.

[23] Source: Association of American Medical Colleges (AAMC) (2024). *The complexities of physician supply and demand: Projections from 2021 to 2036*. Retrieved from: https://www.aamc.org/media/75236/download?attachment .

[24] Source: Association of American Medical Colleges (AAMC) (2024). *State of US Nursing Report 2024*. Retrieved, from https://www.incrediblehealth.com/wp-content/uploads/2024/03/2024-Incredible-Health-State-of-US-Nursing-Report.pdf .

[25] Source: AAMC (2021). *North Carolina physician workforce profile*. Retrieved September 9, 2024, from: https://www.aamc.org/media/58286/download.

[26] Source: AAMC (2021). *North Carolina physician workforce profile*. Retrieved September 9, 2024, from: https://www.aamc.org/media/58286/download

[27] Source: Joszt, L. (2018). 5 Vulnerable Populations in Healthcare. *American Journal of Managed Care*. Retrieved September 9, 2024 from https://www.ajmc.com/view/5-vulnerable-populations-in-healthcare.

[28] Source: Espinoza, J. and Derrington, S. (2021). How Should Clinicians Respond to Language Barriers That Exacerbate Health Inequity? *AMA Journal of Ethics*. Retrieved from: https://journalofethics.ama-assn.org/article/how-should-clinicians-respond-language-barriers-exacerbate-health-inequity/2021-02.

Secondary Data Findings

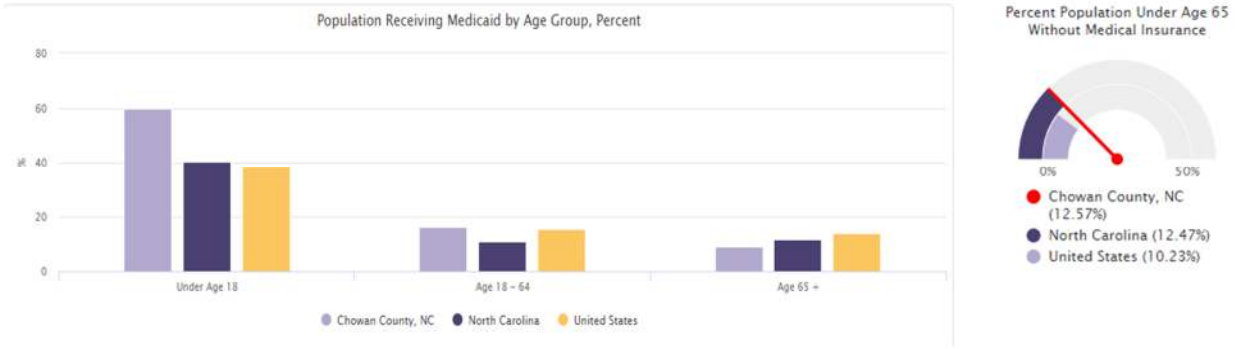
Chowan County faces several challenges related to healthcare access and availability of providers. The county has significantly lower rates of several types of healthcare providers compared to state averages. There are only 14.6 dental providers per 100,000 population, less than half the state rate of 31.5. However, the county does show strength in primary care access, with 138.6 providers per 100,000 population, higher than both state (101.1) and national (112.4) averages.

Table 16: Access to Care Indicators

Indicator	Chowan County	North Carolina	United States
Dental Providers (Rate per 100,000 Population)	14.6	31.5	39.1
Primary Care Providers (Rate per 100,000 Population)	138.6	101.1	112.4
Percentage of Population Living in an Area Affected by a Dental Care HPSA	23.7%	34%	18%
Percent of Insured Population Receiving Medicaid	25.4%	20%	22%
Rate of Federally Qualified Health Centers (Rate per 100,000 Population)	7.3	4.0	3.5

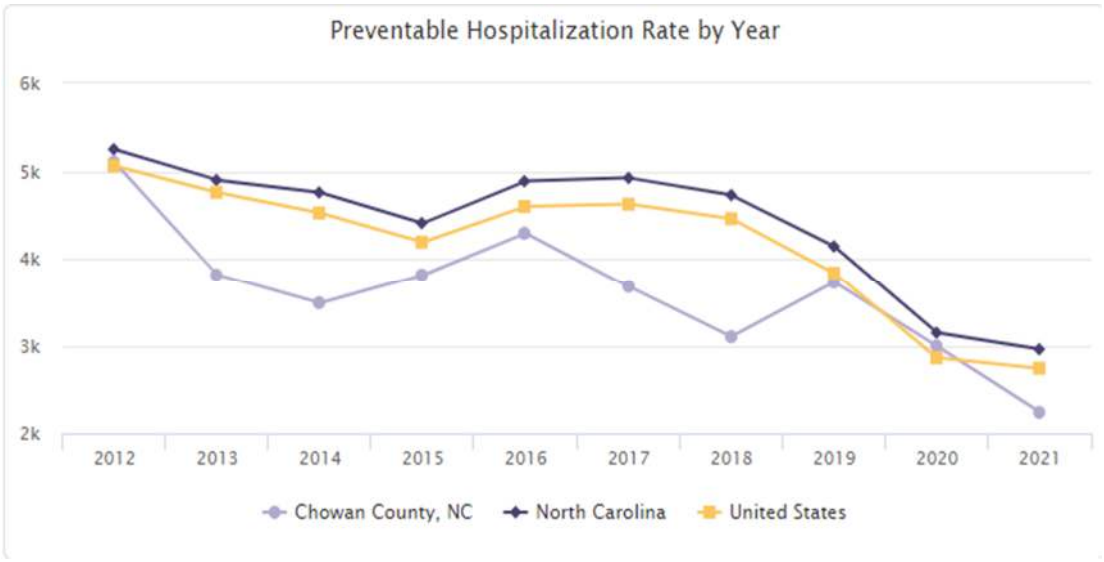
As identified in the table above, a higher percentage of the insured population in Chowan County receives Medicaid compared to the state or nation. In fact, across several age groups, Chowan County maintains a higher percentage of individuals receiving Medicaid compared to the state, as demonstrated in **Figure 22** below. These differences are particularly pronounced for those under age 18. While Medicaid coverage can support access to care, gaps in access can persist, particularly for specific provider types. Additionally, these residents may face greater difficulty finding a provider that accepts Medicaid compared to private insurance. In addition, nearly 12.6% of the population under age 65 in the county is without any type of medical insurance, a higher percentage compared to the state and nation. This suggests additional barriers to accessing care may exist in the community.

Figure 22: Population Receiving Medicaid by Age Group and Under Age 65 Uninsured



Quality of care metrics show some positive trends. The county's rate of preventable hospitalizations (2,239 per 100,000 beneficiaries) is lower than both state (2,957) and national (2,752) averages. The 30-day hospital readmission rate of 14% is also better than the state average of 18%.

Figure 23: Preventable Hospital Stays



However, there are racial disparities in preventable hospital stays, with rates of 1,391 per 100,000 for Black Medicare beneficiaries compared to 2,799 for White beneficiaries.

Figure 24: Preventable Stays by Race and Ethnicity

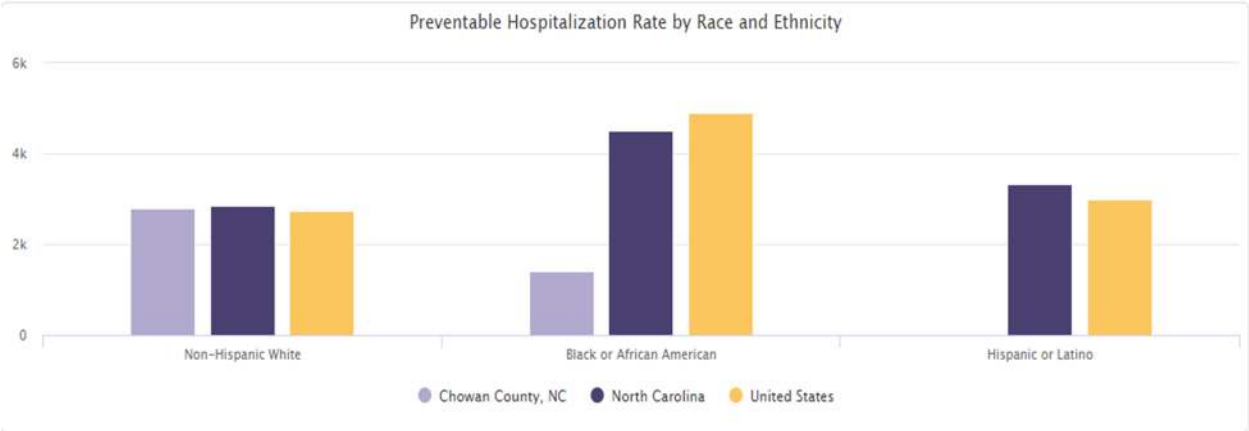


Table 17: Preventable Hospital Stays by Race/Ethnicity

Preventable Hospital Stays (per 100,000 Medicare Beneficiaries)	Chowan County Rate
Preventable Hospital Stays	2,239
Black or African American Medicare Beneficiaries	1,391
White Medicare Beneficiaries	2,799

Transportation also impacts healthcare access, with 10.3% of households lacking a motor vehicle, nearly double the state average of 5.4%.

Table 18: Transportation Indicators

Indicator	Chowan County	North Carolina	United States
Households with No Motor Vehicle, Percent	10.3%	5.4%	8.3%
Percent Population Using Public Transit for Commute to Work	1.0%	0.8%	3.8%

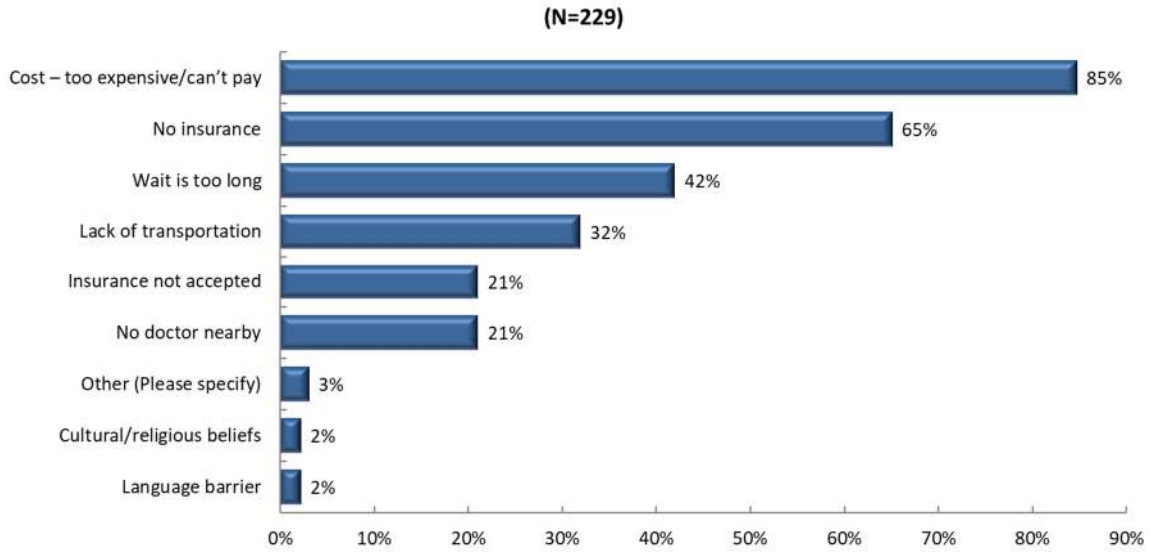
For additional detail on secondary data findings, see **Appendix 3**.

Primary Data Findings – Community Member Web Survey

Nearly 230 Chowan residents responded to the web-based survey. Respondents identified several access to care needs in Chowan County. In the survey, community members were asked to identify the top barriers to receiving healthcare. Cost (85%), no insurance (65%), and long wait times (42%) were the top

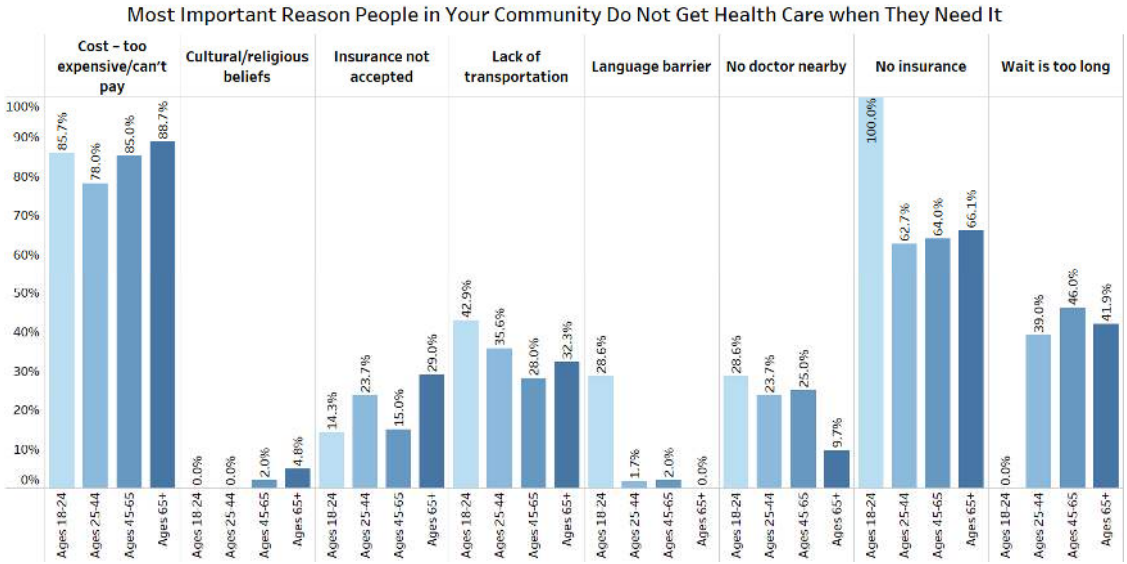
three identified reasons why people in the community are not getting care when they need it. Another third of responses identified lack of transportation and a fifth of responses indicated a lack of nearby doctors as the top barriers to care.

Figure 25: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three.



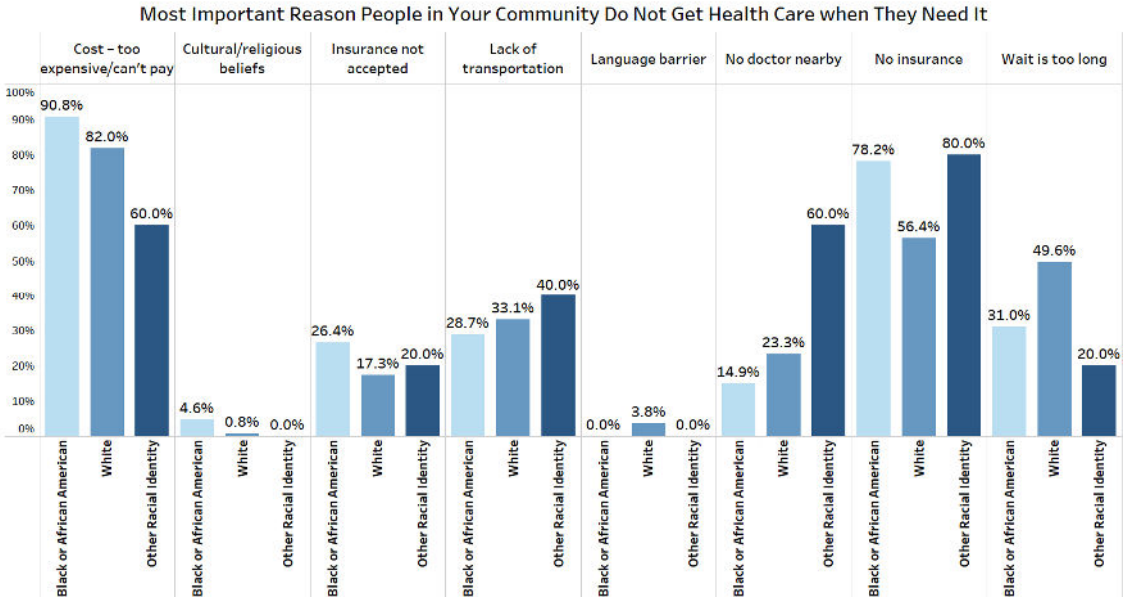
When these data were examined by age group, the age group that most frequently identified lack of insurance (100%) and lack of transportation (42%) as top barriers was those ages 18 to 24. Cost as a barrier was identified slightly more frequently by respondents aged 65 and older compared to all other age groups.

Figure 26: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by age)



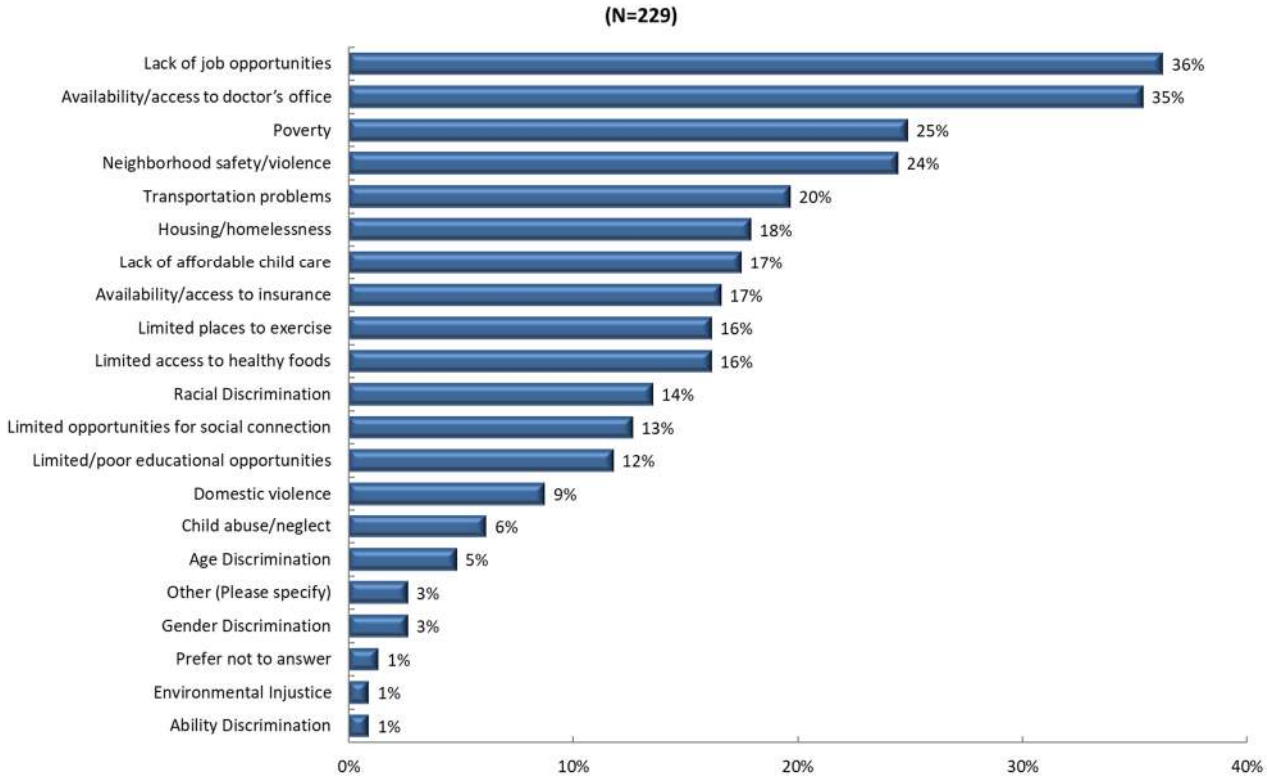
Responses also differed by race. Nearly 91% of respondents identifying as Black or African American noted cost as a top barrier to healthcare compared to 82% of respondents identifying as White and 60% of respondents identifying as the "Other" race category, including those who identified as American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, and/or those who selected more than one race or "other." Similarly, lack of insurance was more frequently selected by respondents identifying as Black or African American (79%) and respondents identifying as all other races (80%) than those identifying as White (56%).

Figure 27: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by race)



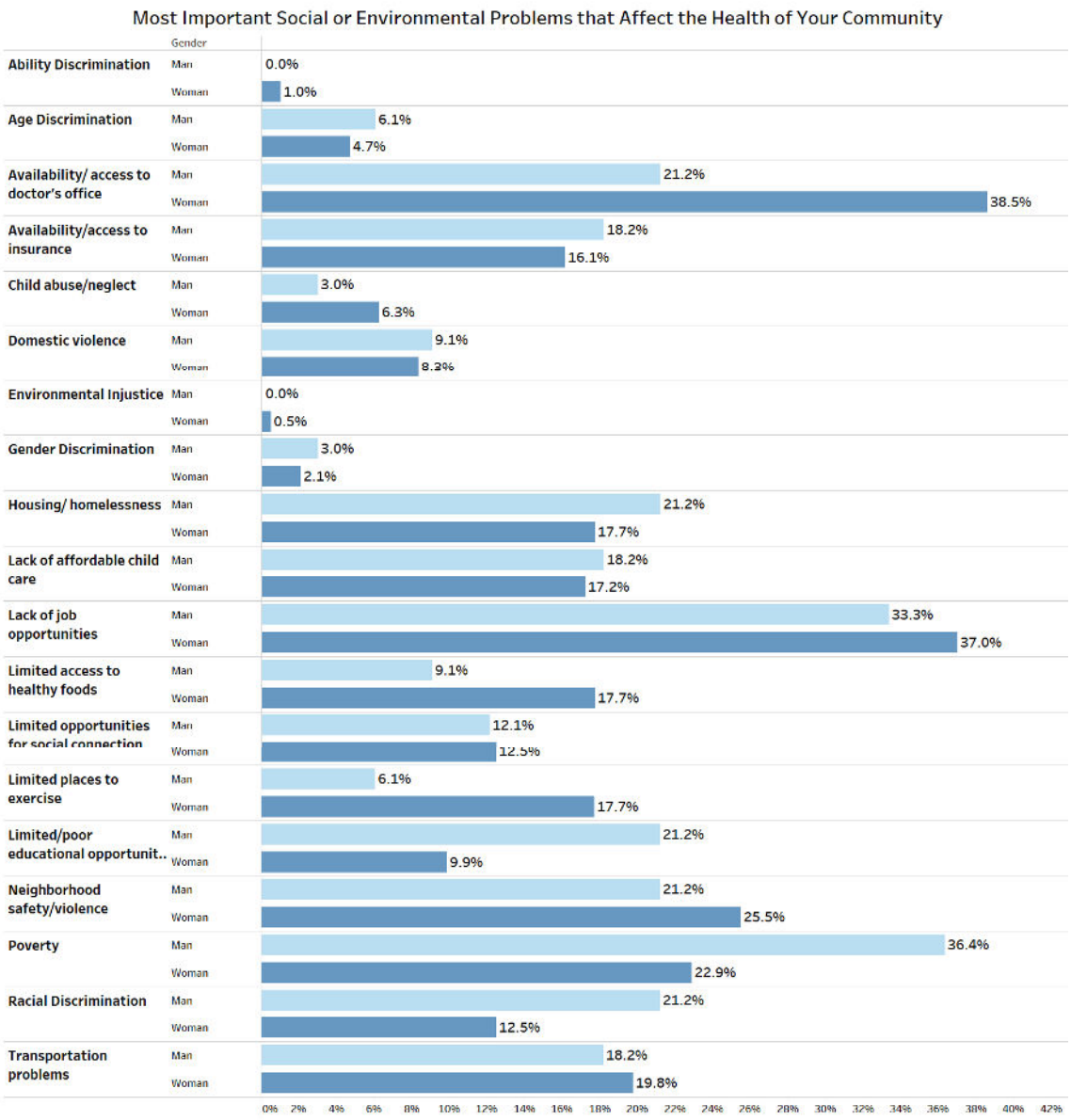
Community members were also asked to identify the most important social or environmental problems that affect the health of the community. As displayed in the figure below, the second most frequent problem identified was the availability or access to doctor's offices (35%), again highlighting access to care challenges within the community. Transportation (20%) was identified as the fifth most frequent social or environmental problem that affects the health of the community.

Figure 28: What are the three most important social or environmental problems that affect the health of your community? Please select up to three.



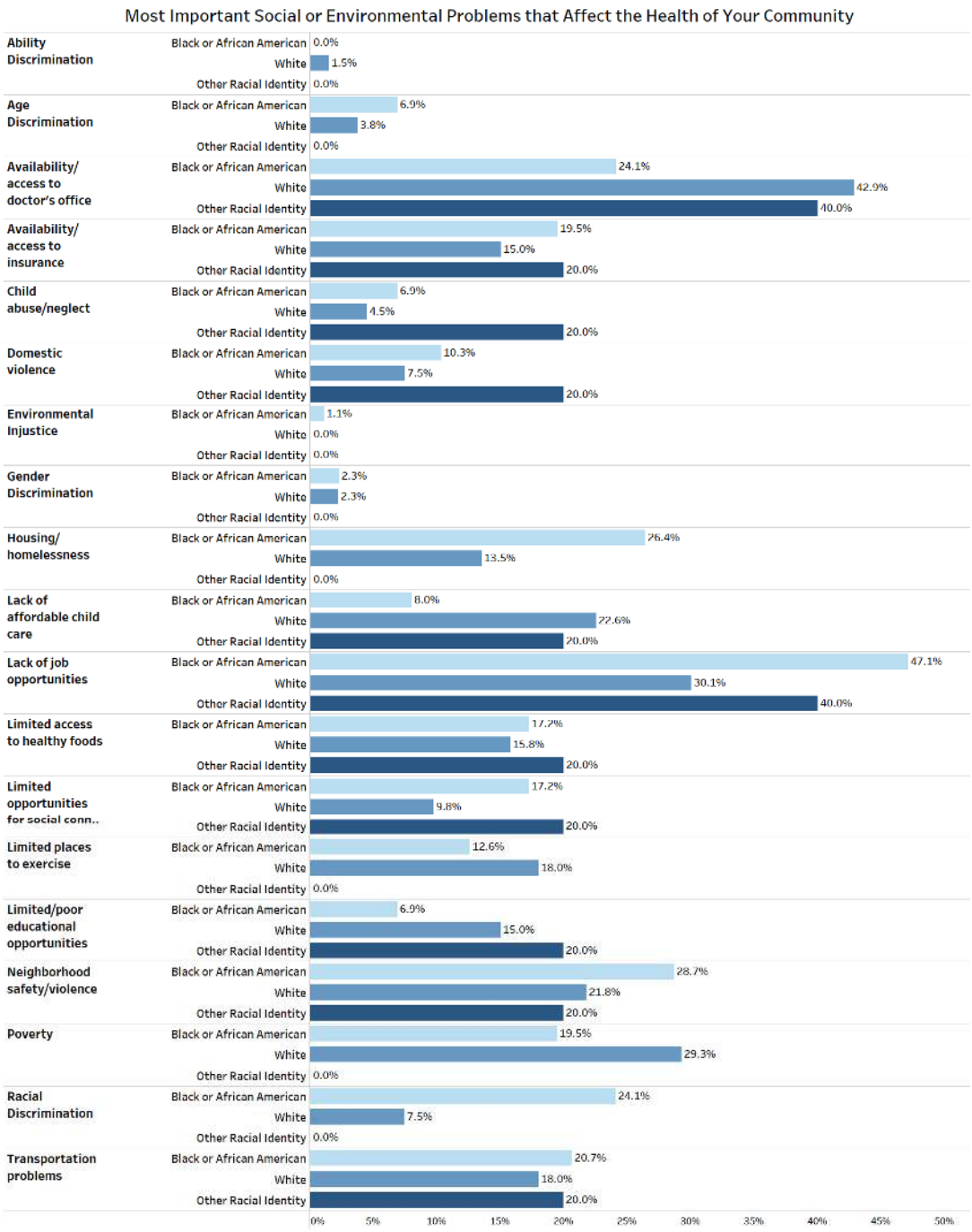
Notably, men and women differed in their responses. More women identified availability and access to doctor's offices as a top social and environmental problem (39% for women vs. 21% for men). Women were also slightly more likely than men to identify transportation problems as an important social and environmental problem (20% compared to 18%).

Figure 29: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)



Responses also varied by race. Those identifying as White were more likely to cite availability of doctor's offices than all other races (43% vs. 24% for Black or African Americans and 40% for all other races). Black or African American respondents and those identifying as all other races were similarly likely to select access to insurance (Black/African American: 20%; All other races: 20%) and transportation problems (Black/African American: 21%; All other races: 20%) compared to respondents identifying as White (15% and 18%, respectively).

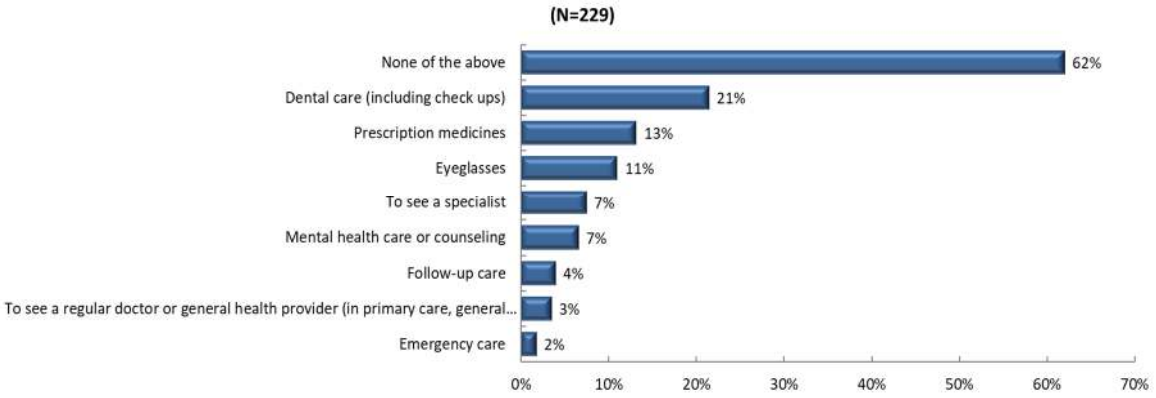
Figure 30: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)



Chowan County community member respondents were also asked if there was a time during the past 12 months that they needed specific medical care or health-related items and were unable to receive it due to the cost. As displayed in the figure below, one-fifth of respondents indicated affordability barriers

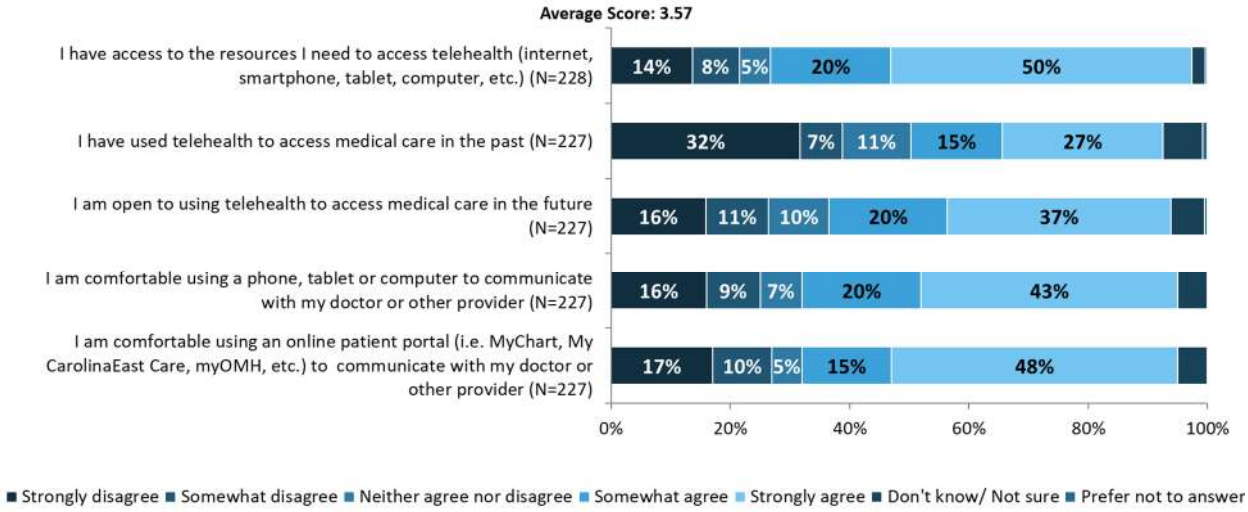
prevented them from accessing dental care. The second highest response identified prescription medicine (13%) access was impacted due to lack of affordability, followed by eyeglasses (11%).

Figure 31: During the past 12 months, was there any time when you needed any of the following, but didn't get it because you couldn't afford it?



Respondents were also asked to agree or disagree with statements related to telehealth, including statements about having access to the necessary resources to use telehealth, past experience using telehealth, and comfort level in using technology or patient portals to communicate with health professionals. While 50% of respondents strongly agreed to having access to the necessary resources and 48% of respondents strongly agreed to being comfortable using an online patient portal, only 37% strongly agreed to being open to using telehealth to access medical care in the future.

Figure 32: How much do you agree or disagree with the following statements about telehealth? Telehealth means connecting virtually with a medical provider using a smartphone, tablet or computer.



For additional detail on survey findings, see **Appendix 5**.

Primary Data Findings – Focus Groups

Similar to other data findings, access to care concerns emerged as a major theme during both focus groups conducted in Chowan County. Participants across both groups discussed several barriers preventing residents from accessing healthcare services. Long wait times and lack of available appointments were highlighted as significant obstacles. The groups also emphasized challenges with retaining medical providers in the area, noting this contributes to reduced availability of medical care. Transportation to and from medical services was identified as a particular challenge, especially for residents in rural areas of the county. The high cost of care was also cited as a major barrier to accessing needed healthcare services.

The Edenton Lion's Club focus group participants specifically discussed difficulties navigating the complicated healthcare system as an additional barrier. The Chowan County Senior Center group provided more context around transportation challenges, noting that lack of transportation in rural parts of the county serves as a barrier not only to healthcare but also to meeting other basic needs, such as employment or food.

When discussing potential solutions, focus group participants suggested that local leaders could host more health fairs and panel discussions at the hospital to help improve community understanding of available healthcare services. They also emphasized the importance of community members staying informed about healthcare resources and following up when they have complaints about services.

For a more detailed description of focus group findings, see **Appendix 5**.

PRIORITY NEED: HEALTHY LIVING

Context and National Perspective

A healthy lifestyle is critical for maintaining one's physical health – the monitoring and maintenance of the human body. There are many factors involved in an individual's overall physical health status, such as disease prevention, timely access to primary and preventive healthcare, exercise, and maintaining a healthy diet. Living a healthy lifestyle is not a one size fits all approach, and many individuals choose to incorporate different healthy behaviors at different times, slowly building more and more healthy habits. The CDC recommends multiple healthy behaviors that can be integrated for healthier living, such as getting enough sleep, moving more and sitting less, limiting alcohol intake, and eating healthy food. Sleep needs can vary from person to person; however, the CDC recommends that an adult gets at least 7 hours of regular sleep. Another healthy behavior that can be incorporated is movement, starting at least 20 minutes a day with some light activity, such as walking or dancing. [29]

Another form of healthy living and disease prevention is taking a proactive role in preventative health care, which can often start with one's diet. According to experts, losing just 5-10 % of one's current weight can lower the risk for multiple chronic conditions such as diabetes, arthritis, cancer, and high blood pressure. When speaking with a primary doctor, or a nutritionist about creating a healthy diet, it is

[29] Source: Centers for Disease Control and Prevention. (2023). *Taking care of your body.* Retrieved October 3, 2024 from: https://www.cdc.gov/howrightnow/taking-care/index.html

important to have some information prepared, such as food allergies, health goals, the types of medication taken, and any other health concerns that one may have. When considering a diet for weight loss, ensuring that the diet is both filling and matches a daily activity level is key. When implementing a new diet, there are a few recommendations for success. First, eating when hungry and stopping when full is key, and choosing to eat filling foods that one might enjoy, such as one's favorite vegetables, fruit, or lean protein. Secondly, seasoning the food with different herbs and spices, and reducing the amount of salt and sugar in a recipe if possible. Finally, drinking enough water throughout the day helps with digestion and other body functions.[30]

When considering healthy living in rural communities, research has shown that just one in four adults in rural areas are consistently performing at least four healthy behaviors.[31] Rural areas often have fewer or less diverse grocery stores, with many relying on smaller general stores, which may not always have fresh produce and meat. Additionally, these areas may also not have safe places to walk or exercise, such as sidewalks, recreation centers, or parks.

In North Carolina, over half (52%) of adults do not get at least two and a half hours of moderate exercise per week, and over 70% don't meet weekly muscle strengthening recommendations. However, 84% of adults eat at least one vegetable a day, and over 60% eat fruit at least once a day.[32] North Carolina's Department of Health and Human Services has implemented several workshops and classes that individuals can take to learn healthy habits, such as Living Healthy workshops. Additionally, several nonprofits have implemented programs to help individuals learn healthy behaviors, and North Carolina also has an extensive WIC program, as well as the NCCARE360 program, which seeks to connect individuals with all necessary resources for living a healthier life.

Secondary Data Findings

Secondary data indicate that Chowan County residents face several challenges related to healthy living, particularly regarding physical activity and chronic disease. Just 19% of the population has access to exercise opportunities, dramatically lower than both state (73%) and national (84%) averages. The county's walkability index score of 6 falls below the state average of 7, further limiting opportunities for physical activity. This lack of access may contribute to the higher rate of physical inactivity in the county, with 26.8% of adults reporting being physically inactive compared to the state average of 21.6%.

[30] Source: U.S. Department of Veterans Affairs. (2023). *Healthy living overview.* Retrieved October 10th, 2024 from https://www.prevention.va.gov/Healthy_Living/index.asp

[31] Source: CDC (n.d.) *Health behaviors in rural America.* Retrieved October 3, 2024 from https://www.cdc.gov/rural-health/php/public-health-strategy/public-health-considerations-for-health-behaviors-in-rural-america.html#:~:text=People%20living%20in%20rural%20areas,and%20getting%20regular%20health%20screenings.

[32] Source: Eat Smart Move More North Carolina. (2017). *The roles of nutrition and physical activity in Chronic Disease in North Carolina.* Retrieved October 23, 2024 from https://www.communityclinicalconnections.com/wp-content/themes/cccph/assets/downloads/2024/07/factsheets/Physical/CCCPHB_FactSheet_HealthyEating-0724.pdf

Table 19: Health Behavior and Food Security Indicators

Indicator	Chowan County	North Carolina	United States
% Adults Reporting Currently Smoking	20.1%	15.0	-
% Physically Inactive	26.8	21.6	-
Recreation and Fitness Facility Establishments, (Rate per 100,000 Population)	N/A	13.1	14.7
Walkability Index Score	6	7	10
Percentage of Population with Access to Exercise Opportunities	19%	73%	84%
Food Insecurity Rate	14%	11%	10%
Child Food Insecurity Rate	26%	15%	13%
Percent Low Income Population with Low Food Access	41%	21%	19%
Food Environment - Fast Food Restaurants Establishments (Rate per 100,000 Population)	73.0	77.4	96.2
Food Environment - Grocery Stores Establishments (Rate per 100,000 Population)	N/A	18.7	23.4

Food security represents another significant challenge for healthy living in the county. The overall food insecurity rate of 14% exceeds the state average of 11%, but the disparity is even more pronounced for children, with 26% experiencing food insecurity compared to 15% statewide. Additionally, 41% of the low-income population has low food access, nearly double the state average of 21%. Data on grocery store access is not available for the county due to its small population size.

The county shows concerning trends in chronic disease prevalence, which are often impacted by a healthy lifestyle. The adult population has higher rates of several chronic conditions compared to state averages, including asthma (10.7% vs 9.8%), coronary heart disease (6.3% vs 5.5%), and hypertension (36.3% vs 32.1%). The rate of adults with poor dental health (15.3%) exceeds both state (12.0%) and national (13.9%) averages as well.

Table 20: Chronic Disease-Related Indicators

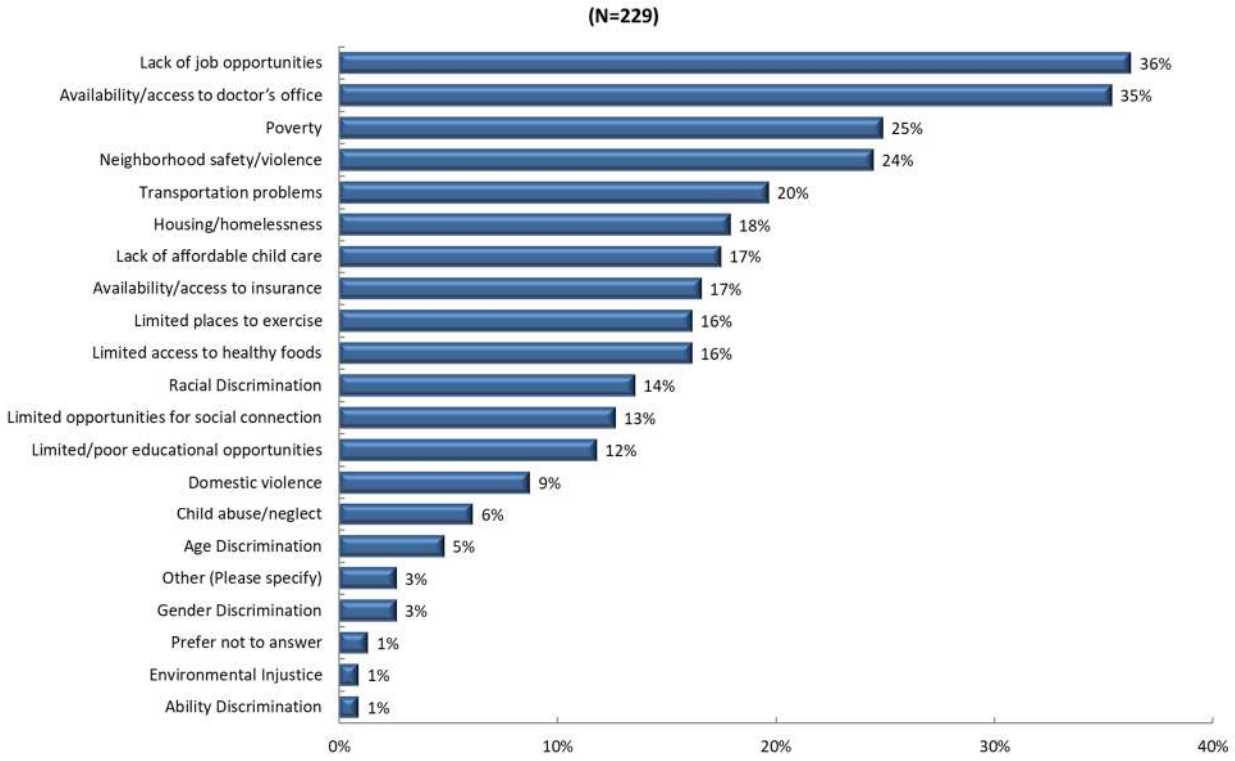
Indicator	Chowan County	North Carolina	United States
Adults (Age 18+) with Asthma	10.7%	9.8%	9.7%
Adults (Age 20+) with Diagnosed Diabetes	8.3%	9.0%	8.9%
Adults (Age 18+) Ever Diagnosed with Coronary Heart Disease	6.3%	5.5%	5.2%
Adults (Age 18+) with Hypertension	36.3%	32.1%	29.6%
Adults (Age 18+) with High Cholesterol	31.4%	31.4%	31.0%
Adults (Age 18+) with Kidney Disease	3.3%	2.9%	2.7%
Adults (Age 18+) Ever Having a Stroke	3.7%	3.1%	2.8%
Adults with BMI > 30.0 (Obese)	21.5%	29.7%	30.1%
Adults (Age 18+) with Poor Dental Health	15.3%	12.0%	13.9%
Percent Reporting Poor or Fair Health	18.9%	14.4%	-

For additional detail on secondary data findings, see **Appendix 3**.

Primary Data Findings – Community Member Web Survey

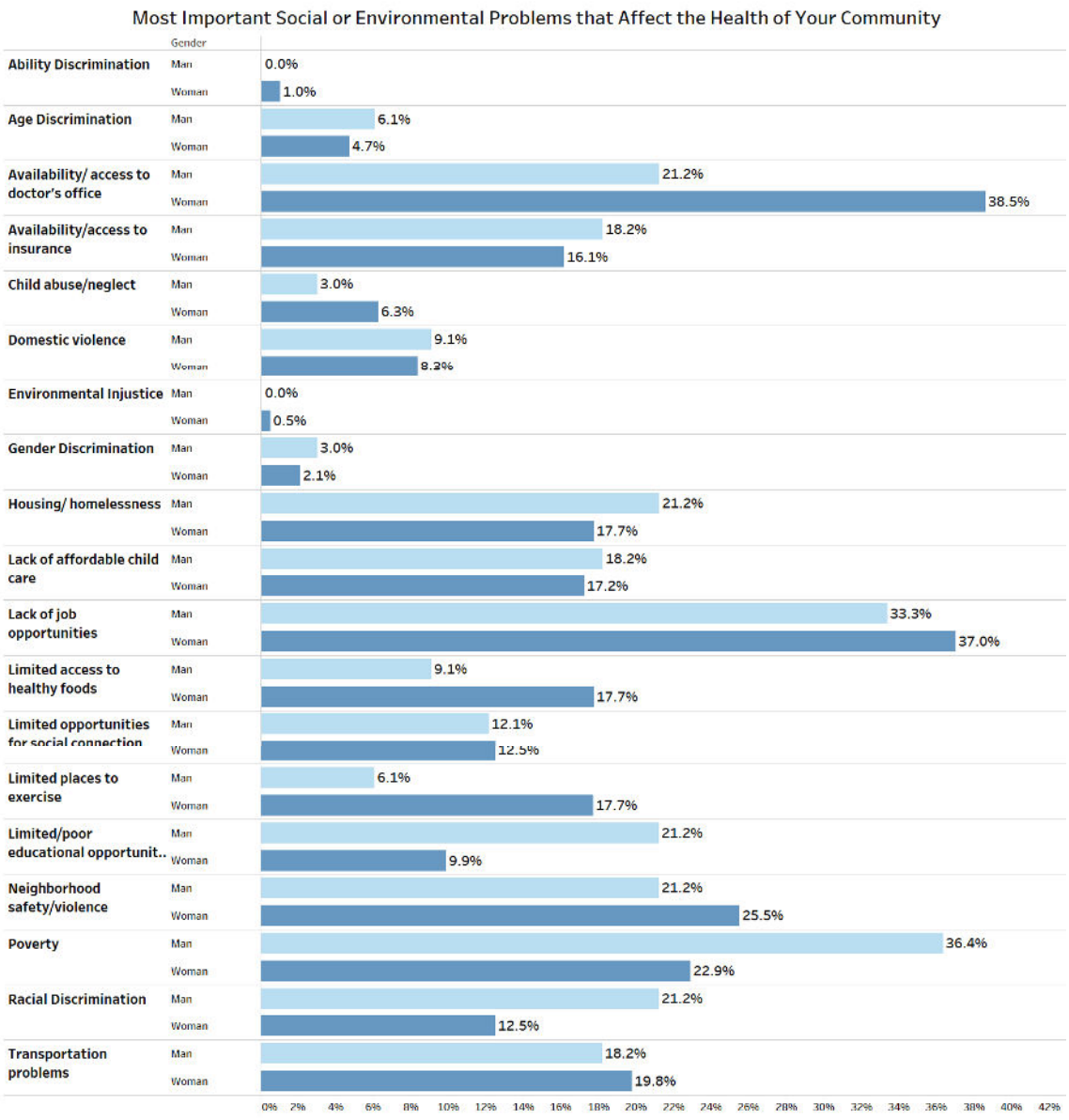
Chowan County residents identified several healthy living concerns in the community in the web survey. As identified in **Figure 33** below, 16% of community respondents indicated limited access to healthy foods and 16% indicated limited places to exercise were top social or environmental problems affecting the health of the community.

Figure 33: What are the three most important social or environmental problems that affect the health of your community?



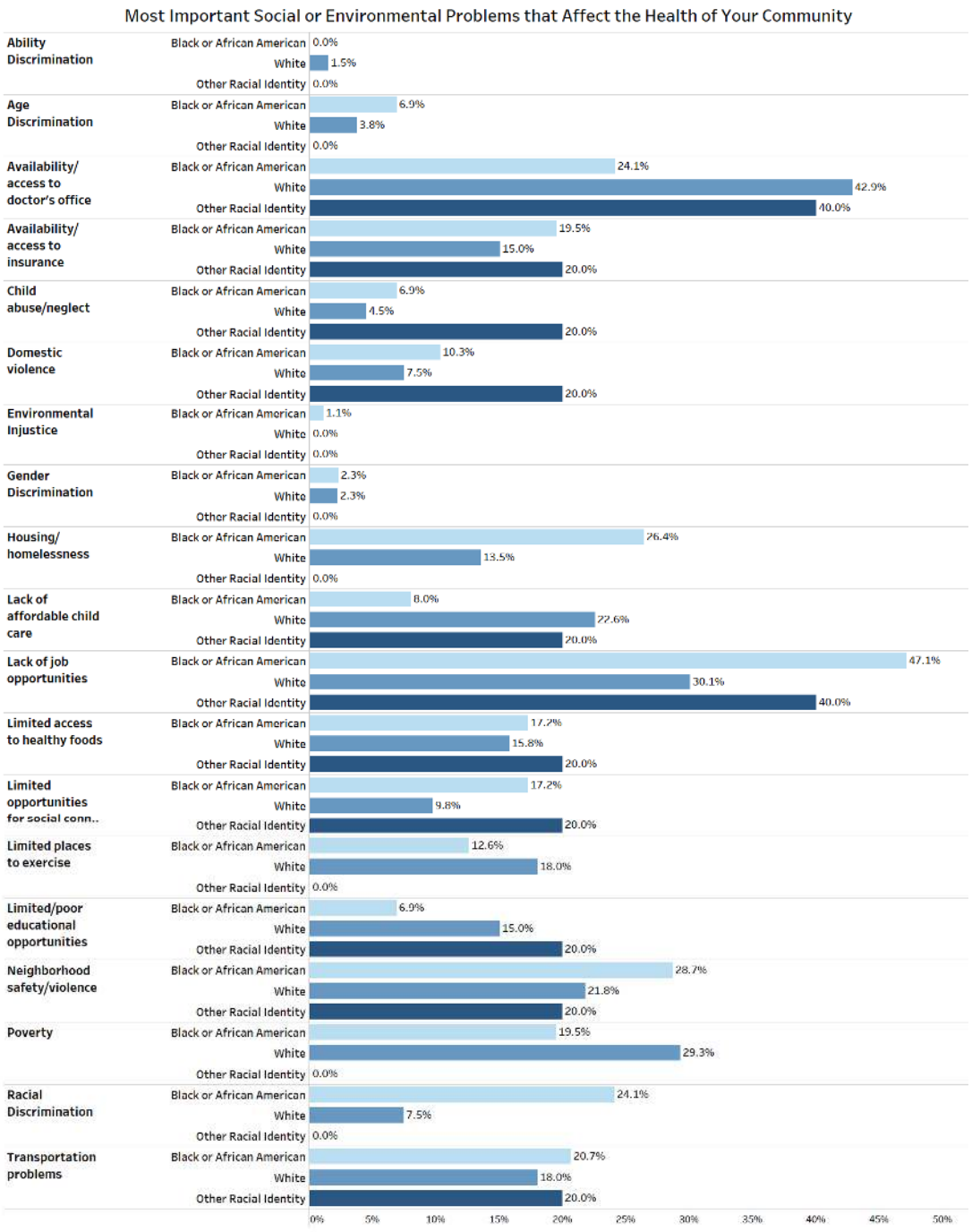
Responses somewhat differed by demographic characteristics of the respondents. When examined by gender, women (18%) more frequently identified limited access to healthy foods than men (9%), while responses for limited places to exercise were nearly equivalent (13% and 12%, respectively).

Figure 34: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)



Respondents who identified with another racial identity (20%) were more likely to select access to healthy foods as a problem than those who identified as White (16%) or Black or African American (17%). In contrast, those who identified as White (18%) were more likely to select limited places to exercise as a problem than those who identified as Black or African American (13%).

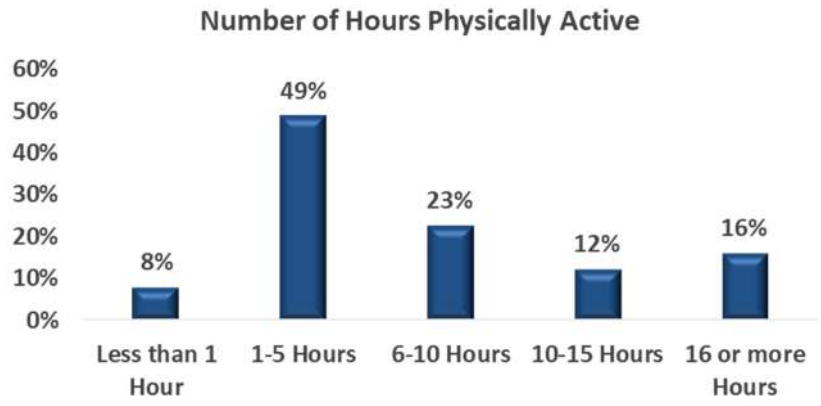
Figure 35: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)



When respondents were asked how often they were physically active outside of their jobs each week during the prior month, 8% indicated they were less than one hour, while 49% indicated they were active for between one and 5 hours weekly. On average, community member respondents in Chowan County

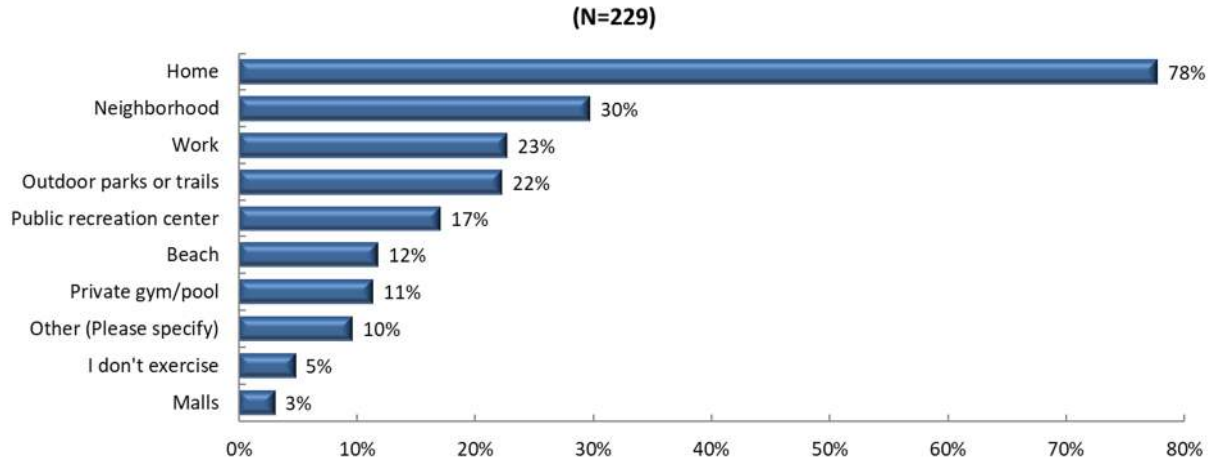
were active 9 hours each week in the preceding month, suggesting opportunities to increase physical activity in the community.

Figure 36: During the past month, approximately how much time (in hours) per week were you physically active outside of your regular job?



When survey participants were asked where they typically engage in exercise or physical activities in the community, the majority indicated at home (78%) with one-third also indicating in the neighborhood and an additional quarter at work.

Figure 37: When you are active, where do you engage in exercise or physical activities? (Select all that apply.)



For additional detail on survey findings, see **Appendix 5**.

Primary Data Findings – Focus Groups

Both Chowan County focus groups identified various barriers to healthy living in the community. Food access and security emerged as major concerns, with participants specifically discussing the lack of grocery stores in the county, lack of nutritional education, and the high cost of healthy food being unattainable for many residents. Environmental quality issues that can impact health were also highlighted by both groups, including concerns about Chowan River water quality and pollution, the use of chemicals in farming operations, and general air quality in the county. The main physical health concerns discussed were diabetes, high blood pressure, obesity, lung disease, and arthritis. Cancer and ALS attributed to pollution and water quality were also raised as concerns.

The Edenton Lion's Club group specifically emphasized challenges around the built environment, noting a lack of outdoor recreational facilities such as hiking or bike trails where community members could exercise. The Senior Center group particularly emphasized the need for community education focused on health, wellness, and nutrition.

When discussing community strengths and opportunities for improvement, participants noted that churches could be more involved in addressing challenges related to physical health by providing education on physical activity and healthy foods. The groups suggested continuing support for the GetFit program and providing more wellness opportunities for youth. They also recommended that local leaders host more health fairs and provide opportunities for the community to learn more about healthy living.

For a more detailed description of focus group findings, see **Appendix 5**.

PRIORITY NEED: MENTAL HEALTH/SUBSTANCE MISUSE

Context and National Perspective

The definition of behavioral health often describes conditions related to both mental health and substance use.[33] Mental health is defined as an emotional, psychological, and social state of well-being. Mental health impacts every stage of life and affects how one is able to handle their relationships, daily stressors, and health behaviors.[34] After evaluating data from a variety of sources including surveys and focus groups conducted throughout the assessment process, the Steering Committee identified mental health, including substance use, to be an area of urgent need within Chowan County.

Mental illnesses are common in the United States: in 2021, an estimated 57.8 million U.S. adults – nearly one in five – were living with a mental illness.[35] There is risk for developing a mental illness across the lifespan, with over one in five children and adults in the U.S. reported to have a mental illness, and nearly one in twenty-five adults currently coping with a serious mental illness (SMI) such as major depression, schizophrenia or bipolar disorder. [36]

[33] Source: American Medical Association (2022). *What is behavioral health?* Retrieved September 13th, 2023, from https://www.ama-assn.org/delivering-care/public-health/what-behavioral-health.
[34] Source: CDC. (2024). About mental health. Retrieved October 1, 2024, from: https://www.cdc.gov/mentalhealth/learn/index.htm
[35] Source: National Institute of Mental Health (2023). *Mental Illness*. Retrieved September 13th, 2023, from https://www.nimh.nih.gov/health/statistics/mental-illness.
[36] Source: CDC. (2024). Mental health. Retrieved October 1, 2024, from https://www.cdc.gov/mentalhealth/learn/index.htm

Mental illness can occur due to multiple different factors, such as genetics, drug and/or alcohol usage, isolation, adverse childhood experiences, and chronic health conditions. Additionally, mental illness can act like other chronic health conditions, in that it can worsen or improve depending on the environment. Mental health services have evolved in the past five years, especially during the COVID-19 pandemic. However, accessing mental health care services can be challenging. According to the National Institute of Mental Health, less than half (47.2%) of adults with a common mental illness received any mental health services in 2021. Those who had an SMI were more likely (65.4%) to have received mental health services that same year.[37] While access to telehealth mental health services has increased, those living in rural areas may still find it difficult to access care. This is a particular concern among those who are low-income or experiencing homelessness, two groups at high risk for developing an acute or chronic mental health condition. As of 2023, over seven million people in the U.S. who reported having a mental illness lived in a rural area.[38]

Mental illness is a prevalent concern in North Carolina, with nearly 1.5 million adults reported to have a mental health condition in 2023. Additionally, that same year, 1 in 7 individuals who were identified as homeless also were living with an SMI. Access to mental health care in North Carolina is changing, however it is still unavailable to many. Specifically, over 452,000 individuals did not seek care in 2023, with 44.8% citing cost as the main reason. Additionally, those that live in North Carolina are seven times more likely to be pushed out of network of their behavioral health providers, than a primary care provider, furthering cost as a cause for stopping treatment. [39]

Substance use disorders (SUDs) are one of the fastest rising categories of behavioral health disorders. According to the American Psychiatric Association, SUDs are a complex condition in which there is uncontrolled use of a substance (such as alcohol or drugs), despite harmful consequences.[40] SUDs often occur in conjunction with other mental illness. In 2023, 16 million (46.9%) young adults aged 18-25 reported having either a SUD or Acute Mental Illness (AMI) in the past year. In that same year, 17.1% (48.5 million) of all U.S. adults were reported as having an SUD.[41] These trends have been increasing in recent years. According to the National Center for Drug Abuse Statistics, in 2018 (3.7%) of all adults aged 18 and older (9.2 million) had both an AMI and at least one SUD.[42] By 2021, this had increased to 13.5% of U.S. adults, with the highest incidence among Multiracial adults.

There are multiple common forms of SUD, such as alcohol use, cocaine use, cannabis use, opioid use, and methamphetamine use disorders. An individual living with one SUD can also be coping with another at the same time, such as co-occurring use of alcohol and cannabis.[43] Treatment SUDs generally cannot follow a cookie-cutter approach, as each person receiving treatment will have different withdrawal and

[37] Source: National Institute of Mental Health. (2023). Mental Illness. Retrieved October 1, 2024, from https://www.nimh.nih.gov/health/statistics/mental-illness

[38] RHI Hub. (2023). Rural mental health. Retrieved October 1, 2024 from: https://www.ruralhealthinfo.org/topics/mental-health

[39] Source: NAMI (2023). *Mental Health in North Carolina.* Retrieved October 10, 2024, from https://www.nami.org/wp-content/uploads/2023/07/NorthCarolinaStateFactSheet.pdf

[40] Source: American Psychiatric Association (2024). *Addiction and Substance Use Disorders*. Retrieved January 16, 2024, from https://www.psychiatry.org/patients-families/addiction-substance-use-disorders.

[41] Source: SAMHSA (2024). *Highlights from the 2023 National Survey on Drug Use and Health*. Retrieved October 10th, 2024 from https://www.samhsa.gov/data/sites/default/files/reports/rpt42731/2022-nsduh-main-highlights.pdf.

[42] Source: National Center for Drug Abuse Statistics (2023). *Drug Abuse Statistics*. Retrieved January 8th, 2024, from https://drugabusestatistics.org/.

[43] Source: Cleveland Clinic. (2024). Substance Use Disorder (SUD). Retrieved October 1, 2024, from https://my.clevelandclinic.org/health/diseases/16652-drug-addiction-substance-use-disorder-sud

coping needs. Treatment is typically provided through various therapies, inpatient admissions, and forms of medication-assisted treatment such as methadone. Opioid overdoses are one of the most common types of deaths related to SUDs, and can be preventable and treatable if caught in time. Multiple efforts have been coordinated within the past two years to incorporate the storage of overdose reversing medications such as Naloxone in public facilities such as federal facilities, and over the counter, as was approved in 2023 by the FDA. This is critical, as in 2022, the number of opioid overdoses nationwide surpassed 81,051 – a 63% increase in overdoses since 2019.[44]

Substance use disorders have also had an impact in North Carolina. Over 36,000 overdose deaths occurred in the state between 2000 and 2022 – an average of more than 1,600 deaths each year.[45] Multiple programs have been developed in North Carolina to combat substance use disorder, notably surrounding opioid usage, which has led to an increase in access and usage of Medication Assisted Treatment (MAT) and methadone clinics within the state. Additionally, North Carolina launched the Opioid and Substance use action plan, which involved the development of multiple interventions, dashboards, and educational incidence of SUDs as well.

The pandemic impacted public mental health and well-being in many ways. Community members continue to grapple with the pandemic-related effects of isolation and loneliness, financial instability, long-term health impacts and grief, all of which are drivers for developing a substance use disorder. In addition, both drug overdose and suicide deaths have sharply increased over the past several years – often disproportionately impacting younger people and communities of color.[46]

Access to services that address mental health and substance use is an ongoing challenge across the U.S. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2021, less than half (47.2%) of U.S. adults who reported having a mental illness utilized any type of mental health services, including inpatient, outpatient or telehealth services or prescription drug therapies. Demand for mental health services, particularly anxiety and depression treatment, remains high across the nation, while the prevalence of stress- and trauma-related disorders, along with substance use disorders, continues to grow. The American Psychological Association reports that the percentage of psychologists in the U.S. seeing more patients than they did before the pandemic increased from 15% in 2020 to 38% in 2021 to 43% in 2022. Further, 60% of psychologists reported having no openings for new patients and 38% maintained a waitlist for their services.

Secondary Data Findings

Mental health and substance use data for Chowan County reveals several concerning trends, particularly regarding deaths of despair. The county's crude death rate for deaths of despair (including suicide, drug

[44] Source: KFF. (2023). Saunders, H., Rudowitz, R. (2023). Will the availability of Over-The-Counter Narcan increase access? Retrieved October 1, 2024 from https://www.kff.org/policy-watch/will-availability-of-over-the-counter-narcan-increase-access/

[45] Source: NCDHHS. (2022). *Overdose epidemic.* Retrieved October 3, 2024 from: https://www.ncdhhs.gov/about/department-initiatives/overdose-epidemic#:~:text=Combating%20North%20Carolina's%20Opioid%20Crisis,is%20devastating%20families%20and%20communities.

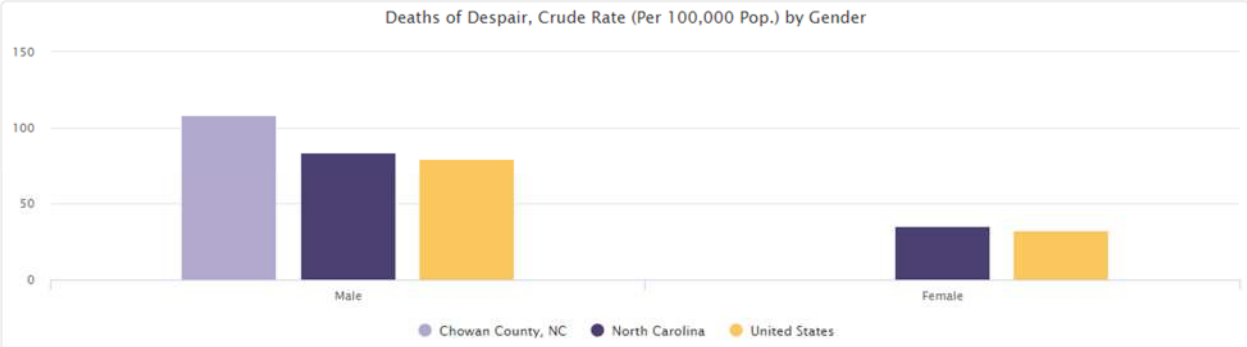
[46] Source: Panchal, N., Saunders H., Rudowitz, R. and Cox, C. (2023). The Implications of COVID-19 for Mental Health and Substance Use. *Kaiser Family Foundation*. Retrieved from https://www.kff.org/mental-health/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use.

overdose, and alcohol-related deaths) is 64.8 per 100,000 population, notably higher than both state (58.7) and national (55.9) averages. Suicide mortality data is suppressed for privacy reasons, due to the county's small population size. Residents report an average of 5.1 poor mental health days per month, higher than both state (4.6) and national (4.9) averages. Additionally, mental health provider availability is limited (94.8 providers per 100,000 population), and considerably below North Carolina's rate of 155.7.

Table 21: Mental Health Indicators

Indicator	Chowan County	North Carolina	United States
Deaths of Despair (Crude Rate per 100,000 Population)	64.8	58.7	55.9
Suicide (Crude Rate per 100,000 Population)	N/A	13.4	13.8
Average Number of Poor Mental Health Days (per Month)	5.1	4.6	4.9
Mental Health Providers (Rate per 100,000 Population)	94.8	155.7	178.7

Figure 38: Crude Rate of Deaths of Despair by Gender



For substance use, the county shows some positive trends. The percentage of adults reporting excessive drinking (14%) is lower than both state and national averages (18%). Emergency department utilization for opioid use disorder is also lower at 19 visits per 100,000 beneficiaries, compared to the state rate of 43. The county's rate of alcohol-involved crash deaths (2.9 per 100,000 population) matches the state average but exceeds the national rate of 2.3. However, the county also faces challenges with substance use treatment, with 21.9 providers per 100,000 population compared to the state's 25.0, and notably has no buprenorphine providers.

Table 22: Substance Use Indicators

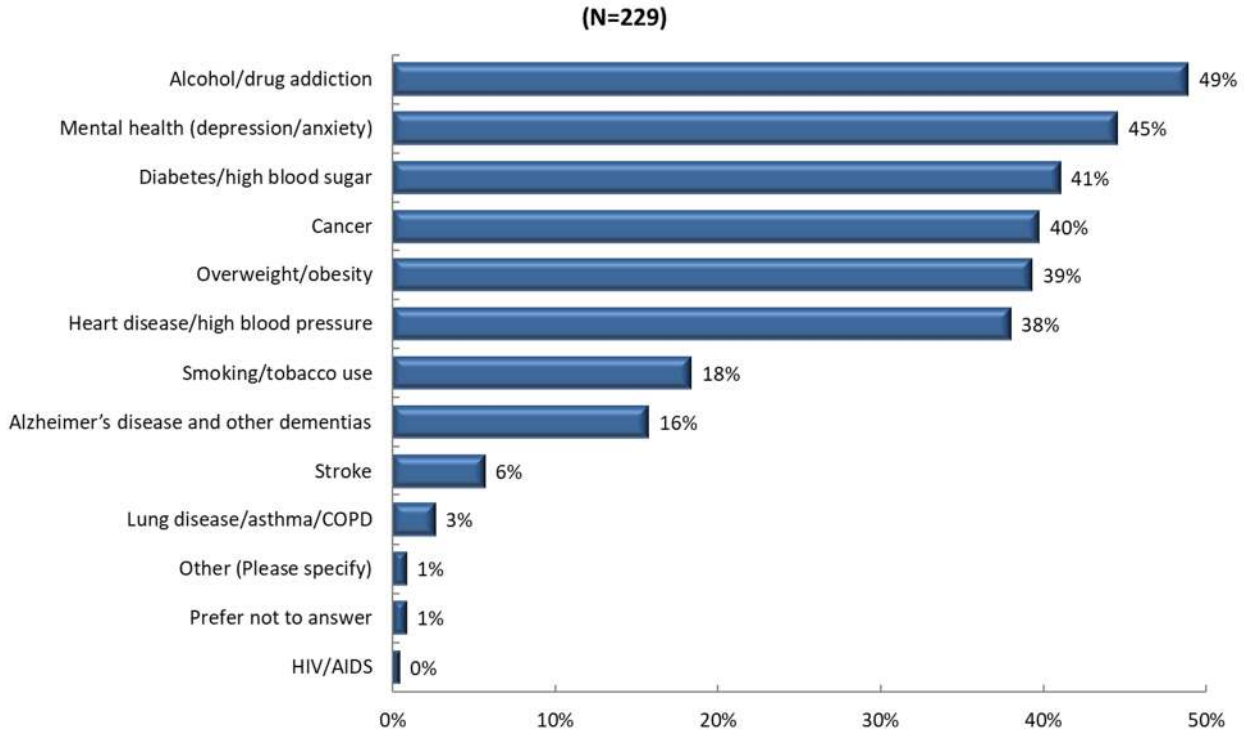
Indicator	Chowan County	North Carolina	United States
Percentage of Adults Reporting Excessive Drinking	14%	18%	18%
Opioid Use Disorder Emergency Department Utilization (Rate per 100,000 Beneficiaries)	19	43	41
Alcohol-Involved Crash Deaths, Annual (Rate per 100,000 Population)	2.9	2.9	2.3
Opioid Overdose Death Rate (Crude Rate per 100,000 Population)	N/A	25.1	N/A
Substance Abuse Providers (Rate per 100,000 Population)	21.9	25.0	27.9
Buprenorphine Providers (Rate per 100,000 Population)	0.0	15.2	15.5

For additional detail on secondary data findings, see **Appendix 3**.

Primary Data Findings – Community Member Web Survey

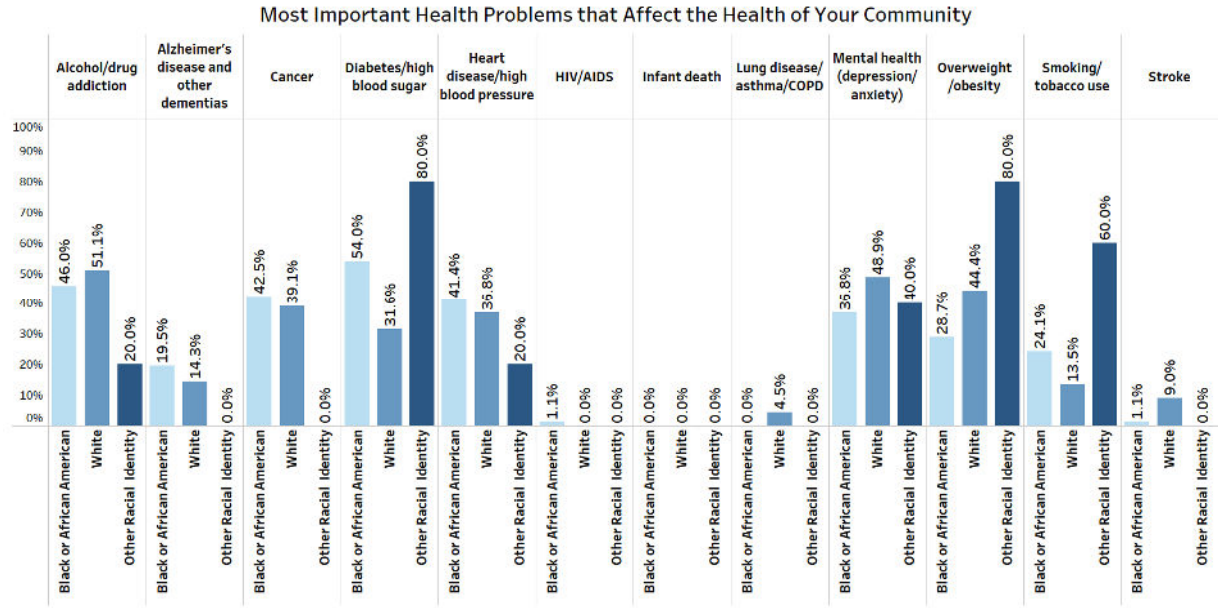
Chowan County residents highlighted different aspects of mental health and substance use as areas of community concern in the web-based survey. When asked to identify the most important community health needs, approximately half (49%) of respondents identified alcohol/drug addiction and 45% of respondents identified mental health (depression/anxiety). These were the first and second most frequent of all community health needs identified, respectively.

Figure 39: What are the three most important health problems that affect the health of your community? Please select up to three.



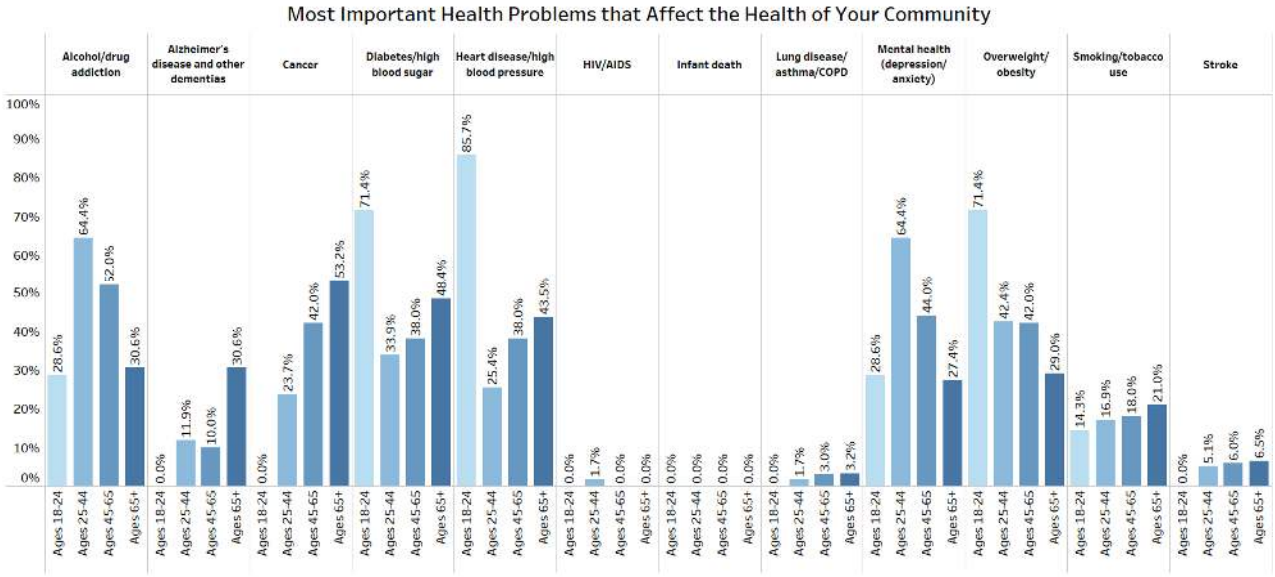
However, when these data were examined by the race of community member respondents, differences emerged. Alcohol/drug addiction had among the most significant differences. Those who identified as White (51%) selected this as an important community health need more frequently than those who identified as Black or African American (46%) and all other races (20%), as displayed in the figure below. Nearly 49% of respondents identifying as White selected mental health as a top community health need, while lower percentages of those identifying as Black or African American (37%) or other racial identities (40%) selected this as a top need.

Figure 40: What are the three most important health problems that affect the health of your community? Please select up to three. (by race)



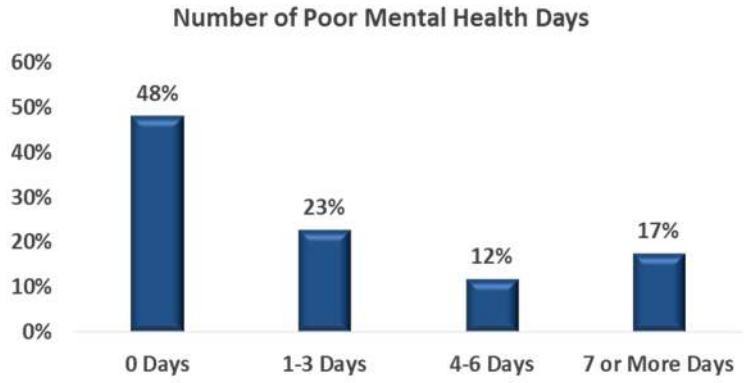
Similarly, there were differences in responses across age groups. People belonging to the 25 to 44 and 45 to 65 age groups identified alcohol/drug addiction and mental health as more significant than both the youngest and oldest respondents. These perceived differences by demographic characteristics may be important in planning efforts to address behavioral health in the community.

Figure 41: What are the three most important health problems that affect the health of your community? Please select up to three. (by age)



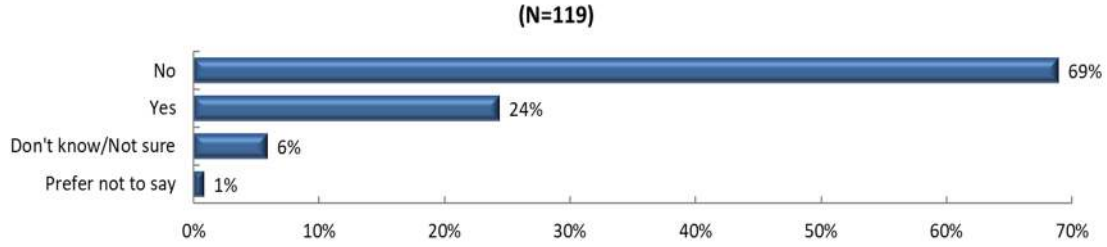
When respondents were asked about their own mental health, more than half of respondents indicated having one or more poor mental health days in the past 30 days, with an average of 4 poor mental health days among all respondents.

Figure 42: Now thinking about your MENTAL health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?



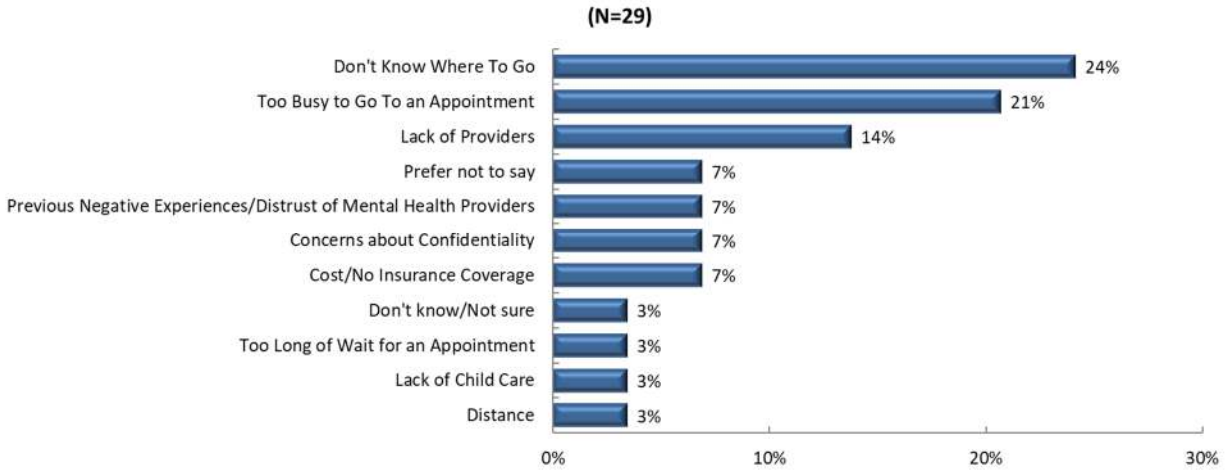
Community member respondents who indicated they experienced at least one poor mental health day in the past month were also asked if there was a time in the past 12 months when they needed mental healthcare or counseling but did not get it at that time. Nearly 25% of these respondents answered yes.

Figure 43: Was there a time in the past 12 months when you needed mental healthcare or counseling, but did not get it at that time?



The top responses for why care was not received for this group, included not knowing where to go (24%), being too busy to go to an appointment (21%), and a lack of providers (14%), suggesting accessibility and resource awareness concerns exist in the community impacting access to needed mental healthcare.

Figure 44: What was the MAIN reason you did not get mental health care or counseling?



For additional detail on survey findings, see **Appendix 5**.

Primary Data Findings – Focus Groups

Both focus groups identified substance use as a significant barrier to healthy living in Chowan County. The misuse of alcohol and other substances was highlighted as a community concern requiring attention and intervention. The Edenton Lion's Club focus group discussed mental health issues in particular detail. Participants emphasized that there are no facilities to treat mental health needs in the area. They also noted there is a lack of understanding about the importance of mental health in the community, suggesting that stigma may prevent people from seeking needed care.

When discussing solutions, participants suggested that local leaders could provide more opportunities for the community to learn about mental health through panel discussions and open town hall meetings. They emphasized the importance of raising awareness and reducing stigma around mental health issues.

For a more detailed description of focus group findings, see **Appendix 5**.

PRIORITY NEED: SEXUAL HEALTH

Context and National Perspective

The term sexual health covers a wide range of reproductive and sexuality-based factors. The World Health Organization's definition is the fundamental health and reproductive well-being of individuals, couples, and families, and the positive and respectful approach to sexuality and sexual relationships.[47] Public health concerns related to sexual health include comprehensive sexual education, the incidence and prevalence of sexually transmitted diseases, LGBTQIA+-friendly clinical care, teen pregnancies, and women's

[47] Source: WHO. (2024). *Sexual health.* Retrieved October 3, 2024 from https://www.who.int/health-topics/sexual-health#tab=tab_1

reproductive health and family planning. One of the most common forms of sexual health addressed in communities is the incidence of sexually transmitted infections (STI). STI rates have grown exponentially since 2018, with more than 2.5 million cases of syphilis, gonorrhea, and chlamydia reported in 2022 alone. Additionally, rates of syphilis alone have grown 17% annually since 2018, and cases are expected to continue to rise. However, Gonorrhea incidence rates have continued to decline at 8.7% per year.[48]

Although abstinence is the most effective way to prevent an STI, education on safe sex practices and how and where to obtain treatment is also beneficial for reducing and treating STIs. Stigma is a major barrier to accessing screenings and treatment, which are often free or low-cost. People may feel embarrassed for contracting an infection, even if they were safe or were unaware of their partner's condition. Tackling the stigma of seeking testing or treatment has come far in recent years, with increased access to over-the-counter tests, discreet screenings, telehealth services, and increased visibility in media and entertainment.

In rural areas, sexual health and STIs often run into the same barriers as other priority health conditions, in that access to clinical health services may be more limited, hindering one's ability to get tested and treated for the condition. Additionally, stigma surrounding STI's may be higher, further reducing one's resolve to seek out treatment.

Although it remains a concern in many places, teenage pregnancy has declined significantly in the U.S, falling 78% between 1991 and 2021. Teen pregnancy rates vary widely by race and ethnicity, with the highest national rate (24 per 1,000 births) among AIAN (non-Hispanic/Latino) females, and the lowest rate (2 per 1,000 births) among Asian (non-Hispanic/Latino) females. The rate among Black or African American teens is slightly lower at 22 per 1,000 births, and the rate is 21 for Hispanic/Latino teens, and 9 for white teens. While not concrete, it has been suggested that the increase in access to contraception and sexual education has played a large part in this decline. Due to the differences in education levels and access to reproductive care, these rates fluctuate throughout the country, especially when considering health disparities among minorities. Multiple SDoH can increase the risk for teen pregnancy, such as unemployment, income, education level, and whether the teen is in foster care.[49] Therefore, ensuring equitable access to comprehensive sexual education and reproductive care is key to reducing teen pregnancies.

In North Carolina, the overall rate of teen pregnancy was 22.9 per 1,000 births in 2020 (the most recent data available). Hispanic/Latino teens had the highest rate (39.5 per 1,000 births) — nearly twice the overall rate.[50] The statewide rate has continued to decline as it has nationally, with increased access to sex education and North Carolina's push for open communication regarding sexual health.

North Carolina promotes open communication between partners regarding sexual health and using safe sex practices to prevent pregnancy and exposure to STIs, as well as promoting vaccines for conditions such

[48]Source: CDC (2022). *Sexually Transmitted Infections (STIs).* Retrieved October 3, 2024, from https://www.cdc.gov/std/statistics/2022/default.htm

[49] Source: CDC. (2024). *About teen pregnancy.* Retrieved October 11th, 2024, from https://www.cdc.gov/reproductive-health/teen-pregnancy/index.html

[50] Source: NC state center for health statistics (2020). *2020 NC resident pregnancy rates.* Retrieved October 11th, 2024 from https://schs.dph.ncdhhs.gov/data/vital/pregnancies/2020/Table2B-2020-pregpubrates-1519Preg-v2.pdf

as Mpox and HPV. Additionally, North Carolina has programs in place to ensure that tests, vaccinations and treatments are free and discreet at many healthcare facilities and local public health departments.

Secondary Data Findings

Secondary data indicate that sexual health is a significant concern in Chowan County, with several metrics exceeding state averages. The county's chlamydia rate of 655.9 cases per 100,000 population is higher than both the state (603.3) and national (495.0) averages. The teen birth rate is particularly concerning at 26.6 births per 1,000 females ages 15-19, significantly higher than both state (18.2) and national (16.6) averages.

Table 23: Sexual Health Indicators

Indicator	Chowan County	North Carolina	United States
HIV / AIDS Infections (Rate per 100,000 Population)	N/A	15.5	12.7
Teen Births (Rate per 1,000 Female Population Age 15-19)	26.6	18.2	16.6
Chlamydia Rate (Rate per 100,000 Population)	655.9	603.3	495.0

Further, there are significant racial and ethnic disparities in teen birth rates, with the rate for non-Hispanic Black (39.3 per 1,000 female population) and Hispanic/Latino (58.8) teens much higher than the rate for non-Hispanic White teens (12.6).

Figure 45: Teen Birth Rate by Race/Ethnicity

Due to the county's small population size, HIV/AIDS infection rate data is suppressed for privacy reasons, limiting the ability to make comparisons with state (15.5 per 100,000) and national (12.7 per 100,000) rates. This data limitation makes it difficult to fully assess the burden of sexually transmitted infections in the community.

The elevated rates of both sexually transmitted infections and teen births suggest a need for enhanced sexual health education and preventive services in the county. These indicators often correlate with other social and economic factors, including access to healthcare services and educational opportunities.

For additional detail on secondary data findings, see **Appendix 3**.

Primary Data Findings – Community Member Web Survey

While sexual health community concerns were highlighted through the secondary data, they were not highlighted through the community member survey. However, this may be due to the lack of relevant questions and response options. HIV/AIDs was identified as an important health problem affecting the community by less than 1% of survey respondents.

For additional detail on survey findings, see **Appendix 5**.

Primary Data Findings – Focus Groups

While sexual health was identified as a priority need area for Chowan County through the prioritization process, neither focus group specifically discussed issues or concerns related to sexual health during their sessions. This suggests that either other data sources drove the prioritization of this need area, or participants may have been reluctant to discuss this topic in a group setting.

For a more detailed description of focus group findings, see **Appendix 5**.

CHAPTER 4 | HEALTH RESOURCE INVENTORY

NCLHDA requirements for local health departments and IRS requirements for nonprofit hospitals require the CHNA report to include a description of the resources available in a county to address the significant health needs identified in the assessment. This section includes information about local organizations in Chowan County that provide resources to address general community health needs, as well as the county's 2024 priority need areas: Access to Healthcare, Behavioral Health, Healthy Living and Sexual Health.

Category	Organization Name
	Albemarle Regional Health Services - Chowan County Health Department 202 W. Hicks Street Edenton, NC 27932 Phone: (252)-482-6003 Website: www.arhs-nc.org **ECU Chowan Hospital** 211 Virginia Road Edenton, NC 27932 **ECU Health Immediate Care** 701 Luke Street Suite C Edenton, NC 27909 Phone: (252) 482-6811 **ECU Health Family Medicine** 201 Virginia Road Edenton, NC 27932 Phone: (252) 482-2116 **Bream Medical** 314 W. Queen Street Edenton, NC 27932 Phone: (252) 482-3350 **ECU Health Women's Care Broad Street** 309 N. Broad Street Edenton, NC 27932 Phone: (252) 482-7001
	Albemarle Eye Center 101 Mark Drive Edenton, NC 27932 Phone: (252) 482-7028 **Albemarle Dental Associates** 103 Mark Drive Edenton, NC 27932 Phone: (252) 482-5131 **Jerry Bradley, DDS** 512 Coke Avenue Edenton, NC 27932 Phone; (252) 482-1080 **Paul Richmond, DDS** 410 N. Broad Street Edenton, NC 27932 Phone: (252) 482- 2181 **Gateway Community Health Center** 2869 Virginia Road Tyner, NC 27980 Phone: (252) 221-2171 **Chowan River Nursing and Rehabilitation** P.O. Box 566 Edenton, NC 27932 Phone: (252) 482-7481 **Edenton House** 323 Medical Arts Drive Edenton, NC 27932 Phone: (252) 482- 1113

	ECU Health Women's Care 203 Earnhardt Drive, Suite A Edenton, NC 27932 Phone: (252) 482-2134 **ECU Health Pediatrics-Edenton** 203 Earnhardt Drive, Suite A Edenton, NC 27932 Phone: (252) 482-7407 **ENC Peds** 222B Virginia Road Edenton, NC 27932 Phone: (252) 482-9024 **Eye Care Center** 111 Virginia Road Edenton, NC 27932 Phone: (252) 482-3218	**Chowan County EMS** 208 W. Hicks St. Edenton, NC 27932 Phone: 252-482-4365 **Edenton Police Department** 301 N. Oakum Street Edenton, NC 27932 (252) 482-5144 **Chowan County Sherriff's Office** 305 West Freemason Street PO Box 78, Edenton, NC 27932 Phone: 252-482-8484 **Center Hill-Crossroads Fire Department** 105 Center Hill Rd PO Box 185 Tyner, NC 27980 Phone: 252-221-4956 **Edenton Fire Department** 704 North Broad Street Edenton, NC 27932 Phone: 252-482-3115
Priority: Healthy Living	**Albemarle Get Fit** 711 Roanoke Avenue Elizabeth City, NC 27909 Phone: (252)338-4400 **Northern Chowan Community Center** 2869 Virginia Road Tyner, NC 27980 Phone: (252) 221- 4901 **Edenton-Chowan Recreation Department** 730 North Granville Street, Suite C Edenton, NC Phone: 252-482-8595	**Sunfish Park** 510 S. Broad Street Edenton, NC 27932 **Griffith Park** 135 E. Freemason Street Edenton, NC 27932 **Hendrix Park & Cannon's Ferry Walk** 331 Cannon's Ferry Road Tyner, NC 27980 **Edenton Harbor and Colonial Park** 101 W. Water Street Edenton, NC 27932

	Bennetts Millpond 2100 Rocky Hock Road Edenton, NC 27932 Phone: (252) 482-8595 **J. Robert Hendrix Park & Cannon's Ferry Heritage Riverwalk** 315 Cannon's Ferry Road Tyner, NC 27980 **Dillard's Millpond** 408 Dillard's Mill Road Tyner, NC 27980 **Filberts Creek Park** 305 Martin Luther King Drive Edenton, NC 27932 **Hayes Farm** 1038 Hayes Farm Road Edenton, NC 27932 **Hollowell Park** 323 W. Queen Street Edenton, NC 27932 **Morgan Park** 106 Robin Lane Edenton, NC 27932	**Pembroke Creek Park** 716 W. Queen Street Edenton, NC 27932 **Queen Ann Park** 210 E. Water Street Edenton, NC 27932 **Paxton Lane Park** 124 Paxton Lane Edenton, NC 27932 **Griffith Park** 135 E. Freemason Street Edenton, NC 27932 **Colonial Park** 510 S. Broad Street Edenton, NC 27932 **Stratford-Hawthorne Park** 913 Stratford Road Edenton, NC 27932 **Chowan County Senior Center and Nutrition Site** 204 East Church Street Edenton, NC 27932 (252) 482-2242
Healthy Eating	**NC Cooperative Extension** 730 N. Granville Street, Suite A Edenton, NC 27932 Phone: 252-482-6585 **Edenton Chowan Food Pantry** 1370 N Broad St. Edenton, NC 27932 (252) 482-2504	**W.R. Bunch Produce Stand** 2833 Rocky Hock Road Edenton, NC 27932 Phone: (252) 221-4594 **Triple B. Farms** Corner of Ryland and Sign Pine Rd. Tyner, NC 27980 252-333-5381

	Edenton Farmers Market 200 N. Broad Street Edenton, NC 27932 Phone: (252) 482-5440 **Food Lion** 300 C Virginia Road Edenton, NC 27909 Phone: (252) 482-1950	**Griffin's Collard Stand** 1800 W. Queen St Edenton, NC 27932
Housing and Homelessness	**Chowan/Perquimans Habitat for Humanity** P.O. Box 434 Edenton, NC 27932 252-482-2686	**Section 8 Economic Improvement Council, Inc.** (Section 2 Housing Choice Vouchers) 712 Virginia Road Edenton, NC 27932 252-482-4458
Priority: Mental Health/Substance Misuse	**Chowan County Health Department** 202 W. Hicks Street Edenton, NC 27932 Phone: (252)-482-6003 **Albemarle Hope line** Elizabeth City, NC 27906 Phone: 252-338-5338 24-hour crisis line: 252-338-3011 Website: www.albemarlehopeline.org	**NENC Connect** Phone: 1-866-437-1821 Website: www.nencconnect.org **Quitline NC** 1-800-QUIT-NOW (1-800-784-8669) https://www.quitlinenc.com/
Long Term Care Facilities	**Chowan River Nursing and Rehabilitation Center** 1341 Paradise Road Edenton, NC 27932 Phone: (252) 482-7481 **Edenton House** 323 Medical Arts Dr. Edenton, NC 27932 Phone: (252) 482-1113	**Home Life Care** 412 W. Queen St. Edenton, NC 27932 Phone: (252) 482-1130

Transportation	**ICPTA** 110 Kitty Hawk Drive Elizabeth City, NC 27909 Phone: (292) 338-4480	
Miscellaneous	**Shepard-Pruden Memorial Library** 106 W. Water Street Edenton, NC 27932 Phone: (252) 482-4112 **White Oak Elementary School** 111 Sandy Ridge Road Edenton, NC 27932 Phone: 252-221-4078 **D.F. Walker Elementary School** 125 Sandy Ridge Road Edenton, NC 27932 Phone: 252-221-4151	**Chowan Middle School** 2845 Virginia Road Tyner, NC 27980 Phone: 252-221-4131 **John A. Holmes High School** 600 Woodard Street Edenton, NC 27932 Phone: 252-482-8426
Higher Education	**College of the Albemarle - Edenton-Chowan Campus** 800 N. Oakum St Edenton, NC 27932 Phone: 252-482-7900	
Child Care Centers	**Chowan/Perquimans Smart Start** Chowan/Perquimans Smart Start Partnership (cp-smartstart.org) Phone: (252) 482- 3035 **White Oak Elementary Preschool** 111 Sandy Ridge Rd. Edenton, NC 27932 252-221-4078 **Chowan County Head Start** 760 Virginia Road Edenton, NC 27932 252-482-8230	**Lil Chicks Child Care** 111 Alexander Rd. Edenton, NC 27932 252-325-3176 **Loving Hearts Daycare** 1201 West Queen Street Edenton, NC 27932 252-482-4789 **M&E Preschool** 3641 Virginia Road Tyner, NC 27980 252-221-8651

	Chowan Early Learning Center 423 Sandy Ridge Rd. Edenton, NC 27932 252-221-6555 **Countryside Care** 100 Countryside Dr. Edenton, NC 27932 252-482-3788 **Edenton Teapot Day Care Center** 102 Cauthen St. Edenton, NC 27932 252-482-8727 **Home Away From Home Childcare Center** 531 Coke Ave. Edenton, NC 27932 252-312-3946	**Out of the Box Childcare Center** 701 N. Broad Street Edenton, NC 27932 252-482-1009 **Chowan EIC** 712 Virginia Road P.O. Box 549 Edenton, NC 27932 (252) 482-4458 Ext. 139 **Chowan County Social Services** 100 W. Freemason Street Edenton, NC 27932 Phone: (252) 482-7441
Priority: Sexual Health	**Emergency Contraception** 1-800-584-9911 **Healthy Start Foundation** 1-800-FOR-BABY (367-2229) **National Sexual Assault Hotline** 1-800-656-HOPE	**Planned Parenthood** 1-800-230-7526 **National Gay Task Force** (202)393-5177
Additional Organizations	**American Association of Poison Control Centers** 1-800-222-1222 **Carolinas Poison Center** 1-800-222-1222 **Children's Home Society of North Carolina** 1-800-632-1400 **National Domestic Violence Hotline**	**National Gay Task Force** (202) 393-5177 **National Mental Health Association** 1-800-969-6642 **National Suicide Prevention Lifeline** 1-800-784-2433 **Rape Crisis Center**

	1-800-799-SAFE (7233) **National Alliance on Mental Illness** 1-800-950-6264 **National Drug Abuse Hotline** 1-800-662-HELP (4357)	1-800-656-4673 **Real Crisis Center** (252) 758-HELP (4357)

CHAPTER 5 | NEXT STEPS

The findings from the Community Health Needs Assessment (CHNA) are instrumental in developing effective strategies to address the identified priority needs. The final steps in the CHNA process involve creating community-based health improvement strategies and making both the CHNA and Implementation Strategies publicly available.

Hospital leaders at ECU Health Chowan will utilize the CHNA insights to formulate implementation strategies. They will collaborate with community partners to ensure that the priority needs are addressed efficiently and effectively. These strategies will include measurable objectives to track progress.

The final CHNA report and Implementation Strategies are available on our public website at https://www.ecuhealth.org/about-us/community/health-needs-assessment/. For further questions or more information, please contact Shavonna Boone, Coordinator, Community Health Improvement at ECU Health Chowan, at SWBoone@ecuhealth.org.

APPENDIX 1 | STATE OF THE COUNTY HEALTH REPORT

Results-Based Accountability Framework

To meet North Carolina accreditation requirements, LHDs are required to track progress on their implementation plans by publishing an annual State of the County Health Report (SOTCH). The SOTCH is guided by the Clear Impact Results-Based Accountability (RBA) ™ Framework and demonstrates that the LHD is tracking priority issues identified in the community health (needs) assessment process, identifying emerging issues, and implementing any relevant new initiatives to address community concerns.[51]

RBA provides a disciplined way of thinking about – and acting upon – complex social issues, with the goal of improving the lives of all members of the community. The framework is organized to recognize two distinct types of accountabilities: population and performance. Population accountability refers to the well-being of entire populations, and RBA recognizes that it is challenging, if not impossible, to hold individual organizations accountable for solving systemic problems. Conversely, performance accountability recognizes that individual organizations are accountable for the outcomes and impact of their programs, policies and practices as they relate to their client populations.

In the CHIP process, RBA asks three key questions: how much did we do, how well did we do it, and is anyone better off? To more effectively answer these questions, and develop measurable strategies to address community health concerns, North Carolina LHDs use a software called Clear Impact Scorecard to develop their SOTCH and track progress against their goals. Clear Impact Scorecard is performance management and reporting software used by non-profit and government agencies to efficiently and effectively explain the impact of their work. ECU Health Hospitals also adopted the RBA framework, leveraging the Clear Impact Scorecard to document and track their improvements efforts. The scorecard mirrors RBA and links results with indicators and programs with performance measures. Chowan County's most recent SOTCH is presented on the following pages.

[51] Clear Impact (2022). *Results-Based Accountability™: A Framework to Help Communities Get From Talk to Action.* Retrieved from: https://clearimpact.com/wp-content/uploads/2022/02/Clear-Impact-Results-Based-Accountability-Brochure-2022.pdf. Note: Clear Impact has exclusive and worldwide rights to use Results-Based Accountability™ (RBA), including all of proprietary and intellectual property rights represented by RBA. RBA intellectual property is free for use (with attribution) by government and nonprofit or voluntary sector organizations, as well as small consulting firms representing the interests of these organizations.

State of the County Health Report

HNC 2030 Scorecard: Albemarle Regional Services - 2021-2023

ALBEMARLE REGIONAL HEALTH SERVICES
Partners in Public Health

Albemarle Regional Health Services is excited to share the Healthy NC 2030 Scorecard for the eight counties in our district health department. This Community Health Improvement Scorecard is an easy way to learn about some of the efforts currently underway to address three health priorities identified in the (CHA):

- ***Healthy Lifestyle Behaviors***
- ***Access to Healthcare***
- ***Mental Health/Substance Misuse***

This Scorecard also serves as **ARHS's** community health improvement plan (CHIP), fulfilling the **NC Local Health Department Accreditation** requirements that local health departments complete two CHIPs following the CHA submission and a State of the County's Health Report for **ARHS** on years when not completing the CHA.

For each priority, this Scorecard spotlights:

- A Result Statement, a picture of where we would like to be,
- Important local Indicators or measures of how we are doing linked to Healthy NC2030 indicators and
- Select Programs or activities and
- Key Performance Measures that show how those programs are making an impact.

Instructions: Click anywhere on the scorecard to learn more about programs and partners that are working together to improve health. The letters below represent key components of the Scorecard.

Results	R
Indicators	I
Programs	P
Performance Measures	PM

Use the ⊕ icons to expand items and the 🗎 icons to read more. This scorecard is not intended to be a complete list of all the programs and partners who are working on these issues in **ARHS**.

Community Health Assessment

2021 Community Health Assessment

	Time Period	Current Actual Value	Current Trend	Baseline % Change

Access to Healthcare

All individuals and families in the ARHS service area have access to equitable, comprehensive care.

	Time Period	Current Actual Value	Current Trend	Baseline % Change
FHLI NC HNC2030 Uninsured: % of North Carolina population under age 65 without health insurance (Total)	2021	10.4%	↘ 2	-15% ↘
FHLI NC HNC2030 Life Expectancy (Total) in North Carolina: Average number of years of life remaining for people who have attained a given age.	2022	76.2	↗ 1	-2% ↘
FHLI NC HNC2030 Primary Care Clinicians: Number of NC counties with a (full-time equivalent) "primary care workforce" to "county population" ratio of 1:1,500	2017	62:1	→ 0	0% →

ARHS Primary Care clinic	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much # of primary care visits at ARHS	2023	987	↗ 2	98% ↗

Healthy Lifestyle Behaviors

All Individuals and families in the ARHS service area live a healthy lifestyle.	Time Period	Current Actual Value	Current Trend	Baseline % Change
[illegible] Sugar Sweetened Beverage (SSB) Consumption Among Adults in NC: % of Adults (Total) reporting consumption of one or more sugar-sweetened beverages (SSBs) per day.	2022	36.8%	↗ 1	12% ↗
[illegible] Life Expectancy (Total) in North Carolina: Average number of years of life remaining for people who have attained a given age.	2022	76.2	↗ 1	-2% ↘
[illegible] Infant mortality rate in North Carolina: Rate of Infant Deaths (Total) per 1,000 Live Births	2022	6.8	→ 1	-3% ↘
[illegible] Teen Birth Rate: Number of births in NC per 1,000 population (Total) to females aged 15-19	2022	15.0	↘ 7	-36% ↘

Albemarle GetFit!	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much Number of individuals enrolled in program	2023	86	↗ 1	87% ↗
How Well % of GetFit! participants self reporting that they engage in at least 150 minutes of fitness each week	2023	38.0%	↗ 1	9% ↗

New Healthy Food Initiatives	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much Number of individuals reached	2023	422	→ 0	0% →
How Much Numbers of individuals receiving nutrition education	2023	222	→ 0	0% →
How Well % of Individuals that self report they have increased their fruit/vegetable consumption	2023	18.0%	→ 0	0% →

New Faithful Families	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much Number of individuals enrolled in program	2023	30	→ 0	0% →
How Well % of Individuals that self report they have increased their fruit/vegetable consumption	2023	18.0%	→ 0	0% →

Chronic Disease Prevention and Management	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Well % of individuals receiving chronic disease education who self report positive behavior changes	2023	20%	→ 0	0% →
How Much Number of individuals receiving chronic disease management through support groups	2023	45	↘ 1	-21% ↘
How Much Number of individuals receiving chronic disease prevention education	2023	570	↘ 1	146% ↗

Mental Health/Substance Misuse

All individuals and families in the ARHS service area have wellness and resiliency, free from stigma of mental illness and substance misuse.	Time Period	Current Actual Value	Current Trend	Baseline % Change
[redacted] Percent of Adults Using Tobacco in North Carolina (Total)	2022	21.6%	↗ 1	-10% ↘
[redacted] Percent of High School Youth Using Tobacco in North Carolina (Total)	2019	27.3%	↘ 1	-1% ↘
[redacted] Percent of Middle School Youth Using Tobacco in North Carolina (Total)	2019	10.4%	↘ 2	-10% ↘
[redacted] Drug Overdose Death Rate in North Carolina: Drug Poisoning Deaths (Total) per 100,000 population	2022	42.1	↗ 4	205% ↗
[redacted] Suicide Rate (TOTAL) in North Carolina (per 100, 000)	2022	14.4	↗ 1	11% ↗

ARHS Behavioral Health Program	Time Period	Current Actual Value	Current Trend	Baseline % Change
[redacted] # of behavioral health visits at ARHS	2023	2,426	↗ 1	346% ↗

Tobacco Prevention and Education	Time Period	Current Actual Value	Current Trend	Baseline % Change
[redacted] # of counties or municipalities that adopt tobacco free policies	2023	1	→ 0	0% →
[redacted] # of individuals receiving tobacco education	2023	2,130	↗ 2	647% ↗
[redacted] # of individuals utilizing QuitlineNC	2023	114	↘ 1	-28% ↘
[redacted] # of media messages provided throughout region	2023	100	↘ 1	-38% ↘

Substance Misuse Awareness and Prevention	Time Period	Current Actual Value	Current Trend	Baseline % Change
[redacted] # of education outreach activities	2023	74	↘ 1	-21% ↘
[redacted] # of community partners promoting NENC Connect website	2022	100	→ 0	0% →
[redacted] # of individuals accessing NENC Connect website	2022	460	↗ 1	130% ↗
[redacted] # of medication take back events held	2023	3	↗ 1	200% ↗

New Suicide Prevention Training	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much # of individuals trained in suicide prevention	2023	90	→ 0	0% →
How Well % of individuals trained that self report utilizing skills learned	2023	0	→ 0	0% →

SOTCH REPORTS

2022 SOTCH Report	Time Period	Current Actual Value	Current Trend	Baseline % Change

2023 SOTCH Report	Time Period	Current Actual Value	Current Trend	Baseline % Change

APPENDIX 2 | SECONDARY DATA METHODOLOGY AND SOURCES

Many individual secondary data measures were analyzed as part of the CHNA process. These data provide detailed insight into the health status and health-related behavior of residents in the county. These secondary data are based on statistics of actual occurrences, such as the incidence of certain diseases, as well as statistics related to SDoH.

Methodology

All individual secondary data measures were grouped into six categories and 20 corresponding focus areas based on "common themes." In order to draw conclusions about the secondary data for Chowan County, its performance on each data measure was compared to targets/benchmarks. If Chowan County's performance was more than five percent worse than the comparative benchmark, it was concluded that improvements could be needed to better the health of the community. Conversely, if an area performed more than five percent better than the benchmark, it was concluded that while a need is still present, the significance of that need relative to others is likely less acute. The most recently available data were compared to these targets/benchmarks in the following order (as applicable):

- For all available data sources, state and national averages were compared.

The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than 5 percent worse = High need
- If the data were within or equal to 5 percent (better or worse) = Medium need
- If the data were more than 5 percent better = Low need

These measures are noted with an asterisk.

Additionally, data measures were also viewed with regard to performance over time and whether the measure has improved or worsened compared to the prior CHNA timeframe.

Data Sources

The following tables are organized by each of the twenty focus areas and contain information related to the secondary data measures analyzed including a description of each measure, the data source, and most recent data time periods.

Table 24: Access to Care

Measure	Description	Data Source	Most Recent Data Year(s)
Primary Care Providers (per 100,000 population)	Number of providers with a CMS National Provider Identifier (NPI) that specialize in primary care. Primary health providers include practicing physicians specializing in general practice medicine, family medicine, internal medicine, and pediatrics.	Centers for Medicare and Medicaid Services (CMS) – National Plan and Provider Enumeration System (NPPES). Data accessed via the North Carolina Data Portal, June 2024.	2024
Mental Health Providers (per 100,000 population)	Number of providers with a CMS National Provider Identifier (NPI) that specialize in mental health. Mental health providers include licensed clinical social workers and other credentialed professionals specializing in psychiatry, psychology, counseling, or child, adolescent, or adult mental health.	CMS –NPPES. Data accessed via the North Carolina Data Portal, June 2024.	2024
Addiction/Substance Abuse Providers (per 100,000 population)	Number of providers who specialize in addiction or substance abuse treatment, rehabilitation, addiction medicine, or providing methadone. The providers include Doctors of Medicine (MDs), Doctors of Osteopathic Medicine (DOs), and other credentialed professionals with a Center for Medicare and Medicaid Services and a valid National Provider Identifier (NPI).	CMS –NPPES. Data accessed via the North Carolina Data Portal, June 2024.	2024
Buprenorphine Providers (per 100,000 population)	Number of providers authorized to treat opioid dependency with buprenorphine. Buprenorphine is the first medication to treat opioid dependency that is permitted to be prescribed or dispensed in physician offices, significantly increasing treatment access. Qualified physicians are required to acquire and maintain certifications to legally dispense or prescribe opioid dependency medications.	US Department of Health and Human Services (DHHS), Substance Abuse and Mental Health Services Administration. Data accessed via the North Carolina Data Portal, June 2024.	2023

Measure	Description	Data Source	Most Recent Data Year(s)
Dental Health Providers (per 100,000)	Number of oral health providers with a CMS National Provider Identifier (NPI). Providers included are those who list "dentist", "general practice dentist", or "pediatric dentistry" as their primary practice classification, regardless of sub-specialty.	CMS – NPPES. Data accessed via the North Carolina Data Portal, June 2024.	2024
Health Professional Shortage Areas - Dental Care	Percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HSPA), defined as having a shortage of dental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.	U.S. Census Bureau, American Community Survey (ACS). Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Federally Qualified Health Centers (FQHCs)	Number of Federally Qualified Health Centers (FQHCs) in the community. This indicator is relevant because FQHCs are community assets that provide health care to vulnerable populations; they receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved.	U.S. DHHS, CMS, Provider of Services File. Data accessed via the North Carolina Data Portal, June 2024.	2023
Population Receiving Medicaid	Percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Uninsured Population (SAHIE)	Percentage of adults under age 65 without health insurance coverage. This indicator is relevant because lack of health insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contribute to poor health status. The lack of health insurance is considered a *key driver* of health status.	U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE). Data accessed via the North Carolina Data Portal, June 2024.	2022

Table 25: Built Environment

Measure	Description	Data Source	Most Recent Data Year(s)
Broadband Access (Access to DL Speeds >= 25MBPS and UL Speeds >= 3 MBPS)	Percentage of population with access to high-speed internet. Data are based on the reported service area of providers offering download speeds of 25 MBPS or more and upload speeds of 3 MBPS or more. These data represent both wireline and fixed/terrestrial wireless internet providers. Cellular internet providers are not included.	Federal Communications Commission (FCC) FABRIC Data. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2023
Broadband Access (Access to DL Speeds >= 100MBPS and UL Speeds >= 20 MBPS)	Percentage of population with access to high-speed internet. Data are based on the reported service area of providers offering download speeds of 100 MBPS or more and upload speeds of 20 MBPS or more. These data represent both wireline and fixed/terrestrial wireless internet providers. Cellular internet providers are not included.	FCC FABRIC Data. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2023
Households with No Computer	Percentage of households who don't own or use any types of computers, including desktop or laptop, smartphone, tablet, or other portable wireless computer, and some other type of computer, based on the 2018-2022 American Community Survey estimates.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Households with No or Slow Internet	Percentage of households who either use dial-up as their only way of internet connection or have internet access but don't pay for the service, or have no internet access in their home, based on the 2018-2022 American Community Survey estimates.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Liquor Stores	Number of liquor stores per 100,000 population provides a measure of environmental influences on dietary behaviors and the accessibility of healthy foods. Note this data excludes establishments preparing and serving alcohol for consumption on premises (including bars and restaurants) or which sell alcohol as a secondary retail product (including gas stations and grocery stores).	U.S. Census Bureau, County Business Patterns. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
Adverse Childhood Experiences (ACEs)	Percentage of children in North Carolina (total) with two or more ACEs. ACEs are potentially traumatic events that occur in childhood (0-17 years), including experiencing violence, abuse, or neglect; witnessing violence in the home or community; and having a family member attempt or die by suicide. Also included are aspects of the child's environment that can undermine their sense of safety, stability, and bonding, such as substance abuse problems, mental health problems, instability due to parental separation, and instability due to household members being in jail or prison. Other traumatic experiences that impact health and well-being may include not having enough food to eat, experiencing homelessness or unstable housing, or experiencing discrimination. ACEs can have lasting effects on health and well-being in childhood and life opportunities well into adulthood, for example, education and job potential. These experiences can increase the risks of injury, sexually transmitted infections, teen pregnancy, suicide, and a range of chronic diseases including cancer, diabetes, and heart disease.	Clear Impact Healthy North Carolina (HNC) 2030 Scorecard, 2021-2024. Data accessed June 2024.	2022

Table 26: Diet and Exercise

Measure	Description	Data Source	Most Recent Data Year(s)
Physical inactivity (percent of adults that report no leisure time physical activity)	Percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month. Examples of physical activities include running, calisthenics, golf, gardening, or walking for exercise. The method for calculating Physical Inactivity changed. Data for Physical Inactivity are provided by the CDC Interactive Diabetes Atlas which	Behavioral Risk Factor Surveillance System. Data accessed via Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute County Health Rankings & Roadmaps, June 2024.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Physical Inactivity is created using statistical modeling.		
Community Design - Walkability Index Score	The National Walkability Index (2021) is a nationwide index score developed by the Environmental Protection Agency (EPA) that ranks block groups according to their relative walkability using selected variables on density, diversity of land uses, and proximity to transit from the Smart Location Database. The block groups are assigned their final National Walkability Index scores on a scale of 1 to 20 where the higher a score, the more walkable the community is.	EPA – Smart Location Database. Data accessed via the North Carolina Data Portal, June 2024.	2021
Access to Exercise Opportunities	Percentage of individuals in the county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. The numerator is the 2020 total population living in census blocks with adequate access to at least one location for physical activity (adequate access is defined as census blocks where the border is a half-mile or less from a park, 1 mile or less from a recreational facility in an urban area, or 3 miles or less from a recreational facility in a rural area) and the denominator is the 2020 resident county population. This indicator is used in the 2024 County Health Rankings.	ArcGIS Business Analyst and Living Atlas of the World, YMCA & U.S. Census Tigerline Files. Data accessed via the North Carolina Data Portal, June 2024.	2023
Recreation and Fitness Facility Access (per 100,000 population)	Number of establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports. Access to recreation and fitness facilities	U.S. Census Bureau, County Business Patterns. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	encourages physical activity and other healthy behaviors.		
Sugar-Sweetened Beverage (SSB) Consumption Among Adults	Percentage of total adults reporting consumption of one or more SSBs per day.	Clear Impact. HNC2030 Scorecard, 2021-2024. Data accessed June 2024.	2022

Table 27: Education

Measure	Description	Data Source	Most Recent Data Year(s)
Population with Limited English Proficiency	Percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well". This indicator is relevant because an inability to speak English well creates barriers to healthcare access, provider communications, and health literacy/education.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
High School Graduation Rate	Percentage of high school students who graduate within four years. The adjusted cohort graduation rate (ACGR) is a graduation metric that follows a "cohort" of first-time 9th graders in a particular school year, and adjusts this number by adding any students who transfer into the cohort after 9th grade and subtracting any students who transfer out, emigrate to another county, or pass away.	U.S. Department of Education, EDFacts. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2020-2021
No High School Diploma	Percentage of the population aged 25 and older without a high school diploma (or equivalency) or higher. This indicator is relevant because educational attainment is linked to positive health outcomes.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Student Math Proficiency (4th Grade)	Percentage of 4th grade students testing below the "proficient" level on the Math portion of state-specific standardized tests.	U.S. Department of Education, EDFacts. Additional data analysis by CARES. Data accessed via the North Carolina Data Portal, June 2024.	2020-2021
Student Reading Proficiency (4th Grade)	Percentage of 4th grade students testing below the "proficient" level on the English Language Arts portion of state-specific standardized tests.	US Department of Education, EDFacts. Additional data analysis by CARES. Data accessed	2020-2021

Measure	Description	Data Source	Most Recent Data Year(s)
		via the North Carolina Data Portal, June 2024.	
School Funding Adequacy	The average gap in dollars between actual and required spending per pupil among public school districts. Required spending is an estimate of dollars needed to achieve U.S. average test scores in each district.	School Finance Indicators Database. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2021
School Funding Adequacy – Spending per Pupil	Actual spending per pupil among public school districts.	School Finance Indicators Database. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2021

Table 28: Employment

Measure	Description	Data Source	Most Recent Data Year(s)
Unemployment Rate (percent of population age 16+ but unemployed)	Percentage of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted) that is unemployed but seeking work. This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.	U.S. Department of Labor, Bureau of Labor Statistics. Data accessed via the North Carolina Data Portal, June 2024.	2024
Average Annual Unemployment Rate, 2013-2023	Average yearly percentage across the given time period of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted) that is unemployed but seeking work. This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2024

Table 29: Environmental Quality

Measure	Description	Data Source	Most Recent Data Year(s)
Climate and Health – Flood Vulnerability	Estimated number of housing units within the special flood hazard area (SFHA) per county. The SFHAs have	Federal Emergency Management Agency (FEMA), National Flood	2011

Measure	Description	Data Source	Most Recent Data Year(s)
	1% annual chance of coastal or riverine flooding.	Hazard Layer. Data accessed via the North Carolina Data Portal, June 2024.	
Air and Water Quality – Drinking Water Safety	Number of drinking water violations recorded in a two-year period. Health-based violations include incidents where either the amount of contaminant exceeded the maximum contaminant level (MCL) safety standard, or where water was not treated properly. In cases where a water system serves multiple counties and has a violation, each county served by the system is given a violation.	EPA. Data accessed via the North Carolina Data Portal, June 2024.	2023

Table 30: Family, Community, and Social Support

Measure	Description	Data Source	Most Recent Data Year(s)
Childcare Cost Burden	Childcare costs for a median-income household with two children as a percentage of household income. Data are included as part of the 2024 County Health Rankings.	The Living Wage Calculator, Small Area Income and Poverty Estimates. Data accessed via the North Carolina Data Portal, June 2024.	2023
Young People Not in School and Not Working	Percentage of youth ages 16-19 who are not currently enrolled in school and who are not employed.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Table 31: Food Security

Measure	Description	Data Source	Most Recent Data Year(s)
Food Insecurity Rate	Estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.	Feeding America. Data accessed via the North Carolina Data Portal, June 2024.	2021
Food Insecure Children	Estimated percentage of the population under age 18 that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of	Feeding America. Data accessed via the North Carolina Data Portal, June 2024.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	limited or uncertain access to adequate food.		
Low-Income and Low Food Access	Percentage of the low-income population with low food access. Low food access is defined as living more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket, supercenter, or large grocery store. Data are from the April 2021 Food Access Research Atlas dataset. This indicator is relevant because it highlights populations and geographies facing food insecurity.	U.S. Department of Agriculture (USDA), Economic Research Service, USDA – Food Access Research Atlas. 2019. Data accessed via the North Carolina Data Portal, June 2024.	2019
Limited access to healthy foods	Percentage of population who are low-income and do not live close to a grocery store.	USDA Food Environment Atlas. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2019
Food Environment - Fast Food Restaurants (per 100,000 population)	Number of fast food restaurants per 100,000 population. The prevalence of fast food restaurants provides a measure of both access to healthy food and environmental influences on dietary behaviors. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating.	US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2022. Data accessed via the North Carolina Data Portal, June 2024.	2022
Food Environment - Grocery Stores (per 100,000 population)	Number of grocery establishments per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Delicatessen-type establishments are also included. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded. Healthy dietary behaviors are supported by access to healthy	US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2022. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	foods, and grocery stores are a major provider of these foods.		

Table 32: Housing and Homelessness

Measure	Description	Data Source	Most Recent Data Year(s)
Renter Costs – Average Gross Rent	Average gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Gross rent provides information on the monthly housing cost expenses for renters. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels, and to provide assistance to agencies in determining policies on fair rent.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Housing Cost Burden, Severe (50%)	Percentage of the households where housing costs are 50% or more total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Housing & Urban Development (HUD)-Assisted Housing Units (per 10,000 households)	Number of HUD-funded assisted housing units available to eligible renters as well as the unit rate (per 10,000 total households).	U.S. Department of HUD. Data accessed via the North Carolina Data Portal, June 2024.	2017-2021
Substandard Housing, Severe	Percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2011-2015

Measure	Description	Data Source	Most Recent Data Year(s)
	facilities, 3) with 1.51 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 50%, and 5) gross rent as a percentage of household income greater than 50%. Selected conditions provide information in assessing the quality of the housing inventory and its occupants. This data is used to easily identify homes where the quality of living and housing can be considered substandard.		
Homeless Children and Youth	Number of homeless children and youth enrolled in the public school system during the school year 2019-2020. According to the data source definitions, homelessness is defined as lacking a fixed, regular, and adequate nighttime residence. Those who are homeless may be sharing the housing of other persons, living in motels, hotels, or camping grounds, in emergency transitional shelters, or unsheltered. Data are aggregated to the report-area level based on school-district summaries where three or more homeless children are counted.	US Department of Education, EDFacts. Additional data analysis by CARES. 2019-2020. Data accessed via the North Carolina Data Portal, June 2024.	2019-2020

Table 33: Income

Measure	Description	Data Source	Most Recent Data Year(s)
Median Family Income	Median family income based on the latest 5-year American Community Survey estimates. A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. Family income includes the incomes of all family members ages 15 and older.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers, presented as "cents on the dollar." Data are	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Measure	Description	Data Source	Most Recent Data Year(s)
	acquired from the 2018-2022 ACS and are used in the 2024 County Health Rankings.		
Population Below 100% Federal Poverty Level (FPL)	Percentage of population living in households with income below the FPL. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2022
Population Below 200% FPL	Percentage of population living in households with income below 200% of the FPL. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Children Below 200% FPL	Percentage of children living in households with income below 200% of the FPL. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Population Receiving SNAP (SAIPE)	Average percentage of the population receiving SNAP benefits during the month of June during the most recent report year. The Supplemental Nutrition Assistance Program, or SNAP, is a federal program that provides nutrition benefits to low-income individuals and families that are used at stores to purchase food.	U.S. Census Bureau, Small Area Income and Poverty Estimates. Data accessed via the North Carolina Data Portal, June 2024.	2021
Children Eligible for Free/Reduced Price Lunch	Percentage of public school students eligible for the free or reduced price lunch program in the latest report year. Free or reduced price lunches are served to qualifying students in families with income between 185 percent (free lunch) and or 130 percent (reduced price) of the US federal poverty threshold as part of the federal National School Lunch Program (NSLP).	National Center for Education Statistics (NCES) – Common Core of Data. Data accessed via the North Carolina Data Portal, June 2024.	2022-2023

Table 34: Length of Life

Measure	Description	Data Source	Most Recent Data Year(s)
Premature Death (years of potential life lost before age 75 per 100,000 population age-adjusted)	Number of events (i.e., deaths, births, etc.) in a given time period (three-year period) divided by the average number of people at risk during that period. Years of potential life lost measures mortality by giving more weight to deaths at earlier ages than deaths at later ages. Premature deaths are deaths before age 75. All of the years of potential life lost in a county during a three-year period are summed and divided by the total population of the county during that same time period-this value is then multiplied by 100,000 to calculate the years of potential life lost under age 75 per 100,000 people. These are age-adjusted.	National Center for Health Statistics – Natality and Mortality Files; Census Population Estimates Program. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2019-2021
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted).	National Center for Health Statistics – Natality and Mortality Files; Census Population Estimates Program. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2019-2021
Life expectancy	Average life expectancy at birth (age-adjusted to 2000 standard). Data were from the National Center for Health Statistics - Mortality Files (2019-2021) and are used for the 2024 County Health Rankings.	National Center for Health Statistics – Natality and Mortality Files; Census Population Estimates Program. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2019-2021

Table 35: Maternal and Infant Health

Measure	Description	Data Source	Most Recent Data Year(s)
Births with no or late prenatal care	Percentage of women who did not obtain prenatal care until the 7th month (or later) of pregnancy or who didn't have any prenatal care, as of all who gave birth during the three-year period from 2017 to 2019. This	CDC – National Vital Statistics System (NVSS). CDC WONDER. CDC, Wide-Ranging Online Data for Epidemiologic Research. Data accessed	2017-2019

Measure	Description	Data Source	Most Recent Data Year(s)
	indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.	via the North Carolina Data Portal, June 2024.	
Low birthweight (percent of live births with birthweight < 2500 grams)	Percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.). The numerator is the number of low birthweight infants born over a 7-year time span, while the denominator is the total number of births in a county during the same time.	National Center for Health Statistics – Natality Files. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2016-2022
Infant Mortality	Number of all infant deaths (within 1 year) per 1,000 live births. Data were from the National Center for Health Statistics - Mortality Files (2015-2021) and are used for the 2024 County Health Rankings.	National Center for Health Statistics – Natality and Mortality Files. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2015-2021

Table 36: Mental Health

Measure	Description	Data Source	Most Recent Data Year(s)
Poor Mental Health Days	Average number of self-reported mentally unhealthy days in past 30 days among adults (age-adjusted to the 2000 standard). Data are included as part of the 2024 County Health Rankings.	CDC, Behavioral Risk Factor Surveillance System (BRFSS). Data accessed via the North Carolina Data Portal, June 2024.	2021
Deaths of Despair (Suicide and Drug/Alcohol Poisoning) (per 100,000 population)	Average rate of death due to intentional self-harm (suicide), alcohol-related disease, and drug overdose, also known as "deaths of despair", per 100,000 population. Figures are reported as crude rates. Rates are re-summarized for report areas from county level data, only where data is available. This indicator is relevant because death of despair is an indicator of poor mental health.	CDC – NVSS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Suicide (per 100,000 population)	Five-year average rate of death due to intentional self-harm (suicide) per	CDC – NVSS. Data accessed via the North	2018-2022

Measure	Description	Data Source	Most Recent Data Year(s)
	100,000 population from 2018 to 2022. Figures are reported as crude rates. Rates are re-summarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.	Carolina Data Portal, June 2024.	

Table 37: Physical Health

Measure	Description	Data Source	Most Recent Data Year(s)
Poor or fair health (percent of adults reporting fair or poor health age-adjusted)	Percentage of adults in a county who consider themselves to be in poor or fair health. This measure is based on responses to the BRFSS question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of respondents who rated their health "fair" or "poor." Poor or Fair Health is age-adjusted. Poor or Fair Health estimates are created using statistical modeling.	Behavioral Risk Factor Surveillance System. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2021
Asthma Prevalence (Adult)	Percentage of adults ages 18 and older who answer "yes" to both of the following questions: "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" and the question "Do you still have asthma?"	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2022
Heart Disease (Adult)	Percentage of adults ages 18 and older who report ever having been told by a doctor, nurse, or other health professional that they had angina or coronary heart disease.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2022
High Blood Pressure (Adult)	Percentage of adults ages 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have high blood pressure (HTN). Women who were told high blood pressure only during pregnancy and those who were told they had borderline hypertension were not included.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2021
High Cholesterol (Adult)	Percentage of adults ages 18 and older who report having been told by a doctor, nurse, or other health	CDC, BRFSS. Data accessed via the North	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	professional that they had high cholesterol.	Carolina Data Portal, June 2024.	
Diabetes Prevalence (Adult)	Percentage of adults ages 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.	CDC, National Center for Chronic Disease Prevention and Health Promotion. Data accessed via the North Carolina Data Portal, June 2024.	2021
Kidney Disease (Adult)	Percentage of adults ages 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have kidney disease.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2021
Stroke (Adult)	Percentage of adults ages 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have had a stroke.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2022
Obesity	Percentage of adults ages 20 and older self-report having a Body Mass Index (BMI) greater than 30.0 (obese). Respondents were considered obese if their BMI was 30 or greater. BMI (weight [kg]/height [m]2) was derived from self-report of height and weight. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.	CDC, National Center for Chronic Disease Prevention and Health Promotion. Data accessed via the North Carolina Data Portal, June 2024.	2021
Poor Dental Health – Teeth Loss	Percentage of adults ages 18 and older who report having lost all of their natural teeth because of tooth decay or gum disease.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2022
Cancer Incidence – All Sites (per 100,000 population)	Age-adjusted incidence rate (cases per 100,000 population per year) of cancer (all sites) adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older).	State Cancer Profiles. Data accessed via the North Carolina Data Portal, June 2024.	2016-2020
Emergency Room (ER) Visits (per 100,000 Medicare beneficiaries)	Rate of ER visits among Medicare beneficiaries age 65 and older (per 100,000 beneficiaries). This indicator is relevant because ER visits are "high intensity" services that can burden on both health care systems and patients. High rates of ER visits "may	CMS – Geographic Variation Public Use File. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	indicate poor care management, inadequate access to care or poor patient choices, resulting in ER visits that could be prevented".		
Hospitalizations – Heart Disease (per 1,000 Medicare beneficiaries)	Hospitalization rate for coronary heart disease among Medicare beneficiaries ages 65 and older for hospital stays occurring between 2018 and 2020.	CDC – Atlas of Heart Disease and Stroke. Data accessed via the North Carolina Data Portal, June 2024.	2018-2020
Hospitalizations – Stroke (per 1,000 Medicare beneficiaries)	Hospitalization rate for Ischemic stroke among Medicare beneficiaries ages 65 and older for hospital stays occurring between 2018 and 2020.	CDC – Atlas of Heart Disease and Stroke. Data accessed via the North Carolina Data Portal, June 2024.	2018-2020

Table 38: Quality of Care

Measure	Description	Data Source	Most Recent Data Year(s)
Seasonal Influenza Vaccine	Percentage of adults ages 18 and older who reported receiving an influenza vaccination in the past 12 months. These data are derived from responses to the 2019 BRFSS.	CDC – FluVaxView. Data accessed via the North Carolina Data Portal, June 2024.	2019
Hospitalizations – Preventable Conditions (per 100,000 Medicare beneficiaries)	Preventable hospitalization rate among Medicare beneficiaries for the latest reporting period. Preventable hospitalizations include hospital admissions for one or more of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, bacterial pneumonia, or urinary tract infection. Rate is presented per 100,000 beneficiaries.	CMS, Mapping Medicare Disparities Tool. Data accessed via the North Carolina Data Portal, June 2024.	2021
Readmissions – All Cause (Medicare Population)	Rate of 30-day hospital readmissions among Medicare beneficiaries ages 65 and older. Hospital readmissions are unplanned visits to an acute care hospital within 30 days after discharge from a hospitalization. Patients may have unplanned readmissions for any reason,	CMS – Geographic Variation Public Use File. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	however readmissions within 30 days are often related to the care received in the hospital, whereas readmissions over a longer time period have more to do with other complicating illnesses, patients' own behavior, or care provided to patients after hospital discharge.		

Table 39: Safety

Measure	Description	Data Source	Most Recent Data Year(s)
Incarceration Rate	Percentage of individuals born in each census tract who were incarcerated at the time of the 2010 Census as estimated by Opportunity Atlas data.	Opportunity Insights. Data accessed via the North Carolina Data Portal, June 2024.	2018
Juvenile Arrest Rate (per 1,000 juveniles)	Rate of delinquency cases per 1,000 juveniles. Data are acquired from the 2021 Easy Access to State and County Juvenile Court Case Counts (EZACO) and are used in the 2024 County Health Rankings.	Office of Juvenile Justice and Delinquency Department, Easy Access to State and County Juvenile Court Case Counts (EZACO). Data accessed via the North Carolina Data Portal, June 2024.	2021
Violent Crime (per 100,000 people)	Annual rate of reported violent crimes per 100,000 people during the three-year period of 2015-2017. Violent crime includes homicide, rape, robbery, and aggravated assault.	Federal Bureau of Investigation (FBI), FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Data accessed via the North Carolina Data Portal, June 2024.	2015-2017
Mortality – Firearm (per 100,000 population)	Five-year average rate of death due to firearm wounds per 100,000 population, which includes gunshot wounds from powder-charged handguns, shotguns, and rifles. Figures are reported as crude rates for the time period of 2018 to 2022. This indicator is relevant because firearm deaths are preventable, and are a cause of premature death.	CDC – National Vital Statistics System. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Mortality – Poisoning (per 100,000 population)	Five-year average rate of death due to poisoning (including drug overdose) per 100,000 population.	CDC – National Vital Statistics System. Data accessed via the North	2018-2022

Measure	Description	Data Source	Most Recent Data Year(s)
	Figures are reported as crude rates for the time period of 2018 to 2022. Rates are re-summarized for report areas from county level data, only where data is available. This indicator is relevant because poisoning deaths, especially from drug overdose, are a national public health emergency.	Carolina Data Portal, June 2024.	

Table 40: Sexual Health

Measure	Description	Data Source	Most Recent Data Year(s)
Sexually transmitted infections (chlamydia rate per 100,000 population)	Number of newly diagnosed chlamydia cases per 100,000 population	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2021
HIV Incidence (rate per 100,000 population)	Incidence rate of HIV infection or infection classified as state 3 (AIDS) per 100,000 population. Incidence refers to the number of confirmed diagnoses during a given time period, in this case is January 1st and December 31st of the latest reporting year.	CDC, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Data accessed via the North Carolina Data Portal, June 2024.	2022
Teen Births (per 1,000 female population age 15-19)	Seven-year average number of births per 1,000 female population age 15-19. Data were from the National Center for Health Statistics - Natality files (2016-2022) and are used for the 2024 County Health Rankings.	CDC – National Vital Statistics System. Data accessed via the North Carolina Data Portal, June 2024.	2016-2022

Table 41: Substance Use Disorders

Measure	Description	Data Source	Most Recent Data Year(s)
Excessive Drinking – Heavy Alcohol Consumption	Percentage of adults that self-report excessive drinking in the last 30 days. Data for this indicator were based on survey responses to the 2021 Behavioral Risk Factor Surveillance System (BRFSS) annual survey and are used for the 2024 County Health Rankings. Excessive drinking is defined as the percentage of the population who	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	report at least one binge drinking episode involving five or more drinks for men and four or more for women over the past 30 days, or heavy drinking involving more than two drinks per day for men and more than one per day for women, over the same time period. Alcohol use is a behavioral health issue that is also a risk factor for a number of negative health outcomes, including: physical injuries related to motor vehicle accidents, stroke, chronic diseases such as heart disease and cancer, and mental health conditions such as depression and suicide. There are a number of evidence-based interventions that may reduce excessive/binge drinking; examples include raising taxes on alcoholic beverages, restricting access to alcohol by limiting days and hours of retail sales, and screening and counseling for alcohol abuse.		
Mortality - Motor Vehicle Crash – Alcohol-Involved (annual rate per 100,000 population)	Crude rate of persons killed in motor vehicle crashes involving alcohol as an annual rate per 100,000 population. Fatality counts are based on the location of the crash and not the decedent's residence. Motor vehicle crash deaths are preventable and are a leading cause of death among young persons.	U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Opioid Use Disorder (per 100,000 Medicare beneficiaries)	Rate of emergency department utilization for opioid use and opioid use disorder among the Medicare population. Figures are reported as age-adjusted to year 2000 standard. Rates are re-summarized for report areas from county level data, only where data is available. This indicator is relevant because mental health and substance use is an indicator of poor health.	CMS, Mapping Medicare Disparities Tool. Data accessed via the North Carolina Data Portal, June 2024.	2021
Mortality – Opioid Overdose (per 100,000 population)	Five-year average rate of death due to opioid drug overdose per 100,000 population. Figures are reported as crude rates for the time period of 2018 to 2022. Rates are re-	CDC – NVSS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Measure	Description	Data Source	Most Recent Data Year(s)
	summarized for report areas from county level data, only where data is available. This indicator is relevant because opioid drug overdose is the leading cause of injury deaths in the United States, and they have increased dramatically in recent years.		

Table 42: Tobacco Use

Measure	Description	Data Source	Most Recent Data Year(s)
Adult smoking	Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Adult Smoking estimates are created using statistical modeling.	Behavioral Risk Factor Surveillance System. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	2021

Table 43: Transportation Options and Transit

Measure	Description	Data Source	Most Recent Data Year(s)
Households with No Motor Vehicle	Percentage of households with no motor vehicle based on the latest 5-year American Community Survey estimates.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
Commuter Travel Patterns - Public Transportation	Percentage of population using public transportation as their primary means of commuting to work. Public transportation includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails, and ferryboats.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

APPENDIX 3 | SECONDARY DATA COMPARISONS

Description of Focus Area Comparisons

When viewing the secondary data summary tables, please note that the following color shadings have been included to identify how Chowan County compares to North Carolina and the national benchmark. If both statewide North Carolina and national data was available, North Carolina data was preferentially used as the target/benchmark value.

Secondary Data Summary Table Color Comparisons

Color Shading	Priority Level	Chowan County Description
	Low	Represents measures in which Chowan County scores are **more than five percent better** than the most applicable target/benchmark and for which a low priority level was assigned.
	Medium	Represents measures in which Chowan County scores are comparable to the most applicable target/benchmark scoring **within or equal to five percent**, and for which a medium priority level was assigned.
	High	Represents measures in which Chowan County scores are **more than five percent worse** than the most applicable target/benchmark and for which a high priority level was assigned.

Note: Please see the methodology section of this report for more information on assigning need levels to the secondary data.

Please note that to categorize each metric in this manner and identify the priority level, the Chowan County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

(Chowan Co Value – Benchmark Value)/(Benchmark) x 100 = % Difference Used to Identify Priority Level

For example, for the % Limited Access to Healthy Foods metric, the following calculation was completed:

(16.3-7.5)/(7.5) x 100% = 117.3% = Displayed as **High Priority Level**, Shaded in Red

This metric indicates that the percentage of the population with limited access to healthy foods in Chowan County is 117.3 percent worse (or, in this case, higher) than the percentage of the population with limited access to healthy foods in the state of North Carolina.

Detailed Focus Area Benchmarks

Table 44: Access to Care

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Primary Care Providers Ratio	112.4	101.1	138.6	2024	Low
Mental Health Providers Ratio	178.7	155.7	94.8	2024	High
Addiction/Substance Abuse Providers Ratio	27.9	25.0	21.9	2024	High
Buprenorphine Providers Ratio	15.5	15.2	0.0	2023	High
Dental Health Providers Ratio	39.1	31.5	14.6	2024	High
% Living in Health Professional Shortage Areas (HPSAs) – Dental Care	17.8%	34.0%	23.7%	2018-2022	Low
Federally Qualified Health Centers (FQHCs)	3.5	4.1	7.3	2023	Low
% Receiving Medicaid	22.3%	20.2%	25.4%	2018-2022	High
% Uninsured	10.2%	12.5%	12.6%	2022	Medium

Table 45: Built Environment

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Broadband Access (Access to DL Speeds >= 25MBPS and UL Speeds >= 3 MBPS)	93.8%	93.6%	74.8%	2023	High
Broadband Access (Access to DL Speeds >= 100MBPS and UL Speeds >= 20 MBPS)	91.2%	90.4%	68.5%	2023	High
Households with No Computer	6.1%	6.9%	9.8%	2018-2022	High

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Households with No or Slow Internet	11.7%	13.0%	19.2%	2018-2022	High
Liquor Stores	13.3	6.2	Suppressed	2022	N/A
Adverse Childhood Experiences (ACEs)	N/A	N/A	Suppressed	2022	N/A

Table 46: Diet and Exercise

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Physically Inactive	N/A	21.6%	26.8%	2021	High
Walkability Index Score	10	7	6	2021	High
% with Access to Exercise Opportunities	84.1%	73.0%	19.0%	2023	High
Recreation and Fitness Facility Access	14.8	13.1	Suppressed	2022	N/A
Sugar-Sweetened Beverage (SSB) Consumption	N/A	N/A	36.8%	2022	N/A

Table 47: Education

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Limited English Proficiency	8.2%	4.6%	1.2%	2018-2022	Low
High School Graduation Rate	81.1%	87.6%	92.3%	2020-2021	Low
% with No High School Diploma	10.9%	10.6%	13.4%	2018-2022	High
Student Math Proficiency	63.9%	65.8%	66.7%	2020-2021	Medium
Student Reading Proficiency	60.1%	59.5%	64.3%	2020-2021	High
School Funding Adequacy	N/A	-$4,742	-$8,321	2021	High
School Funding Adequacy –	N/A	$10,655	$13,220	2021	Low

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Spending per pupil					

Table 48: Employment

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Unemployment Rate	3.9%	3.7%	3.2%	2024	Low
Average Annual Unemployment Rate, 2013-2023	3.6%	3.5%	3.6%	2024	Medium

Table 49: Environmental Quality

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Flood Vulnerability	6.5%	4.9%	7.9%	2011	High
Drinking Water Safety	16,107	194	0	2023	Low

Table 50: Family, Community and Social Support

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Childcare Cost Burden	28.8%	27.0%	24.0%	2023	Low
% Young People Not in School or Working	6.9%	7.5%	0.9%	2018-2022	Low

Table 51: Food Security

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Food Insecure	10.3%	11.4%	14.1%	2021	High
% Food Insecure Children	13.3%	15.3%	25.6%	2021	High
% Low-Income and with Low Food Access	19.4%	21.3%	41.1%	2019	High
% Limited Access to Healthy Foods	N/A	7.5%	16.3%	2019	High
Fast Food Restaurants	96.2	77.4	73.0	2022	Low
Grocery Stores	23.4	18.7	Suppressed	2022	N/A

Table 52: Housing and Homelessness

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Renter Costs – Average Gross Rent	$1,366	$1,090	$688	2018-2022	Low
% Severe Housing Cost Burden	14.1%	12.2%	12.5%	2018-2022	Medium
Assisted Housing Units	413.9	319.2	751.3	2017-2021	High
% Severe Substandard Housing	18.5%	16.1%	20.8%	2011-2015	High
% Homeless Children	2.8%	1.9%	1.1%	2019-2020	Low

Table 53: Income

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Median Family Income	$92,646	$82,890	$68,042	2018-2022	High
Gender Pay Gap	81.0%	83.0%	70.0%	2018-2022	High
% Living Below 100% FPL	12.5%	13.3%	20.9%	2022	High
% Living Below 200% FPL	28.8%	31.6%	40.1%	2018-2022	High
% Children Living Below 200% FPL	37.2%	41.1%	57.0%	2018-2022	High
% Receiving SNAP	12.4%	15.7%	20.6%	2021	High
Children Eligible for Free/Reduced Price Lunch	51.7%	50.8%	54.5%	2022-2023	High

Table 54: Length of Life

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Years of Potential Life Lost Rate	N/A	8,853	10,624	2019-2021	High
Premature Age-Adjusted Mortality	N/A	420	519	2019-2021	High
Life Expectancy	77.6	76.6	74.5	2019-2021	Medium

Table 55: Maternal and Infant Health

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Births with Late or No Prenatal Care	6.1%	6.9%	Suppressed	2019	N/A
Low Birthweight	N/A	9.4%	10.4%	2016-2022	High
Infant Mortality Rate	5.7	7.0	Suppressed	2015-2021	N/A

Table 56: Mental Health

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Poor Mental Health Days	4.9	4.6	5.1	2021	High
Deaths of Despair Rate	55.9	58.7	64.8	2018-2022	High
Suicide Death Rate	13.8	13.4	N/A	2018-2022	N/A

Table 57: Physical Health

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Poor or Fair Health	N/A	14.4%	18.9%	2021	High
% Adults with Asthma	9.7%	9.8%	10.7%	2022	High
% Adults with Heart Disease	5.2%	5.5%	6.3%	2022	High
% Adults with High Blood Pressure	29.6%	32.1%	36.3%	2021	High
% Adults with High Cholesterol	31.0%	31.4%	31.4%	2021	Medium
Diabetes Prevalence	8.9%	9.0%	8.3%	2021	Low
% Adults with Kidney Disease	2.7%	2.9%	3.3%	2021	High
% Stroke	2.8%	3.1%	3.7%	2022	High
Obesity	30.1%	29.7%	21.5%	2021	Low
% Teeth Loss	13.9%	12.0%	15.3%	2022	High
Cancer Incidence Rate	442.3	464.4	413.8	2016-2020	Low
Emergency Room Visits	535	563	729	2022	High

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Heart Disease Hospitalization Rate	10.4	11.7	13.2	2018-2020	High
Stroke Hospitalization Rate	8.0	9.5	5.9	2018-2020	Low

Table 58: Quality of Care

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Children/adults vaccinated annually against seasonal influenza	44.5%	45.6%	43.0%	2021	High
Preventable Hospital Rate	2,752	2,957	2,239	2021	Low
Readmissions Rate	18.1%	17.6%	13.7%	2022	Low

Table 59: Safety

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Incarceration Rate	1.3%	1.5%	1.8%	2018	High
Juvenile Arrest Rate	13.8	16.0	21.0	2021	High
Violent Crime	416.0	365.7	416.6	2015-2017	High
Firearm Death Rate	13.4	15.5	N/A	2018-2022	N/A
Poisoning Death Rate	28.5	31.5	28.8	2018-2022	Low

Table 60: Sexual Health

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
Chlamydia Rate	495.0	603.3	655.9	2021	High
HIV Incidence Rate	12.7	15.5	Suppressed	2022	N/A
Teen Births	16.6	18.2	26.6	2016-2022	High

Table 61: Substance Use Disorders

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Excessive Drinking	18.1%	18.2%	13.9%	2021	Low
% Driving Deaths with Alcohol	2.3	2.9	2.9	2018-2022	Medium
Opioid Use Disorder Rate	41.0	43.0	19.0	2021	Low
Opioid Drug Overdose Deaths	N/A	25.1	N/A	2018-2022	N/A

Table 62: Tobacco Use

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Smokers	14.5%	15.0%	20.1%	2021	High

Table 63: Transportation Options and Transit

Measure	National Benchmark	North Carolina Benchmark	Chowan County Data	Most Recent Data Year	Chowan County Need
% Households with No Motor Vehicle	8.3%	5.4%	10.3%	2018-2022	High
% Public Transit	3.8%	0.8%	0.6%	2018-2022	High

APPENDIX 4 | PRIMARY DATA METHODOLOGY AND SOURCES

Primary data were collected through focus groups, which were conducted in-person, and a web-based Community Member survey.

Methodologies

The methodologies varied based on the type of primary data being analyzed. The following section describes the various methodologies used to analyze the primary data, along with key findings.

Focus Groups

The following two focus groups were conducted in person between May 20th, 2024, and June 17th, 2024. These groups included representation from community members providing responses on their experiences living, working, and receiving healthcare in Chowan County.

- Edenton Lion's Club (Edenton Baptist Church)
- Chowan County Senior Center

Input was gathered on the following topics:

- Community health concerns
- Social and environmental concerns that may impact health
- Access to care
- Other topics of concern for Chowan County

The focus group discussion guide questions are below:

FACILITATOR INTRODUCTION:

"Thank you for being a part of today's focus group! My name is [NAME] and I'm here on behalf of [ORGANIZATION]. We are conducting a community health needs assessment to find out more about some of the health and social issues facing residents in [COUNTY NAME]. The results of this focus group will be used to help health leaders throughout [COUNTY NAME] develop programs and services to address some of the issues we'll be talking about today. We may record today's discussion to assist with notetaking, but we will not be using any identifying information, like participant names, in our results. We would also like to ask you to fill out this demographic form, so we can understand a little bit more about who is participating in this focus group."

PARTICIPANT INTRODUCTIONS

1. Please tell us your first name, how long you've lived in [COUNTY NAME] and something you like about living here.

HEALTH AND WELLNESS

2. What are some of the issues that keep residents in [COUNTY NAME] from living healthy lives?
3. What are the most serious health problems facing people who live in [COUNTY NAME]?
    a. Are there particular groups of people (i.e. race, ethnicity, age, LGBTQ+, etc.) who are more affected by these problems than others?
    b. Are there particular areas in the county that are more affected by these problems than others?
4. Thinking about the health problems you described, what do you think could be done to address these issues?

SOCIAL DETERMINANTS OF HEALTH

5. What are some of the environmental and/or social conditions that affect quality of life for people living in [COUNTY NAME]?
    a. Examples of social and environmental issues that negatively impact health: availability or access to health insurance, domestic violence, housing problems, homelessness, lack of job opportunities, lack of affordable childcare, limited access to healthy food, neighborhood safety/ street violence, poverty, racial/ethnic discrimination, limited/poor educational opportunities.
6. Thinking about the social and environmental issues you described, how do you think these issues could be addressed?

ACCESS TO CARE

7. What are some reasons people in [COUNTY NAME] do not get health care when they need it? How can these issues be addressed?
8. What do you think about the health-related services that are available in your community, including medical care, dental care and behavioral health care?
    a. Are there enough locations providing these types of care for people who need it?
    b. Can you find medical, dental or behavioral health care within a reasonable timeframe when you need it?

c. Are your experiences with providers (doctors, dentists, nurses, therapists, emergency personnel, etc.) more positive or negative, and why?

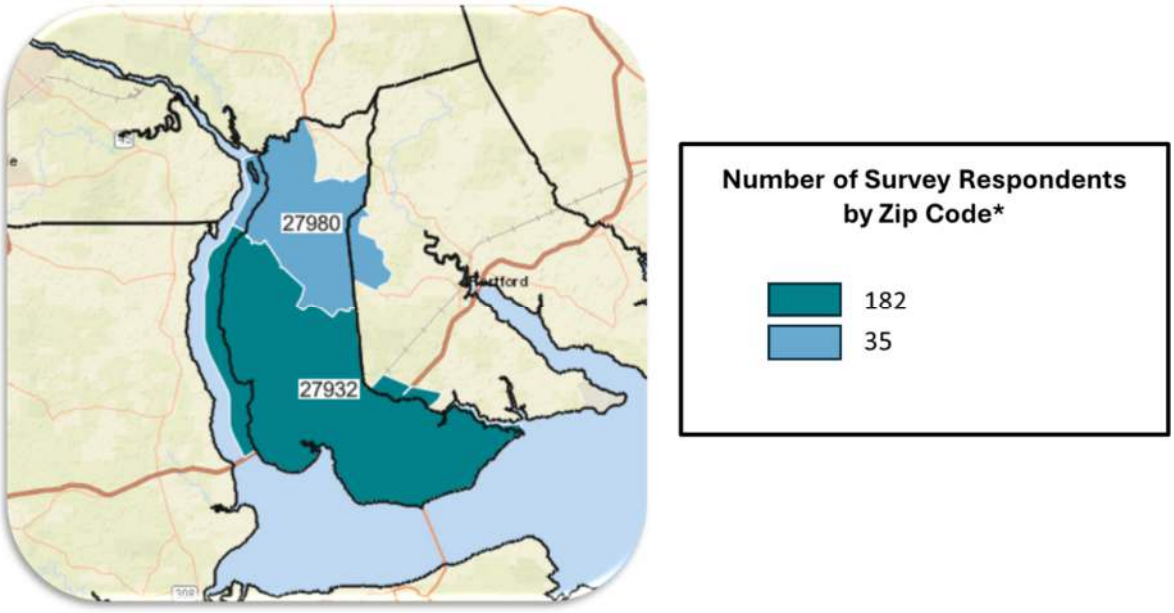
SUGGESTIONS

9. What are some of the strengths or community assets in [COUNTY NAME] that can help residents live healthier lives?
10. What do you think local health leaders should do to improve health and quality of life in [COUNTY NAME]? What do you want local health leaders to know?
11. What actions can local residents take to help improve the health of the community?

Community Member Web Survey

A total of 230 surveys were completed by individuals living, working or receiving healthcare in the Chowan County community. The survey was available in both English and Spanish, however no surveys were completed in Spanish. Consistent with one of the survey process goals, survey community member respondents were representative of a broad geographic area encompassing areas throughout the county. The map below provides additional information on survey respondents' ZIP code of residence.

Figure 46: Respondent Zip Code of Residence[52]



[52] Zip codes with fewer than five respondents were not displayed for privacy reasons.

In general, survey questions focused on:

- Community health problems and concerns
- Community social/environmental problems and concerns
- Specific topics of interest to Chowan County:
    - Access to care
    - Healthy lifestyle
    - Housing and homelessness
    - Mental health
    - Physical health
    - Substance use disorders
    - Transportation and transit

The key findings from the Community Survey are detailed below:

- Alcohol/drug addiction, mental health (e.g., depression and anxiety), and diabetes/high blood sugar were identified as the top 3 health problems affecting the community. About one third of respondents also identified overweight/obesity and cancer as important health problems.
- Cost, not having insurance, and wait times were the top three barriers to receiving health care identified by the community.
- Lack of job opportunities, availability and access to a doctor's office, and neighborhood safety and violence were identified as the top three most important social or environmental problems that affect the health of the community. Poverty, transportation, and housing were also identified by almost one in four respondents.

Information describing the respondents to the Community Member Survey are displayed below:

Figure 47: Respondents by Age Group

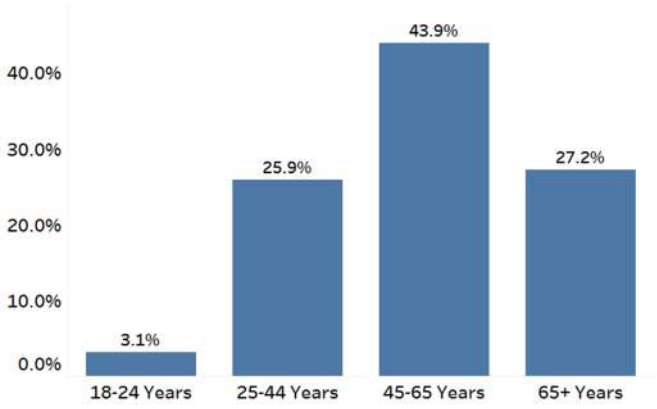


Figure 48: Respondents by Gender

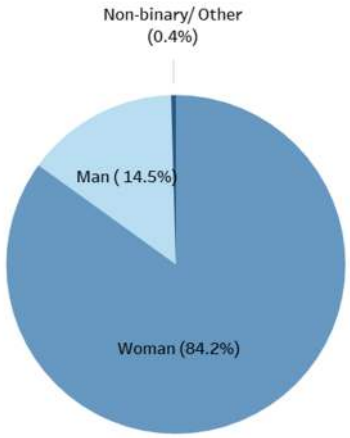


Figure 49: Respondents by Race

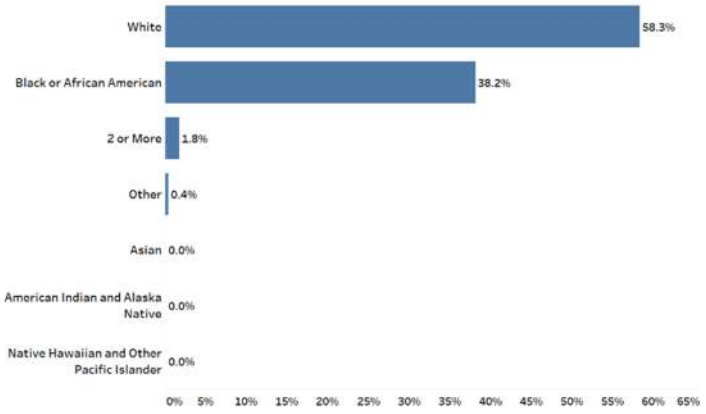
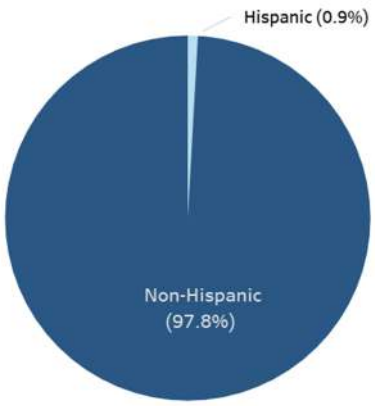


Figure 50: Respondents by Ethnicity



The questions administered via the Community Member Survey instrument are below. The survey instrument was also available in Spanish, and a copy of the Spanish language survey instrument is available on request.

Dear Community Member,

We invite you to participate in your county's Community Health Needs Survey.

Your responses to this optional survey are anonymous and will inform how hospitals and agencies work to improve health in your county. This is not a research survey. It will take less than 10 minutes to complete.

Instructions: You must be 18 years or older to complete this survey. Please answer all questions and return the survey as indicated.

For questions about this survey, contact Ascendient Healthcare Advisors: emilymccallum@ascendient.com

Thank you for your time and participation!

Topic: Demographics

1. What is the zip code where you currently live? _____

2. What is your age group?

   □ 18-24
   □ 25-44
   □ 45-65
   □ 65+
   □ Don't know/ Not sure
   □ Prefer not to say

3. Which of the following best describes your gender? *Select all that apply:*

   □ Man
   □ Woman
   □ Non-binary, genderqueer, or gender nonconforming
   □ Additional gender category: _____
   □ Prefer not to say

4. How would you describe your race? *Select all that apply:*

   □ American Indian and Alaska Native
   □ Asian
   □ Black or African American
   □ Native Hawaiian and Other Pacific Islander
   □ White
   □ Other race: _____
   □ Don't know/Not sure
   □ Prefer not to say

5. Are you of Hispanic or Latino origin, or is your family originally from a Spanish speaking country?[53]

   □ Yes
   □ No
   □ Don't know/Not sure
   □ Prefer not to say

[53] The U.S. Census Bureau defines "Hispanic or Latino" as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race."

6. What is the highest grade or year of school you completed?

□ Less than 9th grade
□ 9-12th grade, no diploma
□ High school graduate (or GED/equivalent)
□ Some college (no degree)
□ Associate's degree or vocational training
□ Bachelor's degree
□ Graduate or professional degree
□ Don't know/Not sure
□ Prefer not to say

7. Which language is most often spoken in your home? *Select one:*

□ English
□ Spanish
□ Other, please specify: _____
□ Don't know/Not sure
□ Prefer not to say

8. For employment, are you currently...*Select all that apply:*

□ Employed full-time (40+ hours per week)
□ Employed part-time (under 40 hours per week)
□ Retired
□ Student
□ Armed forces/military
□ Self-employed
□ Homemaker
□ Temporarily unable to work due to illness or injury
□ Unemployed for less than one year
□ Unemployed for more than one year
□ Permanently unable to work
□ Prefer not to answer

9. Which category best describes your yearly household income before taxes? Do not give the dollar amount, just give the category. Include all income received from employment, social security, support from family, welfare, Aid to Families with Dependent Children (AFDC), bank interest, retirement accounts, rental property, investments, etc.

□ Less than $15,000
□ $15,000 - $24,999
□ $25,000 - $34,999
□ $35,000 - $49,999
□ $50,000 - $74,999
□ $75,000 - $99,999
□ $100,000 - $149,999

□ $150,000 - $199,999
□ $200,000 or more
□ Prefer not to say

Topic: Community Health Opinion Questions

10. What are the **three** most important health problems that affect the health of your community? *Please select up to three:*

□ Alcohol/drug addiction
Alzheimer's disease and other dementias
□ Mental health (depression/anxiety)
□ Cancer
□ Diabetes/high blood sugar
□ Heart disease/high blood pressure
□ HIV/AIDS
□ Infant death
□ Lung disease/asthma/COPD
□ Stroke
□ Smoking/tobacco use
□ Overweight/obesity
□ Other (please specify): _____
□ Prefer not to answer

11. What are the **three** most important social or environmental problems that affect the health of your community? *Please select up to three:*

□ Availability/access to doctor's office
□ Availability/access to insurance
□ Child abuse/neglect
□ Age Discrimination
□ Ability Discrimination
□ Gender Discrimination
□ Racial Discrimination
□ Domestic violence
□ Housing/homelessness
□ Lack of affordable childcare
□ Lack of job opportunities
□ Limited access to healthy foods
□ Limited places to exercise
□ Neighborhood safety/violence
□ Limited opportunities for social connection
□ Poverty
□ Limited/poor educational opportunities
□ Transportation problems
□ Environmental injustice
□ Other (please specify): _____
□ Prefer not to answer

12. What are the **three** most important reasons people in your community do not get health care? *Please select up to three:*

□ Cost – too expensive/can't pay
□ Wait is too long
□ No health insurance
□ No doctor nearby
□ Lack of transportation
□ Insurance not accepted
□ Language barriers
□ Cultural/religious beliefs
□ Other (please specify): _____
□ Prefer not to answer

Topic: Access to Care

13. DURING THE PAST 12 MONTHS, were you told by a health care provider or doctor's office that they did not accept your health care coverage?

□ Yes
□ No
□ Don't know
□ Prefer not to answer

14. Where do you USUALLY go when you are sick or need advice about your health? *Select all that apply:*

□ Doctor's office, clinic or health center
□ Urgent care or minute clinic
□ Hospital emergency room
□ Some other place [please specify]: _____
□ Don't go to one place most often
□ Don't know
□ Prefer not to answer

15. There are many reasons people delay getting medical care. Have you delayed getting care for any of the following reasons in the PAST 12 MONTHS? *Select all that apply:*

□ Didn't have transportation
□ You live in a rural area where distance to the health care provider is too far
□ You were nervous about seeing a health care provider
□ Couldn't get time off work
□ Couldn't get childcare
□ You provide care to an adult and could not leave him/her
□ Couldn't afford the copay
□ Your deductible was too high/could not afford the deductible
□ You had to pay out of pocket for some or all of the visit/procedure
□ I did not delay care for any reason
□ Other *(please specify)*: _____
□ Prefer not to answer

16. DURING THE PAST 12 MONTHS, was there any time when you needed any of the following, but didn't get it because you couldn't afford it? *Select all that apply:*

□ Prescription medicines
□ Mental health care or counseling
□ Emergency care
□ Dental care (including checkups)
□ Eyeglasses
□ To see a regular doctor or general health provider (in primary care, general practice, internal medicine, family medicine)
□ To see a specialist
□ Follow-up care
□ None of the above
□ Prefer not to answer

17. If you get sick or have an accident, how worried are you that you will be able to pay your medical bills?

□ Very worried
□ Somewhat worried
□ Not at all worried
□ Don't know
□ Prefer not to answer

18. How much do you agree or disagree with the following statements about telehealth? Telehealth means connecting virtually with a medical provider using a smartphone, tablet or computer. 1 = Strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree

	1	2	3	4	5	Don't know	Prefer not to say
a. I have access to the resources I need to access telehealth (internet, smartphone, tablet, computer, etc.)	□	□	□	□	□	□	□
b. I have used telehealth to access care from my doctor or other provider in the past	□	□	□	□	□	□	□
c. I am open to using telehealth to access medical care in the future	□	□	□	□	□	□	□
d. I am comfortable using a phone, tablet or computer to communicate with my doctor or other provider	□	□	□	□	□	□	□
e. I am comfortable using an online patient portal (i.e. MyChart, My CarolinaEast Care, myOMH, etc.) to communicate with my doctor or other provider	□	□	□	□	□	□	□

Topic: Diet & Exercise

19. Think about the food you ate during the past week. On average, how many servings of fruit did you eat, not including juices? (For example, one serving equals a medium apple, a small banana, or 7 strawberries.)

    □ Number of servings: _____

20. On average, how many servings of vegetables did you eat, not including potatoes? (For example, one serving equals 6 baby carrots, small bell pepper, or half of a large squash or zucchini.)

    □ Number of servings: _____

21. About how many cans, bottles, or glasses of sugar-sweetened beverages, such as regular sodas, sugar sweetened tea, or energy drinks, do you drink each day?

    □ Number of drinks: _____

22. During the past month, approximately how much time (in hours) per week were you physical active outside of your regular job?

□ Number of hours: _____

23. When you are active, where do you engage in exercise or physical activities? *Select all that apply:*

□ Beach
□ Home
□ Malls
□ Neighborhood
□ Private gym/pool
□ Public recreation center
□ Outdoor parks or trails
□ Work
□ Other (please specify): _____
□ I don't exercise
□ Don't know
□ Prefer not to answer

Topic: Housing and Homelessness

24. In the past 12 months, were there times when you:

	Yes	No	Don't Know	Prefer not to say
a. Were worried about having enough money to pay your rent or mortgage?	□	□	□	□
b. Did not have electricity, water, or heating in your home?	□	□	□	□

25. In the PAST THREE YEARS, were there times when you:

	Yes	No	Don't Know	Prefer not to say
a. Had to live with a friend or relative because of a housing emergency, even if this was only temporary?	□	□	□	□
b. Were evicted or displaced from your home?	□	□	□	□
c. Were living on the street, in a car, or in a temporary shelter?	□	□	□	□

26. Think about the place where you live. Do you have problems with any of the following? *Select all that apply:*

□ Bug infestation
□ Mold
□ Lead paint or pipes
□ Inadequate heat
□ Inadequate cooling (air conditioning)
□ Holes in the floor
□ Oven or stove not working
□ No or not working smoke detector
□ Water leaks
□ None of the above
□ Prefer not to say

Topic: Mental Health

27. Now thinking about your MENTAL health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?

□ Number of days: _____

28. Was there a time in the past 12 months when you needed mental health care or counseling, but did not get it at that time?

□ Yes
□ No
□ Don't know
□ Prefer not to say

29. If you answered 'Yes' to the previous question, what was the MAIN reason you did not get mental health care or counseling?

□ Cost/No insurance coverage
□ Distance
□ Don't know where to go
□ Concerns about confidentiality
□ Inconvenient office hours
□ Lack of childcare
□ Lack of providers
□ Lack of transportation
□ Previous negative experiences/Distrust of mental health providers
□ Stigma
□ Too busy to go to an appointment
□ Too long of wait for an appointment
□ Trouble getting an appointment
□ Other *(please specify)*: _____
□ None of the above
□ Don't know/Not sure
□ Prefer not to say

30. Are you currently taking medication or receiving treatment, therapy, or counseling from a health professional for any type of MENTAL or EMOTIONAL HEALTH NEED?

□ Yes
□ No
□ Prefer not to say

Topic: Physical Health

31. Considering your physical health overall, would you describe your health as…

□ Excellent
□ Very Good
□ Good
□ Fair
□ Poor
□ Don't know/Not sure
□ Prefer not to say

32. Within the past year (anytime less than one year ago), have you:

	Yes	No	Don't Know	Prefer not to say
a. Had a routine/annual physical or check-up?	□	□	□	□
b. Been to the dentist/dental hygienist?	□	□	□	□

33. Have you ever been told by a doctor, nurse, or other health professional that you have any of the following health conditions? *Select all that apply:*

□ Arthritis
□ Asthma
□ Cancer
□ Chronic Obstructive Pulmonary Disease (COPD)
□ Dementia/Short-term memory loss
□ Depression or anxiety
□ Diabetes (not during pregnancy)
□ Heart disease, stroke, or other cardiovascular disease
□ High blood pressure (hypertension)
□ High cholesterol
□ Immunocompromised condition not otherwise listed
□ Kidney disease
□ Liver disease
□ Long COVID
□ Lung disease
□ Osteoporosis
□ Physical disabilities
□ Mental illness not otherwise listed (including bipolar disorder, schizophrenia, borderline personality disorder, dissociative identity disorder)
□ Sexually transmitted diseases (including chlamydia, syphilis, gonorrhea and HIV)
□ Stroke
□ Vision and sight problems
□ Other *(please specify)*:
□ None of the above
□ Don't know/Not sure
□ Prefer not to say

34. What do you need to be able to manage your current health conditions (for example, heart conditions, high blood pressure, stroke, diabetes, asthma, cancer, COPD, congestive heart failure, arthritis, HIV, depression, anxiety, other mental health condition, etc.) to stay healthy? *Please select all that apply:*

□ I don't have a current health condition to manage
□ Health insurance to cover the care I need
□ Assistance finding a doctor
□ Assistance making and keeping appointments with my doctor(s)
□ Assistance understanding all the directions from my doctor(s)
□ Information to understand how to take my medication(s)
□ Assistance paying for my prescription(s)/medication(s) or medical equipment
□ Health care in my home
□ Coordination of my overall care among multiple health care providers
□ Access to healthy foods
□ Access to places to exercise safely
□ Transportation assistance
□ Financial assistance for co-pays, deductibles
□ Home modification assistance (for example, installing a wheelchair ramp or a handicapped-accessible shower)
□ Other *(please specify)*: _____
□ None
□ Don't know
□ Prefer not to say

Topic: Substance Use Disorders

35. Considering all types of alcoholic beverages, how many times during the past 30 days did you have 4 (females)/ 5 (males) or more drinks on an occasion?

□ Number of drinks: _____

36. How often do you consume any kind of alcohol product, including beer, wine or hard liquor?

□ Every Day
□ Some Days
□ Not at all
□ Don't know/not sure
□ Prefer not to say

37. In the past year, have you or a member of your household intentionally misused any form of prescription drugs (e.g. used without a prescription, used more than prescribed, used more often than prescribed, or used for any reason other than a doctor's instructions)?

□ Yes
□ No
□ Don't know/not sure
□ Prefer not to say

38. To what degree has your life been negatively affected by YOUR OWN or SOMEONE ELSE's substance abuse issues, including alcohol, prescription, and other drugs? Would you say:

□ A Great Deal
□ Somewhat
□ A Little
□ Not at All
□ Don't know/Not sure
□ Prefer not to say

Topic: Transportation and Transit

39. In a typical week, what kinds of transportation do you use the most? *Select all that apply:*

□ Car
□ Bus
□ Walk
□ Taxi, Uber, or Lyft
□ Ride with someone
□ Bike
□ Motorcycle
□ Paying for rides from family or friends
□ Other, please specify: _____
□ Prefer not to say

40. In the past 12 months has lack of transportation kept you from medical appointments, meetings, work, or getting things for daily living? *Select all that apply:*

□ Yes, it has kept me from medical appointments or getting medications
□ Yes, it has kept me from non-medical meetings, appointments, work, or getting things that I need
□ No
□ Prefer not to say

41. Do you put off or neglect going to the doctor because of distance or transportation?

□ Yes
□ No
□ Don’t know/not sure
□ Prefer not to say

APPENDIX 5 | DETAILED PRIMARY DATA FINDINGS

Focus Groups

Key findings from the focus groups are summarized below.

Focus Group General Findings

As part of the 2024 CHNA process, Chowan County conducted two focus groups with community members to get a better understanding of the health and social/environmental issues preventing Chowan residents from living healthier lives. Several key themes emerged from the two focus groups including environmental quality issues such as Chowan River water quality and pollution, the use of chemicals in farming operations, and general air quality in the county. Both focus groups also discussed food access and security concerns, specifically discussing the lack of grocery stores in the county, lack of nutritional education, and the high cost of healthy food. Healthcare access and quality was a major theme brought up by the focus group participants. They surfaced the long wait times, lack of available appointments, challenges retaining medical providers in the area, difficulty navigating the healthcare system, transportation to and from medical services, and high cost of care as barriers to accessing the healthcare system. The main physical health concerns discussed were diabetes, high blood pressure, obesity, lung disease, and arthritis. Cancer and ALS attributed to pollution and water quality was also a concern. Lastly, both groups stated substance use was a barrier to healthy living in Chowan County.

Focus Group 1: Unique Insights from Edenton Lion's Club

The first focus group was conducted at Edenton Lion's club. The participants of this focus group listed several additional barriers to healthy living in Chowan County. One key theme was around built environment. The group discussed challenges around the lack of outdoor recreational facilities such as hiking or bike trails where community members could exercise. Related, the group talked about an important family, community, and social support issue which was a lack of opportunities and activities in the community to engage young people. The participants of this focus group also discussed employment and income challenges including job loss due to plant closures, low-skilled workers being replaced by automated machines, and remote workers moving to the area. Lastly, this focus group spoke on the mental health issues in the county. They stated there are no facilities to treat mental health needs in the area and there is a lack of understanding of the importance of mental health.

When discussing some of the strengths of the community, participants cited a number of areas where the county is making strides. They stated the county is attempting to enhance access to community needs such as food and raising awareness on issues such as domestic violence. The group suggested that churches can be more involved in addressing challenges related to physical health by providing education on physical activity and health foods. Lastly, the group stated the importance of community members being involved in what is happening in the community, specifically by attending town council meetings and following up when they have complaints.

Focus Group 2: Unique Insights from Chowan County Senior Center

The second focus group conducted by Chowan County took place at the Chowan County Senior Center with older members of the community. This group discussed three main health and social/environmental concerns. The first was education, specifically a need for community education specifically focused on health, wellness, and nutrition. Second, the group discussed housing and homelessness. They called out a need for affordable housing and the prevalence of mold and mildew in houses in the county. Lastly, the group linked the lack of transportation (particularly in rural areas of the county) as a barrier to meeting basic needs and accessing healthcare.

When asked to name some strengths of the county, this group said the senior center was a strength. They also noted the water sports opportunities, the Boys and Girls Club, the recreation center, and that there is a lot of community involvement. In order to improve quality of life in the county, the group suggested that local leaders can host more health fairs and provide opportunities for the community to learn more such as panel discussions at the hospital and open town hall meetings. They also stated that support should continue for the GetFit program and provide more wellness opportunities for youth. Similarly to the first focus group, the seniors in this focus group also suggested more participation from community members and for community members to keep themselves informed.

Community Member Web Survey

Charts detailing key findings from the Community Member Survey are displayed below:

Topic: Additional Demographic Information

Figure 51: What is the highest grade or year of school you completed? (N=229)

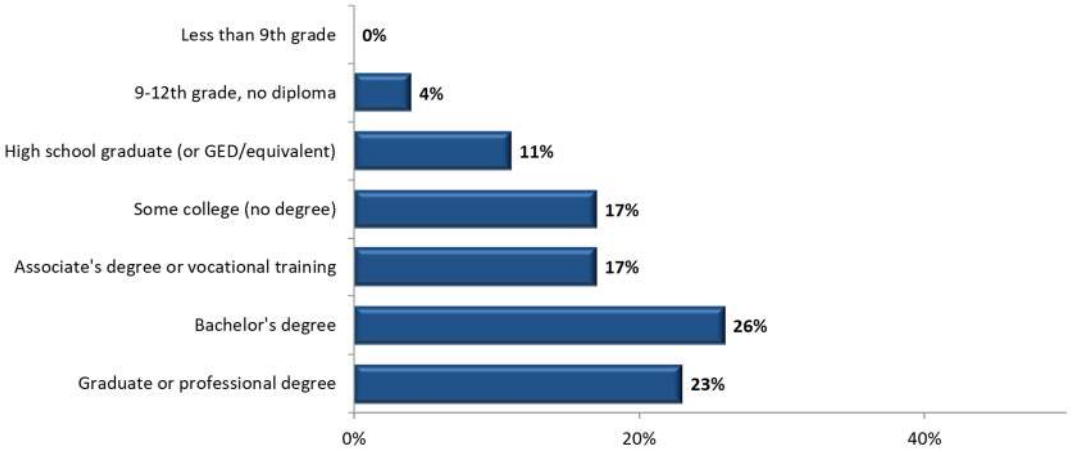


Figure 52: Which language is most often spoken in your home? (choose one) (N=229)

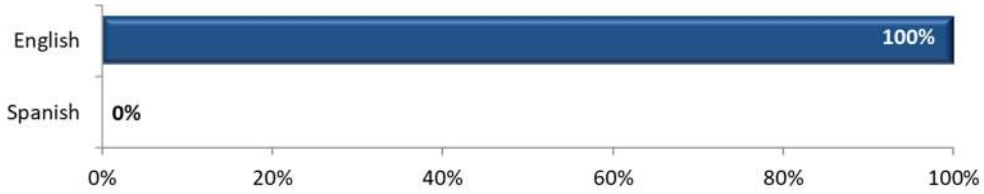


Figure 53: For employment, are you currently... (Select all that apply.) (N=229)

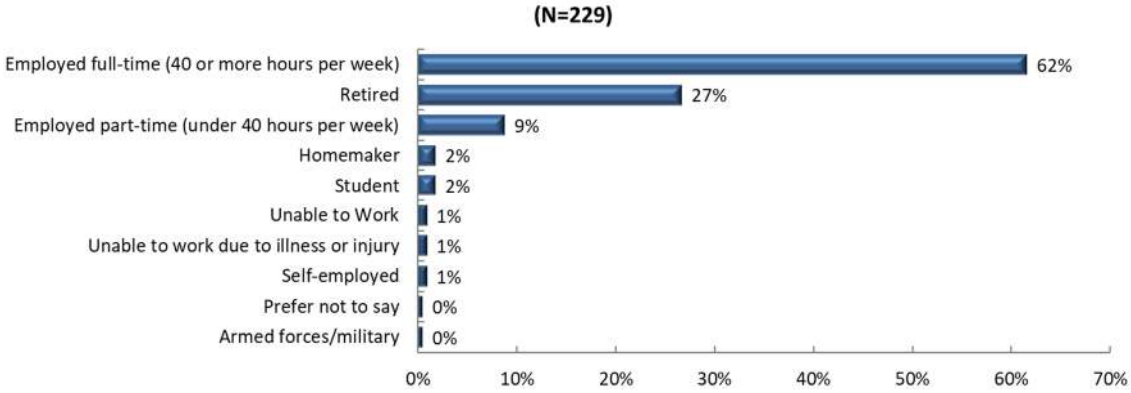
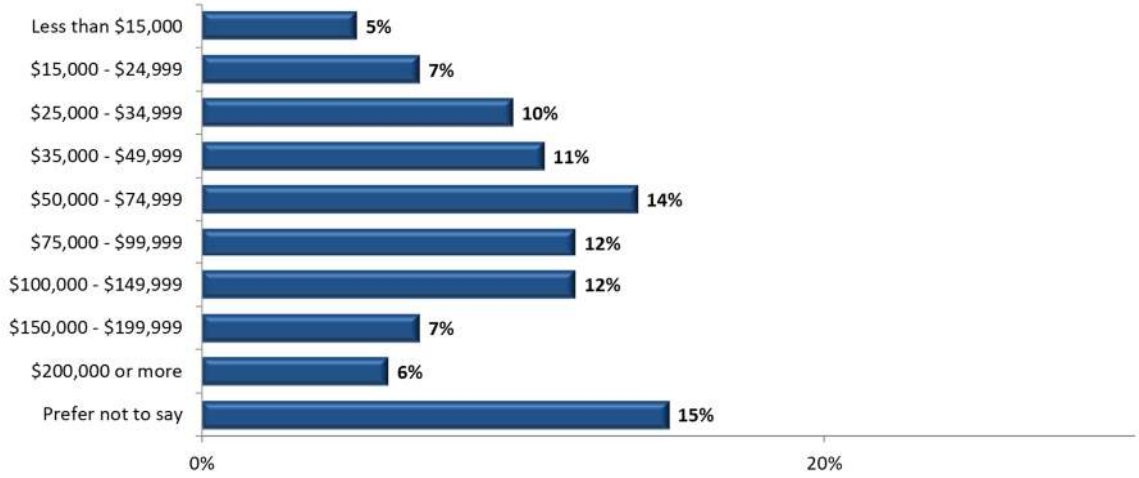


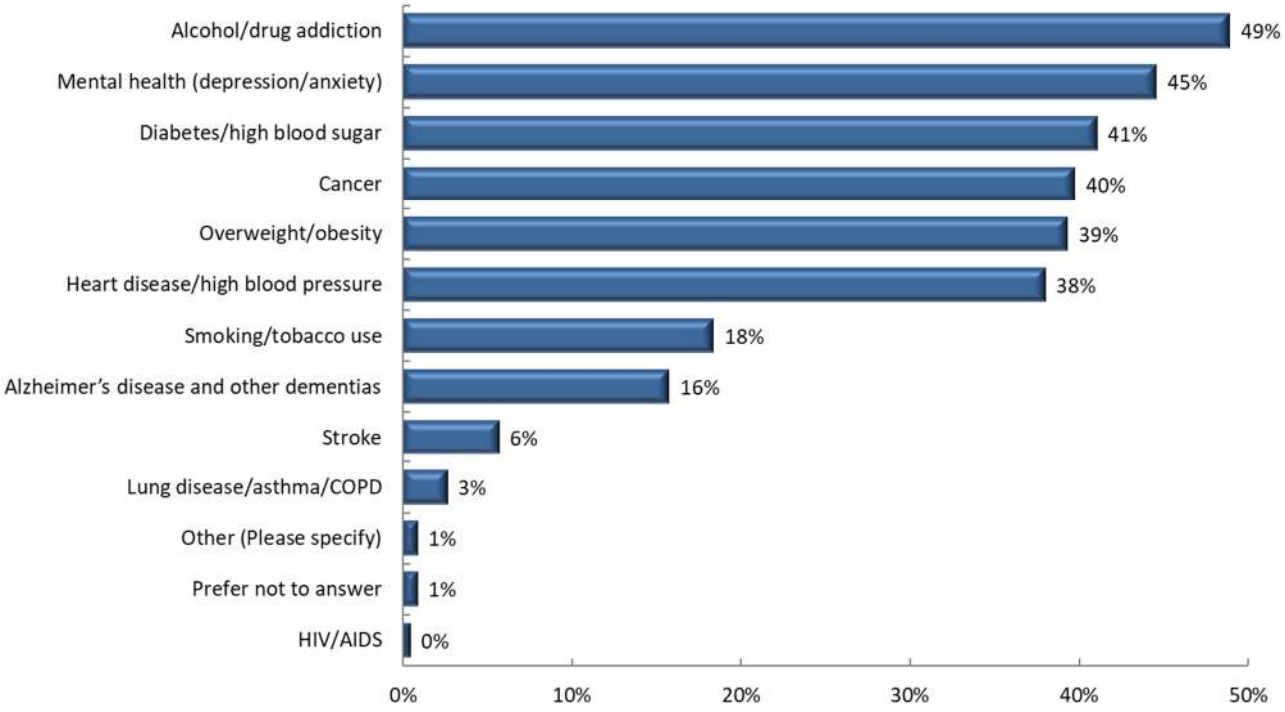
Figure 54: Which category best describes your yearly household income before taxes?[54] (N=229)



[54] Respondents were asked to include all income received from employment, social security, support from children or other family, welfare, Aid to Families with Dependent Children (AFDC), bank interest, retirement accounts, rental property, investments, etc.

Topic: Health Conditions, Barriers to Care, and Social Determinants of Health

Figure 55: What are the three most important health problems that affect the health of your community? Please select up to three.
(N=229)



Other (please specify):

- "Crohn's"
- "Kidney"

Figure 56: What are the three most important health problems that affect the health of your community? Please select up to three. (by age)

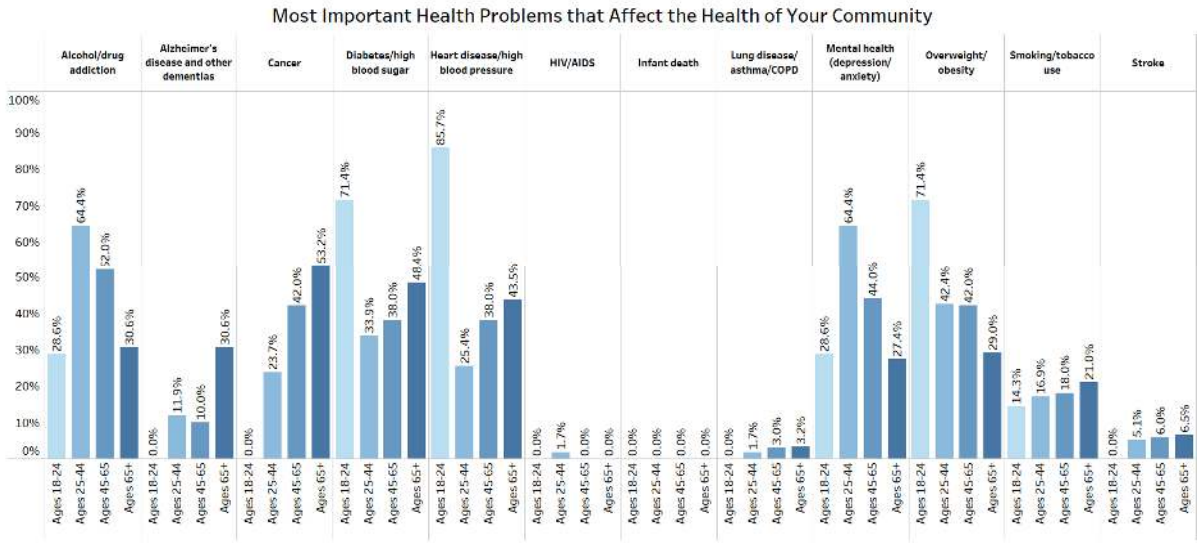


Figure 57: What are the three most important health problems that affect the health of your community? Please select up to three. (by gender)

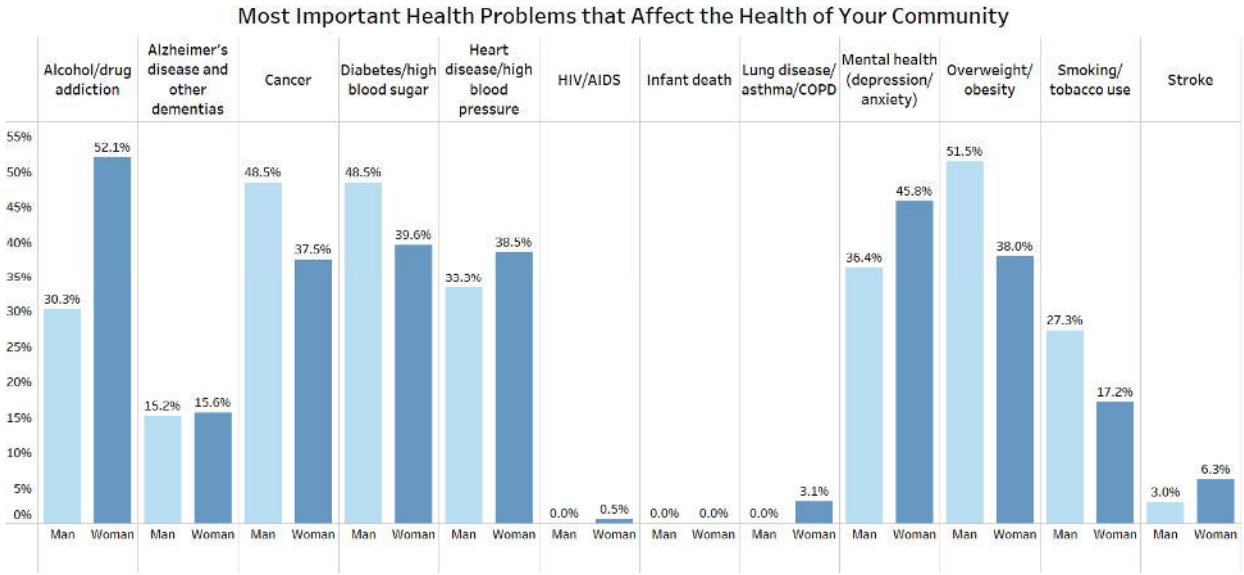


Figure 58: What are the three most important health problems that affect the health of your community? Please select up to three. (by race)

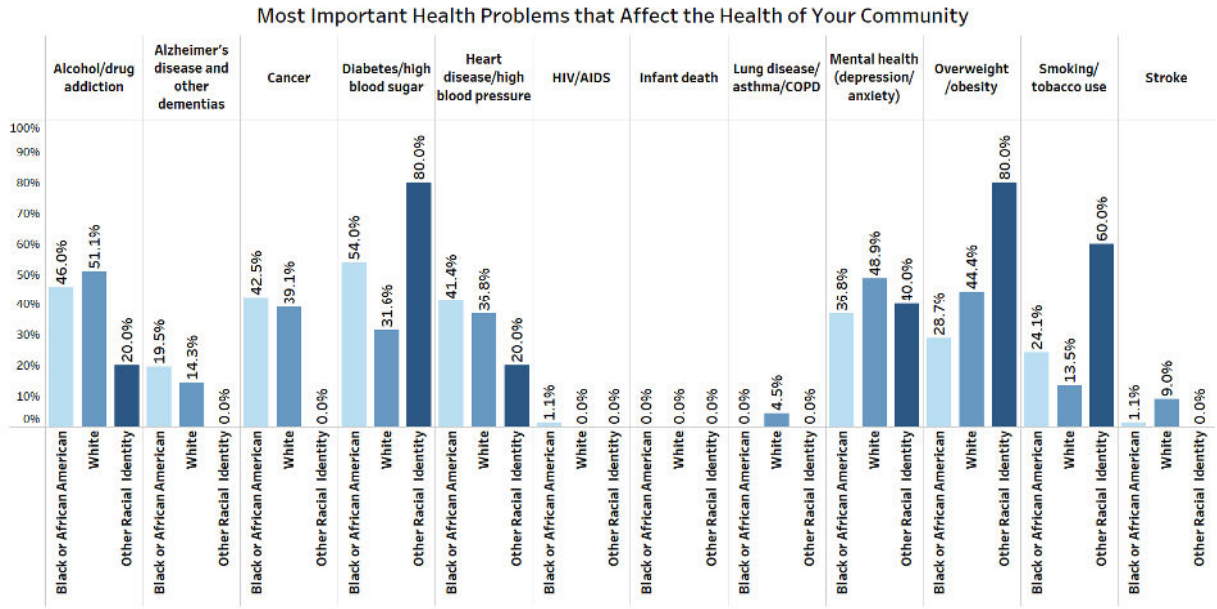
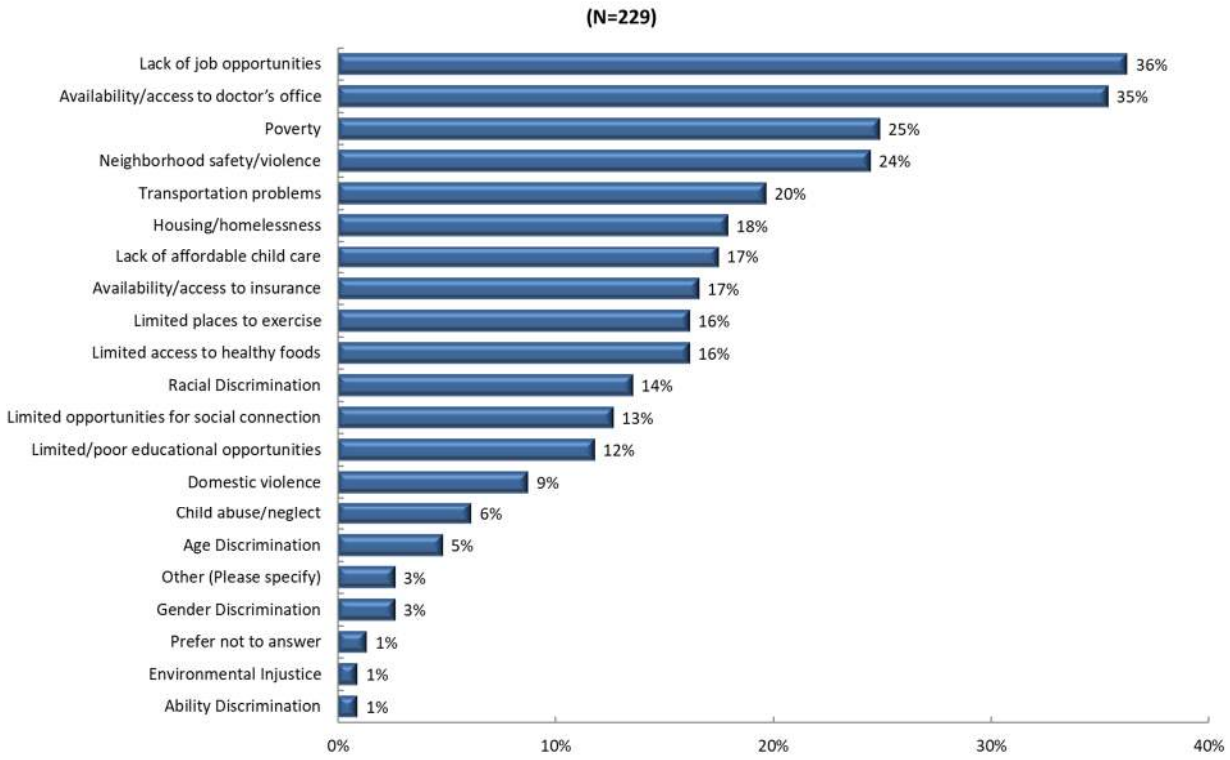


Figure 59: What are the three most important social or environmental problems that affect the health of your community? Please select up to three.



Other (please specify):

- "Gangs & similar social issues"
- "Lack of grocery stores, and a department store"
- "Lack of proper mental health facilities"
- "Lack of recreational opportunities for young adults"
- "Lazy, not wanting to work"
- "Limited support groups"

Figure 60: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by age)

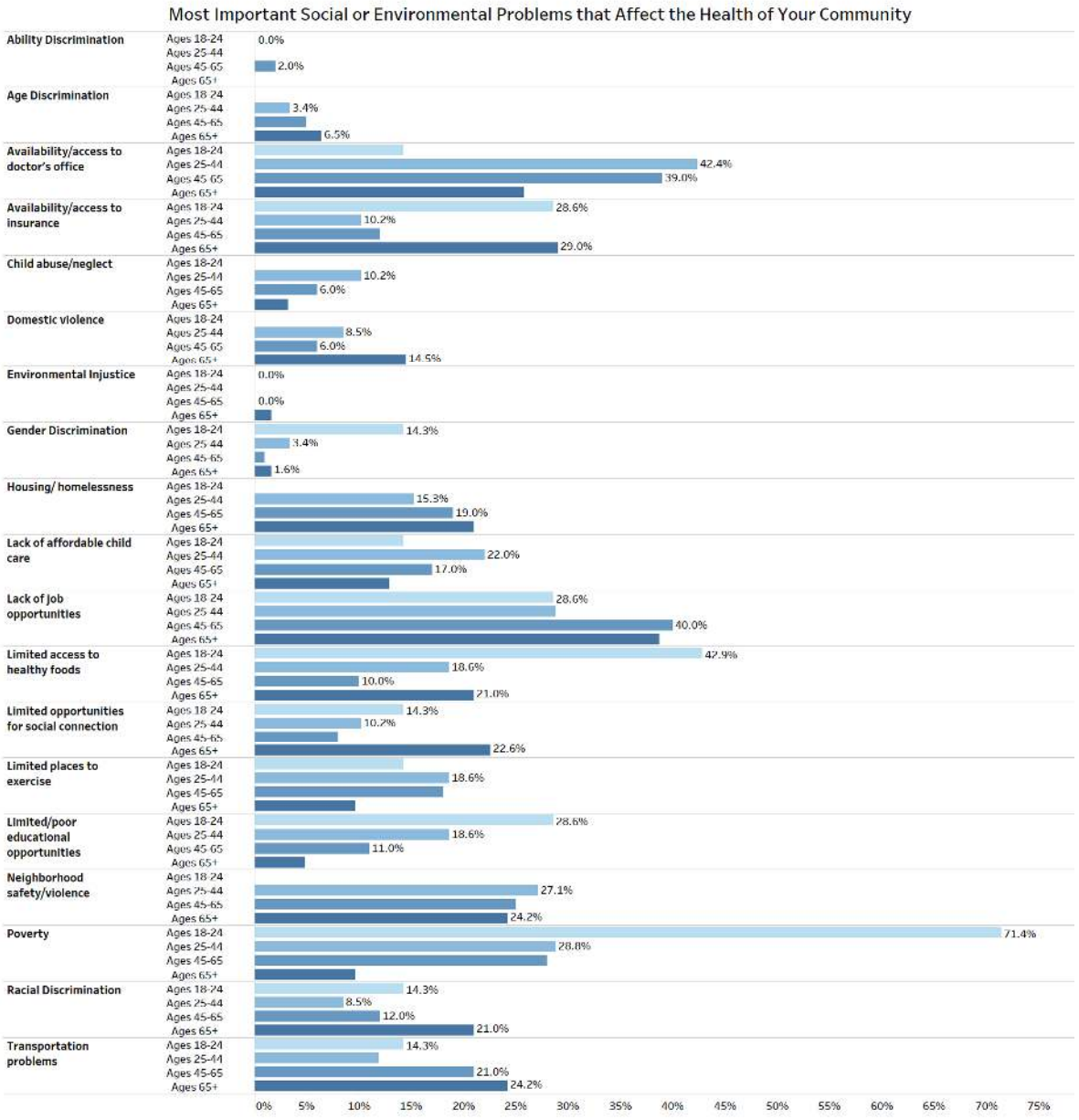


Figure 61: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)

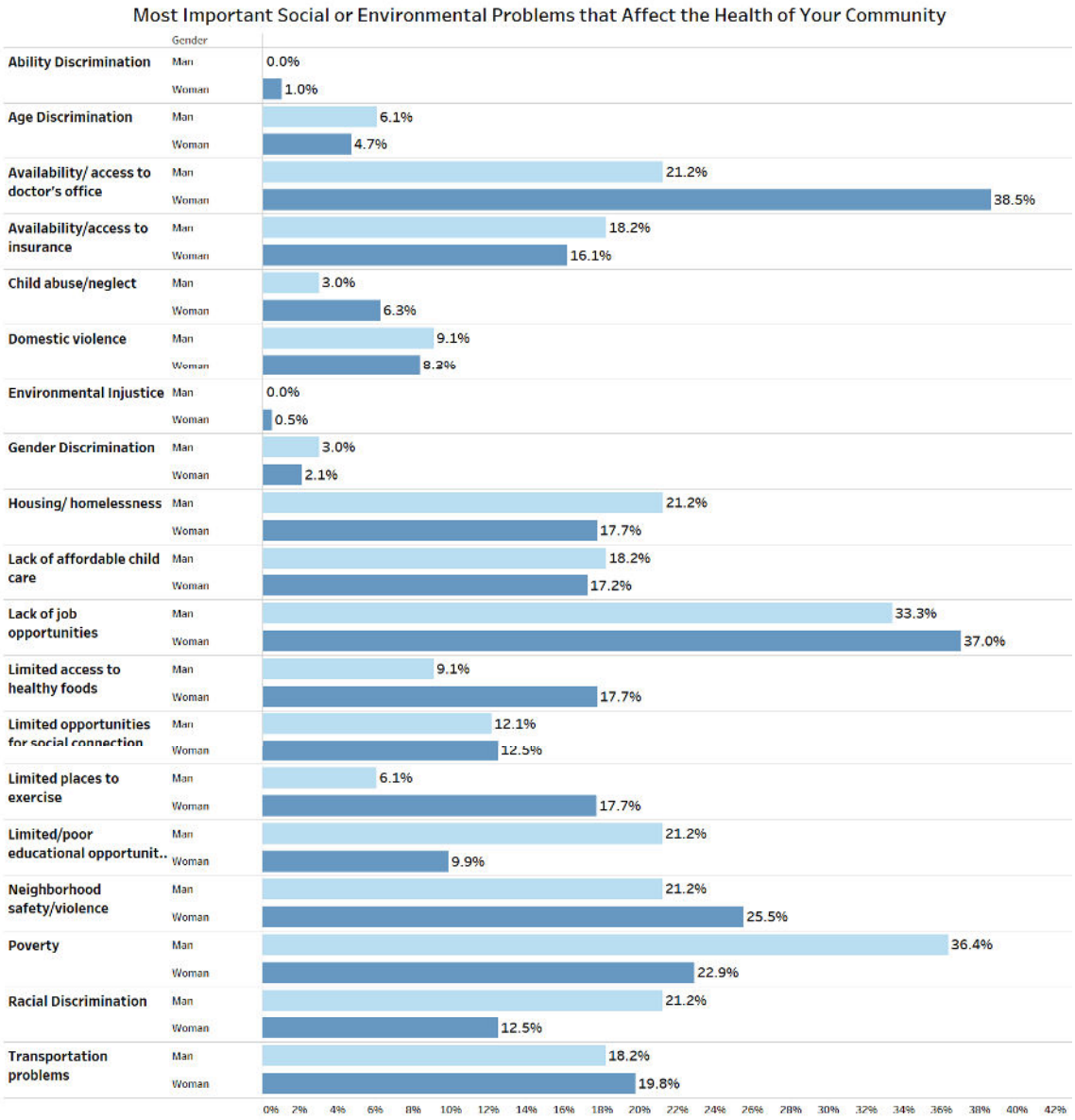


Figure 62: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)

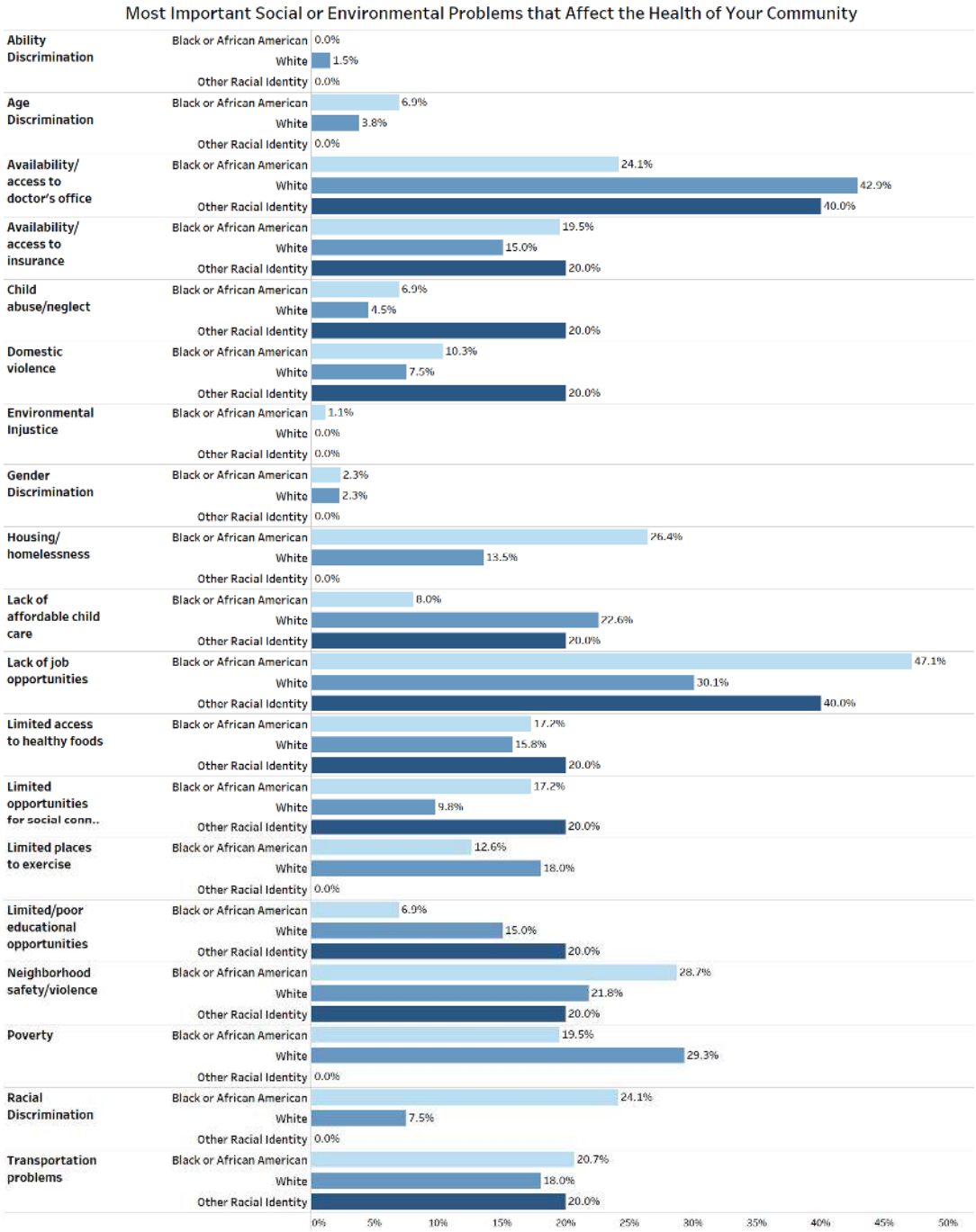
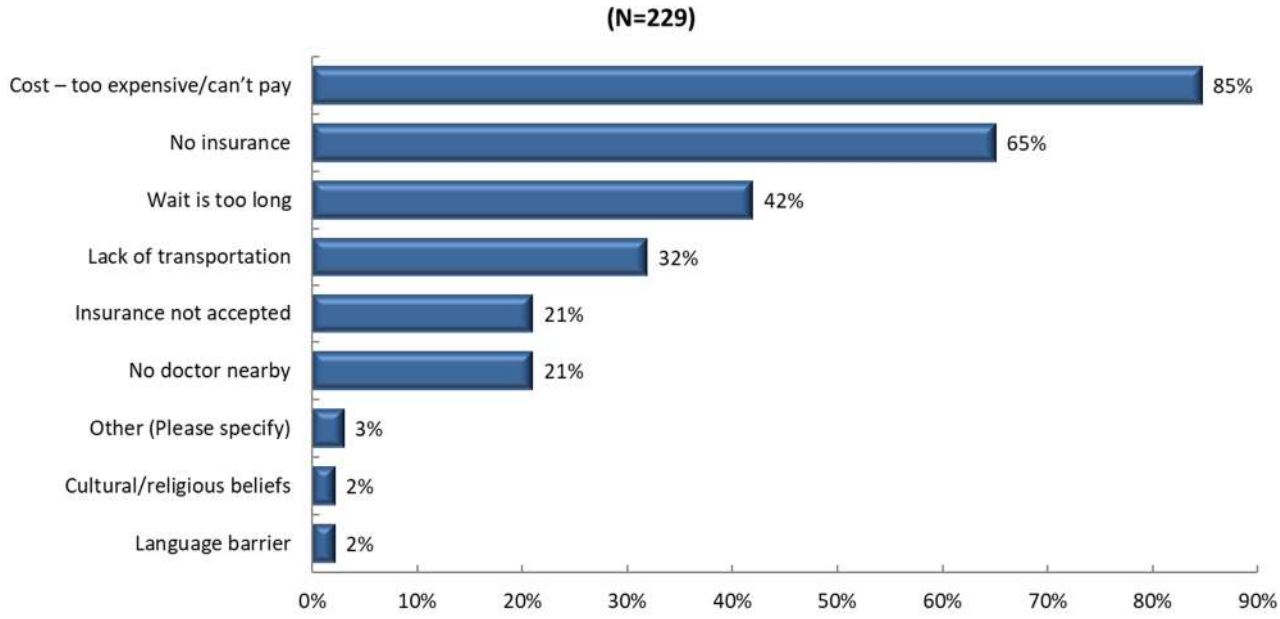


Figure 63: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three.



Other (please specify):

- "Appointment are not available for 6 weeks - when you're sick and you need a MD you can't get in"
- "Don't understand the importance of regular health care"
- "I believe people DO receive health care"
- "Lack of education"
- "Lack of support/advocate and knowledge"
- "Providers not accepting new patients"
- "When insurance is available there is a lack of understanding of benefits."

Figure 64: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by age)

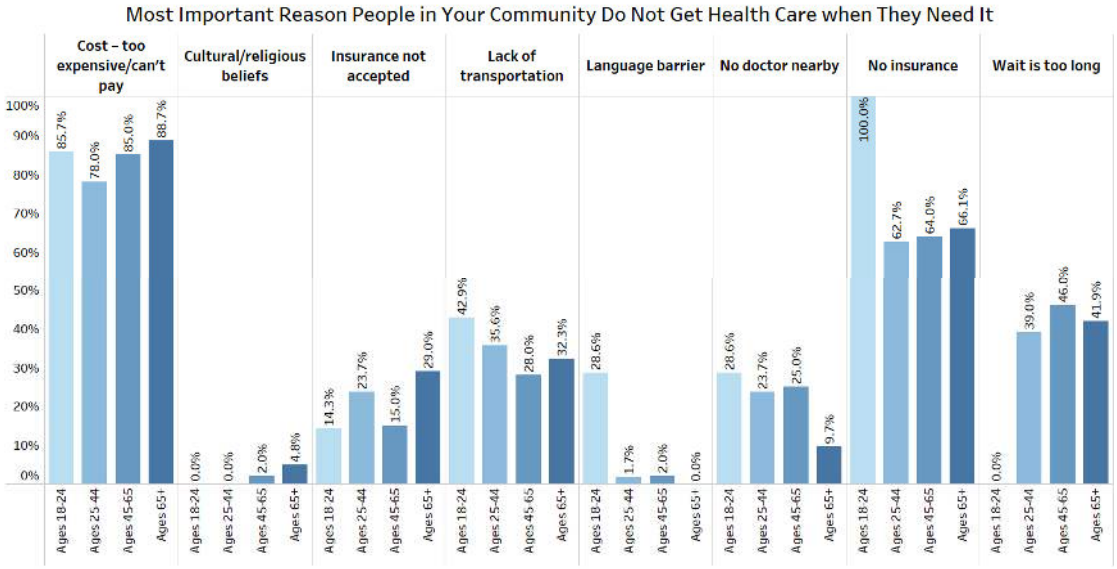


Figure 65: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by gender)

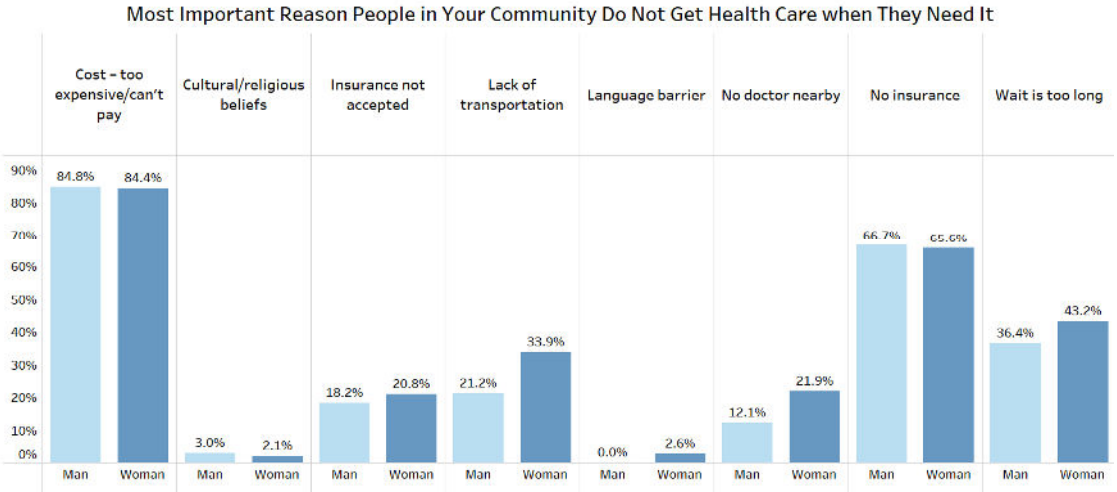
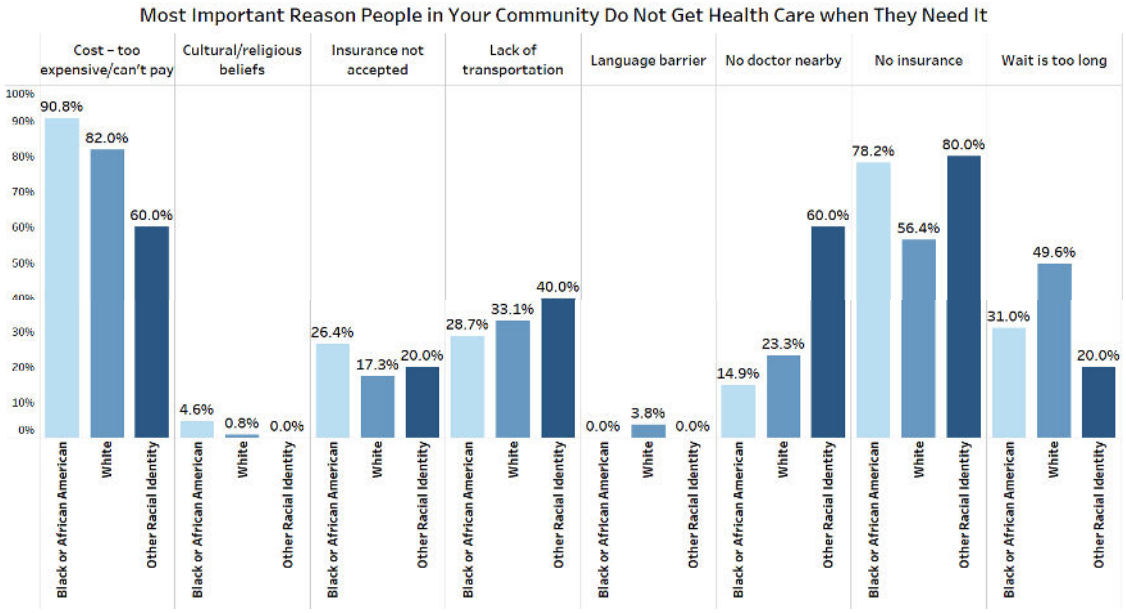


Figure 66: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by race)



Topic: Access to Care

Figure 67: DURING THE PAST 12 MONTHS, were you told by a health care provider or doctor's office that they did not accept your health care coverage?

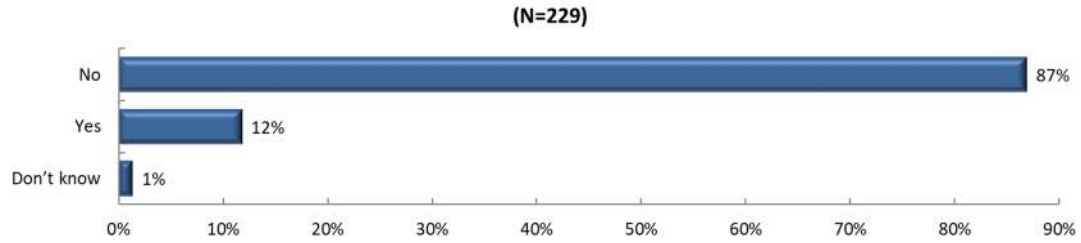
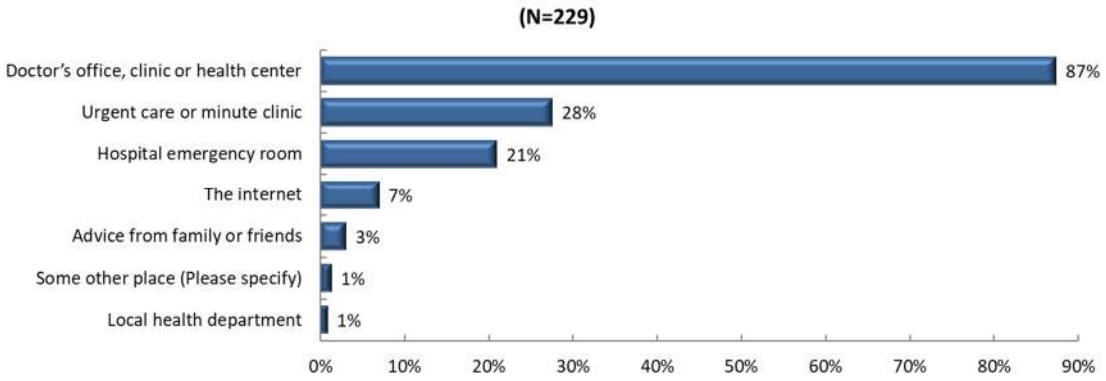


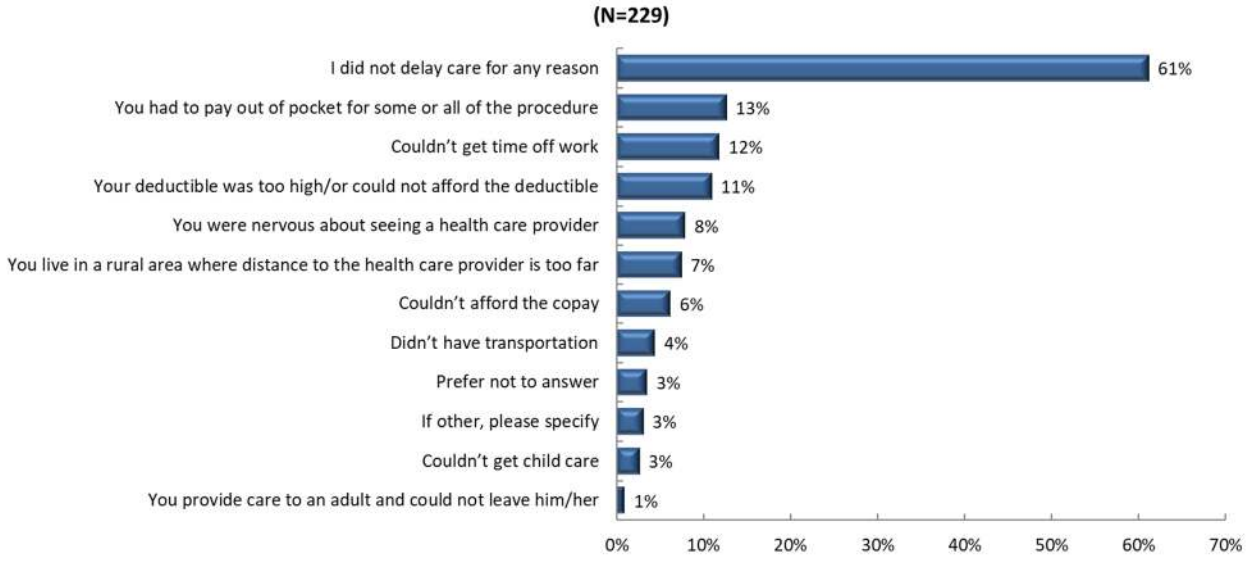
Figure 68: Where do you USUALLY go when you are sick or need advice about your health?



Other (please specify):

- "PCP"
- "Virginia"
- "Virtual/Telehealth"

Figure 69: There are many reasons people delay getting medical care. Have you delayed getting care for any of the following reasons in the PAST 12 MONTHS?



Other (please specify):

- "Appointments are not available when I'm sick"
- "Doctor did not call the pharmacy"
- "Doctors not accepting new patients."
- "Had issue that receptionist deemed stomach bug and said give it a week or so to resolve. Was sick for over a month due medication issues. Also have had issues getting mental health help…not teledoc!"
- "No appointment for months"
- "No inhome help"
- "Not needing care"

Figure 70: DURING THE PAST 12 MONTHS, was there any time when you needed any of the following, but didn't get it because you couldn't afford it?

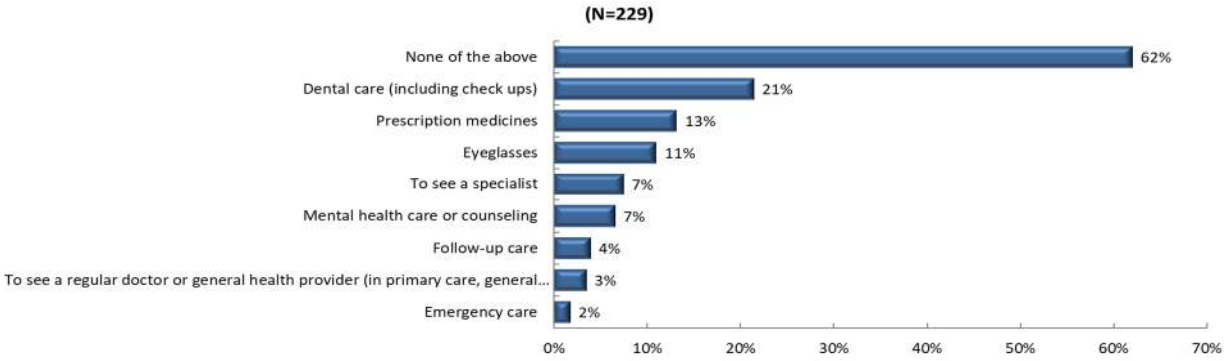


Figure 71: If you get sick or have an accident, how worried are you that you will be able to pay your medical bills?

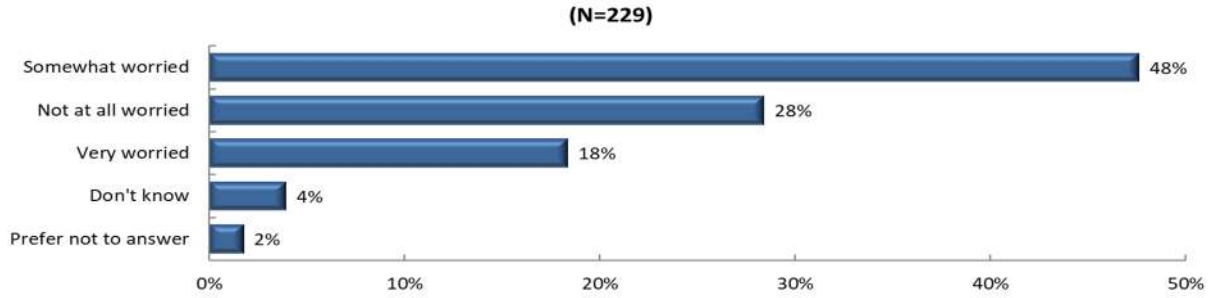
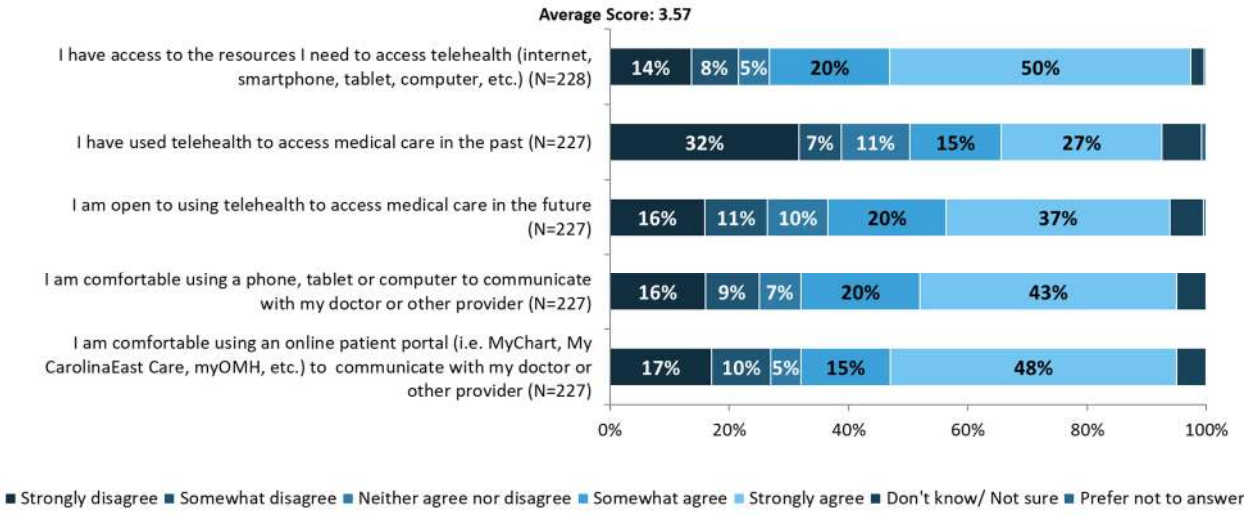
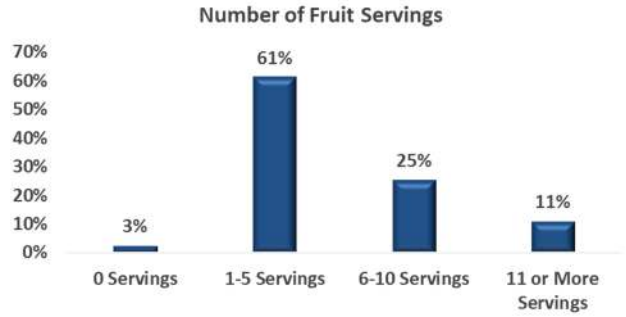


Figure 72: How much do you agree or disagree with the following statements about telehealth? Telehealth means connecting virtually with a medical provider using a smartphone, tablet or computer.



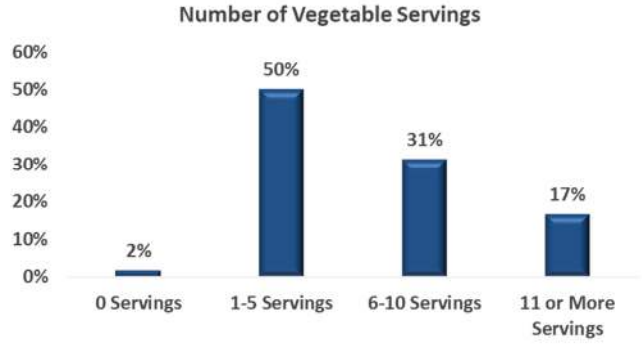
Topic: Healthy Lifestyle (Diet and Exercise)

Figure 73: Think about the food you ate during the past week. On average, how many servings of fruit did you eat, not including juices? (For example, one serving equals a medium apple, a small banana, or 7 strawberries)
(N=229)



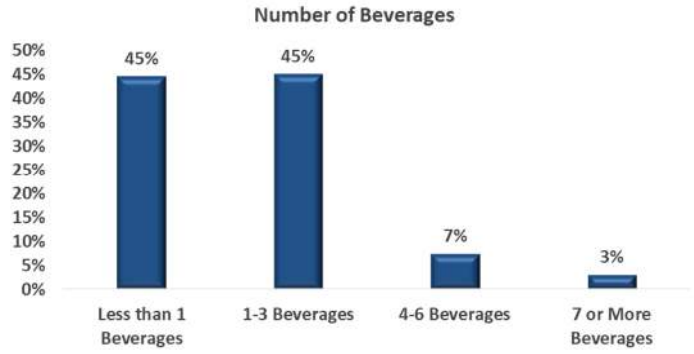
Measure	Value
Mean (Standard Deviation)	6 (5)
Median	4
Mode	2
Minimum-Maximum	0-35

Figure 74: Think about the food you ate during the past week. On average, how many servings of vegetables did you eat, not including potatoes? (For example, one serving equals 6 baby carrots, small bell pepper, or half of a large squash or zucchini)
(N=229)



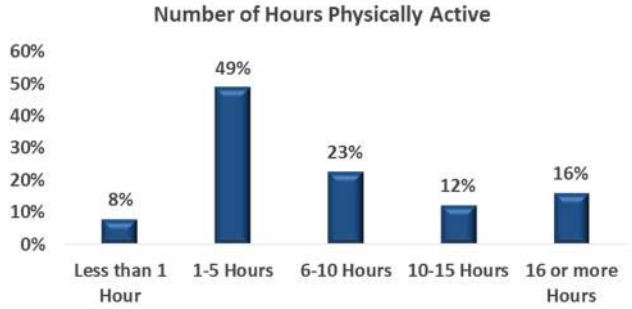
Measure	Value
Mean (Standard Deviation)	7 (5)
Median	5
Mode	4
Minimum-Maximum	0-51

Figure 75: About how many cans, bottles, or glasses of sugar-sweetened beverages, such as regular sodas, sugar sweetened tea, or energy drinks, do you drink each day?
(N=229)



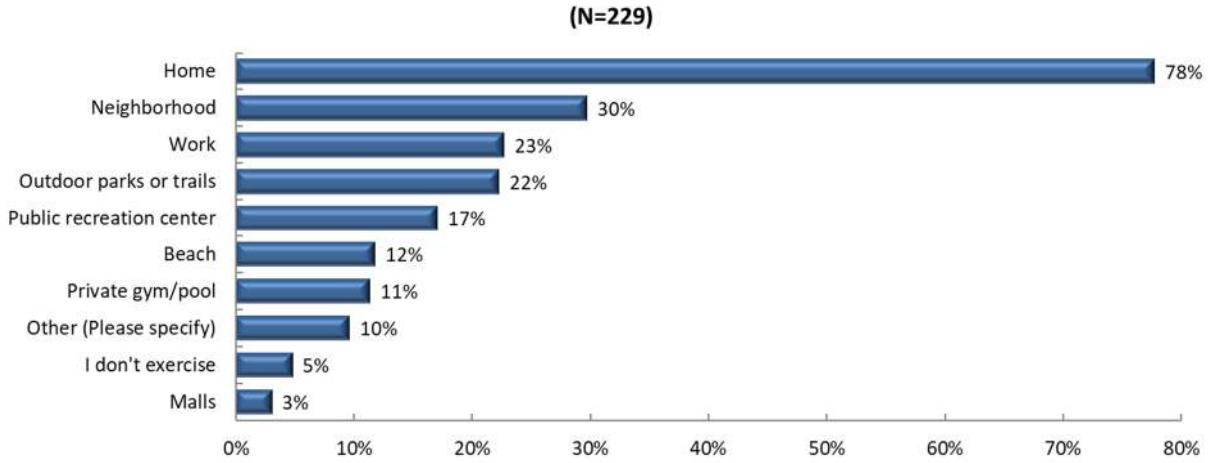
Measure	Value
Mean (Standard Deviation)	1 (2)
Median	1
Mode	0
Minimum-Maximum	0-14

Figure 76: During the past month, approximately how much time (in hours) per week were you physically active outside of your regular job?
(N=229)



Measure	Value
Mean (Standard Deviation)	9 (13)
Median	5
Mode	2
Minimum-Maximum	0-100

Figure 77: When you are active, where do you engage in exercise or physical activities? (Select all that apply.)



Other (please specify):

- "Care of lawn" / "garden yard work" / "yard work"
- "Creeks/sound, kayak, cycling"
- "Dance studio"
- "Grocery store"
- "Just had a baby 3 weeks ago so not working out as frequently"
- "Paddle board in creek and bay"
- "Senior Center" (13 participants)
- "Workout classes"

Topic: Housing and Homelessness

Figure 78: In the past 12 months, were there times when you:

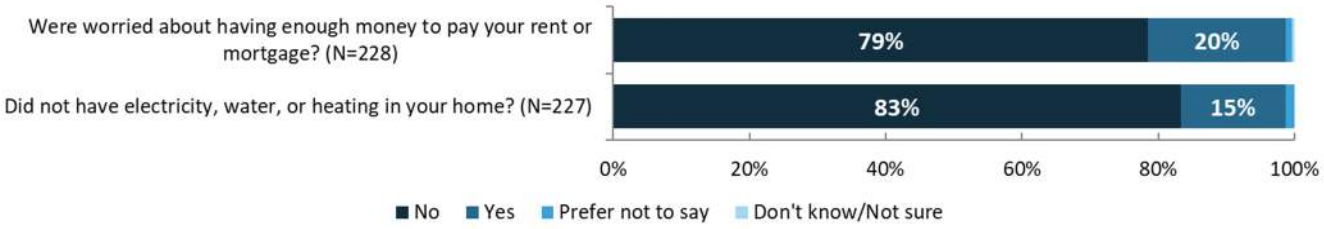


Figure 79: In the PAST THREE YEARS, were there times when you:

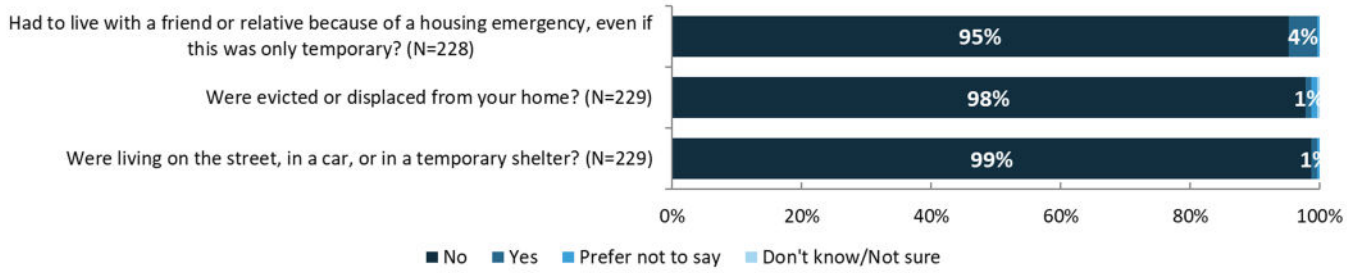
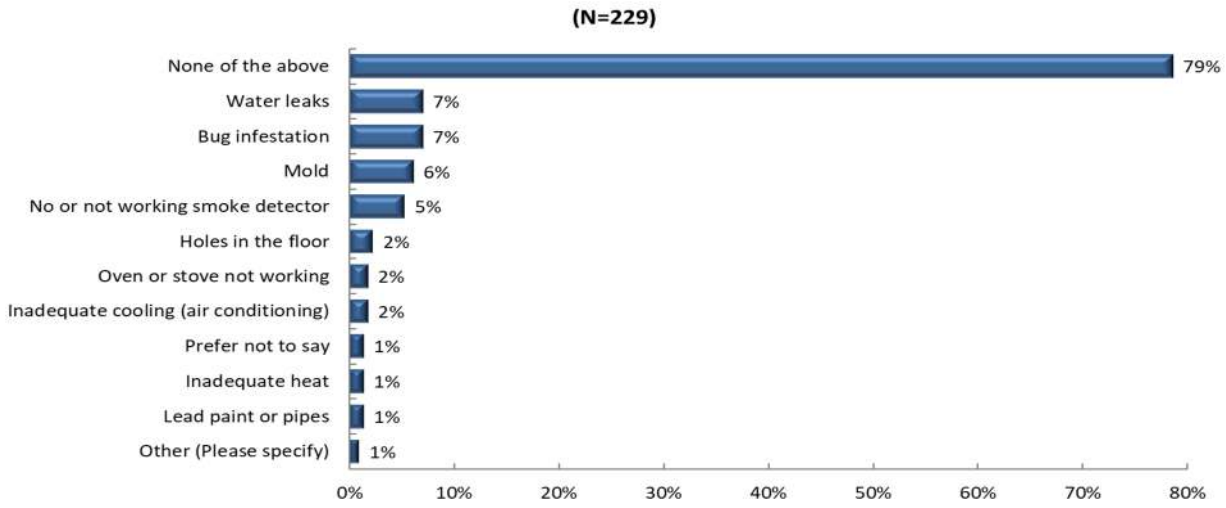


Figure 80: Think about the place you live. Do you have problems with any of the following? (Check all that apply.)

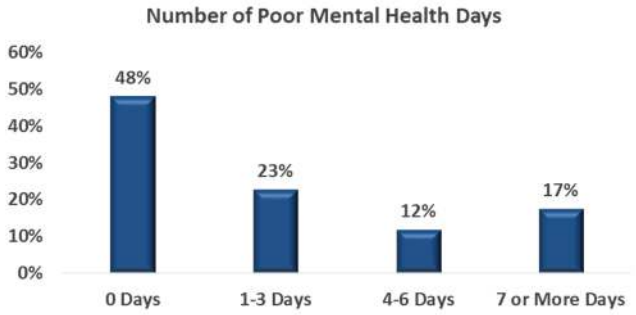


Other (please specify):

- "General house repair"
- "Have portable air conditioner and use electric heaters, hot water heater and oven not working."

Topic: Mental Health

Figure 81: Now thinking about your MENTAL health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good? (N=229)



Measure	Value
Mean	4 (6)
Median	1
Mode	0
Minimum-Maximum	0-30

Figure 82: Was there a time in the past 12 months when you needed mental health care or counseling, but did not get it at that time?

Note: only respondents who indicated experiencing one or more poor mental health day in previous question were asked current question

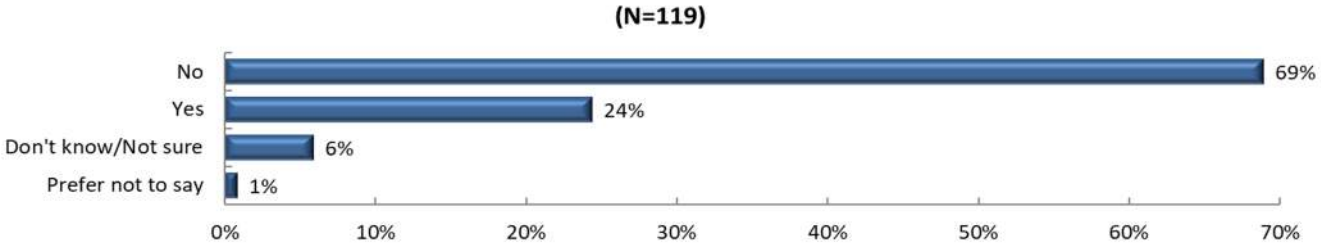


Figure 83: What was the MAIN reason you did not get mental health care or counseling?

Note: only respondents who responded "yes" to previous question were asked current question

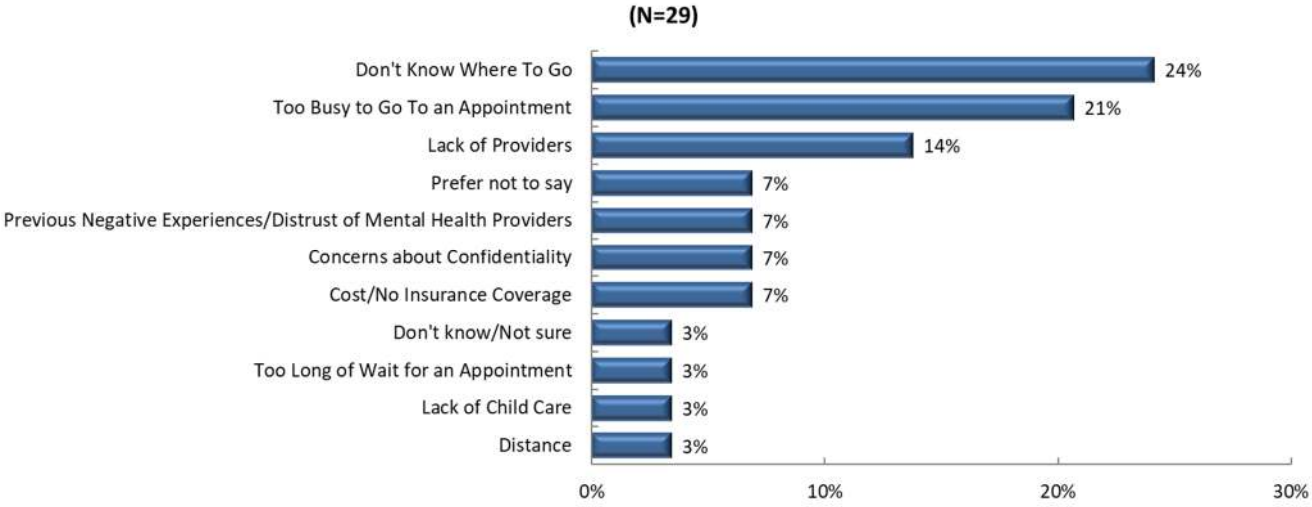
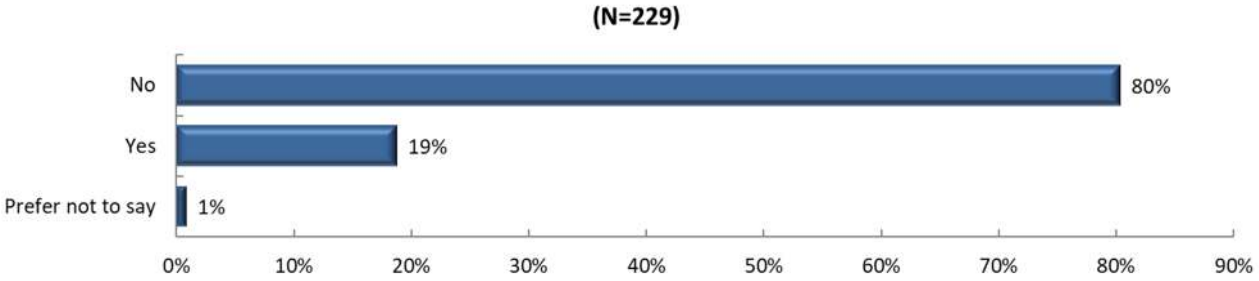


Figure 84: Are you currently taking medication or receiving treatment, therapy, or counseling from a health professional for any type of MENTAL or EMOTIONAL HEALTH NEED?



Topic: Physical Health

Figure 85: Considering your physical health overall, would you describe your health as…

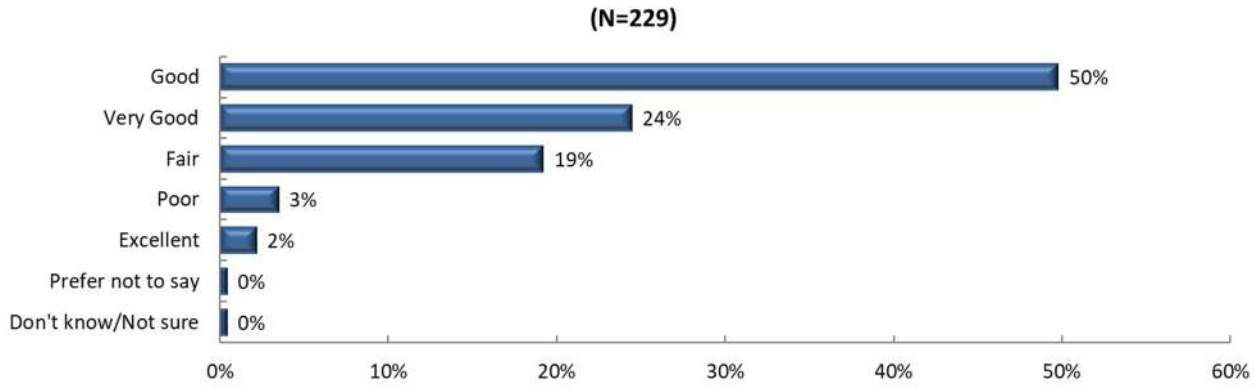


Figure 86: Within the past year (anytime less than one year ago), have you:

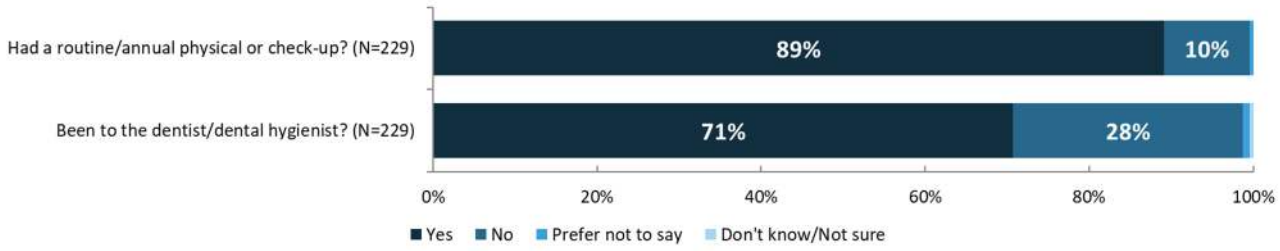
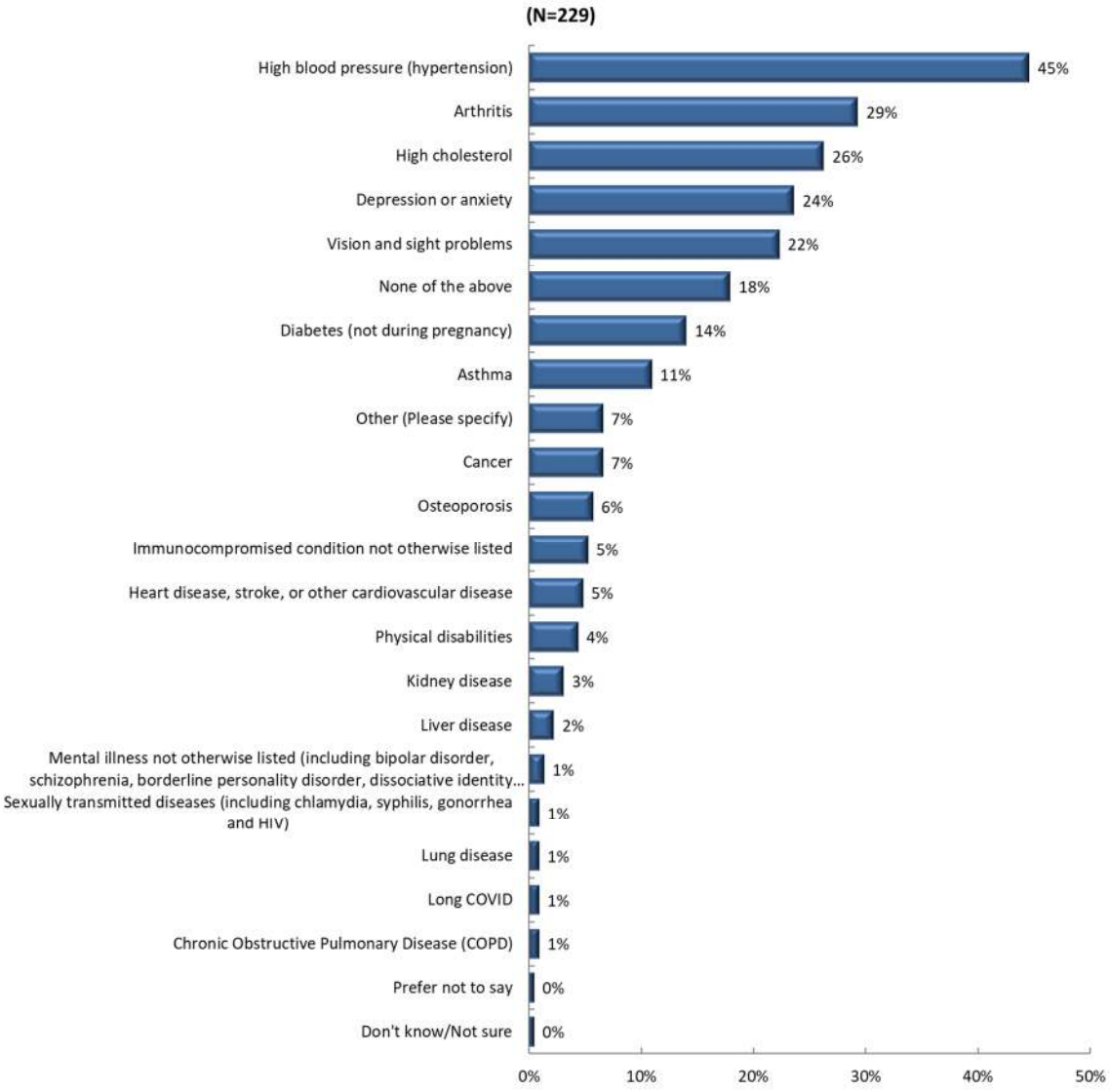


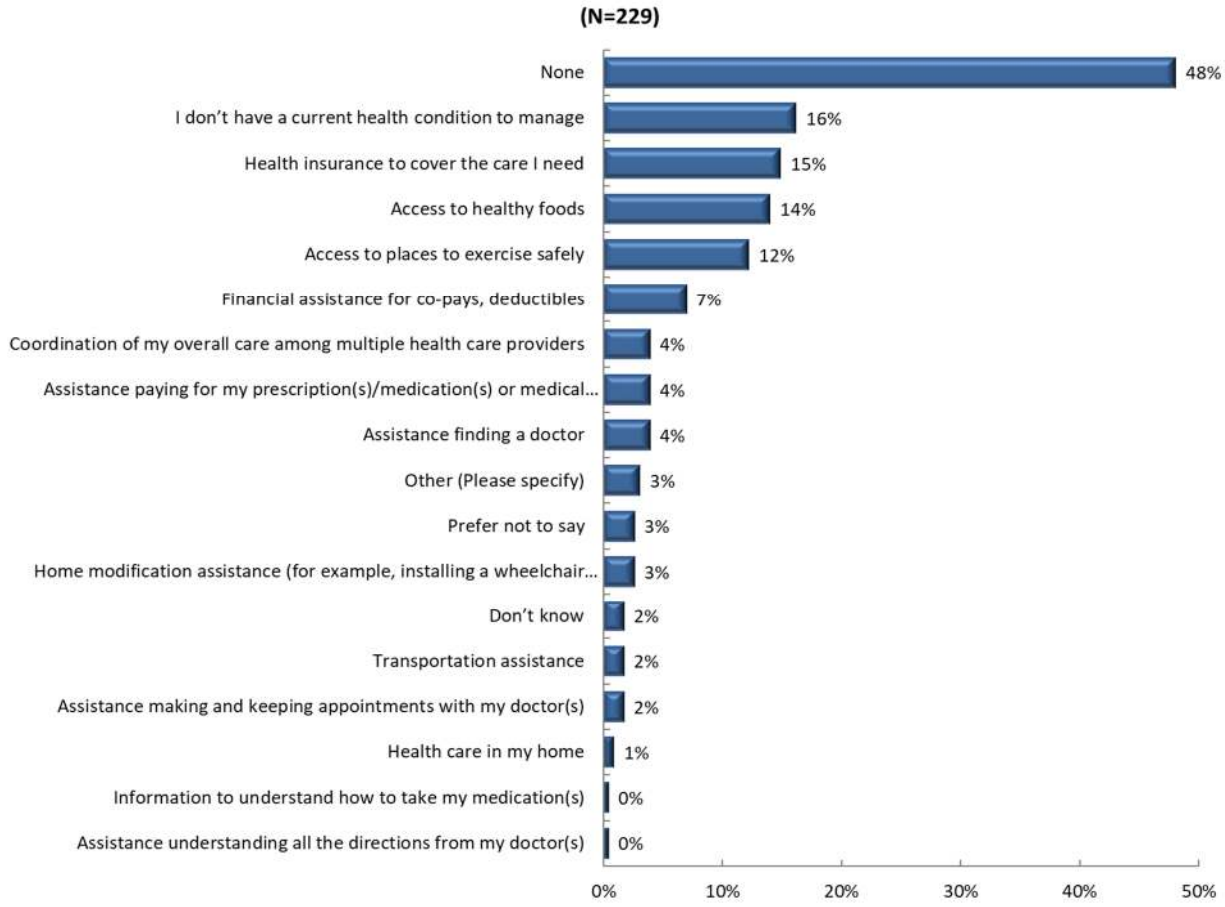
Figure 87: Have you ever been told by a doctor, nurse, or other health professional that you have any of the following health conditions? Select all that apply



Other (please specify):

- "Autoimmune"
- "Bone Spurs; Osteopenia"
- "Cdiff"
- "Degenerative Disc Disease In Spine"
- "Diverticulosis, Kidney Stones"
- "Hearing Problems"
- "Hypothyroid"
- "Hypothyroidism, Ulcerative Colitis"
- "Obstructive Sleep Apnea"
- "Over Weight"
- "Pcos"
- "Polyps In Trachea = Cough"
- "Pre-Diabetes"
- "Pre-Diabetes, Pods, Narcolepsy"
- "Tendinitis"

Figure 88: What do you need to be able to manage your current health conditions (for example, heart conditions, high blood pressure, stroke, diabetes, asthma, cancer, COPD, congestive heart failure, arthritis, HIV, depression, anxiety, other mental health condition, etc.) to stay healthy? (Select all that apply.)

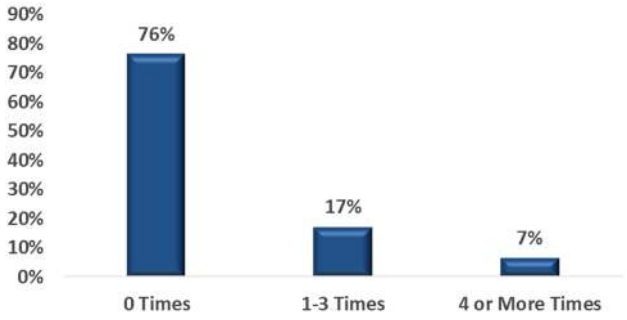


Other (please specify):

- "Access to local Mental health therapy"
- "Affordable health foods and places to exercise"
- "Community safety"
- "Health center for stress reduction (yoga, Mindfulness, pool, gym, adult exercise classes in a nice facility."
- "Monitor Blood Pressure"
- "Online exercise program / weight management- Noom, Hinge, etc"
- "Rail for doorstep"

Topic: Substance Use

Figure 89: Considering all types of alcoholic beverages, how many times during the past 30 days did you have 4 (females)/ 5 (males) or more drinks on an occasion?
(N=228)



Measure	Value
Mean	1 (3)
Median	0
Mode	0
Minimum-Maximum	0-30

Figure 90: How often do you consume any kind of alcohol product, including beer, wine or hard liquor?

(N=229)

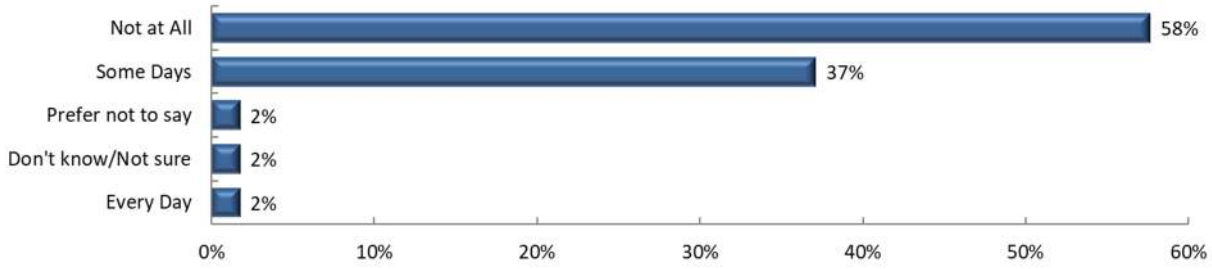


Figure 91: In the past year, have you or a member of your household misused any form of prescription drugs (e.g. used without a prescription, used more than prescribed, used more often than prescribed, or used for any reason other than a doctor's instructions)?

(N=229)

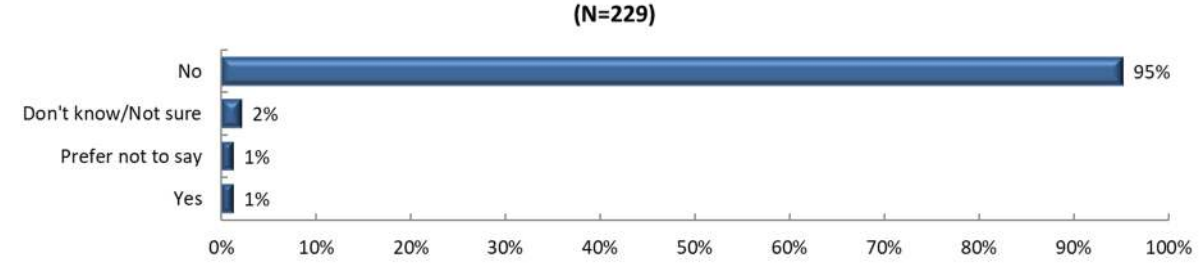
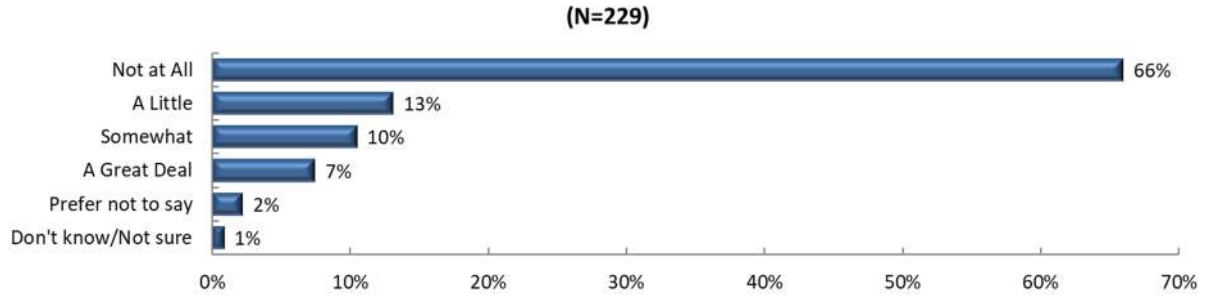


Figure 92: To what degree has your life been negatively affected by YOUR OWN or SOMEONE ELSE's substance abuse issues, including alcohol, prescription, and other drugs?



Topic: Transportation and Transit

Figure 93: In a typical week, what kinds of transportation do you use the most? (Select all that apply.)

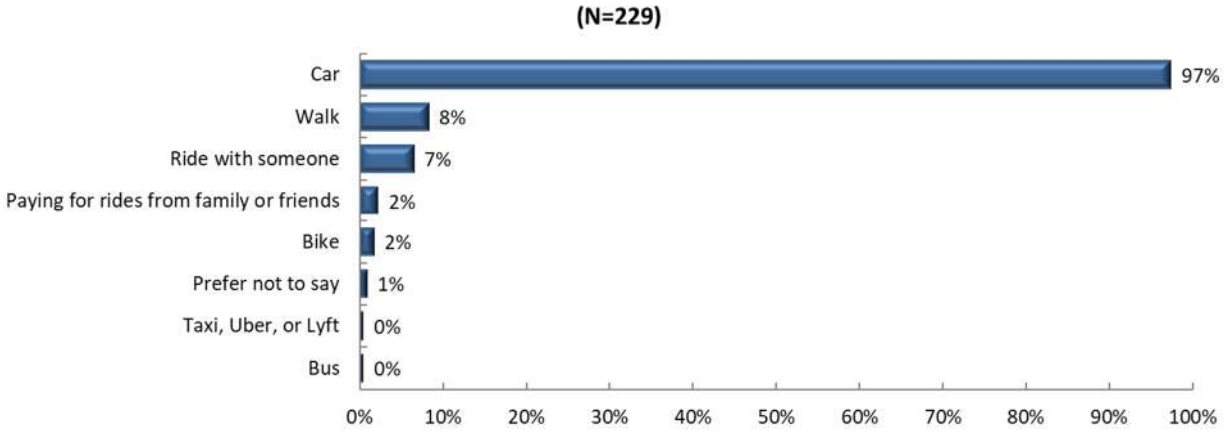


Figure 94: In the past 12 months has lack of transportation kept you from medical appointments, meetings, work, or getting things for daily living? Select all that apply:

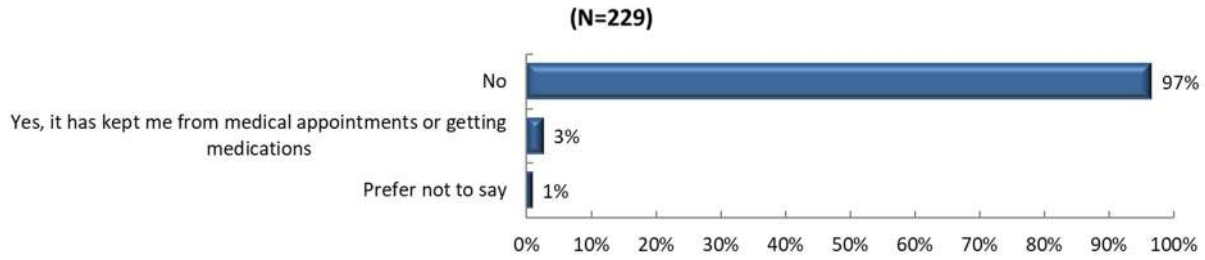
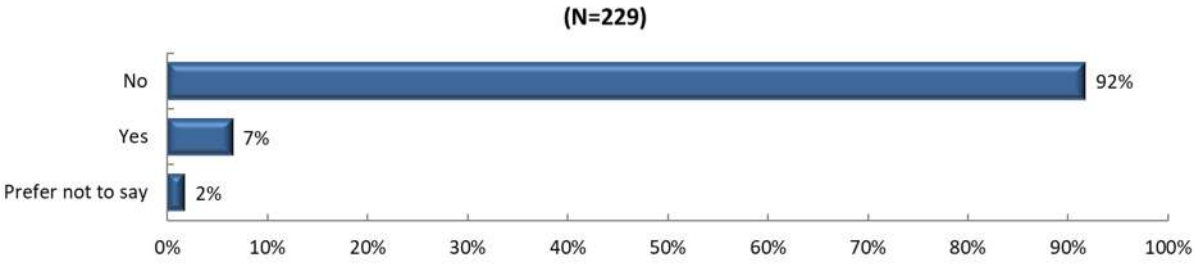


Figure 95: Do you put off or neglect going to the doctor because of distance or transportation?



APPENDIX 6 | SUMMARY OF DATA FINDINGS ACROSS SOURCES

Primary and Secondary data findings are summarized in full by the table below.[55]

Priority Area	Secondary Data	Community Survey	Focus Group 1	Focus Group 2
Behavioral Health: Mental Health	✓	✓	✓	
Behavioral Health: Substance Use		✓	✓	✓
Built Environment	✓		✓	
Community Safety	✓	✓		
Diet & Exercise	✓			
Education				✓
Employment & Income	✓	✓	✓	
Environmental Quality			✓	✓
Family, Community & Social Support			✓	
Food Access & Security	✓		✓	✓
Healthcare: Access & Quality	✓	✓	✓	✓
Health Equity & Literacy				
Housing & Homelessness				✓
Length of Life				
Maternal & Infant Health				
Physical Health (Chronic Diseases, Cancer, Obesity)	✓	✓	✓	✓
Sexual Health	✓			
Tobacco Use	✓			
Transportation & Transit	✓			✓

[55] Survey results captured here reflect major findings from the Community Health Opinion Survey questions. Red boxes indicate categories identified as high need consistently across data sources.

APPENDIX 7 | LEADING CAUSES OF DEATH AND HOSPITAL DATA

Leading Causes of Death (Crude death rate per 100,000.)

Note: Deaths based on fewer than 10 events and death rates based on fewer than 20 events are suppressed due to statistical unreliability.

Top Causes of Death in Chowan County 2020			Top Causes of Death in Chowan County 2021			Top Causes of Death in Chowan County 2022		
Rank	Cause	Rate	Rank	Cause	Rate	Rank	Cause	Rate
1	Disease of the Heart	361.9	1	Diseases of the Heart	415.4	1	Diseases of the Heart	444.8
2	Malignant Neoplasms	253.3	2	Malignant Neoplasms	327.9	2	Malignant Neoplasms	272.6
3	COVID-19	159.2	3	COVID-19	153.0	3	Diabetes Mellitus	-
4	Chronic Lower Respiratory Diseases	-	4	Accidents	-	4	Accidents	-
5	Cerebrovascular Diseases	-	5	-	-	5	COVID-19	-

Source: CDC Wonder
https://wonder.cdc.gov/ucd-icd10-expanded.html

Leading Causes of Causes of Emergency Department Visits

Note: Data reflects emergency department visits from ECU Health hospitals only and may not represent visits to other healthcare facilities in the region.

Top 5 Diagnoses for ED Visits for Chowan County Residents FY 2022			Top 5 Diagnoses for ED Visits for Chowan County Residents FY 2023			Top 5 Diagnoses for ED Visits for Chowan County Residents FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	COVID-19	583	1	Pain in throat and chest	377	1	Pain in throat and chest	409
2	Acute upper respiratory infection	371	2	Acute upper respiratory infection	321	2	Abdominal and pelvic pain	348
3	Pain in throat and chest	324	3	Abdominal and pelvic pain	280	3	Acute upper respiratory infection	334
4	Abdominal and Pelvic Pain	252	4	COVID-19	240	4	Acute pharyngitis	267
5	Back Pain	245	5	Back Pain	230	5	COVID-19	263

Top 5 Diagnoses for ED Visits for ECHO Hospital FY 2022			Top 5 Diagnoses for ED Visits for ECHO Hospital FY 2023			Top 5 Diagnoses for ED Visits for ECHO Hospital FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	COVID-19	1,050	1	Pain in Throat and Chest	660	1	Pain in Throat and Chest	720
2	Acute upper respiratory infection	644	2	Acute Upper Respiratory Infection	577	2	Abdominal and pelvic pain	654
3	Pain in Throat and Chest	611	3	Abdominal and pelvic pain	551	3	Acute Upper Respiratory Infection	612
4	Abdominal and pelvic pain	478	4	COVID-19	419	4	Acute pharyngitis	515
5	Back Pain	415	5	Back Pain	415	5	Influenza	495

Leading Causes of Avoidable Emergency Department Visits

Note: Data reflects emergency department visits from ECU Health hospitals only and may not represent visits to other healthcare facilities in the region.

Top 5 Diagnoses for Avoidable ED Visits for Chowan County Residents FY 2022			Top 5 Diagnoses for Avoidable ED Visits for Chowan County Residents FY 2023			Top 5 Diagnoses for Avoidable ED Visits for Chowan County Residents FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Acute Upper Respiratory Infection	370	1	Acute Upper Respiratory Infection	320	1	Acute Upper Respiratory Infection	334
2	Nausea and vomiting	182	2	Acute pharyngitis	223	2	Acute pharyngitis	267
3	Other joint disorders	175	3	Nausea and vomiting	199	3	Influenza	256
4	Disorders of Urinary System	150	4	Other joint disorders	191	4	Other joint disorders	223
5	Soft Tissue Disorders	114	5	Disorders of Urinary System	173	5	Disorders of Urinary System	206

Top 5 Diagnoses for Avoidable ED Visits for ECHO Hospital FY 2022			Top 5 Diagnoses for Avoidable ED Visits for ECHO Hospital FY 2023			Top 5 Diagnoses for Avoidable ED Visits for ECHO Hospital FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Acute Upper Respiratory Infection	642	1	Acute Upper Respiratory Infection	576	1	Acute Upper Respiratory Infection	612
2	Other joint disorders	331	2	Nausea and vomiting	391	2	Acute pharyngitis	515
3	Nausea and vomiting	328	3	Acute pharyngitis	386	3	Influenza	488
4	Disorders of Urinary System	297	4	Other joint disorders	335	4	Other joint disorders	454
5	Soft Tissue Disorders	223	5	Influenza	330	5	Disorders of Urinary System	417

Leading Causes of Emergency Department Visits Leading to Admission

Note: Data reflects emergency department visits from ECU Health hospitals only and may not represent visits to other healthcare facilities in the region.

Top 5 Diagnoses for ED Visits Resulting in Admission for Chowan County Residents FY 2022			Top 5 Diagnoses for ED Visits Resulting in Admission for Chowan County Residents FY 2023			Top 5 Diagnoses for ED Visits Resulting in Admission for Chowan County Residents FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Sepsis	86	1	Sepsis	84	1	Sepsis	102
2	COVID-19	39	2	Type 2 diabetes mellitus	31	2	Hypertensive Heart and Chronic Kidney Disease	32
3	Hypertensive heart and chronic kidney disease	30	3	Atrial Fibrillation and Flutter	20	3	Ischemic stroke	28
4	Hypertensive heart disease	24	4	Hypertensive heart and chronic kidney disease	19	4	Hypertensive Heart Disease	25
5	Ischemic stroke	23	5	Hypertensive heart disease	17	5	Acute Kidney Failure	23

Top 5 Diagnoses for ED Visits Resulting in Admission for ECHO Hospital FY 2022			Top 5 Diagnoses for ED Visits Resulting in Admission for ECHO Hospital FY 2023			Top 5 Diagnoses for ED Visits Resulting in Admission for ECHO Hospital FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Sepsis	156	1	Sepsis	174	1	Sepsis	205
2	COVID-19	76	2	Type 2 diabetes mellitus	47	2	Hypertensive Heart and Chronic Kidney Disease	58
3	Hypertensive Heart and Chronic Kidney Disease	45	3	Hypertensive Heart and Chronic Kidney Disease	47	3	Ischemic stroke	46
4	Hypertensive Heart Disease	38	4	Acute Kidney Failure	37	4	Hypertensive Heart Disease	36
5	Ischemic stroke	37	5	Atrial Fibrillation and Flutter	36	5	Chronic Obstructive Pulmonary Disease	36

Leading Causes of Admission

Note: Data reflects emergency department visits from ECU Health hospitals only and may not represent visits to other healthcare facilities in the region.

Top 5 Diagnoses for Admission for Chowan County Residents FY 2022			Top 5 Diagnoses for Admission for Chowan County Residents FY 2023			Top 5 Diagnoses for Admission for Chowan County Residents FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Liveborn Infant	115	1	Liveborn Infant	124	1	Liveborn Infant	140
2	Sepsis	110	2	Sepsis	101	2	Sepsis	137
3	COVID-19	46	3	Acute Myocardial Infarction / Heart Attack	36	3	Hypertensive Heart and Chronic Kidney Disease	43
4	Hypertensive Heart and Chronic Kidney Disease	38	4	Type 2 Diabetes Mellitus	35	4	Acute Myocardial Infarction / Heart Attack	40
5	Acute Myocardial Infarction / Heart Attack	34	5	Hypertensive Heart and Chronic Kidney Disease	33	5	Type 2 Diabetes Mellitus	37

Top 5 Diagnoses for Admission for ECHO Hospital FY 2022			Top 5 Diagnoses for Admission for ECHO Hospital FY 2023			Top 5 Diagnoses for Admission for ECHO Hospital FY 2024		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Liveborn Infant	322	1	Liveborn Infant	329	1	Liveborn Infant	397
2	Sepsis	162	2	Sepsis	179	2	Sepsis	210
3	COVID-19	89	3	Hypertensive Heart and Chronic Kidney Disease	50	3	Pregnancy, Childbirth, or Puerperium Complication	64
4	Pregnancy, Childbirth, or Puerperium Complication	66	4	Type 2 Diabetes Mellitus	50	4	Maternal Care for Abnormality of Pelvic Organs	59
5	Maternal Care for Abnormality of Pelvic Organs	47	5	Maternal Care for Abnormality of Pelvic Organs	45	5	Hypertensive Heart and Chronic Kidney Disease	58

Top 5 Leading Causes of Injury Death, Hospitalization, and Emergency Department Visits

Leading Causes of Injury Death 2017-2021 Chowan County			Leading Causes of Injury Hospitalization 2017-2021 Chowan County			Leading Causes of Injury ED Visits 2017-2021 Chowan County		
Rank	Cause	#	Rank	Cause	#	Rank	Cause	#
1	Poisoning - Unintentional	20	1	Fall – Unintentional	232	1	Fall – Unintentional	2,827
2	MVT – Unintentional	14	2	MVT – Unintentional	39	2	Unspecified – Unintentional	1,880
3	Fall – Unintentional	10	3	Poisoning – Unintentional	28	3	No Mechanism or Intent Recorded	1,641
4	Unspecified - Unintentional	6	4	Unspecified - Unintentional	13	4	MVT - Unintentional	845
5	Firearm - Assault	5	5	Other Specified/Classifiable - Unintentional	12	5	Struct By/Against - Unintentional	784

Source: N.C. Injury & Violence Prevention Branch
https://injuryfreenc.dph.ncdhhs.gov/DataSurveillance/pdf/Top5TablesByCounty2017-2021_Final.pdf