Albemarle Regional Health Services
Partners in Public Health

ECU HEALTH
Roanoke-Chowan Hospital

HERTFORD COUNTY

COMMUNITY HEALTH NEEDS ASSESSMENT

2024 CHNA REPORT

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 Steering Committee throughout this CHNA. The 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 CHNA Steering Committee

Name	Title	Organization
Lorrie Basnight	Executive Director	Eastern Area Health Education Center (AHEC)
Amanda Betts	Public Health Education Supervisor	Albemarle Regional Health Services (ARHS)
April Culver	Vice President, External Affairs	UNC Health Johnston
Caroline Doherty	Community Health Consultant	Roanoke Chowan Community Health Center (RCCHC)
Laura Ellis	Health Education	Halifax County Health Department
Sandra McMasters	Community Benefit Project Manager	Sentara Health
Claire Mills	Director	Eastern AHEC
Emmanuelle Quenum	Health Education Director	Greene County Department of Public Health (DPH)
Rose Ann Simmons	Administrator, Community Health Improvement	ECU Health
Michelle Wagner	Public Health Educator	Dare County Department of Health & Human Services (DHHS)

Hertford County CHNA Leadership

In addition to the Steering Committee, the Hertford County 2024 CHNA was developed in partnership with representatives from the following organizations:

- Albemarle Regional Health Services
- ECU Health Roanoke Chowan Hospital
- Hertford Health Maintenance Alliance

Hertford County CHNA Stakeholders

In addition to the organizations listed above, the Hertford 2024 CHNA was developed with input from additional representatives from local health providers, government officials, non-profit organizations, social service providers and community members.

Name	Organization
Rico Nuss	Mayor – Harrellsville
Lori Nuss	Citizen
Bobbie Lowe	Trillium
Michelle Lewis	Roanoke Chowan Community Health Center
Quasia Wilson	Bertie Cooperative Extension
Dylan Lilley	Bertie Cooperative Extension
Chinita Vaughn	Trillium
Amy Underhill	Albemarle Regional Health Services
Gabi Corprew	Albemarle Regional Health Services
Angela Dunstan	Roanoke Cooperative
Johnette Chen	Citizen
Emily Bryant	ECU Health Roanoke-Chowan Hospital
Wendy Vann	ECU Health Roanoke-Chowan Hospital
Amanda Betts	Albemarle Regional Health Services
Kasey Peary	ECU Health Roanoke-Chowan Hospital
Sylvia Outlaw	Albemarle Regional Health Services
Mandy Hall	Roanoke-Chowan Community Health Center
Alicia Mitchell	ECU Health Access East
Jonathan Unger	ECU Health Wellness Center
Betsy Vaughan	ECU Health Roanoke-Chowan Hospital
Sonya Williams	ECU Health Roanoke-Chowan Hospital
Brian Harvill	ECU Health Roanoke-Chowan Hospital
Rose Ann Simmons	ECU Health
Andrea Porter	Albemarle Regional Health Services
Kelly Herr	ECU Health Roanoke-Chowan Hospital

In addition, the Steering Committee would like to thank Ascendient Healthcare Advisors for directing the CHNA process and developing the content of this report.

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EXECUTIVE SUMMARY

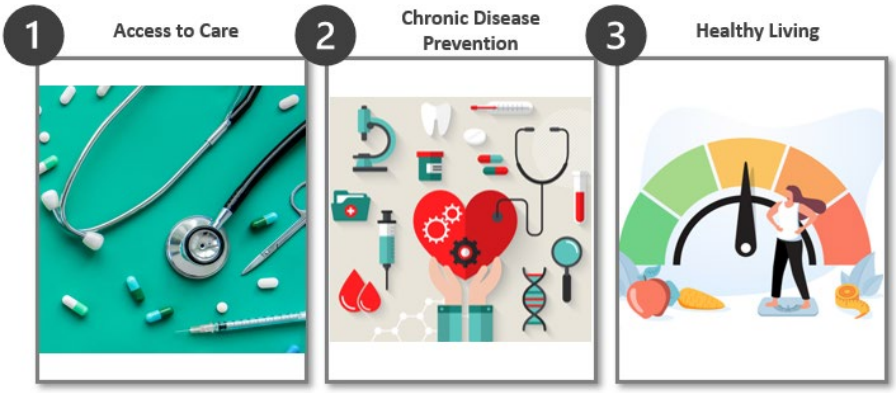
A Community Health Needs Assessment (CHNA) helps health leaders evaluate the health and wellness of the community they serve and identify gaps and challenges that should be addressed through new programs, services and policy changes. This report was created in compliance with North Carolina Local Health Department Accreditation standards, as well as Internal Revenue Service requirements for not-for-profit hospitals.

Several local health organizations came together to help develop this CHNA, including, Albemarle Regional Health Services, ECU Health Roanoke Chowan Hospital, and Roanoke Chowan Community Health Center.

Secondary (existing) data is an important piece of the CHNA process. Key sources for secondary data included information provided by the Steering Committee and a variety of public data sources related to demographics, social and economic determinants of health, environmental health, health status and disease trends, mental/behavioral health trends, and individual health behaviors. Each data measure was also compared to state or national benchmarks to identify areas of specific concern for Hertford County. Top community needs identified through secondary data analysis included health concerns related to physical health and tobacco use, and social or environmental concerns such as education, food access and security, and family, community, and social support, among others.

Primary (new) data were collected through focus groups and a web-based survey for community members, and included feedback from 407 people who live, work or receive healthcare in Hertford County. A total of five 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), community safety, employment and income, food access and security, healthcare access and quality, physical health (chronic diseases, cancer, obesity), and transportation and transit as top needs that impact the health and well-being of people living in Hertford County.

Representatives from Hertford County worked together to identify the priorities the county should focus on over the following three-year period. Leaders evaluated the primary and secondary data collected throughout the process to identify needs based on the size and scope, severity, the ability for hospitals or health departments to make an impact, associated health disparities, and importance to the community. Although it was not possible for every single area of potential need to be identified as a priority, Hertford County selected three top priority health needs (Access to Care, Chronic Disease Prevention, and Healthy Living), which are shown here in alphabetical order:



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

Following completion of this report, health leaders throughout Hertford 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

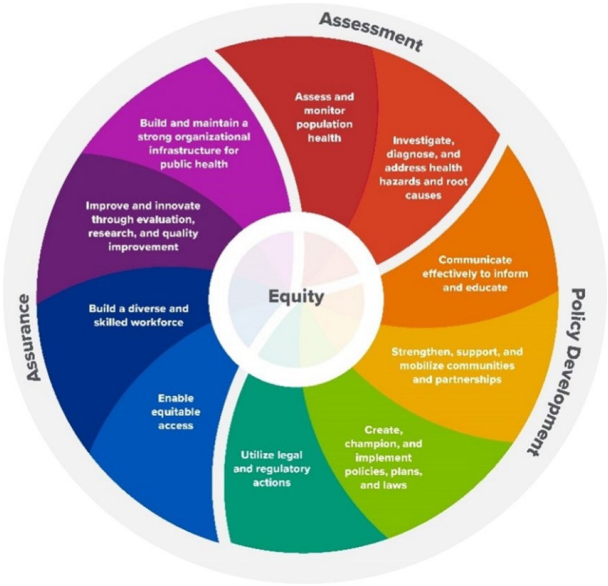
To illustrate its commitment to the health and well-being of the community, the Health ENC CHNA Steering Committee has completed this assessment to understand and document the greatest health needs currently faced by local residents. Guidance was also provided by local representatives from Albemarle Regional Health Services, ECU Health Roanoke Chowan Hospital, and Roanoke Chowan Community Health Center. These organizations helped gather the focus group and survey data that are detailed in this report. 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 Steering Committee and other community partners to proactively identify and respond to the needs of Hertford County residents.

This report was created in compliance with the State of North Carolina's Local Health Department Accreditation (NCLHDA) Board's accreditation standards.[1] The accreditation process allows local health departments to assess how they are meeting national and state-specific standards for public health practice and provides opportunities to address any identified gaps. It also ensures that local health departments have the ability to deliver the 10 essential public health services, as described in **Figure I.1** below. In its demonstration of data and prioritization of Hertford County's community needs, this report aligns with all NCLHDA standards for accreditation, including the need to:

- Provide evidence of community collaboration in planning and conducting the assessment.
- Reflect the demographic profile of the population and describe socioeconomic, educational and environmental factors that affect health.
- Assemble and analyze secondary data to describe the health status of the community.
- Collect and analyze primary data to describe the health status of the community.
- Use scientific methods for collecting and analyzing data, including trend data to describe changes in community health status and in factors affecting health.
- Identify population groups at risk for health problems.
- Identify existing and needed health resources.
- Compare selected local data with data from other jurisdictions; and
- Identify leading community health problems.

[1] Source: NCLHDA Health Department Self-Assessment Instrument Interpretation Document 2024.

Figure I.1: The 10 Essential Public Health Services



Further, this process complies 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:

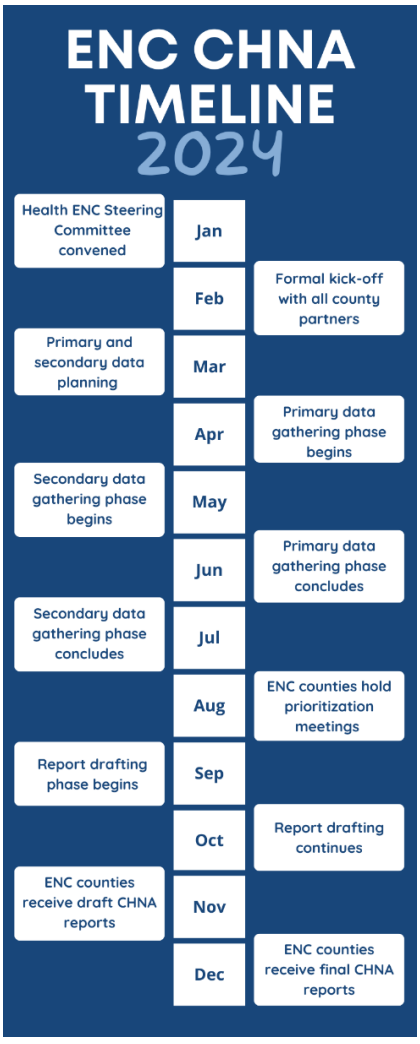
- Define the community it serves.
- Assess the health needs of that community.
- Through the assessment process, consider input received from people who represent the community's broad interests, including those with special knowledge of or expertise in public health.
- Document the CHNA in a written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

[2] Source: *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501®(3)* (2023). Internal Revenue Service. Retrieved February 13th, 2024 from https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3.

Timeline

The Health ENC 2024 CHNA process for all participating counties, including Hertford County, began in January 2024 with the convening of the Steering Committee and continued throughout the year. The process concluded in December 2024 with the delivery of final CHNA reports. A high-level summary of activities conducted throughout the year can be found in **Figure I.2** below.

Figure I.2: Health ENC 2024 CHNA Milestones



Process Overview

A significant amount of information has been reviewed during this planning process, and the Steering Committee has been careful to ensure that a variety of sources were used to deliver a truly comprehensive report. 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 Hertford 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 Hertford County residents. Key objectives of this CHNA include:

- Identify the health needs of Hertford County residents;
- 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 I.3** 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 I.3: The CHNA Process

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 Hertford County residents.

3) *Priority Health Need Areas* – This chapter describes each identified priority health need area for Hertford 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 Hertford County.

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

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**.

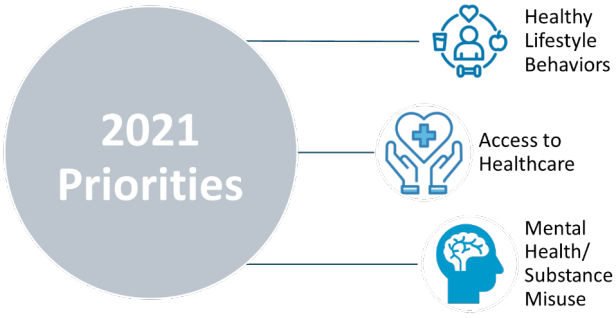
2) *Detailed Summary of Secondary Data Measures and Findings* – Existing data measures and findings used in the prioritization process are presented in **Appendices 2-3.**

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 2021, Hertford County completed its previous assessment. Associated implementation strategies focused on three priority areas, as listed below:

Figure I.4: Hertford County 2021 Priority Need Areas



Local organizations developed goals and implementation plans to address these priority health needs. Below are brief summaries of each organization's most recent CHNA implementation plans.

Albemarle Regional Health Services

Albemarle Regional Health Services (ARHS) is a district health department serving northern North Carolina. The ARHS district model serves as a shining example of regionalization and what true public health champions can accomplish when they work together. This district model would not be possible if it were not for its eight member counties: Bertie, Camden, Chowan, Currituck, Gates, Hertford, Pasquotank, and Perquimans. The mission & vision of ARHS serves to inspire people to lead healthy lives. The public health professionals and programs of ARHS are dedicated to disease prevention and the promotion of a healthy environment to reduce morbidity, mortality, and disability through quality service,

education, and advocacy. ARHS partnerships stretch far and wide, and many agencies serve as public health champions throughout its communities. These agencies range from school systems to cooperative extension, colleges and universities, other county agencies, and many more.

ECU Health Roanoke-Chowan Hospital

ECU Health Roanoke-Chowan Hospital is a 114-bed hospital located in Ahoskie that provides a full spectrum of health services to nearly 40,000 people across four counties, including Hertford County. The hospital's specialty services include behavioral health, cancer care, pain management, wound healing, sleep services, a pediatric asthma program, and an ECU Health Wellness Center location in Ahoskie. ECU Health Roanoke-Chowan Hospital is part of the ECU Health system, which serves more than 1.4 million people in 29 counties. ECU Health's system of care includes 1,708 beds across an academic medical center with two campuses and is a teaching hospital for the Brody School of Medicine at East Carolina University; eight community hospitals; and numerous outpatient facilities, home health, hospice and wellness centers. The system has more than 1,100 academic and community providers practicing in over 185 primary and specialty clinics located in more than 110 locations.

Roanoke-Chowan Community Health Center

Roanoke-Chowan Community Health Center (RCCHC) is one of 42 Federally Qualified Health Centers (FQHCs) in North Carolina. Community Health Centers provide a range of primary care, medical, dental, and behavioral health services to improve the health status of the medically underserved and reduce health disparities. Community Health Centers address the unique and significant barriers to affordable and accessible health services in the communities they serve. RCCHC provides complete preventive and primary health services for the entire family, including pediatric care, dental care, mental health care, and substance abuse services, either directly on-site or through established arrangements, regardless of an individual's ability to pay. RCCHC aims to make healthcare affordable and accessible for the residents of Hertford, Bertie, Gates, Northampton, and Washington counties as well as the surrounding areas of northeastern North Carolina.

Previous CHNA Priority: Healthy Lifestyle Behaviors

Commented [EM1]: Per Sonya - some of the information is still pending. Included her edits so far here.

- ECU Health Roanoke-Chowan Hospital and Wellness Center provided community well screening to 52 individuals in fiscal year (FY) 23 and FY 24.

Previous CHNA Priority: Access to Healthcare

- ECU Health Roanoke-Chowan Hospital holds Certificate of Distinction for Advanced Certification as a Primary Stroke Center by The Joint Commission.
- ECU Health Roanoke-Chowan Hospital was recognized by The American Heart Association and American Stroke Association for achieving Get with The Guidelines- Stroke Gold Plus for FY22 and FY23.

Previous CHNA Priority: Mental Health/Substance Misuse

- ECU Health and ECU Health Roanoke-Chowan Hospital obtained funds from Trillium to purchase Narcan to assist with the reduction of opioid overdoses in FY 23.

Additional detail about previous implementation plans, as captured in the NCLHDA State of the County Health (SOTCH) report, can be found in **Appendix 1**.

Summary Findings: Hertford County 2024 Priority Health Need Areas

To achieve the study objectives in the 2024 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 Hertford 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 January 2024 and continued through July 2024.

Throughout Hertford 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 Hertford 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 Steering Committee identified Hertford 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 three priority need areas. After looking at all relevant data and feedback from the CHNA Steering Committee, the Hertford focus areas identified as countywide priorities for the 2024 CHNA are Access to Care, Chronic Disease Prevention, and Healthy Living, as seen in **Figure I.5**.

Figure I.5: Hertford County 2024 Priority Health Needs

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 for 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 Committee's goal is to work with other community organizations to address underlying factors that could drive long-term improvements to the county population's health.

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

CHAPTER 1 | METHODOLOGY

Study Design

The process used to assess Hertford 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 Hertford County's health needs. While the CHNA Steering Committee 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 Steering Committee. The 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 Hertford 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. In total, the input was gathered from over 430 Hertford County residents and other stakeholders. This included web survey responses from over 400 community members and five focus groups that included 30 community members and other people who live, work or receive healthcare in Hertford County.

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

Existing (Secondary) Data

Key sources for existing data on Hertford County included information provided by the Steering Committee and a variety of public data sources related to demographics, social and economic determinants of health, environmental health, health status and disease trends, mental/behavioral health trends, and individual health behaviors. Key information sources leveraged during this process included:

- *North Carolina Data Portal*, a joint effort by the North Carolina Department of Health and Human Services and the University of Missouri Center for Applied Research and Engagement Systems
- *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
- Data provided by CHNA Steering Committee members and other affiliated organizations, including previous Community Health Assessments from Hertford County in 2018 and 2021.

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 Hertford 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 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 Hertford 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	Hertford County Description
	Low	Represents measures in which Hertford 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 Hertford 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 Hertford 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 Hertford County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

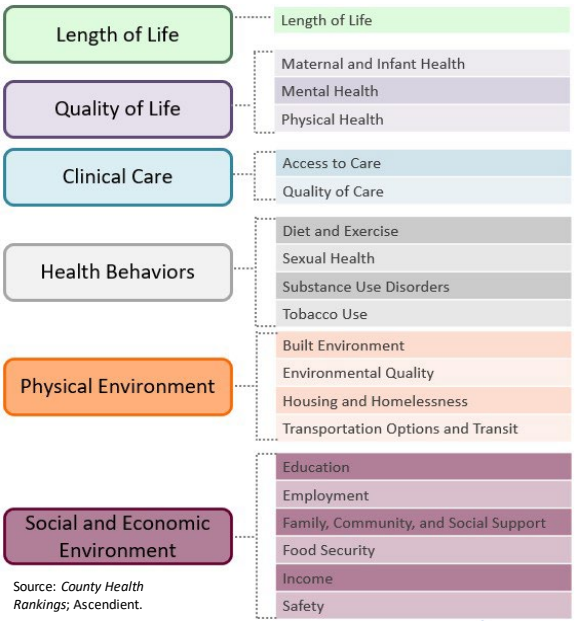
(Hertford Co Value – Benchmark Value)/(Benchmark) x 100 = % Difference Used to Identify Priority Level.

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 1.1** below illustrates the broad categories and sub-categories within the population health framework.

Figure 1.1: Population Health Framework



Source: *County Health Rankings*; Ascendient.

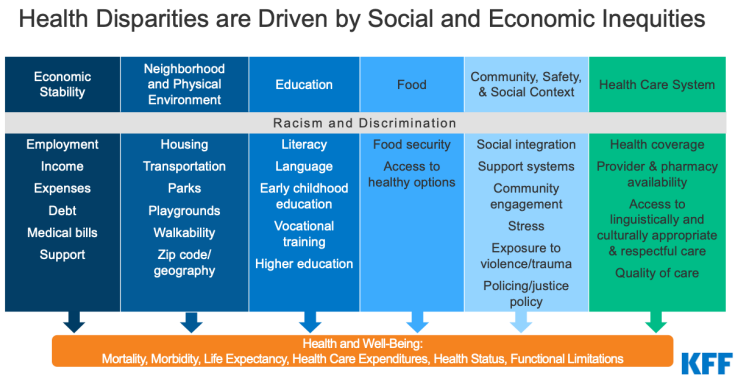
Figure 1.2: Social Determinants of Health

Throughout the process, the 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 1.2**.[3]

Recognizing that SDoH have an impact on health disparities and inequities in the community was a key point the Steering Committee considered throughout the CHNA process. **Figure 1.3** describes the way various social and economic conditions may affect health and well-being.

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

Figure 1.3: SDoH and Health Disparities



Prioritization Process Overview and Results

The process of identifying the priority health needs for the 2024 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 1.1**. 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.

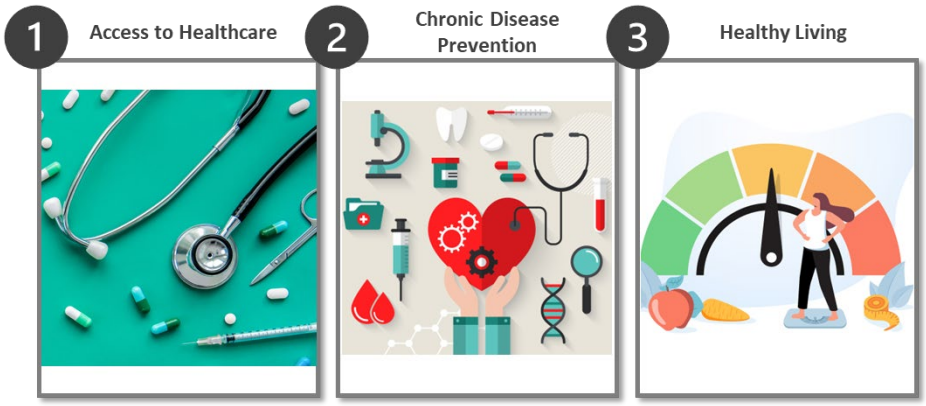
The Steering Committee utilized the multi-voting technique to determine Hertford County's priority need areas, while considering the following factors:

- 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 three focus areas (Access to Care, Chronic Disease Prevention, and Healthy Living) were identified as Hertford County's top priority health needs to be addressed over the next three years, as seen in **Figure 1.4** below:

Figure 1.4: Hertford County 2024 Priority Health Needs



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

- Albemarle Regional Health Services
- Bertie Cooperative Extension
- Citizen
- City of Harrellsville
- ECU Health
- ECU Health Access East
- ECU Health Roanoke Chowan
- Roanoke Chowan Community Health Center
- Roanoke Cooperative
- Roanoke Electric
- Trillium

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. The Steering Committee tried to

account for these limitations by collecting new data, including focus groups and web-based community member 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 Hertford 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. Efforts were made to include diverse community members in survey efforts. Roughly 58% of respondents were Black or African American, similar to the Hertford County population reported as being 57%. Roughly 34% of all respondents were White compared to 31% of the county population reported as being White. Only 0.7% of respondents identified as Hispanic, which is less than the reported county population level of 7.7%. Although survey respondents could choose from multiple race or ethnicity categories, limited responses were received from these groups. This made it difficult for the Steering Committee 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 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 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 Steering Committee has assumed that participating community members accurately and completely represented their fellow residents.

CHAPTER 2 | COUNTY PROFILE

Geography

Hertford County is located in the Inner Coastal Plain region of North Carolina, characterized by the presence of low-lying areas, winding rivers, and rolling hills. It covers a total of 360 square miles, including 353 square miles of land and 7 square miles of water. Hertford County is comprised of six municipalities: Ahoskie, Cofield, Como, Harrellsville, Murfreesboro, and Winton. The majority (77%) of Hertford County's population resides in rural areas.

Population

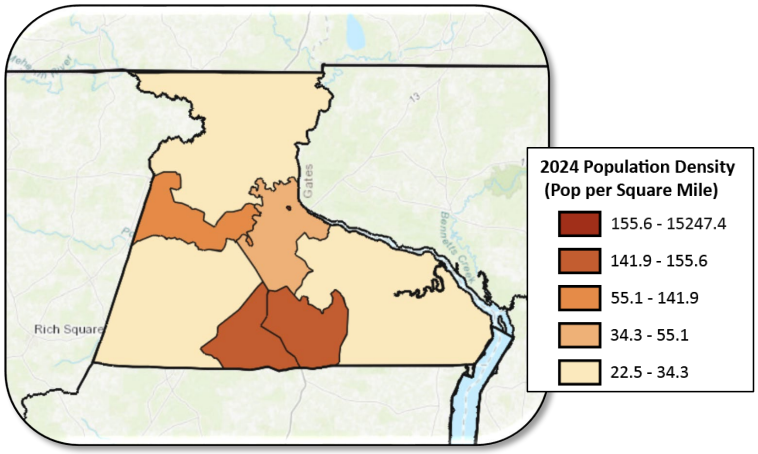
Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

Hertford County has a population of 20,815, making up less than 0.2% of North Carolina's total population

Table 2.1: Total Population, 2023[4]			
	Hertford County	North Carolina	United States
Population	20,815	10,765,678	337,470,185

Hertford County has a population density of 57.7 persons per square mile – lower than the population density for North Carolina (214.7 persons per square mile). Ahoskie is the most densely populated area in the county.

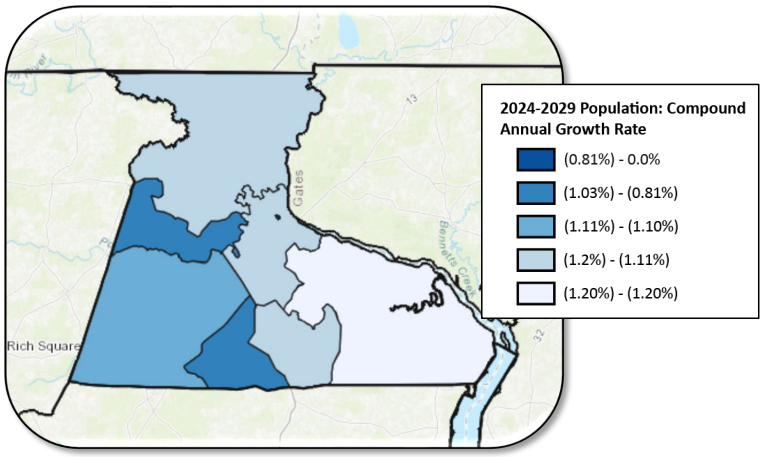
Figure 2.1: Hertford County Map: Population Density[4]



[4]Source: Esri 2023

In total, the population of Hertford County is projected to decline 0.96% annually between 2024 and 2029. Areas in the southeastern parts of the county are experiencing the greatest population decline.

Figure 2.2: Hertford County Map: Population Growth[4]



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 Hertford County skews older than the state and country. Hertford County has a lower percentage of residents below 15 (15.0%) compared to North Carolina (17.9%). The percentage of residents between 15 and 44 (39.6%) is similar to the state average (39.3%), while the proportion aged 45-64 (24.6%) is slightly lower than North Carolina's (25.1%). Most notably, Hertford County has a higher percentage of residents 65 and older (20.8%) compared to the state average (17.7%), suggesting an aging population that may require more senior-focused healthcare services.

Table 2.2: Age Distribution, 2023[4]

	Hertford County	North Carolina	United States
Percentage below 15	15.0%	17.9%	18.1%
Percentage between 15 and 44	39.6%	39.3%	39.5%
Percentage between 45 and 64	24.6%	25.1%	24.6%
Percentage 65 and older	20.8%	17.7%	17.8%

Like North Carolina overall, Hertford County has a higher distribution of females than males in its population. Females make up 52.0% of the county's residents while males comprise 48.0%, a distribution slightly more pronounced than the state's ratio.

Table 2.3: Sex Distribution, 2023[4]						
	Hertford County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Female	10,821	52.0%	5,489,419	51.0%	170,118,720	50.4%
Male	9,994	48.0%	5,276,259	49.0%	167,351,465	49.6%

Race and Ethnicity

Data on race and ethnicity informs the need for healthcare services and cultural factors that can impact how services are delivered. In Hertford County, non-Hispanic Black residents comprise the majority at 57.5%, a percentage significantly higher than North Carolina's 20.4%. Non-Hispanic White residents make up 35.0% of the population, which is considerably lower than the state's 61.2%. The county has lower percentages of Asian (0.6% vs. 3.5% state) and Some Other Race Alone (2.3% vs. 6.3% state) populations. American Indian and Alaska Native (AIAN) residents make up 1.0% of the Hertford County population, similar to the state average (1.2%), while Native Hawaiian and Pacific Islander (NHPI) residents comprise a negligible percentage (0.0%). The percentage of residents identifying as Two or More Races (3.6%) is lower than the state average (7.2%). This data indicates that Hertford County has a distinctly different racial composition compared to North Carolina overall, with a predominantly Black population.

Table 2.4: Racial Distribution, 2023[4]						
	Hertford County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Black (Non-Hispanic)	11,969	57.5%	2,199,488	20.4%	42,132,758	12.5%
White (Non-Hispanic)	7,279	35.0%	6,590,161	61.2%	204,562,590	60.6%
Asian	131	0.6%	379,374	3.5%	21,088,177	6.2%
AIAN	206	1.0%	133,820	1.2%	3,831,126	1.1%
NHPI	3	0.0%	9,214	0.1%	712,229	0.2%
Some Other Race Alone	476	2.3%	677, 338	6.3%	29,432,586	8.7%
Two or More Races	751	3.6%	776,283	7.2%	35,710,719	10.6%

Hertford County's Hispanic population, about 7.7% of the overall population, is lower than the North Carolina proportion (11.4%).

Table 2.5: Ethnic Distribution, 2023[4]						
	Hertford County		North Carolina		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Non-Hispanic	19,206	92.3%	9,465,874	88.6%	271,934,049	80.6%
Hispanic	1,609	7.7%	1,299,804	11.4%	65,536,136	19.4%

The proportion of foreign-born individuals residing in Hertford County is less than 3%, lower than both state and national averages.

Table 2.6: Foreign Born Population, 2022[5,6]			
	Hertford County	North Carolina	United States
Foreign Born	2.8%	9%	13.9%

According to the most recent American Community Survey (ACS), approximately 5% of Hertford County residents speak a language other than English at home. This is lower than the roughly 13% of North Carolina and 22% U.S. residents who speak a language other than English at home. A little over 3% of Hertford County residents speak Spanish at home, suggesting a lower level of linguistic diversity and a strong predominance of English speakers.

Table 2.7: Language Spoken at Home, 2022[6]			
	Hertford County	North Carolina	United States
English Only	95.2%	87.3%	78%
Spanish	3.4%	7.9%	13.3%
Indo-European Languages	0.5%	2.1%	3.8%
Asian and Pacific Islander Languages	0.7%	1.9%	3.6%
Other Languages	0.2%	0.8%	1.2%

Disability Status[7]

Data on disability status helps us understand how to create fair and equal opportunities for everyone in the county. Individuals with disabilities may require services that look different or are delivered in different ways and may require unique outreach by health and other service providers. The percentage of Hertford County's population with a disability (21%) is significantly higher than the state average

[5] Source: U.S. Census Bureau (2022)
[6] Source: American Community Survey 2018-2022 5-Year Estimates
[7] 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.

(13.3%). 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 2.8: Disability Status, 2022[5,6]			
	Hertford County	North Carolina	United States
Population with a Disability	21%	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 health needs. The percentage of veterans in Hertford County is comparable to the state average and a bit higher than the national average.

Table 2.9: Veteran Status, 2022[5,6]			
	Hertford County	North Carolina	United States
Veterans	7.9%	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 Hertford County ($44,580) is significantly lower than the average in North Carolina ($64,316).

Table 2.10: Median Household Income, 2023[4]			
	Hertford County	North Carolina	United States
Median Household Income	$44,560	$64,316	$72,603

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. In 2023, nearly 16% of Hertford County households were below the federal poverty level (FPL), which is much higher than the average for both North Carolina and the U.S.

Table 2.11: Percent of Households Below the Federal Poverty Level, 2023[4]			
	Hertford County	North Carolina	United States
Percent Below FPL	15.7%	10.1%	9.5%

Approximately 39% of Hertford County households received Food Stamps/SNAP (Supplemental Nutrition Assistance Program) benefits in 2022. This is nearly triple the state rate of 13.4%, indicating a significantly higher level of food insecurity among county households.

Table 2.12: Households Receiving Food Stamps/SNAP, 2022[6,8]			
	Hertford County	North Carolina	United States
Number of Households Receiving Food Stamps/SNAP	3,161	575,860	16,072,733
Total Number of Households	8,145	4,299,266	129,870,928
Percentage of Households receiving Food Stamps/SNAP	38.8%	13.4%	12.4%

In Hertford County, 27.8% of the population has an educational attainment of high school alone, which is higher than the state average (21.2%). The county also has higher percentages of residents with some high school but no diploma (10.6%) compared to state figures (5.5%). The county has higher percentages of residents with some college education (23.7%) compared to the state (21.1%), and matches the state average for associate's degrees (9.9%). However, the county shows significantly lower rates of advanced education, with bachelor's degrees (9.2%) at less than half of North Carolina's rate (20.4%) and graduate/professional degrees (6.8%) notably lower than the state average (11.6%). This data indicates that while Hertford County exceeds state averages in high school and some college attendance, it lags significantly in bachelor's and graduate degree completion, suggesting potential barriers to accessing or completing higher education.

Table 2.13: Educational Attainment, 2020[5,9]			
	Hertford County	North Carolina	United States
Less than 9th Grade	5.4%	6.0%	3.5%
Some High School/No Diploma	10.6%	5.5%	5.3%
High School Diploma	27.8%	21.2%	28.5%
GED/Alternative Credential	6.6%	4.3%	*
Some College/No Diploma	23.7%	21.1%	14.6%
Associate's Degree	9.9%	9.9%	10.5%
Bachelor's Degree	9.2%	20.4%	23.4%
Graduate/ Professional Degree	6.8%	11.6%	14.2%

Source: NC OSBM, US Census *US Totals combine GED with High School Diploma

[8] Source: North Carolina Department of Health and Human Services, Social Services Division
[9] Source: North Carolina Office of State Budget and Management

The overall unemployment rate in Hertford County (7.2%) is higher than the state average (5.1%). Young people between ages 16 to 24 face significantly higher unemployment (24.1%) compared to North Carolina's 12.4%. The unemployment rate for ages 25 to 54 (5.6%) is also higher than the state figure (4.7%). However, the county shows lower rates for older workers ages 55 to 64 (1.4% vs. 3.3% state) and ages 65 or more (1.9% vs. 3.0% state). This data indicates substantial employment challenges in the county, particularly among younger workers.

Table 2.14: Unemployment, 2022[6,10]

	Hertford County	North Carolina	United States
Percentage unemployed ages 16 to 24	24.1%	12.4%	11.0%
Percentage unemployed ages 25 to 54	5.6%	4.7%	3.4%
Percentage unemployed ages 55 to 64	1.4%	3.3%	2.7%
Percentage unemployed ages 65 or more	1.9%	3.0%	2.9%
Total unemployment	7.2%	5.1%	3.9%

Hertford County's overall uninsured rate (10.8%) is lower than the state average (15.0%). The county shows better insurance coverage for those 18 and younger (4.5%) compared to the state average (5.2%). However, the uninsured rate for ages 19 to 34 (16.4%) is slightly higher than North Carolina's rate (15.5%), and the rate for ages 35 to 64 (16.7%) is notably higher than the state's 12.5%. This data suggests that while Hertford County performs better overall in terms of insurance coverage, both young and middle-aged adults face greater challenges in accessing health insurance compared to state averages.

Table 2.15: Health Insurance Status, 2022[6]

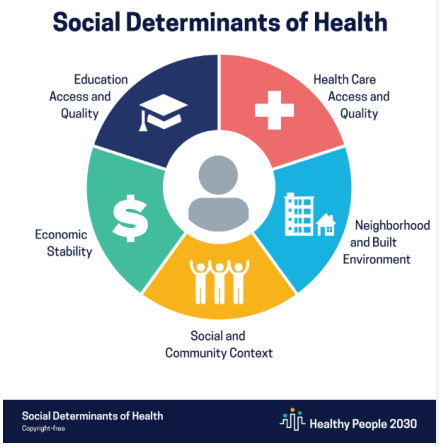
	Hertford County	North Carolina	United States
Percentage uninsured ages 18 or below	4.5%	5.2%	5.4%
Percentage uninsured ages 19 to 34	16.4%	15.5%	13.6%
Percentage uninsured ages 35 to 64	16.7%	12.5%	9.9%
Total % Uninsured	10.8%	15.0%	12.0%

[10] Source: Federal Reserve Economic Data (FRED)

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 Steering Committee 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 2.3: Social Determinants of Health



As seen in **Figure 2.3**, 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 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 Steering Committee 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.

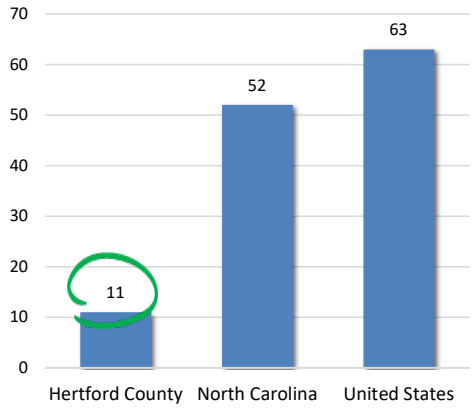
Disparities

Recognizing the diversity of Hertford County, as discussed above, the Steering Committee 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

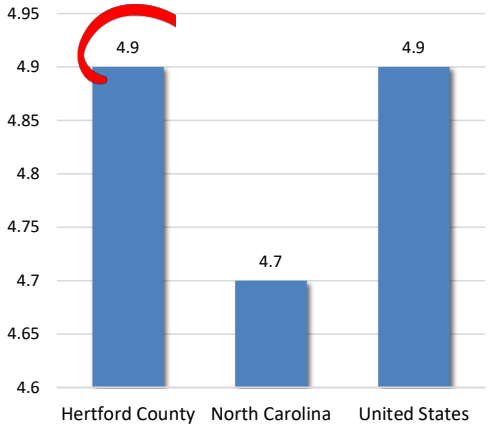
tracts. Lower scores represent a higher level of integration. There is less residential segregation in Hertford County compared to the state and country, as seen in **Figure 2.4**.

Figure 2.4: Residential Segregation[11]



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 2.5**, the income inequality ratio in Hertford County is higher than the state figure.

Figure 2.5: Income Inequality Ratio[11]

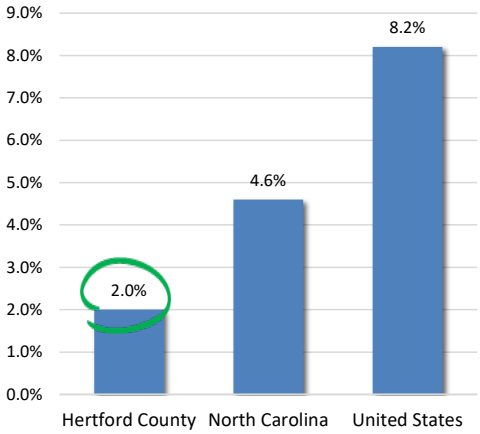


People with limited English proficiency (LEP) may face challenges accessing care and resources that fluent English speakers do not. Language barriers may make it hard to access transportation, medical, and social services as well as limit opportunities for education and employment. Importantly, LEP community

[11] Source: Robert Wood Johnson County Health Rankings 2024

members may not understand critical public health and safety notifications, such as safety-focused communications provided during the COVID-19 pandemic. Fewer people have limited English proficiency in Hertford County when compared to the state and the country, as seen in **Figure 2.6**.

Figure 2.6: Percent of Population with Limited English Proficiency[6]



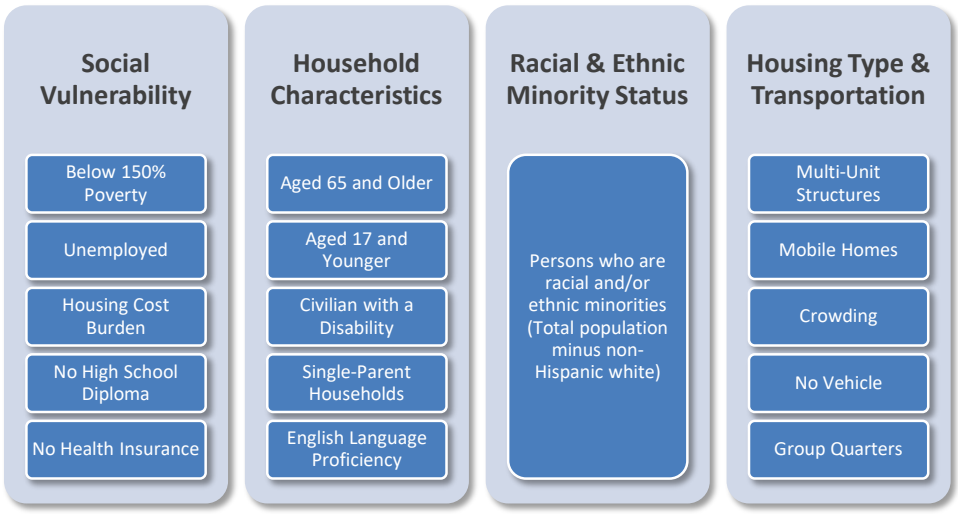
Social Vulnerability Index

One resource that helps demonstrate 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.[12] 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 2.7** outlines the variables used to calculate SVI scores.

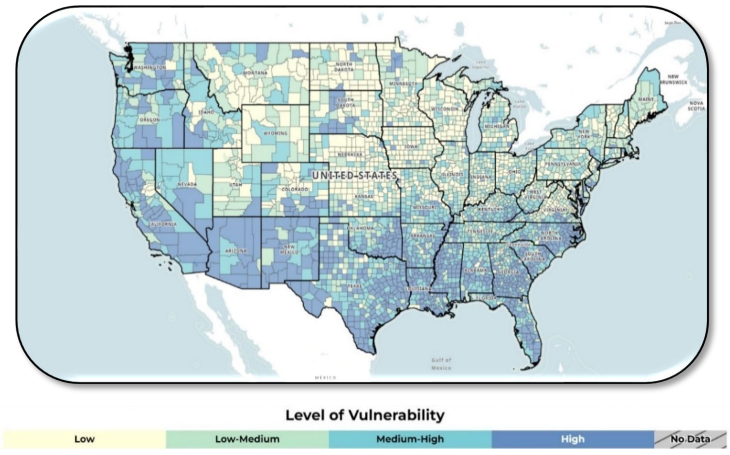
[12] CDC/ATSDR Social Vulnerability Index (SVI). Retrieved from https://www.atsdr.cdc.gov/placeandhealth/svi/index.html.

Figure 2.7: SVI Variables



The United States SVI by county is shown in **Figure 2.8** below. As shown, a lot of variation exists across the country, and even within individual states.

Figure 2.8: United States SVI by County, 2022



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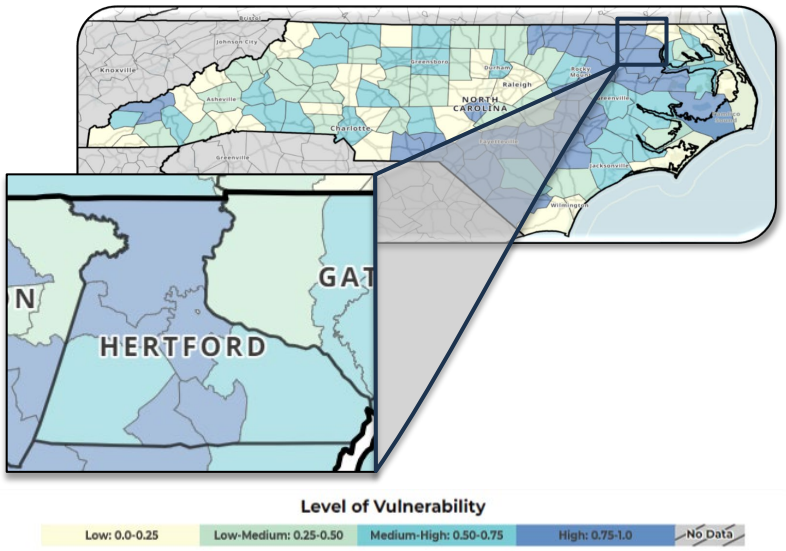
The 2022 SVI scores for Hertford County are shown in **Figure 2.9** below. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), and these scores show a relative comparison with other counties and census tracts in North Carolina. The vulnerability of Hertford County overall is higher than

average compared to the state. Levels of vulnerability are variable across the county with the average being 0.84.

Figure 2.9: Hertford County SVI by Census Tract, 2022



Environmental Justice Index

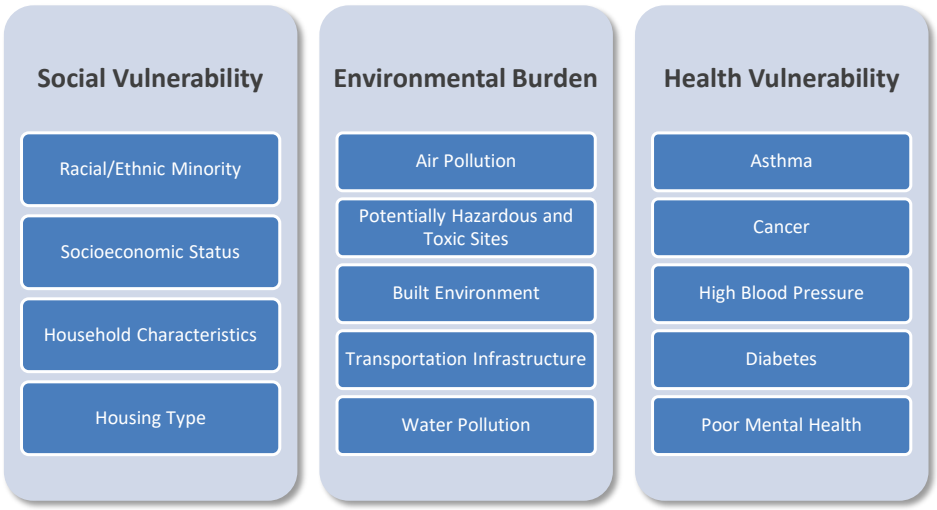
Environmental justice means the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment. It aims to protect everyone 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.[13]

The CDC/ATSDR Environmental Justice Index (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 2.10** outlines the variables used to calculate EJI scores.

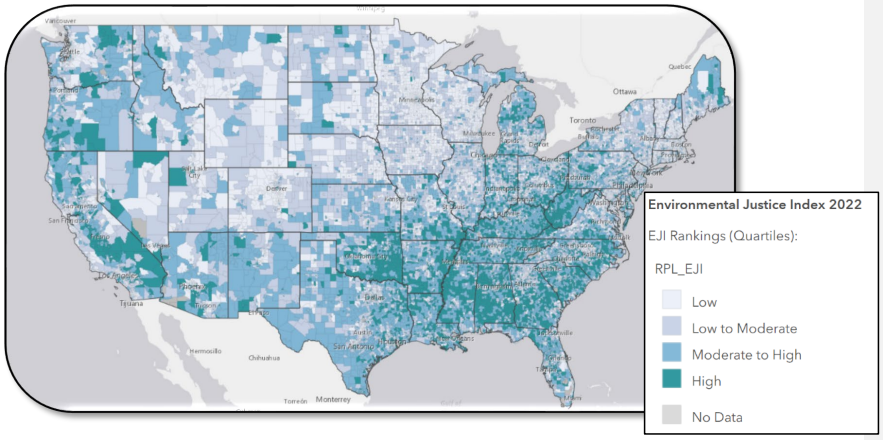
[13] U.S. Environmental Protection Agency (2024). Retrieved from https://www.epa.gov/environmentaljustice

Figure 2.10: EJI Variables



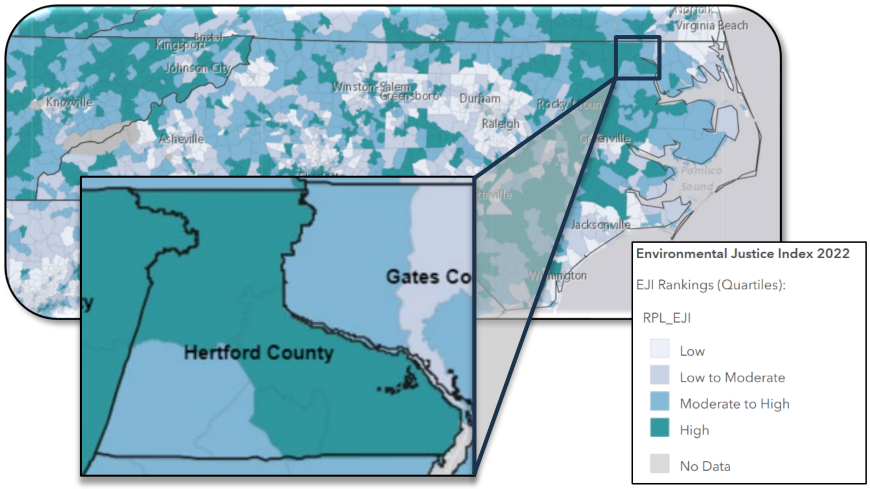
The United States EJI by census tract I is shown in **Figure 2.11** below. As shown, a lot of variation exists across the country, and even within individual states.

Figure 2.11: United States EJI by Census Tract, 2022



The 2022 EJI scores for census tracts within Hertford County are shown in **Figure 2.12** 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 0.75.

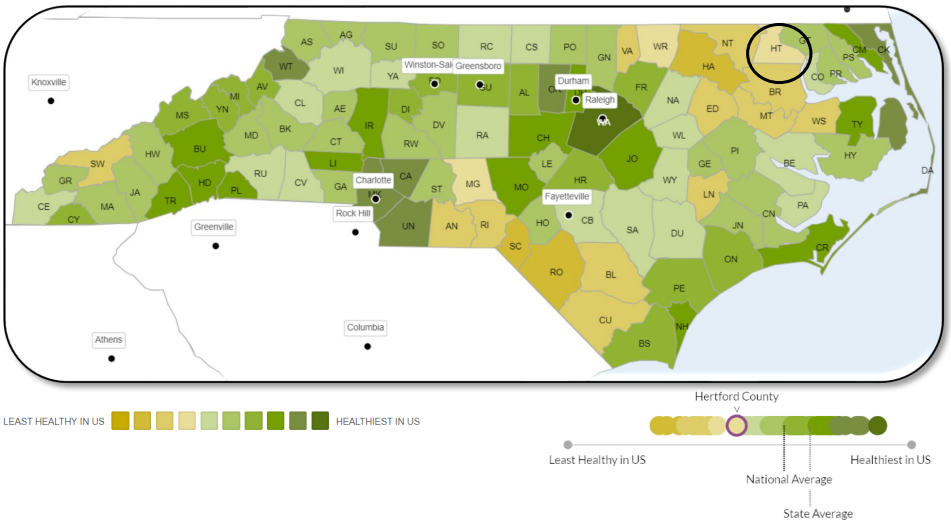
Figure 2.12: Hertford County EJI by Census Tract, 2022



Health Outcome and Health Factor Rankings

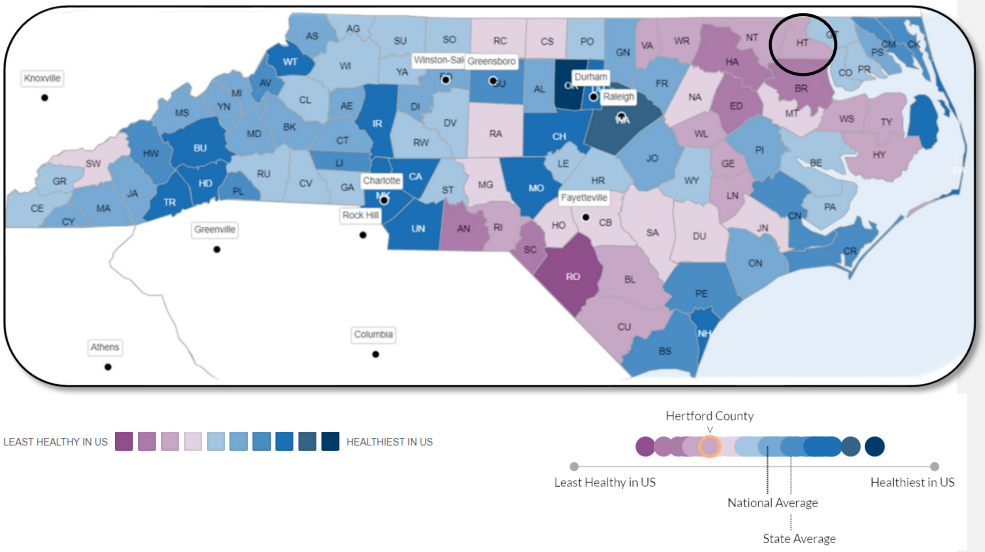
County leaders also reviewed and analyzed data from the Robert Wood Johnson Foundation and the University of Wisconsin County Health Rankings for the year 2024. The Health Outcomes measure looks at how long people in a community live and how physically and mentally healthy they are. These categories are discussed further in Appendices 2 through 4. Hertford County ranks behind the state and US average for health outcomes.

Figure 2.13: State Health Outcomes Rating Map[11]



The Health Factors measure considers variables that affect people's health including health behaviors, clinical care, social and economic factors, and the physical environment in which they live. More details about these indicators can be found in Appendices 2 through 4. Like the Health Outcome measure, Hertford County falls behind the North Carolina and US averages.

Figure 2.14: State Health Factors Rating Map[11]



CHAPTER 3 | PRIORITY NEED AREAS

This chapter describes each of the three 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).

On August 29, 2024, a group of community leaders and stakeholders gathered at the ECU Health Wellness Center in Ahoskie, North Carolina to identify and prioritize health needs for Hertford County. Participants represented a diverse range of organizations including local government, healthcare providers, cooperative extensions, health departments, and community health centers.

The group used the multi-voting technique to determine priorities, first holding discussions to assemble a list of potential priority areas, then having each participant vote on their top three choices. After votes were tallied, the group discussed the selected priorities to ensure they were feasible. Through this process, three key priority areas were identified for the county: Access to Care, Chronic Disease Prevention, and Healthy Living.

As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by the Hertford County leaders in health improvement plans guided by this CHNA. As noted in Chapter 1, county health 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 Hertford 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.[14] Access is a challenge even for those who are insured.[15]

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.[16] 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.[17] 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.[18] 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.[19]

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.[20] 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.[21] Both primary and secondary data resources analyzed for this report highlight the need for greater access to health services within Hertford County.

Secondary Data Findings

Hertford County faces significant challenges in healthcare access, particularly regarding the availability of healthcare providers. The rate of dental providers (9.3 per 100,000 population) is notably lower than both North Carolina (31.5) and the United States (39.1). Additionally, 52% of the county's population lives in an

[14] 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.

[15] 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.

[16] 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 .

[17] 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 .

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

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

[20] 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.

[21] 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.

area designated as a Dental Care Health Professional Shortage Area (HPSA), significantly higher than the state (34%) and national (18%) averages.

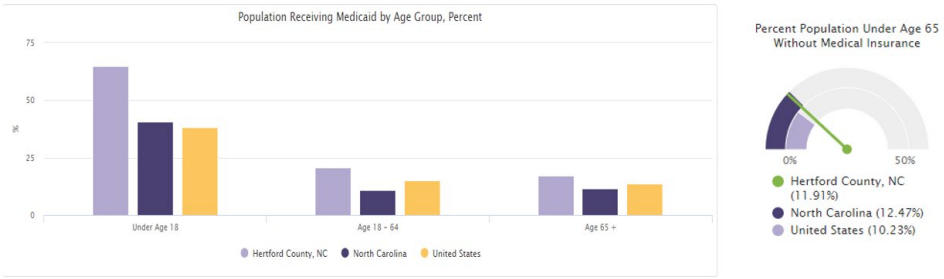
Mental health and primary care provider rates also indicate concerning gaps in access. The county's rate of mental health providers (125.3 per 100,000 population) falls below both state (155.7) and national (178.7) averages. Similarly, primary care provider rates (83.5 per 100,000 population) lag behind state (101.1) and national (112.4) figures. However, the county shows stronger access in some areas, with higher rates of substance abuse providers (27.8 per 100,000) and buprenorphine providers (38.0 per 100,000) compared to state averages (25.0 and 15.2 respectively). The county also surpasses both the state (4.0) and national (3.5) rate of FQHCs, with 13.9 FQHCs per 100,000 population.

Table 3.1: Access to Care Indicators

Indicator	Hertford County	North Carolina	United States
Substance Abuse Providers (Rate per 100,000 Population)	27.8	25.0	27.9
Buprenorphine Providers (Rate per 100,000 Population)	38.0	15.2	15.5
Dental Providers (Rate per 100,000 Population)	9.3	31.5	39.1
Mental Health Providers (Rate per 100,000 Population)	125.3	155.7	178.7
Primary Care Providers (Rate per 100,000 Population)	83.5	101.1	112.4
Percentage of Population Living in an Area Affected by a Dental Care HPSA	52%	34%	18%
Percent of Insured Population Receiving Medicaid	33%	20%	22%
Rate of Federally Qualified Health Centers (Rate per 100,000 Population)	13.9	4.0	3.5

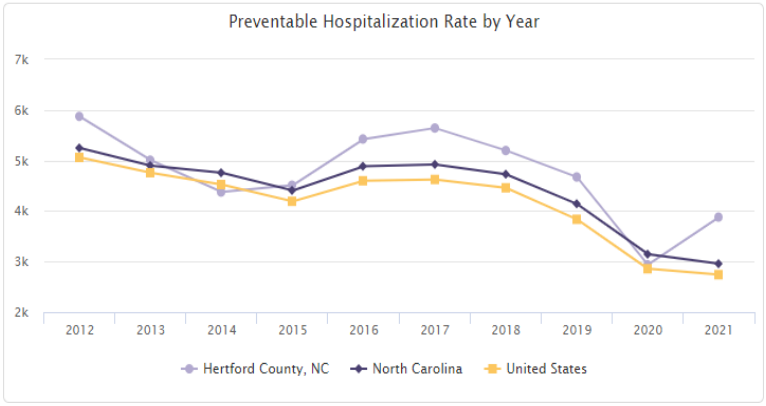
The county also faces notable insurance coverage and preventable hospitalization challenges. Hertford County has a higher percentage of its insured population receiving Medicaid (33%) compared to both state (20%) and national (22%) averages. This higher Medicaid enrollment spans all age groups, with particularly high rates among those under 18.

Figure 3.1: Population Receiving Medicaid by Age Group and Uninsured Under Age 65



The rate of preventable hospitalizations (3,879 per 100,000 Medicare beneficiaries) significantly exceeds both state (2,957) and national (2,752) averages, suggesting barriers to accessing appropriate outpatient care.

Figure 3.2: Preventable Hospital Stays



Notably, there are racial disparities in preventable hospitalizations, with Black Medicare beneficiaries experiencing a lower rate (1,108) compared to White Medicare beneficiaries (2,650).

Figure 3.3: Preventable Stays by Race/Ethnicity

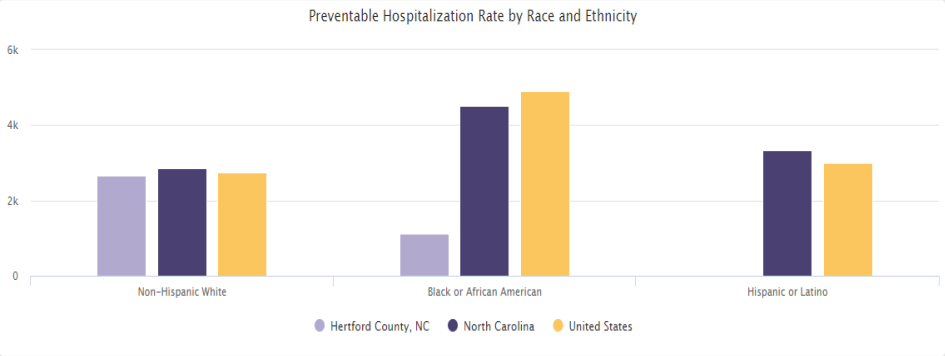


Table 3.2: Preventable Hospital Stays by Race/Ethnicity	
Preventable Hospital Stays (per 100,000 Medicare Beneficiaries)	**Hertford County Rate**
Preventable Hospital Stays	3,879
Black or African American Medicare Beneficiaries	1,108
White Medicare Beneficiaries	2,650

Transportation access presents another significant barrier to healthcare in Hertford County. The county has a higher percentage of households with no motor vehicle (9.0%) compared to the state average (5.4%), though slightly better than the national average (8.3%). Regarding public transportation options, just 1.0% of the county's population uses public transit for commuting, slightly higher than the state average of 0.8% but lower than the national average of 3.8%. Despite this, none of the county's population lives within a half-mile of public transit, compared to 10.9% statewide and 34.8% nationally. This lack of transportation infrastructure can significantly impact residents' ability to access healthcare services, particularly for those without personal vehicles.

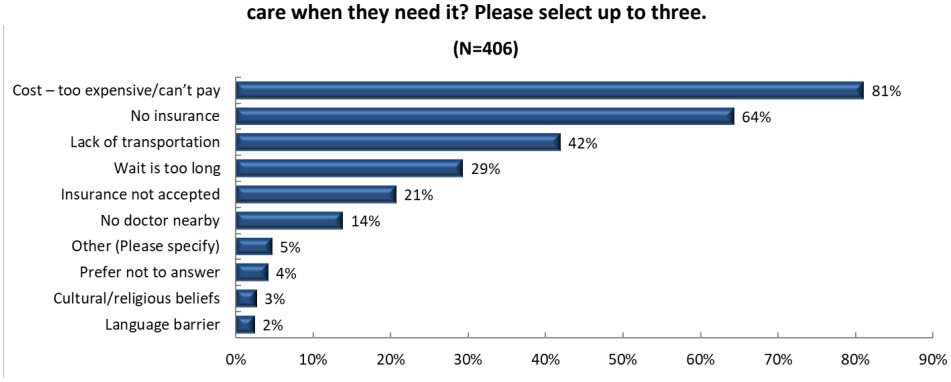
Table 3.3: Transportation Indicators			
Indicator	**Hertford County**	**North Carolina**	**United States**
Households with No Motor Vehicle, Percent	9.0%	5.4%	8.3%
Percent Population Using Public Transit for Commute to Work	1.0%	0.8%	3.8%
Percentage of Population within Half Mile of Public Transit	0.0%	10.9%	34.8%

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

Primary Data Findings – Community Member Web Survey

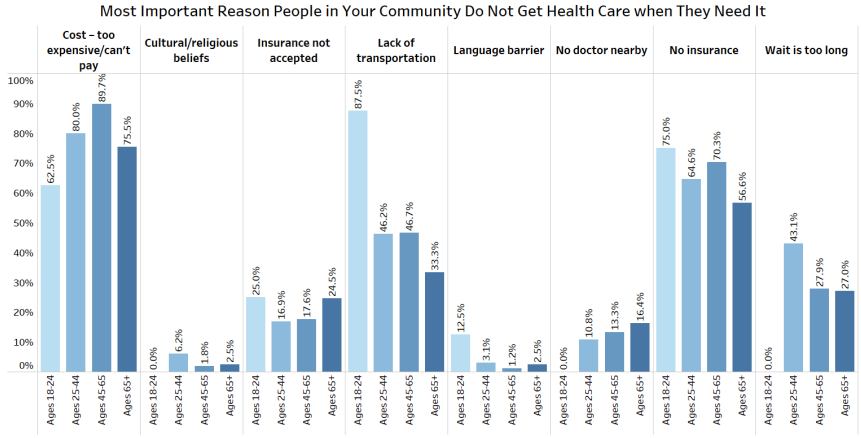
Nearly 400 Hertford County residents responded to the web-based survey. Respondents identified several access to care needs in Hertford County. In the survey, community members were asked to identify the top barriers to receiving healthcare. Cost (81%), no insurance (64%), and lack of transportation (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 long wait times and a fifth of responses indicated insurance not being accepted as the top barriers to care.

Figure 3.4: 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.



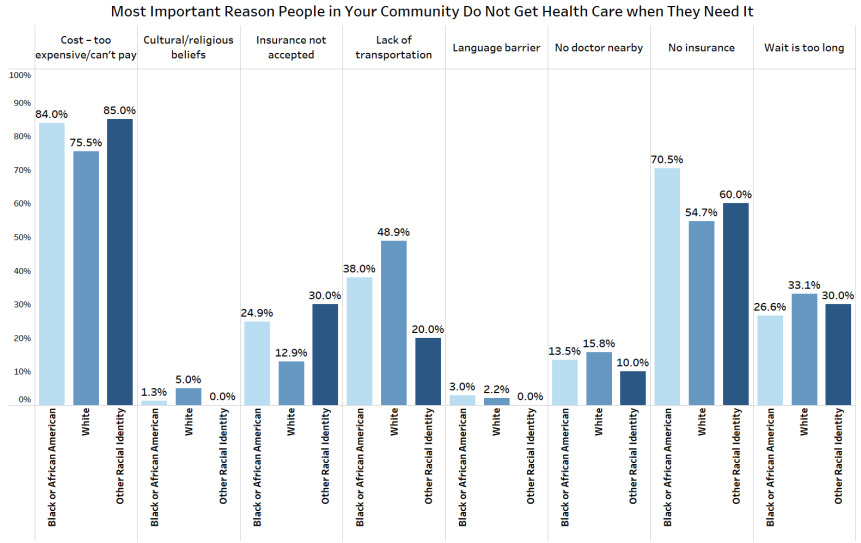
When these data were examined by age group, the age group that most frequently identified lack of transportation (88%) and lack of insurance (75%) as top barriers was those aged 18 to 24. Cost was identified as a barrier most frequently by respondents aged 45 to 65 compared to all other age groups.

Figure 3.5: 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)



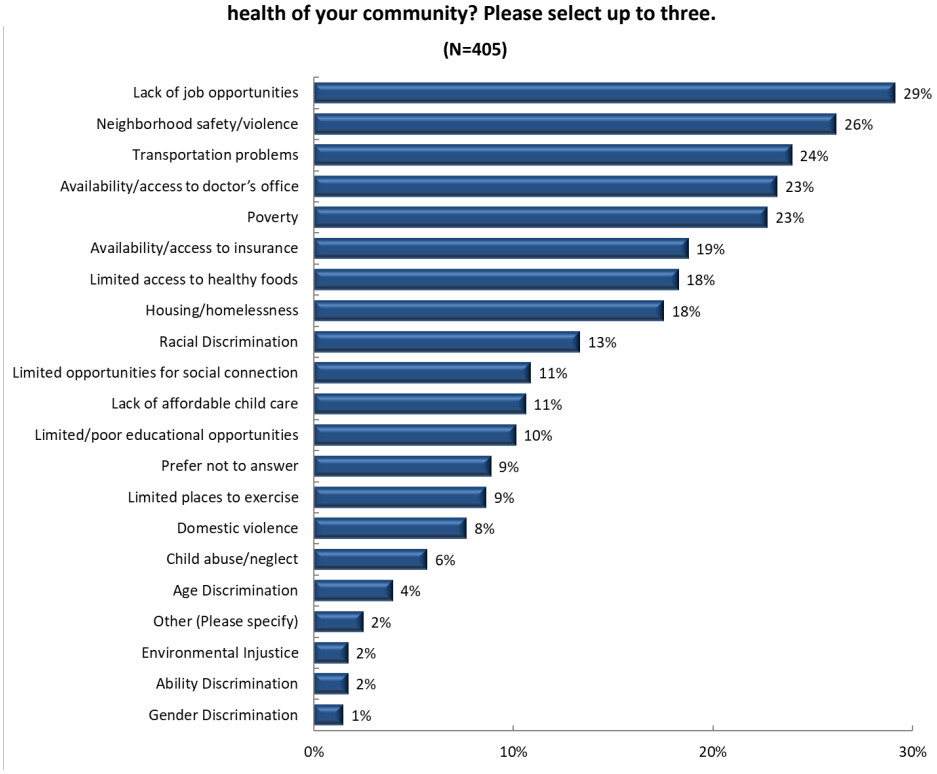
Responses also differed by race. Nearly 71% of respondents identifying as Black/African American noted lack of insurance as a top barrier to healthcare compared to 55% of respondents identifying as White and 60% of respondents identifying as other racial identities. Respondents identifying as White (49%) were most likely to cite lack of transportation as a barrier, while percentages were similar across all racial groups in naming cost as a concern.

Figure 3.6: 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)



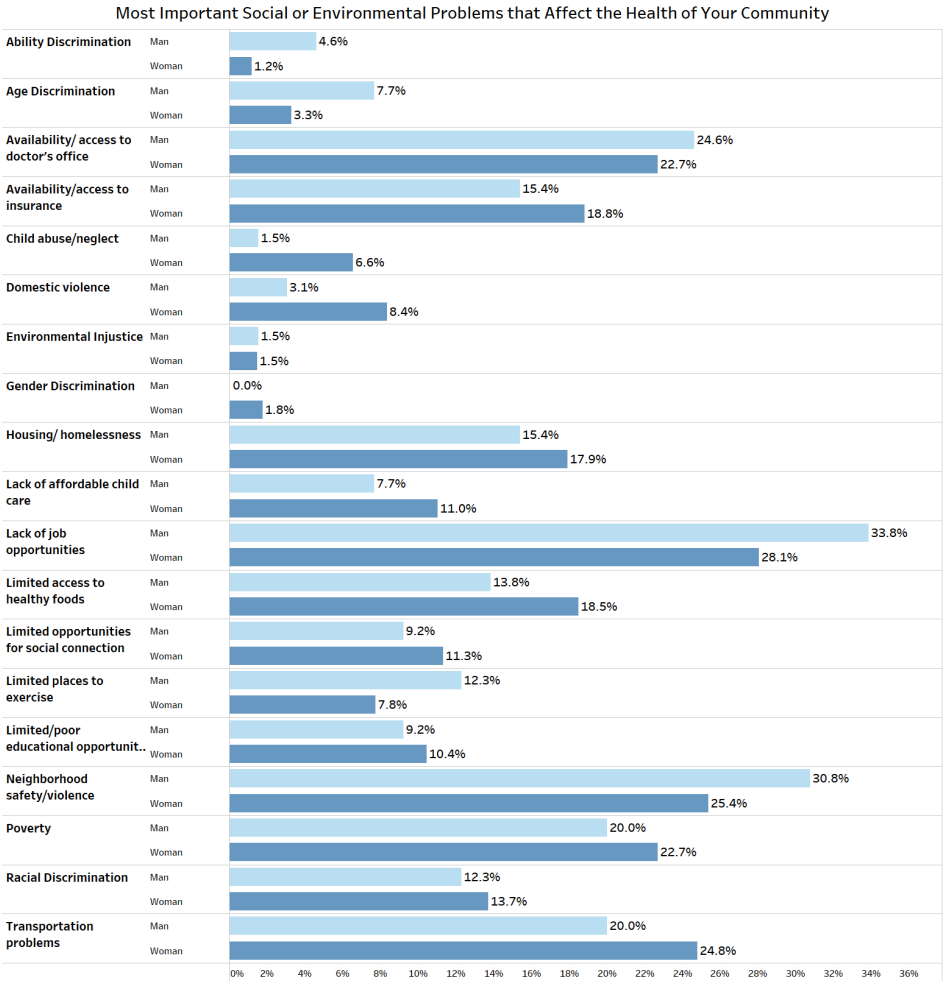
Community members were also asked to identify the most important social or environmental problems that affect the health of the community. As displayed in the figure below, transportation was selected by nearly one quarter of respondents, again highlighting potential access to care challenges within the community. Availability and access to doctor's offices (23%) was identified as the fourth most frequent social or environmental problem that affects the health of the community.

Figure 3.7: 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 insurance as a top social and environmental problem (19% for women vs. 15% for men). Women were also more likely than men to identify transportation problems as an important social and environmental problem (25% compared to 20%).

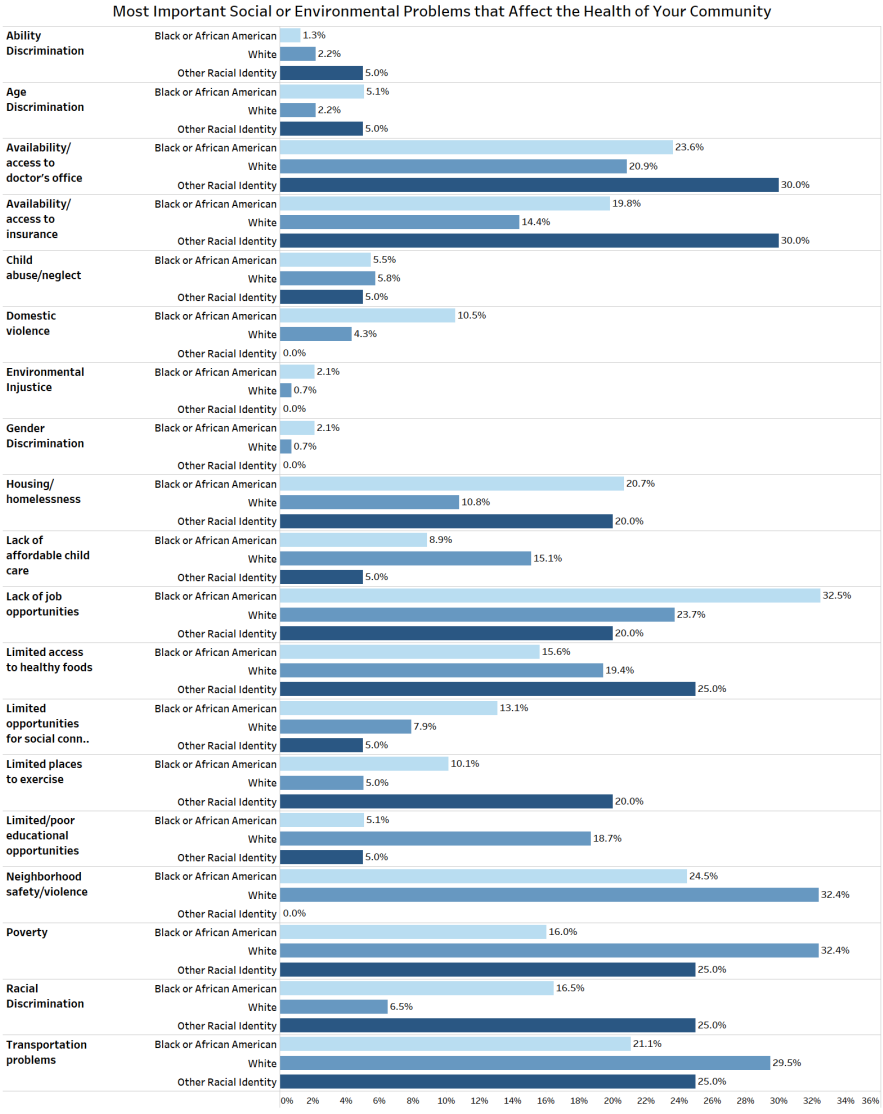
Figure 3.8: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)



Responses also varied by race, with those identifying with the "other" racial identity category[22] more likely to cite availability of doctor's offices and availability or access to insurance, than all other races (Other: 30% for both; Black or African American: 24%, 20%; White: 21%, 14%).

[22] Includes 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."

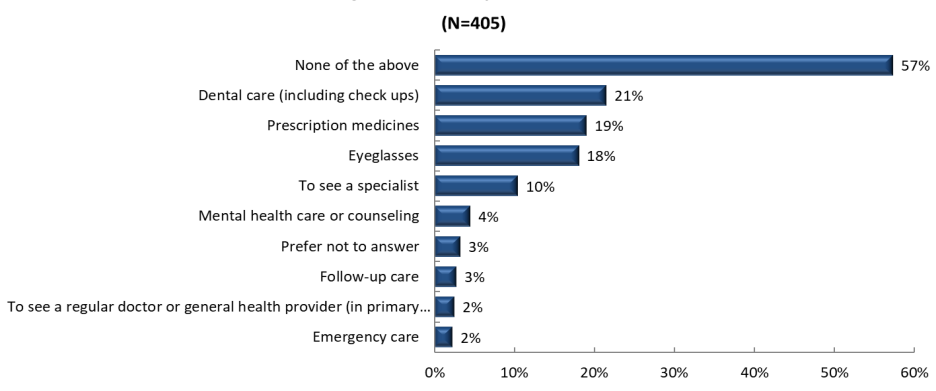
Figure 3.9: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)



Hertford 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

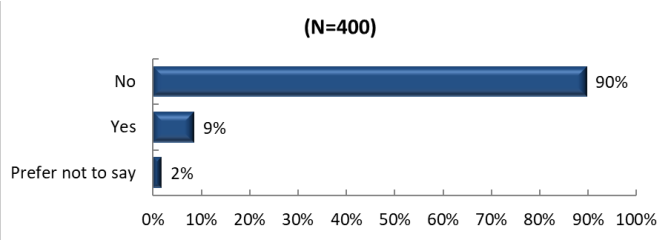
prevented them from accessing dental care. The second highest response identified that access to prescription medicines (19%) was impacted due to cost, followed by eyeglasses (18%).

Figure 3.10: 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?



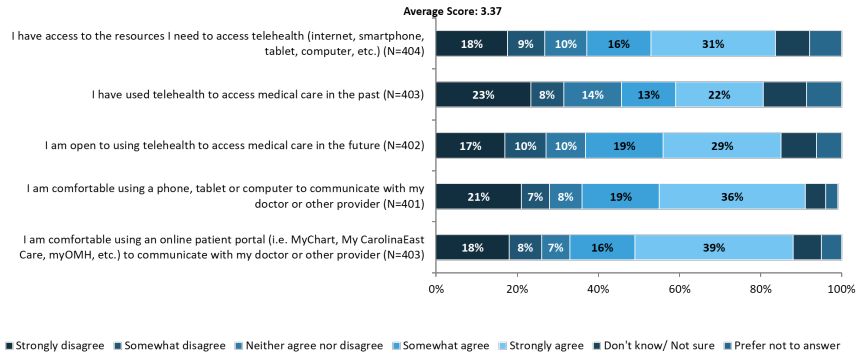
Respondents were also asked if they have put off or neglected going to the doctor due to distance or transportation, to which nearly one-in-ten respondents answered "yes," further emphasizing that transportation can be a barrier for at least a portion of the community.

Figure 3.11: Do you put off or neglect going to the doctor because of distance or transportation?



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. Nearly 20% of respondents strongly agreed to having access to the necessary resources, with similar percentages of respondents strongly agreeing to being comfortable using an online patient portal and strongly agreeing to being open to using telehealth to access medical care in the future.

Figure 3.12: 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 the secondary data findings described above, access to care concerns emerged consistently across all five focus groups conducted in Hertford County. The ECU Health and Wellness Center group emphasized significant barriers around transportation, noting that unaffordable cab services and unreliable insurance coverage for medical transport prevented many residents from accessing care. At Jernigan Swamp Apartments, participants highlighted that Black residents face disproportionate challenges in accessing healthcare services. They suggested providing low-cost health screenings and affordable transportation to help address these disparities.

The Ahoskie Primary Care Center focus groups identified several additional barriers including inconvenient office hours, language barriers, and negative experiences with providers. The second Ahoskie group emphasized the need for more inclusive services with lenient requirements to better serve low-income residents. Both groups noted that the public is often unaware of available healthcare services and resources.

Participants at the Hertford County Health Department discussed how having only one OBGYN office in the county forces people to drive long distances for maternity care or pregnancy complications. They also emphasized the need for more dentists and behavioral health providers in the area. Multiple focus groups noted that the overall high cost of care, even with insurance, prevents many residents from seeking needed treatment.

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

PRIORITY NEED: CHRONIC DISEASE PREVENTION

Context and National Perspective

As society has changed and people live longer, chronic health conditions have become more common than communicable diseases like typhoid and cholera. As defined by the World Health Organization (WHO), chronic diseases are those with a long duration, that are influenced by a combination of genetic, environmental, psychological, or behavioral factors.[23] Chronic health conditions are extremely common in the United States, with 6 in 10 Americans living with at least one chronic disease, such as diabetes, obesity, cancer, hypertension, or heart disease.[24]

Chronic diseases are the leading cause of death and disability in the United States.[23] According to the WHO, chronic health conditions kill 41 million people globally each year and are responsible for 7 in 10 deaths in the U.S. annually.[23] The number of individuals living with a chronic health condition is expected to increase as the U.S. population continues to age. The population over the age of 50 is expected to increase by 61% to 221.1 million people by 2050.[25] Among those 221 million, nearly two-thirds (142.7 million people) are expected to have at least one chronic health condition, with approximately 15 million people living with multiple chronic health conditions.[25]

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells that can result in death if not treated. While the risk of dying from cancer has declined significantly over the past 30 years, it remains the second most common cause of death in the U.S. Incidence of new cancer cases has continued to rise, with 2 million new cases expected to be identified in 2024.[26] This trend is largely affected by the aging and growth of the population and by a rise in diagnoses of 6 of the 10 most common cancers—breast, prostate, endometrial, pancreatic, kidney, and melanoma. Some research has attributed this rise to the impact of the obesity epidemic. [26] Cigarette smoking is another significant risk factor for cancer, and is responsible for about 20% of all cancers and 30% of cancer deaths in the U.S. each year.[27]

The CDC recommends four ways to prevent chronic conditions and maintain good physical health. Recommended healthy behaviors include stopping or refraining from smoking, eating low-fat whole food diets, exercising moderately for at least 150 minutes a week, and limiting or refraining from consuming alcohol.[28] Annual physicals with a primary care provider are also necessary to help prevent or treat chronic health conditions. Yearly screenings can allow providers to identify any warning signs for developing conditions and enable patients to correct or develop healthy behaviors to avoid developing a physical

[23] Source: World Health Organization (WHO) (2023). *Noncommunicable diseases*. Retrieved September 10th, 2024, from: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases.
[24] Source: CDC (2024). *National Center for Chronic Disease Prevention and Health Promotion*. Retrieved September 10th, 2024, from: https://www.cdc.gov/chronic-disease/about/index.html .
[25] Source: Ansah, J.P. & Chiu, T.C., (2022). Projecting the chronic disease burden among the adult population in the United States using a multi-state population model. *Frontiers in Public Health*. Retrieved September 10th, 2024, from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9881650/.
[26] Source: American Cancer Society (ACS) (2024). *ACS Fast & Figures 2024*. Retrieved September 10th, 2024, from https://www.cancer.org/research/acs-research-news/facts-and-figures-2024.html.
[27] ACS (2020). *Health Risks of Smoking Tobacco.* Retrieved September 10th , 2024 from https://www.cancer.org/cancer/risk-prevention/tobacco/health-risks-of-tobacco/health-risks-of-smoking-tobacco.html
[28] Source: CDC (2024). *Preventing chronic diseases: What you can do now.* Retrieved September 10th, 2024 from https://www.cdc.gov/chronic-disease/prevention/index.html

health condition. A CDC study noted that one-third of visits to health centers in 2020 were for preventive care.[29] For those living with chronic conditions, the CDC recommends some general steps people can take to manage their diseases. These include taking medications as prescribed by a provider, self-monitoring symptoms as needed (such as conducting home blood sugar checks), and regularly seeing a provider for check-ups.

As the population in North Carolina and the individual counties continues to collectively age, the prevalence of chronic disease grows. In fact, eight out of the top 10 deaths in North Carolina are related to a chronic health condition[30], accounting for at least two-thirds (50,000) of all annual deaths.[31] Additionally, the population of North Carolina is largely rural, which hinders access to clinical care for these conditions. Finding ways to utilize existing resources for helping community members learn about and manage their chronic health conditions is key for improving health outcomes in these areas.

Secondary Data Findings

Hertford County demonstrates higher prevalence rates of multiple chronic conditions compared to state and national benchmarks. Adults in the county experience notably higher rates of hypertension (40.1%) compared to both state (32.1%) and national (29.6%) averages. The county also shows elevated rates of diabetes, with 9.9% of adults diagnosed compared to 9.0% statewide and 8.9% nationally. Heart disease prevalence among adults (6.6%) exceeds both state (5.5%) and national (5.2%) averages.

Table 3.4: Chronic Disease-Related Indicators

Indicator	Hertford County	North Carolina	United States
Adults (Age 18+) with Asthma	11.1%	9.8%	9.7%
Adults (Age 20+) with Diagnosed Diabetes	9.9%	9.0%	8.9%
Adults (Age 18+) Ever Diagnosed with Coronary Heart Disease	6.6%	5.5%	5.2%
Adults (Age 18+) with Hypertension	40.1%	32.1%	29.6%
Adults (Age 18+) with High Cholesterol	31.0%	31.4%	31.0%
Adults (Age 18+) with Kidney Disease	3.7%	2.9%	2.7%
Adults (Age 18+) Ever Having a Stroke	4.3%	3.1%	2.8%
Adults with BMI > 30.0 (Obese)	28.0%	29.7%	30.1%

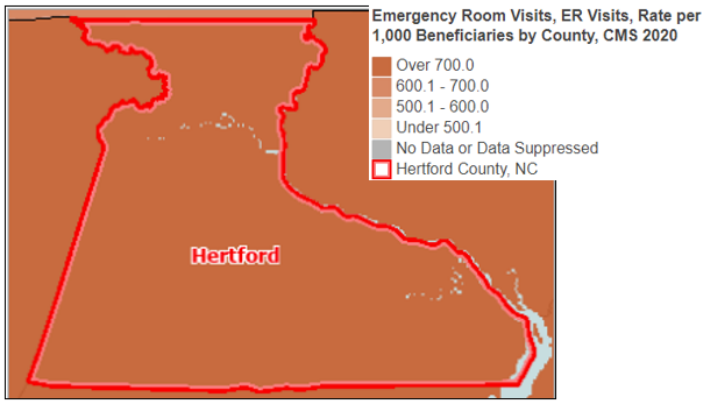
[29] Source: CDC (2022). *Characteristics of visits to health centers: United States, 2020.* Retrieved September 10th, 2024, from https://www.cdc.gov/nchs/products/databriefs/db438.htm.
[30] Source: CDC (2022). *North Carolina.* Retrieved October 3, 2024, from https://www.cdc.gov/nchs/pressroom/states/northcarolina/nc.htm
[31] Source: NCDHHS. (2023). *Chronic disease and injury.* Retrieved October 3, 2024, from https://www.dph.ncdhhs.gov/programs/chronic-disease-and-injury#:~:text=Chronic%20diseases%20and%20injuries%20are,of%20death%20in%20North%20Carolina.

Adults (Age 18+) with Poor Dental Health	18.6%	12.0%	13.9%
Percent Reporting Poor or Fair Health	21.9%	14.4%	-

The burden of other chronic conditions is also significant in Hertford County. The adult population shows higher rates of asthma (11.1%) compared to state (9.8%) and national (9.7%) figures. Kidney disease affects 3.7% of adults in the county, higher than both state (2.9%) and national (2.7%) rates. The prevalence of stroke among adults (4.3%) is notably higher than state (3.1%) and national (2.8%) averages.

Hospitalization rates for cardiovascular conditions reveal additional concerns. Emergency department utilization in Hertford County (738 visits per 1,000 population) is significantly higher than both state (563) and national (535) rates, suggesting possible gaps in preventive care and chronic disease management. This higher utilization rate may also reflect the limited access to primary care providers previously noted in the county.

Figure 3.13: Emergency Room Visits per 1,000 Medicare Beneficiaries



The county's cardiovascular disease hospitalization rate (14.3 per 1,000 population) exceeds both state (11.7) and national (10.4) figures. Similarly, ischemic stroke hospitalizations (10.4 per 1,000 population) are higher than state (9.5) and national (8.0) rates. However, the county's cancer incidence rate (393.2 per 100,000 population) is lower than both state (464.4) and national (442.3) averages.

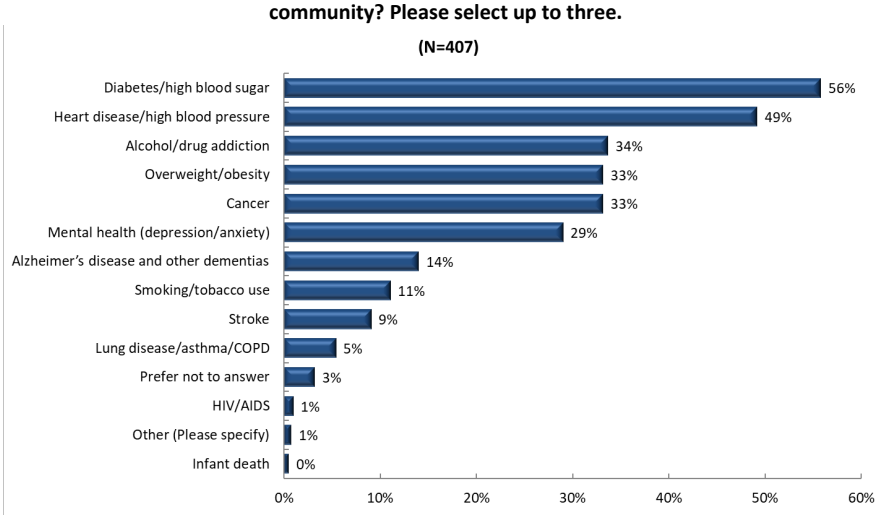
Table 3.5: Cancer Incidence and Cardiovascular Disease and Stroke Hospitalizations			
Indicator	**Hertford County**	**North Carolina**	**United States**
Cancer Incidence (Rate per 100,000 Population)	393.2	464.4	442.3
Emergency Room Visits (Rate per 1,000 Population)	738	563	535
Cardiovascular Disease Hospitalizations (Rate per 1,000 Medicare Beneficiaries)	14.3	11.7	10.4
Ischemic Stroke Hospitalizations (Rate per 1,000 Medicare Beneficiaries)	10.4	9.5	8.0

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

Primary Data Findings – Community Member Web Survey

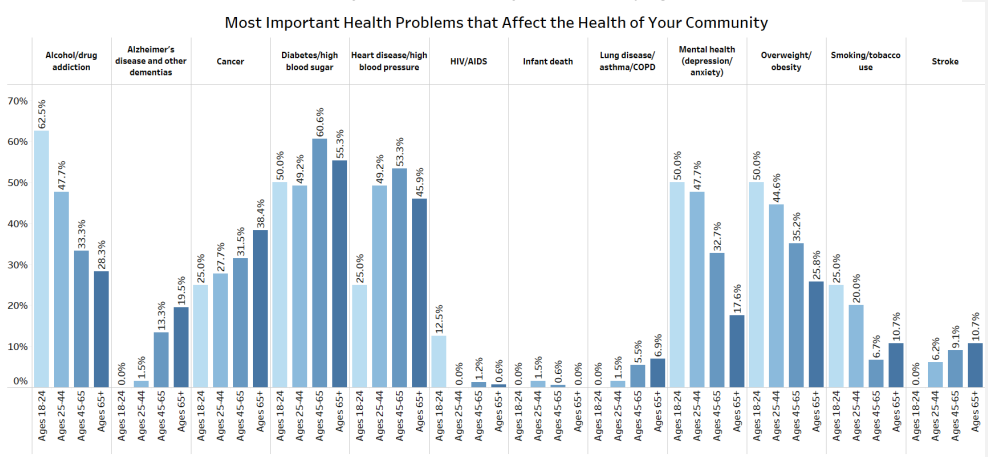
Hertford County residents identified several chronic health conditions of concern in the community in the web survey. In fact, three out of the top five most frequently identified community health needs were chronic health conditions with the top being diabetes/high blood sugar (56% of respondents), followed by heart disease/high blood pressure (49%). A third of respondents also identified overweight/obesity as an important community health problem.

Figure 3.14: What are the three most important health problems that affect the health of your community? Please select up to three.



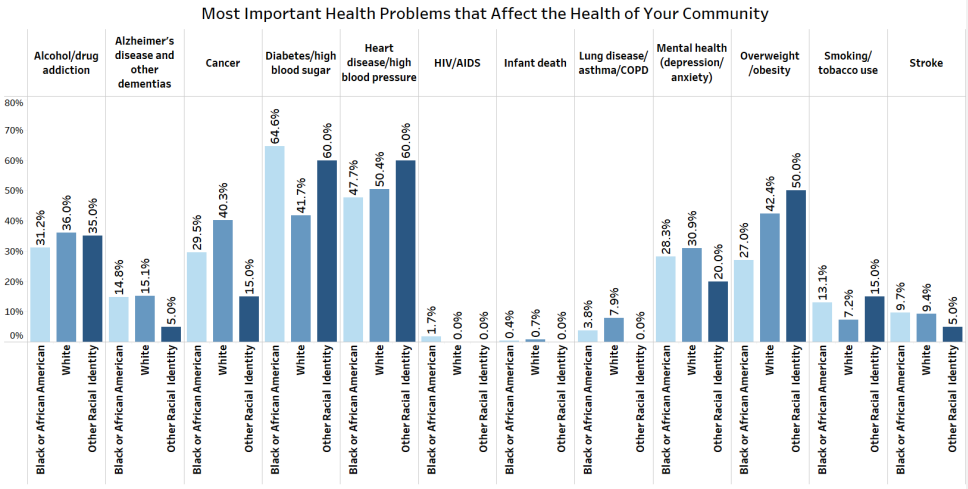
When these results were examined by various characteristics of the respondents, responses varied. Older adults viewed diabetes and heart disease as more significant problems than younger respondents.

Figure 3.15: What are the three most important health problems that affect the health of your community? Please select up to three. (by age)



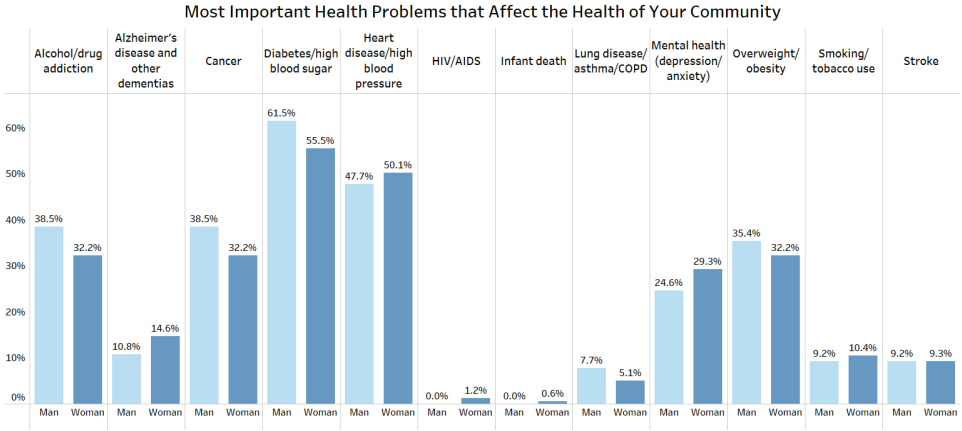
Respondents identifying as all other races (60%) and Black or African American (65%) identified diabetes/high blood sugar more frequently than respondents identifying as White (42%).

Figure 3.16: What are the three most important health problems that affect the health of your community? Please select up to three. (by race)



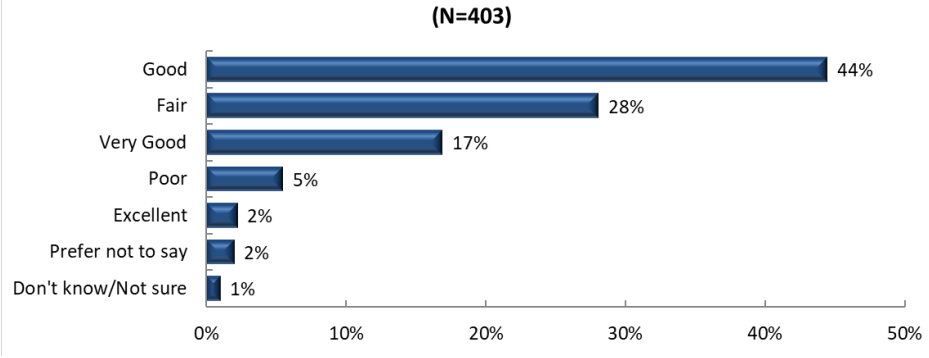
When assessed by gender identity, men were more likely to identify diabetes as an important community health problem than women (62% compared to 56% for women), while women were slightly more likely to identify heart disease as a concern (50% compared to 48% for men). Considering these differences in targeted efforts to address specific community health indicators may be important.

Figure 3.17: What are the three most important health problems that affect the health of your community? Please select up to three. (By gender)



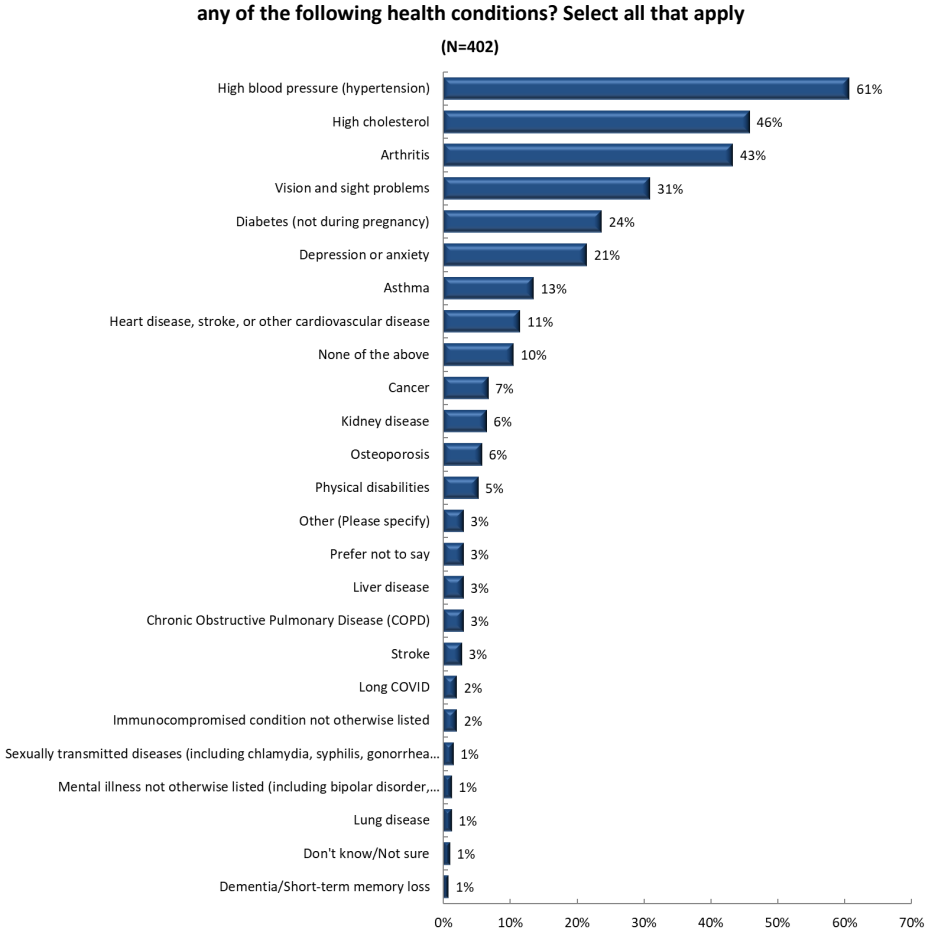
When asked about their overall physical health, 28% of respondents described it as “fair”.

Figure 3.18: Considering your physical health overall, would you describe your health as…



Moreover, 61% of respondents reported having been told by a health professional that they have high blood pressure, and 46% of respondents reported having high cholesterol, contributing factors to chronic health conditions. Equally concerning, nearly one-quarter of respondents also indicated having diabetes as a result of factors unrelated to pregnancy.

Figure 3.19: 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



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

Primary Data Findings – Focus Groups

Similar to both the secondary and primary data findings described above, chronic disease emerged as a significant concern across the focus groups. At the Hertford County Health Department, participants discussed how poverty and affordability challenges make it difficult for residents to create and maintain healthy lifestyles that could prevent chronic conditions. They suggested programs to increase physical activity for both parents and children.

The Jernigan Swamp Apartments group emphasized that Black residents are disproportionately impacted by chronic health conditions. Both Ahoskie Primary Care Center groups highlighted diabetes, high blood pressure, kidney disease, and obesity as prevalent health concerns in the community. The second Ahoskie group stressed the importance of better health education to help residents understand and prevent chronic conditions.

The ECU Health and Wellness Center group discussed racial disparities in chronic disease burden and suggested providing more reliable health information to help link patients with preventive care services. They emphasized that community events focused on health awareness and education could help address these disparities.

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

PRIORITY NEED: HEALTHY LIVING

Context and National Perspective

Physical health is 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. [32]

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 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.[33]

[32] 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

[33] 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

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.[34] 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.[35] 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 NCCares 360 program, which seeks to connect individuals with all necessary resources for living a healthier life.

Secondary Data Findings

Hertford County faces significant challenges related to physical activity and access to exercise opportunities. The percentage of physically inactive adults in the county (29.5%) is substantially higher than the state average (21.6%). Just 61% of county residents have access to exercise opportunities, falling well below both state (73%) and national (84%) averages. The county's walkability index score of 5 is lower than both state (7) and national (10) averages, indicating limited infrastructure for pedestrian activity.

Table 3.6: Health Behavior and Food Security Indicators

Indicator	Hertford County	North Carolina	United States
% Adults Reporting Currently Smoking	21.8%	15.0	-
% Physically Inactive	29.5%	21.6	-
Recreation and Fitness Facility Establishments, (Rate per 100,000 Population)	N/A	13.1	14.7
Walkability Index Score	5	7	10
Percentage of Population with Access to Exercise Opportunities	61%	73%	84%
Food Insecurity Rate	13%	11%	10%
Child Food Insecurity Rate	29%	15%	13%

[34] 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.

[35] 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

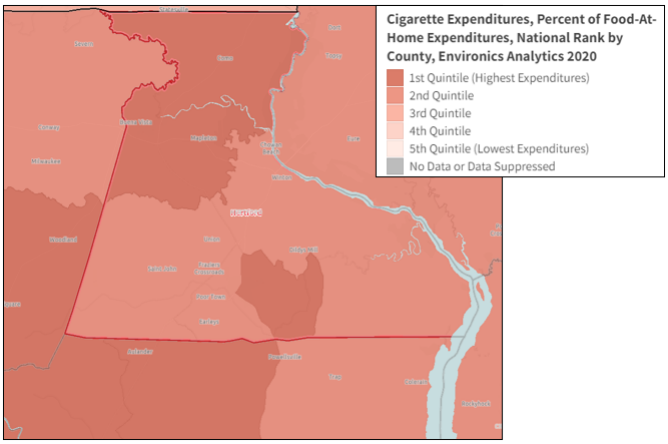
Percent Low Income Population with Low Food Access	26%	21%	19%
Food Environment - Fast Food Restaurants Establishments (Rate per 100,000 Population)	97.4	77.4	96.2
Food Environment - Grocery Stores Establishments (Rate per 100,000 Population)	23.2	18.7	23.4

Food security and access to healthy food options present additional concerns for county residents. The county's food insecurity rate (13%) exceeds the state average (11%), with an even more pronounced disparity in child food insecurity (29% compared to 15% statewide). Additionally, 26% of the low-income population experiences low food access, higher than both state (21%) and national (19%) averages.

The food environment in Hertford County shows mixed results. The county has a higher rate of fast-food restaurants (97.4 per 100,000 population) compared to the state average (77.4), though comparable to the national rate (96.2). However, the county does maintain a higher rate of grocery stores (23.2 per 100,000 population) compared to the state average (18.7), suggesting some positive aspects in food access infrastructure. Within this food environment, obesity represents an ongoing challenge, with the adult obesity rate in Hertford County only slightly lower than state (29.7%) and national (30.1%) averages.

Compounded with limited access to exercise opportunities and healthy food options, smoking is another behavioral health factor that creates substantial barriers to healthy living for county residents. In Hertford County, the smoking rate among adults (21.8%) is significantly higher than the state average (15.0%).
As shown in the map below (**Figure 3.20**), large portions of the county fall into the category associated with the highest expenditure on cigarettes, underscoring both the extent of smoking within the community and its impact on household spending.

Figure 3.20: Cigarette Expenditures



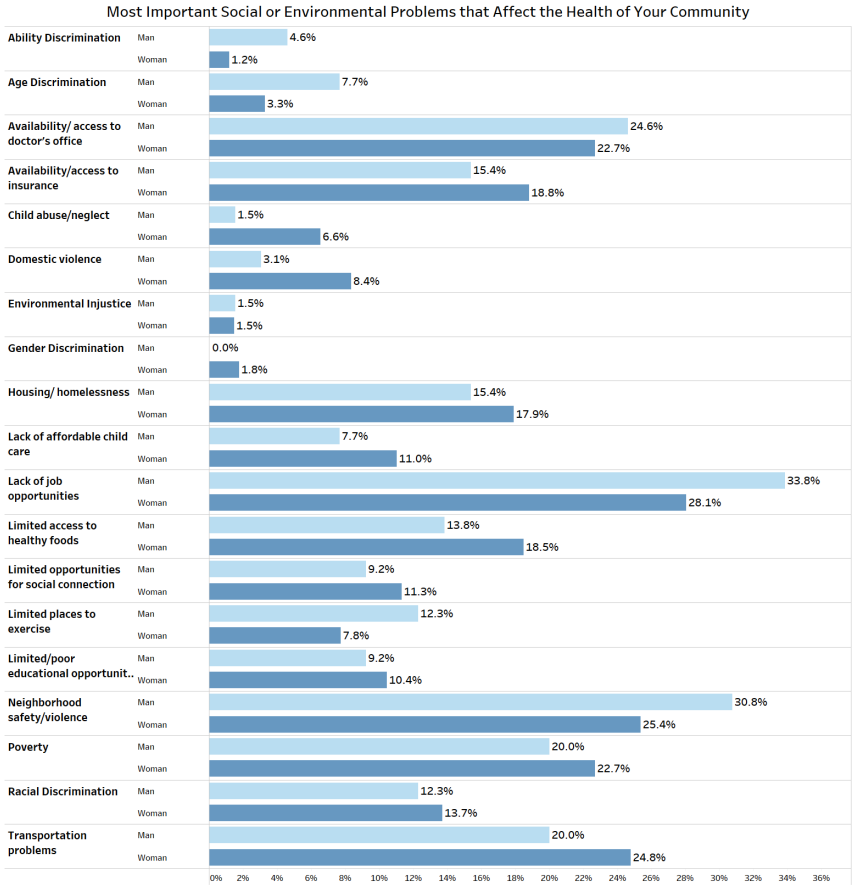
For additional detail on secondary data findings, see **Appendix 3**.

Primary Data Findings – Community Member Web Survey

Hertford County residents identified several healthy living concerns in the community in the web survey. Nearly one-fifth of community respondents indicated limited access to healthy foods and one-in-ten indicated limited places to exercise were top social or environmental problems affecting the health of the community, as previously shown in **Figure 3.7** in the Access to Care section.

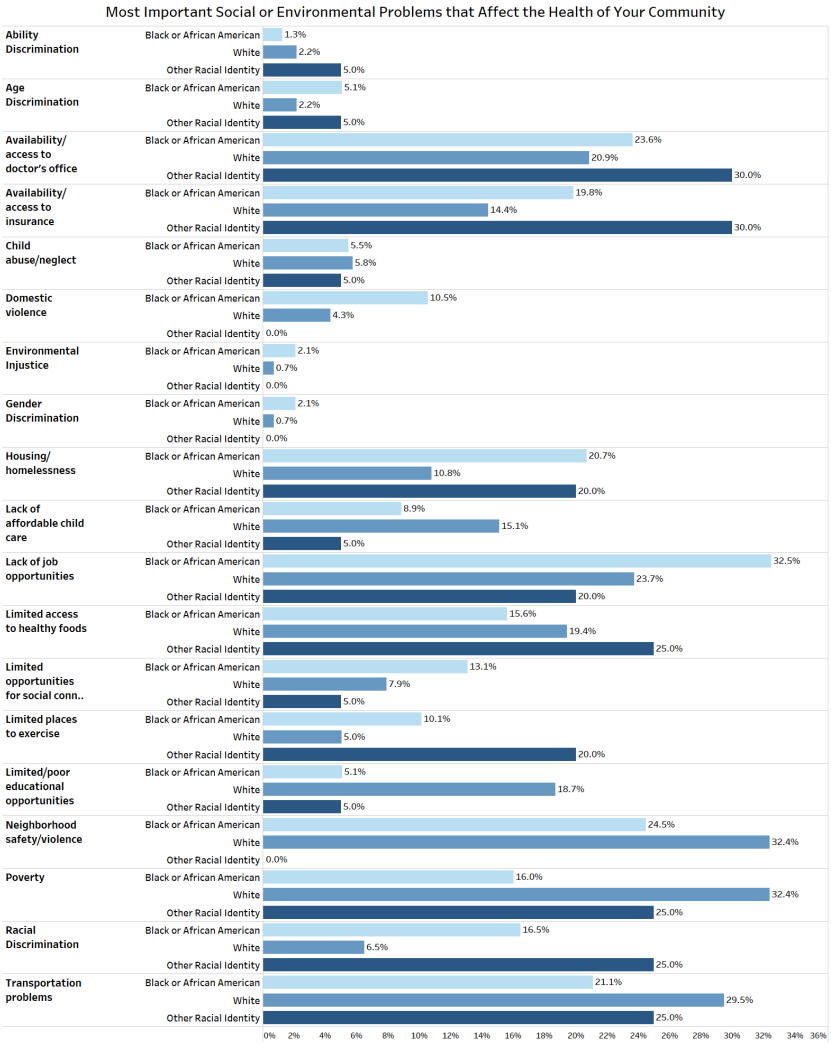
Responses somewhat differed by demographic characteristics of the respondents. When examined by gender, men (12%) more frequently identified limited places to exercise than women (8%), while more women identified limited access to healthy foods (19% compared to 14% for men).

Figure 3.21: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)



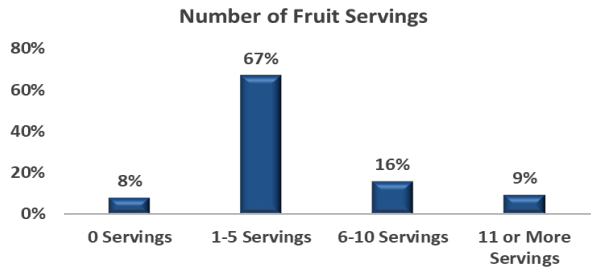
Respondents who identified with another racial identity (25%) were more likely to select access to healthy foods as a problem than those who identified as White (19%) or Black or African American (16%). Similarly, those who identified with another racial identity (20%) were more likely to select limited places to exercise as a problem than the other races (Black/African American: 10%; White: 5%).

Figure 3.22: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)



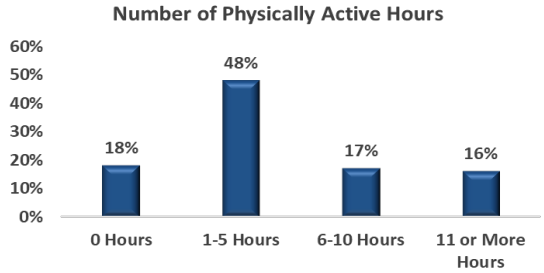
When respondents were asked how many servings of fruit they ate in the past week, 8% indicated none, while 67% indicated they ate between one and five servings. On average, community member respondents in Hertford County ate 5 servings of fruit over the past week. Responses for vegetables were similar, suggesting opportunities for increasing healthy food consumption in the community.

Figure 3.23: 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)



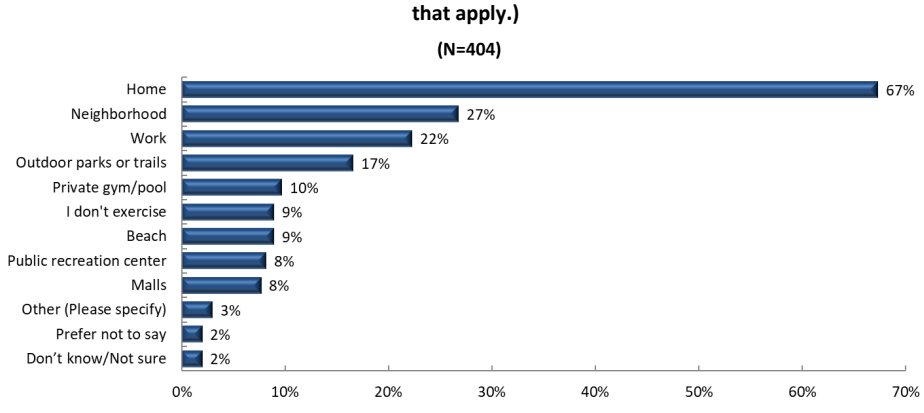
When respondents were asked how often they were physically active outside of their jobs in the last month, 18% indicated they were not active at all, while 48% indicated they were active between one and five hours. On average, community member respondents in Hertford County were active 7 hours in the preceding week, suggesting opportunities for increasing physical activity in the community.

Figure 3.24: 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 engage in exercise or physical activities in the community, the majority indicated at home (67%) with a quarter also indicating in the neighborhood or at work.

Figure 3.25: 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

Focus group participants across all locations identified several barriers to healthy living in Hertford County. The Hertford County Health Department group emphasized that community leaders need to take more initiative in encouraging healthy behaviors. They suggested organizing community events like trash cleanup days to improve the environment and promote active lifestyles.

Food access and security emerged as major concerns as well. Multiple groups noted that traditional Southern soul food preparation can be unhealthy, fresh food is extremely expensive, and food deserts exist throughout the county. The Jernigan Swamp Apartments participants highlighted how these challenges particularly impact public housing residents. Both Ahoskie Primary Care Center groups emphasized the need for more farmers markets and accessible healthy food options.

The ECU Health and Wellness Center group discussed how racial disparities affect access to resources needed for healthy living. The second Ahoskie Primary Care Center group suggested holding more mobile health events in low-income areas to promote healthy behaviors. Several groups noted that limited places for safe walking and exercise, particularly in rural areas, make it difficult for residents to maintain active lifestyles.

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 Hertford County that provide resources to address general community health needs, as well as the county's 2024 priority need areas: Access to Healthcare, Chronic Disease Prevention and Healthy Living.

Category	Organization Name

Healthcare Facilities	**Public Health Services**
	• Albemarle Regional Health Services - Hertford County
	  ○ Mission: Inspiring people to lead healthy lives
	  ○ Vision: Public Health professionals and programs dedicated to disease prevention and promotion of healthy environment to reduce morbidity, mortality, and disability through quality service, education, and advocacy
	  ○ 828 S. Academy St., Ahoskie, NC, 27910
	  ○ 252-332-6650
	Hospital
	• ECU Health Roanoke-Chowan Hospital
	  ○ 500 S. Academy St., Ahoskie, NC 27910
	  ○ 252-209-3000
	
	Medical Practices
	• Ahoskie Comprehensive Care
	  ○ 120 Health Center Dr., Ahoskie, NC 27910
	  ○ 252-332-3548
	• Murfreesboro Primary Care
	  ○ 305 Beachwood Blvd., Murfreesboro, NC 27855
	  ○ 252-398-3323
	• Ahoskie Medical Practice
	  ○ 703 S. Catherine St., Ahoskie, NC 27910
	  ○ 252-209-0088
	• ECU Health Women Care- Ahoskie
	  ○ 700 S. Academy St., Ahoskie, NC 27910
	  ○ 252-209-3614
	• ECU Health Neurology- Ahoskie
	  ○ 700 Academy St- S Ahoskie, NC 27910
	  ○ 252.209.3857

- ECU Health General Surgery- Ahoskie
  - 700 Academy St.- S Ahoskie, NC 27910
  - 252.209.5404

Pediatrics

- Carolina Pediatrics
  - 201 N Colony Ave., Ahoskie, NC 27910
  - 252-332-5041
- Ahoskie Pediatrics
  - 700 Sunset St, Ahoskie, NC 27910
  - 252-332-3403

Urgent Care

- ECU Health Immediate Care
  - 222 S. Academy St., Ahoskie, NC 27910
  - 252-209-3911

Eye Care

- Edwards Eye Care
  - 1488 E. Memorial Dr., Ahoskie, NC 27910
  - 252-332-5618
- Ahoskie Eye Care
  - 500 Church St., Ahoskie, NC 27910
  - 252-332-2020

Dental

- East Carolina University School of Dental Medicine
  - 100 Health Center Dr., Ahoskie, NC 27910
  - 252-332-1904
- Hall Terry, DDS
  - 424 W. Main St., Ahoskie, NC 27910
  - 252-332-3262
- Wilson Vinson Thomas, DDS
  - 112 E Broad St, Murfreesboro, NC 27855
  - 252-398-5143

Assisted Living and Rehabilitation

- Ahoskie Health and Rehab
  - 604 Stokes St. East, Ahoskie, NC 27910
  - 252-332-2126
- Ahoskie House

	○ 407 Loftin Ln, Ahoskie, NC 27910 ○ 252-862-4700 • Ahoskie Assisted Living ○ 240 Early Station Rd, Ahoskie, NC 27910 ○ 252-513-8591
Other Healthcare Services	**Mental Health and Substance Abuse Services** • Integrated Family Services ○ 202 NC-42 Hwy, Ahoskie, NC 27910 ○ 252-209-0388 • Quitline ○ Free, confidential support and nicotine replacement therapy ○ 1-800-QUIT-NOW (784-8669) • Trillium ○ Services: Mental health, substance use, and intellectual/development disability services ○ Crisis Care and Service Enrollment: 1-877-685-2415 ○ Email: info@trilliumnc.org • NENC Connect ○ Free, confidential, 24/7 substance abuse services ○ 1-866-437-1821 • ECU Health Behavioral Health- Ahoskie ○ 113 Hertford County High School Road Suite B, Ahoskie, NC 27910 ○ 252-209-8161 • ECU Health- Adult Behavorial Health ○ 111 Hertford County Road Ahoskie, NC 27910 ○ 252-209-3056
Community Services	**Emergency Services and Fire Departments** • Hertford County Emergency Medical Services (EMS) ○ 102 Industrial Park Rd., Winton, NC 27986 ○ 252-358-7861 • Hertford County Sherriff's Department ○ 701 Taylor St., Winton, NC 27986 ○ 252-358-7800 • Ahoskie Police Department ○ 705 W. Main St., Ahoskie, NC 27910 ○ 252-332-5011 • Murfreesboro Police Department ○ 115 E. Broad St., Murfreesboro, NC 27855 ○ 252-398-4151 • Ahoskie Fire Department

  - 301 Dr. Martin Luther King Jr. Dr, Ahoskie, NC 27910
  - 252-332-3322
- Como Fire Department
  - 833 Statesville Rd, Como, NC 27818
- Como Volunteer Fire Department
  - 1201 US Hwy 258N Como, NC 27818
  - 252-398-3086
- Harrellsville Fire Department
  - 227 E. Main Street, Harrellsville, NC 27942
  - 252-356-1045
- Millenium Fire Department
  - 246 Millenium Rd., Aulander, NC 27805
  - 252-345-8850
- Murfreesboro Fire Department
  - 200 E. Sycamore St, Murfreesboro, NC 27855
  - 252-396-8431
- St. John Fire Department
  - 1127 NC 561 W, Aulander, NC 27805
  - 252-332-3895
- Union Fire Department
  - 829 NC 461, Ahoskie, NC 27910
  - 252-332-7653
- Winton Fire Department
  - 503 W. Main St., Winton, NC 27986
  - 252-358-3651

Health and Fitness

- ECU Health Wellness Center
  - 117 Hertford County High School Rd, Ahoskie, NC 27910
  - 252-209-3090
- VinFit, LLC
  - 124 US 158-258 Business, Murfreesboro, NC 27855
  - 252-398-3200
- Quality Fitness Club
  - 109 Lloyd St., Ahoskie, NC 27910
  - 252-862-2536

Recreation Centers

- Ahoskie Creek Amphitheater
  - 114 Lakeview Dr., Ahoskie, NC 27910
- Ahoskie Recreation Center

- 1103 W Main St, Ahoskie, NC 27910
- 252-826-5461

- Ahoskie Youth Center
  - 701 W. Main Street, Ahoskie, NC 27910
  - 252-332-5146

Senior Services

- Hertford County Aging Senior Center
  - Mission: Promote well-being and enhance quality of life for senior adults
  - Services:
    - Home Delivered Meals and Congregate Lunch Program
    - Transportation Services
    - Respite Care and In-Home Aide Services
    - S.P.I.C.E Grant/Falls Prevention/Seniors Health Insurance Information Program
  - 408 S. Camp St., Winton, NC 27986
  - 252-358-7856
- Murfreesboro Nutrition Site
  - 313 W. Main Street, Murfreesboro, NC 27855
  - 252-398-5329
- Ahoskie Nutrition Site
  - 418 Everette St., Ahoskie, NC 27910
  - 252-358-7856

Food and Nutrition Services

- NC Cooperative Extension
  - 301 W Tryon St, Winton, NC 27986
  - 252-358-7822
- Ahoskie Food Pantry
  - 701 E Church St, Ahoskie, NC 27910
  - 252-676-8065
- Mobile Food Pantry
  - 200 W. Main Street, Murfreesboro, NC 27855
  - 252-398-3613
- Food Bank of Albemarle
  - 109 Tidewater Way, Elizabeth City, NC 27909
  - 252-335-4035
- Wisdom Produce
  - 2117 US-13 Hwy, Ahoskie, NC 27910
  - 252-332-3222

Grocery Stores

- Food Lion (Ahoskie)
  - 1498 E Memorial Dr, Ahoskie, NC 27910
  - 252-332-5255
- Food Lion (Murfreesboro)
  - 920 Main St, Murfreesboro, NC 27855
  - 252-398-8582
- Piggly Wiggly
  - 1007 E Memorial Dr, Ahoskie, NC 27910
  - 252-332-7773
- Walmart Supercenter
  - 2150 US 13, Ahoskie, NC 27910
  - 252-332-7773

Housing and Homelessness Services

- CADA Community Services Center
  - 105 N. Academy St., Ahoskie, NC 27910
  - 252-332-2692
- ReStore Habitat for Humanity
  - 117 Main St., Murfreesboro, NC 27855
  - 252-396-0696
- Healthy Opportunities
  - 711 Roanoke Ave., Elizabeth City, NC 27909
  - 252-338-4400

Emergency Medical Transportation Services

- Choanoke Public Transportation Authority
  - Serves: Hertford, Bertie, Northampton and Halifax County
  - 505 N Main Street, Rich Square, NC 27869
  - 252-539-2022
- Medex Medical Transport
  - 902 E Memorial Dr, Ahoskie, NC 27910
  - 855-329-1003
- Bertie Ambulance Service (BAS)
  - 606 King Street Windor, NC 27983
  - 252-794-9141
- Ahoskie Ambulance Service
  - 119 Railroad Street Ahoskie, NC 27910
  - 252-332-2002
  - 252-287-9049 (after hours)

- Northampton County Ambulance Service
  - 132 Landfill Road Jackson, Nc 27845
  - 252-534-6811

Early Childhood Services

- Hertford Northampton Smart Start Partnership for Children
  - Vision: Support children's school readiness through healthy and nurturing environment
  - Mission: Network and advocate for children and families
  - 711 E Vance St., Murfreesboro, NC 27855
  - 252-398-4124
- Hertford County Cada Headstart
  - 215 W Modlin Rd, Ahoskie, NC 27910
  - 252-209-8569

Childcare Centers

- ACC Child Care Center
  - 309 Church St., Ahoskie, NC 27910
  - 252-209-0540
- Rehoboth Educational Services
  - 415 Holloman Ave., Ahoskie, NC 27910
  - 252-332-8700
- Davis Kids College
  - 728 Evans St., Ahoskie, NC 27910
  - 252-332-4645
- Wards Precious Day Care Child
  - 1013 Ahoskie-Cofield Rd., Ahoskie, NC 27910
  - 252-358-1237
- Creative Minds Learning Academy
  - 108 N 2nd St, Murfreesboro, NC 27855
  - 252-398-3487
- Pam's Kozy Kidz
  - 721 Benthall Bridge Rd, Murfreesboro, NC 27855
  - 252-862-5141

Schools

- Elementary Schools
  - Bearfield Primary School
    - 145 Hertford County High School Rd, Ahoskie, NC 27910
    - 252-209-6140
  - Ahoskie Elementary School

        - 1206 1st St W, Ahoskie, NC 27910
    - Riverview Elementary School
        - 236 US 158 BUS, Murfreesboro, NC 27855
        - 252-398-4862
- Middle School
    - Hertford County Middle School
        - 1850 NC 11, Murfreesboro, NC 27855
        - 252-398-4091
- High Schools
    - Hertford County High School
        - 1500 1st St W, Ahoskie, NC 27910
        - 252-332-4096
    - Ridgecroft School
        - 420 NC 11, Ahoskie, NC 27910
        - 252-332-2964
    - Ahoskie Christian School
        - 500-504 Kiwanis St., Ahoskie, NC 27910
        - 252-332-2764
- Higher Education
    - Roanoke Chowan Community College
        - 109 Community College Rd., Ahoskie, NC 27910
        - 252-862-1200
    - Chowan University
        - 1 University Dr, Murfreesboro, NC 27855
        - 252-398-6500

Libraries

- Ahoskie Public Library
    - 210 E Church St., Ahoskie NC, 27910
    - 252-332-5500
- Murfreesboro Public Library
    - 213 E Main St., Murfreesboro, NC 27855
    - 252-398-4494
- Hertford County Library
    - 303 Tryon St., Winton, NC 27986
    - 252-358-7832

Social Services

- Department of Social Services
    - 704 N King St, Winton, NC 27986
    - 252-358-7830

Priority Need: Access to Care	See Healthcare Facilities and Other Healthcare Services above
Priority Need: Chronic Disease Prevention	See Medical Practices and Facilities above

Priority Need: Healthy Living	**Health and Fitness**
	• ECU Health and Wellness Center
	  ○ 117 Hertford County High School Rd, Ahoskie, NC 27910
	  ○ 252-209-3090
	• VinFit, LLC
	  ○ 124 US 158-258 Business, Murfreesboro, NC 27855
	  ○ 252-398-3200
	• Quality Fitness Club
	  ○ 109 Lloyd St., Ahoskie, NC 27910
	  ○ 252-862-2536

CHAPTER 5 | NEXT STEPS

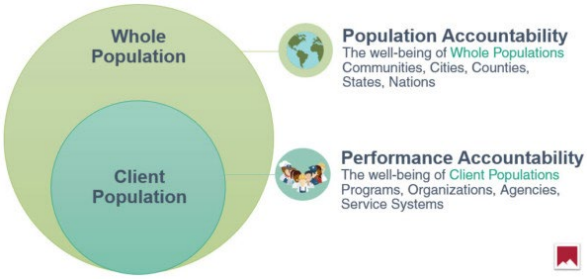
The CHNA findings are used to develop effective community health improvement strategies to address the priority needs identified throughout the process. The next and final step in the CHNA process is to develop community-based health improvement strategies and action plans to address the priorities identified in this assessment. Health leaders in Hertford County will leverage information from this CHNA to develop implementation and action plans for their local community, while also working together with other community partners to ensure the priority need areas are being addressed in the most efficient and effective way. Hertford County leaders recognize that the most effective strategies will be those that have the collaborative support of community organizations and residents. The strategies developed will include measurable objectives through which progress can be measured.

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 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.

Figure A1.1: Population vs. Performance Accountability



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 accountability: 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. **Figure A1.1** illustrates the way population and performance accountability interact.

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. The scorecard mirrors RBA and links results with indicators and programs with performance measures. Hertford County's most recent SOTCH is presented on the following pages.

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
FHLI-NC HNC2030	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% ↗
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	Infant mortality rate in North Carolina: Rate of Infant Deaths (Total) per 1,000 Live Births	2022	6.8	→ 1	-3% ↘
FHLI-NC HNC2030	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
FHLI-NC HNC2030 Percent of Adults Using Tobacco in North Carolina (Total)	2022	21.6%	↗ 1	-10% ↘
FHLI-NC HNC2030 Percent of High School Youth Using Tobacco in North Carolina (Total)	2019	27.3%	↘ 1	-1% ↘
FHLI-NC HNC2030 Percent of Middle School Youth Using Tobacco in North Carolina (Total)	2019	10.4%	↘ 2	-10% ↘
FHLI-NC HNC2030 Drug Overdose Death Rate in North Carolina: Drug Poisoning Deaths (Total) per 100,000 population	2022	42.1	↗ 4	205% ↗
FHLI-NC HNC2030 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
How Much # of behavioral health visits at ARHS	2023	2,426	↗ 1	346% ↗

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

Substance Misuse Awareness and Prevention	Time Period	Current Actual Value	Current Trend	Baseline % Change
How Much # of education outreach activities	2023	74	↘ 1	-21% ↘
How Much # of community partners promoting NENC Connect website	2022	100	→ 0	0% →
How Much # of individuals accessing NENC Connect website	2022	460	↗ 1	130% ↗
How Much # 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 Hertford County, its performance on each data measure was compared to targets/benchmarks. If Hertford 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 A2.1: 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
Dental Health Providers (per 100,000)	Number of oral health providers with a CMS National Provider Identifier	CMS – NPPES. Data accessed via the North	2024

Measure	Description	Data Source	Most Recent Data Year(s)
	(NPI). Providers included are those who list "dentist", "general practice dentist", or "pediatric dentistry" as their primary practice classification, regardless of sub-specialty.	Carolina Data Portal, June 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 A2.2: 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 A2.4: 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 combines 3 years of survey data to provide county-level estimates. In	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)
	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 encourages physical activity and other healthy behaviors.	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)
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 A2.5: 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 via the North Carolina Data Portal, June 2024.	2020-2021

Measure	Description	Data Source	Most Recent Data Year(s)
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 A2.6: 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 A2.7: 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 1% annual chance of coastal or riverine flooding.	Federal Emergency Management Agency (FEMA), National Flood Hazard Layer. Data accessed via the North	2011

Measure	Description	Data Source	Most Recent Data Year(s)
		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 A2.8: 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 A2.9: 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 limited or uncertain access to adequate food.	Feeding America. Data accessed via the North Carolina Data Portal, June 2024.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
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 foods, and grocery stores are a major provider of these foods.	US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2022. Data accessed via the North Carolina Data Portal, June 2024.	2022

Table A2.10: 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 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	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)
	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 A2.11: 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 acquired from the 2018-2022 ACS and are used in the 2024 County Health Rankings.	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022
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,	U.S. Census Bureau, ACS. Data accessed via the North Carolina Data Portal, June 2024.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	healthy food, and other necessities that contribute to poor health status.		
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 A2.12: 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.	National Center for Health Statistics – Natality and Mortality Files; Census Population Estimates Program. Data accessed via RWJF & UWPHI County Health	2019-2021

Measure	Description	Data Source	Most Recent Data Year(s)
	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.	Rankings & Roadmaps, June 2024.	
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 A2.13: 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 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.	CDC – National Vital Statistics System (NVSS). CDC WONDER. CDC, Wide-Ranging Online Data for Epidemiologic Research. Data accessed via the North Carolina Data Portal, June 2024.	2017-2019
Low birthweight (percent of live births with	Percentage of live births where the infant weighed less than 2,500 grams	National Center for Health Statistics –	2016-2022

Measure	Description	Data Source	Most Recent Data Year(s)
birthweight < 2500 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.	Natality Files. Data accessed via RWJF & UWPHI County Health Rankings & Roadmaps, June 2024.	
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 A2.14: 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 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.	CDC – NVSS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Table A2.15: 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 professional that they had high cholesterol.	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2021
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

Measure	Description	Data Source	Most Recent Data Year(s)
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 indicate poor care management, inadequate access to care or poor patient choices, resulting in ER visits that could be prevented".	CMS – Geographic Variation Public Use File. Data accessed via the North Carolina Data Portal, June 2024.	2022
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	CDC – Atlas of Heart Disease and Stroke. Data accessed via the North	2018-2020

Measure	Description	Data Source	Most Recent Data Year(s)
	ages 65 and older for hospital stays occurring between 2018 and 2020.	Carolina Data Portal, June 2024.	

Table A2.16: 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, 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.	CMS – Geographic Variation Public Use File. Data accessed via the North Carolina Data Portal, June 2024.	2022

Table A2.17: 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. 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.	CDC – National Vital Statistics System. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Table A2.18 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 A2.19: 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 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	CDC, BRFSS. Data accessed via the North Carolina Data Portal, June 2024.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	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-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.	CDC – NVSS. Data accessed via the North Carolina Data Portal, June 2024.	2018-2022

Table A2.20: 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 A2.21: 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
Community Design – Distance to Public Transit	Proportion of the population living within 0.5 miles of a GTFS (General Transit Feed Specification) or fixed-guideway transit stop. Transit data is available from over 200 transit agencies across the United States, as well as all existing fixed-guideway transit service in the U.S. This includes rail, streetcars, ferries, trolleys, and some bus rapid transit systems.	EPA – Smart Location Database. Data accessed via the North Carolina Data Portal, June 2024.	2021

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 Hertford 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	Hertford County Description
	Low	Represents measures in which Hertford 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 Hertford 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 Hertford 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 Hertford County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

(Hertford 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:

(11.4-7.5)/(7.5) x 100% = 52.0% = Displayed as **High Priority Level**, Shaded in Red

This metric indicates that the percentage of the population with limited access to healthy foods in Hertford County is 52.0 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 A3.1: Access to Care

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Primary Care Providers Ratio	112.4	101.1	83.5	2024	High
Mental Health Providers Ratio	178.7	155.7	125.3	2024	High
Addiction/Substance Abuse Providers Ratio	27.9	25.0	27.8	2024	Low
Buprenorphine Providers Ratio	15.5	15.2	38.0	2023	Low
Dental Health Providers Ratio	39.1	31.5	9.3	2024	High
% Living in Health Professional Shortage Areas (HPSAs) – Dental Care	17.8%	34.0%	52.4%	2018-2022	High
Federally Qualified Health Centers (FQHCs)	3.5	4.1	13.9	2023	Low
% Receiving Medicaid	22.3%	20.2%	32.9%	2018-2022	High
% Uninsured	10.2%	12.5%	11.9%	2022	Medium

Table A3.2: Built Environment

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Broadband Access (Access to DL Speeds >= 25MBPS and UL Speeds >= 3 MBPS)	93.8%	93.6%	81.4%	2023	High
Broadband Access (Access to DL Speeds >= 100MBPS and UL Speeds >= 20 MBPS)	91.2%	90.4%	79.0%	2023	High
Households with No Computer	6.1%	6.9%	15.3%	2018-2022	High
Households with No or Slow Internet	11.7%	13.0%	23.9%	2018-2022	High
Liquor Stores	13.3	6.2	13.9	2022	High

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Adverse Childhood Experiences (ACEs)	N/A	N/A	Suppressed	2022	N/A

Table A3.3: Diet and Exercise

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Physically Inactive	N/A	21.6%	29.5%	2021	High
Walkability Index Score	10	7	5	2021	High
% with Access to Exercise Opportunities	84.1%	73.0%	61.0%	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 A3.4: Education

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Limited English Proficiency	8.2%	4.6%	2.0%	2018-2022	Low
High School Graduation Rate	81.1%	87.6%	85.1%	2020-2021	Medium
% with No High School Diploma	10.9%	10.6%	16.1%	2018-2022	High
Student Math Proficiency	63.9%	65.8%	92.2%	2020-2021	High
Student Reading Proficiency	60.1%	59.5%	78.7%	2020-2021	High
School Funding Adequacy	N/A	-$4,742	-$21,379	2021	High
School Funding Adequacy – Spending per pupil	N/A	$10,655	$11,858	2021	Low

Table A3.5: Employment

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Unemployment Rate	3.9%	3.7%	4.6%	2024	High
Average Annual Unemployment Rate, 2013-2023	3.6%	3.5%	4.6%	2024	High

Table A3.6: Environmental Quality

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Flood Vulnerability	6.5%	4.9%	2.2%	2011	Low
Drinking Water Safety	16,107	194	0	2023	Low

Table A3.7: Family, Community and Social Support

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Children Cost Burden	28.8%	27.0%	35.0%	2023	High
% Young People Not in School or Working	6.9%	7.5%	7.4%	2018-2022	Medium

Table A3.8: Food Security

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Food Insecure	10.3%	11.4%	13.2%	2021	High
% Food Insecure Children	13.3%	15.3%	29.2%	2021	High
% Low-Income and with Low Food Access	19.4%	21.3%	25.6%	2019	High
% Limited Access to Healthy Foods	N/A	7.5%	11.4%	2019	High
Fast Food Restaurants	96.2	77.4	97.4	2022	High
Grocery Stores	23.4	18.7	23.2	2022	Low

Table A3.9: Housing and Homelessness

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Renter Costs – Average Gross Rent	$1,366	$1,090	$763	2018-2022	Low

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Severe Housing Cost Burden	14.1%	12.2%	15.1%	2018-2022	High
Assisted Housing Units	413.9	319.2	693.0	2017-2021	High
% Severe Substandard Housing	18.5%	16.1%	20.9%	2011-2015	High
% Homeless Children	2.8%	1.9%	0.4%	2019-2020	Low

Table A3.10: Income

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Median Family Income	$92,646	$82,890	$60,148	2018-2022	High
Gender Pay Gap	81.0%	83.0%	77.0%	2018-2022	High
% Living Below 100% FPL	12.5%	13.3%	20.3%	2022	High
% Living Below 200% FPL	28.8%	31.6%	43.1%	2018-2022	High
% Children Living Below 200% FPL	37.2%	41.1%	60.9%	2018-2022	High
% Receiving SNAP	12.4%	15.7%	28.7%	2021	High
Children Eligible for Free/Reduced Price Lunch	51.7%	50.8%	99.2%	2022-2023	High

Table A3.11: Length of Life

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Years of Potential Life Lost Rate	N/A	8,853	12,338	2019-2021	High
Premature Age-Adjusted Mortality	N/A	420	555	2019-2021	High
Life Expectancy	77.6	76.6	73.3	2019-2021	Medium

Table A3.12: Maternal and Infant Health

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Births with Late or No Prenatal Care	6.1%	6.9%	Suppressed	2019	N/A
Low Birthweight	N/A	9.4%	11.0%	2016-2022	High
Infant Mortality Rate	5.7	7.0	13.0	2015-2021	High

Table A3.13: Mental Health

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Poor Mental Health Days	4.9	4.6	4.9	2021	High
Deaths of Despair Rate	55.9	58.7	48.9	2018-2022	Low
Suicide Death Rate	14.5	14.0	N/A	2018-2022	N/A

Table A3.14: Physical Health

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Poor or Fair Health	N/A	14.4%	21.9%	2021	High
% Adults with Asthma	9.7%	9.8%	11.1%	2022	High
% Adults with Heart Disease	5.2%	5.5%	6.6%	2022	High
% Adults with High Blood Pressure	29.6%	32.1%	40.1%	2021	High
% Adults with High Cholesterol	31.0%	31.4%	31.0%	2021	Medium
Diabetes Prevalence	8.9%	9.0%	9.9%	2021	High
% Adults with Kidney Disease	2.7%	2.9%	3.7%	2021	High
% Stroke	2.8%	3.1%	4.3%	2022	High
Obesity	30.1%	29.7%	28.0%	2021	Low
% Teeth Loss	13.9%	12.0%	18.6%	2022	High
Cancer Incidence Rate	442.3	464.4	393.2	2016-2020	Low
Emergency Room Visits	535	563	738	2022	High

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Heart Disease Hospitalization Rate	10.4	11.7	14.3	2018-2020	High
Stroke Hospitalization Rate	8.0	9.5	10.4	2018-2020	High

Table A3.15: Quality of Care

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Children/adults vaccinated annually against seasonal influenza	44.5%	45.6%	38.1%	2021	High
Preventable Hospital Rate	2,752	2,957	3,879	2021	High
Readmissions Rate	18.1%	17.6%	18.9%	2022	High

Table A3.16: Safety

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Incarceration Rate	1.3%	1.5%	2.4%	2018	High
Juvenile Arrest Rate	13.8	16.0	35.0	2021	High
Violent Crime	416.0	365.7	292.6	2015-2017	Low
Firearm Death Rate	13.4	15.5	24.9	2018-2022	High
Poisoning Death Rate	28.5	31.5	24.9	2018-2022	Low

Table A3.17: Sexual Health

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
Chlamydia Rate	495.0	603.3	874.1	2021	High
HIV Incidence Rate	12.7	15.5	Suppressed	2022	N/A
Teen Births	16.6	18.2	N/A	2016-2022	N/A

Table A3.18: Substance Use Disorders

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Excessive Drinking	18.1%	18.2%	13.7%	2021	Low

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Driving Deaths with Alcohol	2.3	2.9	6.5	2018-2022	High
Opioid Use Disorder Rate	41.0	43.0	20.0	2021	Low
Opioid Drug Overdose Deaths	N/A	25.1	17.8	2018-2022	Low

Table A3.19: Tobacco Use

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Smokers	14.5%	15.0%	21.8%	2021	High

Table A3.20: Transportation Options and Transit

Measure	National Benchmark	North Carolina Benchmark	Hertford County Data	Most Recent Data Year	Hertford County Need
% Households with No Motor Vehicle	8.3%	5.4%	9.0%	2018-2022	High
% Public Transit	3.8%	0.8%	1.2%	2018-2022	Low
% Living Near Public Transit	34.8%	10.9%	0.0%	2021	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 five focus groups were conducted in person between May 24th and June 20th, 2024. These groups included representation from key leaders, non-profit partners, patients, and community members, with participants providing responses on living, working, or receiving healthcare in Hertford County.

- Hertford County Health Department
- Jernigan Swamp Apartments
- Ahoskie Primary Care Center
- ECU Health and Wellness 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 Hertford 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?

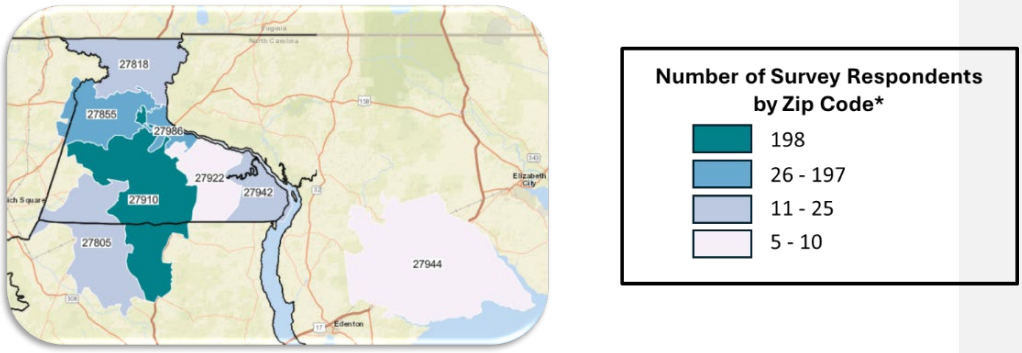
SUGGESTIONS

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 407 surveys were completed by individuals living, working or receiving healthcare in the Hertford County community. The survey was available in both English and Spanish, however, none 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 A4.1: Respondent Zip Code of Residence[36]



[36] 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 Hertford County:
    - Access to care
    - Health lifestyle
    - Housing and homelessness
    - Mental health
    - Physical health
    - Substance use disorders
    - Transportation and transit

The key findings from the Community Survey are detailed below:

- Diabetes/high blood sugar and heart disease/high blood pressure were identified as the top two health problems affecting the community. One-third of respondents also identified alcohol/drug addiction, cancer, and overweight/obesity as important health problems.
- Cost, lack of insurance and lack of transportation were identified as the top three barriers to care.
- Lack of job opportunities, neighborhood safety/violence, and transportation were identified as top social or environmental barriers to health. Availability of providers and poverty were also identified by nearly a quarter of respondents.

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

Figure A4.2: Respondents by Age Group

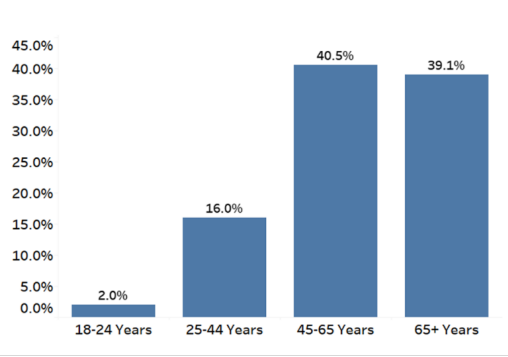


Figure A4.3: Respondents by Gender

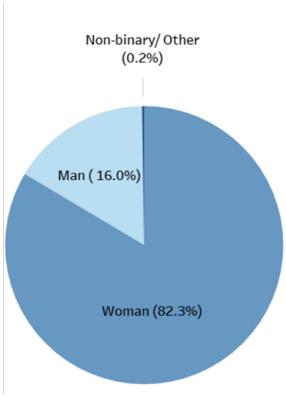


Figure A4.4: Respondents by Race

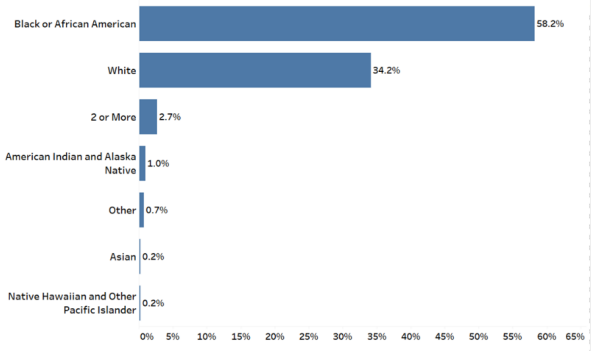
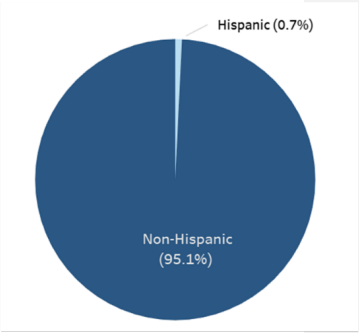


Figure A4.5: Respondents by Ethnicity



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?[37]
   □ Yes
   □ No
   □ Don't know/Not sure
   □ Prefer not to say

[37] 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

Five focus groups were conducted in Hertford County to identify health concerns and barriers to care. The common themes across all groups included food access and security, healthcare access and quality, and physical health. Participants noted that traditional Southern soul food preparation is unhealthy, fresh food is extremely expensive, and there are food deserts in the county. They expressed a need for more farmer's markets. Regarding healthcare, barriers included negative experiences with providers, lack of transportation, lack of health insurance, need for more dentists and behavioral health providers, inconvenient hours, language barriers, and overall high cost of care. Chronic diseases such as diabetes, high blood pressure, kidney disease, obesity, and asthma were identified as prevalent physical health concerns.

Focus Group 1 Unique Insights: Hertford County Health Department

This group identified several additional health and social/environmental concerns. Employment and income were major issues, with poverty and affordability of basic necessities to create a healthy life being primary concerns. Maternal and infant health was highlighted, noting that having only one OBGYN office in the county often forces people to drive long distances for maternity care or pregnancy complications. Transportation and transit issues were also emphasized as impacting access to healthcare and other necessities.

Participants suggested that local health leaders should provide programs for parents and children to increase physical activity, establish a community ride pool, take more initiative to encourage community health, and organize trash cleanup events.

Focus Group 2 Unique Insights: Jernigan Swamp Apartments (Public Housing)

This group identified several unique concerns. The built environment was noted as lacking investment, with many old buildings that could be converted into housing. Employment and income issues included poor job opportunities and a high cost of living. Health equity was a concern, with Black residents seen as disproportionately impacted by health and social/environmental problems. Housing and homelessness were significant issues. Sexual health concerns, particularly HIV and STIs, were mentioned. Substance use was noted as a problem by several participants.

Suggestions for local health leaders included providing low-cost health screenings, affordable transportation for patients, more community events to promote health awareness and education, and more reliable health information to help link patients with providers.

Focus Group 3 Unique Insights: Ahoskie Primary Care Center (Low Income) Group 1

This group highlighted concerns related to education and mental health. Community safety, particularly domestic violence, was mentioned. The need for better health education delivered in understandable ways was emphasized. Health equity issues, particularly affecting Black/African American residents, were noted. Housing and homelessness were concerns. Sexual health, specifically teen pregnancy, was mentioned. Substance use was identified as an issue in the county.

Participants suggested that local health leaders should focus on better and more effective community education, provide a day focused solely on the elderly for care and education, and take more time during appointments rather than rushing to the next patient.

Focus Group 4 Unique Insights: Ahoskie Primary Care Center (Low Income) Group 2

This group identified community safety concerns, particularly gang violence. Education was highlighted, noting that the public is not always aware of available services and resources. Employment and income issues included a lack of job opportunities and challenges associated with childcare. Health equity concerns focused on Black/African American residents, particularly young people. Substance use, including drugs and alcohol, was noted as a problem.

Suggestions for local health leaders included offering more low-cost services, ensuring services are inclusive with lenient requirements, holding more mobile events to target low-income areas, and improving health leaders' education to treat patients with respect.

Focus Group 5 Unique Insights: ECU Health and Wellness Center

This group emphasized health equity concerns, noting racial disparities impacting the community. Housing and homelessness were highlighted, with a specific mention of no shelters for the homeless population. Transportation and transit issues were reiterated, including the lack of transportation options, unaffordable cab services, and unreliable insurance coverage for medical transport.

Participants suggested that local health leaders should provide low-cost health screenings and affordable transportation for patients, organize more community events to promote health awareness and education, and provide more reliable health information to help link patients with providers.

Community Member Web Survey

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

Topic: Additional Demographic Information

Figure A5.1: What is the highest grade or year of school you completed?

(N=405)

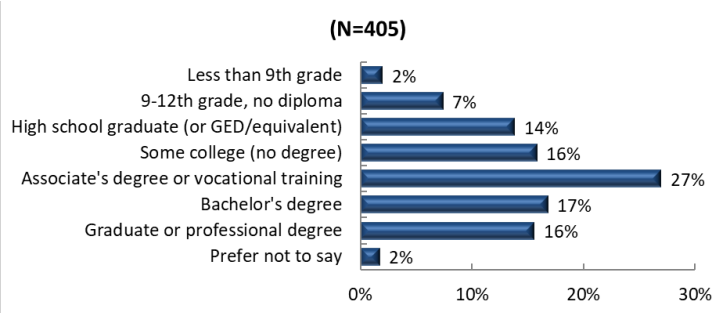


Figure A5.2: Which language is most often spoken in your home? (Choose one)

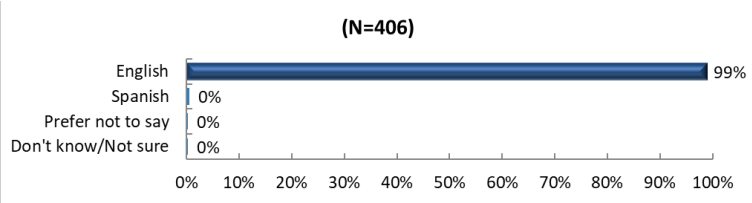


Figure A5.3: For employment, are you currently... (Select all that apply.)

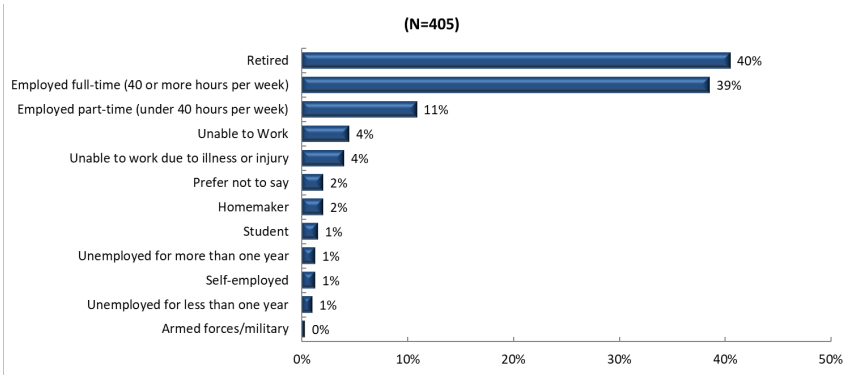
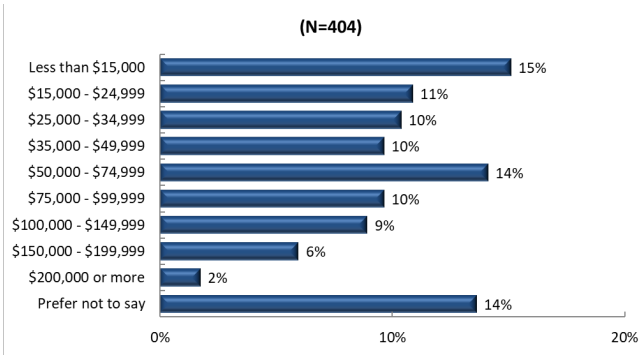


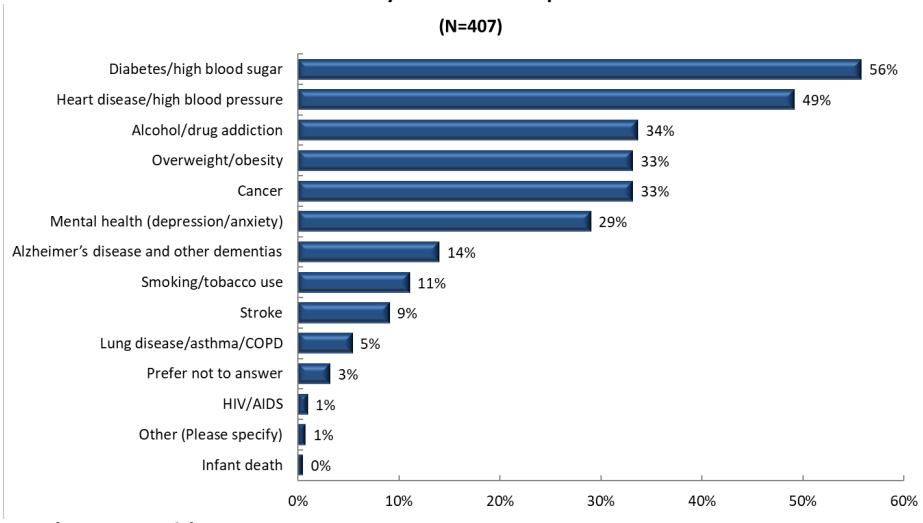
Figure A5.4: Which category best describes your yearly household income before taxes?[38]



[38] Participants 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, Social Determinants of Health, and Barriers to Care

Figure A5.5: What are the three most important health problems that affect the health of your community? Please select up to three.



Other (please specify):

- "Kidney"

Figure A5.6: What are the three most important health problems that affect the health of your community? Please select up to three. (by age)

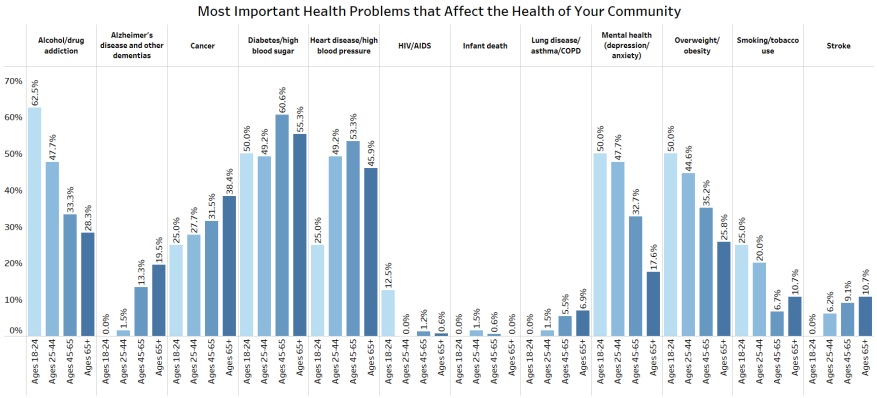


Figure A5.7: What are the three most important health problems that affect the health of your community? Please select up to three. (By gender)

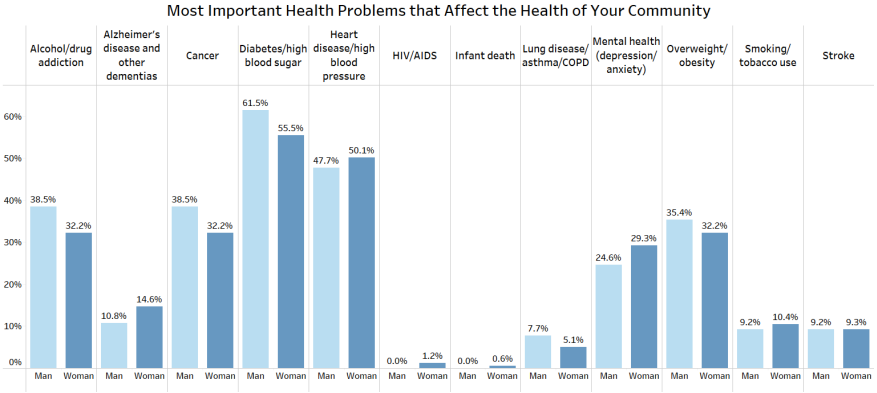


Figure A5.8: What are the three most important health problems that affect the health of your community? Please select up to three. (by race)

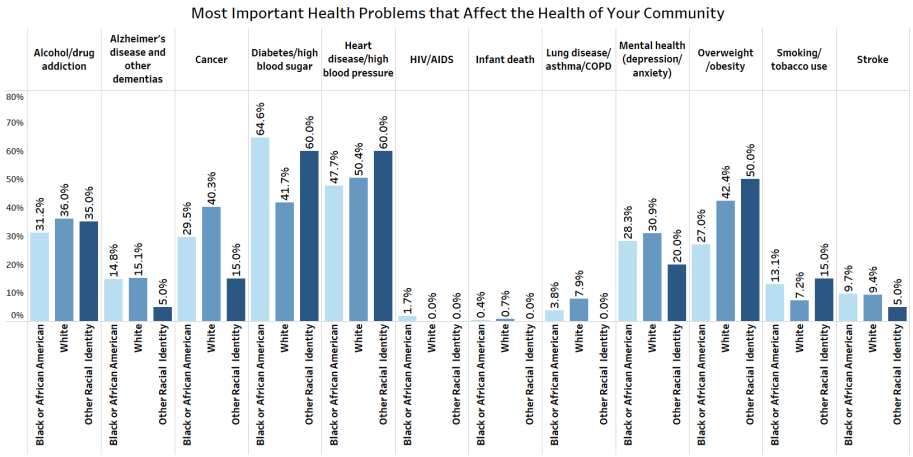
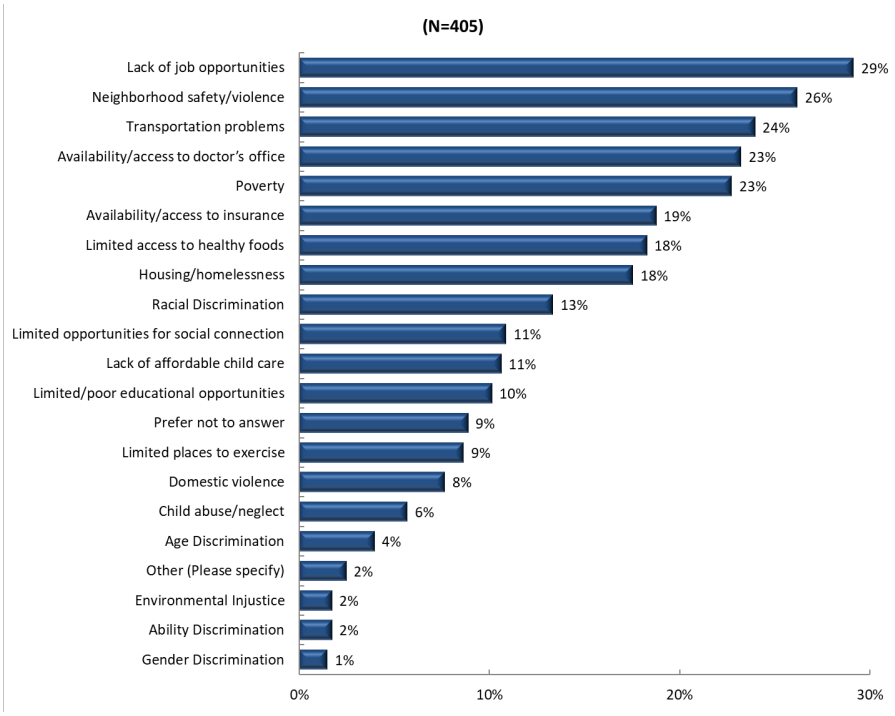


Figure A5.9: What are the three most important social or environmental problems that affect the health of your community? Please select up to three.



Other (please specify):

- "Education on healthy foods"
- "Limited education/lack of understanding of healthcare needs"
- "Low wages"
- "Majority of population do not take responsibility for their own health"
- "People refuse to work"
- "The ability to have dental and vision coverage"
- "The increase for the Cost of Living"

Figure A5.10: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by age)

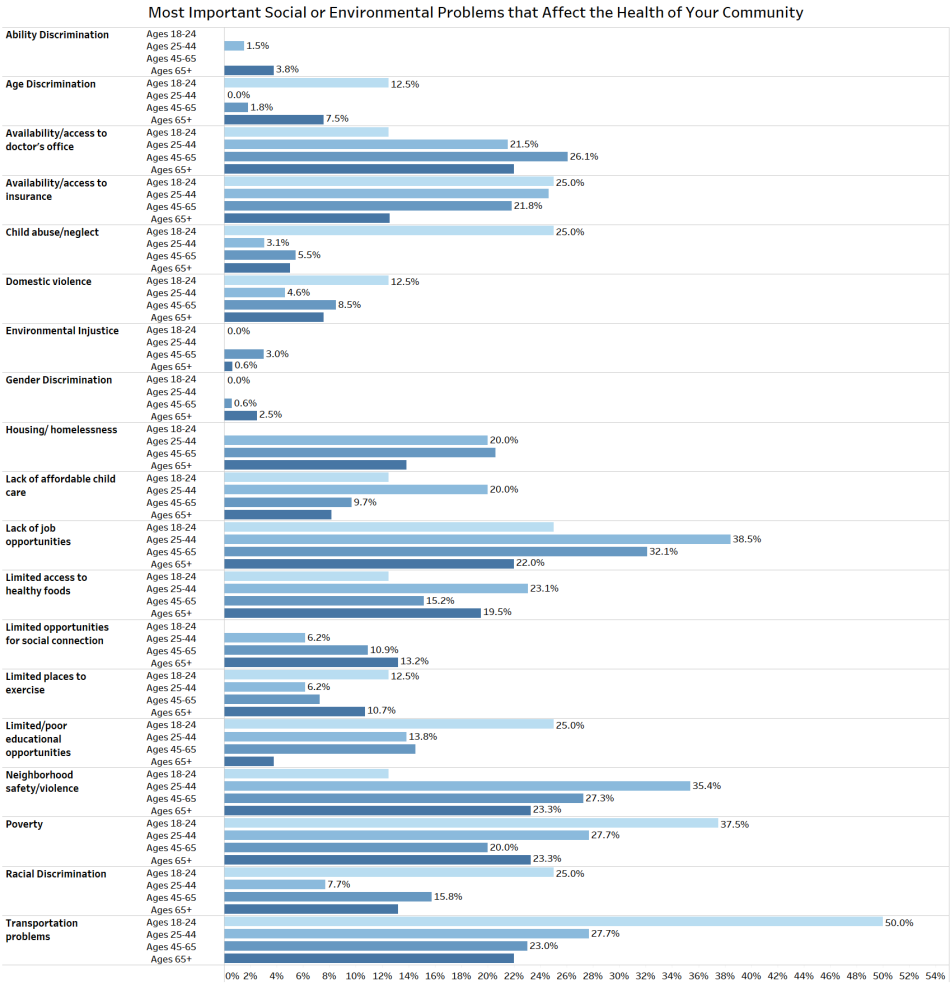


Figure A5.11: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by gender)

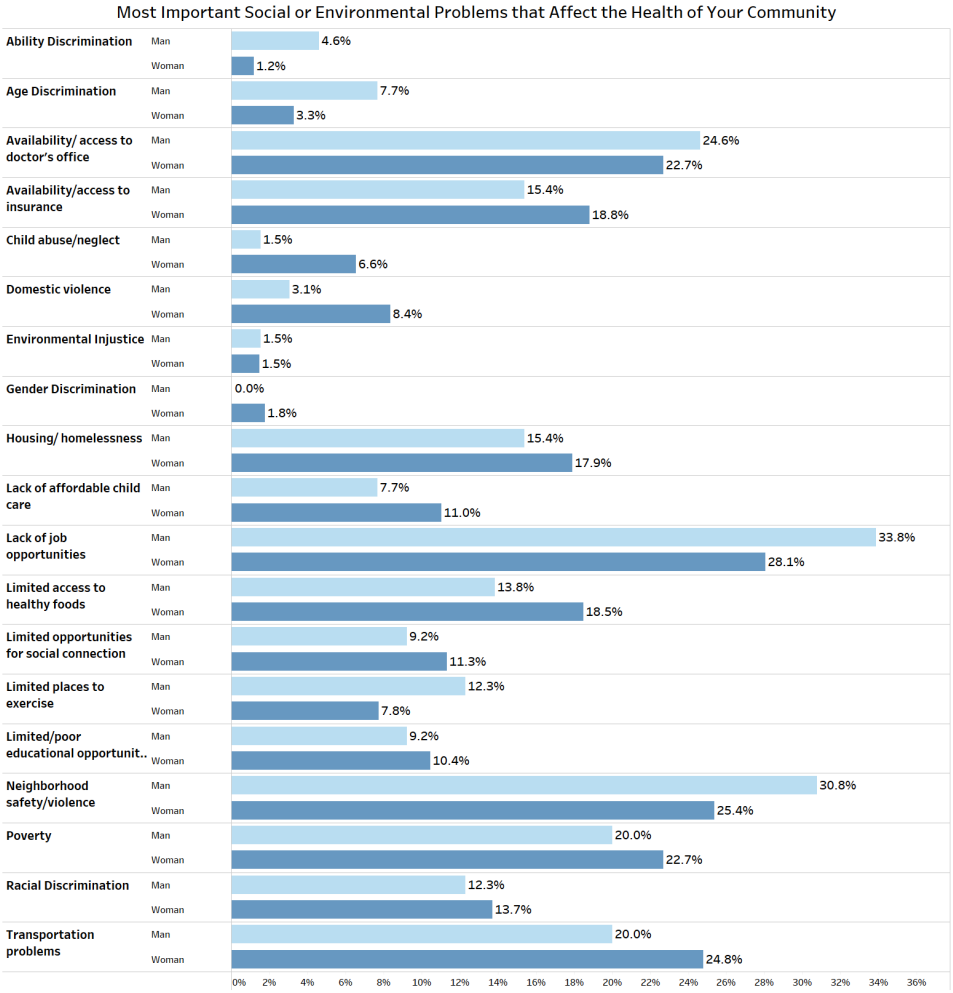


Figure A5.12: What are the three most important social or environmental problems that affect the health of your community? Please select up to three. (by race)

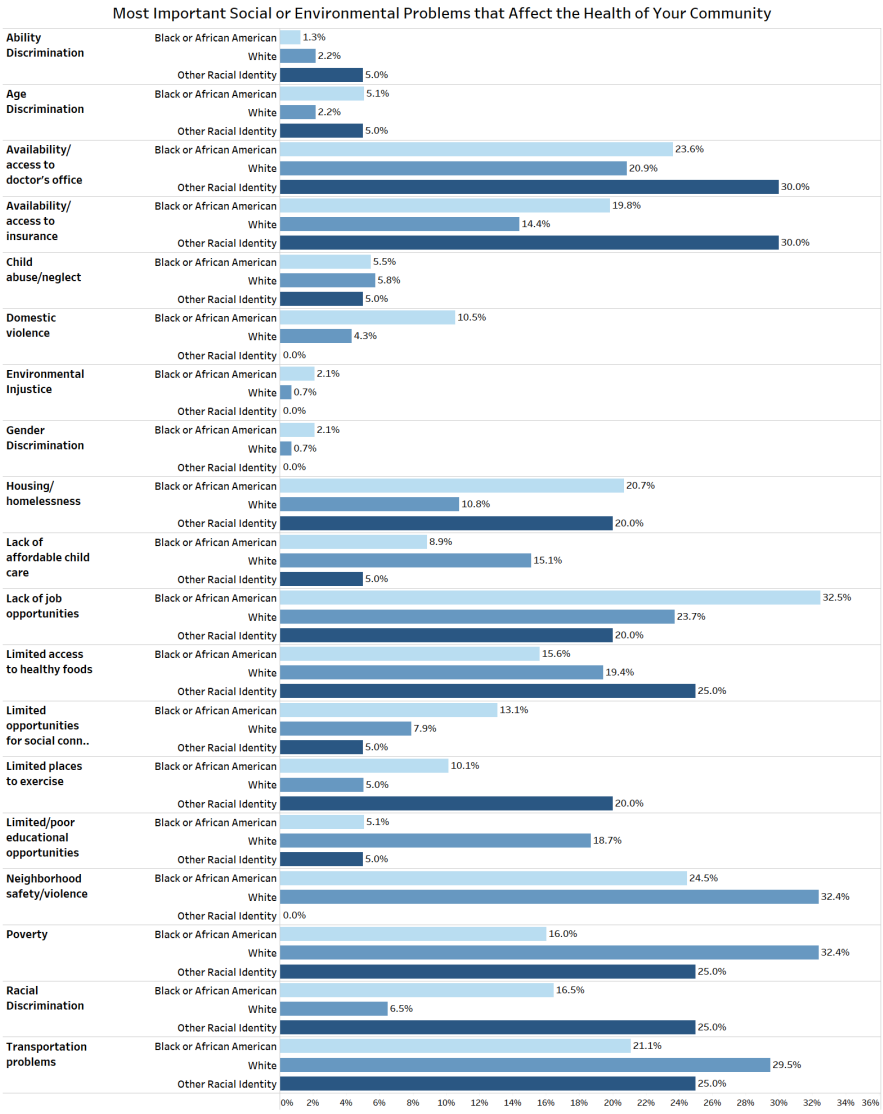
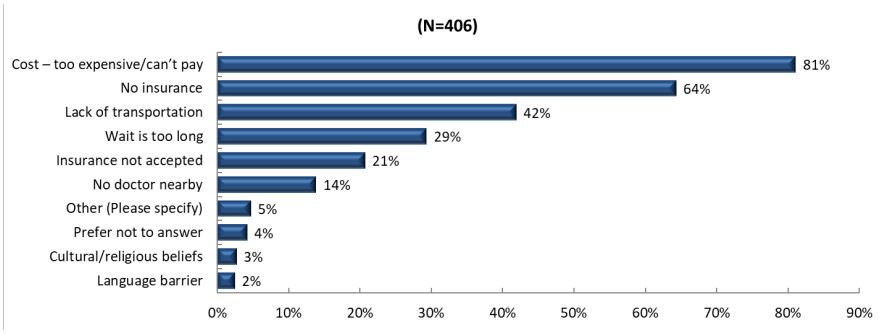


Figure A5.13: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three.



Other (please specify):

- "Although medicaid transport is available, this area lacks a reliable transportation company. As a health care worker, I have watched several of my clients have their medicaid transport be canceled the day of their appointment. This is from more than one transport company. None of them are reliable. Also Copays are so high that many of these low income people cannot afford their doctors visits, the emergency room, urgent care or their medications. It's truly sad to see this state allow their people to suffer in such a way."
- "Do not avail themselves of what is available, lack of understanding of the importance and lack of personnel to help/assist patients with this"
- "Doctors not taking complaints seriously. Patients wait for hrs just to have their medical needs dismissed"
- "Don't care"
- "Fear of the unknown"
- "Health Care Facilities won't see you when you are sick and refer to the hospital and then continuity of care is interrupted"
- "Ignorance (don't know importance of compliance)and complacency"
- "In my opinion health care is available but it seems to be a revolving door with few people seeking to change their lifestyle in order to improve their health instead they are led to believe that modern medicine can fix their health."
- "Lack of bedside manner"
- "Lack of health education"
- "Medical billing long after Dr. visits . health insurance does not cover obesity challenges"
- "Poor care from healthcare community"
- "Probably all of the above but I can't speak for the community"
- "Racial discrimination"
- "The community health center treats people bad"
- "The non-affordable cost for medicines"

Figure A5.14: 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)

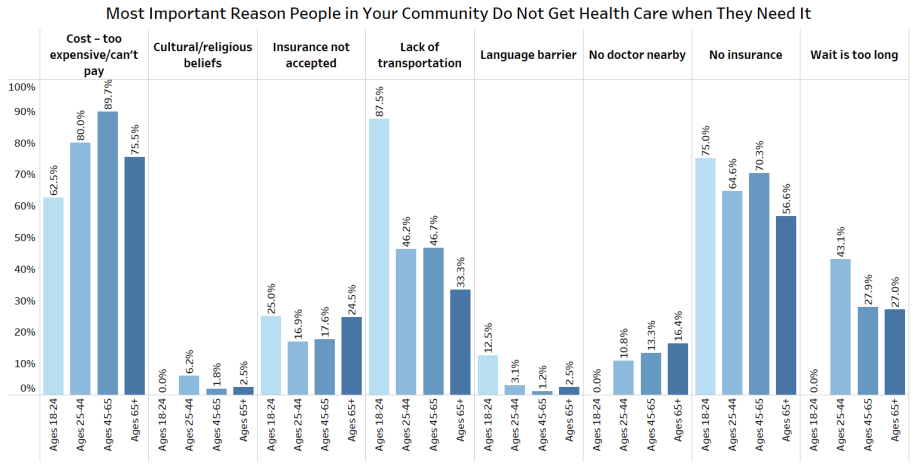


Figure A5.15: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by gender)

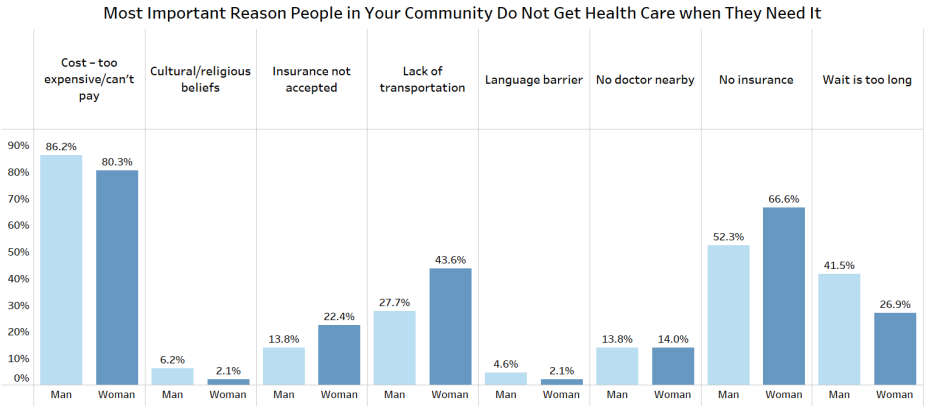
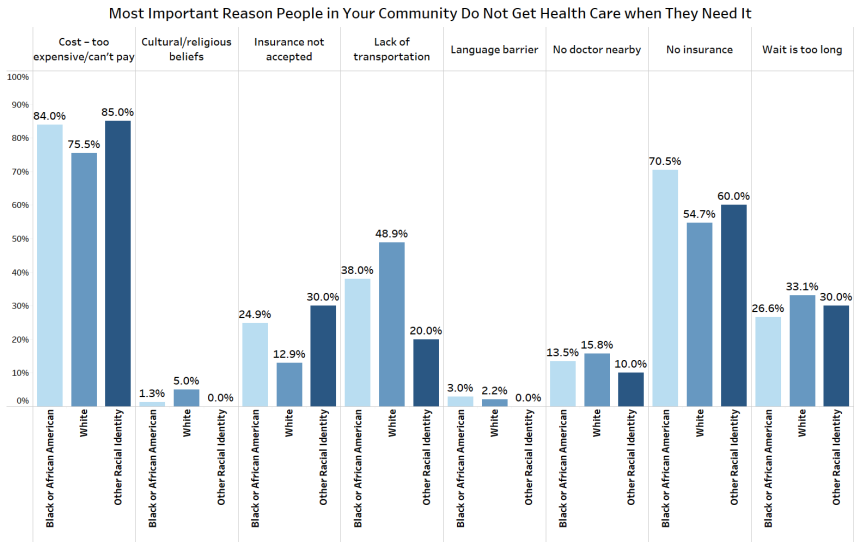


Figure A5.16: What are the three most important reasons people in your community do not get health care when they need it? Please select up to three. (by race)



<u>Topic: Access to care</u>

Figure A5.17: 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?

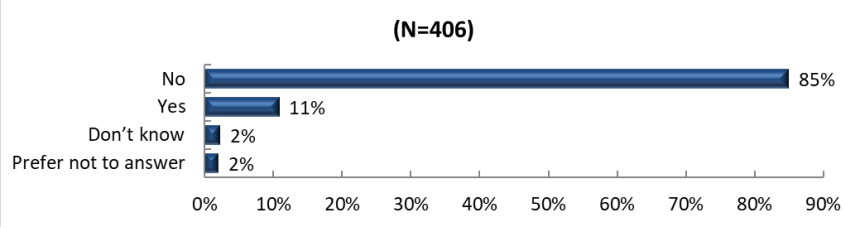
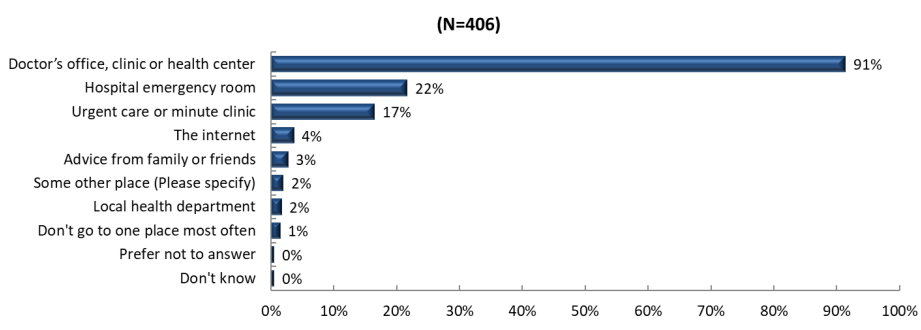


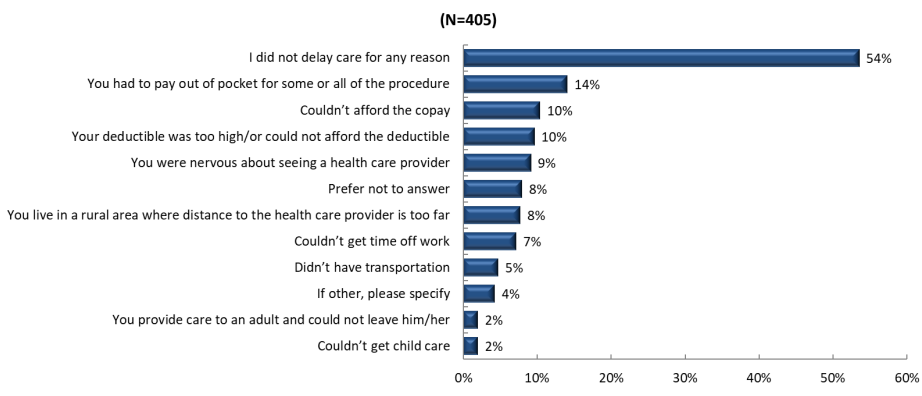
Figure A5.18: Where do you USUALLY go when you are sick or need advice about your health?



Other (please specify):

- "I do research on my own before I decide to go to doctor"
- "My doctor"
- "Perdue Health Care"
- "pharmacy"
- "Roanoke Chowan community health center"
- "VA"
- "Virtual app offered by employer"

Figure A5.19: 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):

- "appointment availability"
- "Doctors was not available"
- "dont care to go to the dr"
- "Focused on job and family versus self"
- "Had to wait for specialist appointment"
- "Had wrong medicare"
- "Hoped I could take care of problem"
- "I did not have health insurance"
- "I go to all my doctors appointments"
- "Invested in work and just didn't take the time"
- "Long wait times, horrible customer service, drs being dismissive."
- "No"
- "No insurance"
- "Too busy to stop working and go to the doctor."
- "Unable to get provider to respond to requests. Went to office and they told me to use MyChart."
- "Was working on my health before going to see doctor for them to push pills"

Figure A5.20: 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?

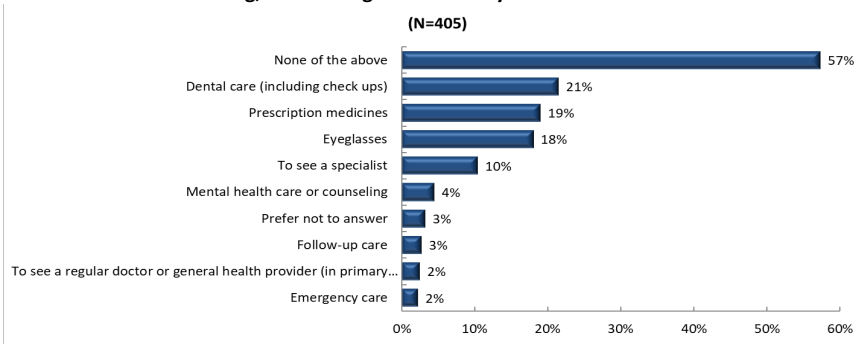


Figure A5.21: If you get sick or have an accident, how worried are you that you will be able to pay your medical bills?

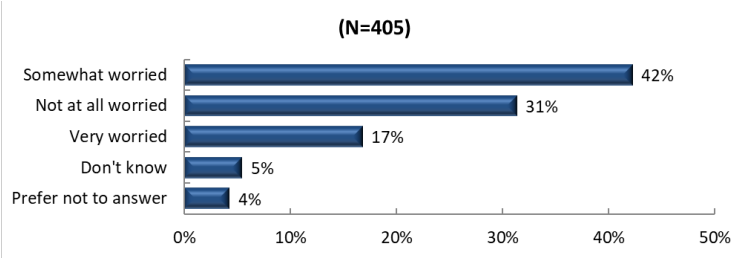
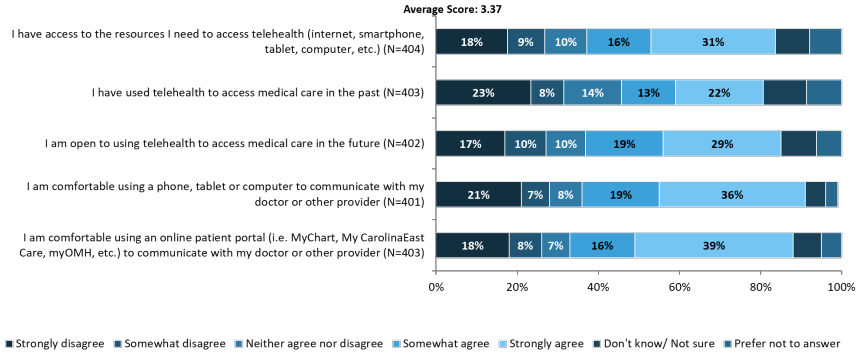


Figure A5.22: How much do you agree or disagree with the following statements about telehealth? Telehealth means connecting virtually with a medical provider using a smartphone, tablet or computer.

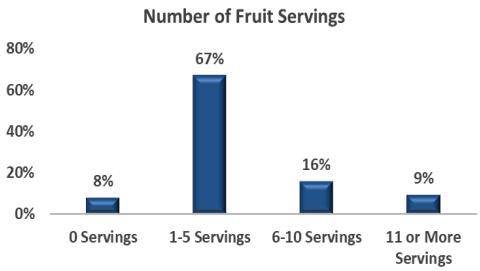
Rated on scale from 1 to 5 with 1 being "strongly disagree" and 5 being "strongly agree"



Topic: Health Lifestyle (Diet and Exercise)

Figure A5.23: 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)

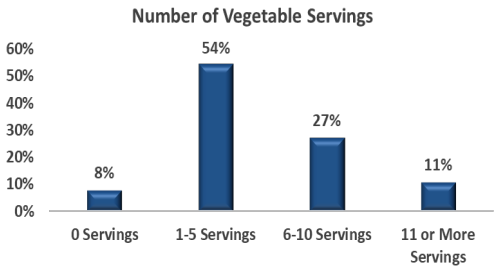
(N=398)



Measure	Value
Mean (Standard Deviation)	5 (8)
Median	4
Mode	3
Minimum-Maximum	0-89

Figure A5.24: 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)

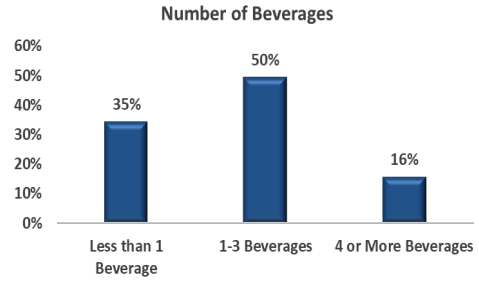
(N=397)



Measure	Value
Mean (Standard Deviation)	7 (10)
Median	5
Mode	3
Minimum-Maximum	0-100

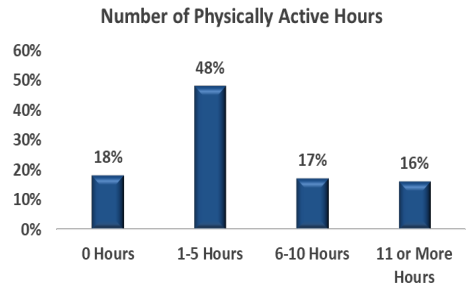
Figure A5.25: About how many cans, bottles, or glasses of sugar-sweetened beverages, such as regular sodas, sugar sweetened tea, or energy drinks, do you drink each day?

(N=397)



Measure	Value
Mean (Standard Deviation)	2 (5)
Median	1
Mode	0
Minimum-Maximum	0-71

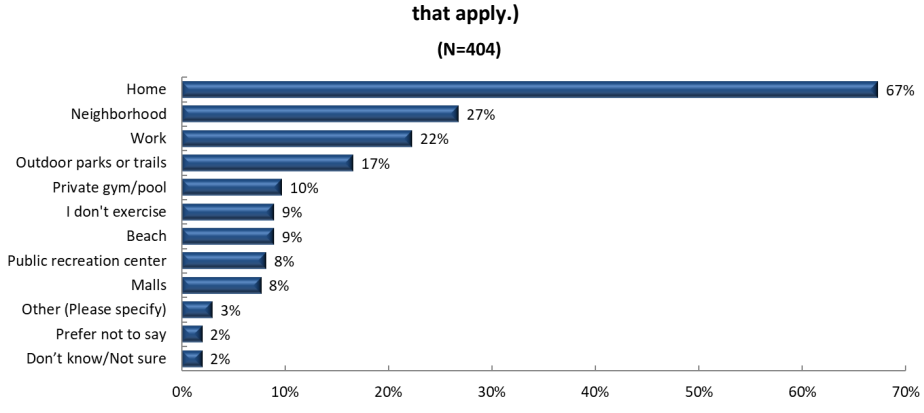
Figure A5.26: During the past month, approximately how much time (in hours) per week were you physically active outside of your regular job?
(N=393)



Measure	Value
Mean (Standard Deviation)	7 (12)
Median	4
Mode	0
Minimum-Maximum	0-100

Figure A5.27: When you are active, where do you engage in exercise or physical activities? (Select all that apply.)

(N=404)



Other (please specify):

- "Church"
- "Cutting grass"
- "Dance aerobics"
- "Senior center" (7 responses)
- "Walmart to walk around"

<u>Topic: Housing and Homelessness</u>

Figure A5.28: In the past 12 months, were there times when you:

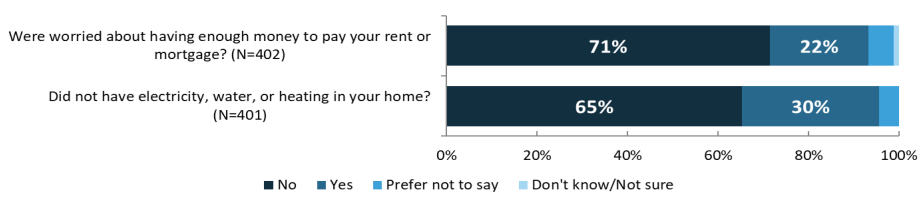


Figure A5.29: In the PAST THREE YEARS, were there times when you:

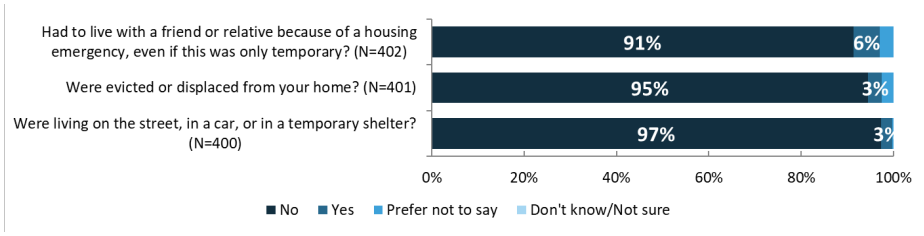
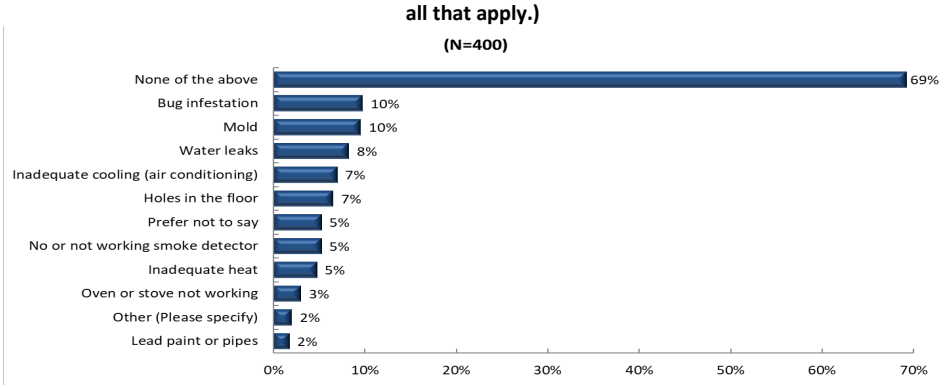


Figure A5.30: Think about the place you live. Do you have problems with any of the following? (Check all that apply.)



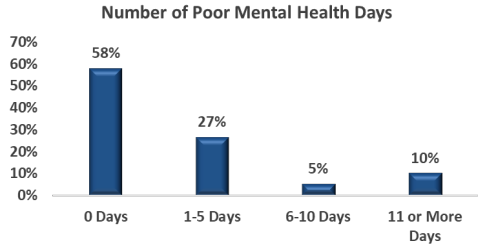
Other (please specify)

- "Floor not level"
- "Floors need to be replaced"
- "holes in ceiling"
- "Need a wheelchair ramp"
- "Spiders"

Topic: Mental Health

Figure A5.31: 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=392)



Measure	Value
Mean (Standard Deviation)	3 (7)
Median	0
Mode	0
Minimum-Maximum	0-30

Figure A5.32: 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 participants who indicated experiencing one or more poor mental health days in previous question were asked current question

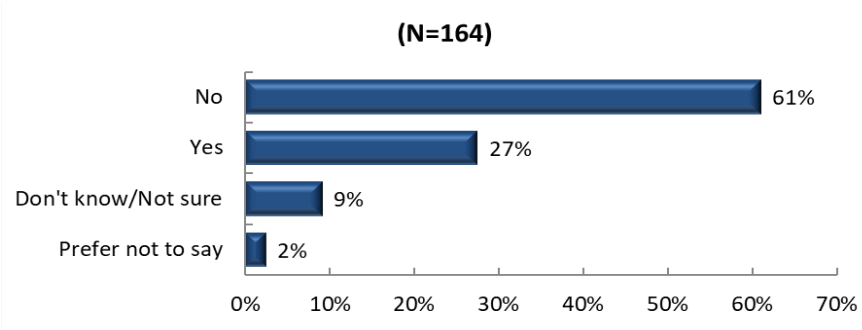
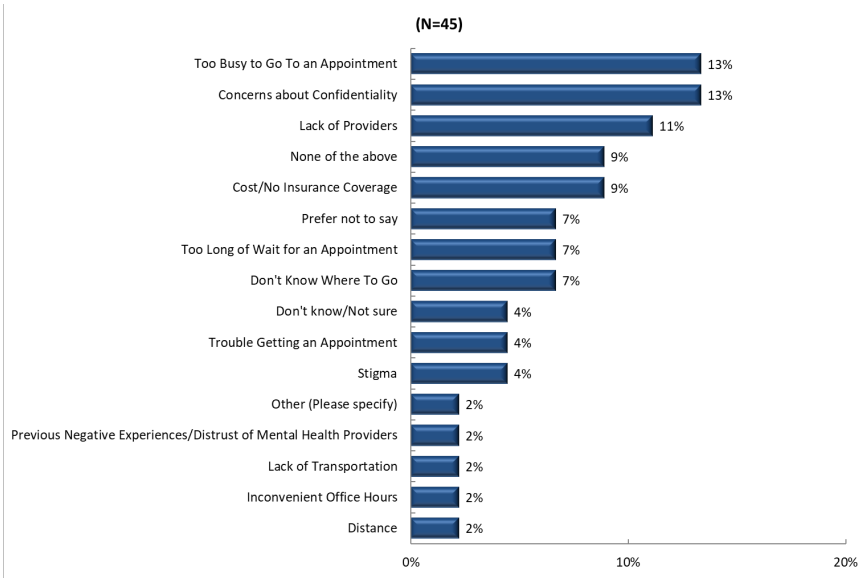


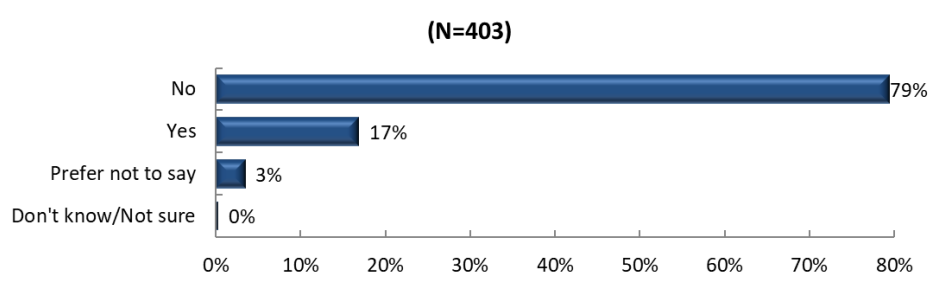
Figure A5.33: What was the MAIN reason you did not get mental health care or counseling?
Note: only participants who responded "yes" to previous question were asked current question



Other (please specify):

- "Not that severe"

Figure A5.34: 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 A5.35: Considering your physical health overall, would you describe your health as…

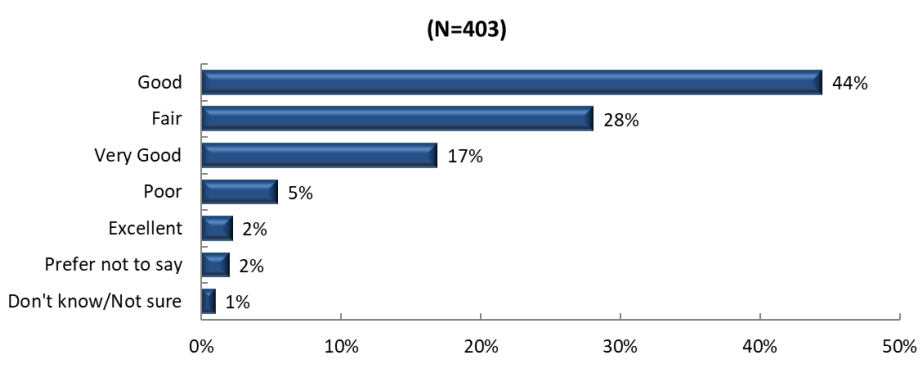


Figure A5.36: Within the past year (anytime less than one year ago), have you:

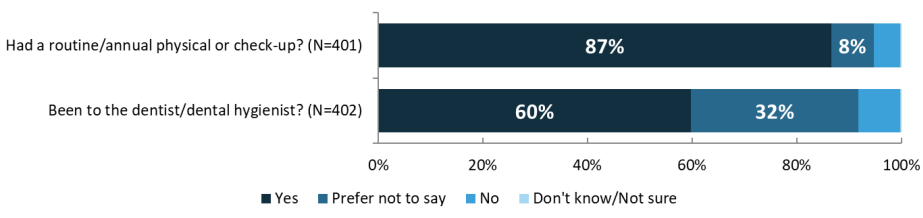
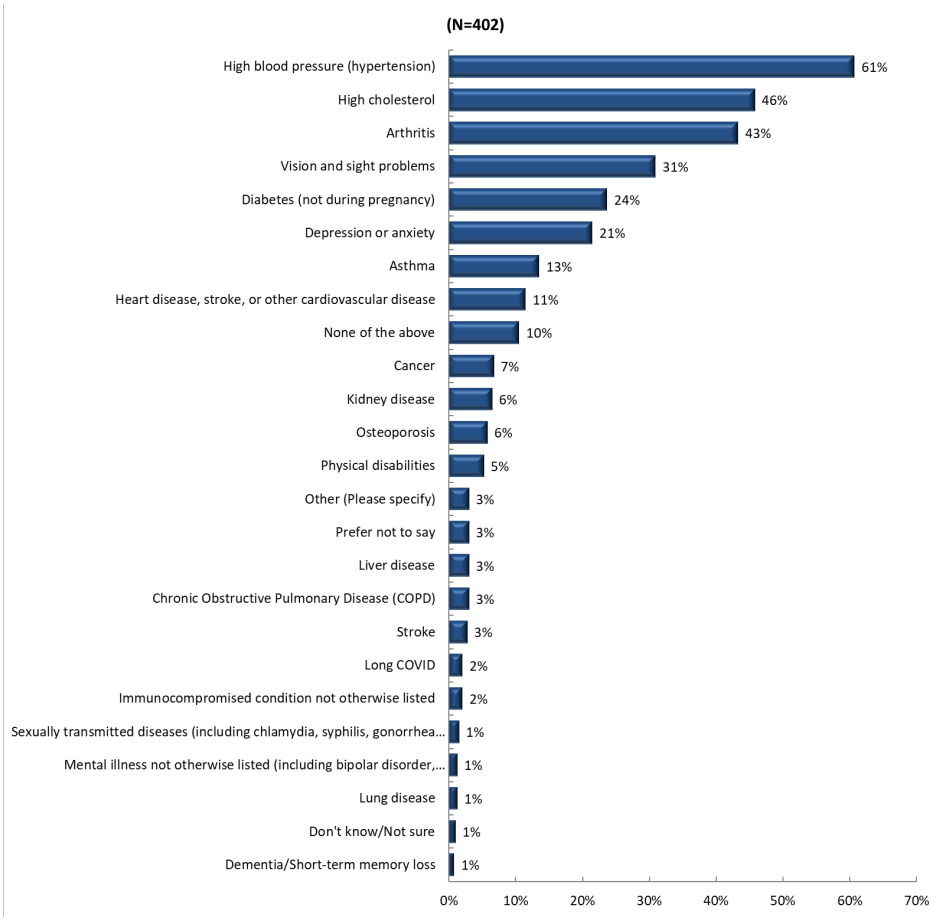


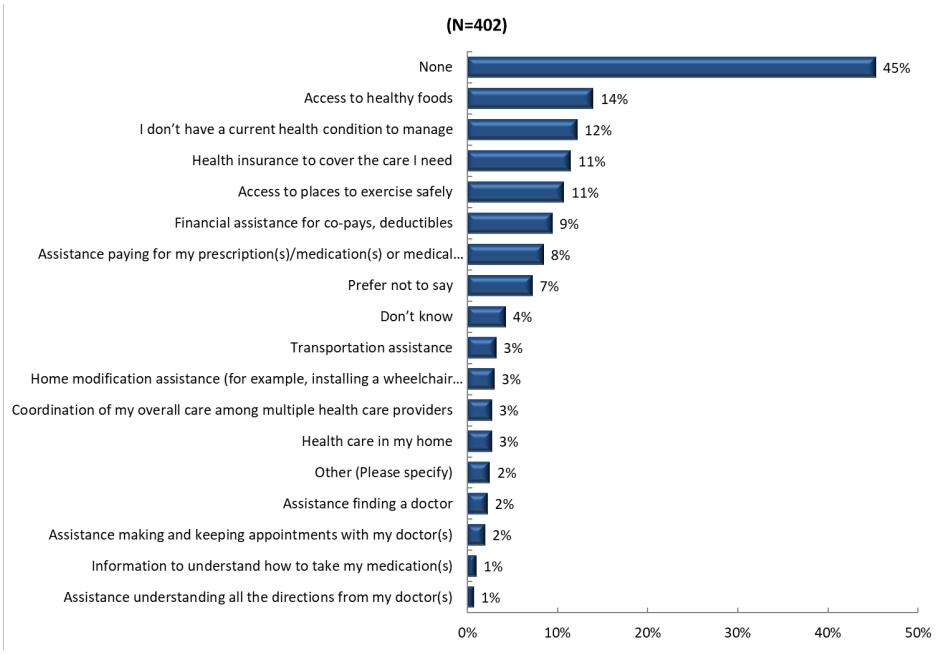
Figure A5.37: Have you ever been told by a doctor, nurse, or other health professional that you have any of the following health conditions? Select all that apply



Other (please specify):

- "Benign PVCs"
- "Gastroenterologist"
- "Hearing issues"
- "hip"
- "Migraines"
- "MS" (2 responses)
- "OSTOPENIA, FIBROMYALGIA"
- "parathyroid"
- "weight"
- "Yes doctors push pills instead of getting to the source of the problem"

Figure A5.38: 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.)



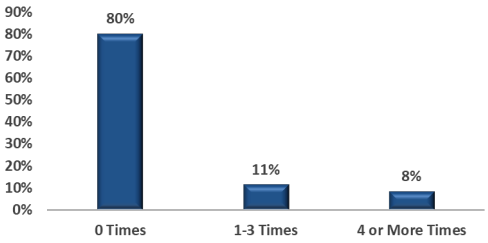
Other (please specify):

- "A better doctor"
- "A doctor that listens and works WITH me instead of pushing pills that have side effects. NATURAL ways of helping manage health instead of chemicals & toxic things that causes side effects"
- "Difficulty getting Prolia when I had to take a break from Fosamax. Primary care Dr office an hour away and I could never get med delivered to them. Too much red tape. I just gave up."
- "Grab bars, railings"
- "Humana and ECU Health to play nice in the sandbox and cover local people--it's ridiculous"
- "Less expensive locations for exercise"
- "medicine"
- "Providers that actually care about the patients needs and not just moving them along like an assembly line"
- "Psychological safety/confidentiality"
- "weight"

Topic: Substance Use Disorders

Figure A5.39: 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=393)



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

Figure A5.40: How often do you consume any kind of alcohol product, including beer, wine or hard liquor?

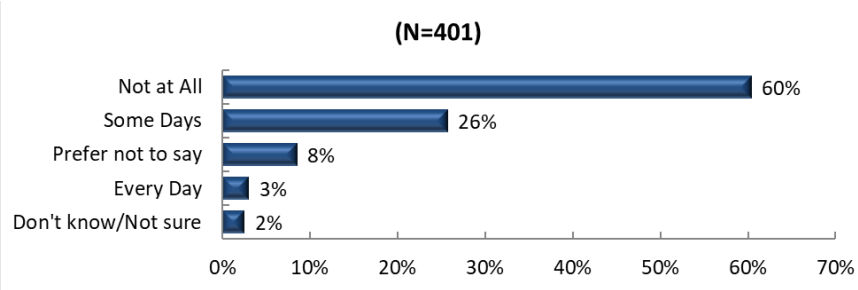


Figure A5.41: In the past year, have you or a member of your household misused any form of prescription drugs (e.g. used without a prescription, used more than prescribed, used more often than prescribed, or used for any reason other than a doctor's instructions)?

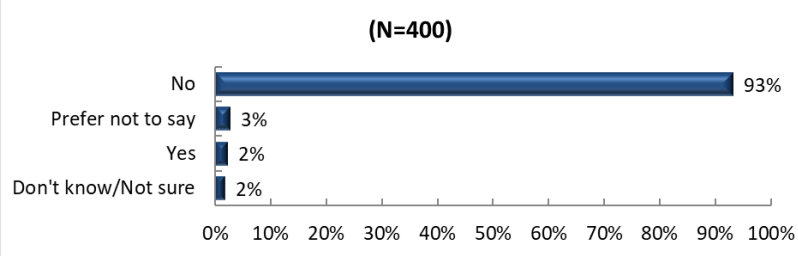
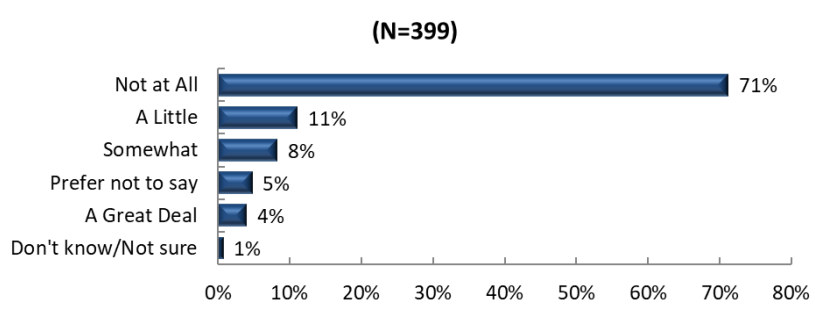
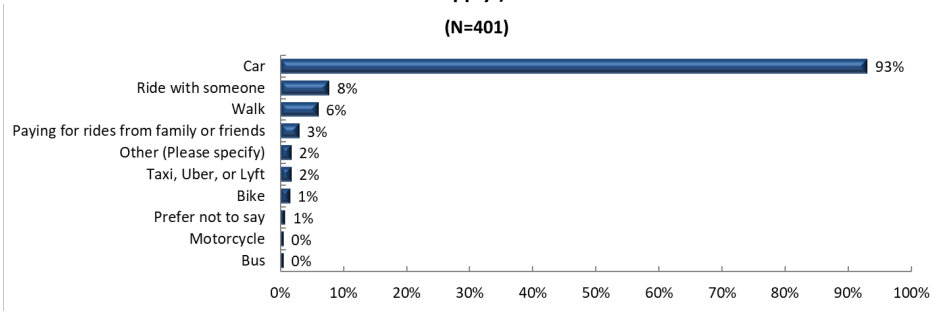


Figure A5.42: To what degree has your life been negatively affected by YOUR OWN or SOMEONE ELSE's substance abuse issues, including alcohol, prescription, and other drugs?



Topic: Transportation And Transit

Figure A5.43: In a typical week, what kinds of transportation do you use the most? (Select all that apply.)



Other (please specify)

- "Airplane"
- "Facility Transportation"
- "Scooter"
- "Transportation van"
- "Truck"

Figure A5.44: 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:

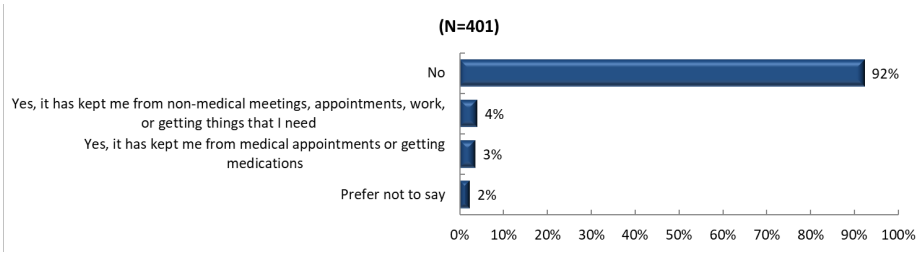
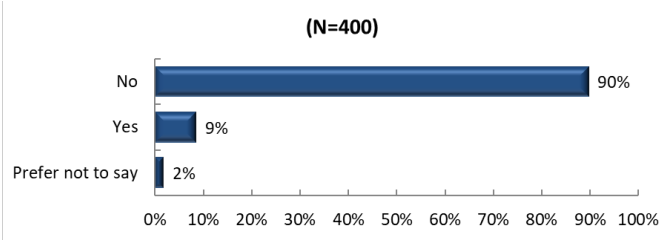


Figure A5.45: Do you put off or neglect going to the doctor because of distance or transportation?



APPENDIX 6 | SUMMARY OF DATA FINDINGS ACROSS SOURCES

Primary and Secondary data findings are summarized in full by the table below.[39]

Priority Area	Secondary Data	Community Survey	Focus Group 1	Focus Group 2	Focus Group 3	Focus Group 4	Focus Group 5
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	✓	✓	✓	✓			✓

[39] 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 | EMERGENCY ROOM AND INPATIENT DATA