



Sentara Albemarle Medical Center

COMMUNITY HEALTH NEEDS ASSESSMENT 2022

We Improve Health Every Day

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EXECUTIVE SUMMARY

As an organization, we are driven to improve health every day. And while we meet that mission through the healthcare services we provide to our patients, we understand that our greater purpose must include building trust and listening to the voices of individuals in the community to better understand the specific needs of those we serve. In 2021, SAMC began conducting the community health needs assessment of the area that we serve. The assessment, completed in 2022, provides us with a picture of the health status of the residents in our communities and provides us with information about health and health-related problems that influence health status.

Sentara conducts comprehensive community health needs assessments for each of our inpatient hospitals and outpatient surgical centers across Virginia and Eastern North Carolina. The following comprehensive report goes into more detail about the assessment to include an introduction, social and economic factors, demographic and background information, health determinant data and incorporates extensive community survey and outreach. The community health needs assessment incorporates information from a variety of primary and secondary quantitative data sources and more importantly helps us to understand the disparities that exist in vulnerable populations.

We are grateful to the residents, faith-based organizations, businesses, clinics, nonprofits, government agencies, and others who devoted expertise and significant time helping us better understand these priorities identified and know we must be committed to working together to identify solutions. We further understand that the implementation strategies will be most successful by working with residents of the community so that we move closer to achieving health equity for all.

While there are many important community health problems, we are focusing our efforts on the key issues listed below. Considering factors such as size and scope of the health problem, the severity and intensity of the problem, the feasibility and effectiveness of possible interventions, health disparities associated with the need, the importance the community places on addressing the need, and consistency with our mission “to improve health every day,” we have identified these priority health problems in our area, all of which have been exacerbated by the COVID-19 pandemic:

Health Priorities for 2022-2025

- Behavioral Health
- Chronic Disease
- Social Determinants of Health

“We partner with our community in Northeastern North Carolina to support actions that improve health every day.”

Glen Needham,
Director of Surgical Services

OVERVIEW

We Improve Health Every Day

Sentara celebrates more than 130 years in pursuit of its mission “We improve health every day.” Named to IBM Watson Health’s “Top 15 Health Systems” in 2018 and 2021, Sentara is an integrated, not-for-profit health system of 12 hospitals in Virginia and Northeastern North Carolina, including a Level I trauma center, the Sentara Heart Hospital, the Sentara Brock Cancer Center, two orthopedic hospitals, and the Sentara Neurosciences Institute. The Sentara family also includes a medical group, Nightingale Regional Air Ambulance, home care and hospice, ambulatory outpatient campuses, advanced imaging and diagnostic centers, a clinically integrated network, the Sentara College of Health Sciences and Sentara Health Plans, comprised of Optima Health Plan and Virginia Premier Health Plan, serving 950,000 members in Virginia, and North Carolina. Sentara has more than 30,000 employees dedicated to improving health in the communities we serve, and was recognized as one of “America’s Best Employers” by Forbes in 2018. Sentara is strategically focused on clinical quality and safety, innovation and creating an extraordinary health care experience for our patients and members.

SENTARA AT A GLANCE

- Headquartered in Norfolk, Virginia
- 130-year not-for-profit history
- 12 hospitals
- One medical group
- 3,800+ provider medical staff
- 30,000+ team members
- Health plans (Optima Health and Virginia Premier)
- Outpatient campuses
- Urgent care centers
- Advanced Imaging Centers
- Home health and hospice
- Rehabilitation and therapy centers
- Nightingale air ambulance

INTRODUCTION

Sentara Albemarle Medical Center

Sentara cares about advancing health equity and ensuring that all members of our communities have access to the resources they need to live their healthiest and most fulfilling lives. We are guided by our understanding that overall health is greatly influenced by where we are born and where we live, learn, work, play, worship, and age. In fact, these environmental factors account for nearly 80 percent of health outcomes, while direct healthcare accounts for only 20 percent.

SENTARA CARES

Our purpose calls us to address these issues on the ground every day where people live—not just when they are under our care. Only then can we help to eliminate health disparities and promote equitable access to nutritious foods, education, safe and affordable housing, and stable, rewarding job opportunities. We know such disparities cannot be solved solely in the exam room, and they cannot be solved solely by Sentara. Through our partnerships we continue to make both immediate impact and lasting change for our communities.

COVID-19 RESPONSE

As we embarked on this Community Health Needs Assessment (CHNA) process, the country and North Carolina were focused on mitigating the COVID-19 pandemic. The impacts of COVID-19 are likely to affect community health and well-being beyond what is currently captured in available data. Sentara seeks to engage the community as directly as possible in prioritizing needs.

Sentara is committed to always keeping our patients, employees, and community members safe. We have developed extensive safety protocols and guidelines to ensure the patient/member receives the care they need at any Sentara facility. Sentara cares about improving the health and well-being of all individuals and the quality of life enjoyed by everyone in our community. Sentara responds to the needs of our communities, particularly individuals who are disproportionately impacted by the economic and social effects of COVID-19. We are committed to supporting, strengthening, and serving our communities.

OUR PROCESS

Sentara developed a primary statistical data profile integrating claims and encounter data to assess the population's use of emergency services, preventive services, chronic health conditions, and cultural and linguistic needs. A secondary statistical data profile was created using advanced data sources to assess population characteristics such as household statistics, age, educational level, economic measures, mortality rates, incidences rates, and racial and ethnic composition because social factors are important determinants of health. Our assessment includes a review of risk factors including obesity and smoking and other health indicators such as infant mortality and preventable hospitalizations.

"We approach every community and every partner with our ears and our hearts open. We're not here to provide prescriptive solutions. We're here to support and amplify the work of our partners in every way we can to improve more lives and inspire more hope for the future."

Sherry Norquist, MSN, RN-ACM
Director of Community
Engagement & Impact

Research components for this Assessment included data from the following sources:

- Alzheimer’s Association
- Centers for Disease Control and Prevention
- Centers for Medicare & Medicaid Services
- National Cancer Institute
- United States Census Bureau
 - American Community Survey 2019: 5-Year Estimates Data Profiles
- Virginia Department of Health
- Virginia Health Information, AHRQ Quality Indicators
- Virginia Department of Medical Assistance Services
- County Health Rankings 2021
- Weldon Cooper Center for Population Studies, UVA
- Sentara Claims Data
- Community Health Needs Assessment Survey
- Community Focus Groups

This assessment was carried out in partnership with Albemarle Regional Health Services (ARHS), Health ENC, and Conduent Healthy Communities Institute in the area that we serve, including Camden, Currituck, Gates, Pasquotank, and Perquimans Counties. County level data and community findings for each county were provided by Conduent Healthy Communities Institute, with The Duke Endowment as the fiscal sponsor. During the assessment process, these data and findings were explored to better understand the unique sociodemographic and health issues relevant to each county.

Our assessment includes a review of population characteristics such as age, educational level, and racial and ethnic composition because social factors are important determinants of health. The assessment also looks at risk factors such as obesity and smoking and at health indicators such as infant mortality and cancer incidence rates. Community input is important, so the assessment also includes results from a community survey, as well as findings from focus groups with community members addressing health issues and barriers to achieving good health.

OUR NEXT STEPS

SAMC works with several community partners to address health needs. Information on available resources is available from sources including Sentara.com and arhs-nc.org. By using this information, together, we will work to improve the health of the communities we serve.

Your input is important to us so that we can incorporate your feedback into our assessments. You may use our online feedback form available on the Sentara.com website.



Sentara Albemarle Medical Center (SAMC) serves residents of North Carolina in Camden, Currituck, Pasquotank and Perquimans counties. About 89% of the hospital's inpatients reside in these counties. Additionally, SAMC serves patients in Gates, Chowan, and Dare counties in the adjacent area.



The Sentara Albemarle Medical Center (SAMC) Service Area | Source: Truven/Market Expert

COMMUNITY DESCRIPTION

GEOGRAPHY

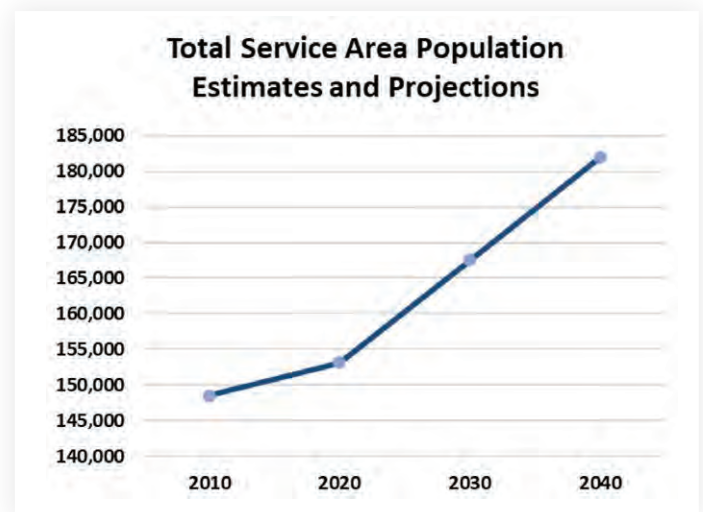
The combined population of the SAMC service area numbers over 150,000 people. The service area of SAMC is comprised of Dare, Currituck, Camden, Pasquotank, Perquimans, Chowan, and Gates Counties in northeastern North Carolina. The entire service area is rural, with population centers throughout, but is well traveled as its coastal communities draw vacationers in the summer.

POPULATION CHANGE

Currituck County is predicted to experience the highest rate of population growth between now and 2030, with the county exceeding 25% growth. Gates, Perquimans, and Chowan Counties are projected to decrease by 2030 with a population decrease of more than 15% in Gates County. However, the population in our service area overall has increased by 3% since 2010 and is projected to continue to increase through 2030 and into 2040.

Source: US Census Bureau QuickFacts Table 2020
<https://www.census.gov/quickfacts/fact/table/VA,US/PST045219>

Office of State Budget and Management; [County/State Population Projections](#)



COMMUNITY SPECIFIC DEMOGRAPHICS (APPENDIX A)

County of Camden has 10,355 residents with 7.4% of this population living in poverty and 12% uninsured. Of the population in this county, 21.8% are ages 0-19, 19.5% are ages 20-34, 41.4% are ages 35-64, 15.4% are ages 65-84, 1.8% are aged 85 and over. 95.3% of the residents primarily speak English, while 4.7% speak another language in the home. The ethnicity for this population includes 82.7% White, 11.5% African American, 3.0% Hispanic, and 2.1% Asian.

County of Chowan has 13,708 residents with 17.3% of this population living in poverty and 12% uninsured. Of the population in this county, 22.0% are ages 0-19, 17.5% are ages 20-34, 35.6% are ages 35-64, 21.5% are ages 65-84, and 3.5% are aged 85 and over. 97.8% of the residents primarily speak English, while 2.2% speak another language in the home. The ethnicity for this population includes 62.6% White, 34.4% African American, 2.4% Hispanic, and 0.6% American Indian.

County of Currituck has 28,100 residents with 9.6% of this population living in poverty and 13% uninsured. Of the population in this county, 22.1% are ages 0-19, 17.9% are ages 20-34, 42.8% are ages 35-64, 15.9% are ages 65-84, and 1.3% are aged 85 and over. 95.8% of the residents primarily speak English, while 4.2% speak another language in the home. The ethnicity for this population includes 90.5% White, 5.8% African American, 4.4% Hispanic, and 0.8% Asian.

County of Dare has 36,915 residents with 8.8% of this population living in poverty and 15% uninsured. Of the population in this county, 19.9% are ages 0-19, 15.9% are ages 20-34, 41.8% are ages 35-64, 20.3% are ages 65-84, and 2.0% are aged 85 and over. 91.8% of the residents primarily speak English, while 8.2% speak another language in the home. The ethnicity for this population includes 93.8% White, 2.8% African American, 7.7% Hispanic, and 0.9% Asian.

County of Gates has 10,478 residents with 13.2% of this population living in poverty and 11% uninsured. Of the population in this county, 20.8% are ages 0-19, 20.3% are ages 20-34, 38.2% are ages 35-64, 18.2% are ages 65-84, and 2.5% are aged 85 and over. 98.3% of the residents primarily speak English, while 1.8% speak another language in the home. The ethnicity for this population includes 65.3% White, 31.2% African American, 2.4% Hispanic, and 0.6% American Indian.

County of Pasquotank has 40,568 residents with 14.0% of this population living in poverty and 12% uninsured. Of the population in this county, 26.7% are ages 0-19, 20.8% are ages 20-34, 36.4% are ages 35-64, 14.4% are ages 65-84, and 1.8% are aged 85 and over. 94.1% of the residents primarily speak English, while 5.9% speak another language in the home. The ethnicity for this population includes 58.5% White, 36.6% African American, 5.8% Hispanic, and 1.6% Asian.

County of Perquimans has 13,005 residents with 14.4% of this population living in poverty and 14% uninsured. Of the population in this county, 19.9% are ages 0-19, 16.7% are ages 20-34, 35.4% are ages 35-64, 24.6% are ages 65-84, and 3.4% are aged 85 and over. 98.3% of the residents primarily speak English, while 1.7% speak another language in the home. The ethnicity for this population includes 74.6% White, 22.7% African American, 2.7% Hispanic, 0.5% Asian.

POPULATION HIGHLIGHTS

The combined population of the SAMC service area is approximately 153,129 people, with 50% of the population concentrated in Dare and Pasquotank Counties.

Age and Sex

There is a slightly higher percentage of residents aged 65+ than the state living in the SAMC service area. Perquimans, Chowan, Dare and Gates Counties have the highest number of the senior population with 18,344 residents aged 65+. Though Chowan County has the highest percentage of the very elderly, aged 85+, Dare County has the highest number with 758 residents aged 85+.

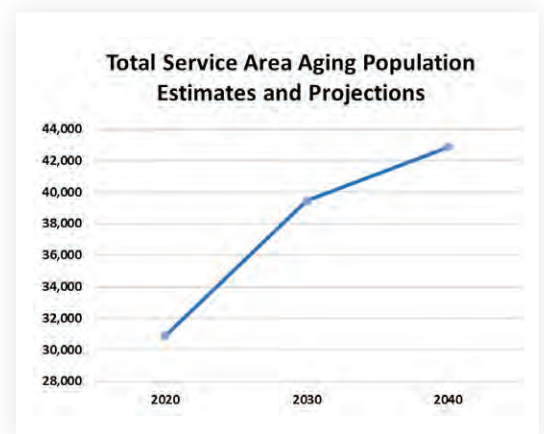
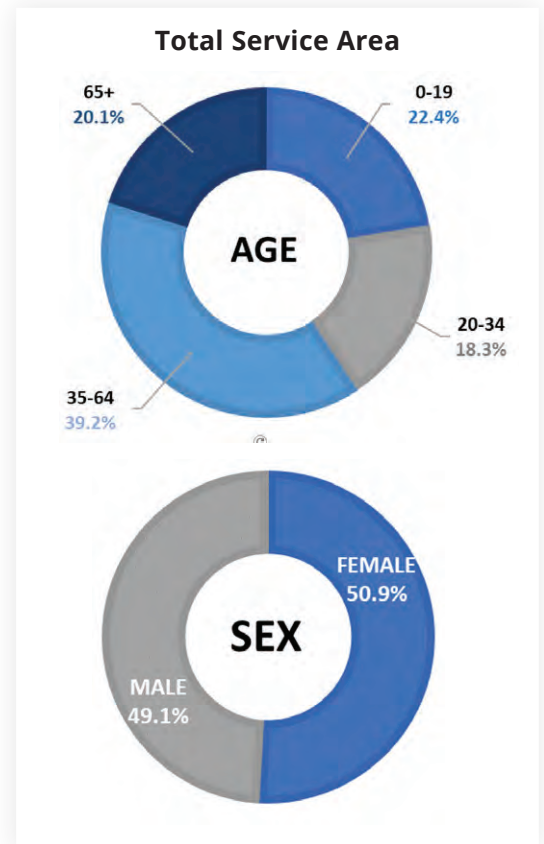
Of community members living in the SAMC service area, most residents are between the age of 35-64. The service area has a higher percentage of residents in this age range than the state as a whole. The service area also has a lower percentage of young adults than the state, possibly reflecting the national trend for young adults to leave rural places in search of jobs.

Pasquotank County has the highest number of children under the age of 18, with 10,666 residents in this age group. This county also had the highest birth rate in 2019 at 11.3 births per 1000. Similar to state demographics, the service area has a slightly higher percentage of residents born as female.

Aging Population

It is well understood that older individuals are likely to need more healthcare services, and a variety of services targeted toward that population. The population of the SAMC service area trends older than the state average with continued growth into 2040. Research shows that the highest utilization of medical services is among elderly populations. Within this service area, the percentage of the very elderly is highest in Chowan and Gates Counties.

In 2020, 20.1% of the population living in the service area was age 65+, higher than the state percentage of 16.9%. The population of older adults in the service area is projected to be 23.6% by 2030. The graph above shows the number of older adults increasing in the next 20 years, leading to a higher number of aging adults in the service area. Pasquotank is projected to have an increase in the very elderly population of 5% by 2040. The 2040 overall population of residents aged 85+ in Pasquotank County is projected to be at 6.7%, representing 2,795 residents. This percentage is higher than the state at 3.6%.



Source: US Census Bureau QuickFacts Table 2020 <https://www.census.gov/quickfacts/fact/table/VA,US/PST045219>, Office of State Budget and Management; [County/State Population Projections](#); for Gates Count, NC; NCDHHS Division of Public Health, [North Carolina State Center for Health Statistics](#)

Other Demographic Features

The overall rate of the population who are veterans is higher than North Carolina with 9.6% veterans living in the service area. The median home value in the service area is less than that of North Carolina as a whole, and the median income and per capita income reflect that lower cost of living. There is a lower percentage of owner-occupied homes in Pasquotank County as compared to the state. In the rural communities, fewer households have computers and internet access, impacting remote learning opportunities and outcomes during the COVID-19 pandemic. A higher percentage of the population, including children, working age adults, and the elderly, has a disability than in the state as a whole. Pasquotank, Perquimans, Chowan, and Gates Counties each have a higher percentage of persons living in poverty, with the SAMC service area having lower percentage of residents with college degrees when compared to the state.

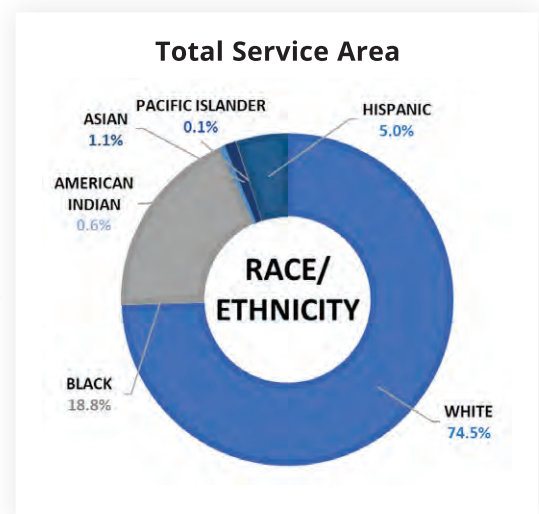


COMMUNITY DIVERSITY PROFILE

Ethnicity

The population of the service area is overwhelmingly white, with just under 20% Black, and very small representation of other races. Dare and Perquimans Counties are the more diverse communities, with 9.3% and 8.1% combined non-white or Black respectively, followed by Currituck County at 6.0%. Camden and Pasquotank each have a small Asian population. The population of North Carolina as a whole and is less diverse than the metropolitan areas of the state such as Charlotte and the Raleigh-Durham corridor. The western counties of Pasquotank, Chowan and Gates have the highest concentration of Black residents.

The service area is home to a small Hispanic population at 5.1%, which is less than the state. Dare County is home to the largest percentage of Hispanic community with 7.7% of the population, followed by Pasquotank County with 5.8% and Currituck County with 4.4%. No other community in the service area has more than 4% Hispanic population, roughly half the percentage of the state's Hispanic population at 9.8%. Dare County has the highest concentration of Hispanic residents, at 7.7%. In the SAMC service area 93.8% of residents are non-Hispanic, while that number is 89.7% in the state as a whole.



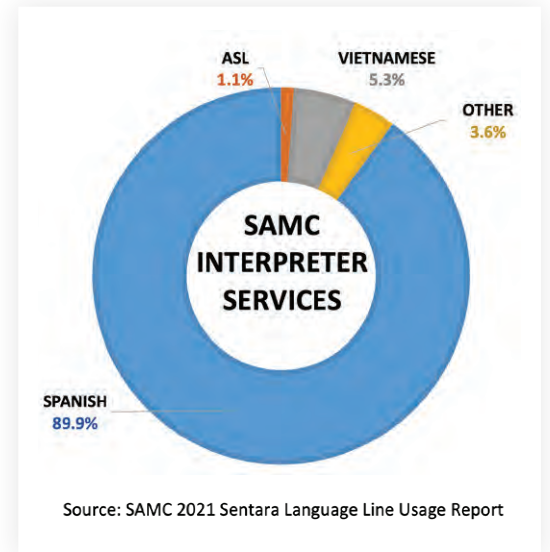
Preferred Language

English is the primary language spoken in the service area. As of 2020, 94.9% of the population being served identified as English speaking.

Cultural and Linguistic Needs

It is important to note that non-English-speaking populations are vulnerable. Non-English-speaking populations are disproportionately represented among the lowest socioeconomic status populations, have poorer health and more disabilities, are often linguistically and culturally isolated, and live with less income and lower education than do their English-speaking counterparts. The language barrier makes it difficult for this population to understand, interpret, and implement preventive recommendations.

Departments within Sentara and SAMC continue to work closely with one another to ensure all communication to members is in the preferred language, offering interpreter services when needed. Sentara provides its patients and their families with qualified interpreters for languages other than English and for American Sign Language (ASL). In 2021, SAMC had 2,075 requests for interpreter services. The highest percentage of interpreter services were for Spanish speaking individuals.



Health Equity

The CHNA analyzes differences by race and ethnicity, language needs, age, gender, income, and housing. A dedicated focus on health equity allows a better understanding of community needs. Equity continues to be an issue and is rapidly evolving in health care systems as global health crises and ongoing disparities impact local communities. Health equity work highlights awareness, education and access to care or lack thereof, across racial, ethnic, gender, and geographic groups, and how implicit or unconscious bias among providers affects treatment decisions and outcomes. Where people live can influence educational and occupational opportunities impacting financial stability, which affects well-being and quality of life.

The Health Equity team analyzes economic status, access to health care, transportation, and other social determinants of health to identify potential causes of health inequity in our communities. Partnerships are formed with community leaders and organizations, physicians, and all Sentara facilities to achieve more equitable health care.

Priorities include measurement of disparities and related contributing factors and development and implementation of an action plan to reduce disparities in care. This includes screening and diagnosis rates for chronic health issues such as hypertension and diabetes, and prevalence of prostate and breast cancers in communities of color, utilization rates for treatments and development of initiatives for communities of color, immigrants, patients who are unsheltered and other marginalized groups, including LGBTQ+ persons and individuals with disabilities.

Inequities occur when barriers prevent people from reaching their full potential.

Health disparities are the differences in health status between groups of people.

Health equity provides everyone the opportunity to attain their highest level of health.

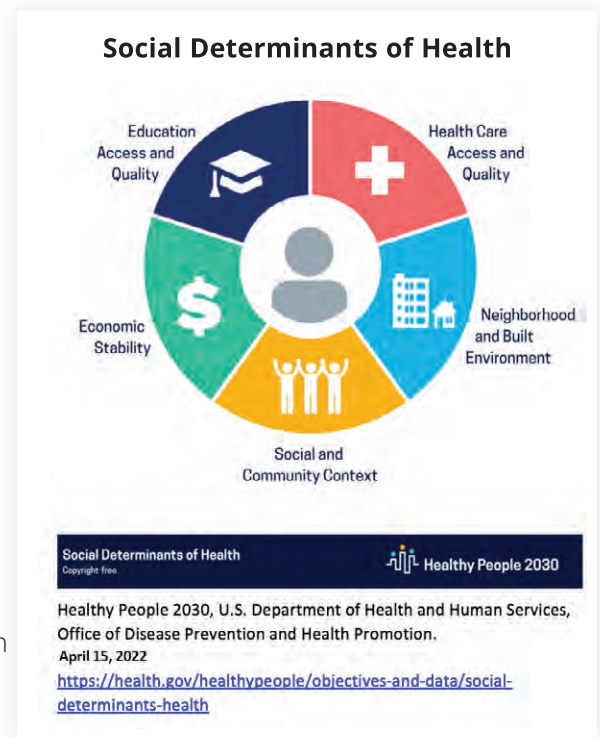
Source: American Public Health Association (APHA), [apha.org/topics-and-issues/health-equity](https://www.apha.org/topics-and-issues/health-equity)

SOCIAL DETERMINANTS OF HEALTH

Sentara seeks to transform the lives of our neighbors by focusing on the root factors that affect our health beyond the clinical care we receive.

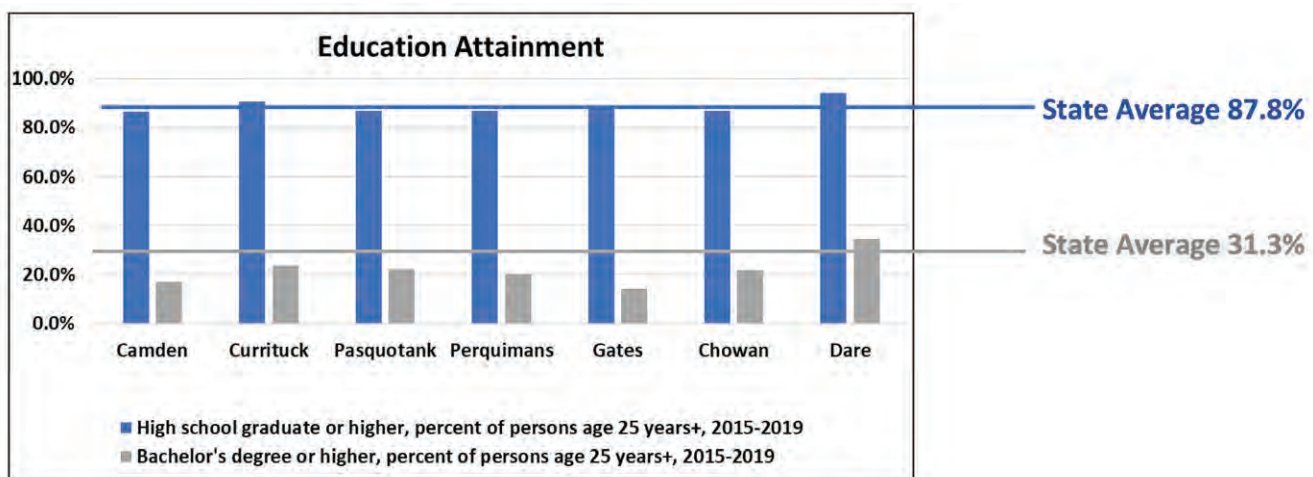
Sentara works to:

- Fill the unprecedented need for behavioral health practitioners in the field and ensure greater access to behavioral health services for children, families, and adults.
- Secure consistent, equitable access to nutritious food — every day and in times of emergency need.
- Support targeted training and development programs for higher-paying skilled careers.
- Develop more robust emergency and scattered housing solutions in our communities.
- Dismantle barriers to accessing health and human services in traditionally underserved populations.



Education

Education is the basis for stable employment, and financial stability is the foundation for a sustainable household, which provides for the health needs of family members. The SAMC service area overall has a lower percentage of individuals aged 25+ with a high school diploma when compared to the state, although in Dare County the percentage of residents with a high school diploma and advanced or professional degrees is slightly above the state average.



Source: US Census Bureau QuickFacts Table 2020 <https://www.census.gov/quickfacts/fact/table/VA,US/PST045219>

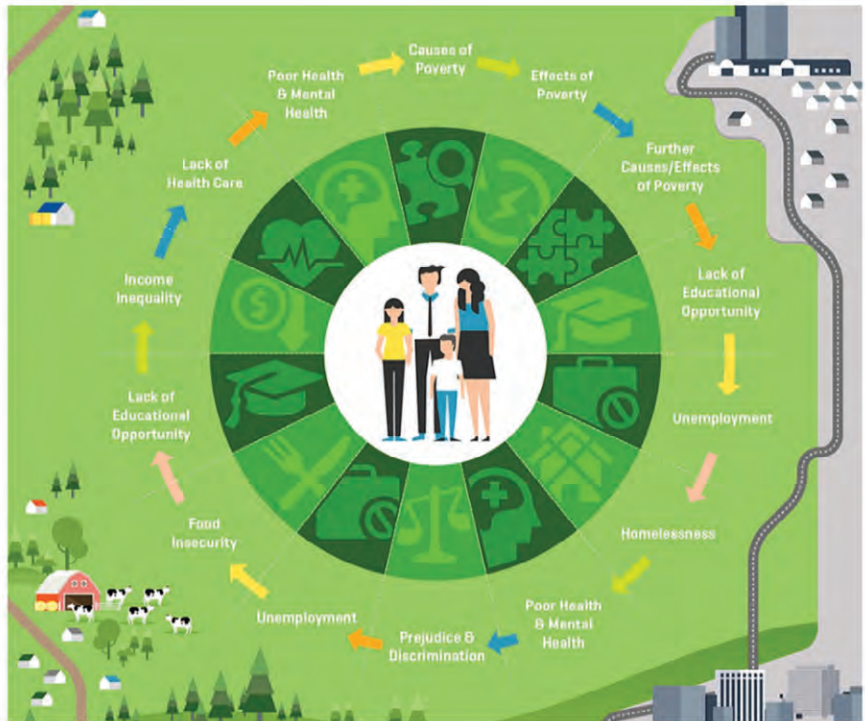
The Cycle of Poverty

Poverty continues because it reproduces existing patterns of circumstances, opportunities, and effects.

The causes of poverty lead to consequences that make it more likely that the individual – or their offspring – will experience poverty in the future.

Generational poverty is a vicious cycle in which each generation is unable to escape poverty because of a lack of resources to put toward the effort.

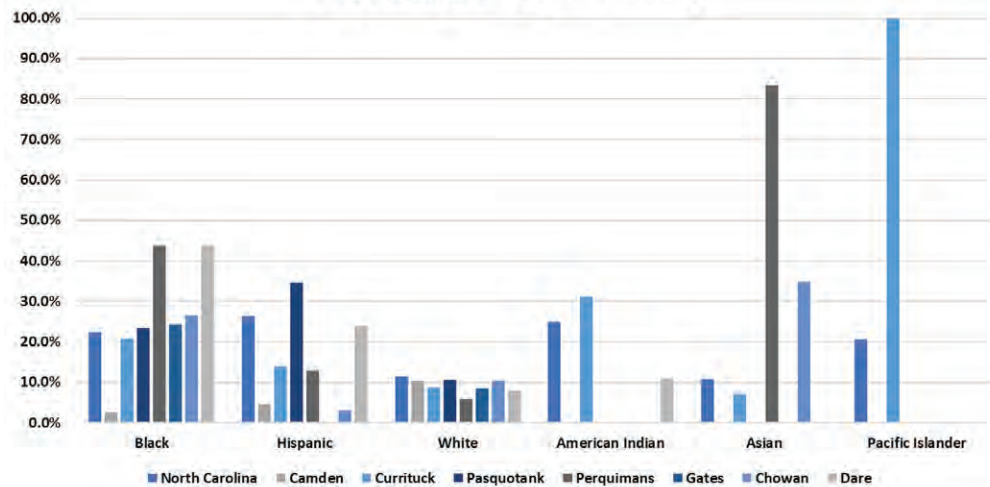
[Rural Poverty vs Urban Poverty | Social Workers | AU Online \(aurora.edu\)](#)



Poverty

While simple poverty rates tell us something about the residents of the service area, when inserting race as a factor, we see the racial disparities that constrain residents of the service area in their ability to support and sustain healthy, functioning households for themselves and their children. As with Virginia as a whole, African Americans, Hispanics, and American Indians are more likely to live in poverty compared to white Americans.

2019 Poverty Status by Race/Ethnicity

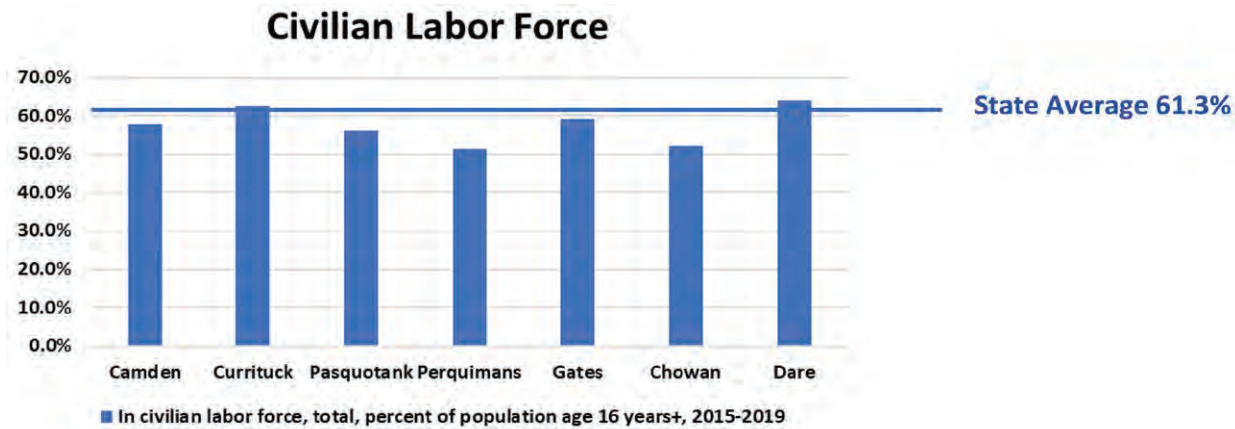


Camden County residents are less likely to live in poverty than other area residents. The poverty rate for Gates County is closer to the rate for North Carolina as a whole. Pasquotank, Perquimans, Gates, and Chowan County residents are more likely to live in poverty than other counties by a significant margin, and an even bigger contrast with the state of North Carolina at 12.9%.

Source: US Census Bureau QuickFacts Table 2020 <https://www.census.gov/quickfacts/fact/table/VA,US/PST045219>

Employment

Central to a healthy community is an economy that supports individuals in their efforts to live well. Dare and Currituck Counties are slightly above the state average of residents in the civilian labor force. Of those in the civilian labor force, only in Dare County is the percentage of female residents higher than in the state as a whole.



Medicaid & FAMIS, Medicare, Medicare & Medicaid Enrollment

Out of the 2,706,086 members newly enrolled in Medicaid in the state of North Carolina, 1,684,630 are enrolled in the Standard Plan Mandatory. The total service area has a slightly lower percentage of members on Medicaid as compared to North Carolina overall with the highest percentage living in Chowan and Pasquotank Counties. The number of residents living in the service area receiving Medicaid services continues to increase each year, with an increase of 17.9% since January 2020.

In 2019, there were 18,191 community members age 65+ living in the service area receiving Medicare and 1,593 receiving both Medicare and Medicaid. As the aging population grows in this service area, so will the need for these services.

2020 Medicaid Enrollment/ 2019 Medicare and Medicaid 65+									
	North Carolina	Total Service Area	Camden	Currituck	Pasquotank	Perquimans	Gates	Chowan	Dare
Medicaid Enrollment (Below 138% FPL)	2,224,714	29,088	1,299	3,235	10,074	2,949	2,190	3,729	5,612
Medicaid Percentage of Population	21.3%	18.9%	12.5%	11.5%	24.8%	22.6%	20.9%	27.2%	15.2%
65+ Medicare	1,059,139	18,191	1,071	2,347	3,548	2,198	1,596	2,184	5247
65+ Medicare Percentage	66.7%	63.3%	58.0%	57.3%	56.7%	61.0%	70.7%	67.8%	70.4%
65+ Medicare/Medicaid	107,071	1,593	71	122	712	159	72	215	242
65+ Medicare/Medicaid Percentage	6.7%	5.5%	3.8%	3.0%	11.4%	4.4%	3.2%	6.7%	3.2%
Persons in Poverty	12.9%	11.7%	7.4%	9.6%	14.0%	14.4%	13.2%	17.3%	8.8%

Source: US Census Bureau QuickFacts Table 2020 <https://www.census.gov/quickfacts/fact/table/VA,US/PST045219>
 North Carolina Medicaid: [Medicaid and Health Choice Enrollment Reports](#)
 Centers for Medicare & Medicaid Services 2019; [Mapping Medicare Data](#)

COMMUNITY INSIGHT

Having an active, supportive, and engaged community is essential to creating the conditions that lead to improved health. The community insight component of this CHNA consisted of two methodologies: a Community Survey and a series of more in-depth Community Focus Groups partnered with the hospital, health department, and community partners.

COMMUNITY HEALTH NEEDS ASSESSMENT SURVEY

The community survey was conducted by Health ENC and analyzed by Conduent Health Communities Institute. The 57-question online and paper survey was made available in both English and Spanish. SurveyMonkey was the tool used to distribute and collect responses for the community survey. Completed paper surveys were entered into the SurveyMonkey tool. The community survey was distributed across Health ENC's entire survey area from April 18, 2021–June 30, 2021.



Health Data Sources

Community Survey Findings

Survey Methodology/Design

Health ENC Steering Committee structured the primary data collection for participating health departments and hospitals. The primary data used in the community health needs assessments included a community survey that could be distributed online or by a paper submission. The Health ENC Steering Committee did not encourage focus groups for the 2021-2022 community health needs assessments because of the COVID-19 pandemic. However, some counties were able to hold focus group discussions safely despite significant challenges in collecting enough survey responses to accurately represent their community's population.

The Health ENC Steering Committee developed a primary survey to gather information from community members about their health concerns. A workgroup of Steering Committee members convened and examined survey questions utilized in the 2021-2022 community health needs assessment. The workgroup also examined readily available data from secondary sources. The workgroup focused on developing survey questions to obtain data from community members which was not readily available in secondary sources or where secondary data was weak. In addition, workgroup members worked to combine questions where appropriate and to be more inclusive in the wording of response choices. The Steering Committee reviewed the sample survey questions and made a few additional revisions to assure the survey only contained questions for which community input was needed to guide health priority selection and strategic action planning.

Once the survey questions were finalized, the Steering Committee decided on targets for each county. Because the survey was a convenience sample being conducted during a the COVID-19 pandemic, each county was asked to complete a minimum of 300 surveys with representation from as many community groups as possible to assure sufficient sampling to represent the full community. The target of 300 surveys per county was identified through previous work with data analysis vendors who examined each county's population and confirmed this number should provide an accurate reflection of the total county's population, if responses reflected the population demographics appropriately.

The surveys were made available to the public from April 1–June 30, 2021. Surveys were made available in paper format and electronically using the REDcap software. Health ENC partners received feedback throughout the survey period. The survey asked participants for demographic details such as age, gender, race/ethnicity, and language to assist in promoting the surveys to various community members within their counties, as well as their opinions about important health concerns in the community for adults and for children:

- Quality of life, health behaviors, health perceptions
- Preventative services, exercise, and access to care

At the completion of the survey period, 16,661 English surveys and 502 Spanish surveys were completed. Most counties did not have an equally distributed response to surveys to represent their entire county's population.

Total Survey Respondents			
Service Area	English Survey	Spanish Survey	Total
All Health ENC Counties	16,661	502	17,163
Camden County	309	0	309
Chowan County	396	0	396
Currituck County	425	0	425
Dare County	1,029	5	1,034
Gates County	343	2	345
Pasquotank County	398	5	403
Perquimans County	398	4	402

As a result, survey responses should be considered as only one component of information utilized to select health priorities. The most underserved populations' feedback is not adequately reflected in most surveys. Health ENC partners were encouraged to include key stakeholders serving these populations in the health priority selection process to ensure many of their clients' health needs were considered.

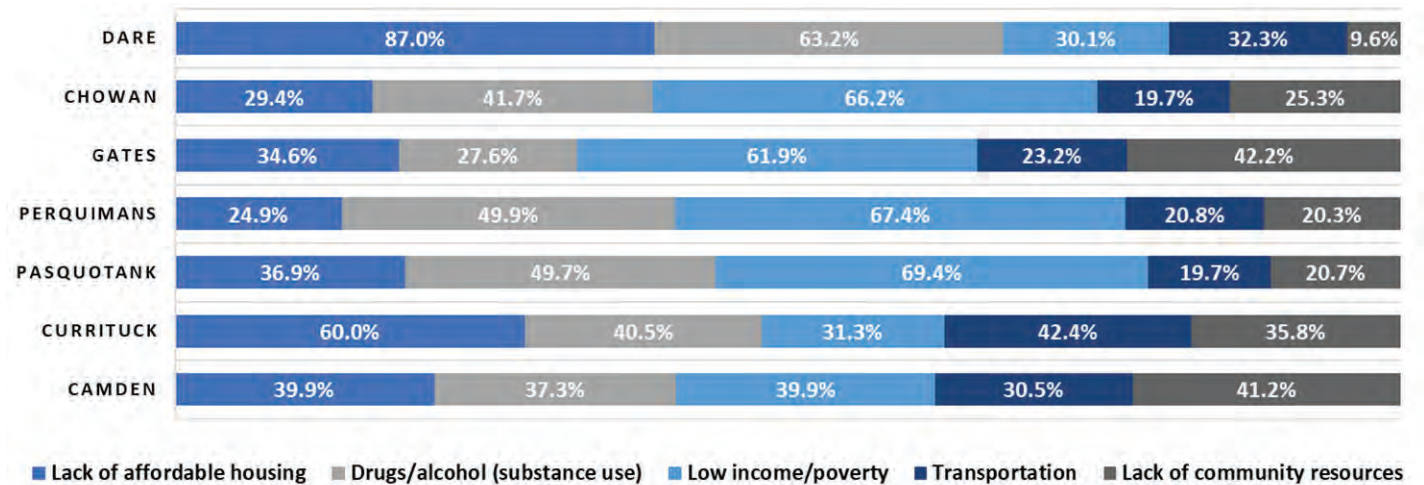
Survey Results

For this CHNA report, we will focus on the respondents living in the SAMC service area and the below questions asked in the survey. Survey respondents were asked to review a list of common community health issues and select up to three items. The below tables show the top five answers for each question among respondents.

- What are the top issues which have the highest impact on quality of life?
- What services need improvement in the community to help families be healthy?
- What are the top health behaviors needing more information shared?
- What prevented access to healthcare services?

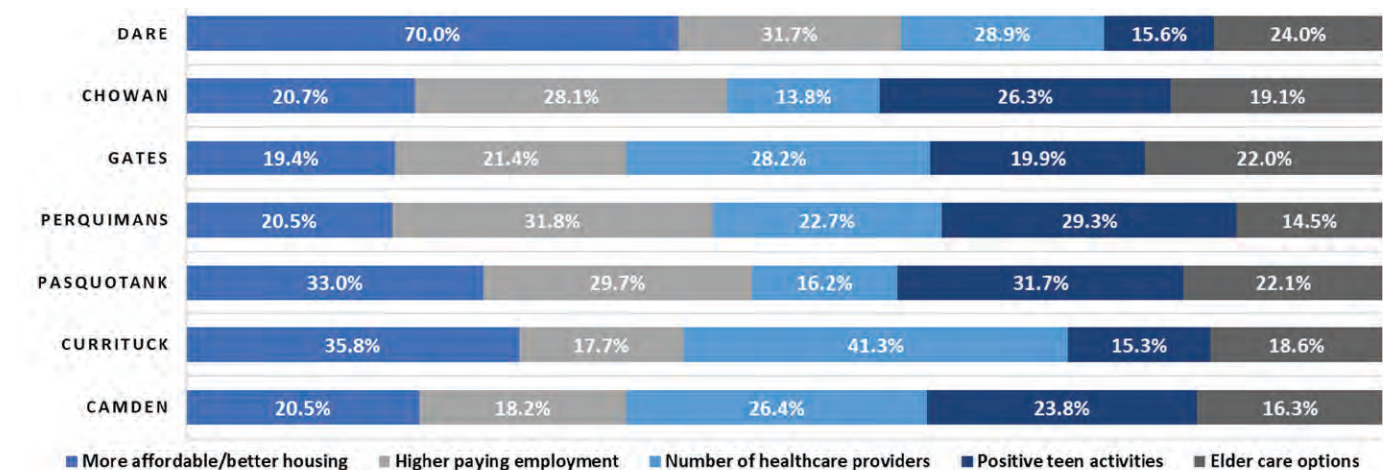
1. What are the top issues which have the highest impact on quality of life?

According to survey respondents living in the SAMC service area, the top three issues with the greatest impact on quality of life are lack of affordable housing; alcohol and substance use; and low-income and populations living in poverty. Other top concerns included transportation and lack of community resources.



2. What services need improvement in the community to help families be healthy?

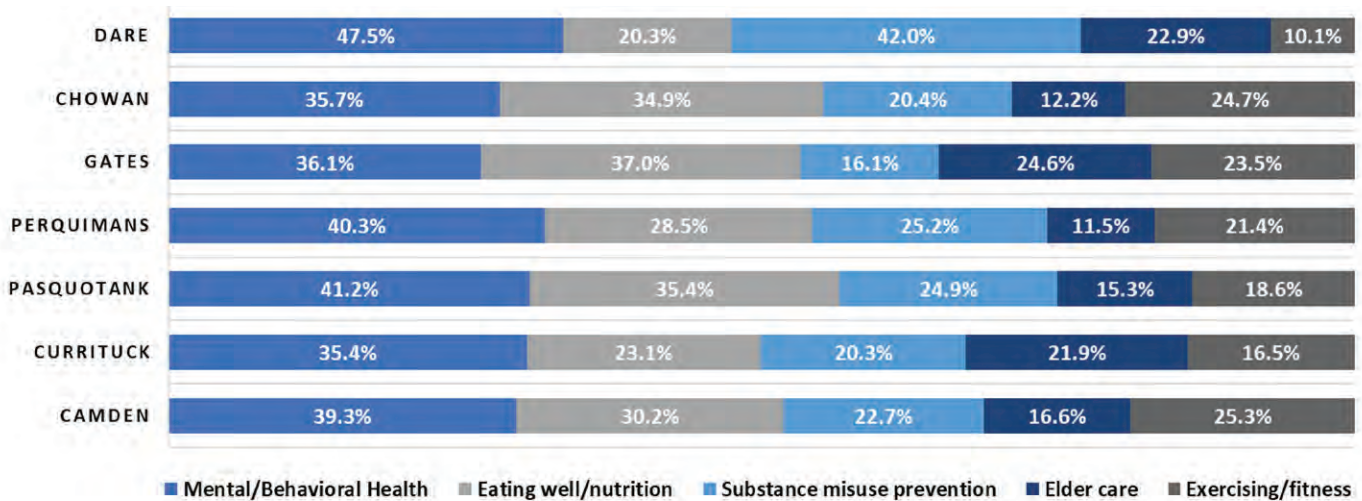
Survey respondents living in the SAMC service area most frequently chose more affordable and better housing, higher paying employment, and number of healthcare providers as the top three services needing improvement. Other concerns included positive teen activities and elder care options.



3. What are the top health behaviors needing more information shared?

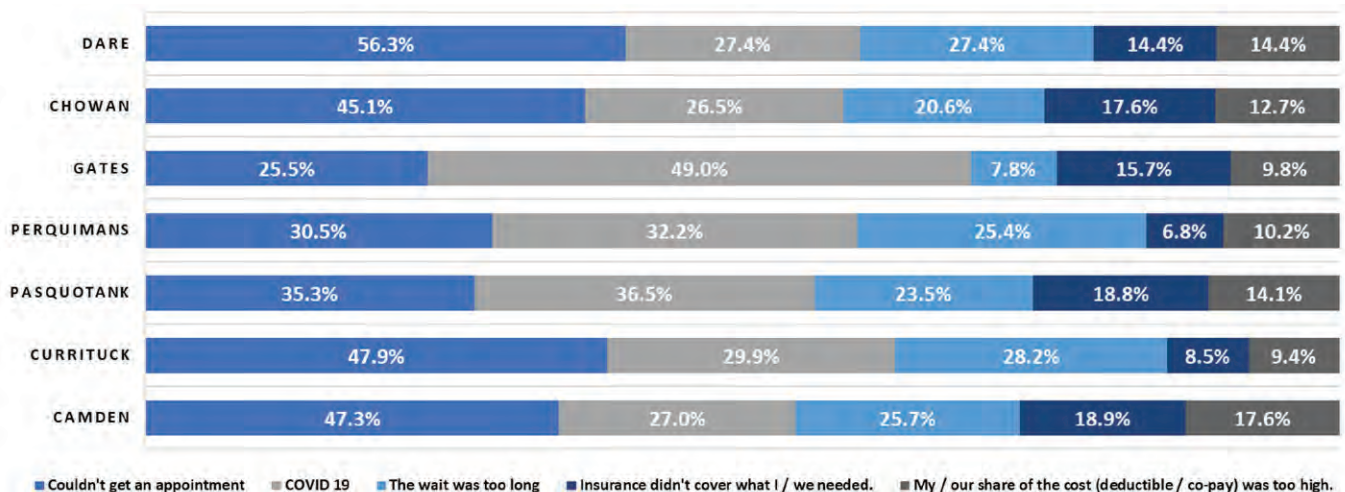
The most frequent responses to question three were mental and behavioral health, prevention of substance misuse, and elder care. Other top concerns included eating well and nutrition, and exercising and fitness.

Behavioral health was the top health concern identified in all Sentara facility service areas. Perhaps this is resulting from the COVID-19 pandemic and related isolation, as well as substance use.



4. What prevented access to healthcare services?

When thinking about the barriers communities face to access healthcare services, respondents most frequently chose that they could not get an appointment, COVID-19-created barriers and too long a wait. Additional concerns included insurance not covering the service and healthcare cost was too high.



Demographics of Survey Respondents

Of the 3,265 respondents for the SAMC service area, 3,209 answered the demographic questions. The 3,209 respondents ranged between the ages of 15 to over 85. Altogether, the respondents were 77.6% white Americans, 14.3% African American, 1.8% Hispanic, 0.4% Asian, 0.4% Native American, and 0.1% Pacific Islander, with 3.6% preferring not to answer. The respondents were 68.4% female, 29.7% male and 0.2% nonbinary, with 1.7% preferring not to answer. The primary language of respondents was English, with 1.2% stating another primary language. The languages chosen by respondents included Spanish, Chinese and other. Respondents varied as to education completed, with 15% having completed high school, 17.5% having some college experience, 15.4% receiving an associate's degree, 25.6% receiving a bachelor's degree and 22.7% holding a graduate degree.



Survey Results Review

While this assessment brings focus to an array of healthcare issues, the monumental issue in 2020-2022 has been the COVID-19 pandemic, caused by the novel coronavirus that entered the country at the end of 2019. Community member respondents were asked about their concerns regarding vaccines and whether they received the vaccine. Out of 3,255 respondents 82.5% stated they were vaccinated. Of 508 respondents who responded they were not vaccinated, 57.9% chose personal preference and 16.3% chose needed more information or had questions.

Access to primary care doctors, dentists and specialists were also cited as a concern by respondents. Across the survey area, these access concerns were due to the inability to get an appointment, which may be related to the COVID-19 pandemic, and the third choice chosen as a barrier to accessing care. When asked how COVID-19 has impacted the respondent, the top three responses were stress and anxiety, social isolation, and mental/behavioral health.

In the 2019 CHNA, survey respondents also chose mental health/behavioral health and/or substance use as a major concern community members needed more information about. The pandemic has been shown to have created additional mental health strain on the US population, adding to an existing problem. Sentara has worked during the last several years to address this issue, which is near the top of every CHNA need list over time and across the country.

Key Findings by County and Topic

Highlights of the survey for each county are included below for key health areas.

CAMDEN COUNTY

Access to Health Services

Out of the 309 survey respondents, more than half of community survey respondents agree they have good healthcare in the county (53.1%). For those who reported having difficulties accessing health care services, the most common types of care with access issues were provided by a primary care doctor (47.9%), dentist (38.0%) or specialist (38.0%). The top reasons participants reported not being able to get the health care they needed included that they couldn't get an appointment (47.3%), COVID-19 (27.0%), or the wait was too long (25.7%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (30.2%), exercising/fitness (25.3%) and managing weight (23.1%) as the top health behaviors people in the county about which residents need more information. Over half of the respondents (62.8%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 23% of community members do not engage in any physical activity or exercise during the week. Of respondents who exercise, 21.1% state they do so two times a week, 32.5% exercise three times a week and 38.7% are physically active four or more times a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (46.4%), not having enough time (31.3%), and they do not like to exercise (17.9%).

Mental Health and Substance Use

When asked what issues have the highest impact on quality of life in this county, 37.3% chose drugs/alcohol and substance use. Respondents chose mental/behavioral health (39.3%) as the top behavior about which more information is needed. Respondents also stated COVID-19 impacted their mental/behavioral health (25.2%) stress and anxiety (62.1%). Substance misuse prevention and suicide prevention (22.7% and 17.9% respectively) were also cited as health behaviors about which the community needs more information. Of respondents, 19.6% reported currently using tobacco products. Of those reporting tobacco product use, 38.0% would go to a doctor if they wanted to quit and 22.0% stated that they did not want to quit.

CHOWAN COUNTY

Access to Health Services

Out of the 396 survey respondents, more than half of survey respondents agree they have good healthcare in the county (68.9%). For those who reported difficulties accessing health care services, the most difficult providers to access were dentists (48.8%), primary care doctors (43.0%), or eye care/Optometrists/Ophthalmologists (27.9%). The top reasons participants reported not being able to get the health care they needed included that they couldn't get an appointment (45.1%), COVID-19 (26.5%), or the wait was too long (20.6%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (34.9%), exercising/fitness (24.7%) and managing weight (22.4%) as top health behaviors about which people in the county need more information. Over half

of the respondents (62.2%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 26% of community members do not engage in any physical activity or exercise during the week. Of the respondents who exercise, 24.7% state they do so two times a week, 28.4% exercise three times a week and 40.3% are physically active four times or more a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (39.1%), not having enough time (37.3%), and they do not like to exercise (17.6%).

Mental Health and Substance Use

When asked which top issues have the highest impact on quality of life in this county, 41.7% chose drugs/ alcohol and substance use. Respondents chose mental/behavioral health (35.7%) as the top behavior about which more information is needed. Respondents also cited COVID-19 impacting their mental/behavioral health (24.6%) and stress and anxiety (56.4%) as concerns. Substance misuse prevention was selected by 20.4% of respondents and 8.9% of respondents selected suicide prevention as health behaviors about which the community needs more information. Of respondents, 26.6% reported currently using tobacco products. Of those who reported tobacco product use, 33.3% did not know where to seek help to quit, 25.5% would go to a doctor if they wanted to quit, and 23.5% stated that they did not want to quit.

CURRITUCK COUNTY

Access to Health Services

Out of the 425 survey respondents, less than half of community survey respondents agree they have good healthcare in the county (39.1%). For those who reported having difficulties accessing health care services, the most common types of providers they had trouble getting services from were primary care doctors (51.3%), dentists (34.5%), or specialists (26.5%). The top reasons participants reported not being able to get the health care they needed included that they couldn't get an appointment (47.9%), COVID-19 (29.9%), or the wait was too long (28.2%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (23.1%), exercising/fitness (16.5%) and managing weight (14.9%) as being top health behaviors about which people in the county need more information. Over half of the respondents (68.8%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 26% of community members do not engage in any physical activity or exercise during the week. Of respondents who exercise, 16.2% state they do so two times a week- 30.7% exercise three times a week, and 50.7% are physically active four or more times a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (39.6%), not having enough time (32.5%), and they do not like to exercise (20.8%).

Mental Health and Substance Use

When asked which top issues have the highest impact on quality of life in this county, 40.5% chose drugs/ alcohol and substance use. Respondents chose mental/behavioral health (35.4%) as the top behavior about which more information is needed. Respondents also cited COVID-19 impacting their mental/behavioral health (24.4%) and stress and anxiety (60.7%) as issues. Substance misuse prevention was selected by 20.3% of respondents and 13.2% of respondents selected suicide prevention as the health behavior about which the community needs more information. Of the respondents, 17.2% reported currently using tobacco

products. Of those who reported tobacco product use, 31.1% would go to a doctor if they wanted to quit and 31.1% stated that they did not want to quit.

DARE COUNTY

Access to Health Services

Out of the 1,029 survey respondents, more than half of community survey respondents agree they have good healthcare in the county (52.6%). For those who reported difficulties accessing health care services, the most commonly reported providers they had difficulty accessing were primary care doctors (54.2%), specialist (37.3%), or dentists (27.3%). The top reasons participants reported not being able to get the health care they needed included that they couldn't get an appointment (56.3%), COVID-19 (27.4%), or the wait was too long (27.4%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (20.3%), exercising/fitness (10.1%) and managing weight (10.8%) as being health behaviors about which people in the county need more information. Over half the respondents (72.6%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 22% of community members do not engage in any physical activity or exercise during the week. Of respondents who exercise, 15.2% state they do so two times a week, 29.7% exercise three times a week and 52.2% are physically active four times or more a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (48.7%), not having enough time (33.9%), and they do not like to exercise (17.6%).

Mental Health and Substance Use

When asked which top issues have the highest impact on quality of life in this county, 63.2% chose drugs/ alcohol and substance use. Respondents chose mental/behavioral health (47.5%) as the top behavior about which more information is needed. Respondents also identified COVID-19 impacting their mental/behavioral health (32.5%) and stress and anxiety (63.1%). Substance misuse prevention was selected by 42.0% of respondents and 10.4% of respondents selected suicide prevention as the health behavior about which the community needs more information. Of respondents, 12.1% reported currently using tobacco products. Of those who reported tobacco product use, 28.8% do not know where to go to get help with quitting, 20.5% would go to a doctor if they wanted to quit and 28.8% stated that they did not want to quit.

GATES COUNTY

Access to Health Services

Of the 343 survey respondents, fewer than half agree they have good healthcare in the county (33.4%). For those who reported have difficulties accessing health care services, the most providers most commonly cited as having access issues were primary care doctors (63.3%), dentists (38.8%), or eye care/Optometrists/Ophthalmologists (14.3%). The top reasons participants reported not being able to get the health care they needed included COVID-19 (49.0%), that they couldn't get an appointment (25.5%), or insurance didn't cover the service (15.7%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (37.0%), exercising/fitness (23.5%) and managing

weight (16.7%) as being health behaviors about which people in the county need more information. Over half of the respondents (50.9%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 36% of community members do not engage in any physical activity or exercise during the week. Of the respondents who exercise, 23.1% state they do so two times a week, 32.9% exercise three times a week and 38.2% are physically active four or more times a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (34.1%), not having enough time (28.9%), or they are physically disabled (15.2%).

Mental Health and Substance Use

When asked to identify the top issues having the highest impact on quality of life in this county, 27.6% chose alcohol and substance use. Respondents chose mental/behavioral health (36.1%) as the top behavior about which more information is needed. Respondents also cited COVID-19 impacting their mental/behavioral health (26.1%) and stress and anxiety (50.7%). Substance misuse prevention was selected by 16.1% of respondents and 8.2% selected suicide prevention as health behaviors about which the community needs more information. Of respondents, 18.5% reported currently using tobacco products. Of those who reported tobacco product use, 33.3% would go to a doctor if they wanted to quit and 26.7% stated that they did not want to quit.

PASQUOTANK COUNTY

Access to Health Services

Of the 398 survey respondents, more than half of community survey respondents agree they have good healthcare in the county (68.8%). For those who reported having difficulties accessing health care services, the most providers most commonly reported as difficult to access were dentists (57.1%), primary care doctors (36.5%), or specialists (30.2%). The top reasons participants reported not being able to get the health care they needed included COVID-19 (36.5%), that they couldn't get an appointment (35.3%), or the wait was too long (23.5%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (35.4%), exercising/fitness (18.6%) and managing weight (23.7%) as being health behaviors about which people in the county need more information. Over half of the respondents (61.4%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 29% of community members do not engage in any physical activity or exercise during the week. Of respondents who exercise, 19.8% state they do so two times a week, 41.6% exercise three times a week and 32.1% are physically active four or more times a week. Among individuals who do not exercise, respondents reported primary reasons as being too tired to exercise (44.6%), not having enough time (25.8%), or they do not like to exercise (17.6%).

Mental Health and Substance Use

When asked what the top issues have the highest impact on quality of life in this county, 49.7% chose drugs/alcohol and substance use. Respondents chose mental/behavioral health (41.2%) as the top behavior about which more information is needed. Respondents also cited COVID-19 impacting their mental/behavioral health (28.7%) and stress and anxiety (60.4%). substance misuse prevention was selected by 24.9% of respondents and 12.0% of respondents selected suicide prevention as the health behavior about

which the community needs more information. Of the respondents, 15.2% reported currently using tobacco products. Of those who reported tobacco product use, 28.3% would go to a doctor if they wanted to quit and 20.8% stated that they did not want to quit.

PERQUIMANS COUNTY

Access to Health Services

Of the 365 survey respondents, more than half of community survey respondents agree they have good healthcare in the county (59.4%). For those who reported having difficulties accessing health care services, the service providers most commonly reported as difficult to access were primary care doctors (43.1%), dentist (33.3%), and eye care/Optometrists/Ophthalmologists (23.5%). The top reasons participants reported not being able to get the necessary health care they needed included COVID-19 (32.2%), that they couldn't get an appointment (30.5%), or the wait was too long (25.4%).

Exercise, Nutrition and Weight

Community survey respondents chose eating well/nutrition (28.5%), exercising/fitness (21.4%) and managing weight (17.3%) as health behaviors about which people in the county need more information. Over half of the respondents (60.5%) engage in physical activity or exercise that lasts 30 minutes or more. Data from the community show that 29% of community members do not engage in any physical activity or exercise during the week. Of the respondents who exercise, 20.9% state they do so two times a week, 35.9% exercise three times a week and 40.0% are physically active four or more times a week. Among individuals that do not exercise, respondents reported primary reasons as being too tired to exercise (42.9%), not having enough time (26.0%), or they do not like to exercise (15.8%).

Mental Health and Substance Use

When asked which of the top issues have the highest impact on quality of life in this county, 49.9% chose alcohol and substance use. Respondents chose mental/behavioral health (40.3%) as the top behavior about which more information is needed. Respondents also reported COVID-19 impacting their mental/behavioral health (24.4%) and stress and anxiety (58.6%). Substance misuse prevention was selected by 25.2% of respondents and 11.0% of respondents selected suicide prevention as the health behavior the about which the community needs more information. Of the respondents, 24.3% reported currently using tobacco products. Of those who reported tobacco product use, 35.1% would go to a doctor if they wanted to quit and 29.7% stated that they did not want to quit.



COMMUNITY FOCUS GROUPS

In addition to the online surveys for community insight, SAMC carried out a series of more in-depth Community Focus Groups to obtain greater insight from diverse stakeholders and community members.

Methodology

Focus groups were promoted electronically and by word of mouth, to hospital patients and visitors, existing hospital and community groups, and partner organizations. Input was also sought from other populations in the community, including representatives of underserved communities and consumers of services. The questions below were utilized at each focus group session.

- What are the most serious health problems in our community?
- When considering Social Determinants of Health, which of the following resonate with you as a key social determinant that we should be focusing on?
- Who has the health problems? What groups of individuals are most impacted by these problems?
- What keeps people from being healthy? In other words, what are the barriers to achieving good health?
- What is being done in our community to improve health and to reduce the barriers? What resources exist in the community?
- How has the COVID-19 pandemic worsened the health issues in our community?
- What more can be done to improve health, particularly for those individuals and groups most in need?

Focus Groups

1. 4/14/2022 virtual session: Spouses of SAMC Employees
2. 5/3/2022 virtual session: SAMC Family and Friends
3. 5/9/22 in person session: Non-profit volunteers

Demographics

The 20 participants ranged between the ages of 18 to over 60. Altogether, the focus group participants were comprised of 60.0% white, 35.0% African American, and 5% Hispanic. The groups were 70.0% female and 30.0% male.

Methodology

The Health ENC Steering Committee did not encourage focus groups for the 2021-2022 community health needs assessments because of the COVID-19 pandemic. However, SAMC was able to hold three small focus group discussions virtually. In addition to a facilitator, additional staff took detailed notes to capture the information shared.

Results

Mental health, chronic diseases and healthy lifestyle concerns were brought up in the focus groups. For a detailed summary of the focus group sessions see Appendix D. A brief summary of key findings for each topic is presented below.

TOPIC	Key Findings (List of Responses)
<p>What are the most serious health problems in our community?</p>	<ul style="list-style-type: none"> • Addiction • Cancer • COPD • Diabetes • Heart Disease • Heart Health • Mental Health • Obesity • Renal
<p>When considering Social Determinants of Health, which of the following resonate with you as a key social determinant that we should be focusing on?</p>	<ul style="list-style-type: none"> • Education • Employment • Health Behaviors • Housing • High levels of unemployment • Poverty • Social Support • Transportation
<p>Who has the health problems? What groups of individuals are most impacted by these problems?</p>	<ul style="list-style-type: none"> • African American • Elderly • Low income • Youth • 60–70-year-olds

TOPIC	Key Findings (List of Responses)
<p>What keeps people from being healthy? What are the barriers they face with taking care of their health and accessing care?</p>	<ul style="list-style-type: none"> • Communication • COVID-19 • Lack of direction • Lack of knowledge • Lack of insurance • Motivation • Transportation
<p>What is being done in our community to improve health and reduce barriers? What resources exist in the community?</p>	<ul style="list-style-type: none"> • Community Care Clinic • Extension offices • Food Banks • Free clinics • Meals on Wheels • Mobile Crisis • Mobile Units • Public Transportation • SAMC • Salvation Army • Senior Center • YMCA

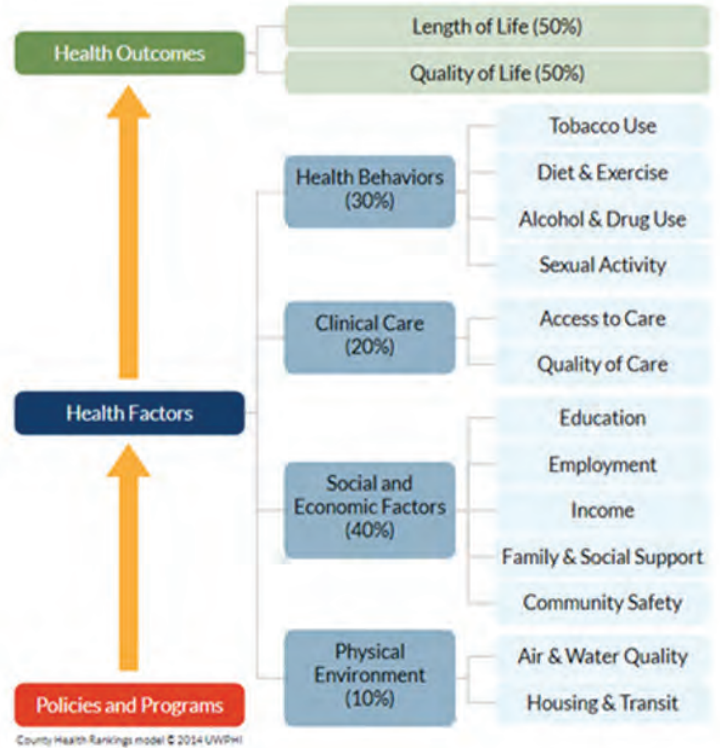
TOPIC	Key Findings (List of Responses)
<p>How has the COVID-19 pandemic worsened the health issues in our community?</p>	<ul style="list-style-type: none"> • Access to food • Access to resources • Isolation • Gyms and park closures • Medication access • Mental Health • Post COVID symptoms • Postponing preventative care services • Postponing elective services • Restricting visitors • Shelters • Weight gain
<p>What more can be done to improve health, particularly for those individuals and groups most in need? Are there specific opportunities or actions our community could take?</p>	<ul style="list-style-type: none"> • Billboards • Community health fairs • Educate community • Focus interventions • Health behaviors • Health fairs • Insurance options • Involve churches • Mobile access to care • Promote healthy lifestyles • Resources • Screening events • Social media

HEALTH STATUS INDICATORS

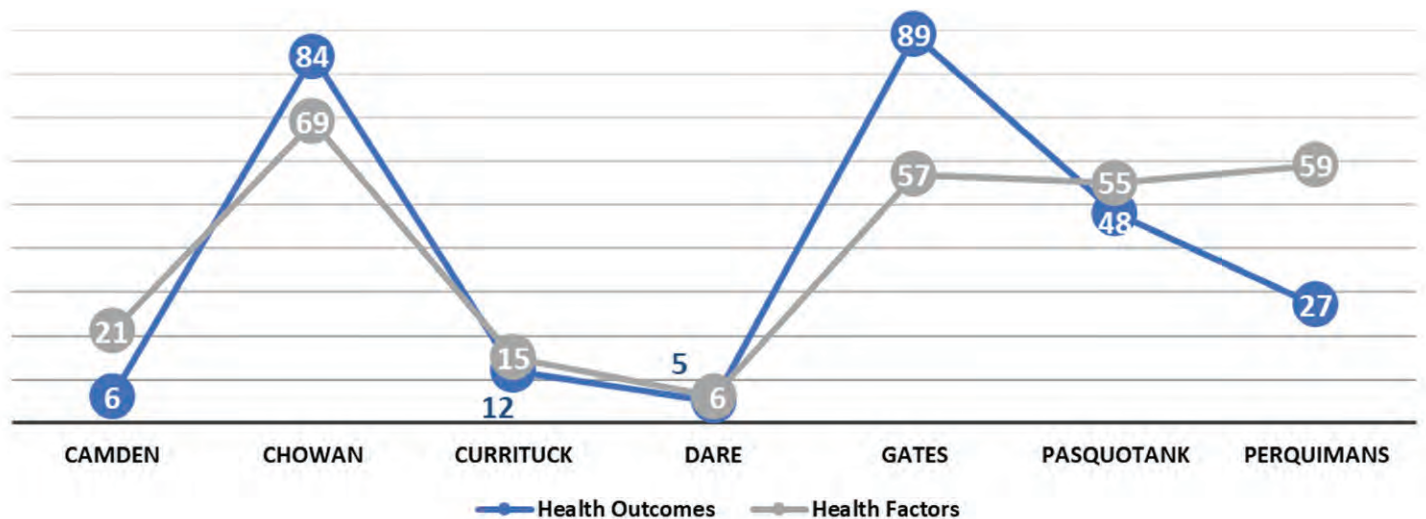
County Health Rankings

Health Indicators were viewed on County Health Rankings. The County Health Rankings are based on a model of community health that emphasizes the many factors influencing how long and how well we live. The Rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors). Explore the Model to learn more about these measures and how they fit together to provide a profile of community health.

- There are many factors that influence how well and how long people live.
- The County Health Rankings model (right) is a population health model that uses data from different sources to help identify areas of concerns and strengths to help communities achieve health and wellness.
- The Rankings provides county-level data on health behavior, clinical care, social and economic and physical environment factors.



The graph below shows the Health Outcomes Rank and Health Factors for the communities in the SAMC service area. The Counties of Chowan, Gates and Pasquotank rank worse out of 133 Virginia counties (Appendix B).



Source: County Health Rankings 2021, [Rankings and Documentation](#)

Health Status Indicators

Below are key health status indicators for the counties representing the SAMC service area. Here indicators can be explored for a comparison to other nearby localities, change over time, race/ethnicity, and gender, where available.

The key health status indicators are organized in the following data profiles:

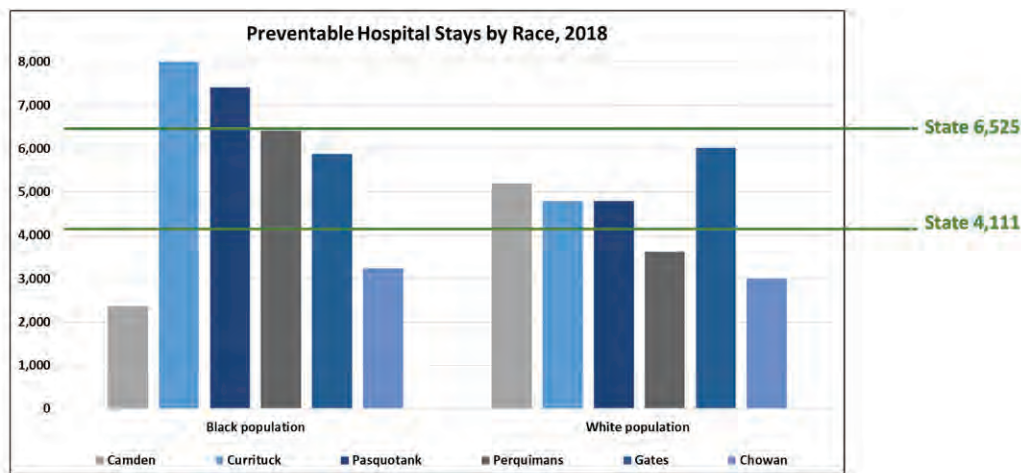
- A. Access to Health Services Profile
- B. Mortality Profile
- C. Risk Factor Profile
- D. COVID-19 Profile
- E. Maternal and Infant Health Profile
- F. Older and Aging Adults
- G. Cancer Profile
- H. Diabetes Profile
- I. Behavioral Health Profile
- J. Community Violence and Gun Violence Profile



Source: County Health Rankings 2021, [Rankings and Documentation](#)

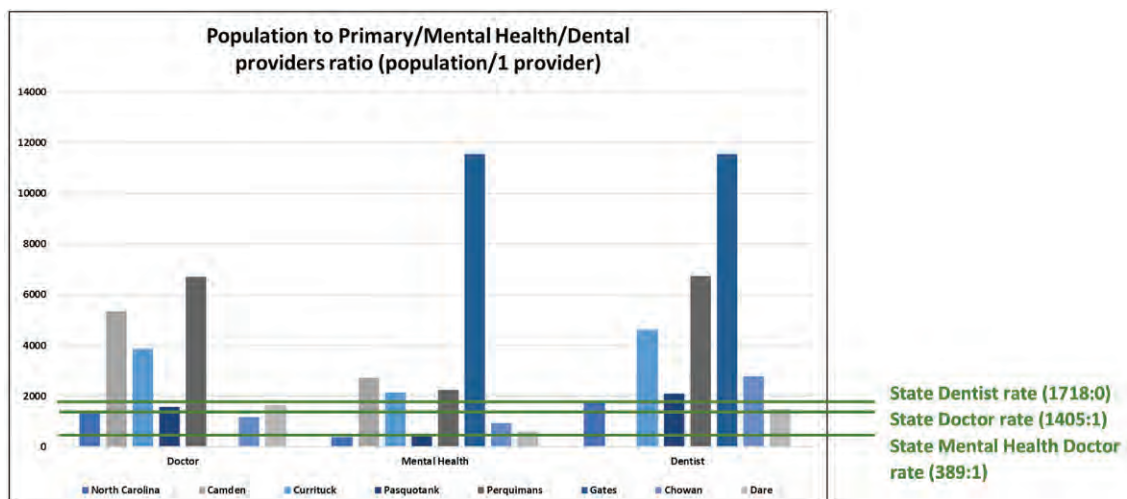
ACCESS TO HEALTH SERVICES PROFILE

Access to quality and affordable health care is important to an individual’s health. Health insurance and local care resources can ensure access to care. If outpatient care in a community is poor, then people may be more likely to overuse the hospital as their main source of care, resulting in unnecessary hospital stays. Typically, areas with higher densities of primary care have lower rates of hospitalizations for these ambulatory care sensitive conditions. Increasing access to primary care is a key solution to reduce these unnecessary and costly hospital stays and improve the health of the community.



Provider Ratio

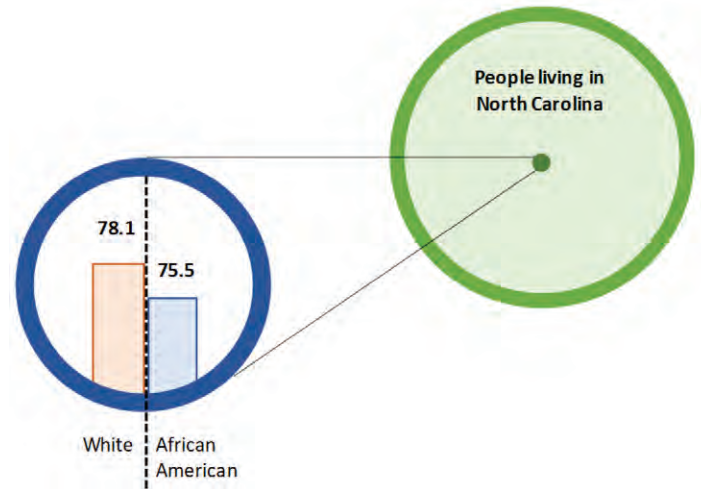
The rates of primary and dental care providers were examined in the SAMC service area. The rates for population to primary care providers were higher than the state in most counties in the service area. The population ratio for dental care providers was also higher than the state in most of the service area. Having fewer providers suggests concerns with access to health care, including oral health, throughout the service area. The percentage of people with health insurance was in line with the state rate in all counties except Perquimans County and Dare County. The preventable hospital stay rate among Medicare beneficiaries was highest in Gates County, followed by Pasquotank County, Camden County, and Currituck County, suggesting that there may be challenges with access to primary and outpatient care. Data also show disparities among African American beneficiaries.



Source: County Health Rankings 2021, [Rankings and Documentation](#) *primary care provider ratio unavailable for Gates County, dental care provider ratio unavailable for Camden County, **rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees.

MORTALITY PROFILE

The life expectancy for a person living in the state of North Carolina is 78.1. The counties of Camden, Currituck, Perquimans, and Dare have a slightly higher life expectancy than the state (80.2, 78.5, 78.9, 79.0, respectively). It is important to note there is a racial/ethnicity disparity related to life expectancy with African American likely to live one to three years less than white Americans in the service area. (Appendix B).



Leading causes of death in the SAMC service area were examined. In 2019, heart disease, cancer and respiratory disease were the top three causes of death in the service area. Heart disease was the top cause of death for all counties, with the exception of Dare County which had cancer as the leading cause of death, followed by heart disease. Perquimans County, Pasquotank County, Gates County, Dare County and Chowan County had crude death rates for cancer that were higher than the rate for North Carolina overall. Crude death rates for heart disease were higher than for North Carolina as a whole in the entire SAMC service area.

Leading Causes of Death, Age-adjusted per 100,000 Population, 2019								
		Heart Disease	Cancer	Respiratory Diseases	Unintentional Injuries	Stroke	Alzheimer's Disease	Diabetes
Camden County	Prevalence Rate	230.05	174.84	18.4	73.62	36.81	36.81	36.81
	Numerator (count)	25	19	2	8	4	4	4
Chowan County	Prevalence Rate	351.43	301.23	86.06	50.2	100.41	107.58	64.55
	Numerator (count)	49	42	12	7	14	15	9
Currituck County	Prevalence Rate	226.92	169.29	25.21	28.82	21.61	18.01	1.03
	Numerator (count)	63	47	7	8	6	5	3
Dare County	Prevalence Rate	189.14	205.36	62.15	64.85	56.74	27.02	21.62
	Numerator (count)	70	75	23	24	21	10	8
Gates County	Prevalence Rate	268.12	216.23	69.19	60.54	77.84	69.19	60.54
	Numerator (count)	31	25	8	7	9	8	7
Pasquotank County	Prevalence Rate	273.7	216.0	60.3	52.7	42.7	47.7	42.7
	Numerator (count)	109	86	24	21	17	19	17
Perquimans County	Prevalence Rate	274.83	329.82	44.57	44.57	59.42	37.14	22.28
	Numerator (count)	37	44	6	6	8	5	3
North Carolina	Prevalence Rate	187.43	190.34	51.59	44.65	49.61	42.98	29.81
	Numerator (count)	19,661	19,963	5,411	4,683	5,203	4,508	3,127

Prevalence Rate

400 0

Source: North Carolina State Center for Health Statistics, 2019 Vital Statistics Public Use Data Files

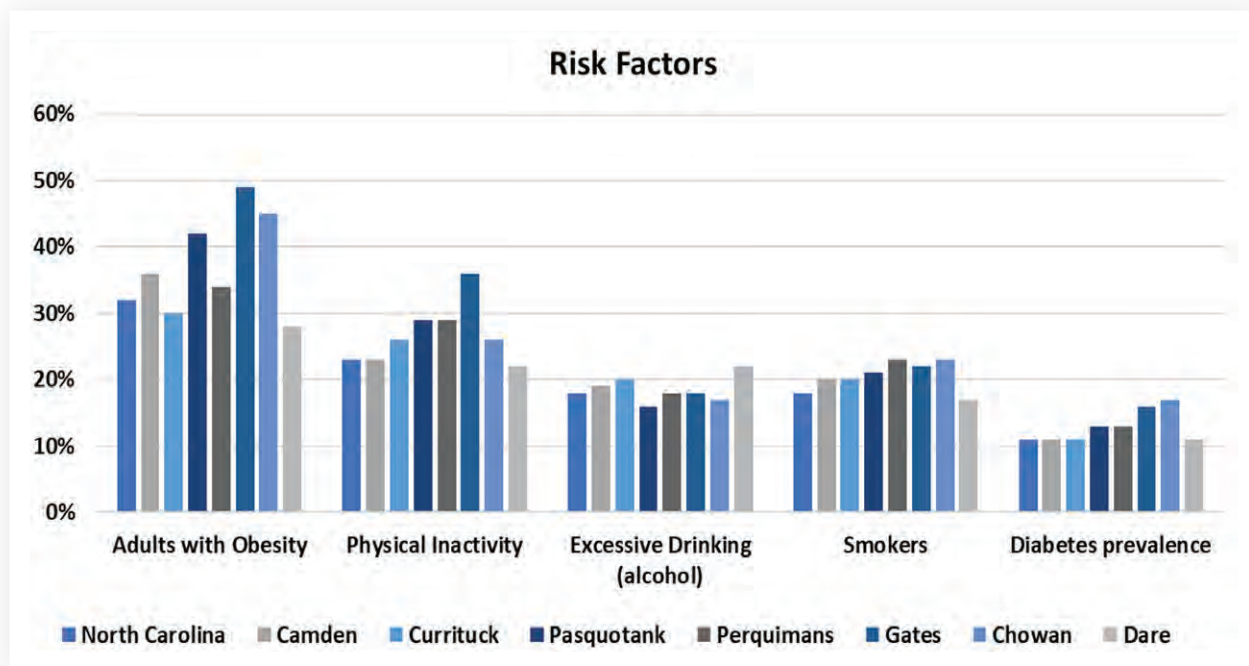
HOSPITALIZATIONS PROFILE

SAMC examined age-adjusted hospitalization rates for the service area. For the top conditions seen in hospitals, unintentional injury was the highest rated in the service area, with Pasquotank County followed by Dare County having the highest rates. Unintentional injuries included falls, self-inflicted poisoning, unintentional poisoning, and motor vehicle incidents. Unintentional injuries are among leading causes of death in children, adolescents, and adults under 45 years of age (Herron, 2019). Developing interventions to prevent unintentional injuries is key to keeping the community safe in their homes, places of work and within the community they live (Healthy People 2030).

RISK FACTOR PROFILE

Smoking percentages and frequent mental health distress were higher for all localities in the SAMC service area compared to North Carolina values. The percentage of adults who drink excessively was higher in Dare County, Currituck County and Camden County as compared to the state of North Carolina, but lower in the other localities.

Obesity and physical inactivity percentages were also higher in all localities, with the exception of Dare and Currituck Counties. Food insecurity was highest in Pasquotank County, Perquimans County and Chowan County, all of which were slightly higher than the state percentage of 14%. Limited access to healthy food was highest in Pasquotank County at 12% and Chowan County at 11%, both of which are much higher than the state of 6% (Appendix B). Obesity is a concern because it increases the risk of diabetes, heart disease, stroke, and some cancers. It is also associated with poor mental health outcomes and reduced quality of life.

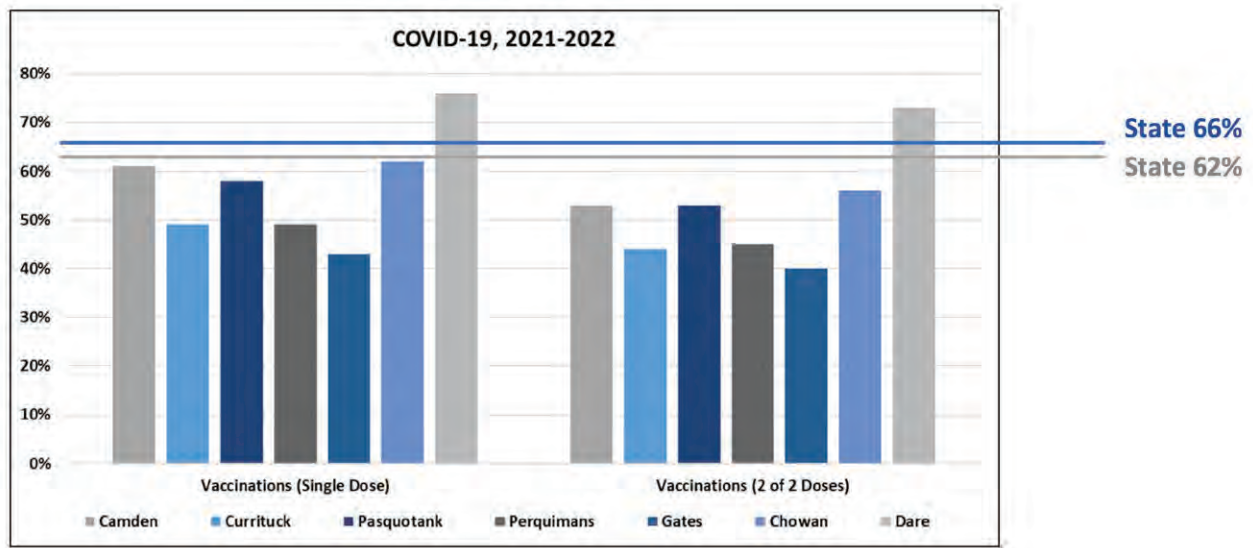


Source: North Carolina State Center for Health Statistics, [2019 Vital Statistics Public Use Data Files](#); North Carolina Department of Health and Human Services, Injury and Violence Prevention [Data and Surveillance](#); County Health Rankings 2021, [Rankings and Documentation](#); Herron, M. (2019). Deaths: Leading Causes for 2017. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf; Healthy People 2030, [Injury Prevention](#)

COVID-19 PROFILE

In 2020, the nation faced the COVID-19 pandemic. This contagious disease impacted the health of communities. People infected with the virus may experience mild to moderate respiratory illness and recover without medical treatment. However, some people will become seriously ill, requiring medical attention and possible hospitalization. People with underlying medical conditions are at a higher risk for developing serious illness while infected with COVID-19, as well as a higher risk for death (World Health Organization, 2022).

Between March 2020 to March 2022, the state of North Carolina had 433,206 cases per 100,000 residents and 23,203 related deaths per 100,000 residents. Chowan County had the highest rate of cases at 29,578 per 100,000 residents while Pasquotank County had the highest rate of deaths at 111 per 100,000 residents. As of March 2022, Dare County has the highest percentage of residents with a single dose and two doses of the vaccine, and their percentage is higher than the state percentage: 62%.



MATERNAL AND INFANT HEALTH PROFILE

Unsupported and under-supported young families face many negative health outcomes and predict many long-term health challenges as time goes on, so looking at the way families begin can help us understand the current and future health of the community. Compared to North Carolina, residents of the SAMC service area had slightly lower percentages of babies born with low and very low weight births. Camden County, however, had a higher percentage of 13.4% compared to North Carolina at 8.8%. The infant mortality percentage was higher than the state (6.8%) in Gates County (10.3%) and Pasquotank County (8.4%) (Appendix B). The number of mothers with less than a high school education was highest in Pasquotank at 121 out of 474 mothers in 2019. This is important to note since low educational attainment can lead to financial instability and poor health outcomes.

Source: World Health Organization, [Coronavirus disease \(COVID-19\)](#); North Carolina DHHS COVID-19 Response [Dashboard](#); North Carolina DHHS Division of Public Health NC State Center for [Health Statistics](#)

OLDER AND AGING ADULTS PROFILE

In many communities, older adults are the fastest growing segment of the population. Challenges come with an aging population, including health-related factors and other factors that ultimately impact health. Preventable hospital stays among the Medicare population in the SAMC service area were higher than for the state in most localities. This indicator reflects that there may be opportunities to improve primary and outpatient care for this population in the service area.

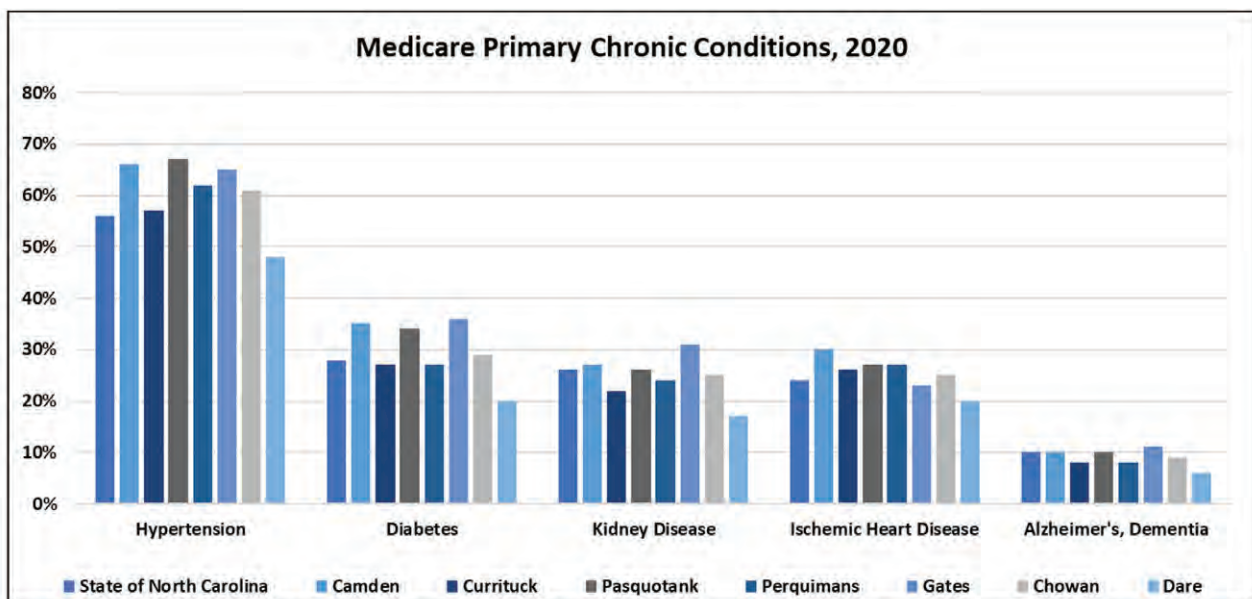
The Medicare population was seen for multiple conditions during 2020. Hypertension and diabetes were the top conditions seen in the SAMC services area with most localities having higher percentages than the state. Kidney disease and heart conditions also showed higher percentages for the Medicare population utilizing hospital services when compared to the state percentages.

The percentage of Medicare beneficiaries treated for Alzheimer’s disease or dementia was higher in Gates County as compared to North Carolina (Appendix B). Per the Alzheimer’s Association there is a projected estimated increase of 7.6% by 2025 in prevalence of people age 65+ receiving an Alzheimer’s diagnosis in the state of North Carolina. This is important to note as it will impact the aging population’s health, quality of life, healthcare demand and costs.

Advance Care Plans are for adults to specify their medical wishes and/or designate someone as their legal medical decision maker in the event they cannot communicate and advocate for themselves. While many team members working within the healthcare industry understand the importance and value of Advance Care Plans, it is evident within the acute care setting that our community members may not have that same understanding until it is too late. Currently, within the state of North Carolina, there are 1,334 active registrants with Advanced Care Plans filed within the USLWR (US Living Will Registry). Sentara has 70,236 active registrants with Advanced Care Plans on file within the USLWR with 980 of those completed for residents of the service area.

1 in 3 seniors dies with Alzheimer’s or another dementia. It kills more than breast cancer and prostate cancer combined.

Source: Alzheimer’s Association, 2022



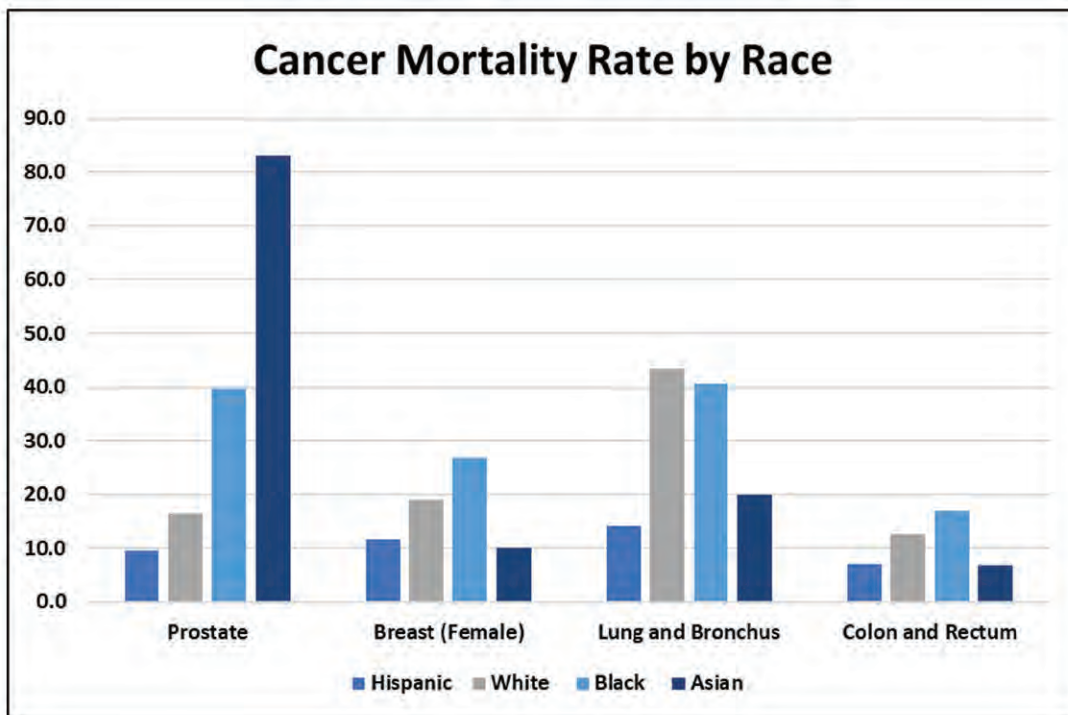
Source: Centers for Medicare & Medicaid Services, [Data.cms.gov](https://data.cms.gov/); Alzheimer’s Association, 2022 Alzheimer’s Disease [Facts and Figures](#); United States [Living Will Registry](#)

CANCER PROFILE

As cancer is a leading cause of death in the SAMC service area, death and incidence rates for a variety of cancer types were examined. Compared to the previous 5-year collective rates for both incidence and mortality for the leading types of cancer, most of the service area is trending down, with fewer cases and lower death rates. The rates, however, are slightly rising for breast cancer in the state of North Carolina. It is important to note the rates are rising especially for the African American, Hispanic, and Asian populations living in North Carolina.

Mortality rates were highest among lung, breast, prostate, and colon cancers, though these are not the only ones on which Sentara will focus efforts. Localities with the greatest all cancer incidence rates were Pasquotank County, Dare County, and Chowan County, in order of decreasing incidence (Appendix B). The trend is stabilizing in all three counties. Prostate cancer and breast cancer are the leading causes of cancer death for African American, Hispanic and Asian populations living in North Carolina. See the graph below showing mortality disparities among racial and ethnic groups. Community outreach programs providing education and cancer screenings, as well as medical developments, have been shown to have an impact. Efforts will need to focus on populations at higher risk.

Breast cancer is the most common cancer diagnosed among U.S. women and is the second leading cause of death among women after lung cancer
 Source: American Cancer Society



Data Source: NIH National Cancer Institute, *State Cancer Profiles*, 2014-2018

BEHAVIORAL HEALTH PROFILE

Hospitalization rates due to self-inflicted poisoning and mental health distress were examined. Chowan County had higher hospitalization rates due to self-inflicted injury from October 2020 to September 2021 than in the state of North Carolina overall. Females in the 10 to 18 age group had the most self-inflicted harm.

Mental health is becoming an increasing health concern for both adolescents and adults. The population living in the SAMC service area had higher rates of mental distress than the state and had more days of poor mental health. Sentara also examined emergency department visits for 2021 to gain a better understanding of the mental health crisis communities have been facing during the COVID-19 pandemic. In 2021, SAMC Emergency Department saw a patient frequency of 649 for people aged 18+ with a behavioral health diagnosis. Of the 649 visits, 24.3% presented with suicidal ideations and 11.0% with major depressive disorder.

“In early 2021, emergency department visits in the United States for suspected suicide attempts were 51% higher for adolescent girls and 4% higher for adolescent boys compared to the same time period in early 2019” (Office of Surgeon General, 2021). SAMC saw a patient frequency of 134 for youth, age 0-17, present with a behavioral health diagnosis. Of the 134 visits, 35.8% presented with suicidal ideations and 17.1% with major depressive disorder.

The rates of mental health diagnoses for this service area are higher than the state rate overall. The COVID-19 pandemic has worsened mental health among youth and adults with increases in anxiety, depression, and stress. Loss of freedoms due to social distancing, masking, and isolating negatively impacted the most vulnerable, increasing emergency department visits due to a lack of mental health providers to assist with therapy and development of coping skills. The SAMC service area has fewer mental health providers per person as compared to the state. Gates County (11,562:1), Camden County (2,717:1), Perquimans County (2,244:1), and Currituck County (2,136:1) have the lowest ratio of providers per person followed by Chowan County (930:1), Dare County (607:1) and Pasquotank (463:1) (Appendix B). It is also important to note that the mental health workforce is nearing retirement age, which will negatively impact provider capacity. There is a need for a more racially and ethnically diverse mental health workforce to provide racially concordant care (Appendix B).

“Mental health and access to treatment services are often overlooked in our health care system. One indicator of mental health outcomes – suicide – has been on the rise for years. Some special populations, such as veterans and LGBTQ youth, have seen elevated rates of suicide that will require targeted prevention strategies.”

*Healthy North Carolina 2030,
Health Indicator 19: Suicide*

Source: North Carolina Department of Health and Human Services, Injury and Violence Prevention [Self-Inflicted Injury](#);
Healthy North Carolina 2030, [Health Indicator 19: Suicide](#)

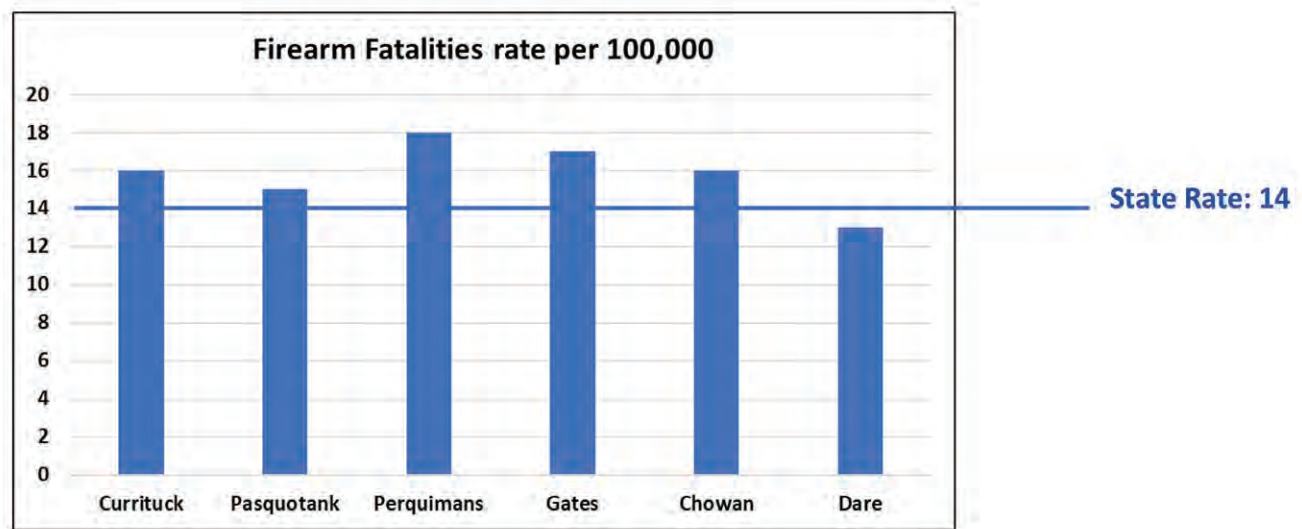
COMMUNITY VIOLENCE AND GUN VIOLENCE PROFILE

Violent crimes such as gun violence, robbery, or aggravated assault have socio-emotional impact. Physical and emotional symptoms such as sleep disturbances, increase in feelings of distress, anger, depression, inability to trust, and significant problems with family, friends, or coworkers can occur. Violent crimes can hinder the pursuit of healthy behaviors such as outdoor physical activities. Chronic stress has been associated with violent crimes and increases prevalence of certain illnesses such as upper respiratory illness and asthma. This can have life-long impact on the health of the individual.

The violent crime rate was much higher in Chowan County (454) and Pasquotank County (382) as compared to the state rate of 351 violent crime offenses per 100,000 population. (Appendix B). Gun violence alone is a top contributor to premature death. Deaths due to firearms are considered largely preventable; as a result, gun violence has been identified as a key public health issue by national agencies. A study published by American Academy of Pediatrics (2022) showed an increase in pediatric deaths due to firearms. The study also showed a disparity among African American youth who are “14 times more likely to die of firearm injury compared with their White peers” (Andrews AL, et al. *Pediatrics*. Feb. 28, 2022).

When deaths were examined for localities within the SAMC service area, most of the counties had rates higher than the state rate for firearm fatalities per 100,000 population. Perquimans County and Chowan County had the highest rates of death due to firearms.

“Firearm injury is a leading cause of death for youth in the United States.”
Source: Andrews AL, et al. *Pediatrics*. Feb. 28, 2022



Source: County Health Rankings 2021, [Rankings and Documentation](#)

2019 IMPLEMENTATION STRATEGY PROGRESS REPORT

The previous community health needs assessment identified several health issues. The SAMC implementation strategy progress report was developed to identify activities to address health needs identified in the 2019 CHNA report through primary and secondary data sources. This section of the CHNA report describes these activities.

For reference, the list below includes the 2019 CHNA health needs that were prioritized to be addressed by SAMC in the 2019 Implementation Strategy.

- Lifestyle and Healthy Behaviors
- Access to Healthcare
- Chronic Care Management, including Mental Health

SAMC is monitoring and evaluating progress to date on its 2019 implementation strategies for the purpose of tracking implementation and documenting impact of those strategies in addressing selected CHNA health needs. Please note that the 2019 community health needs assessment implementation strategy process was disrupted by COVID-19, which has impacted all our communities.

STRATEGY PROGRESS

Lifestyle and Healthy Behaviors

SAMC on-boarded a community outreach team member to increase digital presence and launch community outreach digital form to increase community education sessions through leaders, campus, social media, faith-based organizations, and schools. The COVID-19 pandemic limits the number of community events and community health screenings. When restrictions allow, SAMC provides community health screenings to include blood pressure, BMI, cholesterol, and stroke risk assessment. Staff also attend community events and COVID-19 and flu immunization clinics to promote awareness of services and health resources. SAMC provides regional EMS Sports Medicine training and community CPR (Hands-only) classes in partnership with Pasquotank-Camden EMS team when COVID-19 restrictions allow. SAMC Executive leadership continues to serve Healthy Carolinians of the Albemarle and other health related boards to share local department of health programming and community events. SAMC continues to provide stroke education/awareness programs annually. Stroke education was also provided to Elizabeth City Senior Center members focusing on recognition, prevention, and when to seek help. SAMC recognizes that partners are needed to fully address the health concerns impacting the community. Multiple grant opportunities were provided to community partners. The following grants were awarded:

- Food Bank of the Albemarle to build healthy cooking teaching facility
- Faith and Victory Christian Church to support healthy living, eating, habits, and exercise program
- Albemarle Area United Way to support their health, education, and financial assistance programs
- Port Discover to support their health, education, and youth building programs
- Albemarle Regional Health Services to support fitness programs
- Albemarle Alliance for Families and Children to improve early care and education, provide strength-based programs to support families with young children and children with special needs
- Albemarle Hopeline to enhance their domestic and sexual violence support programs
- Kids First child to provide help, healing, and hope to children who have been sexually or physically abused or neglected

SAMC utilizes lactation consultants to increase breastfeeding initiation rates to over 70% and support mothers with education and assistance to help establish and maintain our patients' breastfeeding goals. SAMC worked to increase lactation consults, support groups, staff education, and support after discharge. When able, SAMC hosts an annual community event to help spread community awareness and education about breastfeeding with SAMC Women's Health Services providing information and other resources in the area. SAMC is fostering business partnerships to encourage and promote breastfeeding-friendly designated spaces.

Access to Healthcare

To increase Primary Care access through onboarding of advanced practice providers and physicians, SAMC on-boarded two primary care providers, two orthopedic providers, and one general surgery provider in 2021. SAMC continues to offer flu and COVID-19 immunization clinics to the community. SAMC continues their commitment to provide programmatic support to community engagement programs including but not limited to: asthma management, diabetes education, primary care services, and behavioral health and telepsychiatry. In 2021, an orthopedic surgeon provided education to the Elizabeth City Senior Center and to Elizabeth City Rotary Club members. SAMC also continues to provide annual sports physicals to regional schools and no cost. SAMC continues to collaborate with American Red Cross to host multiple blood drive events. Executive leaders continue to engage with the Community Care Clinic to provide support and attend board meetings. SAMC piloted Primary Care telehealth and expanded primary care telehealth platforms to include all providers. SAMC partnered with ECU (NC-Step) to provide care coordination to psychiatric patients discharged from emergency departments. SAMC also launched the following telehealth psychotherapy services for emergency department patients: Brief Cognitive Behavioral Therapy, Acceptance and Commitment Therapy, Dialectical Behavioral Therapy, and Solution Focused Therapy.

Chronic Care Management, including Mental Health

SAMC continued and expanded the Food Rx Program to SMG clinics, Paramedicine pilot projects, and other community partners to identify food insecurity. This program refers qualifying patients with heart failure or diabetes to a six-month food supplement program to reduce CHF and diabetic related readmissions. SAMC partners with the Paramedicine program to provide chronic disease health education resources and Food Rx resources to identified high-risk patients. SAMC focuses on follow-up appointments for high-risk patients with chronic diseases to prevent readmissions. Primary Care patients are assigned an Integrated Care Manager (ICM) RN to help manage chronic conditions to reduce hospitalizations and improve outcomes. SAMC continues referrals to the Community Care Collaborative for patients identifying a need under the social determinants of health screening tool. SAMC also participates in EMS collaborative meetings to standardize regional EMS protocols and shared initiatives and continues partnership with a paramedicine mobile response unit to reduce avoidable readmissions. In 2021, SAMC launched an outpatient diabetes education and support program and a SAMC surgeon provided breast cancer education at Camden Heritage Festival. To improve mental health treatment options and to expand mental health resources in the service area, SAMC partners with Trillium, a leading specialty care manager (LME/MCO) for individuals with substance use, mental illness, and intellectual/development disabilities, along with other stakeholders including the Mobile Crisis Unit and the Elizabeth City Police Department.

When able, SAMC provides centralized clinical screening services at all SMG Primary Care locations including coordination of care for low- and rising-risk patients with chronic diseases, and conducts in-person and telephone education for low- and rising-risk patients with chronic diseases such as hypertension, chronic obstructive pulmonary disease, congestive heart failure, and diabetes.

Mental Health

Sentara continues to improve access to behavioral health resources.

Sentara has expanded, and will continue to expand, Telepsychiatry within the EDs and is working on expanding IOP/PHP in Hampton Roads. Sentara will continue to partner with community mental health programs to identify alternate placement options for BH ED patient. Sentara is also in the process of developing workgroups to improve behavioral health at each Sentara Hospital. The following workgroups are being created to assist the community:

A Behavioral Health Tactical Operations Committee (BHTOC) Clinical Patient Management Workgroup for:

- rapid treatment of agitation.
- active treatment of psychiatric illness.
- timely evaluation of medical comorbidities.
- improved coordination and communication around dispositions; and
- improved guidance on the ECO process.

A BHTOC Clinical Patient Management workgroup, which will continue to improve processes and work toward:

- management of patients with BH needs who are placed on regular medical units.
- providing active treatment for substance intoxication or withdrawal/overdose.

A BHTOC Safety workgroup focused on:

- Leader trainings
- Behavioral Health Consultant and Behavioral Health Safety Workgroup completed priority I & II Emergency Departments site visits and BH Risk Assessments in March 2022
- Priority III Emergency Departments site visits and Risk Assessments will be completed by the Behavioral Health Consultant and BH Safety Workgroup team in May 2022

SENTARA

Grantmaking and Community Benefit

In the 2019 Implementation Strategy process, Sentara and hospital facilities planned for and drew on a broad array of resources and strategies to improve the health of our communities and vulnerable populations, such as grant making, in-kind resources, collaborations, and partnerships.

Sentara is focused on supporting organizations and projects that address prominent social determinants of health factors and that promote health equity by eliminating traditional barriers to health and human services. Sentara strongly encourages grant proposals that align with one or more of the following priorities:

- Housing
- Skilled Careers
- Food Security
- Behavioral Health
- Community Engagement

Sentara is aware of the significant impact that our organization has on the economic vitality of our communities. In 2020, Sentara invested nearly \$256 million in our communities. Sentara invested \$20 million in health and prevention programs, \$45 million in teaching and training of healthcare professionals, \$11 million in philanthropic giving and \$180 million in uncompensated patient care. In 2021, Sentara invested \$245 million in the communities; \$16 million in community giving, \$23 million in health and prevention programs, \$45 million in teaching and training of healthcare professionals and \$167 million in uncompensated patient care.

Clearly, the definition of community health is broader than simply medical care. As more is known about the role of social determinants of health, more opportunities will arise to influence population health through engaging in community building approaches to care. Beyond the scope of SAMC alone, these opportunities will require active partnerships among community organizations and individuals to create lasting impact. Sentara and SAMC are committed to finding innovative, responsive, and successful strategies to address these challenges, to fulfill our mission to improve health every day.

Community Health Needs Assessment References

Community Demographics

GEOGRAPHIC DATA

USA.com, [North Carolina Population Density County Rank](#)

POPULATION DATA

Centers for Medicare & Medicaid Services 2019; [Mapping Medicare Data](#)

North Carolina Medicaid, [Medicaid and Health Choice Enrollment Reports](#)

Office of State Budget and Management, [County/State Population Projections](#)

US Census Bureau; 2019: [Census - Table Results](#)

US Census Bureau QuickFacts Table 2020, [Virginia Quick Facts](#)

US Census Bureau QuickFacts Table 2020; [\(2020 Small Area Income and Poverty Estimates \(SAIPE\)\)](#)

US Census Bureau, Small Area Income and Poverty Estimates (SAIPE). [SAIPE \(census.gov\)](#)

Health Indicators

ADVANCE CARE PLANNING

The United States Will Registry, <https://www.theuswillregistry.org/>

ALZHEIMER'S AND DEMENTIA

Virginia Alzheimer's Commission, [AlzPossible Initiative](#)

CANCER

NIH National Cancer Institute, 2014-2018 Incident Rate Report for Virginia, [Cancer Profile](#); 2014-2018 Mortality Rate Report for Virginia, [Cancer Profile](#)

COUNTY HEALTH RANKINGS

County Health Rankings 2021, [Rankings Data & Documentation](#)

County Health Rankings 2021, [Overview](#)

COVID-19

North Carolina DHHS COVID-19 Response , [Dashboard](#)

World Health Organization, 2022. Coronavirus disease (COVID-19). https://www.who.int/health-topics/coronavirus#tab=tab_1. March 2022

MATERNAL AND INFANT

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NORTH CAROLINA STATE CENTER FOR HEALTH STATISTICS

North Carolina Detailed [Mortality Statistics](#)

Reviews

Annie L. Andrews, Xzavier Killings, Elizabeth R. Oddo, Kelsey A.B. Gastineau, Ashley B. Hink; Pediatric Firearm Injury Mortality Epidemiology. *Pediatrics* March 2022; 149 (3): e2021052739. 10.1542/peds.2021-052739. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/35224633/> on April 11, 2022.

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Virginia Health Care Foundation. (January 2022). Assessment of the Capacity of Virginia's Licensed Behavioral Health Workforce. Retrieved from <https://www.vhcf.org/wp-content/uploads/2022/01/BH-Assessment-Final-1.11.2022.pdf> on April 11, 2022.

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