Sentara CarePlex Hospital
CarePlex Orthopaedic Ambulatory Surgery Center
Port Warwick Surgery Center

COMMUNITY HEALTH NEEDS ASSESSMENT 2022

We Improve Health Every Day

This joint Community Health Needs Assessment report was completed in collaboration with Sentara CarePlex Hospital, CarePlex Orthopaedic Ambulatory Surgery Center and Port Warwick Surgery Center, which have the identical service areas of the cities of Newport News, Hampton, and Poquoson, and the County of York.

SENTARA®

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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, Sentara CarePlex Hospital (SCH), CarePlex Orthopaedic Ambulatory Surgery Center (COASC), and Port Warwick Surgery Center (PWSC) began conducting the community health needs assessment of the area we serve. The assessment, completed in 2022, provides us with a picture of the health status of the residents in our communities and 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:

SCH, COASC, and PWSC Health Priorities for 2022-2025:

- Behavioral Health
- Chronic Disease
- Social Determinants of Health

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
- Sentara Health Plans
- Outpatient campuses
- Urgent care centers
- Advanced Imaging Centers
- Home health and hospice
- Rehabilitation and therapy centers
- Nightingale air ambulance

INTRODUCTION

Sentara CarePlex Hospital

Sentara CarePlex Hospital (SCH) is a technologically advanced acute care hospital and Certified Primary Stroke Center located in Hampton, Va. The 224-bed hospital offers an eICU® to monitor patients even more closely with state-of-the-art equipment and computer software. Sentara CarePlex Hospital provides care through advanced surgical programs, emergency cardiac intervention, fellowship-trained physicians, and the newly opened Family Maternity Center. It is also home to the Orthopaedic Hospital at Sentara CarePlex Hospital, the area's first dedicated orthopedic hospital, taking specialized orthopedic care to a new level.

CarePlex Orthopaedic Ambulatory Surgery Center

The Orthopaedic Hospital at Sentara CarePlex Hospital (COASC) is the area's first dedicated orthopedic hospital, taking specialized orthopedic care to a new level. The 55,000-square-foot, two-story facility provides patients access to the full continuum of orthopedic services, from the pre-operative phase and surgery to rehabilitation and home care services. The hospital is also home to the Sentara OrthoJoint Center, a dedicated center for patients undergoing hip or knee joint replacement surgery.

Port Warwick Surgery Center

At Port Warwick Surgery Center (PWSC), physicians and staff provide a personalized experience for every patient at a fraction of the cost of a hospital. Our compassionate team of providers and nurses makes patients feel at ease before, during, and after their procedures, with one-on-one care that begins upon admission and continues until discharge. We specialize in orthopedic and ENT services, and we take great pride in the care we provide.

Our skilled orthopedic surgeons address common and complex orthopedic conditions, including total joint replacement in our technologically advanced surgical suites. Patients undergoing ear, nose, throat, or neck surgery receive advanced surgical care using the latest surgical techniques. Our specialists treat a full range of complaints and disorders in adults and children

SENTARA CARES

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 our 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 health care accounts for only 20 percent.

Our purpose, then, 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. However, through our partnerships we continue to make both immediate impact and lasting change for our communities.

> *"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*

COVID-19 RESPONSE

As we embarked on this Community Health Needs Assessment (CHNA) process, the country and Virginia 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, smoking and other health indicators such as infant mortality and preventable hospitalizations.

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

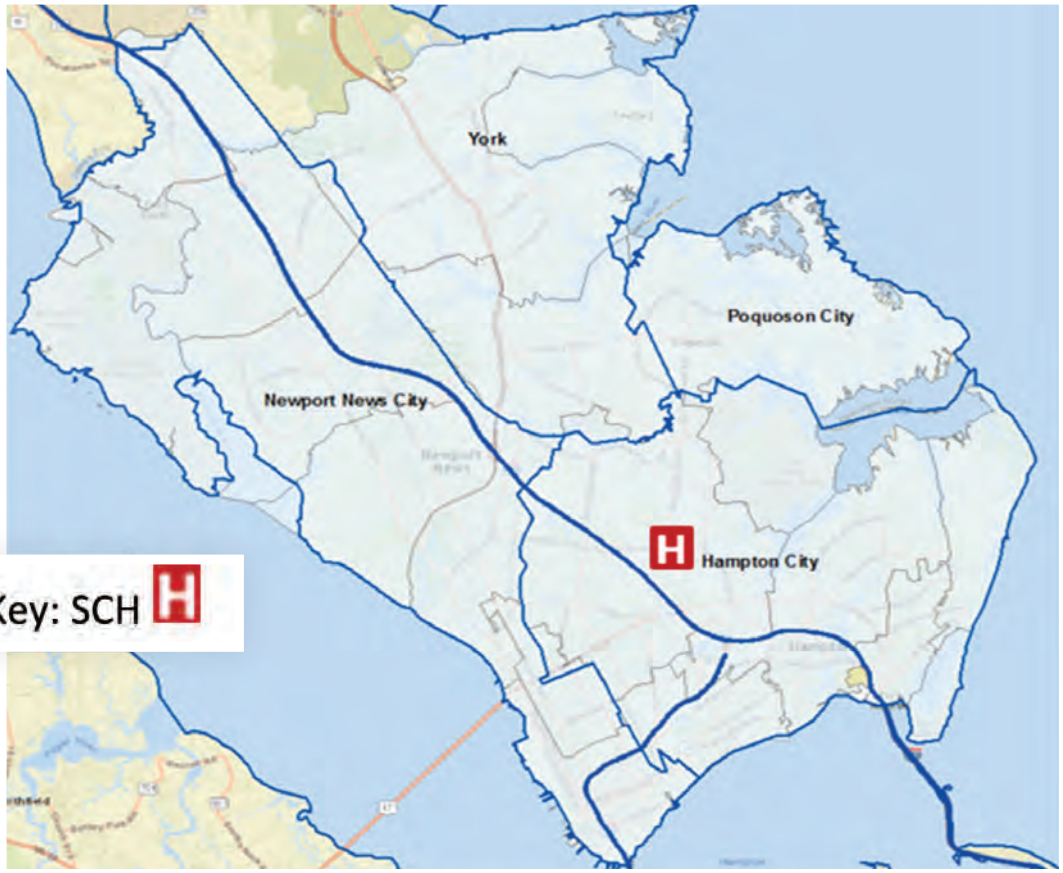
Community input is imperative, so we conducted a survey jointly with Bon Secours Hampton Roads, Children's Hospital of The King's Daughters, Riverside Health System, the Hampton and Peninsula Health Districts, and Three Rivers Health District. The assessment includes survey results from key stakeholders including those in public health, social services, service providers, and those who represent underserved populations. An additional survey of Hampton Roads residents on key health topics is included. The report also includes findings from focus groups with community members on health issues and barriers to achieving good health.

OUR NEXT STEPS

Sentara CarePlex Hospital, COASC and PWSC work with several community partners to address health needs. Using the information from this Community Health Needs Assessment, SCH, COASC and PWSC will develop an implementation strategy to address the identified health problems. Sentara CarePlex Hospital, COASC and PWSC will track progress of the implementation activities and evaluate the impact of these actions. The implementation progress report for the 2019 CHNA is available at the end of this report for SCH and COASC. As PWSC opened in 2022, this is the facility's first such report.

Information on available resources is available from sources including 2-1-1 Virginia and sentara.com. 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 sentaracares.com website.



THE SENTARA CAREPLEX HOSPITAL, CAREPLEX ORTHOPAEDIC SURGERY CENTER, & PORT WARWICK SURGERY CENTER SHARED SERVICE AREA **SOURCE: TRUVEN/MARKET EXPERT**

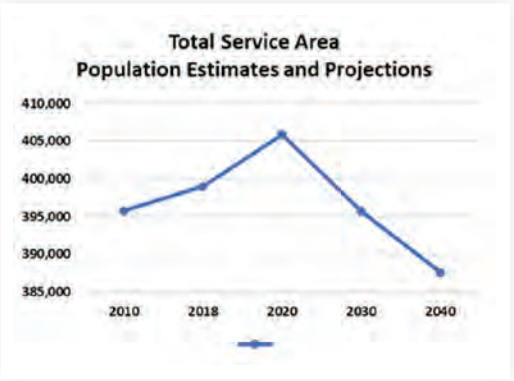
COMMUNITY DESCRIPTION

GEOGRAPHY

The service area of SCH, COASC, and PWSC is comprised of four localities: the Cities of Newport News, Hampton, and Poquoson, and the County of York. Newport News is the most populous locality in the service region, followed by Hampton and York County. Those four localities make up the lower peninsula, with SCH located near the center of Hampton.

POPULATION CHANGE

Historically, the service area population has been relatively stable. Though Hampton saw a decrease in residents, Newport News experienced a counterbalancing modest increase in population since 2010. York County has experienced 6.5% growth, approaching the state's growth of 7.3%. Though the service area has seen an increase in population since 2010, it is projected to decrease in population through 2040.



Source: US Census Bureau QuickFacts Table 2020 https://www.census.gov/quickfacts/fact/table/VA,US/PST045219
Produced by Demographics Research Group of the Weldon Cooper Center for Public Service, July 2019 http://demographics.coopercenter.org

COMMUNITY SPECIFIC DEMOGRAPHICS (APPENDIX A)

City of Hampton has 137,148 residents with 20.7% of this population living in poverty and 11% uninsured. Of the population in this city, 21.1% are ages 0-19, 16.4% are ages 20-29, 43.1% are ages 30-64, 13.4% are ages 65-84, and 1.7% are aged 85 and over. 93.5% of the residents primarily speak English. The ethnicity for this population includes 41.1% white, 49.9% African American, 5.8% Hispanic, and 2.5% Asian.

City of Poquoson has 12,460 residents with 5.6% of this population living in poverty and 7% uninsured. Of the population in this city, 22.4% are ages 0-19, 8.3% are ages 20-29, 46.9% are ages 30-64, 17.8% are ages 65-84, and 2.0% are aged 85 and over. 95.6% of the residents primarily speak English. The ethnicity for this population includes 93.2% white, 1.2% African American, 3.3% Hispanic, and 2.4% Asian.

City of Newport News has 186,247 residents with 20.2% of this population living in poverty and 13% uninsured. Of the population in this city, 23.1% are ages 0-19, 17.8% are ages 20-29, 43.3% are ages 30-64, 11.2% are ages 65-84, and 1.5% are aged 85 and over. 89.8% of the residents primarily speak English. The ethnicity for this population includes 47.9% white, 41.1% African American, 9.0% Hispanic, and 3.2% Asian.

County of York has 70,045 residents with 5.7% of this population living in poverty and 10% uninsured. Of the population in this county, 23.5% are ages 0-19, 10.5% are ages 20-29, 45.7% are ages 30-64, 15.2% are ages 65-84, and 1.7% are aged 85 and over. 89.1% of the residents primarily speak English. The ethnicity for this population includes 75.4% white, 13.8% African American, 6.9% Hispanic, and 6.1% Asian.

POPULATION HIGHLIGHTS

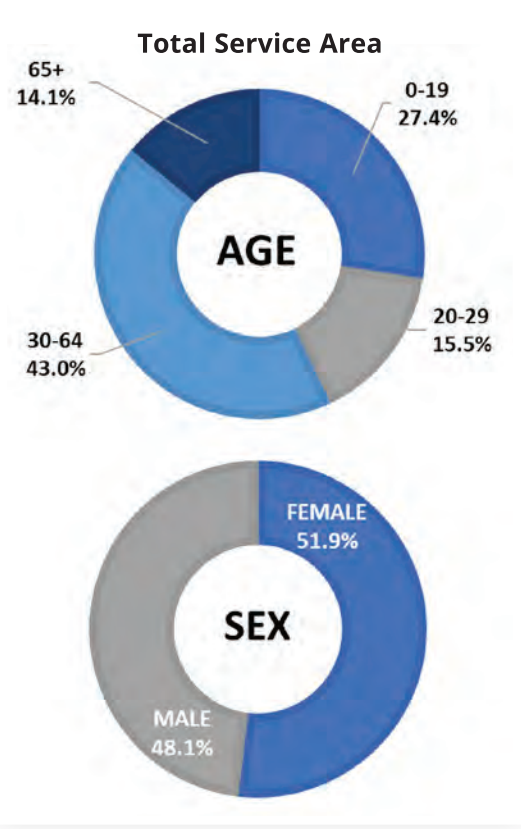
The combined population of the service area is approximately 400,000, nearly 5% of the state population. Newport News is the most populous city in the service region, followed by Hampton. Those two cities combined hold 4% of the population of the Commonwealth of Virginia. Some localities in the service area are very rural.

Age and Gender

Of the 405,900 community members living in the service area, most residents are between the ages of 30-64. The service area has a lower percentage of residents aged 85+ than the state average, with the exception of Poquoson, although it is also home to a higher percentage of population aged 65-84 years.

There is a slightly higher percentage of residents aged 19-64 than in the state as a whole. Newport News and Hampton have the highest percentage of seniors with 43,403 residents aged 65+. Poquoson has the highest percentage of the very elderly, aged 85+.

Similar to state demographics, there is a slightly higher percentage of residents born as female in the service area.

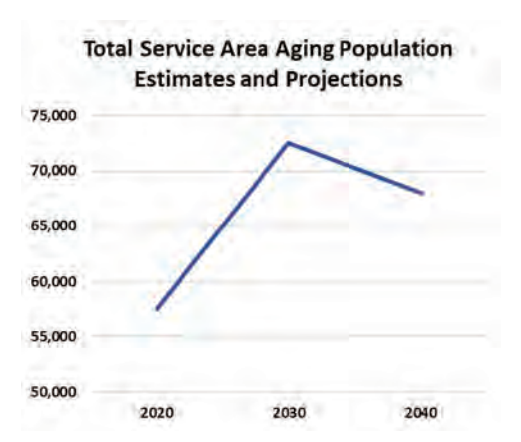


Source: Produced by Demographics Research Group of the Weldon Cooper Center for Public Service, July 2019, http://demographics.coopercenter.org

There were 5,045 babies born in the service area in 2019. The majority of births were in Newport News, which also has the highest percentage of children. The segments of the population representing children, young adults and working age adults vary only slightly from the statewide proportions.

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. 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 Poquoson and York County.



In 2020, 14.2% of the population living in the service area was age 65+, slightly below the percentage in Virginia overall which was 15.9%. By 2030, the population of older adults in the service area is projected to increase to 17.8%. This shows the number of older adults rising in the next 10 years, leading to a higher number of aging adults in the service area. However, there is a projection of a slight decrease to 16.8% by 2040. Poquoson is projected to experience an increase in the population age 65+ by 3.3% by 2030. It is important to note that the 2040 projected overall population of residents aged 85+ in Poquoson is only 409 which is relatively low compared to the 3,132 residents projected for Newport News.

Other Demographic Features

The overall percentage of the population who are veterans is higher than either Virginia or the United States with 12.3% veterans living in the service area. The median home values for Newport News and Hampton are less than that of Virginia as a whole, with values in Poquoson and York County higher. The median income and per capita income reflect a lower cost of living for Newport News and Hampton. There is a higher percentage of owner-occupied homes in Poquoson and York County as compared to the state. In Newport News and Hampton there are fewer households with internet access, impacting remote learning opportunities and outcomes during the COVID-19 pandemic. A greater percentage of the population in Newport News and Hampton has a disability than in the state, as well as a higher percentage of persons living in poverty, and lower percentage of college degrees as compared to the state.

Source: Produced by Demographics Research Group of the Weldon Cooper Center for Public Service, July 2019, http://demographics.coopercenter.org; US Census Bureau QuickFacts Table 2020 https://www.census.gov/quickfacts/fact/table/VA,US/PST045219

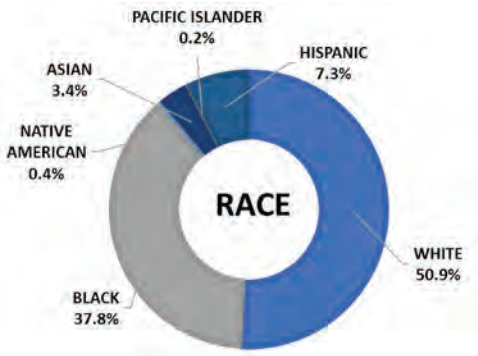
COMMUNITY DIVERSITY PROFILE

Ethnicity

The population of the service area is overwhelmingly white and Black, with York and Newport News the most diverse communities (13.8% and 12.7% combined non-white or Black) followed by Hampton, at 9.0% and Poquoson at 6.3% combined. The area has small Hispanic and Asian populations, but no other racial groups are represented in the area in any significant number.

The service area is home to a small Hispanic population area with Newport News at 9.0% approaching the state's Hispanic population of 9.8%.

Total Service Area



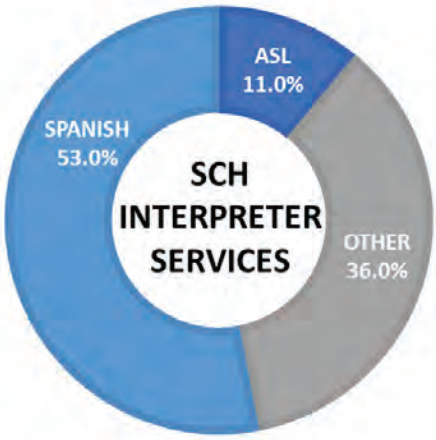
Preferred Language

English is the primary language spoken in the service area. As of 2020, 96.2% of the population being served identified as English speaking. Per the 2014 American Community Survey five-year estimates, Spanish was the second language identified in the community being served, with 7,409 service area residents identifying as speaking English "less than well."

Cultural and Linguistic Needs

It is important to note that non-English-speaking populations are vulnerable. Non-English-speaking populations are disproportionately among the low 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 SCH 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, SCH had 3,517 requests for interpreter services. The highest percentage of interpreter services were for Spanish- speaking individuals.



Source: SCH 2021 Sentara Language Line Usage Report

Health Equity

The CHNA analyzes differences by race and ethnicity, language needs, age, gender, income, and housing. A dedicated focus on health equity allows for 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 affect 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.

***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

Priorities include measurement of disparities and 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, 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.

SOCIAL DETERMINANTS OF HEALTH

Sentara is about transforming the lives of our neighbors by focusing on the root factors that affect our health beyond the clinical care we receive.

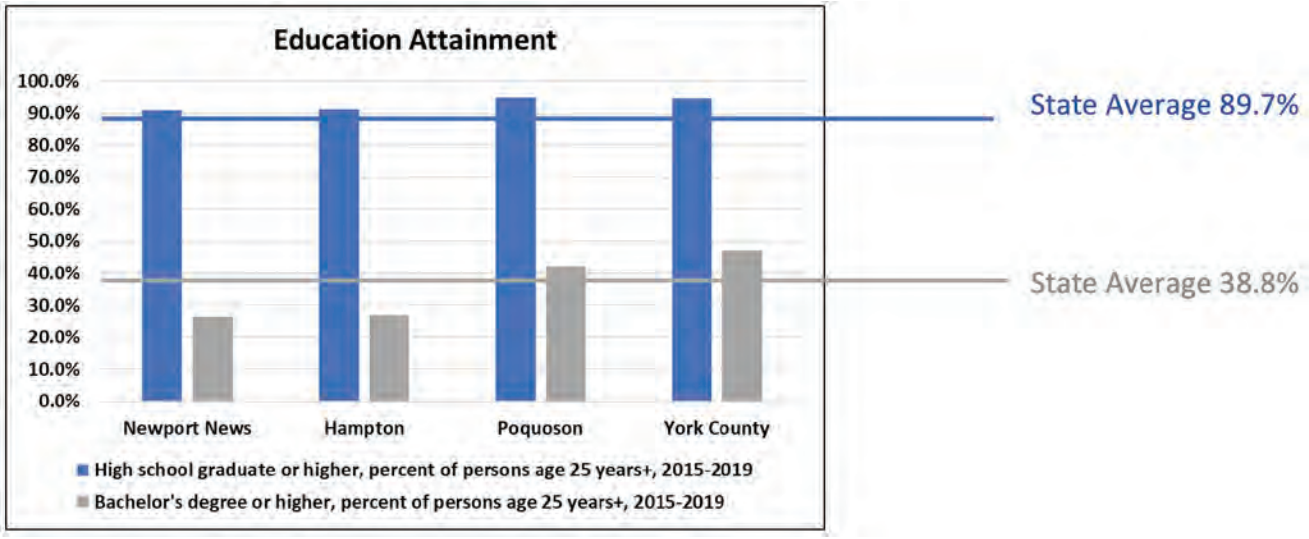
Sentara works to:

- 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.

Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.
April 15, 2022
https://health.gov/healthypeople/objectives-and-data/social-determinants-health

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. Newport News and Hampton have the highest percentage of individuals aged 25+ with less than a high school diploma, while Poquoson and York Counties have the highest percentage of residents with advanced or professional degrees.



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

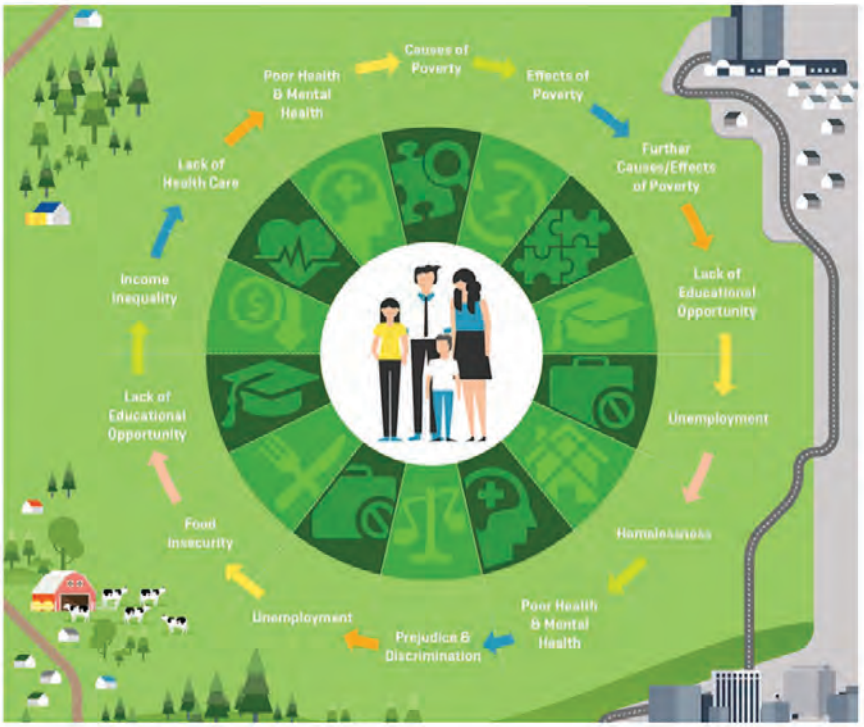
The Cycle of Poverty

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.

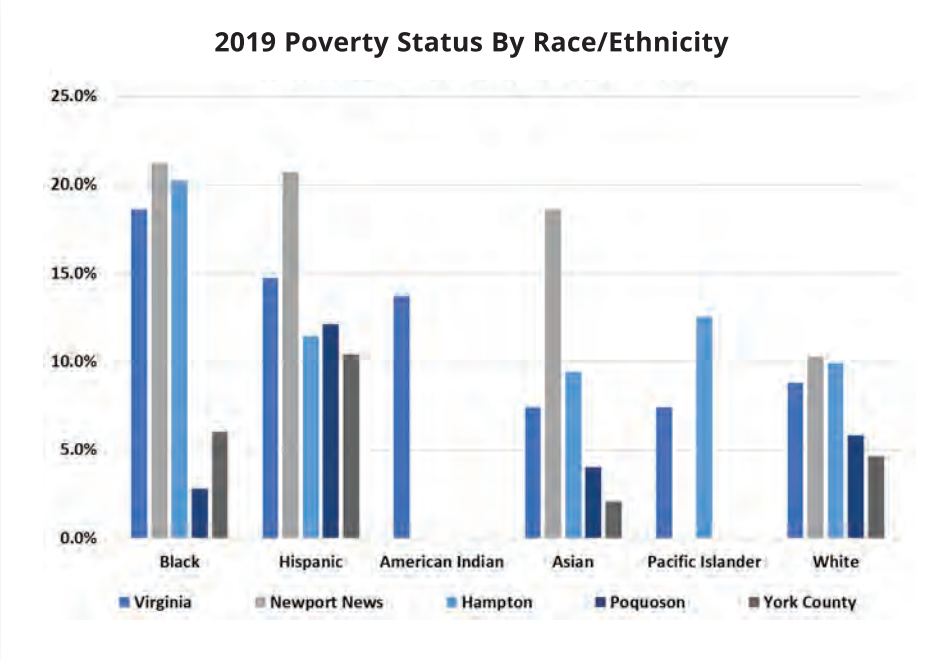
Generational poverty is a vicious cycle in which each generation is unable to escape poverty because of a lack of resources to put toward the effort.

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, Hispanic, and American Indians are more likely to live in poverty as compared to white Americans.

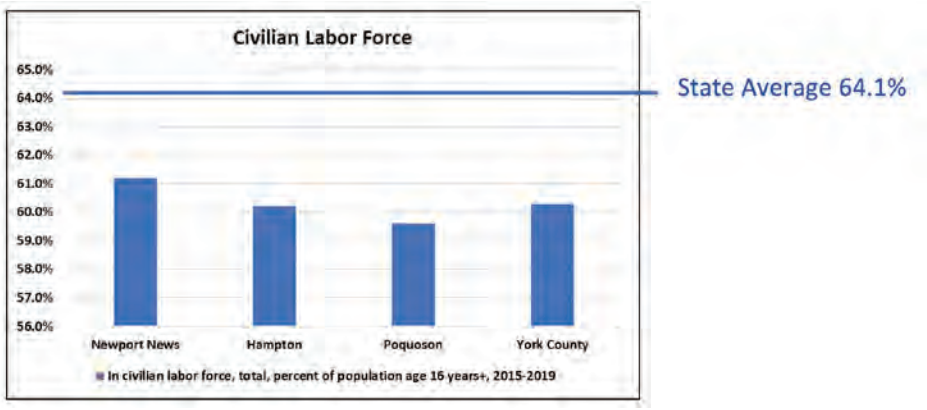


Poquoson and York County residents are less likely to live in poverty than residents of other areas. Newport News and Hampton residents are more likely to live in poverty than other counties by a significant margin, with an even bigger contrast with the Commonwealth of Virginia as a whole.

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. The service area is below the state average in the number of residents in the civilian labor force. Of those in the civilian labor force, the percentage of female residents is also lower than the state average.



Medicaid & FAMIS, Medicare, Medicare & Medicaid Enrollment

Of the 626,398 members newly enrolled in Medicaid in the Commonwealth of Virginia in January 2022, 463,967 are below 100% of the federal poverty level and 162,431 are between 101-138% of the federal poverty level. The total service area has a higher percentage of members on Medicaid and FAMIS compared to Virginia overall, with the highest percentage living in Newport News and Hampton. The number of residents living in the service area receiving Medicaid and FAMIS services continues to increase each year, with an increase of 23.2% since January 2020.

In 2019, there were 29,049 community members age 65+ living in the service area receiving Medicare and 2,448 receiving both Medicare and Medicaid. As the aging population grows in this service area, so will the need for these services.

Medicaid and FAMIS 2022/Medicare and Medicaid 65+ 2019						
	Virginia	Total Service Area	Newport News	Hampton	Poquoson	York County
Medicaid Enrollment (Below 138% FPL)	626,398	36,748	19,547	13,770	522	2,909
Medicaid Percentage	7.2%	**9.1%**	**10.5%**	**10.0%**	4.2%	4.2%
FAMIS (Below 138% FPL)	1,347,010	79,972	64,301	30,220	--	5,520
FAMIS Percentage	15.6%	**19.7%**	**34.5%**	**22.0%**	--	7.9%
Children Enrolled in Medicaid/FAMIS (Below 138% FPL)	813,229	48,605	27,384	17,756	--	3,465
Children Enrolled in Medicaid/FAMIS Percentage	9.4%	**12.0%**	**14.7%**	**12.9%**	--	4.9%
65+ Medicaid (Below 138% FPL)	83,149	3736	1967	1466	--	303
65+ Medicaid Percentage	0.9%	0.9%	1.1%	1.1%	--	0.4%
65+ Medicare	802,949	29,049	11,813	10,310	1,469	5,457
65+Medicare Percentage	64.5%	52.7%	53.2%	51.5%	62.7%	51.7%
65+ Medicare and Medicaid	56,810	2,448	1,236	1,015	32	165
65+ Medicare and Medicaid Percentage	4.6%	4.4%	**5.6%**	**5.1%**	1.4%	1.6%
Persons in Poverty	9.2%	**12.1%**	**14.5%**	**13.4%**	4.7%	4.7%

Source: Virginia Medicaid Department of Medical Assistance Services; (As of January 15, 2022) https://www.dmas.virginia.gov/data; US Census Bureau QuickFacts Table 2020; (2020 Small Area Income and Poverty Estimates (SAIPE)); US Census Bureau 2019: ACS 5-Year Estimates; Centers for Medicare & Medicaid Services 2019; Mapping Medicare Data

COMMUNITY INSIGHT

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

COMMUNITY SURVEY

To obtain community input, the Community Surveys were conducted jointly with Bon Secours Hampton Roads, Children's Hospital of The King's Daughters, Riverside Health System, and the Hampton and Peninsula Health Districts of the Virginia Department of Health.

The survey was conducted with a broad-based group of community stakeholders and community members in Eastern Shore, Middle Peninsula, Peninsula, South Hampton Roads, Western Tidewater, and Northeast region of North Carolina. Surveys were available online and in English and Spanish by paper submission. The survey gathered demographic data such as gender, race, income, zip code and COVID-19 factors. The survey asked respondents for their insight and perspective regarding important health concerns in the community for adults and for children:

- What is important to the health of adults and children?
- What should be improved in the community to keep children and families healthy?
- What should be added or improved in the community to help families be healthy?
- What are the most important health concerns for adults and children?
- How is the community accessing resources for health concerns for adults and children?
- What makes it difficult to access healthcare services for adults and children?

The surveys were made available to the public from December 1, 2021 – February 28, 2022, both in paper format and electronically using SurveyMonkey. The survey was distributed to 1,892 stakeholders including individuals representing public health, education, social services, businesses, local government, and local civic organizations.

After the initial survey period, the collaborative recognized that a preponderance of respondents were white females. Sentara leaders partnered with clinical staff at each hospital to encourage survey participation. Sentara staff also attended a Hispanic Women's Health Fair, Feria de Salud de la Mujer, to encourage additional survey participation from Hispanic community members. Thirteen families completed the survey at the event and the information obtained was used for this assessment.

At the completion of the survey period, 1,871 stakeholder surveys and 17,294 community member surveys were completed. It is important to note that not every respondent answered every question in the stakeholder and community member surveys. Most counties did not have an equally distributed response to surveys to represent

the entire service area population. 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. Sentara staff performed targeted outreach activities to include individuals who serve the underserved populations to further develop the robustness of the survey response.

> ***"We need to listen to our community and allow them to guide us. Then, we need to focus on the key drivers that are the biggest impact to health outcomes."***
>
> ***-Anonymous Stakeholder***

Healthcare providers and community health centers comprised 43.85% of stakeholders responding to the survey. Additionally, multiple organizations were represented, each having unique insight into the health factors that impact the community. In total, stakeholders represent hospitals, physician offices, city departments of social services, health departments, and community-based non-profit service organizations. The respondents represented many diverse professional and volunteer fields—from emergency medical providers to pastors and public-school teachers. See Appendix C for the complete survey, the list of types of employers of stakeholder respondents, characteristics of survey respondents and top health concerns identified.

Demographics of Survey Respondents

Of the 19,165 respondents, a little over 10,000 answered the demographic questions. The respondents were 78.5% Caucasian, 14.61% African American, 3.64% Hispanic, 1.81% Asian, and 0.5% Native American. The respondents were 70.7% female, 26.12% male and 0.5% nonbinary, with 2.64% preferring not to answer. The primary language of respondents is English, with 0.8% stating other primary language. Other languages spoken in the home and chosen by respondents included Spanish (1.6%), German (0.5%), Tagalog (0.3%), American Sign Language (0.21%), Arabic (0.2%), Chinese (0.2%), Korean (0.2%), Russian (0.2%), and other (0.3%). The respondents varied as to education completed: 5.7% completed high school, 17.7% had some college experience, 10.2% received an associate degree, 31.6% received a bachelor's degree and 33.7% had graduate degree.

Survey Responses

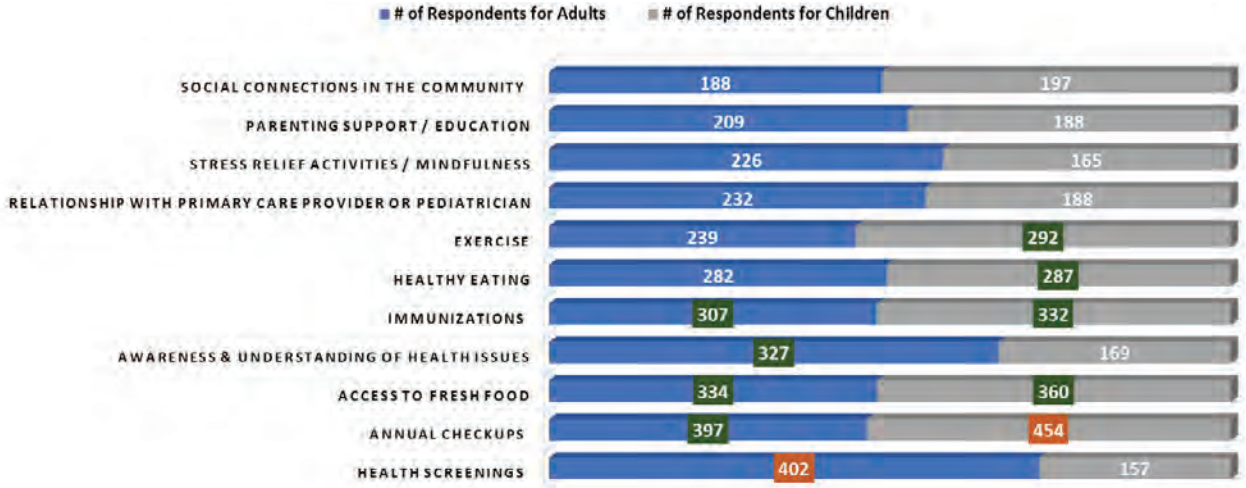
For this CHNA report, we will focus on the below questions asked in the survey. Survey respondents were asked to review a list of common community health issues and select up to three items. The tables below show the answers for each question among stakeholder and community member respondents.

- What is important to the health of adults and children?
- What should be added or improved in the community to help families be healthy?
- What are the most important health concerns for adults and children?
- What makes it difficult to access healthcare services for adults and children?

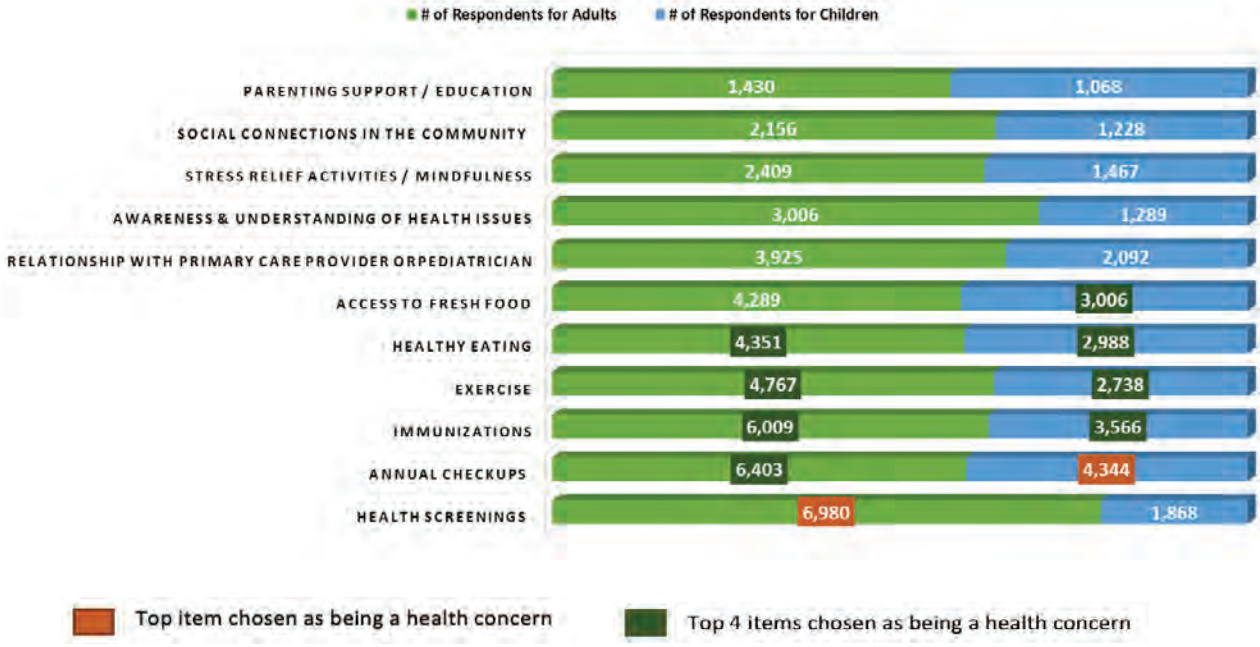
1. What is important to the health of adults and children?

Both stakeholder and community member survey respondents chose health screenings such as mammograms, colonoscopies vision exams, and cholesterol checks, annual checkups such as physicals and well child visits, and immunizations such as flu, Tdap, MMR, and COVID-19 as being important to the health of adults in their communities. Stakeholders and community members chose the same top five items that are important to the health of children. Respondents chose annual checkups such as physicals and well child visits, immunizations for flu, Tdap, MMR, and COVID-19, access to fresh food, healthy eating, and exercise.

Stakeholder Responses



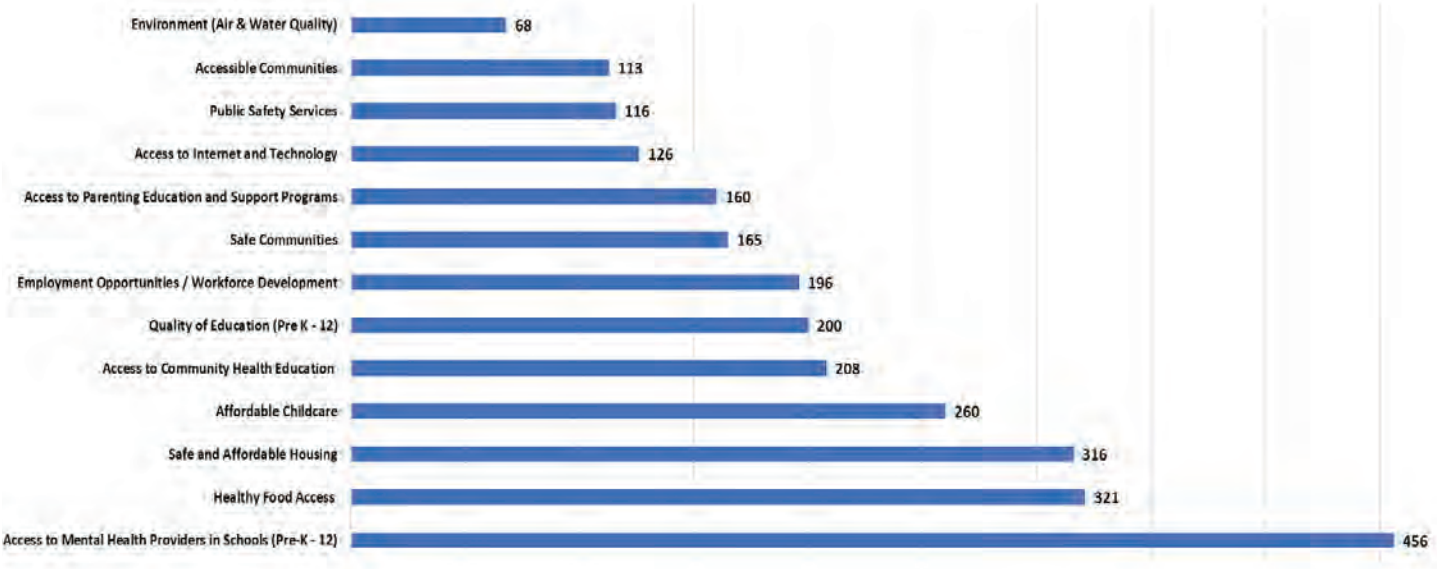
Community Member Responses



2. What should be added or improved in the community to help families be healthy?

Stakeholders and community member survey respondents most frequently chose access to mental health providers in schools (Pre-K-12) as an important area needing to be added or improved in the community. Respondents also chose access to healthy food such as fresh foods, community gardens, farmers' markets, EBT, and WIC, and safe and affordable housing.

Stakeholder Responses



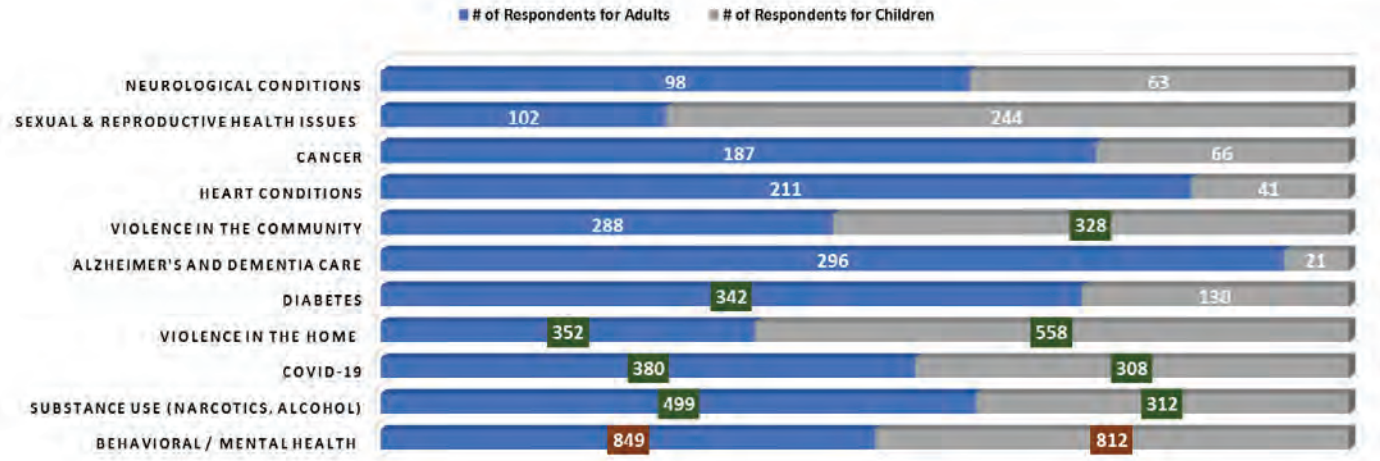
Community Responses

3. What are the most important health concerns for adults and children?

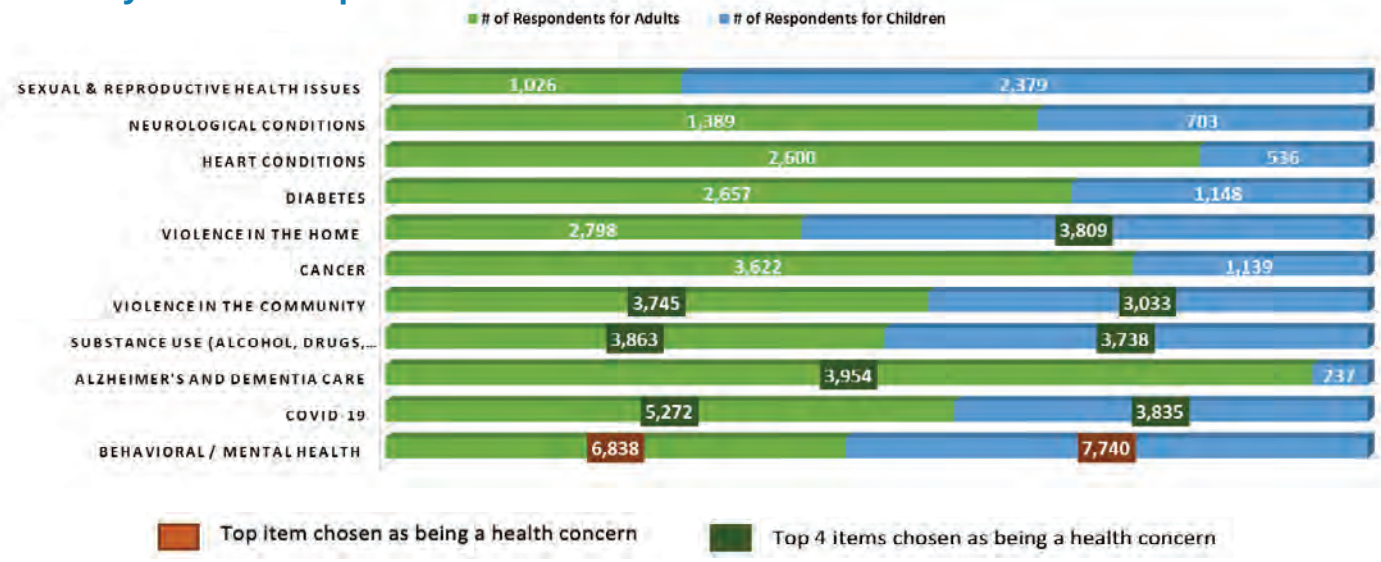
The most frequent response to question 3, see above, was behavioral health, which includes anxiety, depression, psychoses, and suicide, substance use such as narcotics and alcohol, COVID-19, and Alzheimer's and Dementia care. For children, respondents chose behavioral health as defined above, COVID-19, violence in the community, substance use, and sexual and reproductive health issues such as sexually transmitted infections and teen pregnancy as the most pressing health concerns.

Behavioral health was the top identified health concern for both adults and children, along with access to mental health providers in schools (Pre-K-12). Perhaps this is resulting from the COVID-19 pandemic and isolation, as well as substance use, and violence in the home and community. Behavioral health being identified as a top concern for children is consistent with the increased understanding that modern children live with a great deal of stress, both mental and physical, and stress impacts their health in ways we are just beginning to understand.

Stakeholder Responses



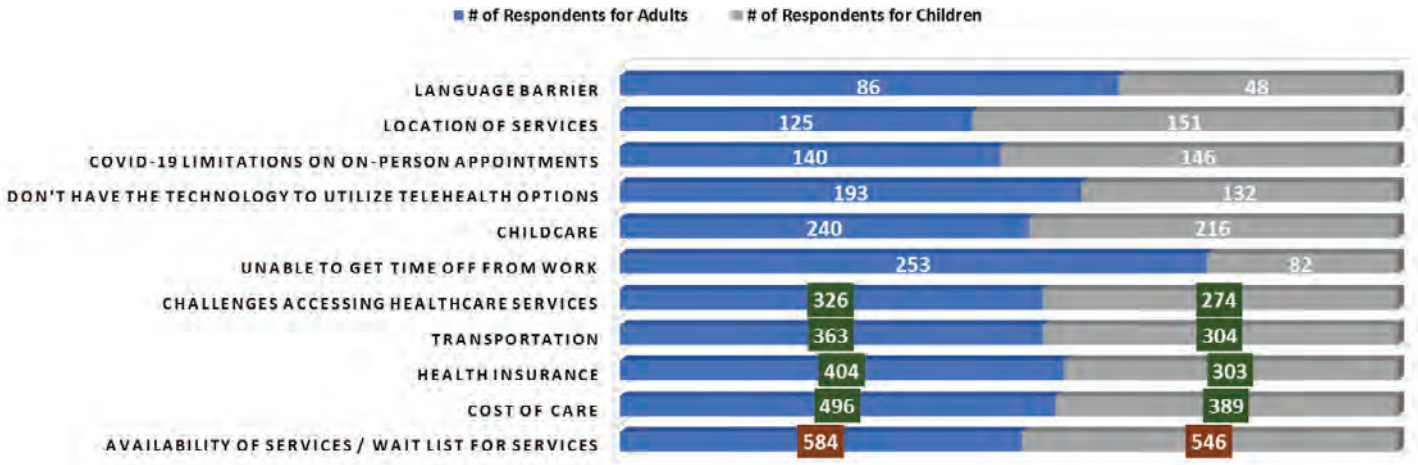
Community Member Responses



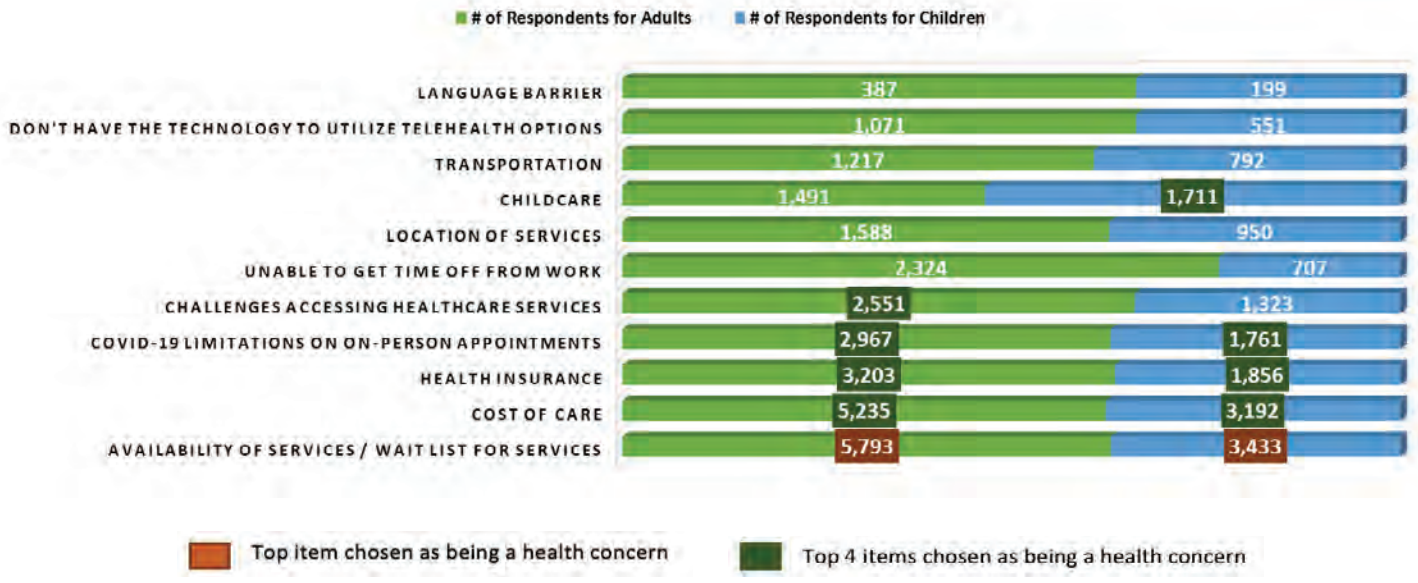
4. What makes it difficult to access healthcare services for adults and children?

When thinking about the barriers communities face to access healthcare services, stakeholder and community members mostly agreed on the top six. For adults, barriers identified were availability of services, wait list for services, cost of care, health insurance, challenges accessing healthcare services and unable to get time off from work. For children, barriers were similar to adults and included availability of services, wait list for services, cost of care, health insurance, challenges accessing healthcare services, as well as childcare. The responses reflect that children face the same access challenges as do adults, while recognizing the effect of parenting and living conditions, often things over which children have no control.

Stakeholder Responses



Community Member Responses



As in the current survey, in the 2019 CHNA, survey respondents also chose mental health/behavioral health as a major concern. The pandemic has added additional mental health strain on the U.S. population. Over the past several years, Sentara has worked to address this issue which is near the top of every CHNA both over time and in breadth across the country.

Access to behavioral and mental health services were the most frequently cited need in our community for children, teens, and adults. Across the survey area, this choice is followed by substance use and COVID-19 for both adults and children, as well as Alzheimer's and dementia care for adults and violence in the home for children. As we understand more about how childhood events impact adult health, the call for these support services is likely to grow stronger. For a more detailed discussion of these effects, follow this link to the Adverse Childhood Experiences (ACES) website: https://www.cdc.gov/violenceprevention/aces/about.html.

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 own personal experience with the disease to learn how COVID-19 has impacted community resources and services, and concerns regarding vaccines. Of 10,185 respondents, 91.2% stated adults in the home were vaccinated. Of 9,946 respondents 24% stated their eligible children were vaccinated and 34.74% planned to vaccinate their eligible children. Of 687 respondents who stated they were not vaccinated, 72.2% worried about the COVID-19 vaccine being harmful or having side effects for adults. Of 1,137 respondents whose children were not vaccinated, 80.04% also worried about the COVID-19 vaccine being harmful or having side effects for children.

The survey explored the many factors in addition to medical care that determine an individual's health. Collectively called the social determinants of health, these factors are increasingly becoming recognized as contributing both directly and indirectly to individual health through processes as different as the effect of household mold on respiratory disease and the effect of stress from unemployment. The effects of social determinants are sometimes subtle, sometimes only discoverable after a health problem is identified, yet are often important in explaining health status. Respondents were asked to choose three community assets to be strengthened. Their responses included affordable housing and childcare, healthy food access, quality of education, and safe communities.

The top choices of factors impacting access to care were availability of services, wait list for services, cost of care and health insurance. Lack of providers and unavailability of providers working extended hours make access less feasible for those who work outside the home or have other scheduling constraints and is the barrier to care voiced most often.

Some aspects of access to care impact population segments differently. Access barriers to care disproportionately impacts those with psychosocial barriers to care, such as lack of reliable transportation and limited income. The survey included a question designed to identify which consumers face barriers that might be addressed through specific programming.

COMMUNITY FOCUS GROUPS

In addition to the online surveys for community insight, SCH, COASC, and PWSC 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?

Sentara CarePlex Hospital, COASC, and PWSC held 5 focus group sessions between March and April 2022. The number of participants in each group ranged from eight to 11. When possible, representatives from the health department and other local hospitals were invited to attend the sessions.

Focus Groups

1. 4/2/2022 virtual session: Community Hispanic Group
2. 4/3/2022 in person session: Disciples of Jesus Christ Ministries Group
3. 4/3/2022 in person session: Iglesia Pentecostal Church Group
4. 4/5/2022 virtual session: Community Disabled Veterans Group
5. 4/5/2022 in person session: Patient Family Advisory Committee

Demographics

The total of 45 participants ranged in age between 17 and 60+. Altogether, the focus group participants were comprised of 6.6% Caucasian, 46.6% African American, 42.2% Hispanic, 2.3% Native American, with 2.2% preferring not to answer. The groups were 62.3% female and 37.7% male.

Methodology

Due to the COVID-19 pandemic, most focus groups were held virtually and were only held in person when safety protocols allowed. Each focus group had a facilitator guiding discussions through the seven previously prepared questions. Additional staff took detailed notes to capture the information shared.

Results

Mental health, financial instability, lack of providers and access concerns were brought up in every focus group. For a detailed summary of the focus group sessions see Appendix D. A brief summary of the key findings for each topic is presented below.

TOPIC	KEY FINDINGS
What are the most serious health problems in our community?	• Anxiety and depression • Asthma • Cancer • Cardiovascular health • COVID-19 • Dental health • Diabetes • Flu • Health care expenses • Heart Disease • High Blood Pressure • High Cholesterol • Hypertension • Mental Health • Mold, environmental factors • Obesity • Sciatic nerve • Sexual Health • Stress • Substance Use
When considering Social Determinants of Health, which of the following resonate with you as a key social determinant that we should be focusing on?	• Access to food and healthy food • Access to services • Community Outreach options • Education • Employment • Financial concerns • Health behaviors • Housing • Peer Counseling • Public Community Outreach options • Social Support • Transportation • Understanding how to prepare healthy food • Violence

TOPIC	KEY FINDINGS
Who has the health problems? **What groups of individuals are most impacted by these problems?**	• African Americans • Aging populations • Caregivers • Chronic disease diagnosis • Disabled persons • Discharged military • Fixed income • Geriatrics • Homeless • Indigent • Latinx • Low socioeconomic status • Low-income populations • Minorities • Under educated • Under insured • Uninsured • Women • Working class • Young adults • Youth
What keeps people from being healthy? **What are the barriers they face with taking care of their health and accessing care?**	• Access to doctor • Adequate housing • Affordable healthcare • Culture • Drugs • Economic status • Education • Fear • Financial barriers • Food insecurity • Lack of mental health providers • Lack of resources • Lack of social support • Loneliness • Mistrust • No insurance • Poor diet • Race • Time • Transportation

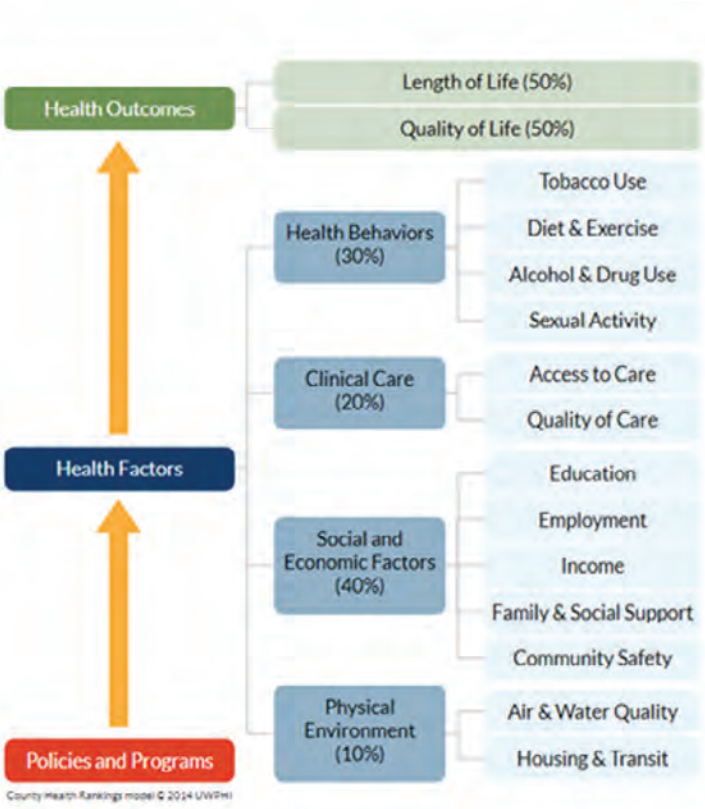
TOPIC	KEY FINDINGS
What is being done in our community to improve health and reduce barriers? **What resources exist in the community?**	• CHKD classes • Church programs • COVID-19 testing • Department Social Services • Flu clinics • Free clinics • Free services • Health Fairs • Immunization clinics • Outreach organizations
How has the COVID-19 pandemic worsened the health issues in our community?	• Access to doctor • Depression • Food insecurity • Free clinic closure • Isolation • Lack of resources • Scheduling wait lists • Substance Use, alcohol use • Wait times • Weight issues

TOPIC	KEY FINDINGS
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?**	• Affordable Healthcare • Better Access • Church Programs • Community Events • Community pantry • Culture Conscious Care • First aid mobile trails • Fundraisers • Health Education • Health Fairs • Mobile Clinic • Neighborhood Events • Outreach Programs

HEALTH STATUS INDICATORS

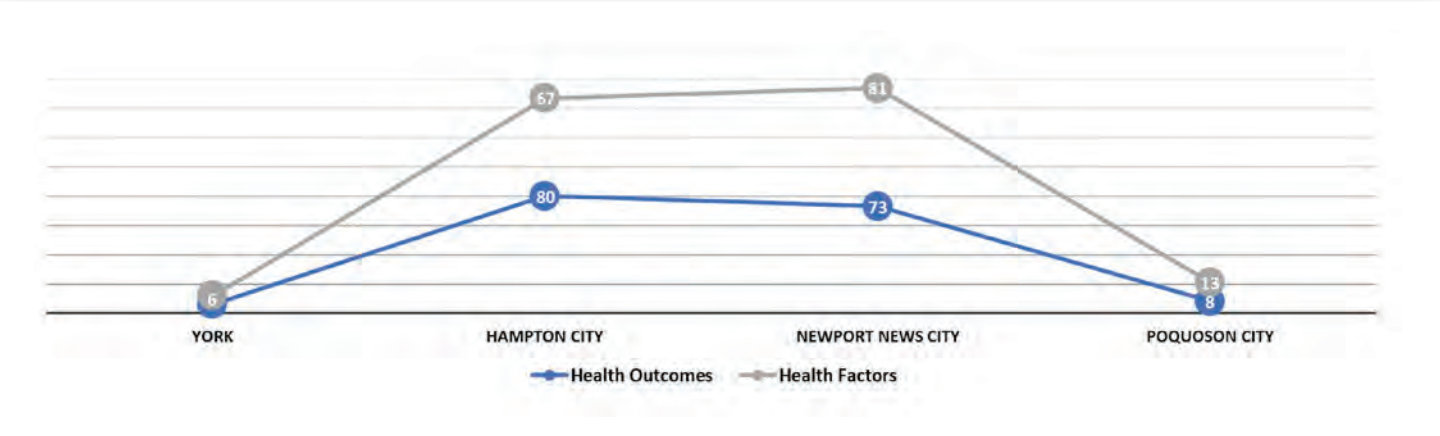
County Health Rankings

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 that influence 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 service area of Newport News, Hampton, Poquoson, and York County (Appendix B).



Source: County Health Rankings 2021, Rankings and Documentation;

Health Status Indicators

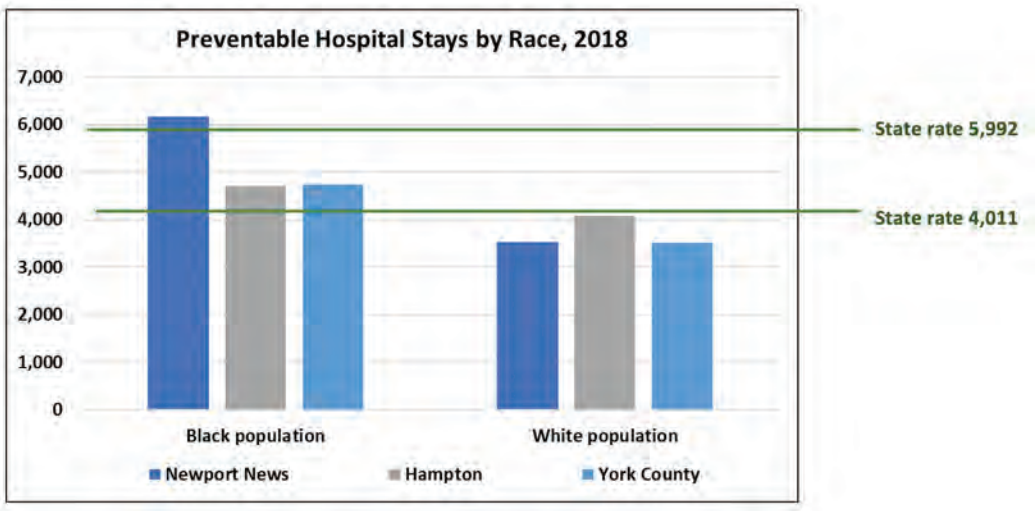
Below are key health status indicators for the counties represented in the service area. Links are also included to interactive data dashboards on the Greater Hampton Roads Indicators Dashboard, also known as GHRconnects. Here indicators can be explored for a comparison to other nearby localities, change over time, race/ethnicity, and gender, where available. In addition, more indicators are often available through the link and Appendix B.

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

A. Access to Health Services Profile
B. Mortality Profile
C. Hospitalizations for Chronic and Other Conditions Profile
D. Risk Factor Profile
E. COVID-19 Profile
F. Maternal and Infant Health Profile
G. Older and Aging Adults
H. Cancer Profile
I. Diabetes Profile
J. Surgical Site Infections Profile
K. Behavioral Health Profile
L. Community Violence and Gun Violence Profile

ACCESS TO HEALTH SERVICES PROFILE

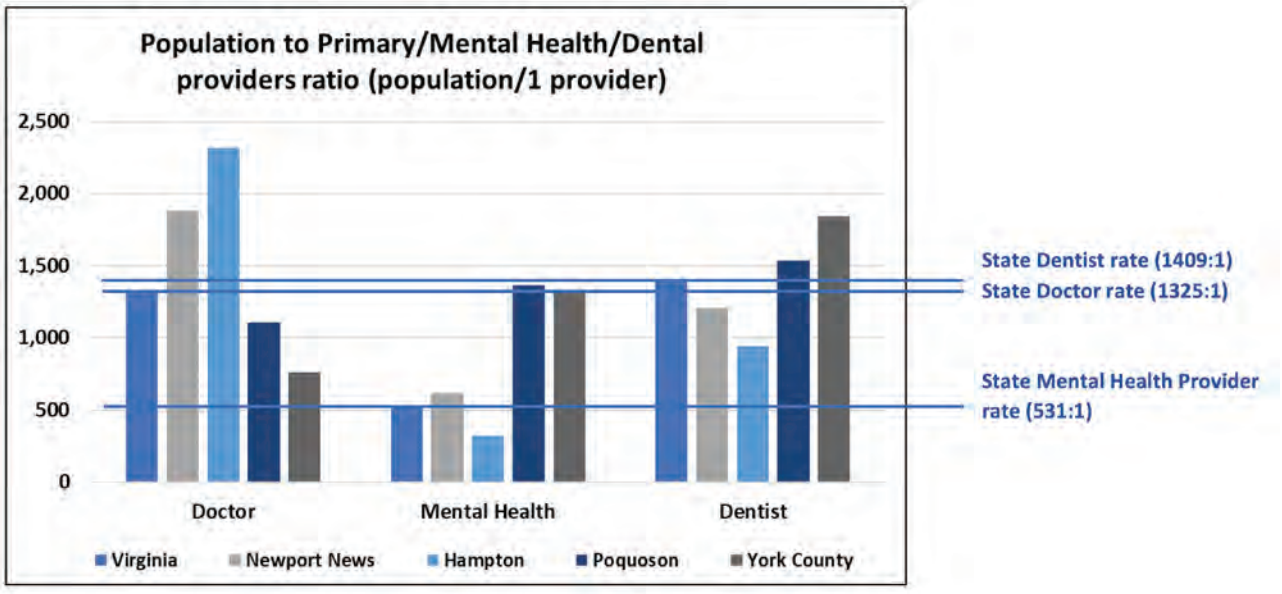
Access to quality and affordable health care is important to an individual's health. Health insurance and local care resources can ensure access to care. If outpatient care in a community is poor, then people may be more likely to overuse the hospital as their main source of care, resulting in unnecessary 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 reducing these unnecessary and costly hospital stays and improving the health of the community.



Source: County Health Rankings 2021, Rankings and Documentation;
**Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees. Disparity data unavailable for Poquoson County*

Provider Ratio

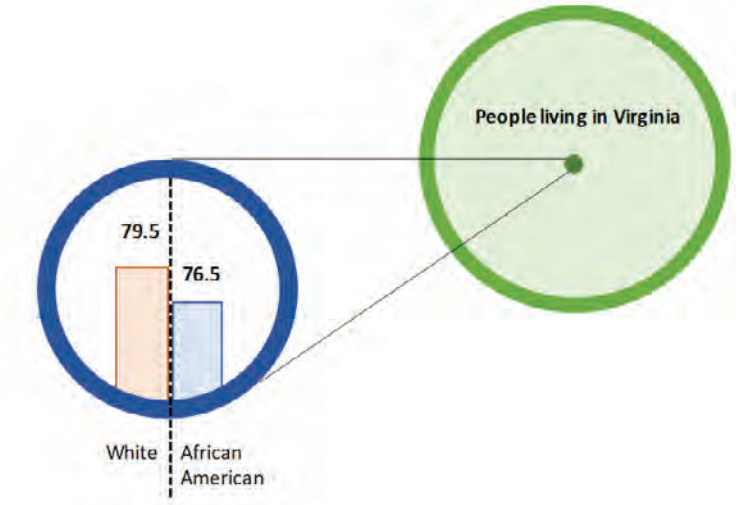
The rate of primary care and dental care providers was examined in the service area. The rates for population to primary care providers were higher than the state (1325:1) in some localities in the service area. The population ratio for dental care providers was also higher than the state (1409:1) in some localities (Appendix B). 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 percentage in all localities except Newport News which has a higher percentage of uninsured. The preventable hospital stay rate among Medicare beneficiaries was highest in Newport News, followed by Hampton and Poquoson, which suggests 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;

MORTALITY PROFILE

The life expectancy for a person living in the Commonwealth of Virginia is 79.5. York County has a slightly higher life expectancy than the state at 82.5. It is important to note there is a disparity with life expectancy among African Americans. The life expectancy for African Americans is one to three years less compared to white Americans in the service area (Appendix B).



Leading causes of death in the service area were examined. In 2019, the top three causes of death were cancer, heart disease, and respiratory disease.

In comparison, accidents were the third leading cause of death in Virginia, with heart disease and cancer being the top two causes. In the service area, the crude death rate from all causes was mostly greater than the rate in the state overall. For Hampton, Newport News and Poquoson, the top three causes of death had a crude death rate higher than the rate for Virginia.

Leading Causes of Death Per 100,000, Age-adjusted, 2019

		All Causes	Cancer	Heart Disease	Respiratory Diseases	Accidents	Stroke	Alzheimer's Disease	Diabetes	Suicide	Chronic Liver Disease	Hypertension and Renal Disease
Hampton City	Prevalence Rate	972	200.7	205.2	49.8	59.5	48.3	38.7	30.5	14.9	14.1	11.2
	Annual Average Count	1,308	270	276	67	80	65	52	41	20	19	15
Newport News City	Prevalence Rate	910	180.8	186.9	51.9	51.9	48.5	32.4	44.6	13.9	13.9	15.1
	Annual Average Count	1,631	324	335	93	93	87	58	80	25	25	27
Poquoson City	Prevalence Rate	921	268.9	171.1	114.1	32.6	40.7	57	24.4	24.4	8.1	8.1
	Annual Average Count	113	33	21	14	4	5	7	3	3	1	1
York County	Prevalence Rate	738	140.6	131.8	51.3	45.4	42.5	39.5	33.7	13.2	14.6	7.3
	Annual Average Count	504	96	90	35	31	29	27	23	9	10	5
Virginia	Prevalence Rate	823	176	176.1	42.9	46.8	44.7	30.8	27.5	13.3	12.1	9.6
	Numerator (count)	70,242	15,024	15,035	3,662	3,993	3,819	2,626	2,351	1,135	1,037	816

Prevalence Rate

250 0

*Data Source: Virginia Department of Health, Division of Health Statistics, Virginia statistics 2019, received 1-13-2019 * Data unavailable*

HOSPITALIZATIONS FOR CHRONIC AND OTHER CONDITIONS PROFILE

Sentara CarePlex Hospital, COASC, and PWSC examined the age-adjusted hospitalization rates for the service area. For the top conditions seen in hospitals, adult mental health, heart attacks and diabetes were the highest rated in the service area, followed by adolescent suicide/self-inflicted harm. Rates for adolescent suicide and self-inflicted harm increased across the service area, as did adult mental health and adult suicide and self-inflicted harm (Appendix B). Substance use was a top condition in Poquoson.

RISK FACTOR PROFILE

The percentages of smokers and those selecting frequent mental health distress were higher for the majority of the localities in the service area as compared to Virginia values. The percentage of adults who drink excessively was higher in Poquoson and York County as compared to the Commonwealth of Virginia, but lower in Newport News and Hampton.

Obesity and physical inactivity percentages were higher for the service area when compared to Virginia overall. Access to exercise opportunities was higher than the state in Newport News, Hampton and Poquoson. The percentage of people with diabetes was higher in Newport News and Hampton, but lower in Poquoson and York County. Food insecurity percentages were lower in Poquoson and York County compared to the state, while limited access to healthy food was highest in Hampton at 10% as compared to the state at 4% (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.

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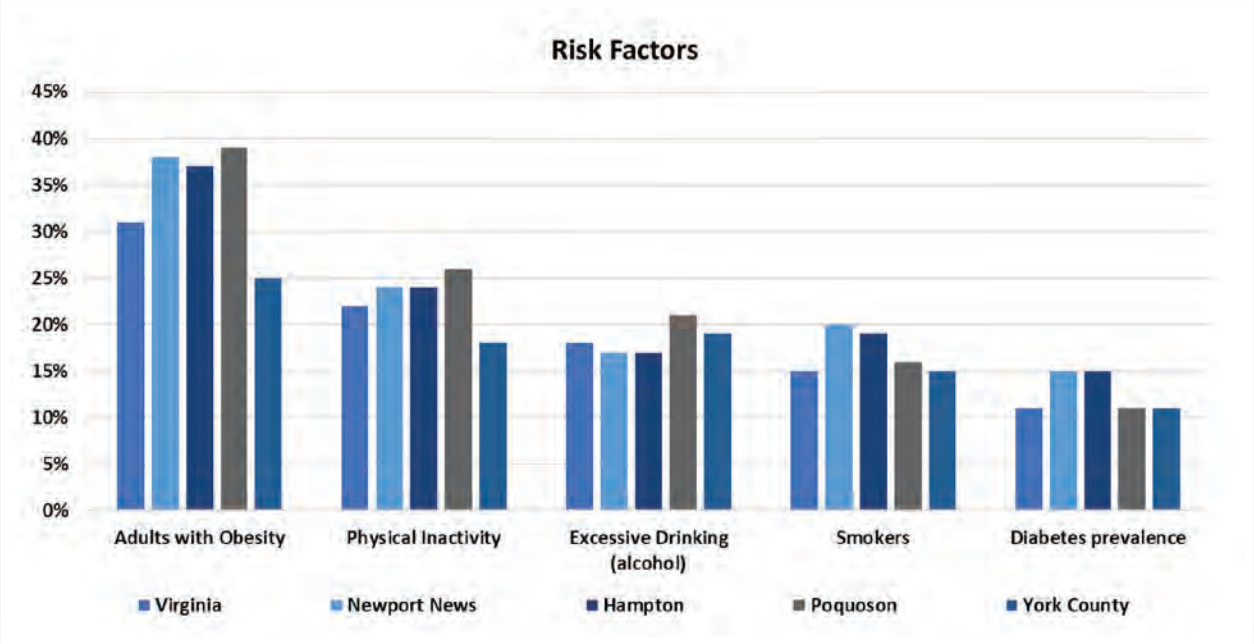
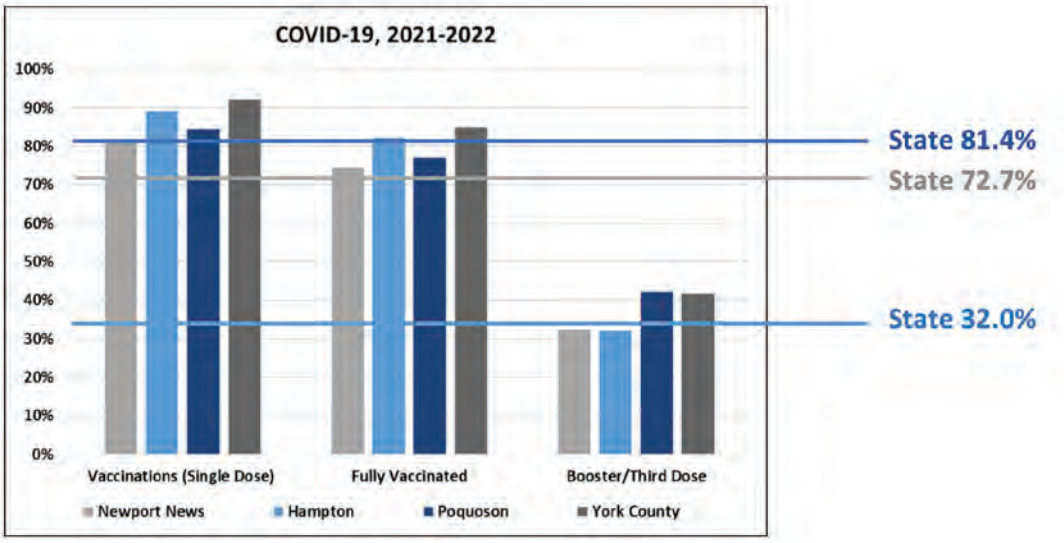


Source: County Health Rankings 2021, Rankings and Documentation

COVID-19 PROFILE

In 2020, the nation faced the COVID-19 pandemic. This contagious disease impacted the health of the 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 August 27, 2020 and April 1, 2022, the Commonwealth of Virginia had 1,669,750 cases with 19,714 deaths. Between March 2021 and April 2022, Newport News had the highest rate of cases at 12,927 per 100,000 residents and Hampton had the highest rate of deaths at 112.9 per 100,000 residents. As of April 2022, York County had the highest percentage of residents both with a single dose and with two doses of the vaccine, higher than the state percentage.



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 Virginia, residents of the service area had a high percentage of babies born with low and very low birthweights compared to Virginia values. The infant mortality rate was slightly higher in Poquoson, Newport News, and York County compared to Virginia (Appendix B). While teen births are a community concern, the low numbers do not permit meaningful standardization for comparison to state rates. The non-marital birth rate is slightly higher than the Virginia rate in Newport News and Hampton. While this does not carry the stigma that it once did, it may indicate the degree of support for both the mother and the infant.

Source: World Health Organization, Coronavirus disease (COVID-19); Virginia Department of Health, COVID-19 Data in Virginia, Dashboard; Virginia Department of Health Division of Health statistics

OLDER AND AGING ADULTS PROFILE

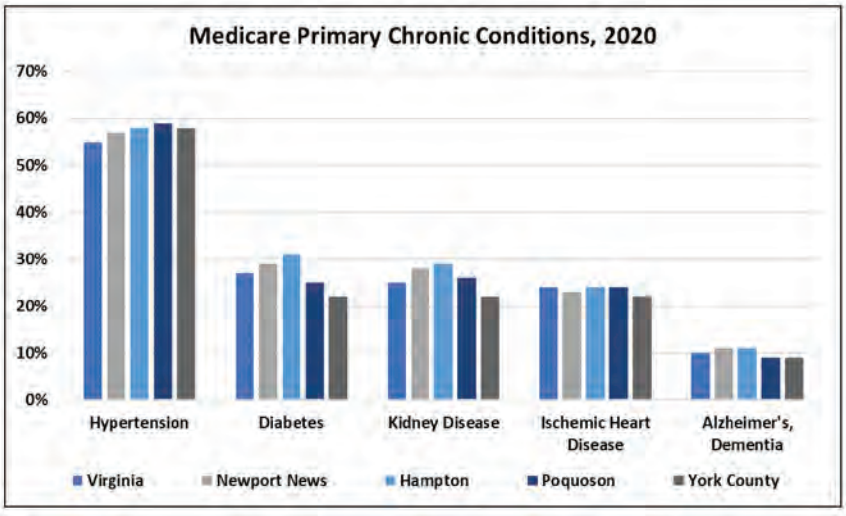
In many communities, older adults are the fastest growing segment of the population. Challenges come with an aging population, including health-related factors and other factors that ultimately impact health. Preventable hospital stays among the Medicare population in the service area was higher than in the state as a whole. This indicator reflects there may be opportunities to improve primary and outpatient care to 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 service area having higher percentages in most localities than in the state overall. Kidney disease and heart conditions also showed high percentages for the Medicare population utilizing hospital services.

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

The percentage of persons under 65 with Alzheimer's disease and dementia diagnoses in the service area is higher than the state overall. The percentage of Medicare beneficiaries, aged 65+, treated for Alzheimer's disease or dementia was slightly higher in the service area compared to Virginia (Appendix B). Per the Alzheimer's Association, there is an estimated increase of 26.7% projected by 2025 in prevalence of the number of people age 65+ receiving an Alzheimer's disease diagnosis in the Commonwealth of Virginia. 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 Commonwealth of Virginia, there are 41,380 active registrants with Advanced Care Plans filed within the USLWR (U.S. Living Will Registry). Sentara has 70,236 active registrants with Advanced Care Plans on file within the USLWR with 5,875 of those completed for residents of the service area.



Source: Centers for Medicare & Medicaid Services, Data.cms.gov
Alzheimer's Association, 2022 Alzheimer's Disease Facts and Figures, Virginia Alzheimer's Statistics; Virginia Alzheimer's Commission, AlzPossible Initiative; United States Living Will Registry

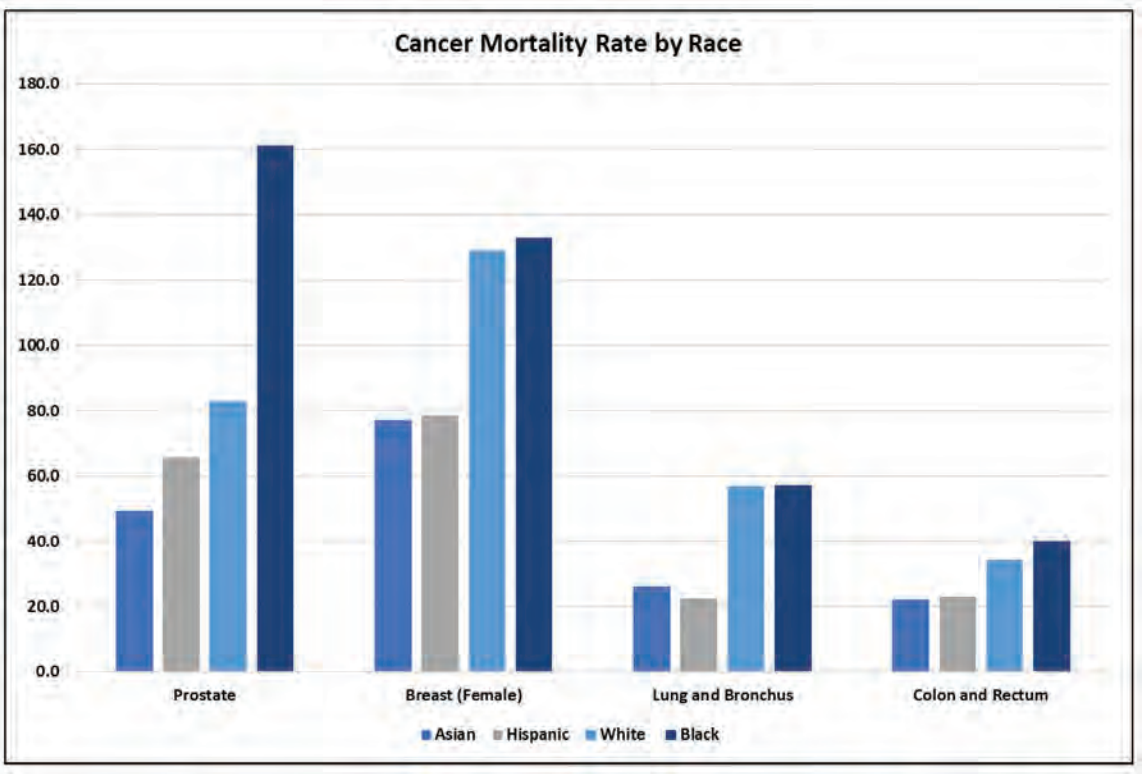
CANCER PROFILE

Death and incidence rates for a variety of cancer types were examined since cancer is the leading cause of death in the service area. 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. However, the cancer incidence rates in Newport News, Hampton and Poquoson were mostly higher than the state and cancer death rate in Newport News and Hampton were well above the state rate. It is important to note that cancer rates are rising for the African American population living in the Commonwealth of Virginia.

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

Mortality rates were highest among lung, breast, prostate, and colon cancers, though these are not the only ones on which Sentara will focus efforts. The trend for these cancers is falling compared to the previous 5-year period. However, mortality rates for African Americans diagnosed with breast cancer is rising compared to previous years (Appendix B). Prostate and breast cancers are the leading causes of cancer death for African Americans living in Virginia. See the below graph which shows the mortality disparities among races. The community outreach programs educating and providing cancer screenings, as well as medical developments, are having an impact. Efforts will need to focus on populations at higher risk of this disease.



Data Source: NIH National Cancer Institute, 2014-2018 Incident Rate Report for Virginia

DIABETES PROFILE

According to the Centers for Disease Control and Prevention, the prevalence of type 2 diabetes continues to increase in the United States and is the 7th leading cause of death (CDC, 2021). Risk factors such as obesity and physical inactivity have played a significant role in this increase, but age and race/ethnicity also remain key risk factors. Diabetes is a top cause of death in the service area. Here we examine additional related indicators.

Diabetes is also associated with increased risk of certain types of cancer, such as liver, pancreas, uterine, colon, breast, and bladder cancer.

Source: CDC, 2019

The percentage of adults with diabetes living in Newport News and Hampton is higher than the state percentage of 8.5%. The death rate due to diabetes in Newport News and Hampton is also higher than the state. Sentara CarePlex Hospital, COASC and PWSC examined hospitalization rates related to diabetes and found the age-adjusted hospitalization rates due to diabetes was above that of the state for both cities. Newport News had the highest rate of 33.1 compared to the state rate at 20.7. Newport News and Hampton have high hospitalization rates due to short-term and long-term complications of diabetes and were higher than the state. It is also important to note that the percentage of Medicare recipients living in Newport News and Hampton and diagnosed with diabetes is higher than the state.

SURGICAL SITE INFECTIONS PROFILE

Both COASC and PWSC examined surgical site infections (SSIs) for their surgery centers. SSIs occur after surgery and in the part of the body where the surgery took place. SSIs can occur within days of the surgery, or can develop even months after surgery. Some patients may be at higher risk for developing a SSI due to age and underlying medical conditions such as diabetes and COVID-19 infections. Sentara CarePlex Hospital, COASC, and PWSC will continue to work together to educate patients on the risk factors for SSI to decrease infection rates.

"Data from AHRQ's Partnership for Patients initiative indicates that the national rate of SSI decreased by 16% between 2010 and 2015, translating into significant benefits for patients (including many lives saved), as well as significant cost savings" (Agency for Healthcare Research and Quality, 2019). Advances have been made in infection control practices, including improved operating room ventilation, sterilization methods, barriers, surgical technique, and availability of antimicrobial prophylaxis, yet SSIs remain a substantial cause of morbidity, prolonged hospitalization, and death in the inpatient setting (National Healthcare Safety Network, OPC-SSI, 2022).

Data Source: Centers for Disease Control and Prevention, Diabetes; Diabetes Report Card, 2019; Greater Hampton Roads Indicators Dashboard; Agency for Healthcare Research and Quality, Surgical Site Infections

BEHAVIORAL HEALTH PROFILE

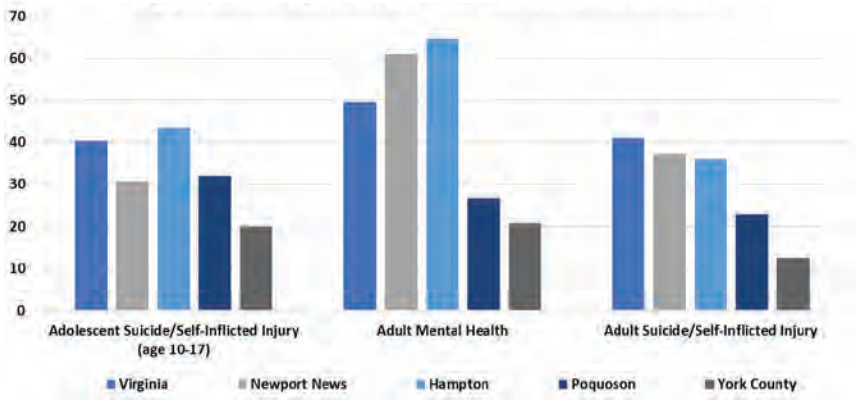
Hospitalization rates due to alcohol/substance use and mental health and suicide/self-intentional injury were examined for the service area. Hampton had higher hospitalization rates due to adult mental health and adolescent suicide/self-intentional injury while Poquoson had a higher rate of substance use when compared to Virginia rates between 2018-2020.

Mental health is an increasing health concern for both adolescents and adults. Between 2018-2020, the adult mental health rate per 10,000 population was highest in Hampton and Newport News. 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, SCH emergency department saw a patient frequency of 1,857 for people aged 18+ with a behavioral health diagnosis. Of the 1,857 visits, 28.6% presented with suicidal ideations and 8.5% with major depressive disorder.

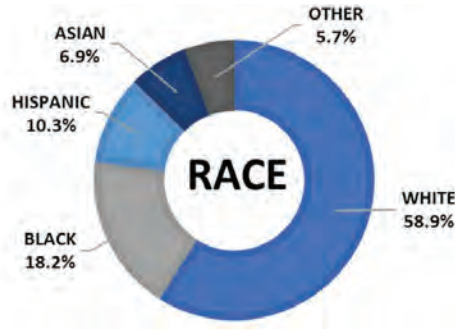
The adolescent suicide rate was highest in Hampton followed by Poquoson. "In early 2021, emergency department visits in the United States for suspected suicide attempts were 51% higher for adolescent girls and 4% higher for adolescent boys compared to the same time period in early 2019" (Office of Surgeon General, 2021). SCH emergency department saw a patient frequency of 288 for youth, age 0-17, present with a behavioral health diagnosis. Of the 288 visits, 37.5% presented with suicidal ideations and 9% with major depressive disorder.

The COVID-19 pandemic has worsened mental health among youth and adults with increasing 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. Most of the service area has fewer mental health providers per person compared to the state (531:1), Poquoson (1,363:1), York County (1,313:1), and Newport News (614:1). Hampton is doing better in their rate of mental health providers per person (320:1) (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 also a need for a more racially and ethnically diverse mental health workforce to provide racially concordant care (Appendix B).

Age-Adjusted Hospitalization Rates, 2018-2020: Mental Health



Virginia Mental Health Providers 2020



Source: Virginia Health Care Foundation

Source: Greater Hampton Roads, Community Indicators Dashboard; Virginia Health Care Foundation;

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.

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

The violent crime rate in Newport News and Hampton was much higher compared to the state rate of 207 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 service area, the rate per 100,000 was higher than the state rate for firearm fatalities, with the exception of Poquoson and York County which did not have rate data available.

Source: County Health Rankings 2021, Rankings and Documentation

2019 IMPLEMENTATION STRATEGY PROGRESS REPORT

The previous Community Health Needs Assessment identified several health issues. The SCH, COASC, and PWSC 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.

Sentara CarePlex Hospital, COASC and PWSC are monitoring and evaluating progress to date on its 2019 implementation strategies for the purpose of tracking the implementation and documenting the 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.

Sentara CarePlex Hospital

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

- Access to Health Care for Low-Income and/or Underinsured Population
- Opioid Crisis / Community Drug Use
- Health Literacy and Community Outreach (including cancer, diabetes, and obesity)
- Access to Healthy, Affordable Food

Sentara CarePlex Hospital continues to partner with the Hampton and Newport News Health departments to help meet the needs of our community, though collaborative efforts were placed on hold during the pandemic. Collaborative efforts to identify ways to work together on initiatives to avoid duplication of resources and better meet the needs of our community will resume at the end of 2022.

Access to Health Care for Low-Income and/or Underinsured Population

Sentara CarePlex Hospital continues to provide Advance Care Planning and Advanced Directive education to the general community. Enrollment coaches assisted with enrolling eligible patients in the Medicaid Expansion Program at SCH throughout 2021. The hospital continues to provide free screening mammograms to qualified women through a Komen Foundation Grant. Free colon cancer test FIT Test kits are provided to qualified program participants. Colonoscopy screenings are offered. Sentara CarePlex Hospital is also assessing locations for Peninsula cancer center and clinical program expansions. The hospital collaborated with Riverside Regional Medical Center and Bon Secours along with other partners to provide a free Prostate Cancer Early Detection program. Sentara CarePlex Hospital also continues to refer qualified patients to the Every Woman's Life program coordinator at the Health Departments. The program, funded by a state grant, provides Virginia women meeting age and financial requirements with free mammograms and cervical cancer screenings.

Sentara CarePlex Hospital collaborates with Community Paramedicine Program

Hampton Initiative:

- The objective of the project is to increase access to healthcare services through a community-based paramedicine approach. The goal of the program is to decrease inappropriate utilization of emergency departments and reduce readmissions by increasing compliance and usage of primary care and specialty care services, as well as to reduce readmission of congestive heart failure (CHF) patients specifically.

Newport News Initiative:

- The objective of the project is to provide healthcare assistance and increased access for Newport News residents. The goal of the program is to decrease inappropriate utilization of emergency departments and provide community outreach care through partnerships with physicians, continuing care staff, and other community agencies to improve the quality of life for the citizens of Newport News.

Program Service Offerings:

- Hampton:
  - Home Visits to include physical assessment, vital signs, and medication reconciliation
  - Phone follow-up with patients
  - Appointment Scheduling and Follow-up with Sentara Cardiology or Sentara Medical Group
  - Food Assistance
  - Appointment Scheduling and Follow-up with Primary Care
- Newport News:
  - Medical Education
  - Vital Signs
  - Medication Reconciliation
  - Wellness Checks/Home and Safety
  - Wound Care
  - Health/Mental Health Crisis Referrals
  - Hospital Discharge Follow Up
  - Care Coordination

Community Collaboration:

- Virginia Peninsula Foodbank
  - CHF Food Program
  - Community Food Boxes
  - Southeastern Virginia Health System
  - Medicaid Application Assistances
  - Primary Care Appointments
- Dental Services
  - Referrals to Specialty Care Services

Opioid Crisis / Community Drug Use

Sentara CarePlex Hospital continues to collaborate with community partners to address substance use. The hospital continues to partner with the Community Service Board (CSB) to provide telehealth services for all involuntary behavioral health patients. The CSB continues to partner with Personal Emergency Response System for bed placement. Patients presenting with high-risk actions, thoughts, or behaviors such as suicidal/homicidal ideations, psychosis, etc. are evaluated by the provider and CSB is consulted. The CSB provides updates on placement and works with the staff to coordinate transport once a bed has been found.

Behavioral Health

Sentara continues to improve access to behavioral health resources. In 2021, a Behavioral Health Care Center opened to provide follow-up care within seven days of being discharged from an emergency department with a behavioral health diagnosis or from an inpatient behavioral health unit. This clinic started with a focus on inpatient behavioral health units and behavioral health patients discharged from Sentara Virginia Beach General Hospital, Sentara Independence and Sentara Princess Anne Hospital emergency departments. The Behavioral Health Care Center has expanded its services to include other individuals needing behavioral health care. As of March 2022, the Behavioral Health Care Center has seen a total of 1215 patients.

In 2022 the Hampton Roads Behavioral Health Consortium convened as a regional coalition of private and public partners in mental health to address the escalating mental health crisis. The Behavioral Health Consortium will develop a strategic action plan to address prevention, intervention, treatment, workforce, resources, access, education, recovery and eliminating the stigma associated with behavioral health.

Sentara has expanded, and will continue to expand, telepsychiatry within the EDs and is working on expanding Intensive Outpatient Programs and Partial Hospitalization Programs in Hampton Roads. Sentara will continue to partner with community mental health programs to identify alternate placement options for emergency department patients presenting with behavioral health issues.

The Behavioral Health Safety Workgroup is focusing on improving the emergency department's staff and patient safety.

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

- 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.

The BHTOC Clinical Patient Management workgroup will continue to improve processes and work toward:

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

A BHTOC Safety workgroup addresses:

- Working 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 department site visits and risk assessments was completed by the Behavioral Health Consultant and BH Safety Workgroup team in May 2022.

Health Literacy and Community Outreach (including cancer, diabetes, and obesity)

Sentara CarePlex Hospital collaborates with Virginia Hospital Healthcare Association (VHHA), Hampton Healthy Families (HHF), and the Stork's for Family Maternity Center to provide health education to patients and family members. VHHA provided a grant to our Stork's Nest Community partner to assist with transportation for a

prenatal program. Stork's Nest provides curriculum-based educational programs to pregnant women in the community. Hampton Healthy Families (HHF) provides postnatal care patients, i.e., education/information on breastfeeding and mental health support. Sentara CarePlex Hospital staff continue to support health fairs and present education related to orthopedic and bariatric services. During community day the bariatric surgery team educated the public about the bariatric medical and surgical programs available. Sentara CarePlex Hospital also provided information pertaining to insurance coverage and distributed products such as weight loss shakes, juices, and protein bars. Sentara CarePlex Hospital continues to collaborate with the American Heart Association to address heart health in the community by providing fundraisers and educational programs.

Cancer Awareness and Prevention

Sentara extends its reach into the community, where life happens. Sentara brings prevention, hope, inspiration, and support to our local community where Sentara is working to reduce cancer's impact. The cancer educators implement programs focused on cancer prevention and detection, and provide community outreach by hosting and participating in screening and education events. In 2021, more than 3,000 individuals participated in community events.

Sentara is continuing to build the "Living Beyond Cancer" survivorship program to enhance patients' wellbeing and long-term health. This is accomplished through cancer support groups and various education programs on nutrition, physical therapy, and exercise through the Wellness Beyond Cancer program. This free, six-week holistic health program incorporates meditation, yoga, and fitness for cancer patients and addresses the needs of the entire individual to strengthen both physically and mentally, providing a sense of peace and balance throughout their journey to wellness. Local cancer screening events for oral, head and neck cancers, FIT testing for colorectal cancer, breast cancer mammography screening and skin cancer screening events are offered around the Hampton Roads area.

In 2022, Sentara plans to continue to remove barriers to wellness for uninsured or underinsured women for mammography, including supplementing traditional measures, such as its mobile mammography van, with more targeted efforts to reach underserved communities, including connecting with faith leaders, providing transportation for those who need it and building trust with patients. New and exciting opportunities await cancer patients in the Hampton Roads area with the opening of the Carrillo Kern Center for Integrative Therapies at the Sentara Brock Cancer Center in Norfolk. It is another way we are working to fulfill our promise to ensure all patients and families have the mind, body and spiritual support they need throughout their cancer journey. Services such as acupuncture, integrative nutrition, yoga, meditation, reiki, and garden therapy will be offered to the community. Additionally, cancer screenings will continue to be offered throughout the community, in collaboration with community partners, to continue to bring cancer education and preventative services to the historically underserved.

Access to Healthy, Affordable Food

Sentara CarePlex Hospital partnered with Riverside Regional Medical Center, Bon Secours Mary Immaculate Hospital, Children's Hospital of the King's Daughters, and the Hampton and Newport News Health Departments to help meet the needs of the community via participation in a healthy food program for patients experiencing food insecurity. This was placed on hold due to the pandemic. Sentara CarePlex Hospital continues to collaborate with partners to identify ways to share resources on initiatives, to avoid

duplication of resources, and better meet the needs of our Peninsula Community. Sentara explored alternative strategies in collaboration with the Virginia Peninsula Food Bank to offer consistent healthy food to feed food insecure community members.

CarePlex Orthopaedic Ambulatory Surgery Center

For reference, the list below includes the 2019 CHNA health needs that were prioritized to be addressed by COASC in the 2019 implementation strategy.

- Accident/Injury Reduction
- Underinsured/Uninsured
- Access
- Community Outreach

Accident/Injury Reduction

CarePlex Orthopaedic Ambulatory Surgery Center continues community outreach activities, educational series, and screening activities, focusing joint preservation, injury prevention, and health screenings. CarePlex Orthopaedic Ambulatory Surgery Center utilizes social media for live talks in which patients can watch explanations of injuries and how to repair them while asking questions. Physical Therapy (PT) continues pre-PT for joint patients. Also, COASC utilizes virtual PT coach for patients to log in and keep track of exercises.

Underinsured/Uninsured

CarePlex Orthopaedic Ambulatory Surgery Center is working with Uber to provide transportation for those who cannot come to surgery due to lack of transportation. The center maintained its goal of over 4% for charity giving in 2021. CarePlex Orthopaedic Ambulatory Surgery Center provides brochures in the lobby and in every patient folder to help educate patient, family and friends. CarePlex Orthopaedic Ambulatory Surgical Center provides all insurances that COASC accepts and a list of fees on its website. Patients are provided a link and a phone number that will send them directly to the financial counselor. The center also added a patient calculator in which patients can enter the name of the procedure that they are having and learn the associated out-of-pocket cost.

Access

CarePlex Orthopaedic Ambulatory Surgical Center provides Care Credit to assist in financing care. For transparency, the financial policy is readily available to all patients and patients are directed to a Financial Assistance person who will guide them through the various programs provided. Care Credit, as well as payment programs, are available for patients who are unable to pay their bill up front.

Community Outreach

In partnership with Tidewater Orthopaedic Associates, patients meeting the criteria for health concerns are provided education as well as educational handouts. The surgery center created a “same day” program through TOA where patients can be seen without an appointment for injuries. Facebook live talks discuss joint pain, neuropathy issues and arthritis. CarePlex Orthopaedic Ambulatory Surgical Center collaborates with TOA to provide educational information addressing obesity and smoking cessation. Pamphlets are provided at both TOA and COASC waiting rooms listing educational offerings for patients’ health needs. CarePlex Orthopaedic Ambulatory Surgical Center utilizes social media, educational classes, and virtual coaches to educate patients on conservative treatments, as well as exercises for hip and knee problems.

Sentara Port Warwick Ambulatory Surgery Center

This portion of the 2019 CHNA progress report is for Sentara Port Warwick Ambulatory Surgery Center (SPWASC) which closed in 2021. SPWASC which monitored and evaluated progress on its 2019 implementation strategies for the purpose of tracking implementation and documenting impact of those strategies in addressing selected CHNA health needs. The facility-maintained licensure under the SPWASC through the end of 2021; however, the SPWASC was closed due to Covid and performed no cases during part of 2020 and all of 2021. The SPWASC staff were reassigned to cases in the SCH during this timeframe. The 2019 community health needs assessment implementation strategy process was also disrupted by COVID-19, which has impacted all our communities.

Access to Health Care for Low Income and/or Underinsured

Sentara Port Warwick Ambulatory Surgery Center collaborated with SCH to improve access to health care for low income and underinsured populations. Through part of 2020, SPWASC provided assistance for uninsured patients to enroll in health care insurance plans during the open enrollment period. Enrollment coaches were available to help enroll uninsured patients into Federally Qualified Health Center primary care network.

Health Literacy and Community Outreach, including Eye Health and Cancer
Sentara Port Warwick Ambulatory Surgery Center collaborated with SCH and partnered with the Hampton and Newport News Health Departments to help meet the needs of our community and identify ways to share resources on initiatives to avoid duplication of resources and better meet the needs of our Peninsula Community. The SPWASC also conducted community outreach and educational programs that focus on prevention and early detection of the key community concerns of cardiac disease/stroke, pulmonary disease, obesity, cancer, diabetes, a flu prevention campaign.

Community Drug/Substance Use

Sentara Port Warwick Ambulatory Surgery Center collaborated with SCH to address community drug/substance use. Sentara Port Warwick Ambulatory Surgery Center and Sentara CarePlex Hospital continue to partner with the CSB to provide telehealth services for all behavioral health patients hospitalized involuntarily. The Community Service Board continues to partner with PERS for bed placement. Patients presenting with high-risk actions, thoughts, and behavior such as suicidal/homicidal ideations, psychosis, etc., are evaluated by the provider and CSB is consulted. The CSB provides updates on bed placement and works with the staff to coordinate transport once a bed has been found.

Access to Healthy, Affordable Food

Sentara Port Warwick Ambulatory Surgery Center collaborated with local food banks to ensure food was available to communities facing food insecurity.

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 learned 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 SCH, COASC and PWSC alone, these opportunities will require active partnerships among community organizations and individuals to create lasting impact. Sentara, SCH, COASC and PWSC 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, Virginia State Population Density

POPULATION DATA

Centers for Medicare & Medicaid Services 2019; Mapping Medicare Data
Research Group of the Weldon Cooper Center for Public Service, July 2019, Demographics
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)
Virginia Department of Health Culturally and Linguistically Appropriate Health Care Services; US Census Bureau American Community Survey Five-Year Estimates, 2014 vintage; CLAS
Virginia Medicaid Department of Medical Assistance Services; Data (As of January 15, 2022)

Health Indicators

ADVANCE CARE PLANNING

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

ALZHEIMER'S AND DEMENTIA

Alzheimer's Association, Virginia Alzheimer's facts
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

COVID-19

Virginia Department of Health, COVID-19 Data in Virginia, Dashboard

DIABETES

Center for Disease Control and Prevention, Diabetes
Center for Disease Control and Prevention, Diabetes Report Card 2019

GREATER HAMPTON ROADS

Greater Hampton Roads Community Indicators Dashboard

MATERNAL AND INFANT

Virginia Department of Health Division of Health statistics

Reviews

Agency for Healthcare Research and Quality (AHRQ). (September 7, 2019). Surgical Site Infections. Retrieved from https://psnet.ahrq.gov/primer/surgical-site-infections on August 10, 2022.

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.

Herron, M. (2019). Deaths: Leading Causes for 2017. Retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf on April 11, 2022.

Office of the Surgeon General (OSG). Protecting Youth Mental Health: The U.S. Surgeon General's Advisory [Internet]. Washington (DC): US Department of Health and Human Services; 2021. PMID: 34982518. Retrieved from https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf on April 11, 2022.

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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