Sentara Leigh Hospital
Leigh Orthopedic 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 Leigh Hospital and Leigh Orthopedic Surgery Center, which have the identical service areas of the Cities of Chesapeake, Norfolk, and Virginia Beach.

SENTARA®

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EXECUTIVE SUMMARY

> *"The status quo is never enough for our Fami-Leigh. We strive to provide exceptional care within the inpatient environment and within the community."*
>
> ***Tess Bilyeu**, MSN, RN, NPD-BC, Director Patient Care Services/ Magnet Program Director*

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 Leigh Hospital (SLH) and Leigh Orthopedic Surgery Center (LOSC) began conducting the community health needs assessment of the area that we serve. The assessment, completed in 2022, provides us with a picture of the health status of the residents in our communities and provides us with information about health and health-related problems that influence health status.

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

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

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

SLH and LOSC 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 Leigh Hospital

Sentara Leigh Hospital (SLH), located in Norfolk, Va., is a 250-bed facility featuring all patient-friendly private rooms and offers many advanced clinical services. The hospital specializes in orthopedic, cardiac, advanced imaging, gynecological and comprehensive breast care services.

Leigh Orthopedic Surgery Center

Leigh Orthopedic Surgery Center (LOSC) is a new, single specialty orthopedic surgery center that opened in January 2021. The facility is a joint venture between Sentara Healthcare and two local orthopedic groups of physician owners. The second-floor surgical suite features two operating rooms, a procedure room and pre/post-op recovery areas for state-of-the-art outpatient procedures.

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

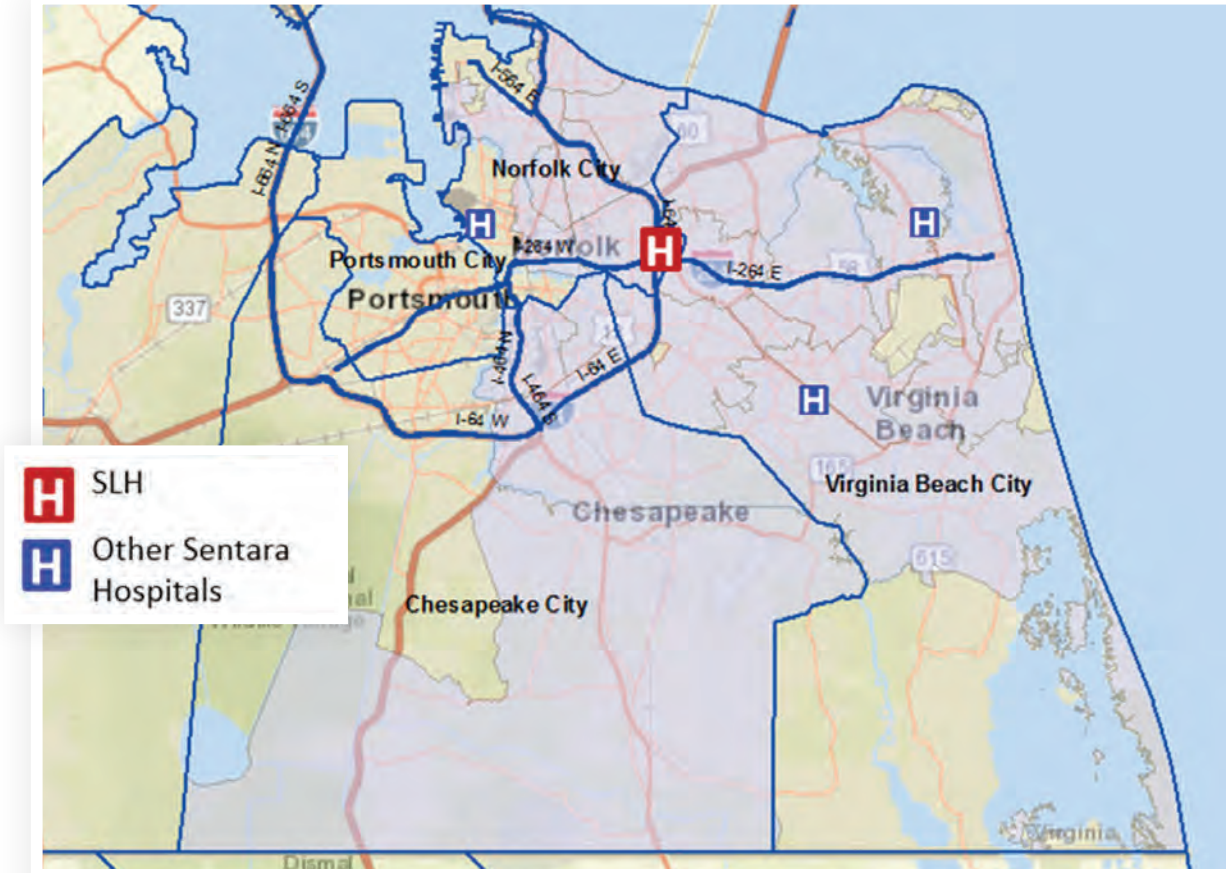
Community input is imperative, so we conducted a survey jointly with Bon Secours Hampton Roads, Children's Hospital of The King's Daughters, Riverside Health System, the Hampton and Peninsula Health Districts, and Three Rivers Health District. The assessment includes survey results from key stakeholders including 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 Leigh Hospital and LOASC work with several community partners to address health needs. Using the information from this community health needs assessment, SLH and LOASC will each develop an implementation strategy to address the identified health problems. Sentara Leigh Hospital and LOASC will track the progress of their implementation activities to evaluate the impact of these actions. The implementation progress report for the 2019 CHNA report for SLH is available at the end of this report. As LOASC opened in 2021 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.



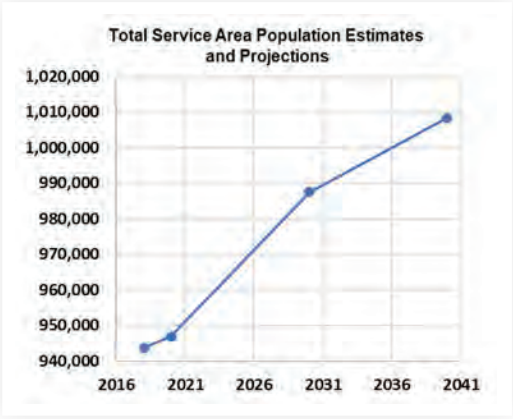
SENTARA LEIGH HOSPITAL (SLH) & LEIGH ORTHOPEDIC SURGERY CENTER (LOSC) SERVICE AREA

SOURCE: TRUVEN/MARKET EXPERT

COMMUNITY DESCRIPTION

GEOGRAPHY

The service area of SLH and LOSC is comprised of three localities: the Cities of Virginia Beach, Norfolk, and Chesapeake, with 89% of patients residing in these localities. Virginia Beach is the most populous city in the service region, followed by Norfolk and Chesapeake. Sentara Leigh Hospital and LOSC are located near the junction of the three localities.



POPULATION CHANGE

The service area population is enjoying healthy growth, primarily driven by Chesapeake's 10.9% growth since 2010. Virginia Beach has also experienced growth at 3.9%, while the Norfolk population has remained basically stable with a modest 1.3% growth.

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

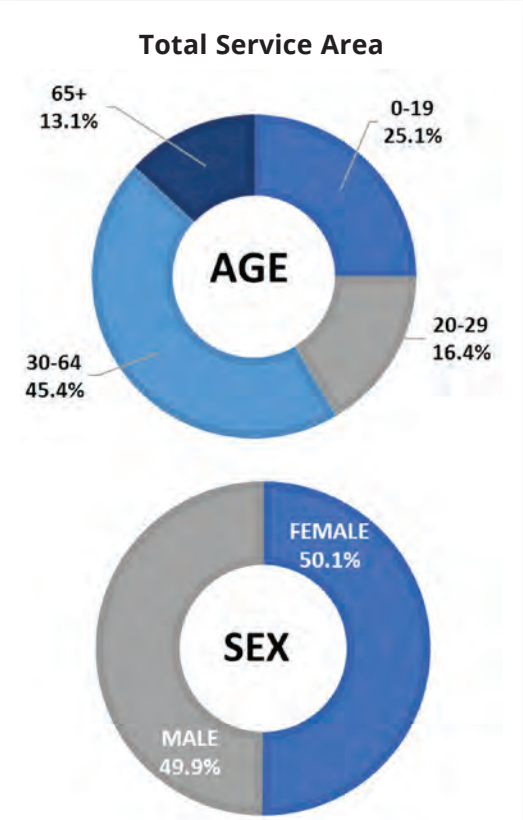
POPULATION HIGHLIGHTS

The combined population of the SLH service area is approximately 940,000 people. The three cities combined hold 11% of the population of the Commonwealth of Virginia.

Age and Sex

Of the 946,897 community members living in the SLH service area, most residents are between the age of 30-64. The service area has a lower percentage of residents aged 65+ than does the state. The population segments that represent children, young adults and working age adults vary slightly from the statewide proportions.

The SLH service area has a higher percentage of children compared to the Commonwealth of Virginia. There were 11,741 babies born in the service area in 2019. The majority of births were in Virginia Beach, accounting for slightly over 8% of the state-wide births. Similar to state demographics, there is a slightly higher percentage of residents born as female in the entire service area. In Norfolk slightly over half of the residents identify as male.

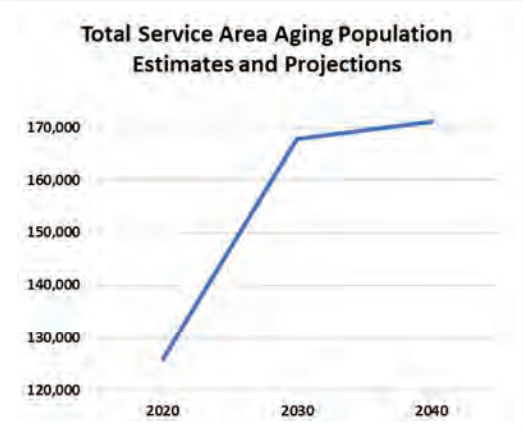


Aging Population

It is well understood that older individuals are likely to need more health care services, and a variety of services which are 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 Virginia Beach.

In 2020, 13.1% of the population living in the service area was age 65+, slightly below that of Virginia at 15.9%. By 2030, the population of older adults in the service area is projected to be 16.9%. This shows the number of older adults increasing in the next 10 years, leading to a higher number of aging adults in the service area.

Of the 125,919-aging population in 2020, 51% reside in Virginia Beach. Virginia Beach's aging population is projected to increase by 2.4% by 2040, bringing the projected overall population of residents 85+ to 12,124.



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 2019http://demographics.coopercenter.org

Other Demographic Features

The overall percentage of the population who are veterans is higher than either Virginia as a whole or the United States with 11.7% of service area's residents being veterans. There is a higher percentage of owner-occupied homes in Chesapeake compared to the state. In Norfolk, fewer households have internet access, impacting remote learning opportunities and outcomes during the COVID pandemic. A higher percentage of the population in Norfolk has a disability than in the state overall. The SLH service area has a higher percentage of persons living in poverty, and lower percentage of college degrees when compared to the state.

COMMUNITY SPECIFIC DEMOGRAPHICS (APPENDIX A)

City of Norfolk has 238,005 residents with 17.6% of this population living in poverty and 15% uninsured. Of the population in this county, 26.3% are ages 0-19, 22.5% are ages 20-29, 42.7% are ages 30-64, 9.7% are ages 65-84, and 1.2% are aged 85 and over. 89.6% of the residents primarily speak English, while 10.4% speak another language in the home. The ethnicity breakdown for this population is 47% white, 41.1% African American, 8% Hispanic, and 3.7% Asian.

City of Virginia Beach has 459,470 residents with 8.1% of this population living in poverty and 11% uninsured. Of the population in this county, 28.6% are ages 0-19, 15.4% are ages 20-29, 45.6% are ages 30-64, 12.7% are ages 65-84, and 1.6% are aged 85 and over. 87.5% of the residents primarily speak English, while 12.5% speak another language in the home. The ethnicity breakdown for this population is 66.3% white, 19.0% African American, 8.2% Hispanic, and 6.7% Asian.

City of Chesapeake has 249,422 residents with 7.6% of this population living in poverty and 10% uninsured. Of the population in this county, 30.5% are ages 0-19, 12.5% are ages 20-29, 47.4% are ages 30-64, 12.1% are ages 65-84, and 1.3% are aged 85 and over. 91.7% of the residents primarily speak English, while 8.3% speak another language in the home. The ethnicity breakdown for this population is 61.1% white, 30.0% African American, 6.2% Hispanic, and 3.2% Asian.

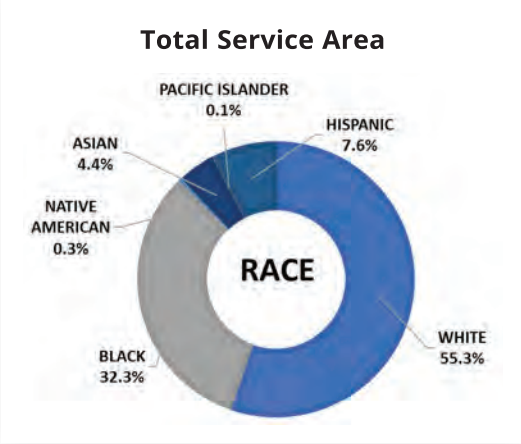
Source: Produced by Demographics Research Group of the Weldon Cooper Center for Public Service, July 2019, http://demographics.coopercenter.org

COMMUNITY DIVERSITY PROFILE

Ethnicity

The population of the service area is overwhelmingly white and Black, with Virginia Beach and Norfolk the most diverse communities with 15.3% and 12.2% combined non-white or Black followed by Chesapeake at 9.7% combined.

The service area is home to a small Hispanic population, with Virginia Beach home to the largest Hispanic community with 8.2% of the population followed by Norfolk with 8.0%. Chesapeake has the smallest Hispanic population, at just over 6%. The Commonwealth of Virginia has a larger Hispanic community with greater than 9% of people identifying as Hispanic.



In addition to white, Black, and Hispanic residents Virginia Beach, Norfolk and Chesapeake are home to small Asian populations. No other racial groups are represented in the area in any significant number.

Preferred Language

English is the primary language spoken in the service area. As of 2020, 90.9% 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 10,877 community members living in the service area identifying as speaking English "less than well."

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

Virginia Department of Health Culturally and Linguistically Appropriate Health Care Services; US Census Bureau American Community Survey Five-Year Estimates, 2014 vintage; https://apps.vdh.virginia.gov/omhhe/clas/leppopulation/

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 SLH 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, SLH had 5,916 requests for interpreter services. The highest percentage of interpreter services were for Spanish speaking individuals.

Source: SLH 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 affects their well-being and quality of life.

> ***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*

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

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

SOCIAL DETERMINANTS OF HEALTH

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

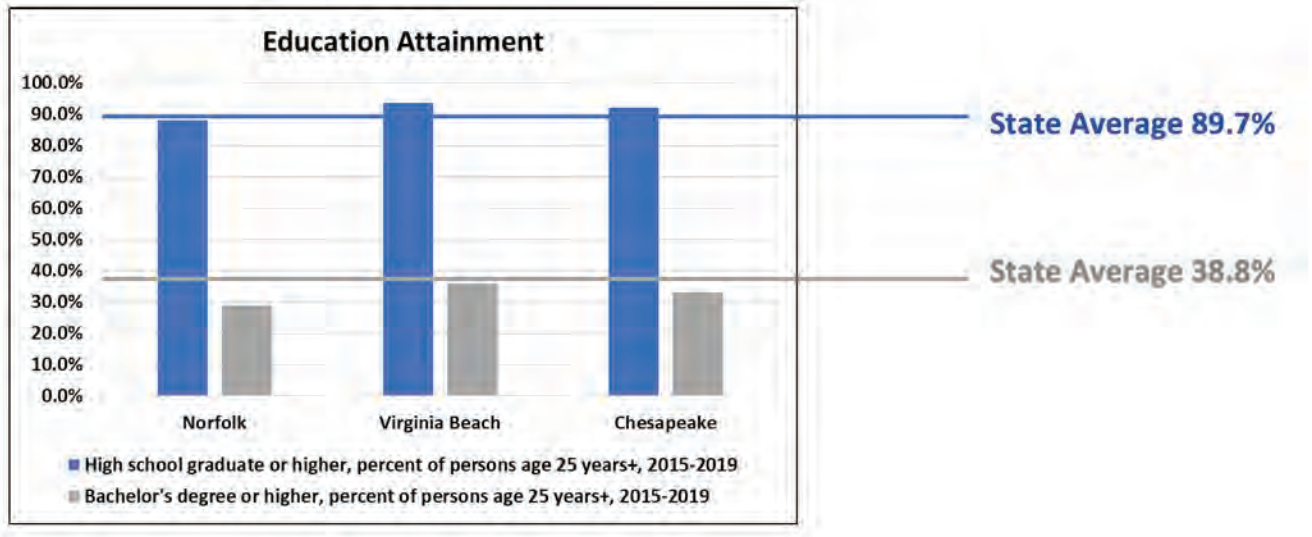
Sentara works to:

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

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. Norfolk has the highest percentage of individuals aged 25+ with less than a high school diploma, while Virginia Beach has 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

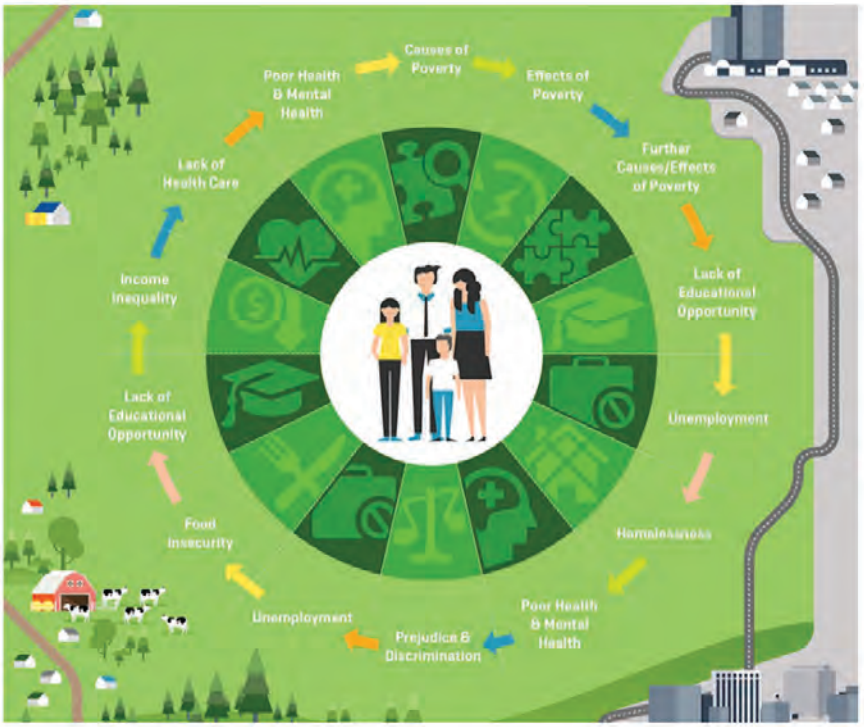
The Cycle of Poverty

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.

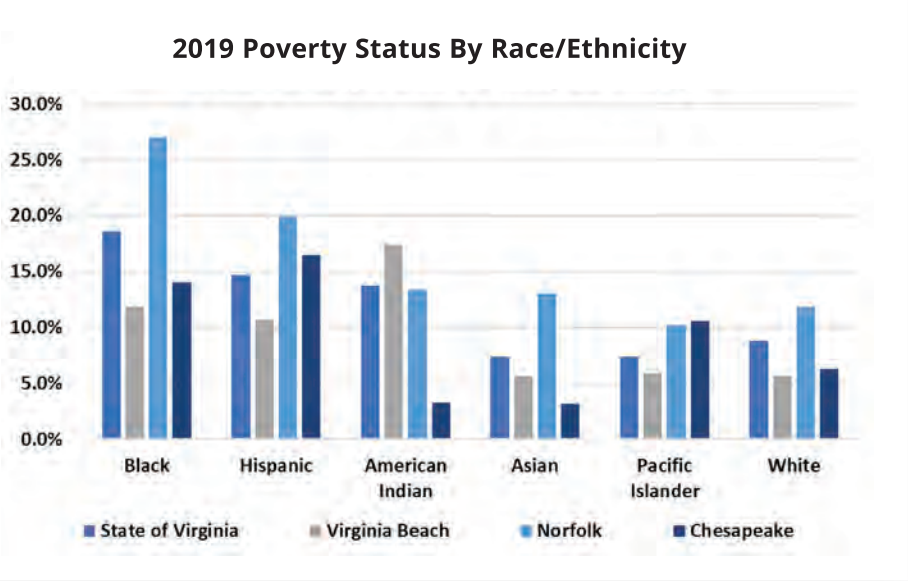
Generational poverty is a vicious cycle in which each generation is unable to escape poverty because of a lack of resources to put toward the effort.

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

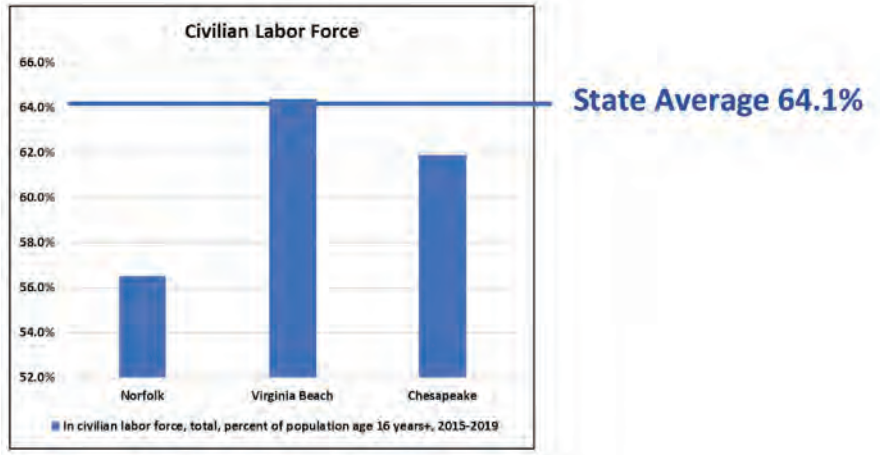


Chesapeake (7.6%) and Virginia Beach (8.1%) are less likely to live in poverty compared to other areas within the Commonwealth of Virginia (9.2%). Norfolk residents (17.6%) are significantly more likely to live in poverty, and an even bigger contrast with the Commonwealth of Virginia.

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. Virginia Beach is slightly above the state average of residents in the civilian labor force, though the service area is slightly below; This may be due to the service area's significant military presence. Of those in the civilian labor force, the percentage of female residents is higher than the state in Virginia Beach. The service area is also home multiple military bases and has a high military presence which may account for the lower percentage of civilian labor force.



Medicaid & FAMIS, Medicare, Medicare & Medicaid Enrollment

Of the 626,398 members newly enrolled in Medicaid in the Commonwealth of Virginia, 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 slightly lower percentage of members on Medicaid and FAMIS compared to Virginia overall with the highest percentage living in Norfolk. The number of residents living in the service area receiving Medicaid and FAMIS services continues to increase each year, with an increase of 22.8% since January 2020.

In 2019, there were 62,570 community members age 65+ living in the service area receiving Medicare and 4,789 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	Virginia Beach	Norfolk	Chesapeake
Medicaid Enrollment (Below 138% FPL)	626,398	67,048	29,639	26,118	16,579
Medicaid Percentage	7.2%	7.1%	6.4%	10.9%	6.6%
FAMIS (Below 138% FPL)	1,347,010	144,614	57,745	52,188	34,681
FAMIS Percentage	15.6%	15.3%	12.6%	21.9%	13.9%
Children Enrolled in Medicaid/FAMIS (Below 138% FPL)	813,229	86,957	35,689	30,211	21,057
Children Enrolled in Medicaid/FAMIS Percentage	9.4%	9.2%	7.7%	12.6%	8.4%
65+ Medicaid (Below 138% FPL)	83,149	7,558	2,697	3,161	1,700
65+ Medicaid Percentage	0.9%	0.8%	0.5%	1.3%	0.6%
65+ Medicare	802,949	62,570	30,733	13,795	18,042
65+Medicare Percentage	64.5%	53.4%	50.5%	53.2%	59.3%
65+ Medicare and Medicaid	56,810	4,789	1,349	2,469	971
65+ Medicare and Medicaid Percentage	4.6%	4.1%	2.2%	9.5%	3.2%
Persons in Poverty	9.2%	10.2%	8.1%	17.6%	7.6%

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)): Centers for Medicare & Medicaid Services 2019; Mapping Medicare Data;
-- Suppressed data; FEP: Federal poverty level; FAMIS: Family Access to Medical Insurance Security

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

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 to obtain community input.

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, 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, 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.

> ***"As healthcare workers we aim to provide the highest quality of care and to ensure that care is equal to all. We're able to do this by listening to our community and focusing on your individual health needs. Thank you for partnering with us to better care for you."***
>
> - ***Esscence Hall-Riddick**, DNP, RN, RN-BC*
> *Clinical Nurse Manager and*
> *Diversity & Inclusion Council Co-Chair*

The stakeholders responding to the survey represent multiple organizations, each having unique insight into the health factors that impact the community with 43.85% being healthcare providers and employees of community health centers. The stakeholders represent hospitals, physician offices, city departments of social services, health departments, and community-based non-profit service organizations. The respondents have 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 for stakeholder respondents, characteristics of survey respondents and top health concerns.

Demographics of Survey Respondents

Of the 19,165 respondents, just 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 was 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 with education completed, with 5.7% having completed high school, 17.7% having had some college experience, 10.2% having received an associate degree, 31.6% having received a baccalaureate degree and 33.7% having earned a graduate degree.

Survey Responses

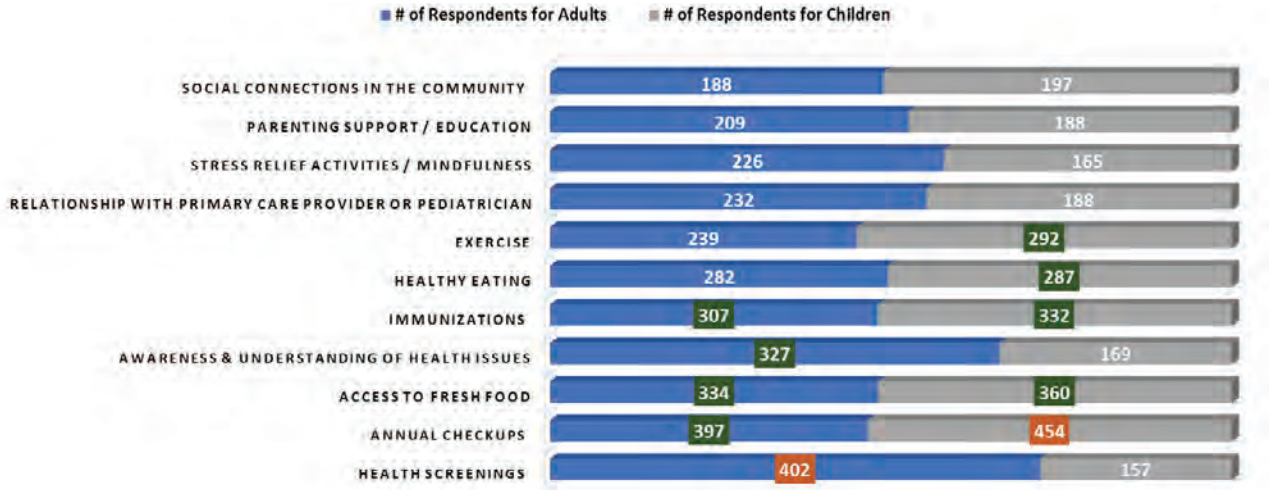
For this CHNA report, we will focus on the below questions asked in the survey. Survey respondents were asked to review a list of common community health issues and select up to three items. The tables below show the answers for each question among stakeholder and community member respondents.

- 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?

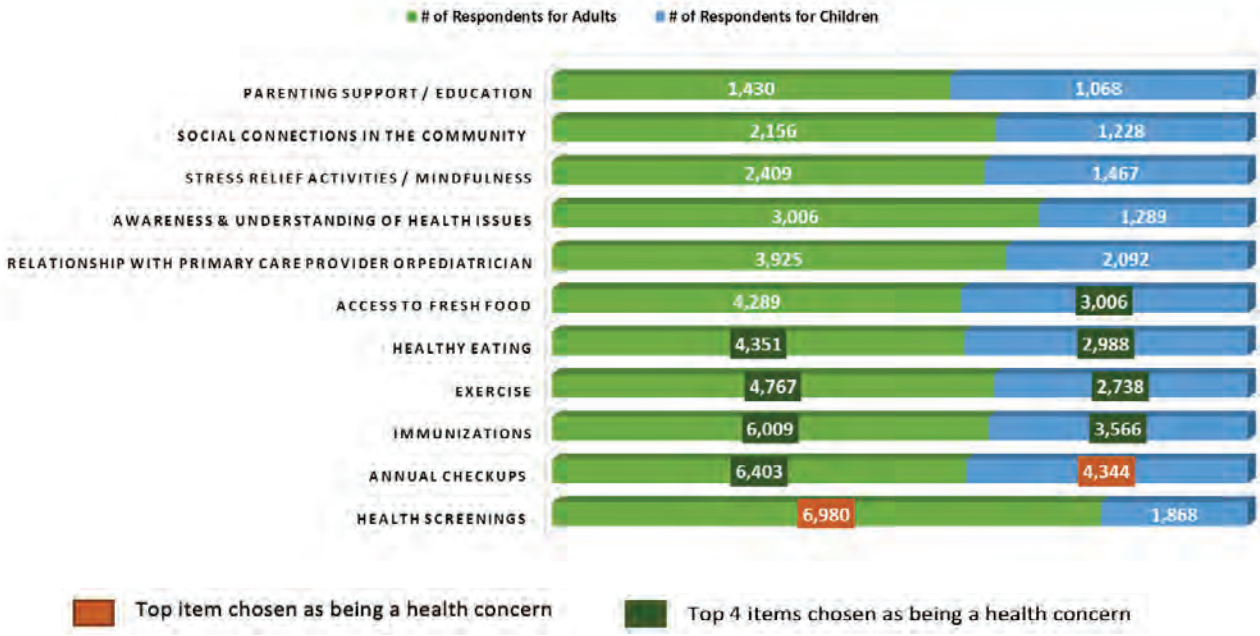
1. What is important to the health of adults and children?

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

Stakeholder Responses



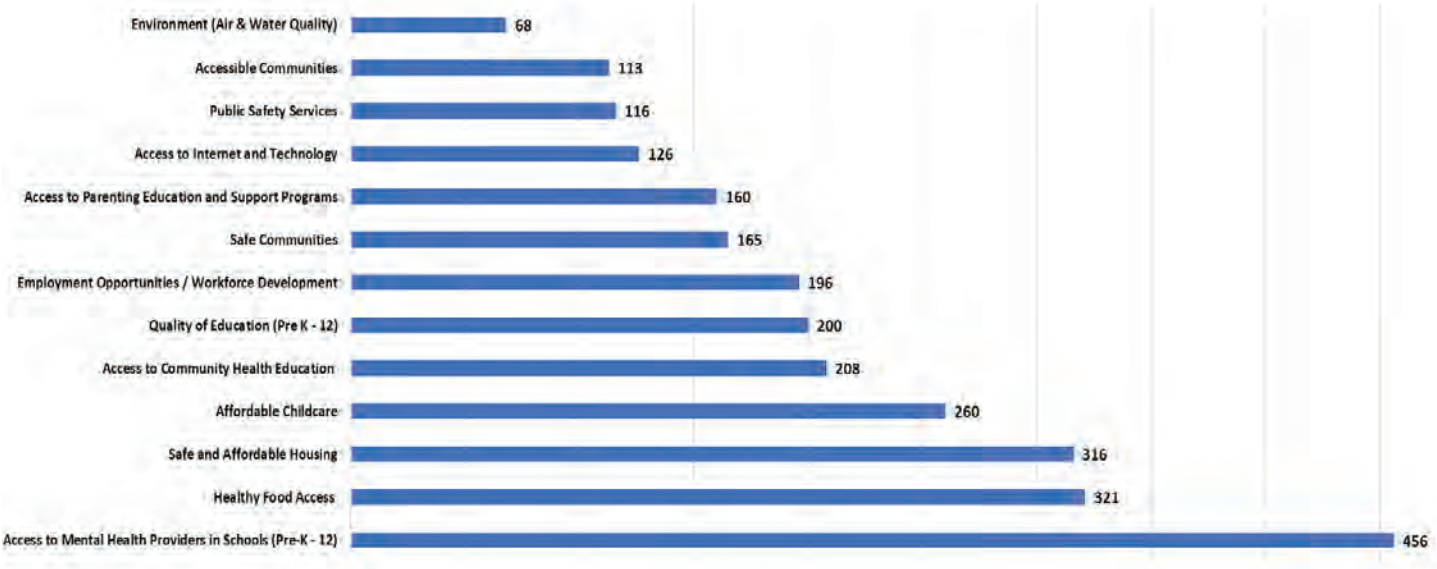
Community Member Responses



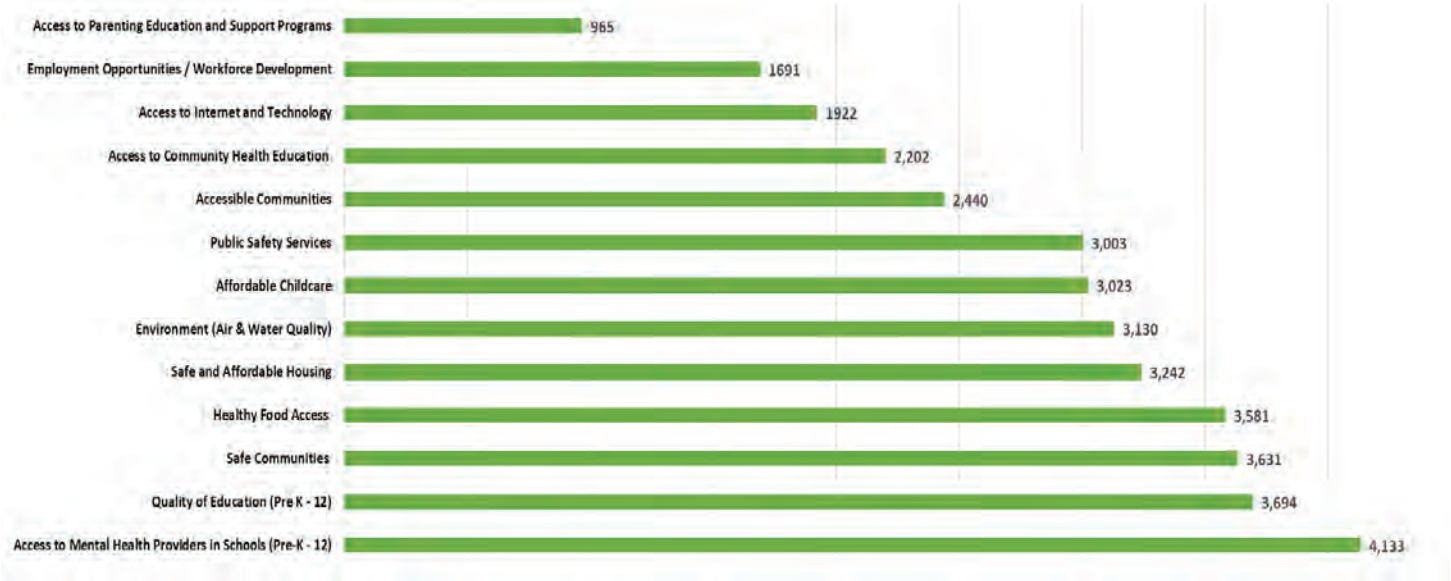
2. What should be added or improved in the community to help families be healthy?

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

Stakeholder Responses



Community Responses

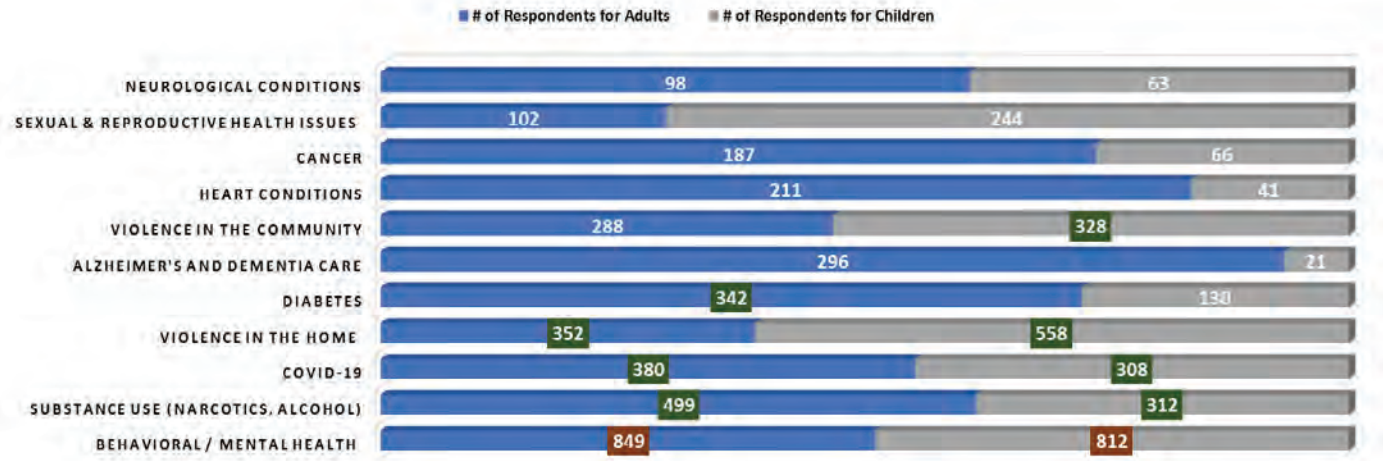


3. What are the most important health concerns for adults and children?

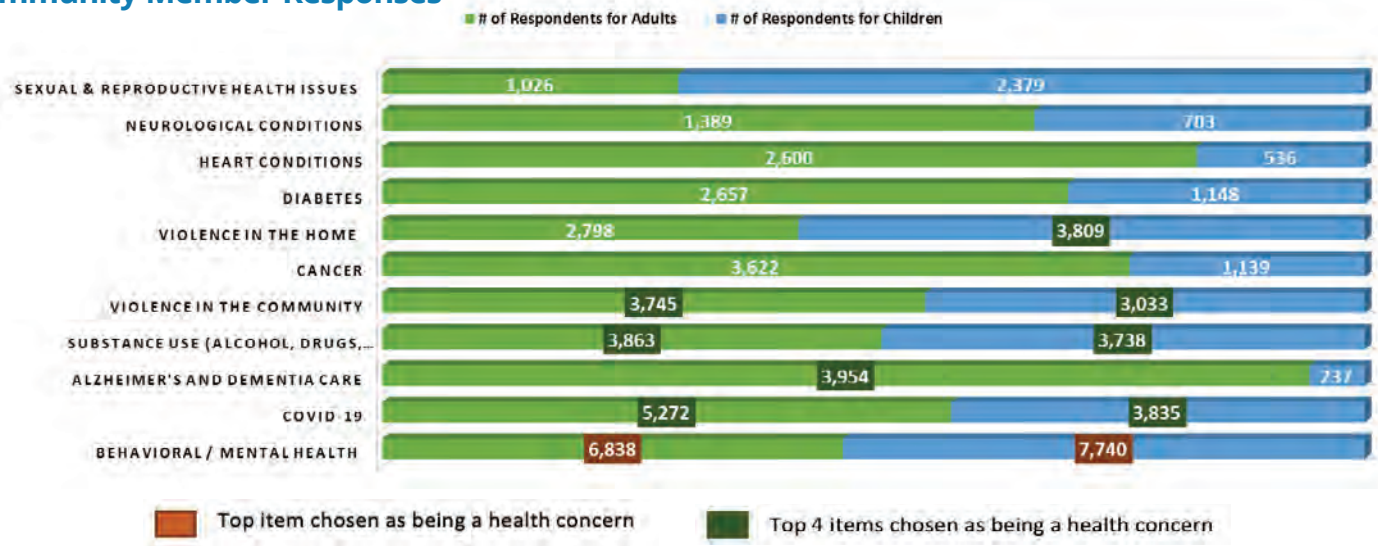
The most frequent response to question three, see above, was behavioral health such asanxiety, depression, psychoses, and suicid), substance use such as narcotics and alcohol, COVID-19, and Alzheimer's and Dementia care. For children, respondents chose behavioral health as defined above, COVID-19, violence 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 it impacts their health in ways we are just beginning to understand.

Stakeholder Responses



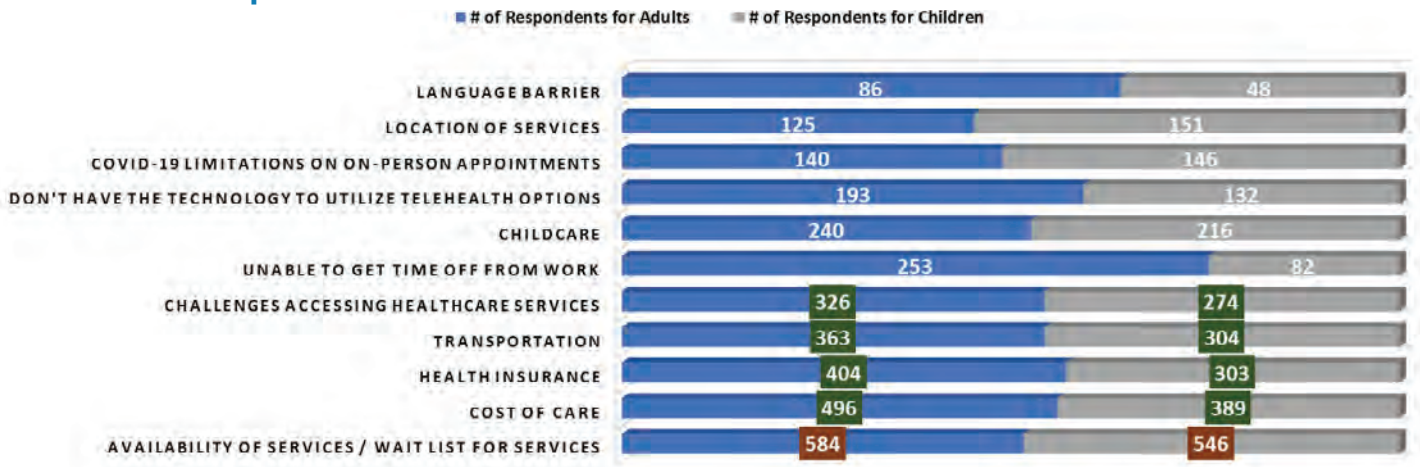
Community Member Responses



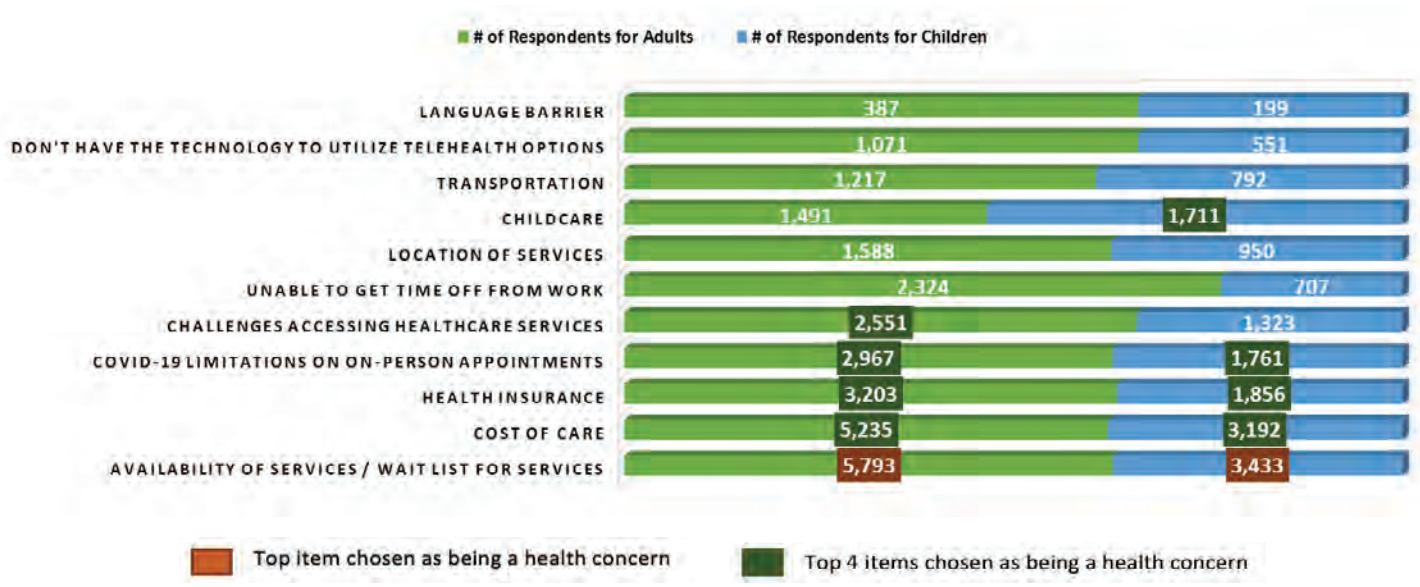
4. What makes it difficult to access healthcare services for adults and children?

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 wereavailability 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 challenges in accessing care that adults do, while recognizing the effect of parenting and living conditions, often things over which children have no control.

Stakeholder Responses



Community Member Responses



In the 2019 CHNA, survey respondents also chose mental health/behavioral health as a major concern. The pandemic has been shown to have created additional mental health strain on the US population, adding to an existing problem. Over the past several years, Sentara has worked to address this issue which is near the top of every CHNA both over time and across the country.

Access to behavioral and mental health services were the most frequently cited need in our community for children, teens, and adults in our community. 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 see how COVID 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 an additional 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, but 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. The lack of providers and the unavailability of providers to work extended hours, make access less feasible for those who work outside the home or have other scheduling constraints, and is the most often voiced barrier to care.

Some aspects of access to care impact population segments differentially. Access to care barriers disproportionately impact 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, SLH and LOASC carried out a series of more in-depth Community Focus Groups to obtain greater insight from diverse stakeholders.

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 Leigh Hospital held eight focus group sessions between March and April of 2022. The number of participants ranged from eight to30. When possible, representatives from the health department and other local hospitals were invited to attend the sessions.

Focus Groups

1. 2/23/2022 virtual session: Patient and Family Advisory Council Focus Group
2. 3/09/2022 virtual session: Filipino focus
3. 3/21/2022 virtual session: SLH Employee, Friends and Family
4. 3/30/2022 virtual session: EVMS/Community Leader/Community Member
5. 3/30/2022 virtual session: B.A.M.E (Black Asian, Minority, Ethnic) Focus Group
6. 4/5/2022 in-person session: Veterans of Foreign Wars of the United States of America
7. 4/6/2022 in-person session: Atlantis Apartments, low-income, African American and Latinx residents
8. 4/7/2022 in-person session: LGBTQ+ focus

Demographics

The 130 participants ranged between the ages of 17 and over 60. Altogether, focus group participants were 50.0% Caucasian, 22.3% African American, 10.7% Asian, 15.3% Hispanic, 0.85% Native American, with 0.85% preferring not to answer. The group included 61.5% female, 31.5% male and 0.85% nonbinary, with 6.15% preferring not to answer.

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 in the below tables.

TOPIC	KEY FINDINGS
What are the most serious health problems in our community?	• Asthma • Cancer • Cardiovascular health, heart disease/ Hypertension • Chronic pain management (sciatic pain, sickle cell, joint pain etc.) • COVID-19 • Dental health • Diabetes • Health care expenses • Mental Health, anxiety, and depression • Mold, environmental factors • Obesity • Sexual Health • Sickle Cell • Smoking and vaping • 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 (healthy food, services, etc.)Education (understanding health behaviors, prevention, promotion, choices, how to prepare healthy food, etc.) • Employment • Financial concerns (food, services, medications,etc.) • Housing • Social support, (community networks, family, counseling, etc.) • Transportation • Violence • Workplace violence

TOPIC	KEY FINDINGS
Who has the health problems? **What groups of individuals are most impacted by these problems?**	• Aging populations • Caregivers • Chronic disease diagnosis • Disabled persons • Discharged military • Fixed/low income, Low socioeconomic statusHomeless/ indignetMinorities (African Americans, Latinx) • Under educated • Uninsured/underinsured • 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, services, etc. • Adequate housing • Affordable healthcare/insurance • Culture • Drugs • Economic status • Education (inadequate) • Fear • Financial barriers • Food insecurity • Inadequate insurance • Lack of resources, mental health providers, services • Lack of social support, loneliness Mistrust • Poor diet • Race • Time • Transportation

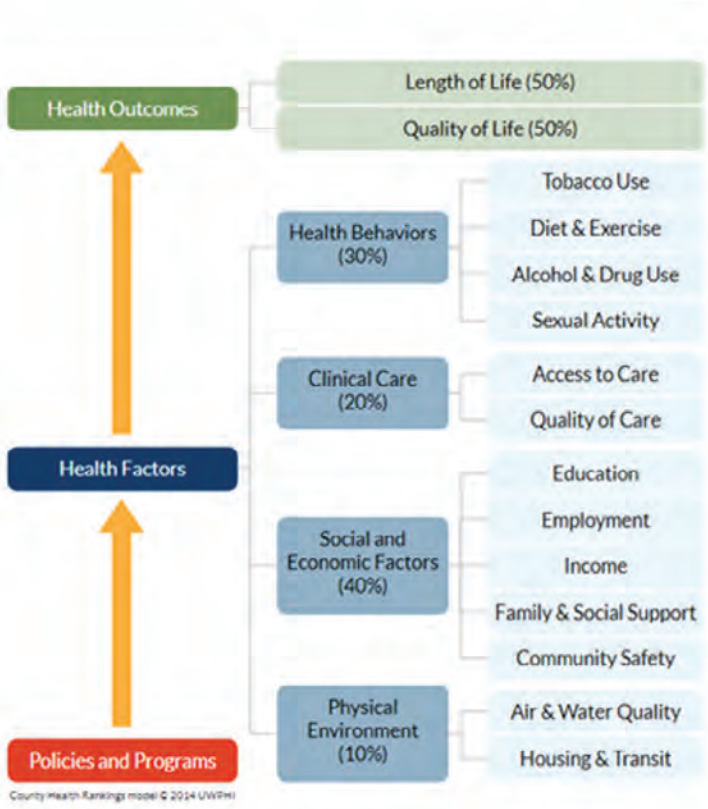
TOPIC	KEY FINDINGS
What is being done in our community to improve health and reduce barriers? **What resources exist in the community?**	• Acute care • CHKD classes • Church programs • COVID-19 testing • Department Social Services • Flu clinics • Free clinics • Free services • Health Fairs • Immunization clinics • LGBT Life Center • Mobile mamo screening • New VA facility • Outreach organizations • PACE program • Sports programs • Telehealth
How has the COVID-19 pandemic worsened the health issues in our community?	• Isolation • Substance use, alcohol use • Depression • Access, lack of available resources • Free clinic closures • Scheduling wait lists/times • Weight issues • Food insecurity

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 • Community events/health fairs/ neighborhood events/ church programs/ mobile clinics (screenings, education, etc.) • Culturally conscious care • Fundraisers (to support health outreach initiatives) • Health/eellness education (maintenance, prevention, planning- Advanced Directives) • Outreach programs • Trauma informed care

HEALTH STATUS INDICATORS

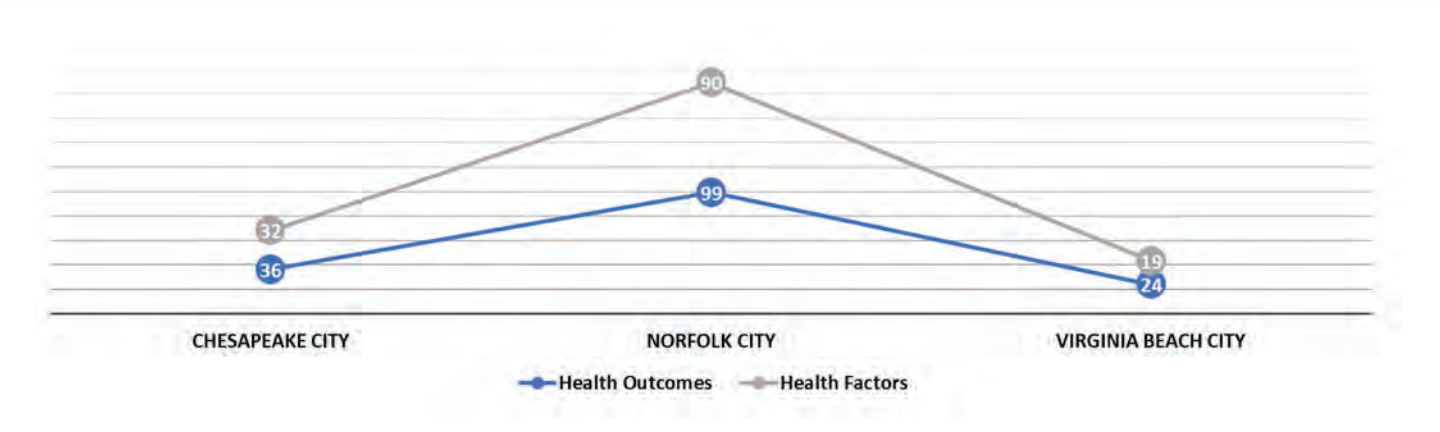
County Health Rankings

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 SLH service area. Virginia Beach City and Chesapeake City rank better for these health outcomes while Norfolk City rank worse out of 133 Virginia counties (Appendix B).



Source: County Health Rankings 2021, Rankings and Documentation;

Health Status Indicators

Below are key health status indicators for the counties representing the SLH 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 available through the links and Appendix B.

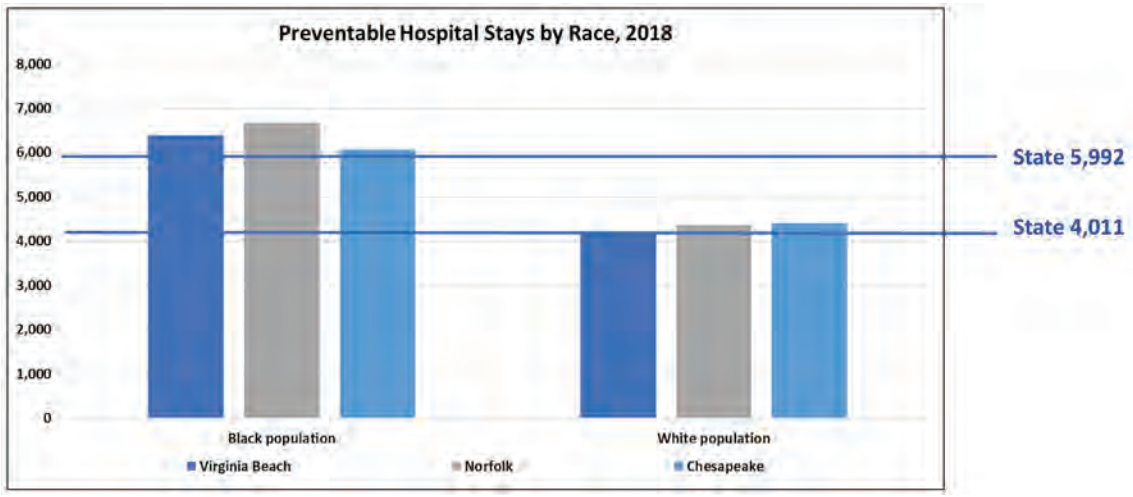
The key health status indicators are organized in the following data profiles:

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

> *"There are explicit biases or unconscious biases that causes individuals to be at the place where it keeps them from being exposed or having access to care."*
>
> *-Anonymous EVMS focus group participant*

ACCESS TO HEALTH SERVICES PROFILE

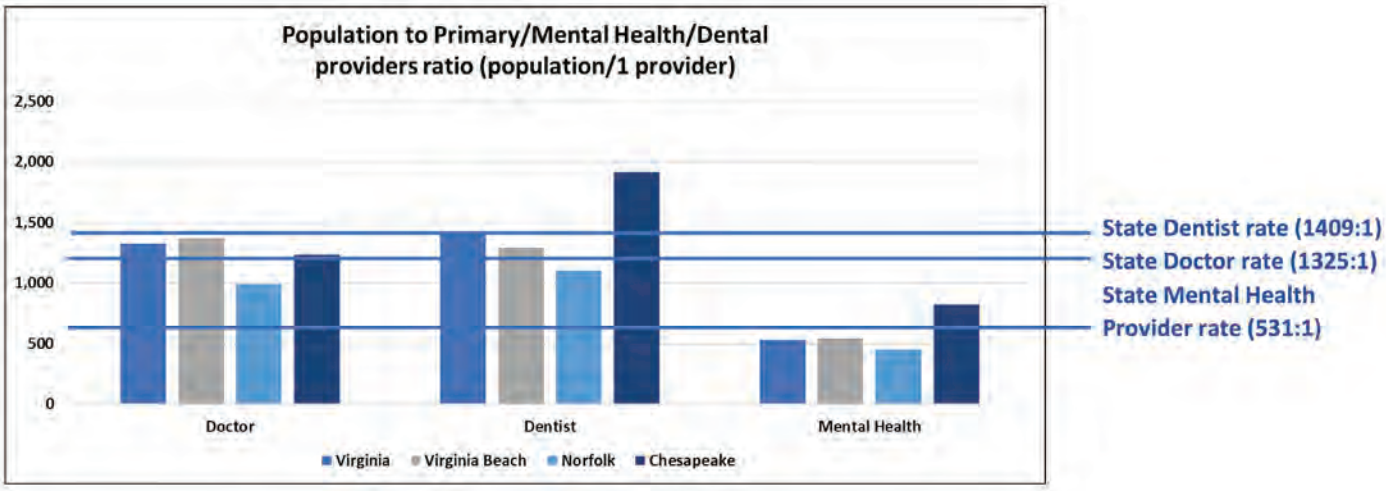
Access to quality and affordable healthcare is important to an individual's health. Health insurance and local care resources can ensure access to care. If outpatient care in a community is poor, then people may be more likely to overuse the hospital as their main source of care, resulting in unnecessary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

Provider Ratio

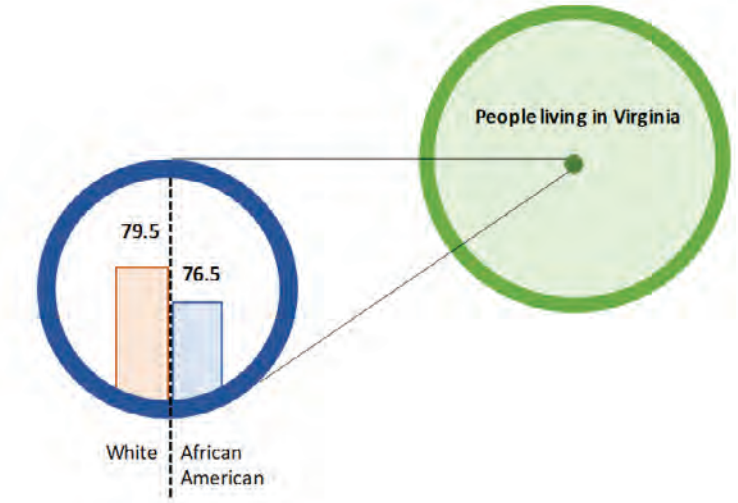
The ratios of primary and dental care providers were examined in the SLH service area. The ratio of population to primary care providers was1325:1 in Virginia Beach which is higher than the state ratio overall. The population ratio for dental care providers was higher than the state in Chesapeake and Virginia Beach at 1409:1. 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 Norfolk which has a higher percentage of uninsured. The preventable hospital stay rate among Medicare beneficiaries was high in the service area suggesting there may be challenges to access primary and outpatient care. Data also show disparities related to African American beneficiaries which have much higher rates of preventable hospital stays when compared to white populations in the service area. .



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. Virginia Beach has a slightly higher life expectancy than the state at 80.5. It is important to note there is a racial/ethnicity disparity related to life expectancy among African Americans. The life expectancy for African Americans is one to three years shorter than white Americans in the service area (Appendix B).



Leading causes of death in localities of the SLH service area were examined. In 2019, Cancer, heart disease, and stroke were the top three causes of death in the service area. In Chesapeake and Virginia Beach cancer was the leading cause of death, followed by heart disease. For Norfolk, heart disease was the leading cause of death, followed by cancer.

In comparison, accidents were the third leading cause of death in Virginia, with heart disease and cancer being the top causes. In Norfolk, the crude death rate from all causes, including cancer and heart disease, was greater than the rate in the state.

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

	Crude Death Rate	All Causes	Cancer	Heart Disease	Respiratory Diseases	Accidents	Stroke	Alzheimer's Disease	Diabetes	Suicide	Chronic Liver Disease	Hypertension and Renal Disease
Chesapeake City	Prevalence Rate	790	172	161.3	45.3	38.8	46.6	38.8	30.2	17.2	13.5	7.8
	Numerator (count)	1,935	421	395	111	95	114	95	74	42	33	19
Norfolk City	Prevalence Rate	841.6	183.3	188.3	37.1	47.8	49.4	18.1	29.7	13.6	12.8	10.7
	Numerator (count)	2,043	445	457	90	116	120	44	72	33	31	26
Virginia Beach City	Prevalence Rate	735.8	172.7	162.9	34.2	34.9	47.3	25.8	21.8	12.7	10.9	6
	Numerator (count)	3,311	777	733	154	154	213	116	98	57	49	27
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

200 0

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

*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

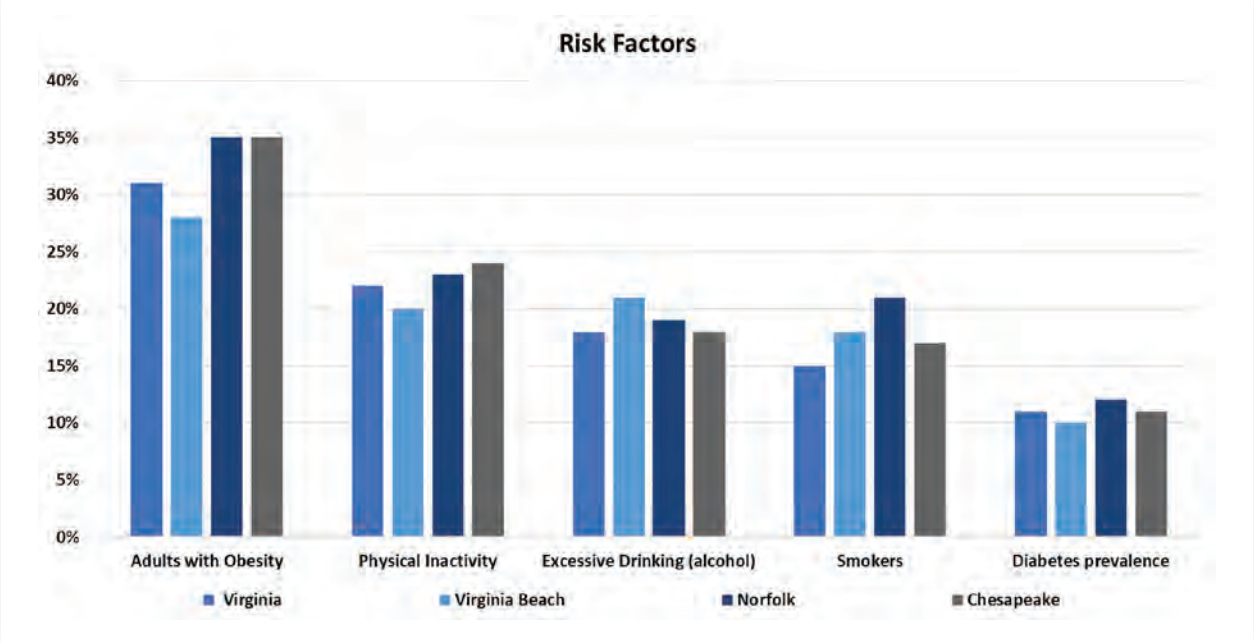
Sentara Leigh Hospital examined age-adjusted hospitalization rates for the service area. For the top conditions seen in hospitals, heart conditions were one of the highest rated in the SLH service area with Norfolk having the highest rates, followed by Chesapeake. Rates for adolescent suicide and self-inflicted harm increased across the service area, as did adult mental health and adult suicide and self-inflicted harm. Norfolk has the highest rates for these conditions (Appendix B). Across localities, the rates in the service area were higher than in Virginia overall. Other top conditions included diabetes and substance use.

RISK FACTOR PROFILE

The percentages of smokers and people experiencing frequent mental health distress were higher for all localities in the SLH service area as compared to Virginia values. Conversely, the percentage of adults who drink excessively was higher in Virginia Beach and Norfolk as compared to the Commonwealth.

> *"I think we should really focus on educating people on 'the WHY' it's important to take care of themselves and take advantage of the things Sentara offers and will offer through these programs."*
>
> *-Anonymous B.A.M.E. focus group participant*

The percentages of obesity and physical inactivity were higher in Norfolk (35%, 23%) and Chesapeake (35%, 24%) compared to the Commonwealth of Virginia (31%, 22%). Virginia Beach percentages for obesity (28%) and physical inactivity (20%) were only slightly better than Norfolk, Chesapeake, and Virginia as a whole. Although access to exercise opportunities was higher in the service area than in the state overall (82%). The percentage of people with food insecurity was highest in Norfolk where it was higher than in the state as a whole Limited access to healthy food was highest in Norfolk at 14%, in sharp contrast 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.

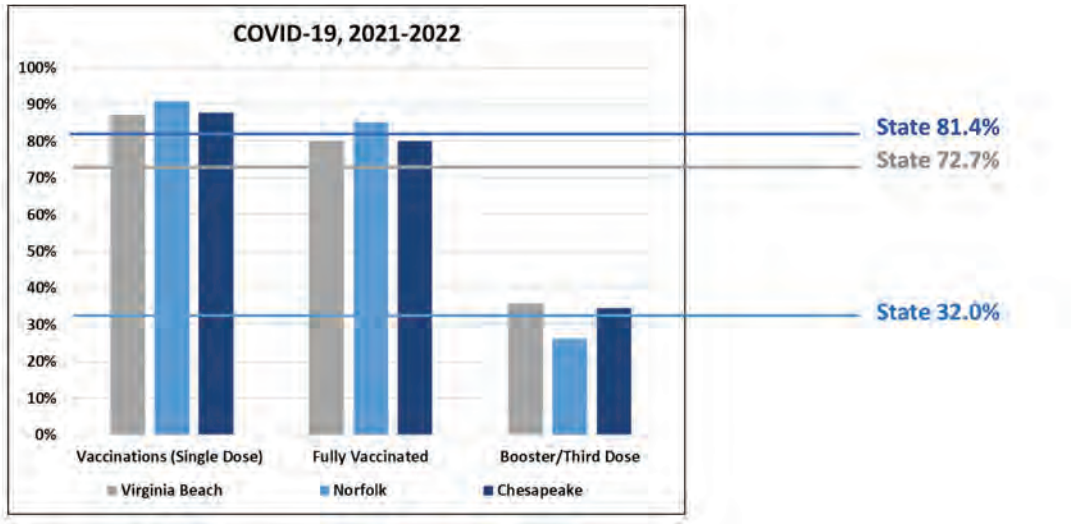


Source: County Health Rankings 2021, Rankings and Documentation

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, through April 1, 2022, the Commonwealth of Virginia had 1,669,750 cases with 19,714 deaths. Between March 2021 and April 2022, Virginia Beach had the highest rate of cases at 12,353 per 100,000 residents and highest rate of deaths at 94 per 100,000 residents. As of April 2022, Norfolk had the highest percentage of residents having received a single dose and two doses of the vaccine, both in the service area and the state.



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 the Commonwealth of Virginia, residents of the SLH service area had high percentages of infants born with a low and very low birthweights as compared to Virginia values with Norfolk having the highest percentages of infants born with low and very low birthweights. The infant mortality rate was greater in the localities served by SLH as compared to Virginia, with the exception of Chesapeake, which had lower values (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 higher than the Virginia rate in most of the service area. 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. While preventable hospital stays among the Medicare population in the SLH service area were slightly lower than for the state, there may be opportunities to improve primary and outpatient care for this population in the service area.

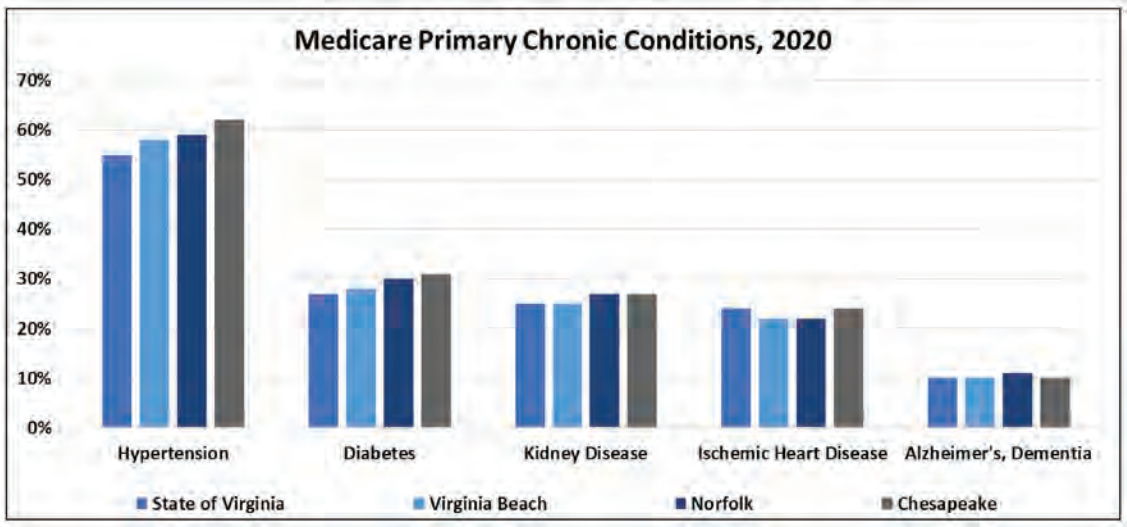
The percentage of Medicare recipients being seen for hypertension and diabetes, the top conditions for which patients received hospital treatment in the service area, was higher than for the state as a whole. The percentage of Medicare patients being treated for kidney disease and heart conditions was also higher than the Commonwealth of Virginia (25%) in Norfolk (27%) and Chesapeake (27%).

The percentage of Medicare beneficiaries treated for Alzheimer's disease or dementia was higher in most of the communities in the SLH service area as compared to the Commonwealth of Virginia with the highest being in Norfolk and Chesapeake (Appendix B). The Alzheimer's Association projects an increase of 26.7% by 2025 in the number of people age 65+ receiving an Alzheimer's 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.

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

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 or advocate for themself. 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 (US Living Will Registry). Sentara has 70,236 active registrants with Advanced Care Plans on file within the USLWR with 19,803 of those completed for residents of SLH 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

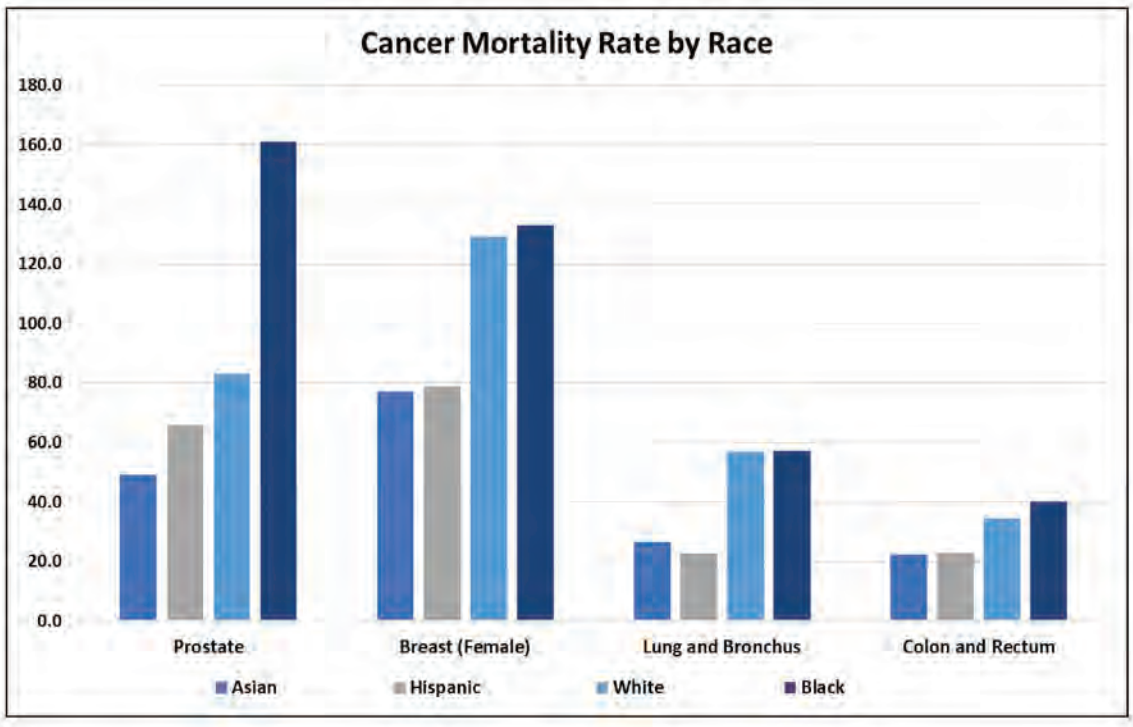
CANCER PROFILE

Since cancer is the leading cause of death in the SLH service area, death and incidence rates for a variety of cancer types were examined. Compared to the previous five-year collective rates for both incidence and mortality for the leading types of cancer, most of the service area is trending down, with fewer cases and lower death rates. The rates, however, are slightly rising for breast cancer in Virginia Beach and Norfolk. It is important to note the rates are especially rising for the African American population living in Virginia Beach, as well as the Commonwealth of Virginia as a whole.

Breast cancer is the most common cancer diagnosed among US 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 Sentara will focus efforts on. Localities with the greatest all cancer incidence rates were Norfolk and Chesapeake. Mortality rates for African Americans diagnosed with breast cancer is rising (Appendix B). Prostate and breast cancers are the leading causes of cancer death for African Americans living in Virginia. See the graph below which demonstrates the mortality disparities among racial/ethnic lines. The community outreach programs providing cancer screenings and education, as well as medical developments, are having an impact, however 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 seventh 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 the SLH service area is higher than the state percentage of 8.5%. The death rate due to diabetes in the service area is also higher than the state, with the exception of Virginia Beach. Sentara Leigh Hospital examined hospitalization rates and found the age-adjusted hospitalization rates due to diabetes was above the state rate in Norfolk and Chesapeake. Hospitalizations due to long-term complications were highest in Norfolk and Chesapeake, while the rate in Virginia Beach was lower than in the state overall. It is also important to note that the percentage of Medicare beneficiaries living in Chesapeake and diagnosed with diabetes is higher than in the state overall.

SURGICAL SITE INFECTIONS PROFILE

Leigh Orthopedic Surgery Center examined the rate of surgical site infections (SSIs). Surgical site infections occur after surgery and in the part of the body where the surgery took place. Surgical site infections can develop within days or even months after surgery. Leigh Ambulatory Surgery Center reviewed patient data to look at SSI rates since opening. Data show the inception to date rate of SSIs is 17%. Some patients may be at higher risk for developing SSIs due to their age and underlying medical conditions, such as diabetes and COVID-19 infections. The COVID-19 infection rates initially increased in 2021 and though vaccinations helped decrease the COVID-19 infection rates toward the end of 2021 and early 2022, COVID-19 infections continue to increase periodically throughout 2022. Leigh Orthopedic Surgery Center requires that all patients be either fully vaccinated or have a COVID-19 test prior to surgery and continues to monitor the pandemic to ensure patient health and safety during routine procedures.

"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).

Source: Virginia Department of Health Division of Health statistics; 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

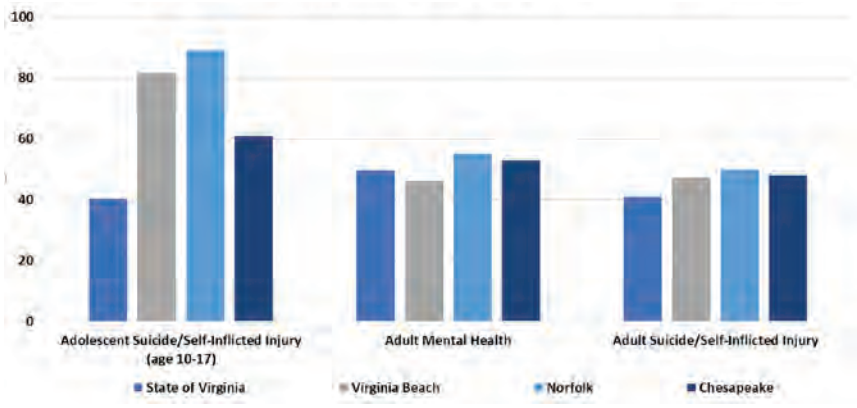
Hospitalization rates due to alcohol/substance use, mental health and suicide/self-intentional injury were examined. Localities in the service had higher hospitalization rates due to substance use, mental health and suicide/self-intentional injury compared to Virginia rates.

Mental health is becoming an increasing health concern for both adolescents and adults. Between 2018-2020, the adult mental health rate per 10,000 population is highest in Norfolk and Chesapeake. 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, the SLH emergency department saw a patient frequency of 1,820 for people aged 18+ with a behavioral health diagnosis. Of the 1,820 visits 23.0% presented with suicidal ideations and 7.8% with major depressive disorder.

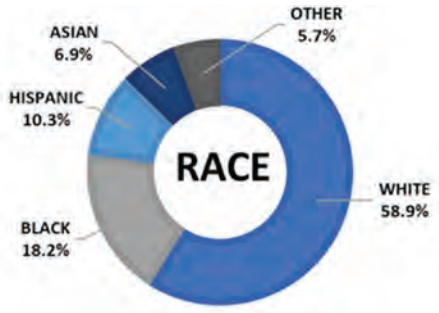
The adolescent mental health rate was highest in Norfolk and Virginia Beach, followed by Chesapeake. "In early 2021, emergency department visits in the United States for suspected suicide attempts were 51% higher for adolescent girls and 4% higher for adolescent boys compared to the same time period in early 2019" (Office of Surgeon General, 2021). Sentara Leigh Hospital saw a patient frequency of 125 for youth, age 0-17, present with a behavioral health diagnosis. Of the 225 visits 34.4% presented with suicidal ideations and 8.8% with major depressive disorder.

The rate of patients with a mental health diagnosis for this service area is higher than the state. The COVID-19 pandemic has worsened mental health among youth and adults, increasing anxiety, depression, and stress. Loss off 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 the development of coping skills. The service area has fewer mental health providers per person compared to the state. Chesapeake (822:1) has the lowest ratio of providers per person followed by Virginia Beach (541:1) and Norfolk (453:1) (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;

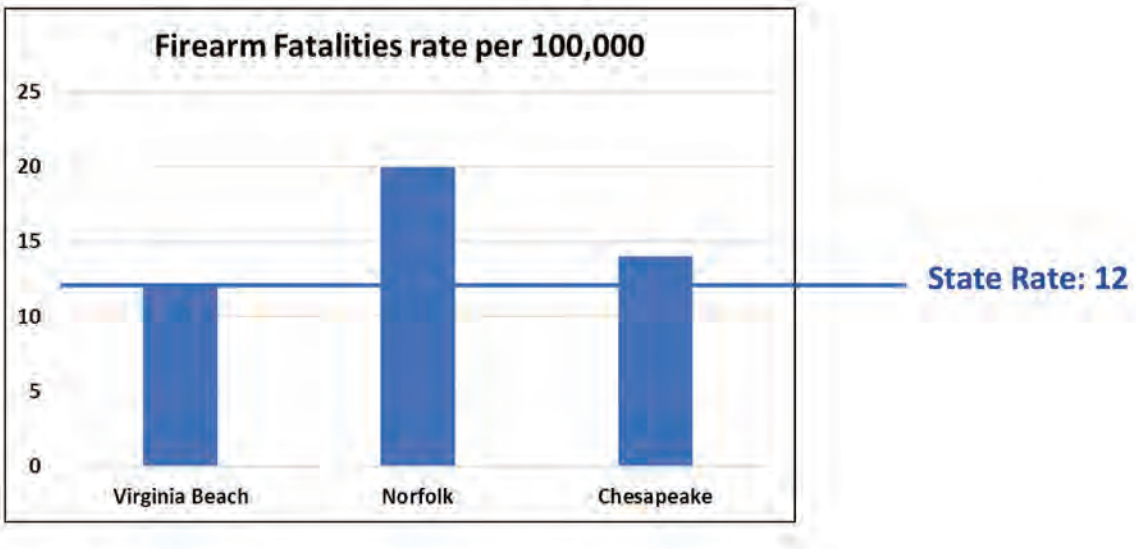
COMMUNITY VIOLENCE AND GUN VIOLENCE PROFILE

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 rate of violent crime was much higher in several localities in the service area compared to the state rate of 207 violent crime offenses per 100,000 people. Per County Health Rankings, Norfolk has the highest rate of violent crimes (603), followed by Chesapeake (423). It is important to note that violent crime is growing in Norfolk, which had the highest rate. The highest rate in the area is in a neighboring city, Portsmouth, and is becoming a concern not only in the service area but across all of Hampton Roads (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, Norfolk and Chesapeake had rates higher than the state for firearm fatalities per 100,000. Norfolk had the highest rate of death due to firearms.



Source: County Health Rankings 2021, Rankings and Documentation

2019 IMPLEMENTATION STRATEGY PROGRESS REPORT

The previous CHNA identified several health issues. The SLH implementation strategy progress report was developed to identify activities that 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 Leigh Hospital is monitoring and evaluating progress to date on its 2019 implementation strategies for the purpose of tracking and documenting the impact of those strategies in addressing selected CHNA health needs. Please note that the 2019 CHNA strategy process was disrupted by COVID-19, which has impacted all our communities.

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

- Chronic Disease
- Behavioral Health / Substance Use (including Opioid Addiction)
- Social Determinants of Health & Community Partnerships to Improve Health

STRATEGY PROGRESS

Social Determinants of Health & Community Partnerships to Improve Health

Sentara Leigh Hospital continues to address multiple health problems to improve the health of staff and the community. Sentara Leigh Hospital continues the Culture of Safety Committee to address patient and employee safety on campus and engages with the Community Health Interest Group & CHNA related meetings. Sentara Leigh Hospital holds virtual Breastfeeding Classes with a lactation consultant. The hospital also participates in and assists with events such as those held at the Foodbank of Southeastern Virginia, CINCH virtual ShareFest, American Heart Association Heart Walk, Shine a Light on Lung Cancer, Day of Caring and other United Way campaigns. Sentara Leigh Hospital continues to hold immunization clinics and partners with the YWCA to assist with the delivery of donations offering community events.

Chronic Disease

Sentara Leigh Hospital participates in monthly meetings with the Norfolk Healthcare Collaborative, which was on hold for some time due to the COVID-19 pandemic. Sentara Leigh Hospital celebrates American Heart Month in February to improve awareness and provide education on heart health and encourages hospital-wide participation in National Wear Red Day for recognition of heart disease in women. The hospital continues the Pink, Powerful, and Perky Breast Cancer Support Group and Singing Survivors Breast Cancer Support Group, both of which are being held virtually due to the pandemic. There are also Wellness and Beyond Cancer classes to help community members through their recovery, as well as the Living Beyond Cancer survivorship program. The Esophageal Cancer Support Group and Colorectal Cancer & Ostomy Support Group meet virtually on a monthly basis. Prior to the pandemic, quarterly Diabetes Support Groups were held. Sentara Leigh Hospital continues to focus on high-risk patients with chronic diseases for follow-up appointments to prevent readmissions and supports community vaccine clinics.

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 attending 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, a free six-week holistic health program aimed to address the physical and mental health needs of individuals to provide a sense of peace and balance throughout their journey to wellness. The program includes meditation, yoga and overall fitness. 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.

Behavioral Health, including Alzheimer's Disease/Dementia

Sentara Leigh Hospital participates in the Behavioral Health Nursing Practice Forum and the Behavioral Health High Performance Team meetings quarterly as part of the system action plan. Sentara Leigh Hospital continues to distribute "Chronic Pain Management: Continuing your chronic pain management in the hospital" brochure for patients on medical units. The hospital participates in the Enhanced Recover After Surgery program and is striving to become dilaudid- free in the emergency department (ED).

Sentara continues to improve access to behavioral health resources. In 2021, a Behavioral Health Care Center opened to provide follow-up care to patients discharged from the ED with a behavioral health diagnosis or from an inpatient behavioral health unit within seven days. This clinic started with a focus on Inpatient Behavioral Health Unit and Behavioral Health patients discharged from Sentara Virginia Beach General Hospital, Sentara Independence and Sentara Princess Anne Hospital EDs. The Behavioral Health Care Center has expanded its services to include other individuals in the community who need 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 elimination of 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 ED patients presenting with behavioral health needs.

A Behavioral Health Safety Workgroup is focusing on improving the ED's staff and patient safety.

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

- 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 emergency custody orders process.

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

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

A BHTOC Safety workgroup:

- Working on leader trainings.
- Behavioral Health Consultant and Behavioral Health Safety Workgroup completed priority I & II ED site visits and BH Risk Assessments in March 2022.
- Priority III ED site visits and Risk Assessments will be completed by the Behavioral Health Consultant and Behavioral Health Safety Workgroup team by May 2022.

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 health care 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 health care professionals and $167 million in uncompensated patient care.

Clearly, the definition of community health is broader than simply medical care. As more is known about the role of social determinants of health, more opportunities will arise to influence population health through engaging in community building approaches to care. Beyond the scope of SLH and LOSC alone, these opportunities will require active partnerships among community organizations and individuals to create lasting impact. Sentara, SLH and LOSC 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

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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

World Health Organization, Coronavirus disease (COVID-19)

GREATER HAMPTON ROADS

Greater Hampton Roads Community Indicators Dashboard

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Virginia Department of Health Division of Health statistics

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