Sentara Williamsburg Regional Medical Center Surgical Suites of Coastal Virginia

COMMUNITY HEALTH NEEDS ASSESSMENT 2022

We Improve Health Every Day

This joint Community Health Needs Assessment report was completed in collaboration with Sentara Williamsburg Regional Medical Center and Surgical Suites of Coastal Virginia, which have the identical service areas of the City of Williamsburg and the Counties of Charles City, Gloucester, James City, King and Queen, King William, Middlesex, New Kent and 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 Williamsburg Regional Medical Center (SWRMC) and Surgical Suites of Coastal Virginia (SSCV) 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 with information about health and health-related problems that influence health status.

> *"Our hospital is deeply committed to improving the health of our community every day. Engaging our community in understanding the most pressing concerns is a critical step."*
>
> ***Susan Bowe**, Manager, Community Relations & Volunteer Services*

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

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

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

Health Priorities for 2022-2025

- Behavioral Health
- Chronic Disease
- Social Determinants of Health

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 more than 30,000 employees dedicated to improving health in the communities we serve, and was recognized as one of "America's Best Employers" by Forbes in 2018. Sentara is strategically focused on clinical quality and safety, innovation and creating an extraordinary health care experience for our patients and members.

SENTARA AT A GLANCE

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

INTRODUCTION

Sentara Williamsburg Regional Medical Center

Sentara Williamsburg Regional Medical Center, a Certified Primary Stroke Center, has 145 licensed beds and features the latest healthcare technologies, serving the region with the life-saving capabilities of an ultra-modern medical center. The hospital offers a full range of medical care from emergency heart catheterization to all-inclusive obstetrics care where patients are able to labor, birth, and recover postpartum in one room. The hospital also provides advanced imaging and "smart" operating rooms. Sentara Williamsburg Regional Medical Center has achieved Magnet® recognition, the nation's highest honor for excellence in nursing.

Surgical Suites of Coastal Virginia

Surgical Suites of Coastal Virginia is staffed by highly skilled medical experts and offers surgical services for ENT and orthopedics. We treat adults and children in an environment designed for convenience, comfort and the delivery of superior care.

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 healthcare 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 and smoking and 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

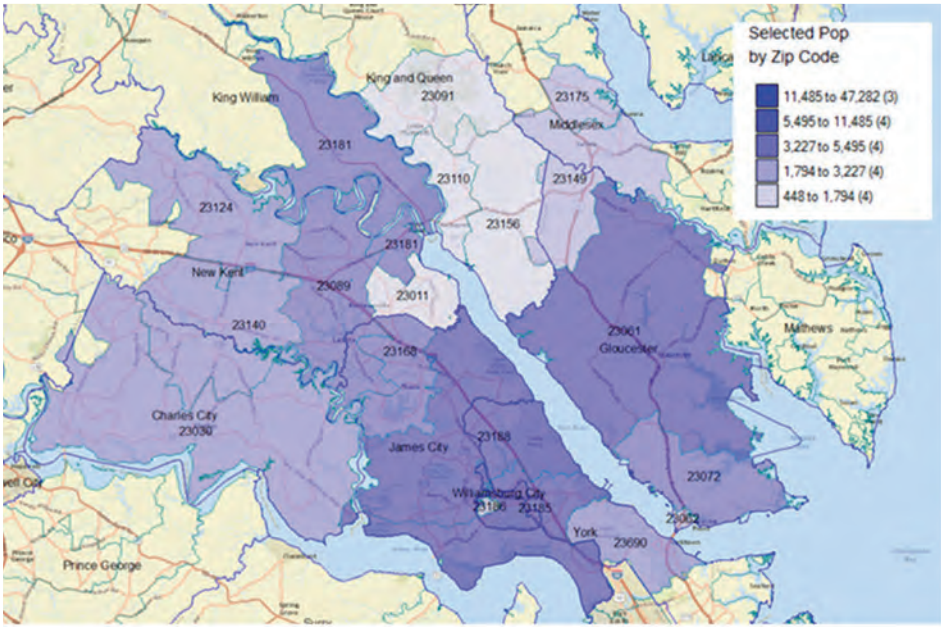
Community input is imperative, so we conducted a survey jointly with Bon Secours Hampton Roads, Children's Hospital of The King's Daughters, Riverside Health System, the Hampton and Peninsula Health Districts, and Three Rivers Health District. The assessment includes survey results from key stakeholders including public health professionals, social service workers, 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

SWRMC and SSCV work with several community partners to address health needs. Using the information from this community health needs assessment, SWRMC and SSCV will develop an implementation strategy to address the identified health problems. SWRMC and SSCV will track the progress of the implementation activities to evaluate the impact of these actions. The implementation progress report for the 2019 CHNA is available at the end of this report for both SWRMC and SSCV.

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 WILLIAMSBURG REGIONAL MEDICAL CENTER & SURGICAL SUITES OF COASTAL VIRGINIA SERVICE AREA **SOURCE: TRUVEN/MARKET EXPERT**

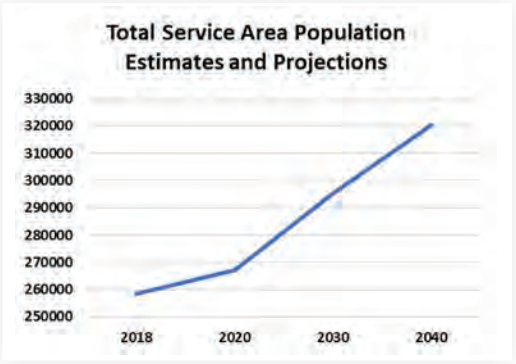
COMMUNITY DESCRIPTION

GEOGRAPHY

The service area of SWRMC and SSCV comprises nine localities: the City of Williamsburg, and the Counties of James City, Gloucester, York, Charles City, New Kent, King William, King and Queen, and Middlesex. Much of the data available for this assessment is only available at the City/County level so information for each entire county is included, although some places may be considered a secondary service area for the hospital.

POPULATION CHANGE

The New Kent population has seen remarkable growth (19.7%) in the last 10 years. James City County, Williamsburg and King William County have seen growth above the state average, with York County experiencing slightly lower growth than the state. The more rural county of Gloucester had lower than average growth. Charles City, King and Queen County and Middlesex County had a decrease in population.



COMMUNITY SPECIFIC DEMOGRAPHICS (APPENDIX A)

City of Williamsburg has 15,425 residents with 16.8% of this population living in poverty and 10% uninsured. Of the population in this city, 24.8% are ages 0-19, 33.3% are ages 20-29, 25.0% are ages 30-64, 15.4% are ages 65-84, and 1.5% are aged 85 and over. 86.1% of the residents primarily speak English, while 13.9% speak another language in the home. The ethnicity for this population includes 73.4% white, 15.0% African American, 7.1% Hispanic, and 6.5% Asian.

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

County of Gloucester has 38,711 residents with 7.9% of this population living in poverty and 10% uninsured. Of the population in this county, 21.7% are ages 0-19, 9.7% are ages 20-29, 48.6% are ages 30-64, 18.2% are ages 65-84, and 1.8% are aged 85 and over. 97.1% of the residents primarily speak English, while 2.9% speak another language in the home. The ethnicity for this population includes 87.8% white, 8.0% African American, 3.8% Hispanic, and 0.9% Asian.

County of Charles City has 6,773 residents with 9.9% of this population living in poverty and 15% uninsured. Of the population in this city, 16.6% are ages 0-19, 8.8% are ages 20-29, 49.2% are ages 30-64, 23.6% are ages 65-84, and 1.8% are aged 85 and over. 96.9% of the residents primarily speak English, while 3.1% speak another language in the home. The ethnicity for this population includes 44.8% white, 44.4% African American, 1.8% Hispanic, 6.7% American Indian, and 0.6% Asian.

County of James City has 78,254 residents with 6.5% of this population living in poverty and 8% uninsured. Of the population in this city, 20.6% are ages 0-19, 9.4% are ages 20-29, 40.1% are ages 30-64, 26.1% are ages 65-84, and 3.8% are aged 85 and over. 92.0% of the residents primarily speak English, while 8% speak another language in the home. The ethnicity for this population includes 80.3% white, 13.6% African American, 6.1% Hispanic, and 2.6% Asian.

County of King and Queen has 6,608 residents with 11.1% of this population living in poverty and 14% uninsured. Of the population in this county, 21.9% are ages 0-19, 9.1% are ages 20-29, 47.2% are ages 30-64, 19.5% are ages 65-84, and 2.3% are aged 85 and over. 99.0% of the residents primarily speak English, while 1% speak another language in the home. The ethnicity for this population includes 69.0% white, 26.2% African American, 3.1% Hispanic, 1.7% American Indian, and 0.5% Asian.

County of King William has 17,810 residents with 6.2% of this population living in poverty and 10% uninsured. Of the population in this county, 25.5% are ages 0-19, 10.7% are ages 20-29, 47.5% are ages 30-64, 14.8% are ages 65-84, and 1.5% are aged 85 and over. 97.4% of the residents primarily speak English, while 2.6% speak another language in the home. The ethnicity for this population includes 79.4% white, 15.4% African American, 2.9% Hispanic, 1.7% American Indian, and 1.1% Asian.

County of Middlesex has 10,625 residents with 11.6% of this population living in poverty and 11% uninsured. Of the population in this county, 16.4% are ages 0-19, 7.3% are ages 20-29, 44.5% are ages 30-64, 28.6% are ages 65-84, and 3.2% are aged 85 and over. 96.2% of the residents primarily speak English, while 3.8% speak another language in the home. The ethnicity for this population includes 80.1% white 16.6% African American, 2.9% Hispanic, 0.5% Asian.

County of New Kent has 22,945 residents with 4.6% of this population living in poverty and 9% uninsured. Of the population in this county, 22.4% are ages 0-19, 8.6% are ages 20-29, 50.6% are ages 30-64, 17.2% are ages 65-84, and 1.2% are aged 85 and over. 95.8% of the residents primarily speak English, while 4.2% speak another language in the home. The ethnicity for this population includes 80.8% white 13.9% African American, 3.6% Hispanic, 1.2% Asian.

County of York has 70,045 residents with 5.7% of this population living in poverty and 7% 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. 87.1% of the residents primarily speak English, while 12.5% speak another language in the home. The ethnicity for this population includes 75.4% white, 13.8% African American, 6.9% Hispanic, and 6.1% Asian.

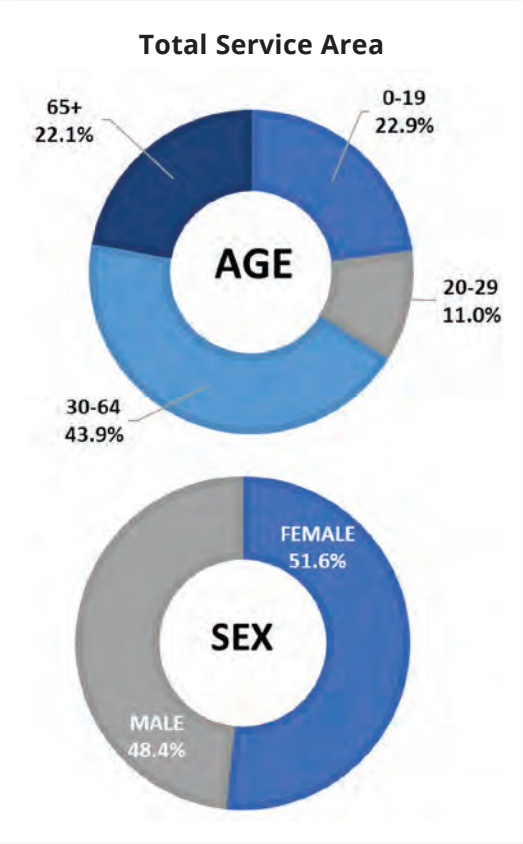
POPULATION HIGHLIGHTS

Williamsburg, home of the College of William and Mary, has more than double the percent of young adults compared to the state average. The combined population of the service area is approximately 267,196 people.

Age and Sex

The service area has a higher percent of residents aged 65+ than does the state overall, in some cases, specifically James City, Charles City, King and Queen and Middlesex Counties, significantly higher. Of the 267,196 community members living in the service area, most residents are between the ages of 30-64. The service area has a higher percentage of residents aged 85+ than the state average, with Middlesex County having a significantly higher percent of population aged 65+ years. The population segments representing children, young adults and working age adults vary slightly from the statewide proportions.

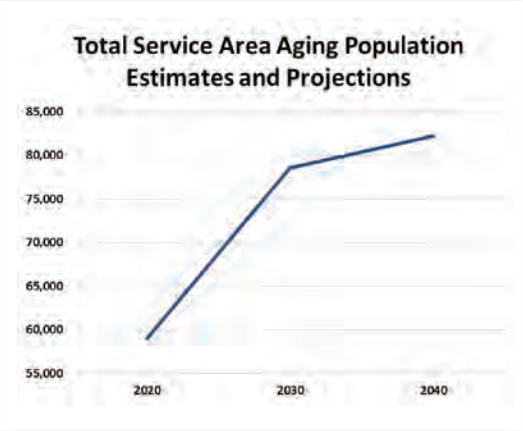
The SWRMC and SSCV service area has a slightly lower percentage of children compared to the Commonwealth of Virginia. There were 2,365 babies born in the service area in 2019. Similar to state demographics, there is a slightly higher percentage of residents born as female in the entire service area.



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 James City and Middlesex.

In 2020, approximately 58,935, 22.8%, of the population living in the service area is age 65+, slightly above the percentage of Virginia which is 15.9%. By 2030, the population of older adults in the service area is projected to be 26.6%. This graph shows the number of older adults increasing in the next 10 years, leading to a higher number of aging adults in the service area. The aging population in this service area is also projected to increase another 2.9% by 2040. The 2040 projected overall population of residents aged 85+ in the service area being 13,790.



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

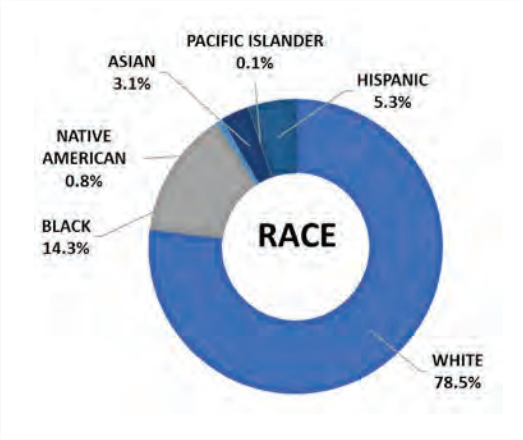
The overall percentage of the population who are veterans is higher than either Virginia or the United States with 11.1% veterans living in the service area. In James City, there is a lower percentage of owner-occupied homes compared to the state and to other communities represented in the service area. The median and per capita income reflect that lower cost of living.

COMMUNITY DIVERSITY PROFILE

One of the primary characteristics of the service area is the presence of a refugee resettlement program in Harrisonburg, which creates both special needs and opportunities for collaborations and partnerships between organizations working to meet those needs. The result is a rich environment with multiple organizations focused on improving community health from different perspectives and care delivery paradigms.

Ethnicity

The population of the service area is overwhelmingly white, with diversity expressed as a 23.6% combined non-white population. Williamsburg and York County are the more diverse communities (14.0% and 13.8% combined non-white or black respectively) although neither place is as diverse as the state overall, with 17.3% identifying as simply non-white or black. Each of the other localities have no more than 10% combined non-white or black population. The service area is home to small Asian communities, but the largest point of diversity in the service area is the percentage who identify as multiracial. The service area population has a small Hispanic population, with Williamsburg home to the largest Hispanic community with 7.1% of the population followed by York County with 6.9% and James City with 6.1%.



Preferred Language

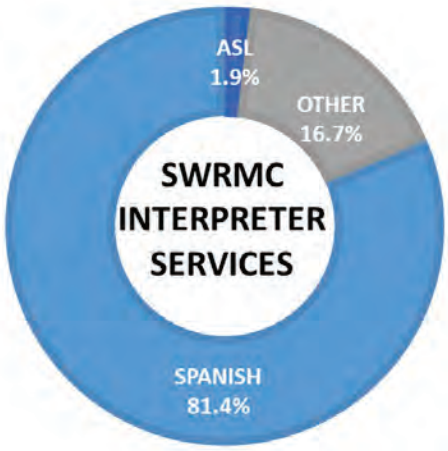
English is the primary language spoken in the service area. As of 2020, 92.8% of the population being served identified as English speaking. Per the 2014 American Community Survey five-year estimates, Spanish was the second language identified in the community being served.

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

Cultural and Linguistic Needs

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

Departments within Sentara, SWRMC and SSCV 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, as well as American Sign Language (ASL). In 2021, SWRMC had 4,001 requests for interpreter services. The highest percentage of interpreter services were for Spanish speaking individuals.



Source: SWRMC 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 a rapidly evolving issue in healthcare 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, as well as 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, in turn, affects 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.

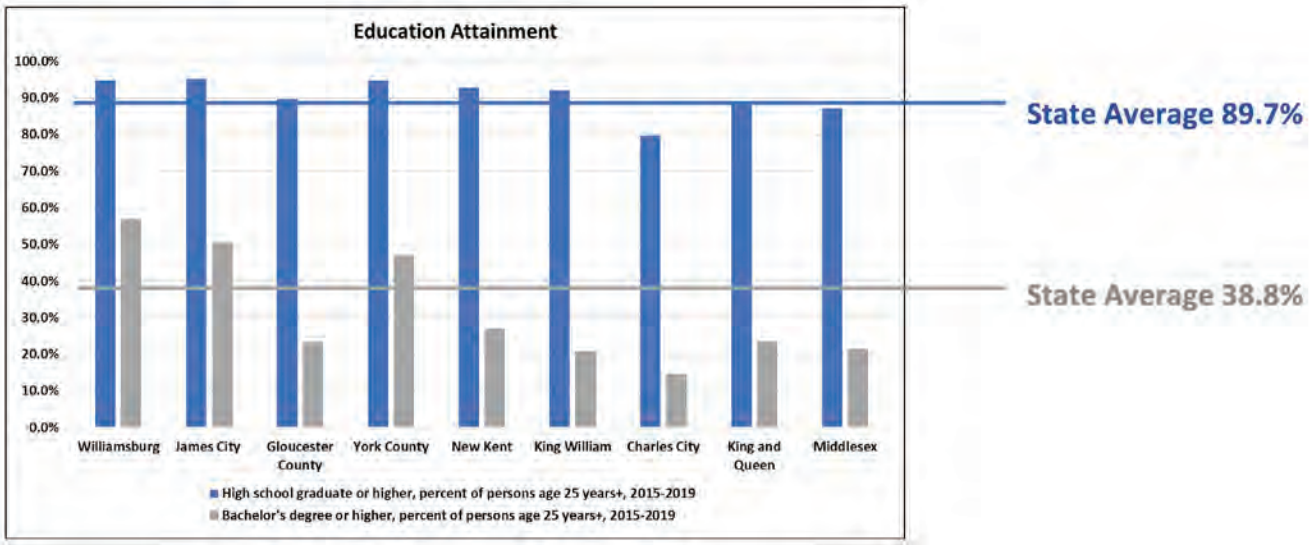
Sentara works to:

- 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. Gloucester County, Charles City, King and Queen County and Middlesex County have a lower percentage of persons graduating high school, with only Williamsburg, James City and York County having a higher percentage of college degrees as compared to the state.



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

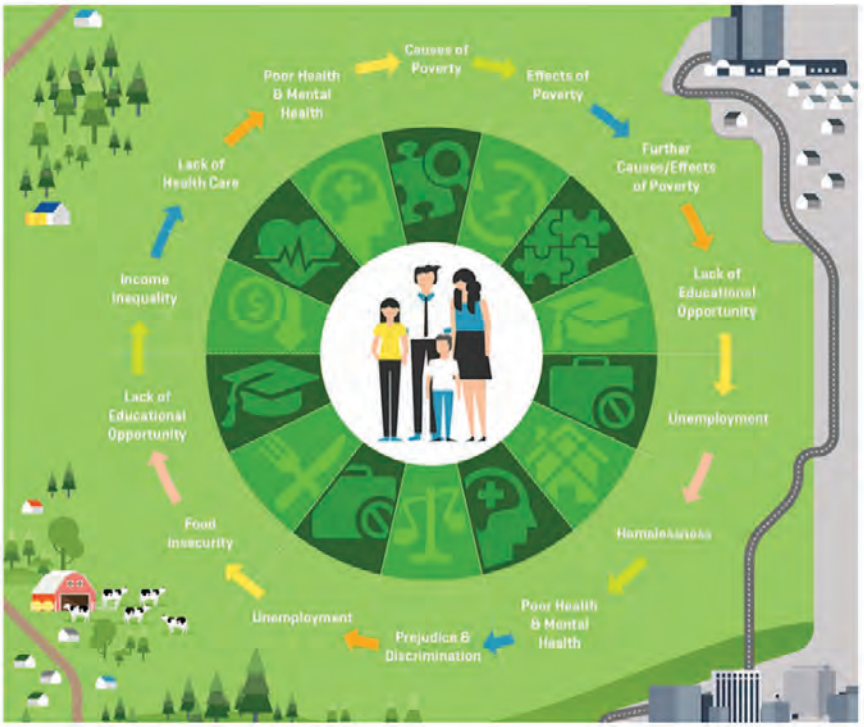
The Cycle of Poverty

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.

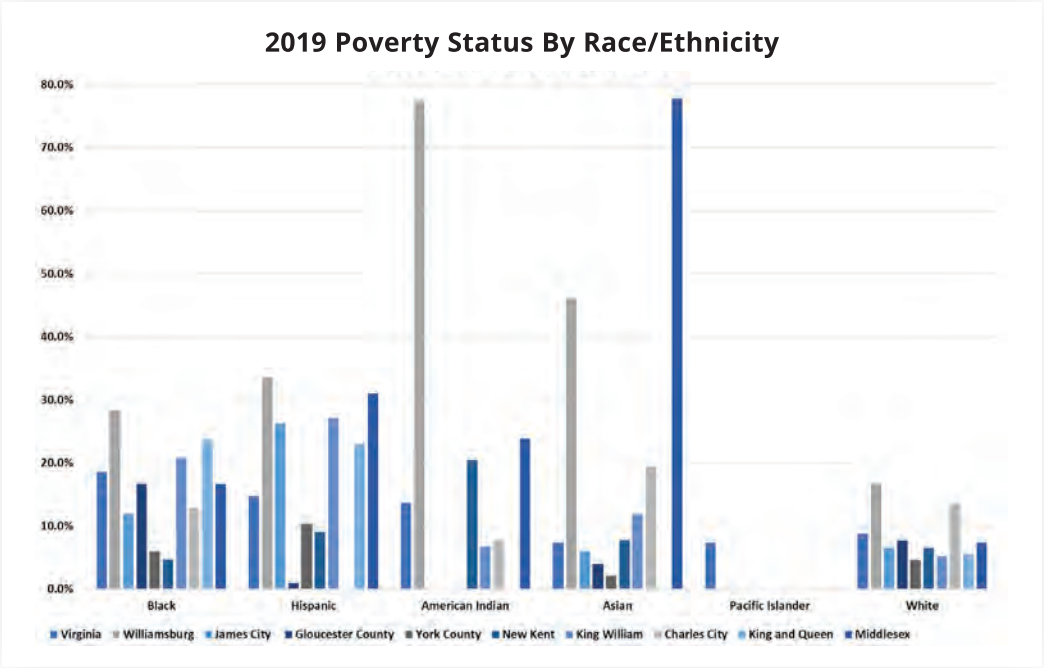
Generational poverty is a vicious cycle in which each generation is unable to escape poverty because of a lack of resources to put toward the effort.

Rural Poverty vs Urban Poverty | Social Workers | AU Online (aurora.edu)



Poverty

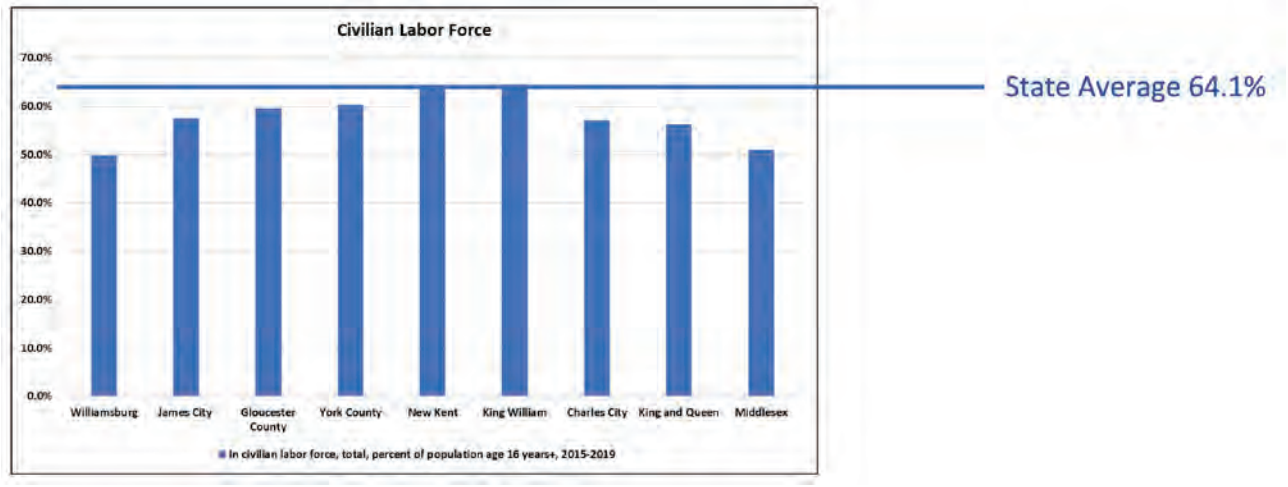
While simple poverty rates tell us something about the residents of the service area, when inserting race as a factor, we see the racial disparities that constrain residents of the service area in their ability to support and sustain healthy, functioning households for themselves and their children.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



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 slightly below the state average of residents in the civilian labor force. Of those in the civilian labor force, the percentage of female residents is highest in New Kent (60.4%), which is lower than the Commonwealth of Virginia (60.5%).



Medicaid & FAMIS, Medicare, Medicare & Medicaid Enrollment

Out 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 number of residents living in the service area receiving Medicaid and FAMIS services continues to increase each year, with an increase of 26.7% since January 2020.

In 2019, there were 29,825 community members age 65+ living in the service area receiving Medicare and 903 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	Williamsburg	James City	Gloucester	York	New Kent	King William	Charles City	King and Queen	Middlesex
Medicaid Enrollment (Below 138% FPL)	626,398	15,459	997	4,058	3,050	2,909	1,040	1,148	594	641	1,022
Medicaid Percentage	7.2%	5.8%	1.3%	26.3%	7.9%	4.2%	4.5%	6.4%	8.8%	9.7%	9.6%
FAMIS (Below 138% FPL)	1,347,010	20,524	1682	7517	5805	5,520	--	--	--	--	--
FAMIS Percentage	15.6%	10.1%	21.0%	48.7%	15.0%	7.9%	--	--	--	--	--
Children Enrolled in Medicaid/FAMIS (Below 138% FPL)	813,229	12,689	1,024	4,941	3,259	3,465	--	--	--	--	--
Children Enrolled in Medicaid/FAMIS Percentage	9.4%	6.3%	0.1%	1.8%	0.9%	4.9%	--	--	--	--	--
65+ Medicaid (Below 138% FPL)	83,149	1,035	98	283	351	303	--	--	--	--	--
65+ Medicaid Percentage	0.9%	0.5%	0.8%	3.1%	0.6%	0.4%	--	--	--	--	--
65+ Medicare*	802,949	29,825	--	11,719	3,899	5,457	2,234	1,920	1,229	1,222	2,145
65+Medicare Percentage	64.5%	62.1%	--	64.8%	57.8%	51.7%	62.3%	75.0%	73.2%	75.1%	67.2%
65+ Medicare and Medicaid	56,810	903	--	121	310	165	42	28	70	44	123
65+ Medicare and Medicaid Percentage	4.6%	1.9%	--	0.7%	4.6%	1.6%	1.2%	1.1%	4.2%	2.7%	3.9%
Persons in Poverty	9.2%	6.9%	16.8%	6.5%	7.9%	4.7%	4.6%	6.2%	9.9%	11.1%	11.6%

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;*

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.

> ***"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*

The stakeholders responding to the survey represent multiple organizations and each have unique insight into the health factors that impact the community, with 43.85% being health care 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 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. Of respondents, 78.5% identified as 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 another 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, 5.7% having completed high school, 10.2% received an associate degree, 17.7% had some college experience, 31.6% received a bachelor's degree and 33.7% had Graduate degree.

Survey Responses

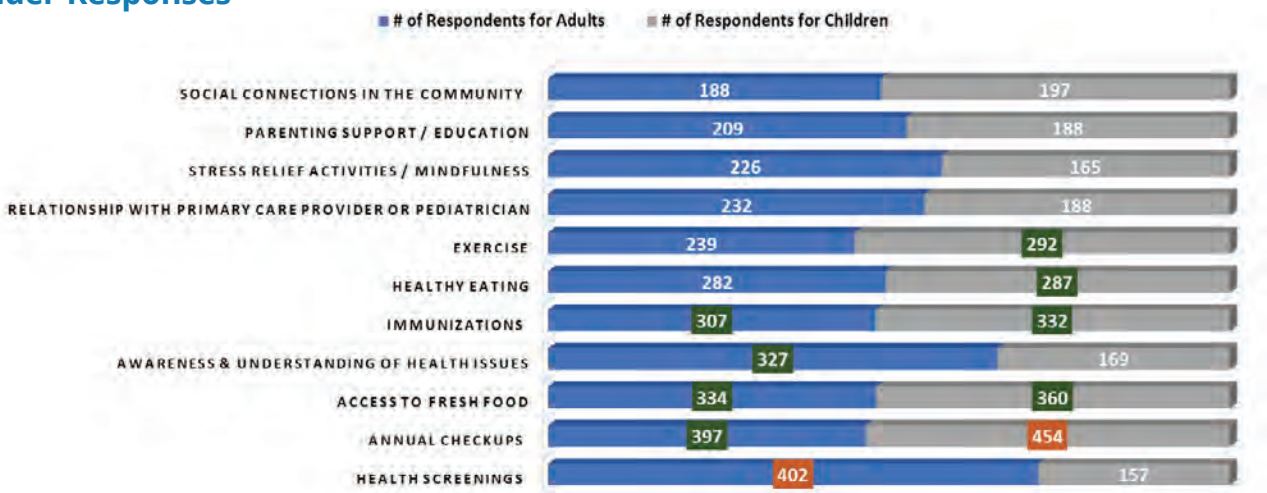
For this CHNA report, we will focus on the below questions asked in the survey. Survey respondents were asked to review a list of common community health issues and select up to three items. The tables below show the answers for each question among stakeholder and community member respondents.

- 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?

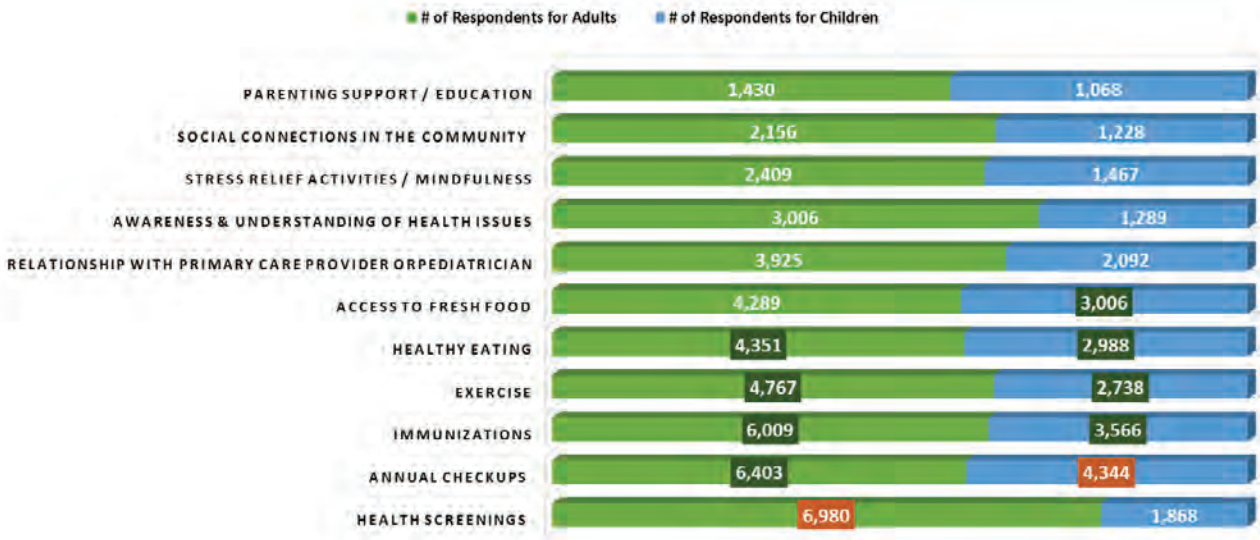
1. What is important to the health of adults and children?

Both stakeholder and community member survey respondents chose health screenings (mammograms, colonoscopies, vision exams, cholesterol checks), annual checkups (physicals, well child visits) and immunizations (Flu, Tdap, MMR, 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 (physicals, well child visits), immunizations (Flu, Tdap, MMR, COVID-19), access to fresh food, healthy eating, and exercise.

Stakeholder Responses



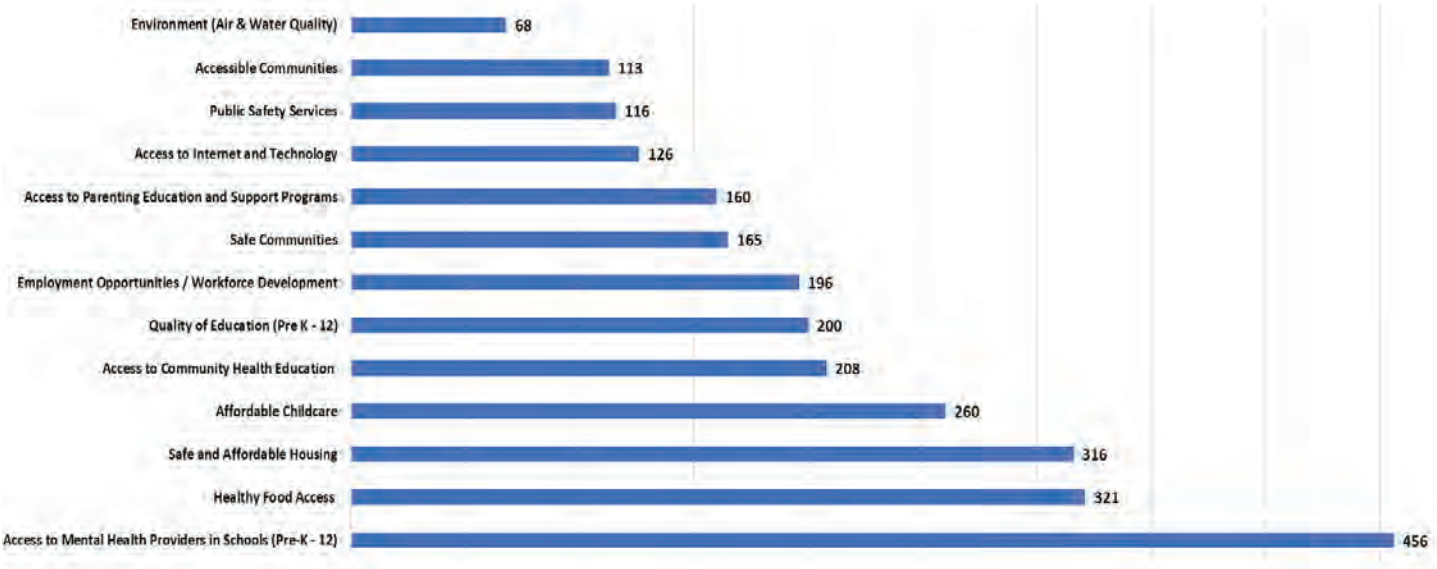
Community Member Responses



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, as well as safe and affordable housing.

Stakeholder Responses



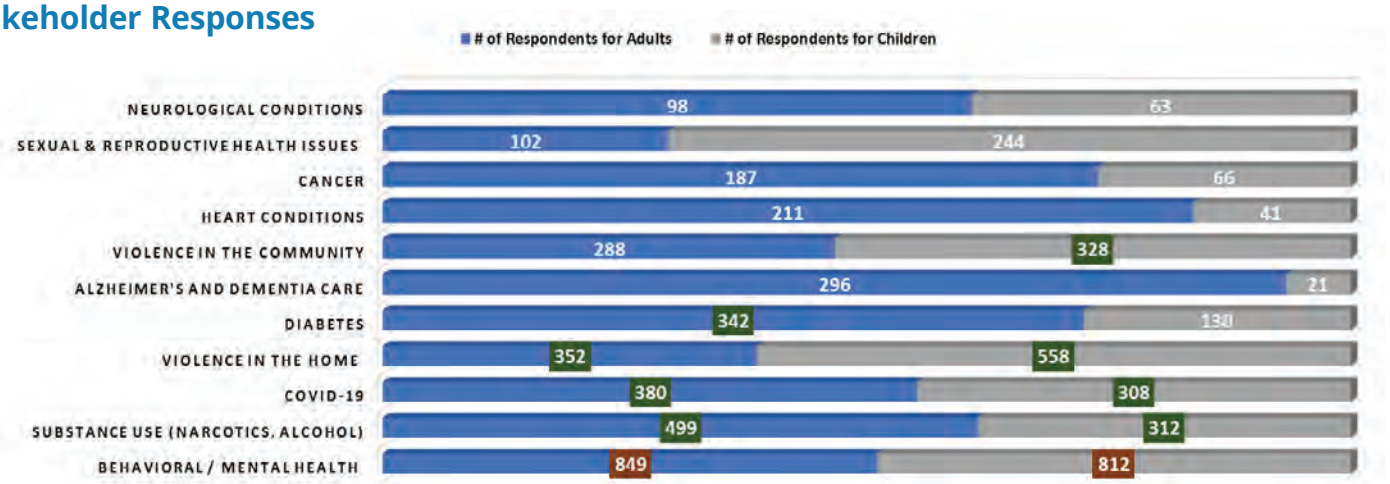
Community Responses

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

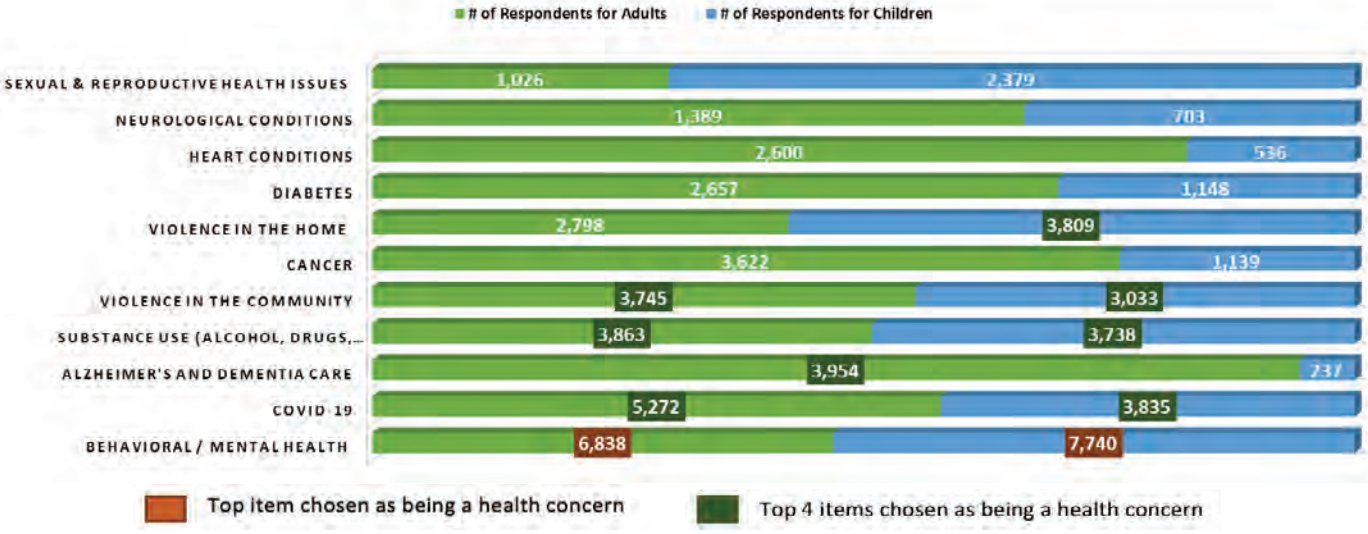
The most frequent response to question 3, see above, was behavioral health, anxiety, depression, psychoses, and suicide, for example, substance use such as narcotics and alcohol, COVID-19, and Alzheimer's and Dementia care. For children, respondents chose behavioral health such as anxiety, depression, psychoses, and suicide, COVID-19, violence in the community, substance use such as narcotics and alcohol, 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 health concern identified for both adults and children, along with access to mental health providers in schools from Pre-K through grade 12. This may be related to 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, that impacts their health in ways we are just beginning to understand.

Stakeholder Responses



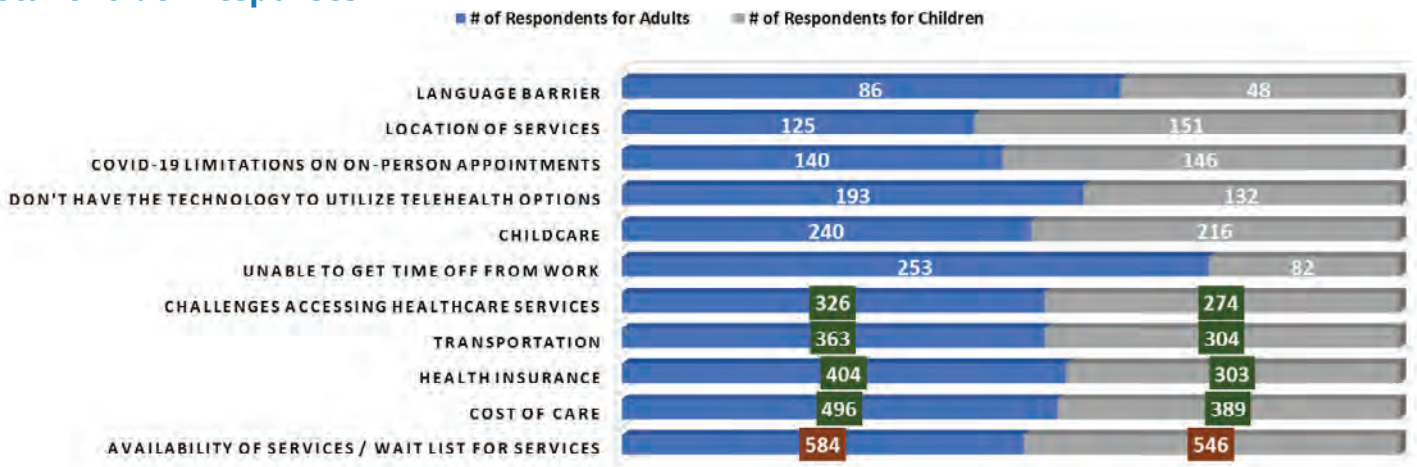
Community Member Responses



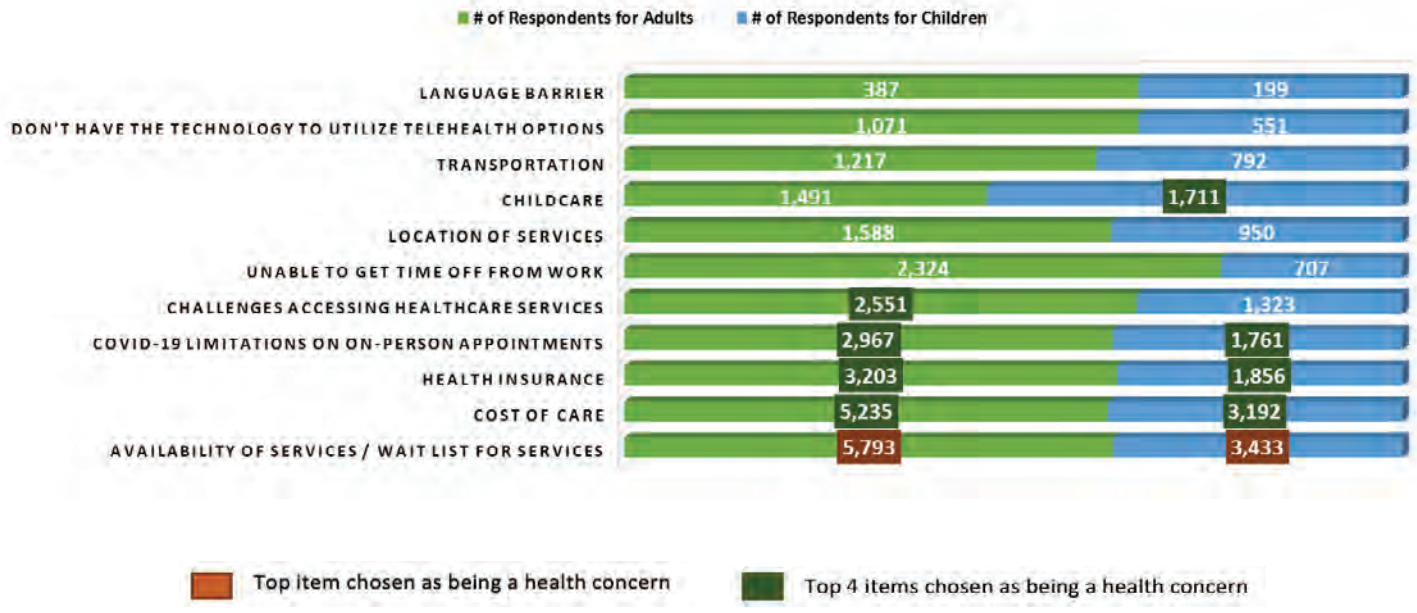
4. What makes it difficult to access healthcare services for adults and children?

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: 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 to access that adults do, while recognizing the effect of parenting and living conditions, often things that children have no control over.

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 U.S. population, adding to an existing problem. During the last several years, Sentara has worked to address this issue, which is near the top of every CHNA 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 Adverse Childhood Events (ACEs) impact adult health, the call for support services is likely to grow stronger. For a more detailed discussion of these effects, follow this link to the 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. Out of 10,185 respondents 91.2% stated adults in the home were vaccinated. Out of 9,946 respondents 24% stated their eligible children were vaccinated and 34.74% planned to vaccinate their eligible children. Out 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. Out 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 diverse as the effect of household mold on respiratory disease and the effect of stress from unemployment. The effects of social determinants are sometimes subtle and 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 factors listed as 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 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. Barriers to accessing care disproportionately impact those with psychosocial barriers, 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, SWRMC and SSCV 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?

SWRMC and SSCV held 4 focus group sessions between March and April 2022. The number of participants ranged from 4-8. When possible, representatives from the health department and other local hospitals were invited to attend the sessions.

Focus Groups

1. 03/02/2022 in-person session: Patient Experience Action Council for Excellence (PEACE)
2. 03/15/2022 virtual session: Community Friends for Sentara Williamsburg Steering Council
3. 03/16/2022 in-person session: R. F. Wilkinson Y.M.C.A. Staff
4. 03/30/2022 in-person session: SWRMC Employees, Interns and Community Volunteers

Demographics

The 25 participants ranged between the ages of 17 and over 60 and were representative of the demographics within the service area. Altogether, the focus group participants were 68% Caucasian, 16% African American, 8% Asian, and 8% Hispanic. The groups were 60% female and 40% male.

Methodology

Due to the COVID-19 pandemic, some focus groups were held virtually and 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, heart health, cost of care, and health education 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.

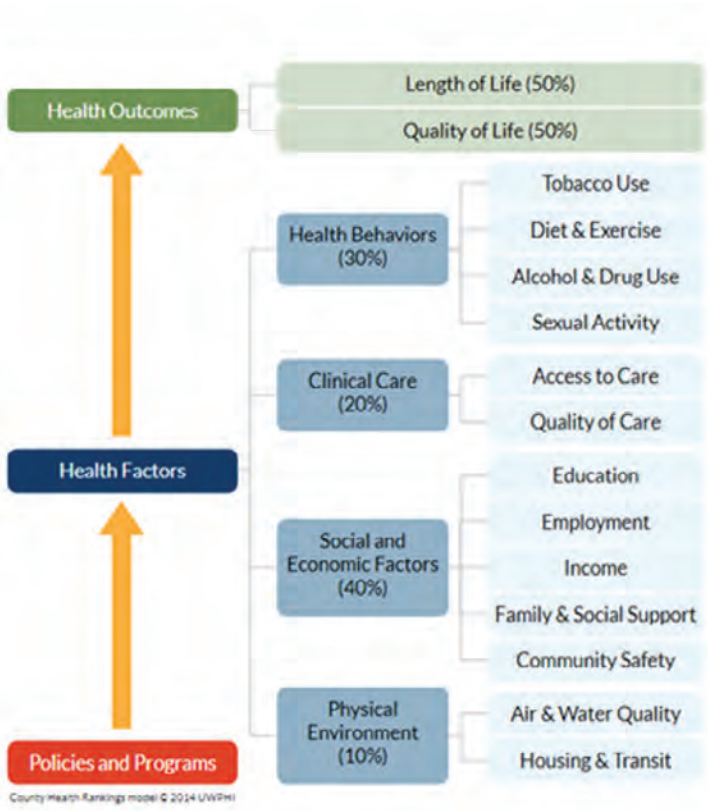
TOPIC	KEY FINDINGS
What are the most serious health problems in our community?	• Aging • Asthma • Cancer • Diabetes • Heart Health • Maternal Health • Mental Health • Obesity • Safety Education • Stroke • Substance Use
When considering Social Determinants of Health, which of the following resonate with you as a key social determinant that we should be focusing on?	• Food • Health Behaviors • Housing • Social Support • Transportation • Violence
Who has the health problems? **What groups of individuals are most impacted by these problems?**	• Children/ Young Adults • Elderly • Everyone • Homeless • Low income • Minority ethnic groups • Single parent household • Uneducated

TOPIC	KEY FINDINGS
What keeps people from being healthy? **What are the barriers they face with taking care of their health and accessing care?**	• Access to care • Cost of care • Fear of doctor • Health education • Lack of representation for minority groups • Lack of time • Motivation • Mental Health
What is being done in our community to improve health and reduce barriers? **What resources exist in the community?**	• Churches • Health and Wellness Facilities • Outreach Programs • Resources • Ride Services
How has the COVID-19 pandemic worsened the health issues in our community?	• Incorrect information in media • Increased cost of care • Lack of employment • Mental Health • Worsening health conditions
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 care • Community outreach programs • Education • Increased access to care • Mental Health support • Promote resources available to patients

HEALTH STATUS INDICATORS

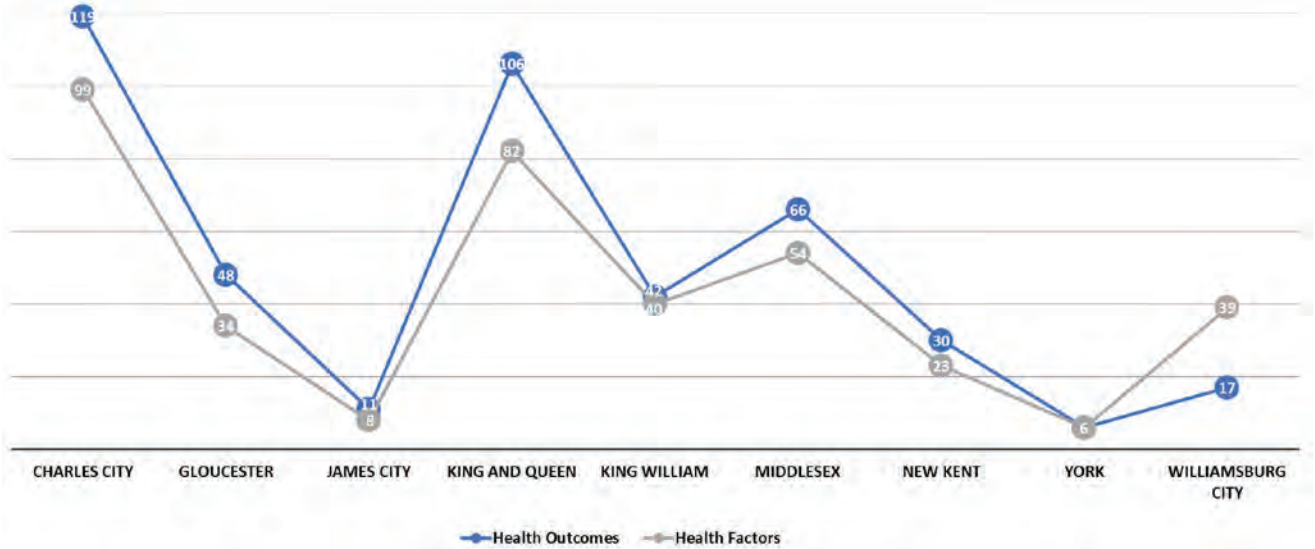
County Health Rankings

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. York County, James City, New Kent County and Williamsburg City rank better for these health outcomes, while Charles City, and King and Queen County rank worse out of 133 Virginia counties (Appendix B).



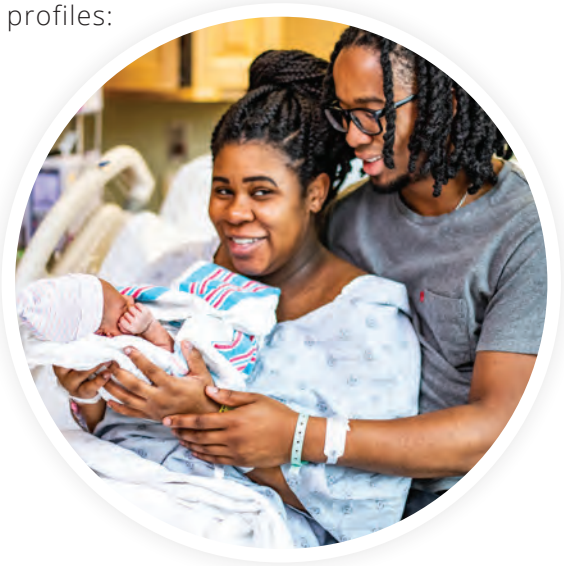
Source: County Health Rankings 2021, Rankings and Documentation;

Health Status Indicators

Below are key health status indicators for the counties represented in the service area. An interactive data dashboard can be viewed on the Greater Hampton Roads Indicators Dashboard, GHRconnects.com. 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.

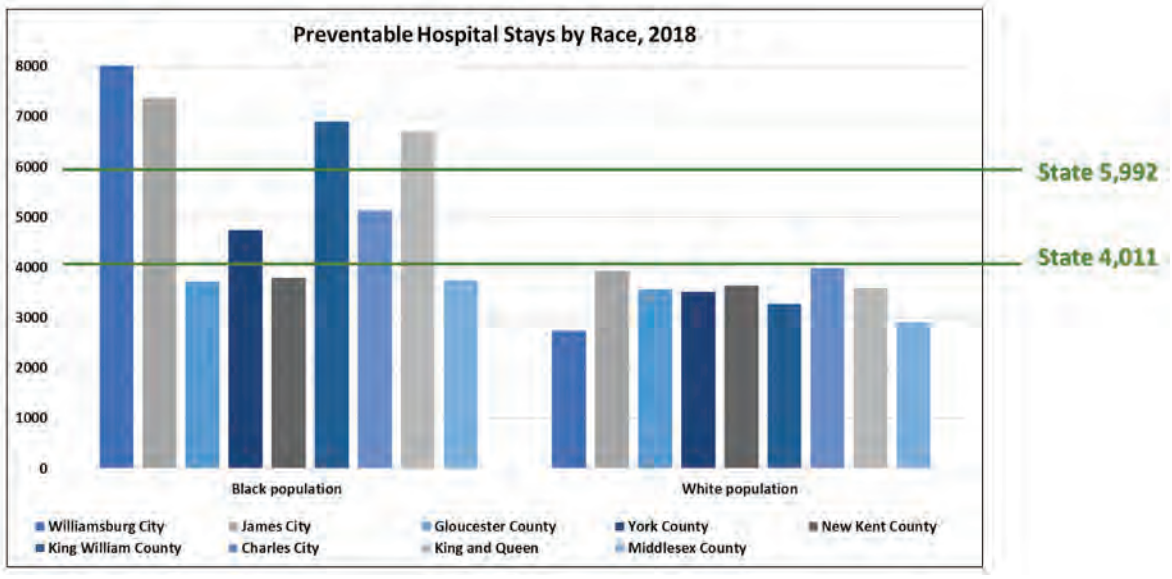
The key health status indicators are organized in the following data profiles:

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

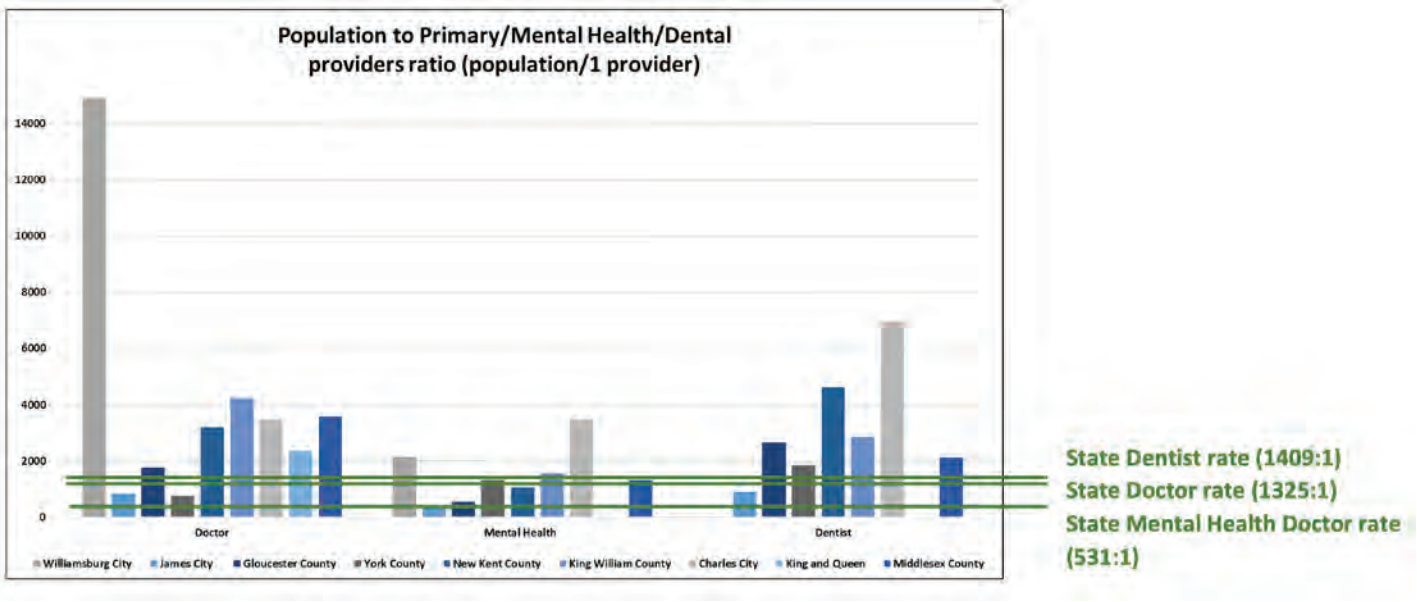
Access to quality and affordable health care is important to an individual's health. Health insurance and local care resources can ensure access to care. If outpatient care in a community is poor, then people may be more likely to overuse the hospital as their main source of care, resulting in unnecessary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

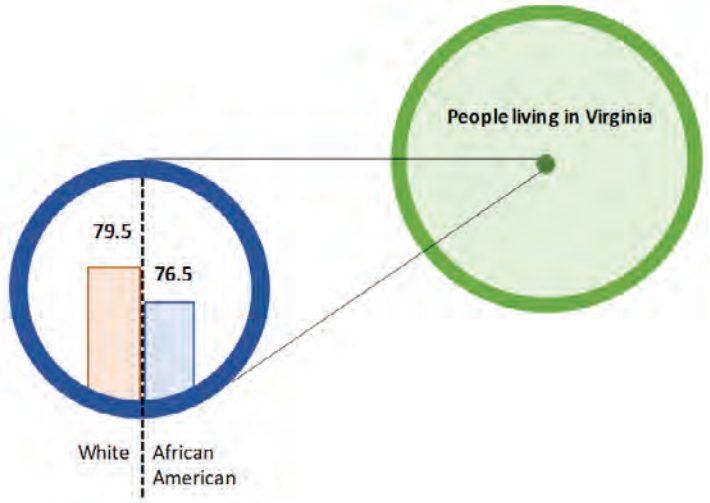
The rate of primary care and dental care providers were examined in the service area. The rates for population to primary care providers were higher than the state (1325:1) in some of the localities in the service area. The population ratio for dental care providers were also higher than the state in some localities (Appendix B). Fewer providers suggest concerns about 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 Charles City and King and Queen County, which have a higher percentage of uninsured. The preventable hospital stay rate among Medicare beneficiaries was highest in King and Queen County, followed by Charles City and James City, suggesting that there may be challenges with access to primary and outpatient care. Data also show a disparity 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. Williamsburg City, James City, and York County are the only communities with a slightly higher life expectancy than the state at 82.6, 81.8, and 82.2. It is important to note there are racial/ethnicity disparities related to life expectancy among African American populations. Life expectancy for African Americans is anywhere from 1 year to 5.8 years less than for white Americans in the service area (Appendix B).



Leading causes of death were examined. In 2019, cancer, heart disease, and accidents were the top three causes of death in the service area. In Gloucester County, King and Queen County, Middlesex County, New Kent County, and York County cancer was the leading cause of death, followed by heart disease. For Charles City, King William County, and Williamsburg City 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 most of the service area, the crude death rate from all causes was greater than the rate in the state overall. Of the top causes of death, cancer and heart disease were the causes with crude death rates higher than the rates for Virginia.

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
Charles City	Prevalence Rate	1,465	258.5	359.0	100.5	86.2	14.4	28.7	86.2	14.4	43.1	14.4
	Number of Deaths	102.0	18.0	25.0	7.0	6.0	1.0	2.0	6.0	1.0	3.0	1.0
Gloucester	Prevalence Rate	1,111	281.1	241.0	32.1	75.0	37.5	64.3	26.8	16.1	8.0	10.7
	Number of Deaths	415.0	105.0	90.0	12.0	28.0	14.0	24.0	10.0	6.0	3.0	4.0
James City	Prevalence Rate	917.4	211.7	211.7	28.7	49.7	37.9	57.5	10.5	11.8	10.5	6.5
	Number of Deaths	702.0	162.0	162.0	22.0	38.0	29.0	44.0	8.0	9.0	8.0	5.0
King and Queen	Prevalence Rate	1,566	341.6	327.4	85.4	42.7	128.1	85.4	113.9	14.2	14.2	28.5
	Number of Deaths	110.0	24.0	23.0	6.0	3.0	9.0	6.0	8.0	1.0	1.0	2.0
King William	Prevalence Rate	968.0	198.3	244.9	35.0	75.8	46.7	46.7	23.3	35.0	11.7	23.3
	Number of Deaths	166.0	34.0	42.0	6.0	13.0	8.0	8.0	4.0	6.0	2.0	4.0
Middlesex	Prevalence Rate	1,550	359.1	283.5	85.1	56.7	75.6	104.0	37.8	18.9	18.9	9.5
	Number of Deaths	164.0	38.0	30.0	9.0	6.0	8.0	11.0	4.0	2.0	2.0	1.0
New Kent	Prevalence Rate	900.8	233.9	168.9	56.3	52.0	47.6	43.3	52.0	4.3	30.3	13.0
	Number of Deaths	208.0	54.0	39.0	13.0	12.0	11.0	10.0	12.0	1.0	7.0	3.0
York	Prevalence Rate	738.1	140.6	131.8	45.4	42.5	51.3	39.5	33.7	13.2	14.6	7.3
	Number of Deaths	504.0	96.0	90.0	31.0	29.0	35.0	27.0	23.0	9.0	10.0	5.0
Williamsburg City	Prevalence Rate	983.0	193.9	214.0	60.2	53.5	33.4	93.6	26.7	20.1	*	6.7
	Number of Deaths	147.0	29.0	32.0	9.0	8.0	5.0	14.0	4.0	3.0		1.0
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

*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

SWRMC and SSCV examined the 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 service area followed by diabetes. Rates for adult mental health were also reviewed and across localities, the rate was highest in James City, which was also higher than the Virginia rate (Appendix B). Other top conditions included substance use, adolescent suicide/self-inflicted injury, and adult suicide/self-inflicted injury.

RISK FACTOR PROFILE

When compared to Virginia and United States values, the percentage of smoking and frequent mental health distress were higher for all localities in the service area, with the exception of Williamsburg City and York County. Conversely, the percentage of adults who drink excessively was higher in the service area, with Williamsburg City and Charles City as exceptions, when compared to the Commonwealth of Virginia and the US.

Obesity and physical inactivity percentages were higher in Charles City, New Kent, King William, King and Queen, and Middlesex counties. Access to exercise opportunities was higher than the state in the cities of Williamsburg and James. Food insecurity percentages were highest in Williamsburg City, Charles City and King and Queen County, and were higher than the state percentage of 10%. Limited access to healthy food was highest in James City at 7%, higher than the state at 4% as a whole (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 longevity and quality of life

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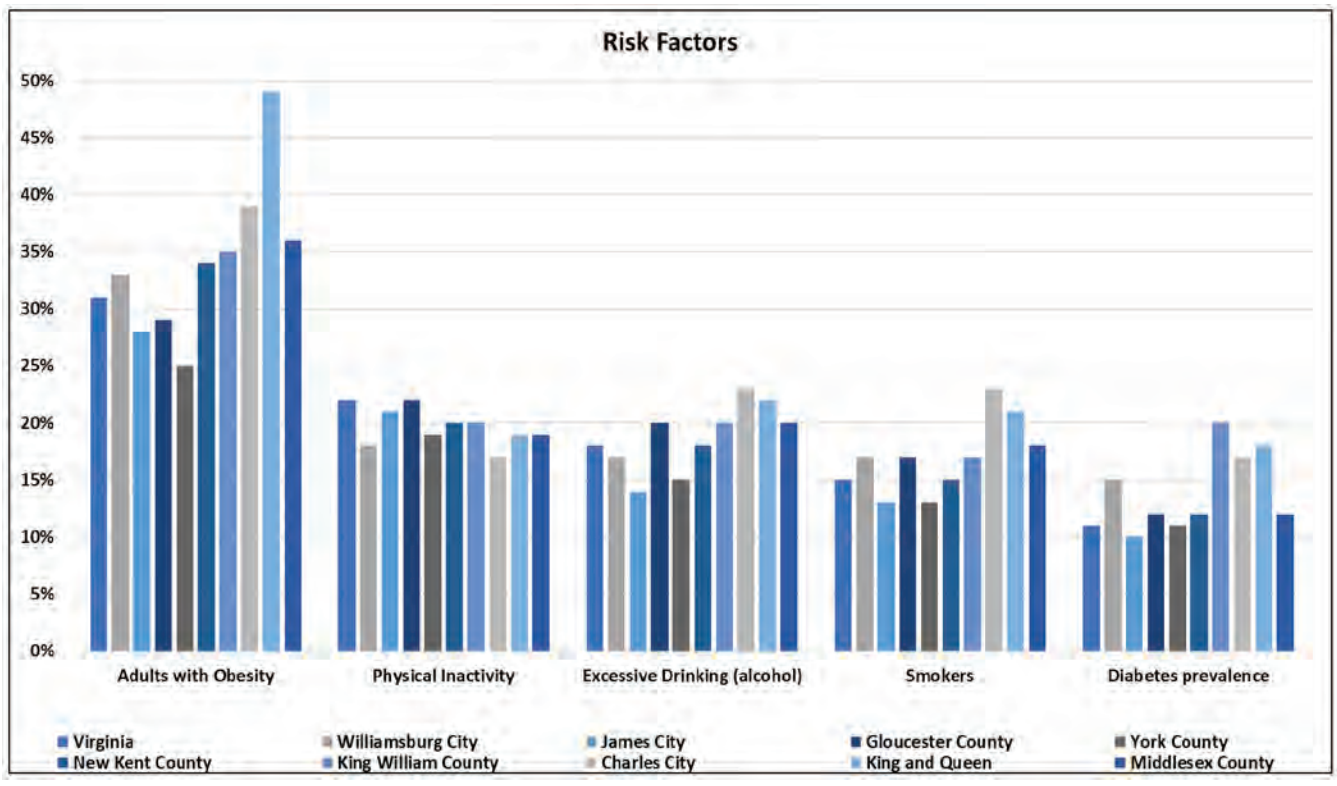
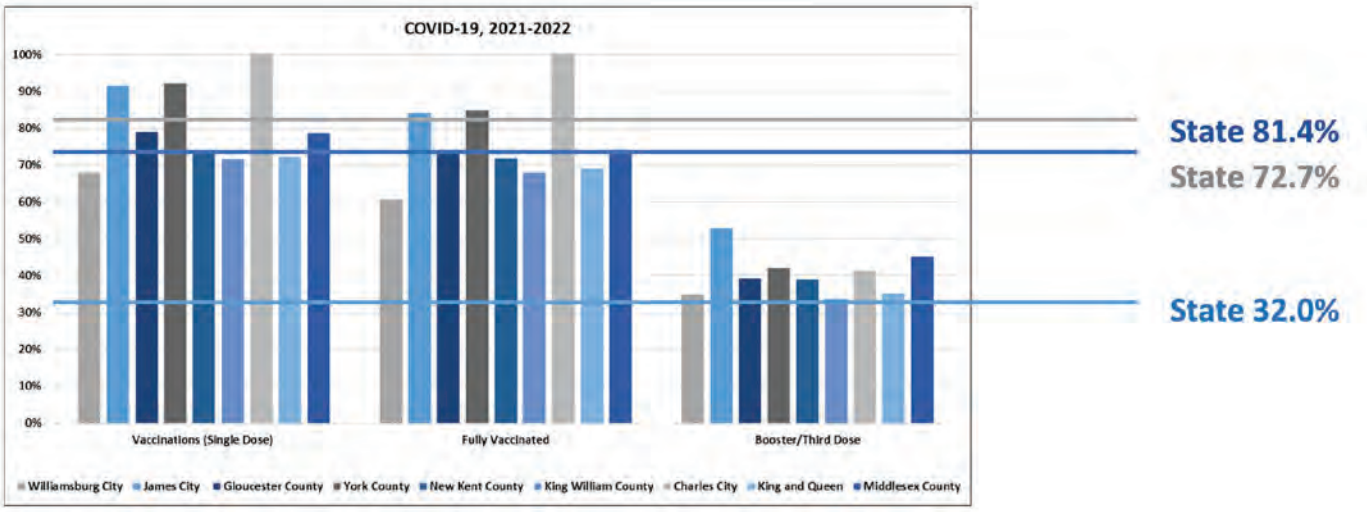


Source: County Health Rankings 2021,, Rankings and Documentation

COVID-19 PROFILE

In 2020, the nation faced the COVID-19 pandemic. This contagious disease impacted community health. 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 when 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, James City had the highest number of cases with 10,457. Gloucester had the highest rate of cases at 13,818 per 100,000 residents and the highest number of deaths. Middlesex had the highest rate of deaths at 236.5 per 100,000 residents but it is important to note the population is smaller and though there is a higher rate there were only 25 deaths. As of April 2022, Charles City has the highest percentage of residents with a single dose and two doses of the vaccine, which is much 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. Therefore, looking at the way families begin can help us understand the current and future health of the community. Residents of Charles City, James City, Gloucester County, King and Queen County and Middlesex County had high percentages of babies born with a low and very low weight births compared to Virginia values. King and Queen County had the highest percentages of low and very low weight births. The infant mortality rate was greater than the Virginia rate in Williamsburg City, Charles City, Middlesex County, York County and highest in King and Queen County (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 was higher than the Virginia rate in Williamsburg City, Charles City, Gloucester County, King and Queen County and Middlesex County. 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 are better than state and national rates and have also been improving over time. This is an indicator of quality outpatient care being available in the service area.

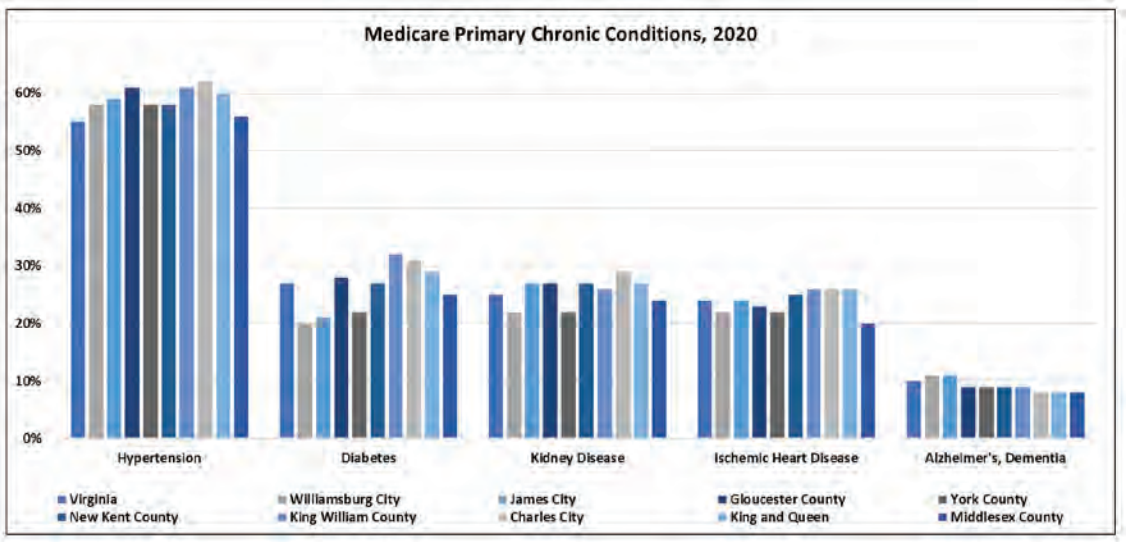
The Medicare population was seen for multiple conditions in 2020. Hypertension and diabetes were the top conditions seen in the service area with higher percentages in most localities than the state percentage. Kidney disease and heart conditions also showed high percentages for the Medicare population utilizing hospital services.

The percentage of Medicare beneficiaries treated for Alzheimer's disease or dementia is increasing in Williamsburg City and York County and is higher than the state 10%(Appendix B). Per the Alzheimer's Association there is a projected estimated increase of 26.7% by 2025 in prevalence of 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 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 the 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 8,943 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

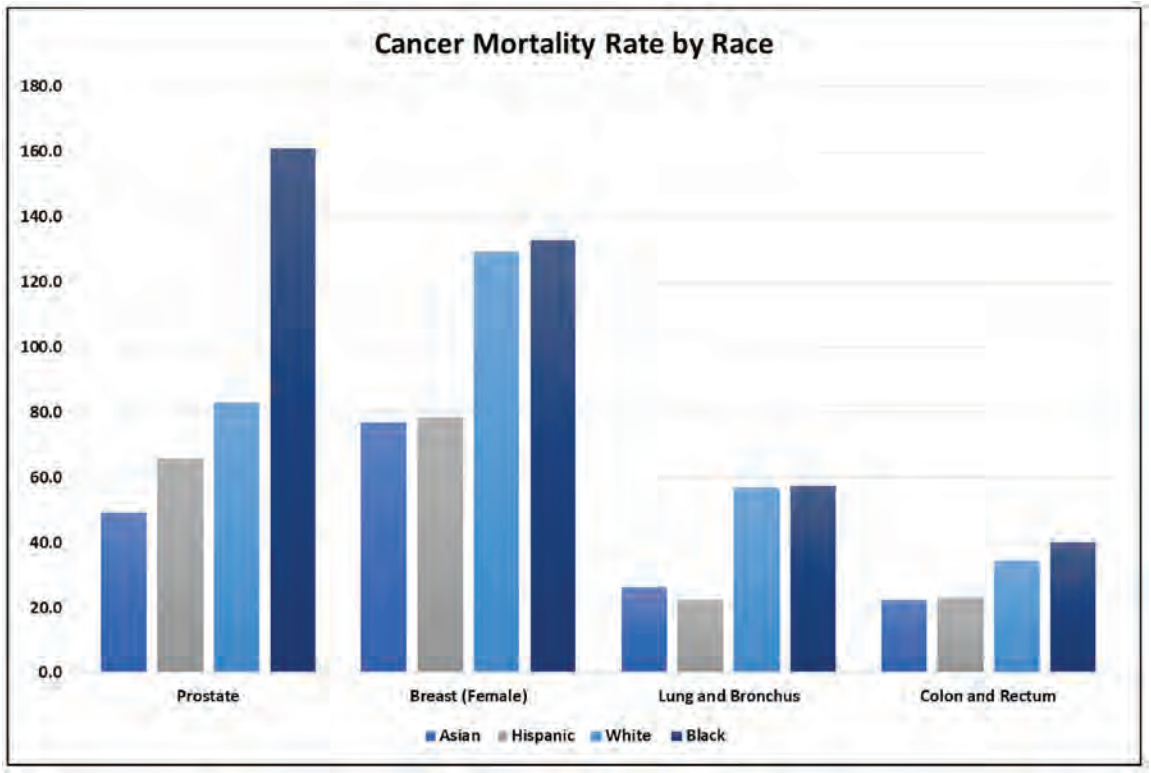
CANCER PROFILE

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 from the leading types of cancer, most of the service area is trending down. However, Williamsburg City has a rising incident rate for all cancers and Gloucester County has a rising rate of colon and rectum cancers. It is important to note the breast cancer rates are rising for the African American population living in 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 on which Sentara will focus efforts. Localities with the greatest all cancer incidence rates were Gloucester County, New Kent County, and Middlesex County in order of decreasing incidence (Appendix B). Prostate cancer and breast cancer are the leading cause of cancer death for African Americans living in Virginia. See the graph below which shows the mortality disparities among races. 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 significant roles in this increase, but age and race/ethnicity also remain key risk factors. Diabetes is a major 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 James City, Williamsburg City, Gloucester County and York County is lower than the state percentage of 8.5%. The death rate due to diabetes in Gloucester County is higher than the state. Surgical Suites of Coastal Virginia examined hospitalization rates due to diabetes and found the age-adjusted hospitalization rate due to diabetes, hospitalization rate due to short-term complications, hospitalization rate due to type 2 diabetes and hospitalization rate due to uncontrolled diabetes was above the state rate in James City. It is also important to note that the percentage of the Medicare population living in the service area diagnosed with diabetes is higher than the state percentage of 55%.

SURGICAL SITE INFECTIONS PROFILE

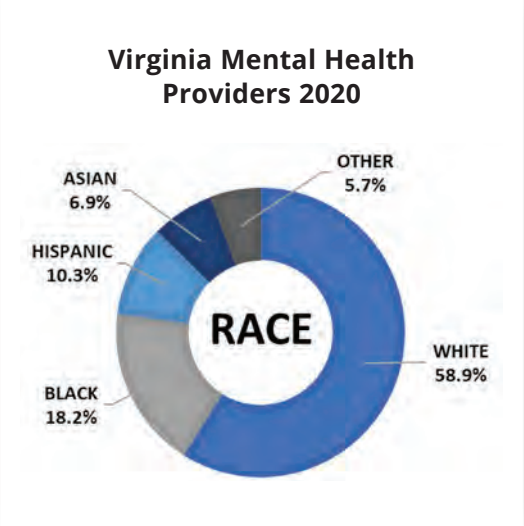
SSCV examined surgical site infections (SSIs). SSIs occur after surgery and in the part of the body where the surgery took place. SSIs can occur within days or even months after surgery. Some patients are at higher risk for developing a SSIs due to their age and underlying medical conditions, such as diabetes and COVID-19 infections. SWRMC and SSCV will continue to work together to educate patients about risk factors for SSIs 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).

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 use were examined. Localities in the service area, with the exception of James City, had lower hospitalization rates due to mental health and suicide/self-intentional injury as compared to Virginia rates. Gloucester County had a higher rate of hospitalizations due to opioid and other substance use.



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 was highest in James City. 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 SWRMC Emergency Department saw a patient frequency of 411 for people aged 18+ with a behavioral health diagnosis. Of the 411 visits, 23.1% presented with suicidal ideations and 12.8% with major depressive disorder.

The adolescent mental health rate is highest in Gloucester County. "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.) In 2021 SWRMC saw a patient frequency of 92 for youth, age 0-17, present with a behavioral health diagnosis. Of the 92 visits 34.7% presented with suicidal ideations and 26.1% with major depressive disorder.

The mental health rates for this service area are higher than in the state overall. The COVID-19 pandemic has worsened mental health among youth and adults, anxiety, depression, and stress. Loss of freedoms due to social distancing, masking, and isolation negatively impacted the most vulnerable, increasing emergency department visits due to a lack of mental health providers to assist with therapy and development of coping skills. The service area has fewer mental health providers per person compared to the state. Charles City (3,482:1), Williamsburg (2,136:1), and King William County (1,559:1) have the lowest ratio of providers per person followed by Middlesex County (1,323:1), York County (1,313:1) and New Kent County (1,050:1) (Appendix B). It is also important to note that the mental health workforce is nearing retirement age which will negatively impact provider capacity. There is a need for a more racially and ethnically diverse mental health workforce to provide racially concordant care. (Appendix B).

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

COMMUNITY VIOLENCE AND GUN VIOLENCE PROFILE

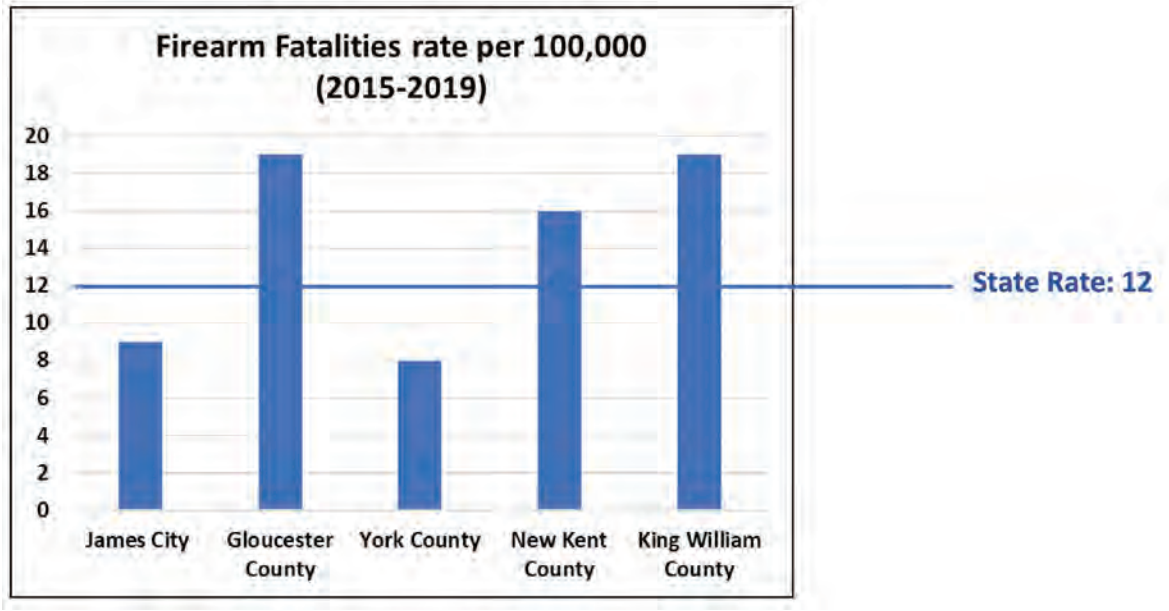
Violent crimes such as gun violence, robbery, or aggravated assault have socio-emotional impact on people. Physical and emotional symptoms such as sleep disturbances, increase in feelings of distress, anger, depression, inability to trust, and significant problems with family, friends, or coworkers can 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 was lower in several localities of the service area compared to the state rate of 207 violent crime offenses per 100,000 population. However, per County Health Rankings, the rate in Middlesex County was higher than in the state overall and has the highest rate of violent crimes in the service area at 217 (Appendix B).

Gun violence alone is a top contributor to premature death. Deaths due to firearms are considered largely preventable, as a result, national agencies have identified gun violence as a key public health issue. 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, Gloucester County, King William County and New Kent County had rates higher than that of the state for firearm fatalities per 100,000 population.



Source: County Health Rankings 2021, Rankings and Documentation;
**Data unavailable for Williamsburg, Charles City, King and Queen and Middlesex.*

2019 IMPLEMENTATION STRATEGY PROGRESS REPORT

The previous community health needs assessment identified several health issues. The SWRMC and SSCV 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 and collaborative efforts.

SWRMC is 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 Williamsburg Regional Medical Center

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

- Heart Health
- Cancer
- Nutrition and Outreach
- Behavioral Health, including Alzheimer's Disease/Dementia

STRATEGY PROGRESS

Heart Health

SWRMC continues to research strategies for a HEARTSafe program. SWRMC is planning to implement a screening tool developed by AHA for risk assessment/stratification to use in conjunction with RVHS with businesses to identify high risk patients. A PulsePoint program was implemented and hands only CPR trainings for the community were provided prior to the COVID-19 pandemic. SWRMC continues to support the Mended Hearts Chapter and supports heart-related events when COVID-19 restrictions allow. Support groups were held prior to the pandemic and have been held only a few times due to COVID-19 restrictions. SWRMC does continue to provide education during annual Heart month in February.

Cancer

Unfortunately, due to the pandemic, the Vigil Volunteer program is on hold. Living Beyond Cancer Survivorship class has been offered virtually since COVID-19. A survivorship class brochure is offered to all breast cancer survivors. A social worker from Virginia Oncology Associates (VOA) is one of the presenters for the class. Due to the constraints of COVID-19, SWRMC hasn't been able to conduct Breast Cancer awareness in the lobby and cafeteria where we would typically provide handout materials. SWRMC continues to offer free Mammogram/Bone Density Program/Unique Boutique services through Auxiliary when COVID-19 restrictions allow.

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, detection, and provide community outreach by hosting and attending screening and education events. In 2021, more than 3,000 individuals participated in such 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, meditation, yoga and fitness program for cancer patients. The program is aimed to strengthen both physical and mental health and provide 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 needing mammography by 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 needed support for the mind, body and spirit 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 partner, to continue to bring cancer education and preventative services to the historically underserved.

Nutrition and Outreach

SWRMC continues to support workshops for the public exploring variety of topics to be included in a Women's Health Day/Men's Health Day when COVID-19 restrictions allow. Multiple community events were placed on hold due to the pandemic. Diabetes prevention programs have continued virtually. Though COVID-19 led to Tobacco Cessation classes being discontinued in late 2019, SWRMC provides tobacco users educational information on 1-800-QUIT-NOW. In 2020, SWRMC completed the Diabetes Prevention Programs (DPP) that had been started in 2019 but did not start any new programs for DPP in 2020 to the present. This was in part due to COVID-19 social distancing, and also due to productivity constraints.

SWRMC continues to support Breast Cancer education within the community. In early summer 2021, SWRMC developed and posted a virtual tour for families to become better acquainted with the facility, some of the staff, and the many changes we've made. In summer 2021, SWRMC revamped the Family Maternity Center (FMC) website and had a stand-alone domain for ease in finding both the SWRMC Family Maternity Center and fresh information, www.sentarawilliamsburgmaternity.com and monitored mailbox SWRMCMaternity@sentara.com to answer questions.

In summer 2021, an e-marketing campaign was launched to educate the community about FMC and the wide variety of support options and capabilities to our community. In summer 2021, SWRMC developed an electronic "tour" for women to opt into during pregnancy. This supports pregnant women through and

beyond their first pregnancy, with pregnancy education targeted to teens, 20-30-40-year olds. In early 2022, SWRMC is planning a re-launch of updated and expanded pregnancy classes. The plan is to begin in January 2022 and will continue to have childbirth education, lactation class, breastfeeding support group, and Postpartum Support Williamsburg support group (for postpartum depression, part of Postpartum Support Virginia). Our plan is to continue offering these classes and support groups at no cost.

SWRMC launched a media campaign including print, radio, social media, and MyChart, regarding safety protocols and encouragement to seek medical care timely. SWRMC also widely distributed information about COVID-19 vaccines throughout the community to dispel myths. SWRMC also promotes #VaxItUp throughout hospital. SWRMC continues to support and host blood drives.

Behavioral Health, including Alzheimer's Disease/Dementia

Monthly meetings were placed on hold due to COVID-19. Goals of the program are to identify businesses in the community willing to teach staff how to be dementia friendly using pre-defined tools from our organization. The businesses completing this goal will receive the dementia friendly designation and will be allowed to market themselves as such. The idea is to have areas in the community where families feel comfortable taking their loved ones who may suffer with this disease. Teams are partnering with restaurants to help with menus for patrons with dysphagia. Staff of dementia friendly partners who were previously trained are now attending meetings.

Sentara is moving away from Nurses Improving Care for Healthsystem Elders (NICHE) designation. The decision was made to achieve "Age Friendly" designation as many community resources are available.. This will result in a significant cost savings for the health system. Sentara has begun a gap analysis of current standards and practices. SWRMC is beginning to trial the SPICES tool in the multidisciplinary rounds and bedside shift reports to help narrow the focus for this population in order to deliver excellent care.

SWRMC is in discussion with other Sentara Divisions to combine and augment programs. Goals for 2020 included completion of training and orientation to provide autonomous Sexual Assault Nurse Examiner (SANE) exams. All staff in Sentara's Behavioral Health Units, Emergency Departments (EDs), Personal Emergency Response System (PERS), Security Departments, Safety Partners and anyone who would be pulled to be a Safety Partner, and Patient Care Supervisors are required to maintain Handle with Care (HWC) certification every 12 months. During the COVID-19 pandemic, Handle with Care, Inc. issued 3-month extensions on certifications for all clients. All Sentara staff now have three months from their current certification expiration date to complete their re-certification course. All new hire staff are required to complete their Handle with Care initial certification within the designated timeframes associated with their job profile.

SWRMC continues to participate in monthly meetings with safety net clinics serving Greater Williamsburg to remove barriers to care and tackle the issues surrounding social determinants of health. SWRMC is also working to expand help for patients presenting to the ED for voluntary psychiatric treatment or admission.

Sentara continues to improve access to behavioral health resources. In 2021, a Behavioral Health Care Center opened to provide follow-up care within 7 days of being discharged from the emergency department or an inpatient behavioral health unit. 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 Emergency Departments. 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 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 Behavioral Health ED patients.

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

The Behavioral Health Tactical Operations Committee (BHTOC) Clinical Patient Management Workgroup addresses:

- 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 Operations Plan (ECO) process.

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

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

The 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 Departments site visits and Risk Assessments will be completed by the Behavioral Health Consultant and BH Safety Workgroup team by May 2022.

Surgical Suites of Coastal Virginia

The list below includes the 2019 CHNA health needs prioritized to be addressed by SSCV in the 2019 Implementation Strategy.

- Nutritional/Healthy Living Outreach
- Access to Care

STRATEGY PROGRESS

Nutritional/Healthy Living Outreach

SSCV continues to collaborate with SWRMC and support strategies that address multiple health problems. In 2021, a non-perishable food drive was completed for A Gift from Ben program. Organizations provided food support to low-income Williamsburg families. Due to the pandemic, workshops and events were canceled. SSCV looks forward to supporting events and holding workshops to address these health concerns in the future.

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 focusing on nutrition, physical therapy, and exercise through the Wellness Beyond Cancer program, a free six-week holistic health, meditation, yoga and fitness program for cancer patients aimed to address the needs of the entire individual to strengthen physically and mentally and provide 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.

Access to Care

SSCV continues to collaborate with SWRMC to reduce access to care barriers. Surgical services were provided to five community members free of charge, totaling $22,75.29 in charity care.

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 and that promote health equity by eliminating traditional barriers to health and human services. Sentara strongly encourages grant proposals that align with one or more of the following priorities:

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

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

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

COUNTY HEALTH RANKINGS

County Health Rankings 2021, Rankings Data & Documentation

County Health Rankings 2021, Overview

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 April 11, 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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