

Novant Health New Hanover Regional Medical Center

Community Health Needs Assessment New Hanover County, North Carolina 2022-2024

Approved by the Novant Health New Hanover Regional Medical Center Board of Directors on November 17, 2022

Table of Contents

ı.	Introduction	3
	a) Organization overview	3
	b) Our defined community	4
	i) Primary and Secondary Service Areas	4
	ii) New Hanover County Population: Demographics	5
	iii) New Hanover County Population: Health Indicators	6
	iv) New Hanover County Population: Social Indicators	7
II.	Assessment process	11
	a) Collaborative community partners	12
	b) Solicitation	12
	c) Data collection and analysis	13
III.	Identification and Prioritization of Health Needs	15
	a) Identified significant health needs	15
	b) Analysis and prioritization	16
IV.	Addressing needs	18
V.	Impact evaluation of 2019-2021 CHNA	21
VI.	Appendix: New Hanover County CHA Stakeholder Group Agencies	25

I. Introduction

Novant Health New Hanover Regional Medical Center (NHNHRMC), in partnership with New Hanover County Health and Human Services, conducted a community health needs assessment in 2022 to identify the most pressing health needs in our community. Novant Health New Hanover Regional Medical Center will enhance the community's health by offering health and wellness programming, clinical services, and financial support in response to the specific health needs identified.

a) Organization Overview

Novant Health is an integrated network of hospitals, physician clinics and outpatient facilities that delivers a seamless and convenient healthcare experience to communities in North Carolina, South Carolina, and Georgia. The Novant Health network consists of more than 1,800 physicians and over 35,000 team members who provide care at more than 800 locations, including 15 hospitals and hundreds of outpatient facilities and physician clinics. *Diversity MBA Magazine* ranked Novant Health first in the nation on its 2021 list of "Best Places for Women & Diverse Managers to Work." In 2021, Novant Health provided more than \$1.1 billion in community benefit, including financial assistance and services.

Mission

Novant Health exists to improve the health of our communities, one person at a time.

Our team members and physician partners strive every day to bring our mission, vision, and values to life. We demonstrate this commitment to our patients in many ways. For example, our organization:

- Maintains an active community health outreach program.
- Demonstrates superior outcomes for many health conditions as indicated by our state and national quality scores.
- Creates innovative programs that address important health issues, with many of our programs and services being recognized nationally.
- Believes in its role as a socially responsible organization, working with community agencies and organizations to make our communities better places to live and work.

Novant Health New Hanover Regional Medical Center (NHNHRMC) is a not-for-profit 800-bed teaching hospital, regional referral center and UNC School of Medicine branch campus. We offer specialty medical and surgical care, which includes women's and children's, rehabilitation and psychiatric hospitals, and a level II trauma center. Other specialty services include: three 24-hour emergency departments; adult, neonatal and pediatric intensive care; neurosurgery; pediatric surgery; open heart surgery; vascular surgery and oncology services.

b) Our Defined Community

Primary and Secondary Service Areas

The Primary Service Area for Novant Health New Hanover Regional Medical Center is defined by the zip codes that represent at least 75% of the hospital's in-patient population as outlined below:

Zip Code	City	County
28451	Leland	BRUNSWICK
28461	Southport	BRUNSWICK
28462	Supply	BRUNSWICK
28479	Winnabow	BRUNSWICK
28412	Wilmington	NEW HANOVER
28401	Wilmington	NEW HANOVER
28405	Wilmington	NEW HANOVER
28411	Wilmington	NEW HANOVER
28403	Wilmington	NEW HANOVER
28409	Wilmington	NEW HANOVER
28429	Castle Hayne	NEW HANOVER
28428	Carolina Beach	NEW HANOVER
28540	Jacksonville	ONSLOW
28445	Holly Ridge	ONSLOW
28460	Sneads Ferry	ONSLOW
28546	Jacksonville	ONSLOW
28443	Hampstead	PENDER
28457	Rocky Point	PENDER
28425	Burgaw	PENDER

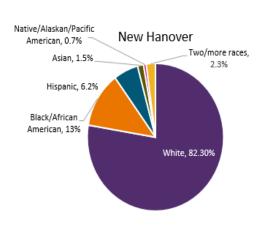
There are 4 counties in the NHNHRMC Primary Service Area (PSA): Brunswick, New Hanover, Onslow, and Pender Counties. 45.5% of patients reside in the PSA of New Hanover County and 46.2% of patients reside in the Primary and Secondary Service Areas of New Hanover County. The PSA does not include more than 13% of the total in-patient population from any other county. Most patients reside in New Hanover County and it represents the highest population of potentially underserved, low-income and minority individuals. Therefore, New Hanover County will be the sole focus of demographic, health, and social indicators.

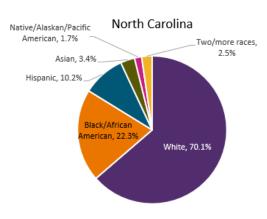
The Secondary Service Area covers a 9-county radius, including Bladen, Brunswick, Columbus, Duplin, New Hanover, Onslow, Pender, Robeson, and Sampson Counties.

New Hanover County Population: Demographics

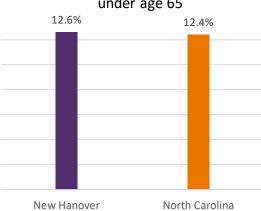
New Hanover County has a population of 229018 compared to the total North Carolina population of 10,551,162.

Race and Ethnicity

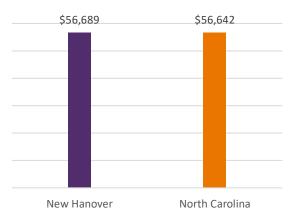




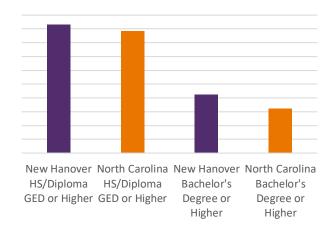
Person without health insurance under age 65



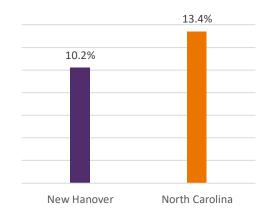
Median Household Income



Education Attainment



Poverty



Source for above graphs: US Census Bureau 2021

Demographics	New H	New Hanover		Carolina
	Population	Percentage	Population	Percentage
Persons Under 5 Years	10,1347	4.4%	605,299	5.8%
Persons Under 18 Years	40,820	17.8%	2,301,596	22.2%
Person 65 Years & Over	43,092	18.8%	1,688,354	16.3%
Female Persons	99,816	53%	5,333,560	51.4%

Source: ACS US Census Bureau 2021 New Hanover

Length of Life	Top U.S. Performers	North Carolina	New Hanover County
Years of potential life lost before age 75 per 100,000 population (age-adjusted).	5,600	8,000	7,300
Clinical Care	Top U.S. Performers	North Carolina	New Hanover County
Ratio of population to primary care physicians	1,010:1	1,400:1	1,090:1
Ratio of population to dentists	1,210:1	1,710:1	1,290:1
Ratio of pop. to mental health providers	250:1	360:1	210:1
Physical Environmental	Top U.S. Performers	North Carolina	New Hanover County
Air Pollution – Particulate Matter (micrograms per cubic meter)	5.9	7.5	3.5
Percentage of households with overcrowding, high costs, lack of kitchen, or lack of plumbing	7%	12%	17%

Source: County Health Rankings & Roadmaps

New Hanover County Population: Health Indicators

New Hanover County's leading causes of death in 2019 were cancer and heart disease. NHNHRMC will consider health indicators such as leading causes of death in the New Hanover County population, but will also consider how to impact root causes with analysis of social determinants of health, social risks, and social needs.

Rank	Leading Causes of Death in New Hanover 2019	Number	%		
1	Diseases of heart	428	20.0		
2	Cancer	424	19.9		
3	Cerebrovascular diseases	146	6.8		
4	All other unintentional injuries	113	5.3		
5	Chronic lower respiratory diseases	101	4.7		
6	Alzheimer's disease	63	2.9		
7	Diabetes mellitus	47	2.2		
8	Nephritis, nephrotic syndrome and nephrosis	47	2.2		
9	Intentional self-harm (suicide)	46	2.2		
10	Septicemia	46	2.2		
	All other causes (Residual)	675	31.6		
	Total Deaths All Causes 213				

Source: State Center for Health Statistics, North Carolina

New Hanover County Population: Social Indicators

Social Determinants of Health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health functioning, and quality-of-life outcomes and risks.

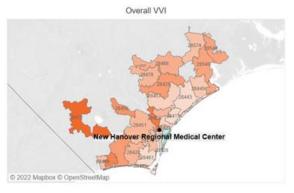
Social Risk is adverse social conditions associated with poor health outcomes, such as food insecurity and housing instability.

Social Needs are the nonclinical needs that individuals identify as essential to their well-being.

Source for definitions: <u>Healthy People 2030</u>, <u>Health Affairs</u>, <u>The Milbank Quarterly</u>

Domains and Components: New Hanover Regional Medical

Each of these maps illustrates the regional variation in the overall VVI, the eight specific domain vulnerabilities, and three selected components that will be referenced in the clinical outcomes and utilization section.





Data source CDB distinct patients of any age seen in this hospital in any setting 2019-2020, identified by zip code. Zip codes representing less than 0.5% of all hospital patients are omitted from man.

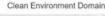








Housing Domain





Social Domain





In addition to the domains, two specific components were identified for inclusion in this analysis due to their reliable relationships with specific metrics across member hospitals.

In particular, the Food Desert component shows a relationship with Diabetes metrics, while the Single Parents component shows a relationship with ED metrics and Maternal Care metrics.

Food Desert Vulnerability



Single Parent Households



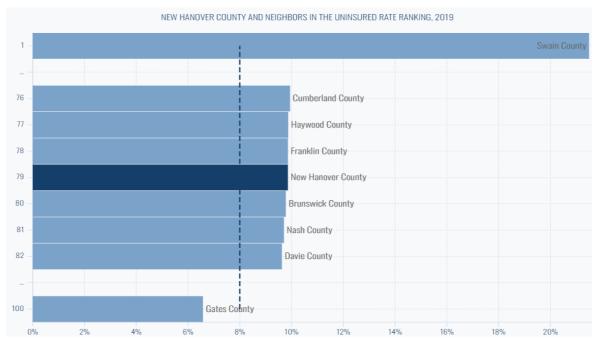
vizient.

According to the Vizient Vulnerability Index (screenshot provided above) released in January 2022, patients admitted to Novant Health New Hanover Regional Medical Center experience the most profound social risks if they live in zip codes 28472, 28401, and 28468. These zip codes experience disproportionately high social risks when compared to their counterpart neighborhoods. Areas of particular concern include access to healthcare, poverty, and food insecurity.

When segmented by race and ethnicity, Black and Native American patients tend to skew more vulnerable than other groups.

Access to Care

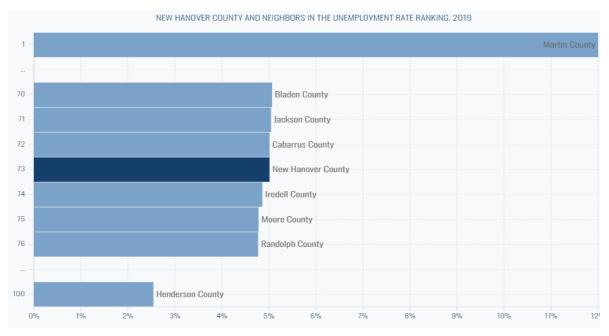
New Hanover County's uninsured rate in 2019 was 9.86%, with a target to reduce that rate to 8% by 2030, according to Healthy Communities NC. The dotted line in the graph below shows the aim targets for New Hanover County by 2030. A higher rate of individuals with healthcare insurance would lead to improved health outcomes and a higher quality of life for this population.



Source: Healthy Communities NC

Workforce Development

In 2019, New Hanover County had a 5% unemployment rate. Healthy Communities NC aims to bring the unemployment rate down to 1.7% by 2030. Improving the employment rate in New Hanover would lead to an increase in insured residents and reduce barriers to accessing care.



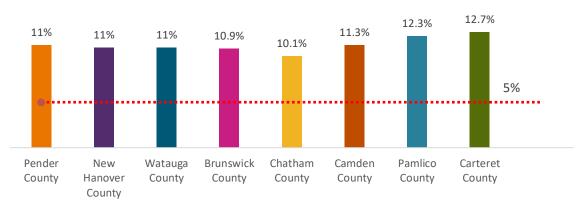
Sources: Healthy Communities NC

Food Hardship

In New Hanover County, 11% of the population is currently facing food hardship. The Healthy

Communities NC target aims to bring that rate to 5% of the overall population by 2030.

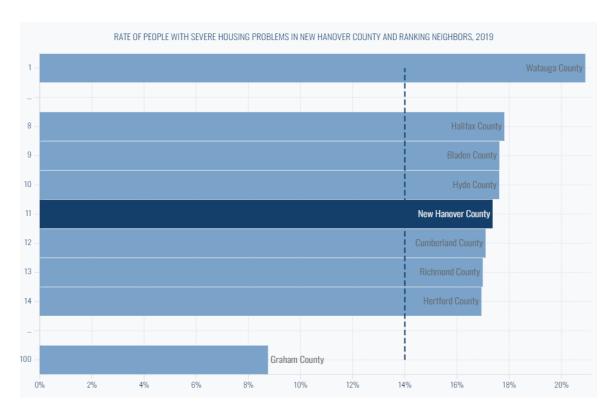
Food Hardship



Sources: Healthy Communities NC, Cape Fear Collective, North Carolina Food Hardship Index

Housing Hardship

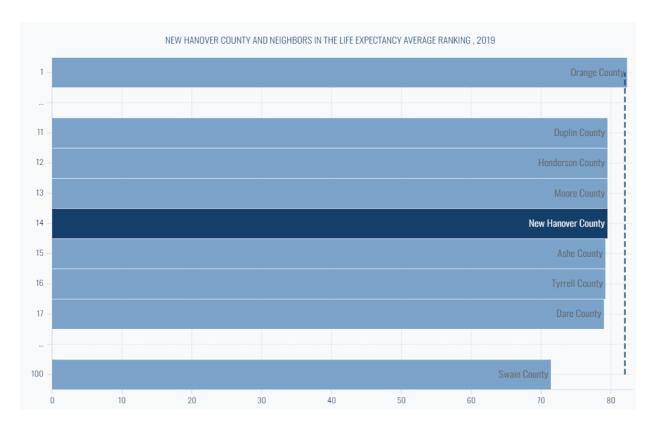
In New Hanover County, the housing hardship rate in 2019 was at 17.4%. The target goal for New Hanover is to reduce the percentage of the overall population facing housing hardship to 14% by 2030.



Source: Healthy Communities NC

Life Expectancy

In 2019, New Hanover County had a life expectancy of 79 years. Healthy Communities NC aims to increase that age to 82 years. Improving access to care and addressing food hardship faced by residents of New Hanover County will help in reaching that goal.



Source: Healthy Communities NC

II. Assessment process

COVID-19 impact on the CHNA assessment process:

The COVID-19 pandemic has been a global public health emergency, requiring the diversion of significant resources from hospital systems, public health departments, clinical healthcare providers, community organizations, and local, state, and national government agencies. In each of the communities we serve, Novant Health has worked tirelessly to keep our patients, team members and community members safe and healthy, delivering free/accessible COVID-19 education, masks, and vaccines.

The pandemic further exposed health inequities, and other problems associated with Social Determinants of Health, including those experienced by the medically underserved, low-income, and minority populations. In its COVID-19 response, Novant Health conducted targeted outreach and education to build trust with—and increase access for--these particularly vulnerable communities and individuals, as well as with the community organizations that serve them.

As it relates to the CHNA process, significant COVID-19 impact and interruption were in the areas of

survey distribution and input solicitation as well as the availability of collaborating community partners to be involved in the planning and prioritization process. Every effort was made to engage with and solicit input from individuals and organizations serving or representing the interests of medically underserved, low-income, and minority populations, but these efforts were sometimes hindered by limited resources and capacity because of COVID-19 pandemic response and heightened safety precautions. While this CHNA cycle process was impacted by COVID-19, Novant Health will continue to inclusively incorporate and serve the interests of all community members in our community response and community benefit work, including those of the medically underserved, low-income, and minority populations.

The following are excerpts and findings from a draft of the **2022 New Hanover County Community Health Assessment,** which was still being finalized at the time this report was written. The next step for New Hanover County is to develop health improvement action plans for each of their priorities. Working with community partners, New Hanover County will develop measurable objectives to address each priority, identify evidence-based strategies to achieve those objectives, and plan evaluation and accountability throughout the next three years.

a) Collaborative community partners

Local Health Departments in North Carolina are required to conduct a comprehensive Community Health Assessment (CHA) every four years to maintain local health department accreditation. As part of the Patient Protection and Affordable Care Act of 2010, not-for-profit hospitals are also now required to conduct a Community Health Needs Assessment (CHNA) once every three years.

New Hanover County Health and Human Services (NHC HHS) and Novant Health New Hanover Regional Medical Center (NHNHRMC) collaborated on the 2022 New Hanover County Community Health Assessment. Consultation services were provided from the North Carolina Institute for Public Health (NCIPH). These three agencies comprised the Steering Committee, and they met monthly from January to October 2022 to coordinate the work of the CHNA.

Additionally, the CHNA Stakeholder Group met monthly throughout the assessment process, led by the collaborative team from NHC HHS, NHNHRMC, and NCIPH. The Stakeholder Group provided input on survey questions, determined focus group populations and topics, promoted participation in CHA activities, reviewed assessment data, and prioritized needs. The agencies represented by this group are listed in the Appendix and were comprised of various health and human service organizations from the local area, who serve a diverse range of the population. This CHNA team engaged those they serve, and other community members, throughout the assessment process.

b) Solicitation

The Community Health Opinion Survey (CHOS) engaged 1,334 community members to learn more about their personal health status and concerns, as well as their concerns for the community overall. Additionally, community members were invited to participate in community conversations to share their experiences living in New Hanover County. The conversation populations were identified by the stakeholder group to ensure a diverse set of voices and experiences were represented; they included Latinx community members, Black and African American community members, individuals with disabilities, older adults, LGBTQIA+ community members, and individuals experiencing homelessness. Finally, community members were invited to vote on a set of priorities for the CHNA cycle based on the information gathered during the assessment.

Community engagement is a critical piece of the community health assessment process, beginning with the formation of a stakeholder group made up of representatives from local public health, social service, and community-based organizations. While this group was able to convene both virtually and in-person, the continued demands on everyone's time and energy during the pandemic may have limited the participation of stakeholder group members.

Another component of community engagement is qualitative data collection, which is essential for bringing the voices and lived experiences of those most affected by health inequities to the attention of decision-makers and those implementing public health and social service programs. Qualitative data provides context and insight that is often missed by survey and secondary data. Outreach to communities for community conversations was somewhat limited due to the pandemic, as participants may have been hesitant to convene indoors with people outside their households. Virtual conversations allow community members to meet safely, but also require internet access and a computer or mobile device. Scheduling and participation hurdles are additional challenges in collecting this essential form of data.

We have also seen these effects playout in representation of community voice in primary data collection. Prior to the COVID-19 pandemic, door-to-door surveying of randomly selected households selected through cluster-based sampling was NCIPH's primary method of distributing the Community Health Opinion Survey (CHOS); this surveying method assured that data included representation of voice across the county, with survey respondent demographics closely matching US Census demographics. However, due to trust and social contact issues during the pandemic that made door-to-door surveying difficult, surveying for this CHA relied on a modified method. The CHNA team used a hybrid approach of in-person surveying at selected households, postcard mailers to selected households, and distributing a general web survey throughout various networks to promote the survey. This modified approach accepted the potential for low response rates to the household survey in favor of a wider, non-probability-based sampling method. In addition to challenges from low participation, responses to online surveys have tended to be heavily skewed towards white women with higher incomes and higher levels of education than the general population. These challenges required an even more intentional and directed approach to including voices of historically marginalized populations and other underrepresented community members in our community conversations.

c) Data collection and analysis

The data collection process included primary data – data collected directly from the community through the community health opinion survey and community conversations – as well as secondary, or existing, data. To fulfill the primary data requirement, both quantitative data from in-person and online surveys and qualitative data from community conversations were collected and analyzed.

Primary Data

Community input was solicited in the following ways: the Community Health Opinion Survey (CHOS) received input from 1,334 New Hanover County residents and the CHNA team conducted six community conversations with county residents to gain an understanding of lived experience. A community conversations workgroup made up of members of the stakeholder group chose to hear from specific identity groups who are often underrepresented in data collection. The CHNA team also conducted two data presentations with the stakeholder group and distributed a priority voting survey, which was open to all adults in New Hanover County, to reach consensus on final priorities.

The Community Health Opinion Survey:

A two-pronged approach was used to recruit adults in New Hanover County to participate in the CHOS. The first involved using a cluster-based sampling design to select 450 households from 45 census block groups across New Hanover County. Sampling was informed by median household income, where 15 population-weighted census block groups were selected from low, medium, and high household income groupings, and 10 households were randomly selected within each census block group for a total of 450 households. Households randomly selected received postcard mailers with a postcard number and a survey link. The random sample was then supplemented with an open-to-the-public convenience survey administered using the same survey instrument, which was open for anyone to take even if they did not receive a postcard mailer. The survey was distributed by stakeholders via social media, listservs, businesses, and networks of stakeholders. The survey instrument included 36 questions about personal health, access to care and barriers encountered, substance use and other community health issues, and was open for a period of eight weeks between May 23 to July 15, 2022. Any adult living in New Hanover County was eligible to complete the CHOS. A total of 1,334 eligible responses were received, and only 105 responses came from those who received postcard mailers.

An important consideration is that this process was heavily reliant upon the general community survey, given the low response from the random sample. It was critical for the team to evaluate non-response bias and how well the survey respondent demographics align with county demographics.

<u>Demographic data collected from the sample of survey participants:</u>

In general, the respondent demographics were comparable to the demographics of New Hanover County by race, as the data showed roughly 79% of respondents identified as non-Hispanic White and 12% identified as Black or African American. However, only 3% of respondents identified as Hispanic or Latino and women made up 78% of respondents. Based on the 2020 Decennial Census, 74.1% of the New Hanover County population is non-Hispanic white, followed by 12% Black, 7.7% Hispanic or Latino, and 4.0% two or more races.

Community Conversations:

Six community conversations were held between May 10 and May 25, 2022. Conversations were conducted in person, via Zoom, and through a hybrid approach and adhered to New Hanover County COVID-19 guidelines. Food was provided for in-person conversations. Attendees were recruited through stakeholder group members' networks and approximately 60 New Hanover County residents participated. Conversations were organized around specific populations, including Latinx community members, Black or African American community members, individuals experiencing homelessness, individuals with disabilities, the LGBTQIA+ community, and older adults. Conversations were mostly held in the morning or evening, and locations were chosen to increase accessibility for community members. One conversation was also facilitated in Spanish. The CHNA team recorded the sessions and took detailed notes, then analyzed the data and identified key themes within and across groups.

Secondary Data

Along with the primary data outlined above, secondary data was collected and analyzed from federal, state, and local sources around topics such as morbidity (illness) and mortality (death) rates for various health outcomes, demographics, education, poverty, health care services, disease tracking, environmental health, and others. The secondary data collected for this report also includes social determinants of health, which are social and environmental factors that influence personal health, health behaviors, and access to health care.

Primary sources included:

- 1. United States Census Bureau
- 2. County Health Rankings
- 3. North Carolina Center for Health Statistics
- 4. North Carolina Department of Health and Human Services
- 5. North Carolina Institute of Medicine
- 6. U.S. Department of Housing and Urban Development

Data from surveillance systems and national surveys is often available on a delay, so for some measures the most recent data available is for 2017, or 2019, or 2021. This is a limitation normally, but especially during COVID-19 as we seek to measure its impact on our communities. Average life expectancy reported in 2019 will not yet reflect the significant loss of life due to the pandemic. Similarly, data for 2020 and 2021 should be considered within the context of COVID-19. For example, data on emergency room visits will not reflect the individuals who needed services but avoided seeking care due to risk of exposure to the virus. Due to these limitations, the data presented in this report will not be wholly comprehensive of all health characteristics within the communities. Rather, the data provides us with a point of reference for tracking social, economic, and health indicators in our community.

III. Identification and Prioritization of Health Needs

a) Identified Significant Health Needs

Data collected from primary and secondary sources were analyzed for this assessment and summarized in nine broad categories. While summarizing the data in categories supports understanding and usability of this report, it is with the recognition that the health outcomes and conditions that support or impede health are complex and interrelated. The identified significant health needs categories with brief supporting explanations are as follows:

1. Housing

 Many factors related to housing affordability and quality can negatively impact health outcomes, including poor air quality, lack of safety, limited space per individual, high cost, and homelessness, among others. Those who are most likely to experience these impacts are children and older adults.

2. Mental health and substance use

• Mental health is as important as physical health to total well-being. The Public Health 3.0 initiative specifically emphasized incorporating mental health and substance use partners into the field of public health. Mental health and substance use are distinct yet interrelated health topics that our society often stigmatizes, which makes identifying, discussing, and improving these issues particularly challenging. Mental health and substance use are both influenced by social, economic, and environmental factors and should be considered in relationship with physical health.

3. Access to care

 Healthcare serves an important role in preventing illness and providing diagnosis and treatment. Access to care includes the availability of high-quality care and community members' ability to take advantage of that care. A community's access to healthcare can be challenged by barriers such as lack of health insurance, high cost of care, few providers, and limited transportation to healthcare facilities.

4. Neighborhood and environment

 The spaces in which people live, work, and play—in their built and natural environments--contribute to the health outcomes of community members. According to the County Health Rankings Model, physical environment alone accounts for 10% of overall health factors.

5. Lifelong development

 Lifelong development includes educational enrollment, performance, environment, and outcomes. Higher educational attainment is linked to better mental and physical health outcomes through increased employment opportunities, higher income, and health literacy. Educational opportunities can also reduce inequalities and support human development.

6. Community cohesion and safety

 Community cohesion refers to linguistic isolation, civic participation, incarceration, and crime rates as well as to the social networks, trust, and collective ability to bring about change in a community. Strong relationships and solidarity among members of a community can lead to improved health outcomes by supporting each other to commit to healthy behaviors and by reducing emotional stress. Conversely, social isolation can be detrimental to health and increases mortality.

7. Economic opportunity

 Economic opportunity encompasses poverty, employment, income and food security, and can have a direct impact on health outcomes. Employment is often a primary source of access to health insurance; having a stable income can increase a person's ability to access safe housing, make healthy food choices, and accumulate savings that can help in times of emergency.

8. Disease, illness and injury

Health outcomes, including many diseases, illnesses, and injuries, are influenced by the
health factors, policies and programs described throughout the assessment findings.
Understanding which conditions primarily impact communities, and where there are
disparities within communities, can help identify opportunities to influence health
factors, policies, and programs that influence health outcomes.

9. Reproductive and child health

Reproductive and child health includes a specific subset of health services and outcomes
pertaining to reproductive health, pregnancy, birth, and childhood. Infant mortality is a
key indicator of reproductive and child health, and reproductive and child health
outcomes are influenced by social, economic, and environmental factors. The United
States holds a higher mortality rate for birthing parents when compared to other
developed countries and has significant racial disparities in birth outcomes, particularly
impacting non-Hispanic Black families.

See the New Hanover County 2022 Community Health Needs Assessment for all supporting data.

b) Analysis and Prioritization

The prioritization process for the 2022 CHNA began with a review of secondary data trends and data collected from New Hanover County residents via the CHOS and Community Conversations. The NCIPH team conducted two virtual data walk sessions to provide an overview of the findings for stakeholders to discuss. Data was visualized through a Tableau dashboard and NCIPH team members walked stakeholders through the data in small breakout rooms. After the data walks, an online prioritization

survey was distributed through stakeholder networks and New Hanover County communication channels for community voting, receiving 468 eligible responses. After community voting, the stakeholder group met for a prioritization meeting, where they discussed community voting results and voted on the top three priorities. The CHNA steering committee considered the feedback from community voting and stakeholder voting and made a final decision on the following priorities: housing, mental health and substance use, and access to care.

County Prioritized Health Outcomes

The following were established in 2022 as New Hanover County's health priorities for this CHNA cycle:

- 1. Housing
- 2. Mental health and substance use
- 3. Access to care

Facility prioritization

In addition to the community rankings, Novant Health New Hanover Regional Medical Center reviewed the top five diagnosis codes for inpatient and outpatient hospital emergency room visits from July 2021 to June 2022.

Novant Health New Hanover Regional Medical Center Emergency Department Top 5 Diagnoses July 2021 to June 2022

NHNHRMC - 17th Street Main Campus				
Top 5 Diagnos	es July 20	21 - June 2022		
Inpatient Diagnosis	Volume	Outpatient Diagnosis	Volume	
COVID-19	1438	COVID-19	2404	
Sepsis, unspecified organism	919	Other chest pain	1542	
Hypertensive heart and chronic kidney				
disease with heart failure and stage 1				
through stage 4 chronic kidney disease,				
or unspecified chronic kidney disease	600	Chest pain, unspecified	1167	
Non-ST elevation (NSTEMI) myocardial		Acute upper respiratory		
infarction	540	infection, unspecified	971	
Hypertensive heart disease with heart		Nausea with vomiting,		
failure	431	unspecified	722	

The top 5 diagnoses from July 2021 to June 2022 were greatly impacted by the Covid-19 pandemic in the outpatient and inpatient settings. As a result of Covid-19 and encouraging virtual visits for patient safety, when possible, the inpatient diagnosis trend for adults was more serious diagnoses like heart and kidney failures. Outpatient trending diagnoses were severe symptoms and side effects of Covid-19.

Upon a comprehensive review of the primary and secondary data and NHNHRMC's ED top 5 diagnosis codes, the Novant Health New Hanover Regional Medical Center leadership team and Board of Directors evaluated this information based on the scope, severity, health disparities associated with the need, and

the estimated feasibility and effectiveness of possible interventions. Through this thorough evaluation, the team agreed on the following significant health priorities for Novant Health New Hanover Regional Medical Center:

- 1. Mental health and substance use
- 2. Access to care
- 3. Food insecurity

V. Addressing needs

Novant Health New Hanover Regional Medical Center is committed to working to address each of its prioritized areas of need through resource allocation and support of the following programs and actions:

Priority Need:	Program:	Action:	Intended Outcome:
Mental Health & Substance Use	Resiliency Training and Screenings Mental Health First Aid Opioid	Provide information and train individuals from various sectors including the nonprofit, faith community and our own team members Partner with Novant Health BRGs and Organizational Resiliency team and align on goals of organization and community	Awareness of Mental Health, impact of trauma and provision of tools/skills to build resiliency Awareness of ways to access resources and increased number of individuals connected to appropriate treatment and services within the community
	Stewardship Task Force Outpatient Peer Support Program	Support community organizations and events aligned with this work such as NH Resiliency Task Force Alignment of system regarding treatment of those with Opioid Use Disorder to include	100 Individuals trained in Mental Health First Aid Community based teams (Home Health, Community Paramedics, CHWs, and other outreach workers) trained on use of Narcan
	Psychiatric Residency Program	education on stigma reduction, monitoring metrics related to use of opioids, and development of pathways for treatment with community partners Implementation of outpatient peer support	Increase in number of patients treated for opioid use disorder in the acute and ambulatory settings Reduction in adverse drug events related to
		program in partnership with Behavioral Health Institute leaders and Emergency Services Establishment of psychiatric residency	opioids Reduction in readmission for those with mental health diagnosis recently discharged from hospital
		program in partnership with UNC School of Medicine	Increased provider base for psychiatric care in our region

Access to	Wellness	Host screenings and provide related	Increased number of community
Care	Education	referrals, assessment of resources	stakeholders connected to a primary medical
			home and appropriate care
	I I a a lab	Host health assessment events	Decrease emergency department use for
	Health		those connected to health screening events
	Screenings	Support community organizations	and mobile health
		and events aligned with this work	
	Interpreter		Improve health outcomes for those
	Services	Engage interpreter services for additional	connected to Community Engagement team
		training and translation services offered at	as it relates to A1c, BMI, and Blood Pressure
	Michael	all facilities within health system	
	Jordan Family		Increased availability of primary care in areas
	Medicine	Establishment of two family medicine clinics	of most need
	Clinics		
Food	Education	Support community organizations	Expansion of food insecurity screening and
Insecurity		and events aligned with this work through	food box distribution to 3 acute care facilities
	Novant Health	capacity building and charitable	and 15 ambulatory care practices
	Food	contributions	
	Pharmacy		75% completion rate of Food Insecurity CEU
	Thairnacy	Further expansion of Novant Health Food	
		Pharmacy throughout health system	Equitable funding towards community based
	Social		organizations supporting food insecurity and
	Responsibility	Secure sustainable funding for Novant	working to eradicate food deserts in our
		Health Food Pharmacy through public and	community
		private sector partners as well as NHRMC	
		Foundation	
		Creation of continuing education	
		opportunities for team members regarding	
		definition and face of food insecurity in our	
		health system and our community	
	İ	Theater system and our community	

Again, NHNHRMC will focus resource allocation on these prioritized needs based on careful consideration of estimated feasibility and effectiveness of possible interventions. While NHNHRMC will not prioritize the remaining significant health needs (listed above in Section III), it will support and collaborate with community partners as appropriate for the purpose of improving outcomes for identified needs that are better aligned with their scope of service.

In addition to the programs and services offered to the community through Novant Health New Hanover Regional Medical Center, there are various existing community assets available throughout the New Hanover County community that have additional programs and resources tailored to meet all the identified health needs. The following is a list of valued community agencies that address those prioritized and non-prioritized needs:

Identified Significant Health Needs	Local Community Resources Addressing Needs
Access to care	New Hanover County Health and Human Services
 Disease, illness and injury 	Cape Fear HealthNet
Reproductive and child health	Med North Health Center
	Cape Fear Clinic
	Southeast Area Health Education Center
	Planned Parenthood
	American Red Cross
	Duke Partners in Caring
	American Cancer Society
Mental health and substance use	New Hanover County Health and Human Services Trillium Health Resources
	Coastal Horizons
	Port Health
	Physician Alliance for Mental Health
	RHA Behavioral Health
	Integrated Family Services
	Healing Place
	NC Harm Coalition
Housing	City of Wilmington
Economic Opportunity	New Hanover County Cape Fear Housing Coalition
	Step Up Wilmington
	Cape Fear Collective
	Genesis Block
	Wilmington Chamber of Commerce
	Vigilant Hope
	Good Shepherd Center
	Wilmington Area Rebuilding Ministry
	Habitat for Humanity
	Cape Fear Homeless Continuum of Care
 Neighborhood and environment 	Port City United
 Community cohesion and safety 	Smart Start of New Hanover County
Lifelong development	UNCW
	Cape Fear Community College
	Communities in Schools of New Hanover County Wilmington Police Department
	Wilmington Police Department New Hanover County Sheriff's Office
	New Hallover County Sheriff S Office

For all community resources, visit www.novanthealth.org/mycommunity

VI. Impact Evaluation of 2019-2021 Community Health Needs Assessment

No written comments were received from the 2019 - 2021 CHNA and implementation strategy.

Based on the previously reported health data from the 2019-2021 Community Health Needs Assessment, the Novant Health New Hanover Regional Medical Center Board of Managers did a collective review of community feedback and prioritization and determined the top health priorities for NHNHRMC as the following:

- 1. Mental health/drug misuse
- 2. Resilience to toxic stress
- 3. Diabetes response
- 4. Hypertension
- 5. Screenings to detect disease
- 6. Housing
- 7. Gun violence
- 8. Food security
- 9. Community building

The specific commitments, objectives, measurements, and successes for NHNHRMC addressing their 2019-2021 priorities are described in the table below.

Of note, in 2020 and 2021, the COVID-19 pandemic diverted our focused response on priority needs to meet new, unexpected, and urgent priorities in our community. Our COVID-19 response, including education, free mask distribution, and vaccines, addressed issues of access to care and chronic disease by targeting vulnerable communities. While intended outcomes identified in 2019 were not always able to be met, Novant Health provided access to critical and life-saving services to all our communities through dedicated COVID-19 response efforts.

Priority	Program/Actions & Anticipated Impact	Measurement	Actual Outcome
Mental Health and Drug Misuse	Collaborate with community partners and community experts to increase awareness, education, and access to resources Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources	# lbs in medication collected at disposal events % QRT patients engaging in treatment	 April 2019: 3,920 lbs collected Oct 2019: 5,920 lbs collected Oct 2020: 3,680 lbs collected April 2021: 1,120 lbs collected Oct 2021: 1,440 lbs collected Medication drop boxes expanded throughout the region (2019: 1300 lbs, 2020: 647 lbs, 2021: 926 lbs)

			QRT: 2019: 4 referrals engaged in treatment, 2020: 13 referrals engaged in treatment, 2021: 27 referrals engaged in treatment
Resilience to Toxic Stress	Collaborate with community partners and community experts to increase awareness, education, and access to resources Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources	# trained in evidence- based causes # who have seen Resilience movie (or similar movies) Trauma-informed schools Businesses/agencies adopting trauma-informed practices	 Resilience Movie Screenings: 2019: 968 participants, 2020: 470 participants, 2021: 316 participants Hospital staff trained in the CRM Model: 2019: 21, 2021: 55 10 schools chosen in 2019 to be part of Trauma Informed Schools pilot: 3 were trained in 2021
Diabetes Response	Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources Increase community-based screenings with education and connection to resources	# of community members screened for A1c # of students in DEEP classes	 Our new A1c machines were ready for use by our lab department in 2020. We utilized these for every DEEP class participant; 30 people were screened at DEEP classes. Diabetes Empowerment Education Program (DEEP) classes: 2019: program in development, 2020: 4 sessions held serving a total of 20 community members, 2021: 5 sessions held serving a total of 49 community members.

Hypertension	Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources Increase community-based screenings with education and connection to resources	# screened # of flu shots given	 Despite the COVID pandemic, we were able to offer 400 Flu Vaccines at a "flu thru" event in October 2020 Blood Pressure Screenings were offered at several venues to include our Barbershop Initiative and the WWAY Health Fair (2019: 87 screened, 2020: 12 screened)
Screenings to Detect Disease	Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources Increase community-based screenings with education and connection to resources	# of community members receiving free mammograms % of mammograms that lead to breast cancer diagnosis # of new breast cancer cases # AAA screens # of detections of asymptomatic aneurysms greater than 3 cm	We've had an increase in new breast cancer cases over the years, however this could also be attributed to our increased screening rates. (2019: 650 screened, 2020: 735 screened, 2021: 760 screened)
Housing	Collaborate with community partners and community experts to increase awareness, education, and access to resources	# of patients referred to Hope Recuperative Care # of disability cases won by SOAR # of clients who find permanent housing through SOAR	 SOAR: 2019: 104 wins, 2020: 100 wins, 2021: 90 Wins Housed 102 SOAR clients
Gun Violence	Collaborate with community partners and community experts to increase awareness, education, and access to resources Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources	# of gunshot victims at NHRMC from all races, communities, and ages	 According to our trauma registry: 2019: 96 GSW, 2020: 105 GSW, 2021: 131 GSW; the majority of victims were Black males between 18-25 years of age. In 2021, our injury prevention coordinator created a volunteer GSW peer support role for victims to receive support at the bedside.

	T		I
Food Security	Collaborate with community partners and community experts to increase awareness, education, and access to resources Increase community-based screenings with education and connection to resources	# of boxes of food given by Food Pharmacy # of residents added to SNAP program Building site identified, funding raised, opening date for grocery store in Northside neighborhood	 Food Pharmacy launched in January of 2020 at our acute care facility and our cancer center (2020: 760 Boxes distributed, 2021: 1105 Boxes distributed) We started partnering with the Food Bank of CENC Food Benefits Assistance team in 2021 to measure SNAP applications completed after referral from the hospital and after referral through our social service platform, OurCommunityLink (2021 Hospital Referrals Completed: 33, 2021 OCL Referrals Completed: 56) The Northside Farmer's Market was established in 2021 to begin building community support for the eventual grocery store. The Northside Food Coop board continued to build momentum by selling shares to the grocery store in 2021 as a true coop model.
Community	Collaborate with	Walkability assessment	A community survey was
Building	community partners and community experts to increase awareness, education, and access to resources Provide Variety of educational programs and activities to increase awareness, knowledge and how to access resources	completed Portia Hines Park improved to City standards # of Stop the Bleed classes and defibrillator installations	completed in the Northside of Wilmington (Zip Code 28401) in 2018 in conjunction with community nonprofit Voyage, the City of Wilmington, and UNCW. The assessment led to certain improvements the residents wished to have in their neighborhoods, to include improvements in Portia Hines Park. Improvements in the park started in 2021 after approval by City and County officials and are still underway. The walkability

|--|

VII. Appendix

Stakeholder Group for the New Hanover County CHA
Agency Represented:
Novant Health
New Hanover County Health and Human Services*
Med North Health
Latino Alliance
NHC Senior Resource Center
Carousel Center
Cape Fear HealthNet
NHC Emergency Management
NHC Veteran Services
Food Bank of CENC @ Wilmington
Port City United
Wilmington Treatment Center
Wilmington Health
Wilmington City Council
Coastal Carolinas Health Alliance
Cape Fear Collective
Liberty Healthcare
Coastal Horizons Center
Trillium Health Resources
New Hanover Disaster Coalition
YMCA of Southeastern NC
Wilmington Police Department

UNCW Latino Alliance
Leading Into New Communities, Inc.
Voyage of Wilmington
New Hanover Community Endowment
Cape Fear Coalition
The Harrelson Center
Liberty Healthcare
City of Wilmington
Cape Fear Clinic
NHC Schools
Good Shepherd Center
Smart Start of New Hanover County
Wilmington Chamber of Commerce
University of North Carolina Wilmington
Community Relations Advisory Committee
Communities in Schools of Cape Fear
NC Cooperative Extension
Town of Carolina Beach
Wave Transit
NC Cooperative Extension
NHRMC -Southeast Area Health Education Center
Centro Hispano
NourishNC
NHC Resiliency Task Force
United Way of the Cape Fear Area
YWCA of the Lower Cape Fear
Housing Authority of the City of Wilmington
Coastal Carolinas Health Alliance

- *Representative of a state, local, tribal, or regional governmental public health department (or equivalent department or agency)
- For a full list of agencies involved in the CHA process, including those representing underserved, low-income, and minority populations, please see the New Hanover County 2022 Community Health Needs Assessment report.