



Novant Health Charlotte Orthopedic Hospital

Community Health Needs Assessment

Mecklenburg County, North Carolina

2022-2024

Approved by the Novant Health Southern Piedmont Region Board of Trustees on October 19, 2022

Table of Contents

I. Introduction	3
a) Organization overview	3
b) Our defined community	4
i. Primary and secondary service areas	4
ii. Mecklenburg county population: demographics	5
iii. Mecklenburg county population: health indicators	7
iv. Mecklenburg county population: social indicators	7
II. Assessment process	12
a) Collaborative community partners	13
b) Solicitation	14
c) Data collection and analysis	15
III. Identification and prioritization of health needs	18
a) Identified significant health needs	18
b) Analysis and prioritization	18
IV. Addressing needs	21
V. Impact evaluation of 2019-2021 CHNA	23
VI. Appendix: Steering Committee	25

I. Introduction

Novant Health Charlotte Orthopedic Hospital and Novant Health Presbyterian Medical Center, in partnership with the Mecklenburg County Public Health Department, Atrium Health and One Charlotte Health Alliance established a community health needs assessment in 2022 to identify the most pressing health needs in our community. Novant Health Charlotte Orthopedic Hospital and Novant Health Presbyterian Medical Center will enhance the community's health by offering health and wellness programming, clinical services and financial support to meet identified health needs.

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. 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 Charlotte Orthopedic Hospital is a department of Novant Health Presbyterian Medical Center. It has 48 beds and is the Charlotte region's only orthopedic hospital and one of a few of its kind in the country.

This report will reference Novant Health Presbyterian Medical Center to be inclusive of Novant Health Charlotte Orthopedic Hospital.

b) Our defined community

Primary and Secondary Service Areas

The Primary Service Area for Novant Health Charlotte Orthopedic Hospital 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	Zip Code	City	County
28027	Concord	CABARRUS	28211	Charlotte	MECKLENBURG
28025	Concord	CABARRUS	28213	Charlotte	MECKLENBURG
28601	Hickory	CATAWBA	28273	Charlotte	MECKLENBURG
28054	Gastonia	GASTON	28270	Charlotte	MECKLENBURG
28120	Mont Holly	GASTON	28278	Charlotte	MECKLENBURG
28056	Gastonia	GASTON	28212	Charlotte	MECKLENBURG
28052	Gastonia	GASTON	28036	Davidson	MECKLENBURG
28117	Mooresville	IREDELL	28206	Charlotte	MECKLENBURG
28115	Mooresville	IREDELL	28217	Charlotte	MECKLENBURG
29707	Fort Mill	LANCASTER	28207	Charlotte	MECKLENBURG
29720	Lancaster	LANCASTER	28209	Charlotte	MECKLENBURG
28037	Denver	LINCOLN	28202	Charlotte	MECKLENBURG
28227	Charlotte	MECKLENBURG	28146	Salisbury	ROWAN
28215	Charlotte	MECKLENBURG	28001	Albemarle	STANLY
28216	Charlotte	MECKLENBURG	28110	Monroe	UNION
28105	Matthews	MECKLENBURG	28173	Waxhaw	UNION
28269	Charlotte	MECKLENBURG	28104	Matthews	UNION
28277	Charlotte	MECKLENBURG	28079	Indian Trail	UNION
28214	Charlotte	MECKLENBURG	28112	Monroe	UNION
28078	Huntersville	MECKLENBURG	29708	Fort Mill	YORK
28226	Charlotte	MECKLENBURG	29730	Rock Hill	YORK
28210	Charlotte	MECKLENBURG	29710	Clover	YORK
28031	Cornelius	MECKLENBURG	29732	Rock Hill	YORK
28205	Charlotte	MECKLENBURG	29715	Rock Hill	YORK
28208	Charlotte	MECKLENBURG	29745	York	YORK

43.5% of patients reside in the Primary Service Area (PSA) of Mecklenburg County and 45% of patients reside in the Primary and Secondary Service Areas of Mecklenburg County. The PSA does not include more than 9% of the total in-patient population from any other county. Like NHPMC, most patients reside in Mecklenburg County, and it represents the highest population of potentially underserved, low-income and minority individuals from the PSA. Therefore, Mecklenburg County will be the sole focus of demographic, health, and social indicators.

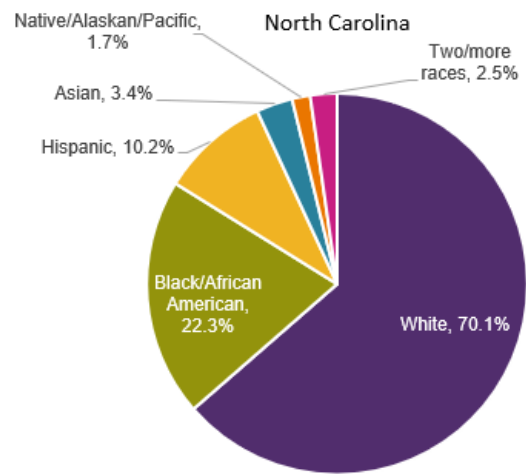
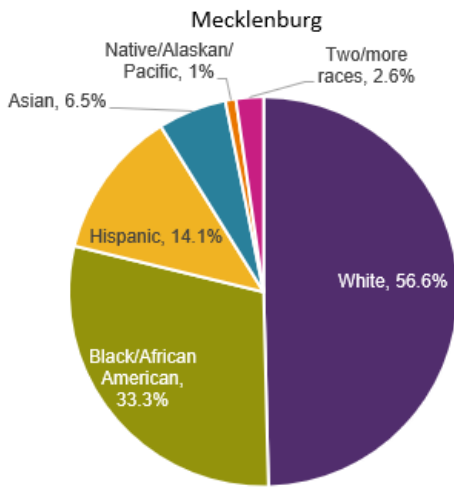
The remainder of this report will reference Novant Health Presbyterian Medical Center to be inclusive of Novant Health Charlotte Orthopedic Hospital.

Mecklenburg County Population: Demographics

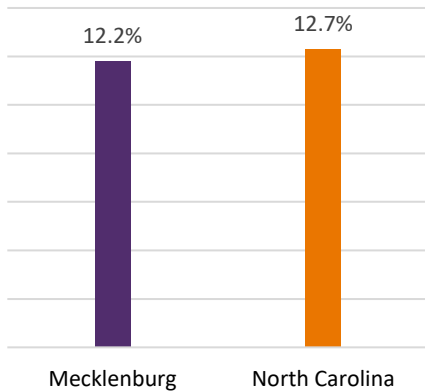
Mecklenburg County has a population of 1,122,276 compared to the total North Carolina population of 10,551,162.

With over 1.1 million people living in Mecklenburg, it is the second most populated county in North Carolina. The county includes six municipalities (Cornelius, Davidson, Huntersville, Matthews, Mint Hill, and Pineville) along with the City of Charlotte. Nearly 80% of residents live in Charlotte.

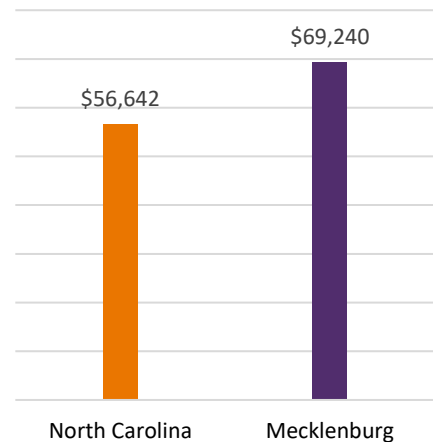
Race and Ethnicity



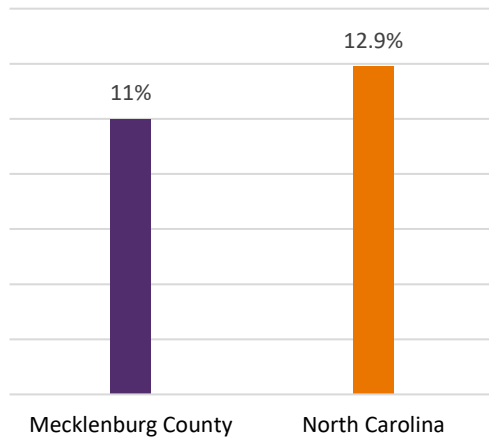
Persons without health insurance under age 65



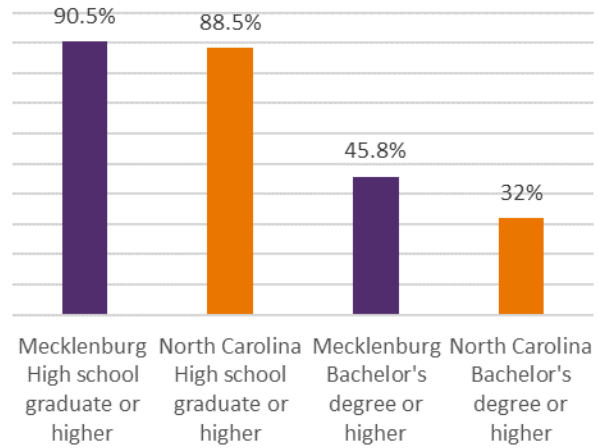
Median Income



Poverty Rate



Educational Attainment



Source for above graphs: US Census Bureau 2021

Demographics	Mecklenburg County		North Carolina	
	Population	Percentage	Population	Percentage
Persons Under 5 Years	72,857	6.7%	605,299	5.8%
Persons Under 18 Years	257,739	23.5%	2,301,596	22.2%
Person 65 Years & Over	122,780	11.2%	1,688,354	16.3%
Female Persons	568,717	51.9%	5,333,560	51.4%

Sources: ACS US Census Bureau 2020 Mecklenburg, ACS US Census Bureau

Length of Life	Top U.S. Performers	North Carolina	Mecklenburg County
Years of potential life lost before age 75 per 100,000 population (age-adjusted).	5,600	8,000	6,100
Clinical Care	Top U.S. Performers	North Carolina	Mecklenburg County
Ratio of population to primary care physicians	1,010:1	1,400:1	1,130:1
Ratio of population to dentists	1,210:1	1,710:1	1,430:1
Ratio of pop. to mental health providers	250:1	360:1	300:1
Physical Environmental	Top U.S. Performers	North Carolina	Mecklenburg County
Air Pollution – Particulate Matter (micrograms per cubic meter)	5.9	7.5	9.0
Percentage of households with overcrowding, high costs, lack of kitchen, or lack of plumbing	9%	15%	16%

Source: County Health Rankings & Roadmaps: Mecklenburg County Health Rankings

Mecklenburg County Population: Health Indicators

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

Rank	Leading Causes of Death in Mecklenburg County in 2019	Number	%
1	Cancer	1359	21.0
2	Diseases of heart	1235	19.1
3	Cerebrovascular diseases	371	5.7
4	Alzheimer's disease	347	5.4
5	All other unintentional injuries	322	5.0
6	Chronic lower respiratory diseases	251	3.9
7	Diabetes mellitus	214	3.3
8	Nephritis, nephrotic syndrome and nephrosis	145	2.2
9	Assault (homicide)	105	1.6
10	Motor vehicle injuries	98	1.5
	All other causes (Residual)	2012	31.3
	Total Deaths -- All Causes	6459	100.0

Source: State Center for Health Statistics, North Carolina

Mecklenburg 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.

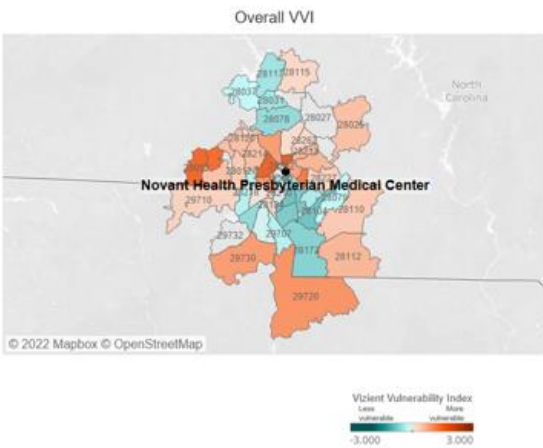
Social Risk is adverse social conditions associated with poor health outcomes, such as food insecurity and housing instability.

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

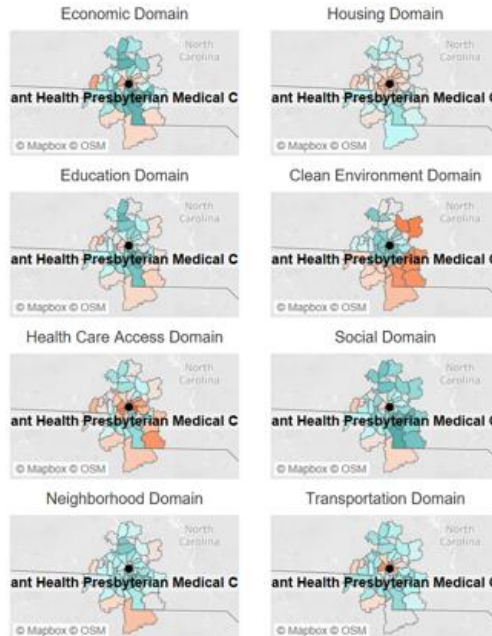
Source for definitions: [Healthy People 2030](#), [Health Affairs](#), [The Milbank Quarterly](#)

Domains and Components: Novant Health Presbyterian Medical Center

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.

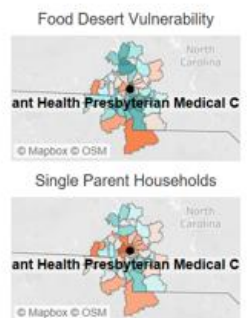


Data source: CDB distinct patients of any age seen in this hospital in any setting 2019-2020, identified by zip code. Zip codes representing less than 0.5% of all hospital patients are omitted from map.



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.

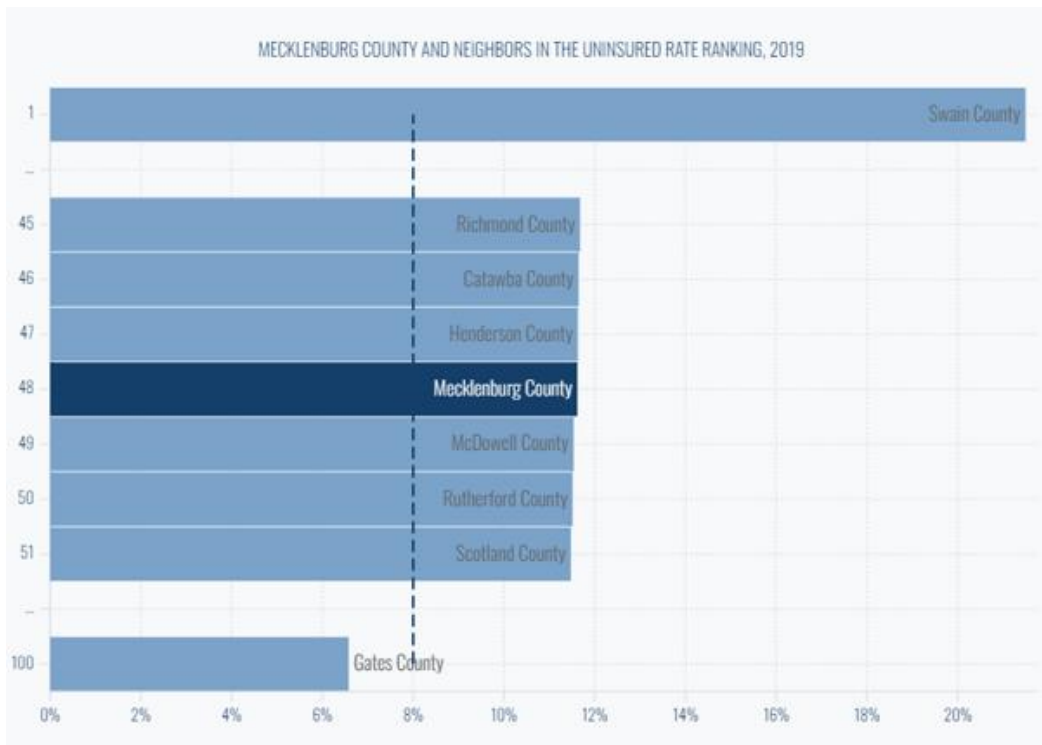


According to the Vizient Vulnerability Index (screenshot provided above) released in January 2022, patients admitted to Novant Health Presbyterian Medical Center experience the most profound social risks if they live in zip codes 28208, 28206, 28212, 28054, and 28052. These zip codes experience disproportionately high social risks when compared to their counterpart neighborhoods. Areas of particular concern include access to healthcare, housing, poverty, and food insecurity.

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

Access to Care

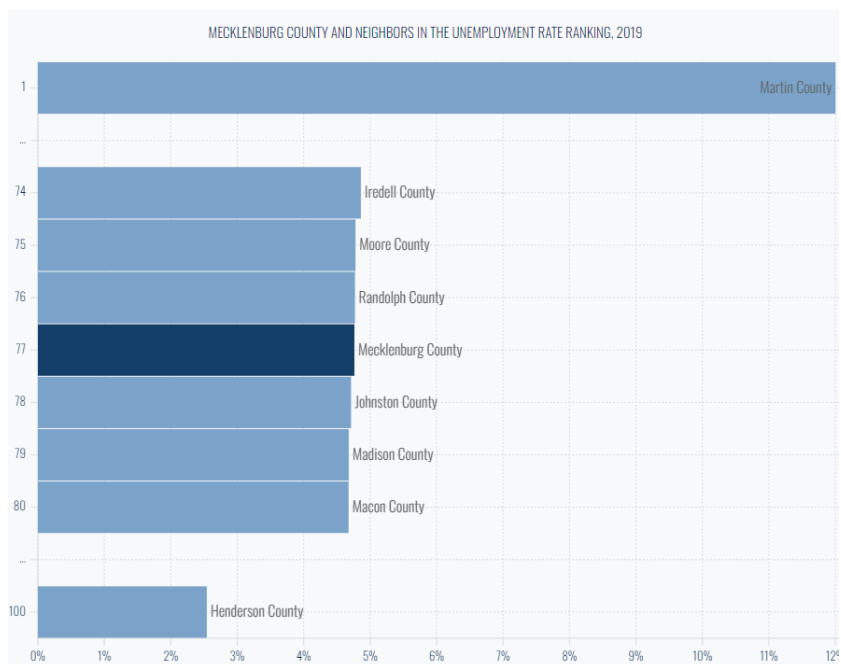
In 2019, 11.6% of the population in Mecklenburg County did not have health insurance. The Healthy Communities NC target is to reduce that rate to 8% by 2030 (shown by the dotted line in the graph below). A higher rate of individuals with healthcare insurance would lead to improved health outcomes and a higher quality of life for this population.



Source: Healthy Communities NC

Workforce Development

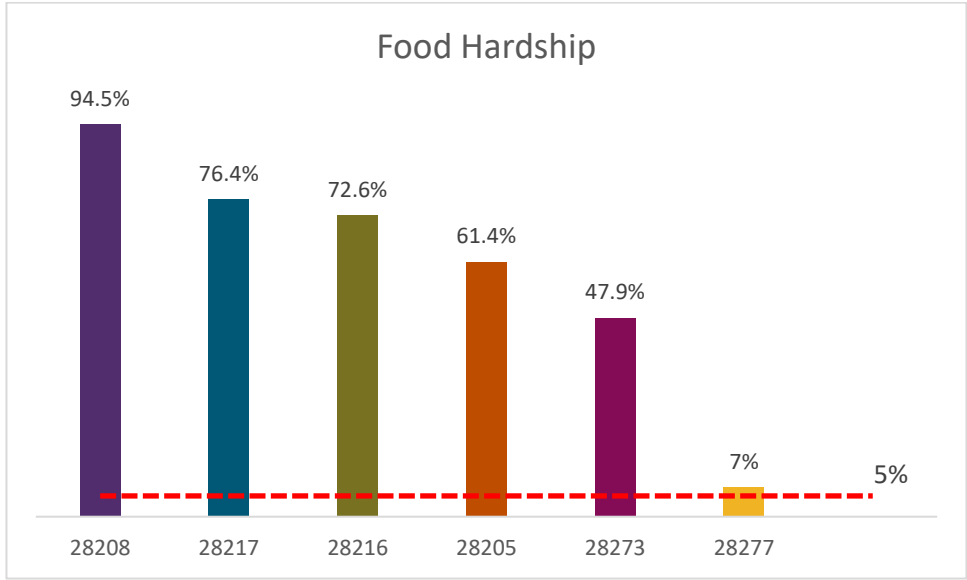
In 2019, Mecklenburg County had a 4.76% unemployment rate. Healthy Communities NC aims to bring that rate down to 1.7% by 2030. Improving the employment rates in Mecklenburg would lead to an increase in insured residents and reduce barriers to accessing health care.



Source: Healthy Communities NC

Food Hardship

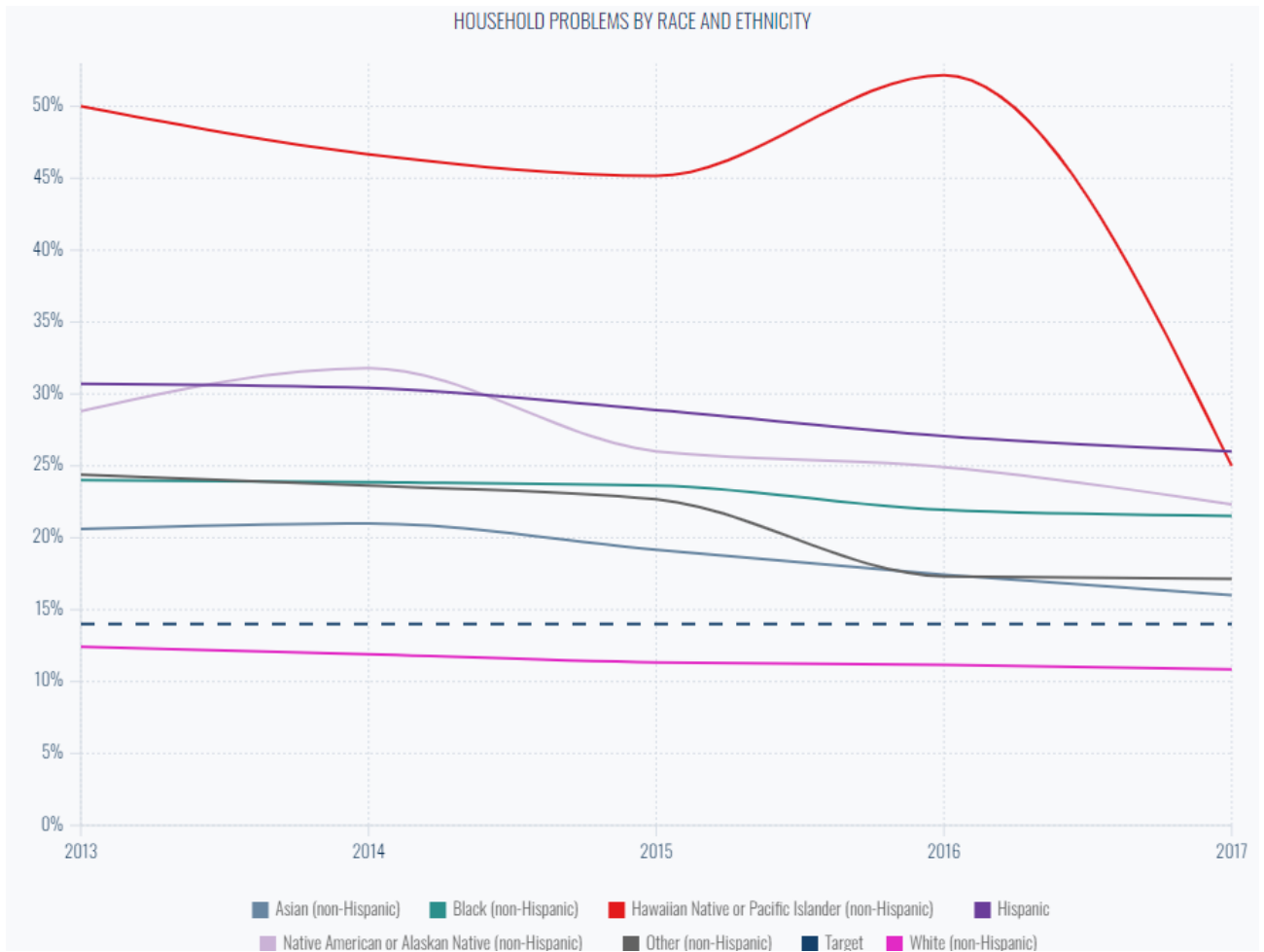
In Mecklenburg County, several regions are facing food hardship. Healthy Communities NC has a target goal of keeping that rate below 5% in Mecklenburg County by 2030. Addressing food hardship would lead to improved health outcomes in Mecklenburg County.



Sources: Cape Fear Collective, North Carolina Food Hardship, Healthy Communities NC, One Charlotte Health Alliance

Housing Hardship

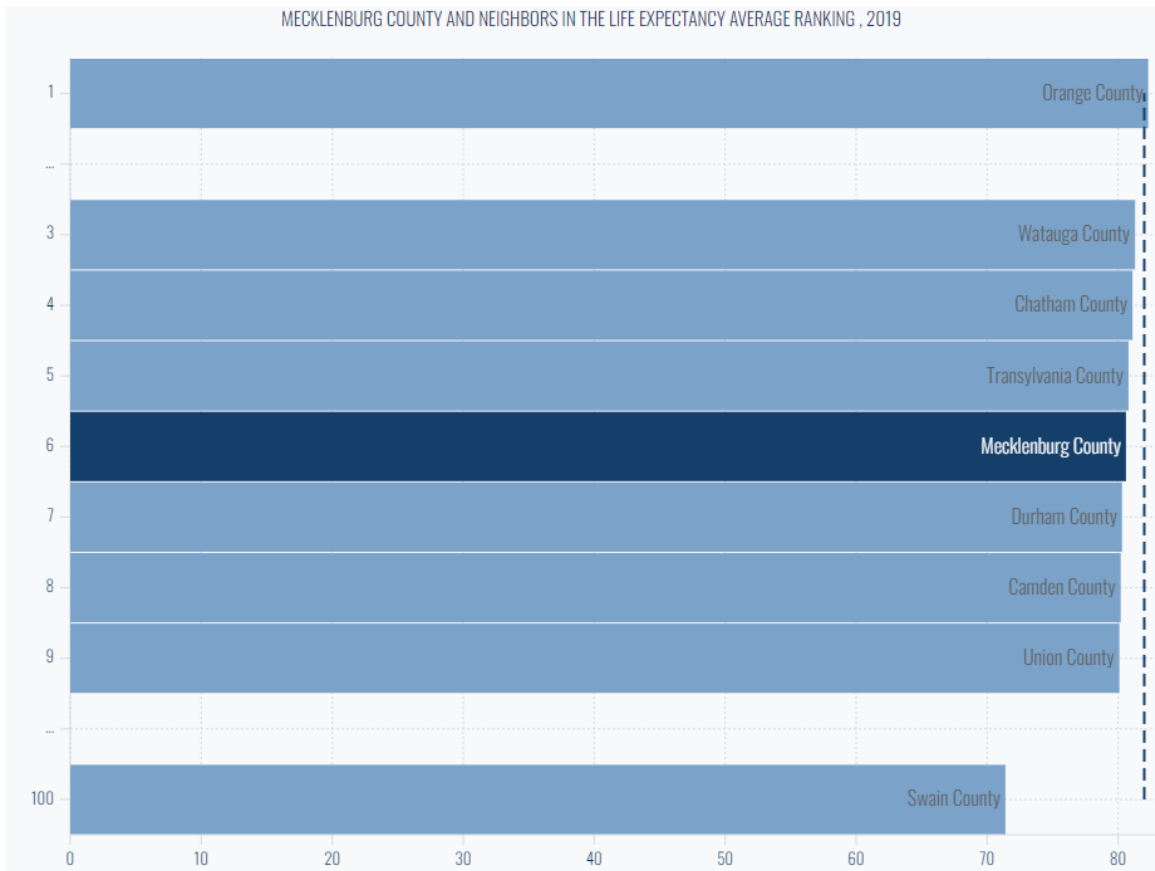
In 2017, Hawaiian Native/Pacific Islanders and Hispanic populations were facing the highest rate of housing hardship in Mecklenburg County, at a rate of 25%. The Healthy Communities NC goal is to reduce that rate to 14% by 2030.



Source: Healthy Communities NC

Life Expectancy

In 2019, Mecklenburg County had a life expectancy of 80 years. Healthy Communities NC aims to increase that to 82 years by 2030. Improving access to care and addressing food hardship faced by residents of Mecklenburg County can 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 the **2022 Mecklenburg County Community Health Assessment**.

The 2022 Mecklenburg County Community Health Assessment and corresponding CHIPs were still being drafted at the time the NHPMC CHNA was written. A final assessment in the form of a written report will be submitted to the State in March 2023 to fulfill accreditation standards. CHA data and community input will serve as the foundation for community action planning around priority health areas beginning in Spring 2023. Interested individuals from the priority setting activities, the public and from organizations and any coalitions already addressing the issues will be invited to participate in the planning process. Community Health Improvement Plans (CHIPs) will be submitted by MCPH to the State in Early September 2023.

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.

Every four years, Mecklenburg County Public Health (MCPH) with a steering committee of community partners has led an extensive examination of the community's health. The CHA includes a review of community health indicators, a community opinion survey, priority setting activities and action planning to address top identified priorities.

Building from that process, MCPH, Novant Health, Atrium Health and One Charlotte Health Alliance collaborated on the 2022 Mecklenburg County Community Health Assessment to update existing data and receive feedback from the community. This work included the 2022 CHA Health Opinion Survey.

The recognition that significant change usually takes more than three years, as well as COVID -19 disrupting community initiatives and services, resulted in the decision to retain previously identified leading health priorities, as long as data review and community input validated their continued concern and interest. Going forward, the CHA process will take place every 3 years and new priorities will be revisited during the 2025 CHA.

In Spring 2023 MCPH will publish an online interactive dashboard to communicate finalized results of the 2022 CHA. Action planning for this CHA cycle will begin Summer 2023.

b) Solicitation

The CHA Steering Committee, in partnership with the MCPH Epidemiology program, collected primary and secondary health data. Examination of the community data overview suggested the prior priority focus areas remained of current concern and interest. Health Disparities and Social Determinants of Health were considered overarching issues rather than individual categories.

Methods used to collect community feedback included the 2022 CHA Health Opinion Survey and CHA Community Virtual Meetings.

The 2022 CHA Health Opinion survey was open for responses between April 22, 2022 and July 8, 2022. Additional responses were collected during a community-wide virtual meeting on July 27, 2022.

The CHA Health Opinion Survey was available to Mecklenburg County residents only. Residency was determined by reported zip code and city/town of residence. Persons with zip codes outside of Mecklenburg County were excluded from participation in the survey. Surveys were administered electronically through Qualtrics™ via survey links and QR codes along with paper copies using English and Spanish languages.

The sampling method used for this survey was convenience sampling which is an inexpensive and quick way to collect data. A nonprobability form of snowball sampling was employed to reach a wide range of residents. Links to the online survey were sent via email to leaders of neighborhood associations; organizations that provide low- and no cost health care; and assorted mailing lists for agency and community members associated with human services and health related initiatives.

The survey link was also posted on the county website, county Facebook and Twitter pages, the Board of County Commissioners newsletter and employee newsletters for the county and Public Health. All recipients of the email and those viewing it on social media were encouraged to share the link among their own contacts.

In addition to outreach through community initiative email lists, professional networks and social media, residents were recruited through partnering with community-based organizations, such as Mecklenburg Interfaith Network, International House, Senior Centers and the Association for the Blind. Community health workers from MCPH, Atrium and Novant promoted the surveys to clients via QR links and paper surveys.

MCPH staff attended community events/meetings to solicit resident participation using printed flyers and table-top billboards featuring QR codes as well as printed copies.

Two virtual meetings were held on July 27, 2022 (1:30 p.m. and 7:00 p.m. sessions) to provide preliminary findings and further solicit community input. Meeting times were selected to promote community involvement among residents often excluded from early-day meetings due to work schedules. 128 participants registered, with most persons (97) selecting the 1:30 p.m. afternoon slot. 86 participants logged into the virtual sessions and were provided opportunities to report on top health issues impacting their community, as a part of final survey results to be published in December 2023.

Residents were asked to reflect on various issues and challenges facing their communities (defined as the resident's neighborhood or place of immediate residence, as opposed to the entire county). The latter portion of the survey asked participants their opinions on ten identified health focus areas, health concerns related to the social determinants of health, and finally, demographic information.

Every effort was made to broadly distribute the survey and collect responses from persons who represent the broad interests of Mecklenburg County, including those who represent the interests of members of the medically underserved, low-income, and minority populations. The demographic profile of survey respondents is represented in the table in the following section.

c) Data collection and analysis

Primary data

The Community Health Opinion Survey

The Health Opinion Survey opened on April 22, 2022, with a soft launch occurring during the preceding weeks. As of July 8, 2022, a total of 792 surveys were completed by Mecklenburg residents.

A limitation of this survey is the sampling selection bias. Because most of the surveys were completed online it is likely that populations who do not have access to or feel comfortable using a computer may have been missed. This issue was addressed by use of scanned QR codes and distributing paper copies.

Every attempt was made to gather a sample that resembled the demographic makeup of the county; however, Males and Asians were underrepresented. The survey is also not representative of youth (0 - 17 yrs.) since less than 1% of the survey was completed by this population. Caution must be exercised in attempting to weight a convenience sample as one cannot hope to bring it in line with a probability sample and, as such, we would be hesitant to perform such an adjustment and say this survey is totally representative of our county. It does, however, represent the opinion of a wide variety of county respondents as seen in the participant profile below.

Survey Demographic Category	2022 Survey Participants		County Population (ACS 2020)		
	Number	Percent	Demographics	Number	Percent
Total Participants	792	100%	Total Population	1,095,170	100%
Gender			Gender		
Male	117	17.7%	Male	526,453	48.1%
Female	540	81.7%	Female	568,717	51.9%
Other	4	0.6%			
Race/Ethnicity			Race/Ethnicity		
White/Caucasian	253	38.7%	White/Caucasian	506,691	46.3%
African American/Black	309	47.3%	African American/Black	340,835	31.1%
Of Hispanic or Latino Origin	75	11.7%	Of Hispanic or Latino Origin	146,710	13.4%
Asian	5	0.8%	Asian	65,898	6.0%
American Indian and Alaska Native	2	0.3%	American Indian and Alaska Native	2,351	0.3%
Two or More Races	51	7.8%	Two or More Races	28,282	2.6%
Native Hawaiian or Pacific Islander	N/A	N/A	Native Hawaiian or Pacific Islander	380	0%
Other Race	34	5.2	Some other Race	4,023	0.4%
Age			Age		
0-24	18	2.8%	Under 5 years	72,857	6.7%
			5 to 9 years	71,529	6.5%
			10 to 14 years	71,343	6.5%
			15 to 19 years	69,272	6.3%
			20 to 24 years	71,418	6.5%
25-44	219	33%	25 to 34 years	187,428	17.1%
			35 to 44 years	160,963	14.7%
45-64	315	47.5%	45 to 54 years	146,983	13.4%
			55 to 59 years	63,972	5.8%
			60 to 64 years	56,625	5.2%
65-84 yrs.	109	16.4%	65 to 74	75,426	6.9%
			75 to 84	33,207	3.0%
85+	2	0.3%	>85	14,147	1.3%
Household Income			Household Income		
\$0-\$19,000	42	6.7%	\$1 to \$9,999 or loss	5,487	1.3%
			\$10,000 to \$14,999	11,436	2.6%
\$20,000-\$29,999	41	6.5%	\$15,000 to \$24,999	43,543	9.9%
\$30,000-\$44,999	100	15.9%	\$25,000 to \$34,999	63,428	14.5%
			\$35,000 to \$49,999	85,852	19.6%
\$45,000-\$64,000	108	17.2%	\$50,000 to \$64,999	63,312	14.5%
\$65,000-\$90,000	109	17.4%	\$65,000 to \$74,999	29,844	6.8%

> \$90,000	228	36.3%	\$75,000 to \$99,999	49,287	11.3%
			>\$100,000	85,518	19.5%
Educational Attainment			Educational Attainment (Population 25 years and over)		
12th grade or less, no diploma or equivalent	11	1.7%	9 th to 12 th , no diploma	35,842	4.6%
High school graduate or equivalent	41	6.3%	High School graduate (includes equivalency)	122,643	16.6%
Some college, but no degree (includes vocational training)	99	15.2%	Some college, no degree	145,308	19.7%
Trade school or vocational training	25	3.8%			
Associate degree in college	63	9.7%	Associate degree	62,112	8.4%
Bachelor's degree in college	193	29.6%	Bachelor's degree	338,590	45.8%
Advanced college degree beyond bachelor's degree	217	33.3%	Graduate or professional degree	115,561	15.6%
Employment					
Employed full time	492	75.1%			
Employed part time	32	4.9%			
Unemployed	12	1.8%			
Caregiver/Homemaker	11	1.7%			
A Student	11	1.7%			
Retired	87	13.3%			
Unable to Work	10	1.5%			

Sources: ACS 2020 Census Bureau Table, ACS 2020 Census Bureau Income, and 2022 Mecklenburg County CHA

Secondary data

The data used in MCPH's report comes from a variety of sources which are collected differently and operate on varying reporting cycles. Delayed reporting, often for a year or more, due to data cleaning and analysis can impact the timeliness of data. The report represents preliminary findings and should not be taken as an exhaustive review of all data compiled during the CHA process.

Along with the primary data outlined above, secondary data was primarily collected and analyzed from the following sources:

- Behavioral Risk Factor Surveillance Survey (BRFSS)
- Charlotte Mecklenburg Police Department (CMPD)
- Mecklenburg County
 - Department of Social Services (DSS)
 - Geographic Information Systems (GIS)
 - Land Use & Environmental Services Agency (LUESA)
- Mecklenburg Youth Drug Survey (YDS)
- Mecklenburg Youth Risk Behavior Survey (YRBS)
- North Carolina Electronic Disease Surveillance System (NCEDSS)
- North Carolina Disease Event Tracking & Epidemiologic Collection Tool (NC DETECT)

- National Institute of Mental Health (NIMH)
- North Carolina Department of Health & Human Services (NC DHHS)
 - Communicable Disease Program
 - HIV/STD Prevention and Care
 - State Center for Health Statistics (SCHS)
 - Vital Statistics
- US Census, American Community Survey
- US Department of Transportation (US DOT)
- FBI Uniform Crime Reporting (UCR) Program
- Center for Disease Control and Prevention (CDC)
- Global Rise in Human Infectious Disease Outbreaks (Katherine F. Smith, Michael Goldberg, et al.)
Journal of the Royal Society Interface (Vol 11, Issue 101)

III. Identification and Prioritization of Health Needs

a) Identified Significant Health Needs

The nine topic areas included in the 2017-18 CHA were selected by reviewing the data and validated using a survey tool that was administered to community leaders and representatives of key health agencies in the county. The survey included 15 health topics for consideration and asked respondents to rank the issues in order of importance. In 2022, the same top nine issues were identified as those included in the 2017 CHA and a new category informed by the data, was added. Emerging Health Issues characterizes the impact of emerging or re-emerging health conditions that pose major public threats, such as COVID-19. Health disparities and social determinants of health are not called out specifically as health issues but rather incorporated within each. In alphabetical order, the 10 health issues are:

1. Access to care
2. Chronic disease prevention
3. Emerging health issues
4. Healthy environment
5. Healthy pregnancy
6. HIV and other STIs
7. Injury Prevention
8. Mental health
9. Substance use disorder
10. Violence prevention

b) Analysis and Prioritization

Prioritized Health Outcomes

Consideration of these topic areas—and the data alongside community input--resulted in the following top four priority health issues for MCPH:

1. Mental Health
2. Access to Care

3. Chronic Disease
4. Violence Prevention

Facility prioritization

In addition to the primary and secondary data, Novant Health Presbyterian Medical Center reviewed the top five diagnosis codes for inpatient and outpatient hospital emergency department visits.

Novant Health Presbyterian Medical Center Adult Emergency Department
Top 5 Diagnoses for Adults July 2021 - June 2022

Inpatient Diagnosis	Volume	Outpatient Diagnosis	Volume
Covid - 19	526	Other chest pain	2122
Sepsis, unspecified organism	361	Covid - 19	1680
Hypertensive heart and chronic kidney disease with heart failure and stage 1 thru stage 4 chronic kidney disease or unspecified chronic kidney disease	231	Headache, unspecified	765
Hypertensive heart disease with heart failure	169	Suicidal Ideations	728
Acute Kidney failure, unspecified	152	Syncope and collapse	624

Novant Health Presbyterian Medical Center Emergency Pediatrics Department
Top 5 Diagnoses for Pediatric Patients July 2021- June 2022

Inpatient Diagnosis	Volume	Outpatient Diagnosis	Volume
Acute Bronchiolitis due to respiratory syncytial virus	129	Acute upper respiratory infection, unspecified	1923
Acute Bronchiolitis due to other specified organism	61	Fever, unspecified	1207
Covid- 19	44	Covid- 19	1028
Major depressive disorder, recurrent sever without psychotic features	42	Vomiting, unspecified	803
Type 1 DM with Ketoacidosis without coma	37	Viral infection, unspecified	648

The top 5 diagnoses, particularly for adults, 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 NHPMC's ED top 5 diagnosis codes, the Novant Health Presbyterian Medical Center leadership team and Board of Trustees 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 Presbyterian Medical Center:

1. Mental health
2. Access to care
3. Chronic disease
4. Violence prevention

IV. Addressing needs

Novant Health Presbyterian 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 / Initiative:	Action:	Intended Outcome:
Mental Health	Mental Health TIC/Resiliency Training/Screenings Investment	<ul style="list-style-type: none"> • Provide information and training to individuals in various sectors including nonprofit, faith, and education communities, to include our own teams • Support aligned community organizations and events 	<ul style="list-style-type: none"> • Increase general mental health awareness, the impact of trauma, and provision of tools and/or skills to build resiliency • Increase individual's ability to access resources, and the number of individuals connected to appropriate treatment and/or services
Access to Care	Education and Health Screenings Mobile Outreach Investment	<ul style="list-style-type: none"> • Host health education and screening events and facilitate referrals to care and/or resources • Host childhood immunizations and health assessment events via mobile outreach program • Support aligned community organizations and events 	<ul style="list-style-type: none"> • Increased number of community stakeholders connected to a primary medical home and appropriate care
Chronic Disease	Wellness Education Health Screenings/ Resources Investment	<ul style="list-style-type: none"> • Wellness Webinars and speaker's bureau program • Host health and SDoH screenings • Provide related referrals, assessment of resources and food insecurity support • Support aligned community organizations and events 	<ul style="list-style-type: none"> • Increased access to health resources and screenings • Increased awareness of health risks and prevention tools/methods
Violence Prevention	Education Public awareness Investment	<ul style="list-style-type: none"> • Wellness Webinars and speaker's bureau program • Public safety and trauma programs with community partners • Collaboration with community partners, board affiliations, and committees • Support aligned community organizations and events 	<ul style="list-style-type: none"> • Increased awareness of violence prevention tools/methods and resources

Again, NHPMC will focus resource allocation on these prioritized needs based on careful consideration of estimated feasibility and effectiveness of possible interventions. While NHPMC 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 Presbyterian Medical Center, there are various existing community assets available throughout the Mecklenburg 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
<ul style="list-style-type: none"> • Access to care • Chronic disease prevention • HIV & other STIs • Healthy pregnancy 	Mecklenburg County Health Department, One Charlotte Health Alliance, Charlotte Community Health Clinic, Care Ring, Center for Prevention Services, RAIN, CW Community Health Center, DeAngelo Williams Foundation, Carolina Breast Friends, Claire’s Army, Colon Cancer Coalition, Healthy Charlotte Alliance, Heartbright, Hospitality House, Madelyn’s Fund, MS Society, LLS, Zero End Prostate, Matthews Free Medical Clinic, Bright Blessings
<ul style="list-style-type: none"> • Emerging health issues (outbreaks of infectious diseases that pose major public health threats, such as COVID-19 and Monkey Pox) 	Mecklenburg County Health Department, One Charlotte Health Alliance
<ul style="list-style-type: none"> • Healthy environment (including pollution, clean water, poverty, housing, and food access) • Violence prevention • Injury prevention 	Heal Charlotte, Second Harvest, Loaves and Fishes, Catawba Riverkeepers, Catawba Lands Conservancy, Roof Above, Sustain Charlotte, Pat’s Place, Shelter Health Services, Safe Alliance, Rebuilding Together, The Bulb, YWCA, Angels and Sparrows, Habitat for Humanity of Greater Matthews, Common Heart Food Pantry, Community Shelter of Union County
<ul style="list-style-type: none"> • Mental health • Substance use disorder 	Charlotte Rescue Mission, Crisis Assistance Ministry, Mental Health America, Living Waters, RAIN, Dilworth Center, Center for Prevention Services, Lake Norman Community Medical Clinic

For a full list of community resources, visit www.novanthealth.org/mycommunity

V. 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 Southern Piedmont Region Board of Trustees did a collective review of community feedback and prioritization and determined the top health priorities for Novant Health Presbyterian Medical Center as the following: Mental Health/Substance Use Disorder and Access to Care.

The specific commitments, objectives, measurements, and successes for Novant Health Presbyterian Medical Center 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 / Action	Intended Outcome	Actual Outcome
Mental Health - Substance Use Disorder	<p>Mental Health TIC/Resiliency Training and Screenings: provide information and train individuals from various sectors including the nonprofit and faith community.</p> <p>Substance Use recovery and prevention: Develop database of regional resources for appropriate behavioral health and SDoH referrals.</p>	<p>Awareness of the impact of trauma and provision of tools/skills to build resiliency.</p> <p>Awareness of ways to access resources and increased number of individuals connected to appropriate treatment and services within the community.</p>	<p>Various support groups—including for breast cancer, caregivers, and COVID/quarantine--provided additional support to 188 community members and their families, to bolster their resilience, mental and emotional health, and sense of community.</p> <p>At least 406 community members were served through 10 mental health educational programs, such as Mental Health First Aid trainings, and radio programming in Spanish on trauma and resilience and grounding practices.</p> <p>The MyCommunity platform—summarized below—serves as a free searchable database for local resources addressing needs, including behavioral health needs and SDoH referrals, for community members, patients, and providers searching on behalf of/referring patients.</p>

			<p>Additionally, NHPMC contributed \$615,682 toward this priority with charitable contributions to organizations including: Kindermourn, Youth Villages, Dilworth Center, Hopeway Foundation, Mental Health America of Central Carolinas, Promise Resource Network, Center for Prevention Services, Urban Promise Charlotte, Charlotte Bilingual Preschool, Girls on the Run, and Pat’s Place Child Advocacy Center.</p>
Access to Care	Wellness Education and Screenings: Host screenings and provide related referrals, assessment of resources	Increased number of community stakeholders connected to a primary medical home and appropriate care	<p>13,867 participants were served through 109 educational events, classes and programming, including health fairs, community conversations with health professionals, and COVID-19 education and mask distribution.</p> <p>Additionally, 464 prospective or new parents benefitted from 16 educational events/classes, including infant CPR, sibling preparation, financial checklist, and breastfeeding support.</p> <p>7,433 participants were served through 103 screening events, including for school health assessments, blood pressure, osteoporosis, mammography, and Remarkable You (which includes cholesterol, glucose and A1C exams to measure diabetes risk).</p> <p>At least 782 community members benefitted from 52 events in Spanish or specifically targeting the Latino/Hispanic population, including health education programming on various topics via Spanish radio, hands-only CPR training, COVID-19 education, resource fairs, and diabetes prevention programs.</p> <p>The MyCommunity platform—an online platform to search for local free and reduced-cost social service programs addressing SDoH areas like access to food, work, housing, transit, and healthcare services—is provided for</p>

		<p>free, and intended to increase trust and access to resources. From 2019 – 2021, there were 19,913 searches performed in Mecklenburg County, and the most common search terms included “food pantry,” “help pay for housing,” “help pay for utilities,” “help find housing,” and “prescription assistance.” More than 5,000 “connections” (or information about health and social needs resources) were sent to patients or community members in this time period via MyCommunity.</p> <p>Additionally, NHPMC contributed \$1,619,271.93 toward this priority with charitable contributions to organizations including: Hospitality House of Charlotte, MedAssist of Mecklenburg County, Urban Ministry Center, Care Ring, Project 658, Youth Villages, Communities in Schools, LabCorp (for indigent patient bills), Crisis Assistance Ministries, Heal Charlotte, Chemo Cars, Shelter Health Services, Baby Bundles, Charlotte Community Health Clinic, etc.</p>
--	--	--

VI: Appendix

Steering Committee for Mecklenburg County CHA	
Agency	
	Atrium Health
	Mecklenburg County Public Health*
	Novant Health
	One Charlotte 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 MCPH 2022 CHA report.