



Novant Health Huntersville Medical Center

Community Health Needs Assessment

Mecklenburg County, North Carolina

2019-2021

Approved by the Novant Health Southern Piedmont Region Board of Directors on October 23, 2019

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I. Introduction

Novant Health Huntersville Medical Center, in partnership with the Mecklenburg County Health Department and other community partners established a community health needs assessment in 2017 to identify the most pressing health needs in our community. Novant Health Huntersville 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 Huntersville Medical Center is an integral part of the Novant Health system (collectively known as "Novant Health"). Novant Health (NH) is a non-profit integrated health care system of 15 medical centers and a medical group with over 575 clinic locations. Other facilities and programs include outpatient surgery and diagnostic centers, charitable foundations, rehabilitation programs, and community health outreach programs. Novant Health and its affiliates serve their communities with programs including health education, home health care, prenatal clinics, community clinics and immunization services. Novant Health's over 28,000 employees and 2,500 physician partners care for patients and communities in North Carolina, South Carolina, and Virginia.

Mission

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

Our employees and physician partners strive every day to bring our mission, vision and values to life. We demonstrate this commitment to our patients in many different 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 Huntersville Medical Center (NHHMC) is located in the Town of Huntersville, North Carolina, and opened in November 2004. The 91-bed facility provides a wide range of health services including emergency care, maternity care, cardiovascular care, cancer care, orthopedic care, laboratory services, radiology services, and sleep services. The expert medical team delivers the care you need, close to home and ensures that you receive personalized attention and a remarkable experience at the hospital.

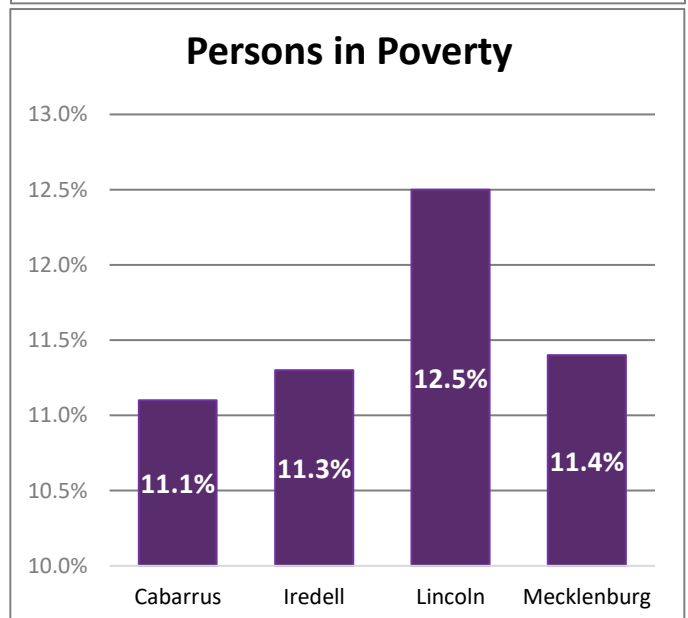
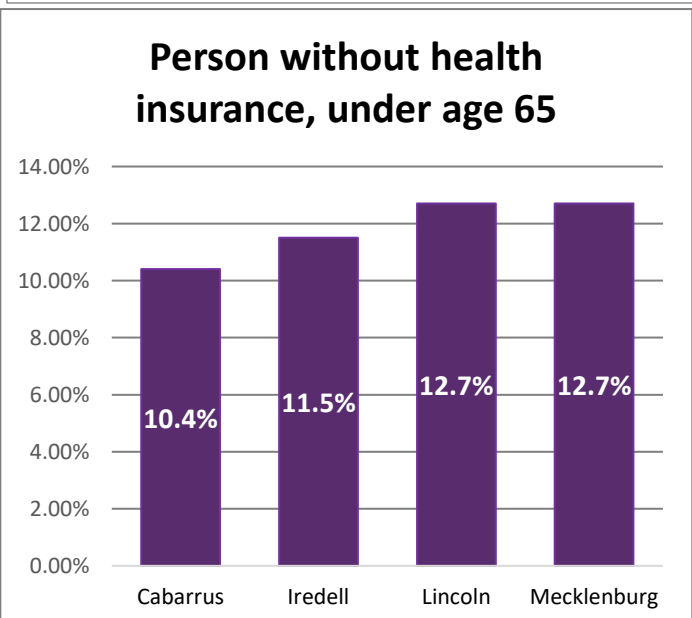
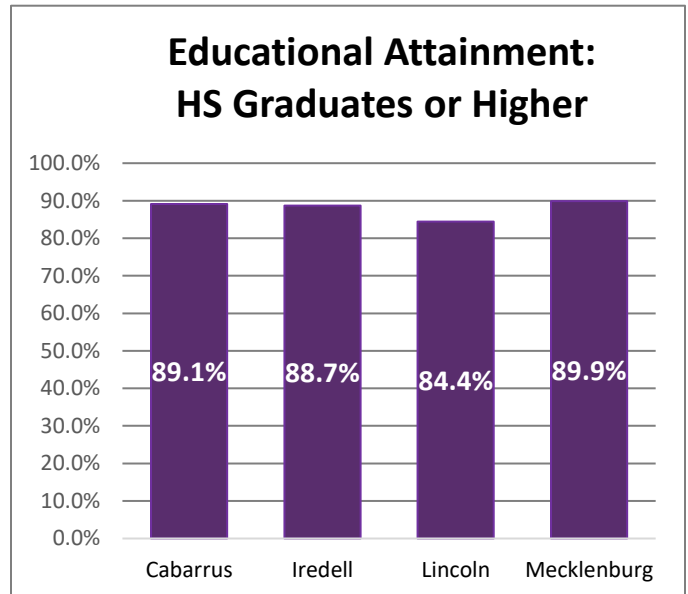
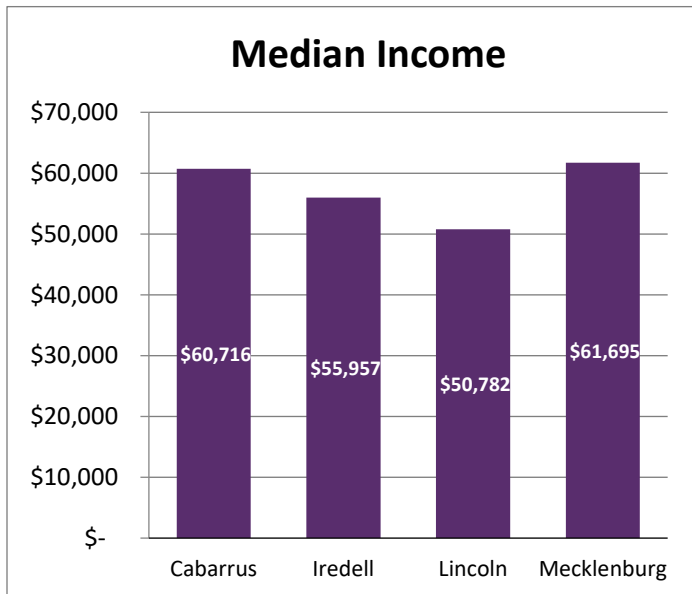
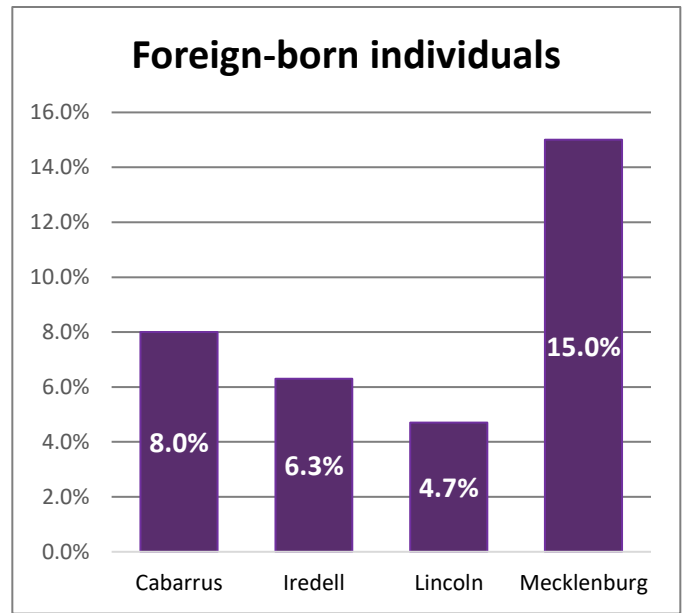
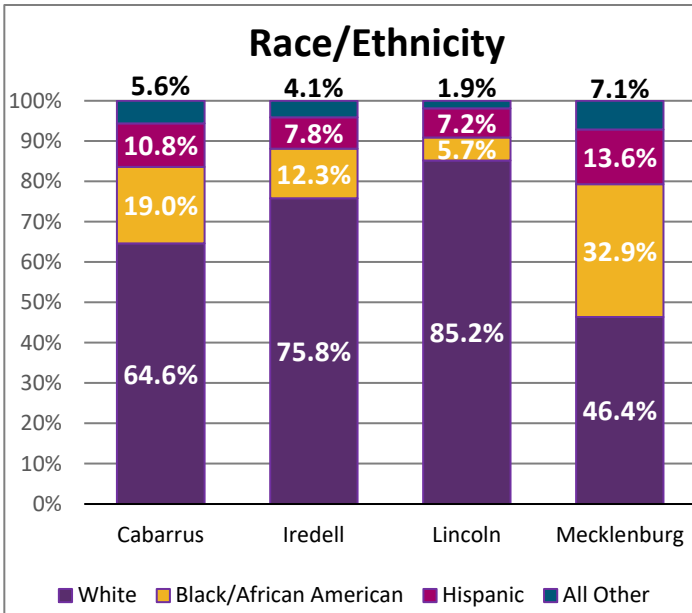
b) Our Defined Community

Primary Service Area

The Primary Service Area for Novant Health Huntersville Medical Center is defined by the zip codes that represent 75% to 85% of the hospital’s in-patient population as outlined below:

Zip Code	City	County
28078	Huntersville	Mecklenburg
28269	Charlotte	Mecklenburg
28031	Cornelius	Mecklenburg
28216	Charlotte	Mecklenburg
28037	Denver	Lincoln
28117	Mooresville	Iredell
28036	Davidson	Davidson
28115	Mooresville	Iredell
28214	Charlotte	Mecklenburg
28027	Concord	Cabarrus

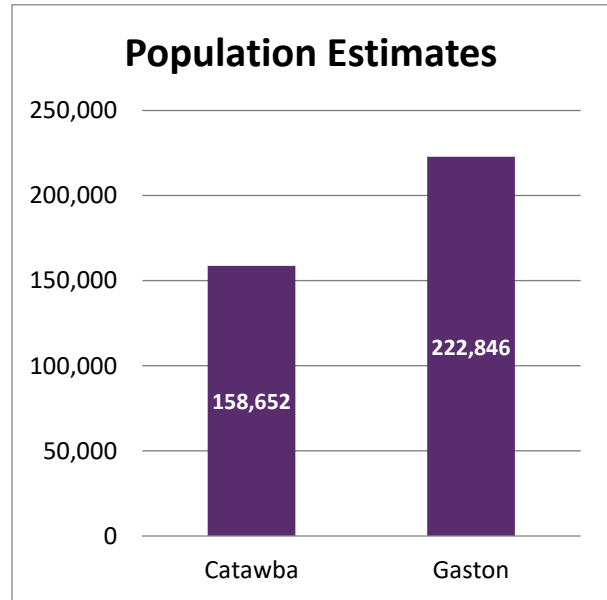
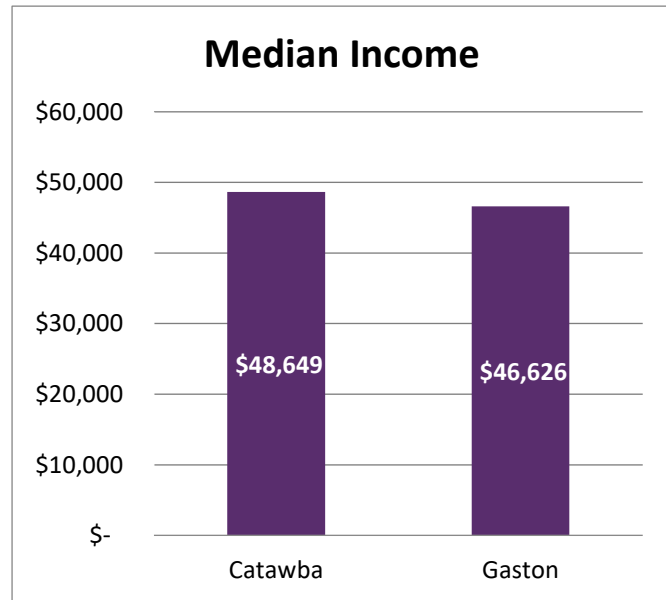
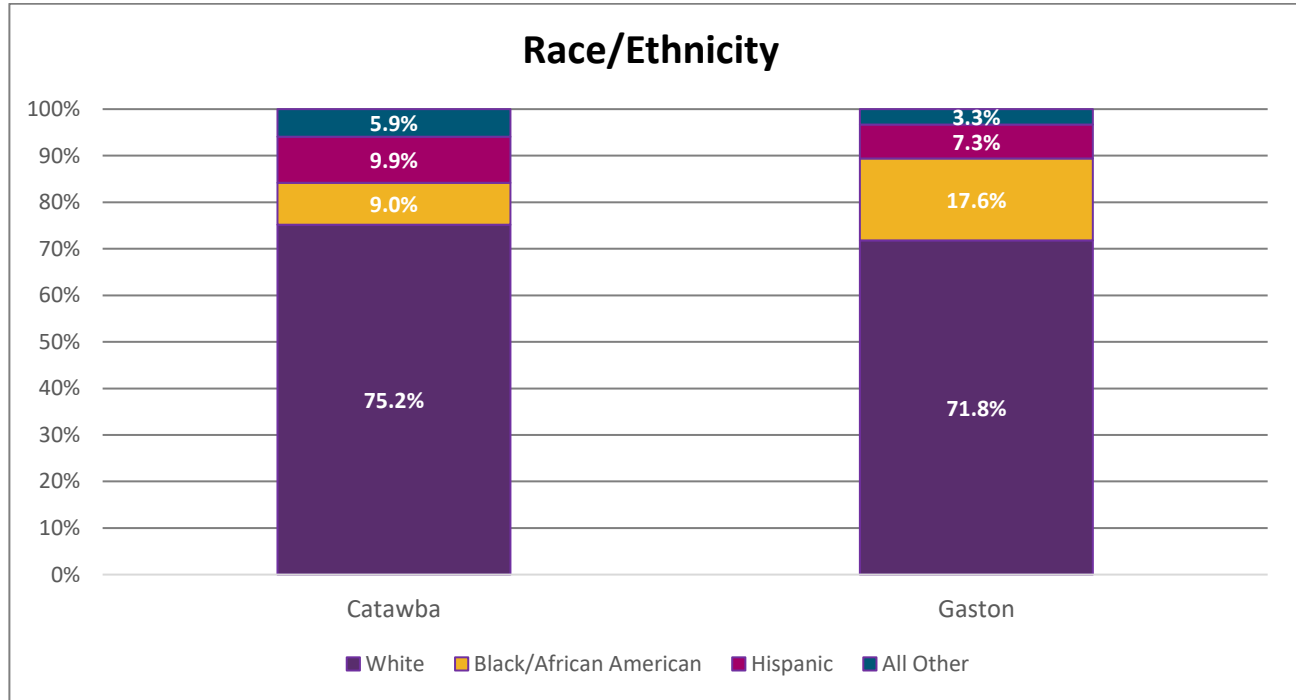
Mecklenburg County contains seven municipalities including the City of Charlotte, and the towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill and Pineville. The Primary Service Area includes the City of Charlotte and the Towns of Cornelius, Davidson and Huntersville, which are all located in Mecklenburg County. Included are the municipalities of Concord, Denver and Mooresville in the counties of Cabarrus, Lincoln and Iredell respectively. 78% of the patients in the Primary Service Area (PSA) reside in Mecklenburg County, while 71% of patients in the PSA and SSA reside in Mecklenburg County. A comparison of county data from each geographic area from which the hospital draws its patients was conducted. Based on comparison of race/ethnicity, median income, educational attainment, persons in poverty and foreign-born individuals, Mecklenburg County represents the highest population of potentially underserved, low-income and minority individuals from the Primary Service Area. All chart data on the following page is sourced from the 2018 census.



Source for all graphs: U.S. Census Bureau (2018)

Secondary Service Area

The Secondary Service Area for Novant Health Huntersville Medical Center covers a two-county radius, including: Catawba and Gaston. According to the 2018 U.S. Census estimates, the aforementioned counties include the following demographic profiles:



Source for all graphs: U.S. Census Bureau (2018)

Mecklenburg County Population: Demographics

As outlined in the charts above, Mecklenburg County represents the highest population of potentially underserved, low-income and minority individuals from the Primary Service Area. As the majority of patients also reside in Mecklenburg County, this county will be the sole focus of demographic, health and social indicators.

Mecklenburg County has the largest population of any county in the State of North Carolina. The County includes the City of Charlotte; towns of Cornelius, Davidson, and Huntersville (north of Charlotte); and the towns of Matthews, Mint Hill, and Pineville (south and southeast of Charlotte). Mecklenburg County is home to just under 1,100,000 residents, making it the most populous county between Atlanta, Georgia and Washington, D.C. In fact, from 2007 to 2018, Mecklenburg County's population growth rate was 19% and expected to grow in excess of 1.5 million people by 2037.

Children and adolescents make up almost one-third (30.2%) of the population in Mecklenburg County, while seniors only make up 11.2% of the population.¹ From 2010 to 2020, the population of Mecklenburg County has been projected to grow by 24%. North Carolina's population is projected to grow by 11% during the same time period. Over the next 15 years, it is expected that persons age 65 and older will be the fastest growing segment of Mecklenburg County's population. Non-white minorities currently make up over one-half (53.6%) of the racial demographic in Mecklenburg County. Demographic data for Mecklenburg County is outlined below:

Mecklenburg County Population by Race & Ethnicity (2018)

	Mecklenburg County	North Carolina
Population Estimate	1,093,901	10,383,620
Persons Under 5 Years	6.6%	5.9%
Persons Under 18 Years	23.6%	22.2%
Person 65 Years & Over	11.2%	16.3%
Female Persons	51.9%	51.4%
White Alone	46.4%	62.8%
Black/African-American Alone	32.9%	22.2%
American Indian & Alaska Native Alone	0.8%	1.6%
Asian Alone	6.4%	3.2%
Native Hawaiian & Other Pacific Islander Alone	0.1%	0.1%
Two or More Races	2.4%	2.3%
Hispanic or Latino	13.6%	9.6%

Source: U.S. Census Bureau (2018). In this chart, race/ethnicity percentages sum to exceed 100% because some individuals identify in multiple categories.

¹ U.S. Census Bureau (2018). State & County QuickFacts. <http://quickfacts.census.gov/qfd/states/37/3712000.html>

Mecklenburg County Population: Health Indicators

In the 2018 County Health Rankings¹, Mecklenburg County ranked 5 out of 100 counties for health outcomes. Despite a strong overall performance, there are profound racial disparities in many categories. For example, Mecklenburg County’s overall child poverty rate is 4% below the North Carolina average. Segmenting the percentage by race, we find the poverty rate among African American children is 24% above that of white children. The poverty rate of Hispanic children is 28% higher than that of white children. As cited by the Leading on Opportunity Task Force², Mecklenburg County’s long history of racial and economic segregation has created sharp disparities in education, health and overall opportunity.

Key findings are listed below:

Length of Life (Ranked 6 out of 100)	Mecklenburg County	Top U.S. Performers	North Carolina
Years of potential life lost before age 75 per 100,000 population (age-adjusted, total)	5,700	5,300	7,300
Years of Potential Life Lost Rate (African American)	8,300	5,300	7,300
Years of Potential Life Lost Rate (Hispanic)	3,400	5,300	7,300
Years of Potential Life Lost Rate (White)	4,800	5,300	7,300
Social and Economic Factors (Ranked 15 out of 100)	Mecklenburg County	Top U.S. Performers	North Carolina
Percentage of children under 18 in poverty (total)	18%	12%	22%
Percentage of children under 18 in poverty (African American)	29%	12%	22%
Percentage of children under 18 in poverty (Hispanic)	33%	12%	22%
Percentage of children under 18 in poverty (White)	5%	12%	22%
Physical Environment (Ranked 69 out of 100)	Mecklenburg County	Top U.S. Performers	North Carolina
Percentage of households with overcrowding, high costs, lack of kitchen, or lack of plumbing	18%	9%	17%

Source: County Health Rankings & Roadmaps <http://www.countyhealthrankings.org/app/north-carolina/2018/rankings/mecklenburg/county/outcomes/overall/snapshot>

² https://www.ftc.org/sites/default/files/2018-05/LeadingOnOpportunity_Report.pdf

Mecklenburg County’s leading cause of death in 2017 was diseases of the heart followed closely by cancer. Heart disease, cancer, and chronic lower respiratory disease have been the three leading causes of death for the last 7 years in Mecklenburg County.

Leading Causes of Death in Mecklenburg County in 2017			
Rank	Cause of Death	Number	%
1	Cancer	1,253	20.3
2	Diseases of heart	1,126	18.3
3	Cerebrovascular diseases	343	5.6
4	All other unintentional injuries	309	5.0
5	Alzheimer's disease	290	4.7
6	Chronic lower respiratory diseases	270	4.4
7	Diabetes mellitus	182	3.0
8	Nephritis, nephrotic syndrome and nephrosis	174	2.8
9	Intentional self-harm (suicide)	116	1.9
10	Influenza and pneumonia	115	1.9
	All other causes (Residual)	1,983	32.1
	Total Deaths – All Causes	6,161	100.0

Source: NC State Center for Health Statistics

Mecklenburg County Population: Social Indicators

According to the U.S. Census 2017 American Community Survey, 89.1% of Mecklenburg County residents have attained a bachelor’s degree or higher³. According to the U.S. Census 2018 data, the median household income in Mecklenburg County is \$61,695. The poverty rate for Mecklenburg County residents continues to be lower than the North Carolina state average by 2.7%, and the poverty rate for children

Median Household Income		Population Educational Attainment (≥ 25 yrs. old)		Poverty Rate	
Mecklenburg County	\$61,695	< HS diploma/GED	10.1%	All ages (Mecklenburg County)	13.4%
		HS diploma/GED	17.9%	All ages (North Carolina)	16.1%
North Carolina	\$50,320	Some college or associate's degree	27.9%	Children (0-17) (Mecklenburg County)	18.4%
		Bachelor's degree	29.2%	Children (0-17) (North Carolina)	22.9%
		≥ Graduate degree	14.9%		

Source: U.S. Census Bureau (2018)

Source: American Community Survey (2013-2017)

³ <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

(ages 0-17) in Mecklenburg County, is 4.5% lower than the NC State average. The poverty rate for Mecklenburg County residents decreases as the amount of education increases.

The Mecklenburg County unemployment rate snapshot from February 2019 is equal to the NC overall rate⁴. According to RWJF’s County Health Rankings and Roadmaps, access to healthy food is slightly more limited in Mecklenburg County than in North Carolina overall. Almost half of renters in Mecklenburg County spend more than 30% of their household income on rent. Mecklenburg County residents also have a slightly higher average percentage of households without access to a vehicle.

Unemployment Rate ⁴		Limited Access to Healthy Foods ⁵		Renters spending more than 30% Of Household Income on Rent ⁶		Percent of Households without a Vehicle ⁶	
Mecklenburg County	3.8%	Mecklenburg County	5%	Mecklenburg County	46.4%	Mecklenburg County	6.2%
North Carolina	3.9%	North Carolina	7%	North Carolina	48.7%	North Carolina	6.1%

⁴: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

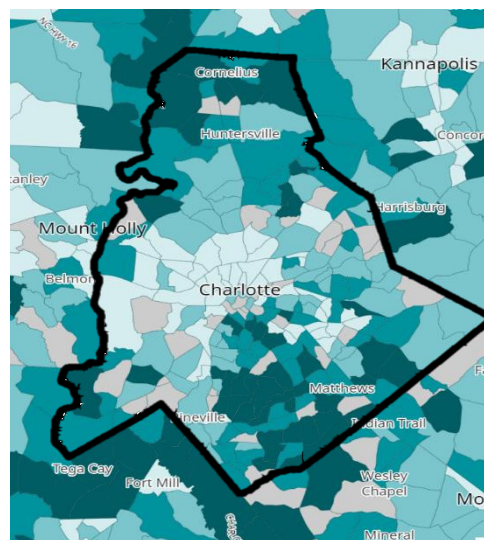
⁵: <http://www.countyhealthrankings.org/app/north-carolina/2018/rankings/mecklenburg/county/outcomes/overall/snapshot>

⁶: <https://nc.maps.arcgis.com/apps/MapSeries/index.html?appid=def612b7025b44eaa1e0d7af43f4702b>

Life expectancy varies widely in Mecklenburg County, from over 81 years in the northern and southern areas of the county, to less than 75.8 years in the “crescent” region of central Charlotte. Huntersville’s life expectancy falls predominantly in the 78.5-81.0-year category.

Over 81.0
78.5 – 81.0
75.8 – 78.5
Under 75.8
No data or data suppressed

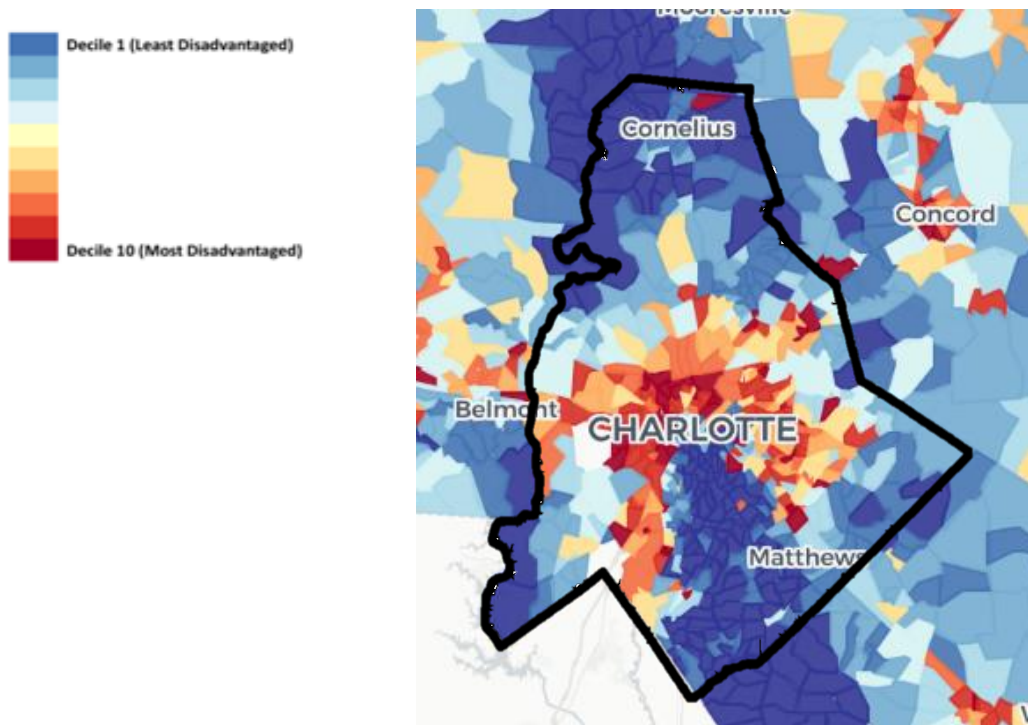
Source: www.communitycommons.org



Mecklenburg County residents display a wide range along the Area Deprivation Index (ADI). The ADI is a factor-based index which uses 17 US Census poverty, education, housing and employment

indicators, including those above, to characterize census-based regions and has been correlated with a number of health outcomes including all-cause, cardiovascular, cancer and childhood mortality, and cervical cancer prevalence⁴.

The map below shows ADI scores from within NC that were ranked from lowest to highest, then divided into deciles (1-10). The least advantaged decile is represented by dark blue; the most disadvantaged in dark red. It's important to note the lower life expectancy census tracts overlap with the highest deprivation areas. These same deprivation areas are widely mirrored when looking at individual social factors, whether limited access to food, unemployment, limited transportation, or less than ideal housing circumstances. When segmented by race, African American residents of Mecklenburg County skew to the more disadvantaged side; white residents skew to less disadvantaged.



II. Assessment

The following are excerpts and findings from the **2017 Mecklenburg County Community Health Assessment**. To access the full report, please visit

https://www.mecknc.gov/HealthDepartment/HealthStatistics/Documents/2017-PrintableReport_no_appendix.pdf

a) Collaborative community partners

Local Health Departments in North Carolina are required to conduct a comprehensive community health needs assessment to maintain local health department accreditation. As part of the Patient Protection and Affordable Care Act of 2011, not-for-profit hospitals are also now required to conduct a Community Health Needs Assessment (CHNA) once every three years.

In Mecklenburg County, the 2017 Community Health Assessment (CHA) was led by a multidisciplinary collaboration of an established Advisory Group, which contains representatives from community organizations including Novant Health and Atrium Health. The assessment process is led and coordinated by the Epidemiology program of the Mecklenburg County Health Department. As part of this assessment process, special attention was paid to the needs of the underserved. The process emphasized collaboration among community partners to improve the overall health of the community.

The assessment process was initiated by the Mecklenburg County Health Department (MCHD), community not-for-profits, Charlotte-Mecklenburg Schools, other city/county agencies and community members. Novant Health and Atrium Health were also invited to participate in the process. To ensure input from public health professionals, leaders of medically underserved communities, and persons with broad knowledge of the community, invitations were distributed to a large number of individuals and community groups (See Appendix A for a complete list of agencies that were represented on the Community Health Needs Advisory Committee). For a listing of individual participant names, see the full report at <https://www.mecknc.gov/HealthDepartment/HealthStatistics/Documents/2017%20Mecklenburg%20CHA%20with%20Appendix%20March%208.pdf>

b) Solicitation

The CHA steering committee in partnership with the Epidemiology program collected community input on health issues to determine the top priorities. Gathering community input on the health issues included in the assessment is an integral part of the CHA process. The three methods to collect community feedback were:

- (1) The Community Health Opinion Survey: 1,793 responses
- (2) Priority Setting Event: 125 attendees
- (3) Priority Setting “In A Box” presentations: Nearly 300 responses

Input gathered from each of these methods was combined to determine our top health priorities. Input was solicited from persons who represent the broad interest of Mecklenburg County, NC, including Hispanics, persons living in poverty and those without a high school degree. Health priorities and data highlights were communicated in a variety of ways including social media, agency websites, and follow up with all the community groups who participated in the prioritization process

c) Data collection and analysis

Primary data

The Community Health Opinion Survey

With guidance from the CHA Advisory Group, the MCHD Epidemiology program developed a health opinion survey for Mecklenburg County residents. Rather than focusing on specific diseases or conditions for which secondary data is readily available, residents were asked to reflect on various issues and challenges facing their communities. “Community” was defined as the resident’s neighborhood or place of immediate residence as oppose to the entire county.

The latter portion of the survey asked participants their opinions on the nine identified health focus areas, health concerns related to the social determinants of health and finally demographic information.

The CHA Community Health Opinion Survey was available to Mecklenburg County residents only. The survey was open for responses from June 2017 to November 2017. Surveys were administered electronically through Qualtrics® and in paper copy in both English and Spanish languages.

The sampling method used for this survey was convenience sampling which is an inexpensive and quick way to collect data. Links to the online survey were sent via email to elected officials of the county, city and towns; heads of city neighborhood associations; city and county employees and through various contact lists. The survey link was also posted on the health department website and the Mecklenburg County Facebook page. All recipients of the email were encouraged to share the link among their own contacts.

A targeted distribution of paper copies was used to reach areas of the population that may not have access to a computer. Paper copies were distributed at the following locations: Care Ring, Charlotte Community Health Clinic, Bethesda Health Center, Salvation Army Center of Hope, the Rosa Parks Farmers Market and various churches throughout the county. Participants surveyed accurately represented the demographic population of Mecklenburg County:

Demographic Category	2017 Survey Participants		County Population (ACS 2017)
	Number	Percent	Percent
Gender			
<i>Male</i>	388	23.3	48.1
<i>Female</i>	1,273	76.3	51.9
<i>Other</i>	8	0.5	0.0
Race/Ethnicity			
<i>White/Caucasian</i>	799	48.5	47.0
<i>African American/Black</i>	583	35.4	32.8
<i>Asian</i>	46	2.8	6.1
<i>American Indian/Alaskan Native</i>	10	0.6	0.8
<i>Native Hawaiian/Pacific Islander</i>	6	0.4	0.1
<i>Hispanic or Latino Origin</i>	282	16.9	13.3
<i>Two or More Races</i>	60	3.6	2.4

<i>Other Race</i>	145	8.8	N/A
Age			
<i>Under 18</i>	15	0.9	24.4
<i>18-24</i>	72	4.3	9.1
<i>25-44</i>	585	34.7	31.8
<i>45-64</i>	633	37.6	24.4
<i>65-84</i>	334	19.8	9.2
<i>85+</i>	45	2.7	1.1
Annual Household Income			
<i>\$0-\$19,999</i>	353	22.9	12.2
<i>\$20,000-29,999</i>	192	12.5	8.3
<i>\$30,000-\$44,999</i>	199	12.9	13.5
<i>\$45,000-\$64,999</i>	203	13.2	N/A
<i>\$65,000-\$90,000</i>	193	12.5	N/A
<i>More than \$90,000</i>	400	26.0	N/A

Areas identified as gaps in the quantitative data sampling included an underrepresentation in males and the Asian population. Also, the Race/Ethnicity percentages totaled more than 100% due to the fact that respondents were allowed to choose more than one category. The response from individuals in the annual household income category of \$0-\$19,999 was 22.9% which was almost double the county population.

Secondary data

Along with the outlined primary data, secondary data was collected from other sources and reviewed. Health data was gathered and analyzed from the following sources:

- Atrium Health Trauma Center
- 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)
- North Carolina Electronic Disease Surveillance System (NCEDSS)
- North Carolina Department of Health & Human Services (NC DHHS)
- Communicable Disease Program •HIV/STD Prevention and Care
- State Center for Health Statistics •Vital Statistics
- North Carolina Disease Event Tracking & Epidemiologic Collection Tool (NC DETECT)
- North Carolina Department of Transportation (NC DOT)
- Youth Drug Survey (YDS)
- Youth Risk Behavior Survey (YRBS)
- US Census, American Community Survey

III. Identifying and Prioritizing Health Needs

a) Identified Significant Health Needs

The nine topic areas included in the 2017 CHA were selected 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. The top nine issues identified were the same nine issues included in the 2013 CHA and are as follows:

- | | |
|-------------------------------|---------------------------|
| 1. Access to Care | 6. Injury |
| 2. Chronic Disease Prevention | 7. Mental Health |
| 3. Environmental Health | 8. Substance Use Disorder |
| 4. Healthy Pregnancy | 9. Violence Prevention |
| 5. HIV and STDs | |

While the categories remained the same as those in the 2013 assessment, the steering committee recommended changing terms used to describe each category to be more descriptive. Those changes are as follows:

- Responsible Sexual Behavior → HIV & STDs
- Maternal & Child Health → Healthy Pregnancy
- Substance Abuse → Substance Use Disorder

Health disparities and social determinants of health are not addressed as separate categories but rather are incorporated within the analysis of each of the nine topic areas.

Residents were asked to describe their community in terms of six categories: access to health care, community living, senior living, economic opportunity, safety and support for those in need. Residents utilized a five-point Likert Scale to express how much they agreed or disagreed with a particular statement. For purposes of this report, neutral responses were excluded.

In general, residents had highly favorable opinions on most issues. Nearly 1 in 5 residents rated health care access, senior living, economic opportunity and providing support for those in need as issues for their community (scored as disagree or strongly disagree).

b) Analysis and Prioritization

Steering committee members gave a brief 15-minute presentation on the CHA process and the nine health topics included and asked meeting participants to select the top 4 issues they thought needed to be addressed. Nearly 300 community members participated in the Priority Setting “In a Box” events.

Community groups who participated in these events included:

- Generation Nation
- On the Table CLT, Mecklenburg County
- Public Health Lunch & Learns
- Black Treatment AIDS Network (BTAN)
- Leadership Charlotte
- Safe Kids parent meeting
- Parenting classes
- Head Start family class
- YMCA older adult education class
- Kohl's staff meeting
- Atrium Health Emergency Medicine

Recommended Prioritized Health Outcomes

Input from all three prioritization methods were combined to arrive at the final list of priorities for Mecklenburg County.

The nine health issues ranked in order of priority are:

1. Mental Health
2. Access to care
3. Chronic Disease Prevention
4. Violence Prevention
5. Substance Use Disorder
6. Healthy Environment
7. HIV & STD Prevention
8. Healthy Pregnancy
9. Injury Prevention

Action plans were created for the top four prioritized health needs: mental health, access to care, chronic disease prevention and violence prevention.

Facility prioritization

In addition to the community rankings, Novant Health Huntersville Medical Center reviewed the top five diagnosis codes for inpatient and outpatient hospital emergency room visits year-to-date July-December 2018.

Novant Health Huntersville Medical Center Emergency Department
Top 5 Diagnoses YTD July-December 2018

		Outpatient	
Diagnosis	Volume	Diagnosis	Volume
Sepsis, unspecified organism	204	Chest pain, unspecified	624
Hypertensive heart and chronic kidney disease with heart failure and stage 1-4 kidney disease	67	Other chest pains	471
Hypertensive heart disease with heart failure	62	Headache	354
Non-ST elevation (NSTEMI) myocardial infarction	54	Acute upper respiratory infection, unspecified	300
Acute kidney failure, unspecified	49	Urinary tract infection, site not specified	283

A review of the hospital emergency room visits indicated that many of the top inpatient diagnosis codes are correlated with chronic issues affecting the aging population and common symptoms related to heart disease. Upon analysis of the outpatient diagnosis codes, it was apparent that many of the patients seen had symptoms that could be related to a number of chronic conditions, including (but not limited to) heart disease, stroke, diabetes, chronic stress and chronic issues related to aging.

Upon a comprehensive review of the community’s recommended prioritized outcomes and NHHMC’s ED top 5 diagnosis codes, the Novant Health Huntersville 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 top two significant health priorities for Novant Health Huntersville Medical Center:

1. Mental Health, substance use disorder
2. Access to Care

IV. Addressing needs

Novant Health Huntersville Medical Center is diligently working to address each of the identified areas of need through resource allocation and support of the following programs:

<u>Identified Priority</u>	<u>Program</u>	<u>Action:</u>	<u>Intended Outcome:</u>
Mental Health – Substance use disorder	Mental Health TIC/Resiliency Training and Screenings Substance Use recovery and prevention	Provide information and train individuals from various sectors including the nonprofit, and faith community. Develop database of regional resources for appropriate behavioral health and SDOH referrals	Awareness of the 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.
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

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

Health Needs	Local Community Resources Addressing Needs
<ul style="list-style-type: none"> - Access to care - Chronic disease - HIV and STD Prevention - Healthy Pregnancy - Mental health - Substance Use Disorder 	<ul style="list-style-type: none"> • Carolinas CARE Partnership • Camino Community Center • Cardinal Innovations Healthcare • CW Williams Health Center • Charlotte Community Health Clinic • Care Ring • Charlotte Mecklenburg Drug Free Coalition • CMC Biddle Point • CMC Elizabeth Family Practice • CMC Meyers Park • CMC North Park • CREW (Community Resources for Empowerment & Wellness) • Matthews Free Medical Clinic • Mecklenburg County Health Department • MedLink of Mecklenburg • NC MedAssist • Lake Norman Community Health clinic • Physicians Reach Out (administered by Care Ring) • Project 658/Smith Family Wellness • RAIN • Shelter Health Services
<ul style="list-style-type: none"> - Healthy Environment - Injury Prevention - Violence prevention 	<ul style="list-style-type: none"> • Children’s Alliance • Community Domestic Violence Review Team • Community Child Fatality Prevention and Protection Team • City of Charlotte Sustainability Office • Mecklenburg Adult Protective Services • Mecklenburg Child Protective Services • Mecklenburg County Community Support Services (CSS) • New Options for Violent Actions (NOVA) • Safe Alliance

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

V. Impact Evaluation of 2016-2018 Community Health Needs Assessment

Based on the previously reported health data from the 2016-2018 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 Huntersville Medical Center as the following: **Mental health, substance use disorder and access to care.**

No written comments were received on the most recently conducted CHNA and implementation strategy.

To address these priorities, Novant Health Huntersville Medical Center committed to providing community education, screenings and support groups to address these needs, as well as youth-focused physical activity and nutrition programs. From 2016-2018, Novant Health Huntersville Medical Center was successful in implementing selected outreach programs for each of the defined priority areas while meeting the goals established for each program. The major program goal that was set for each priority area was to increase the number of community members reached through screenings and health education. In addition, some programs were established with specific goals to increase the number of classes offered to the community-at-large. All goals were met for each priority area. Specific objectives and measures achieved are described below:

Priority Area	Program	Intended Outcome	Actual Outcome
Diabetes	Community A1C Screenings: Remarkable You community screening initiative in initiative in high African American populations	Early detection of undiagnosed prediabetic and diabetic participants will increase	709 community members were reached through 63 Remarkable You + Biometric screenings that included cholesterol, glucose and A1C exams to measure one's risk for diabetes and 4 diabetes screenings. Of the 615 individuals surveyed for race, 176 (25%) were African American, 33% were white and 23% were Hispanic. Screenings were conducted on site at NHHMC's Solomon House as well as in local public schools and universities, faith communities and health centers.
Diabetes	Community Diabetes Education: Lecture series on diabetes prevention	Knowledge level of participants will increase, and participants will learn new skills to change unhealthy behaviors	Free diabetes education was provided to 1,423 community members through lectures and support groups. Health education lectures occurred in both Spanish and English. Education occurred in the Solomon House on the campus of NHHMC and in local nursing facilities. Among surveyed participants, 100% stated they had learned

			new information they previously did not know or reinforced information about diabetes and 98% stated they had learned new skills regarding diabetes that they would begin applying in their life.
Obesity	Community Body Mass Index (BMI) screenings: Remarkable You community screening initiative	Early detection of undiagnosed obese participants will increase, and participants will learn new skills to change unhealthy behaviors	632 community members were reached through 63 Remarkable You screenings that included an assessment of overweightness and obesity. Among the more than 530 participants surveyed, 88% stated they were previously aware of their risk factors. 99% of individuals indicated they were more aware of their risk factors as a result of the screening. Screenings were conducted on site at NHHMC's Solomon House as well as in local public schools and universities, faith communities and health centers.
Obesity	Community nutrition education: Lectures on healthy eating and weight management	Knowledge level of participants will increase, and participants will learn new skills to change unhealthy behaviors.	807 interactions occurred with community members to provide health education specific to nutrition and weight management. Interactions included 8 exercise sessions, 4 nutrition courses for underserved youth and 22 nutrition lectures in Spanish. Among surveyed participants, 100% stated they had learned new information they previously did not know or reinforced information about nutrition and 97% stated they had learned new skills regarding nutrition that they would begin applying in their life. Education was provided on site at NHHMC's Solomon House as well as in local public schools and universities, faith communities and health centers.
Other Chronic Diseases	Community Cancer screenings: Novant Health mammography unit and community cancer screenings in racial minority populations	Participants will change beliefs about importance of annual screening for early detection and increase adherence for follow up appointments.	Free mammograms were provided to 92 uninsured women through 4 mobile mammography events at free clinics and community centers. Among the 92 participants whose race was surveyed, 55% were Hispanic/Latino, 27% were African American, 16% were Caucasian, and 1% were another ethnicity.

<p>Other Chronic Diseases</p>	<p>Community education: Lectures on healthy lifestyles and heart disease, stroke and/or cancer prevention</p>	<p>Knowledge level of participants will increase, and participants will learn new skills to change unhealthy behaviors.</p>	<p>Free health education was provided through 1,078 interactions with community members via lectures and support groups. Outreach included individualized health coaching for people living with chronic disease, a breast cancer support group, 19 heart health classes, and 5 cancer prevention talks. Education occurred free clinics, community gatherings, and on the campus of NHHMC. Among surveyed participants, 98% stated they had learned new information they previously did not know or reinforced information about chronic disease and 95% stated they had learned new skills regarding chronic disease that they would begin applying in their life.</p>
<p>Other Chronic Diseases</p>	<p>Cardiac screenings: Heart health screenings for community-at-large</p>	<p>Detection of undiagnosed heart disease risk factors among participants will increase</p>	<p>1,095 community members were reached through 63 Remarkable You screenings, 4 vascular screenings, 4 cholesterol screenings, and 17 blood pressure screenings. Among the more than 600 participants surveyed, 89% stated they were previously aware of their risk factors. 99% of individuals indicated they were more aware of their risk factors as a result of the screening. Screenings were conducted on site at NHHMC's Solomon House as well as in local public schools and universities, faith communities and health centers.</p>
<p>Maternal & Infant Health</p>	<p>Prepared childbirth classes: Lectures on healthy pregnancy, reducing risk factors and infant care</p>	<p>Knowledge level of participants will increase, and participants will learn new skills and decrease risk factors</p>	<p>Through 6 childbirth preparation sessions, and 6 pediatric care lectures, 297 mothers and their family members received education in the area of maternal and infant health. Of the more than 100 individuals surveyed, 90% stated they had learned new information they did not know or reinforced information about maternal health and 90% stated they had learned new skills regarding maternal health that they would begin applying in their life.</p>

VI. Appendix A

Advisory group agencies for 2017 Mecklenburg County CHA

Steering Committee for Mecklenburg County CHA	
Agency	
	Atrium Health
	Centralina Area Agency on Aging**
	Mecklenburg County Park & Recreation
	Mecklenburg County Public Health*
	Novant Health
	UNC Charlotte

- *Representative of a state, local, tribal, or regional governmental public health department (or equivalent department or agency)
- ** Members of medically underserved, low-income, and minority populations in the community served by the hospital facility, or individuals or organizations serving or representing the interests of such populations

For a full list of agencies involved in priority setting event, including those representing underserved, low-income, and minority populations; and governmental public health please visit <https://www.mecknc.gov/HealthDepartment/HealthStatistics/Documents/2017%20Mecklenburg%20CHA%20with%20Appendix%20March%208.pdf>