Novant Health Huntersville Medical Center

Community Benefit Implementation Plan
Mecklenburg County, North Carolina
2016-2018

Approved by the Novant Health Southern Piedmont Region Board of Trustees on October 26, 2016
Table of Contents

I. Introduction
   a. Organization Overview 3
   b. Our Community 4

II. Prioritized Health Needs
   a. County prioritization 6
   b. Facility prioritization 7

III. Issues identified for remediation
   a. Priority 1: Diabetes 9
   b. Priority 2: Obesity 10
   c. Priority 3: Other chronic disease 10
   d. Priority 4: Maternal & infant health 11

IV. Unaddressed needs 12

V. Role of the board & administration 13

Appendix
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 2013 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 is a non-profit integrated health care system of 14 medical centers and a medical group with over 500 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 25,000 employees and physician partners care for patients and communities in North Carolina, Virginia, South Carolina and Georgia.

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 good corporate citizen, 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 Community

Primary and Secondary Service Areas

Mecklenburg County contains seven municipalities including the City of Charlotte, and the towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill and Pineville. According to the U.S. Census Bureau 2014 population estimate, Mecklenburg County’s population increased 10.1% to 1,012,539 making Mecklenburg County the most populated and densely populated county in North Carolina.

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:

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>City</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>28031</td>
<td>Cornelius</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28078</td>
<td>Huntersville</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28269</td>
<td>Charlotte</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28216</td>
<td>Charlotte</td>
<td>Mecklenburg</td>
</tr>
</tbody>
</table>

The Primary Service Area includes the City of Charlotte and the Towns of Cornelius and Huntersville, which are all located in Mecklenburg County. The Secondary Service Area for Novant Health Huntersville Medical Center includes cities and towns beyond Mecklenburg County geographical boundaries:

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>City</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>28036</td>
<td>Davidson</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28115</td>
<td>Mooresville</td>
<td>Iredell</td>
</tr>
<tr>
<td>28164</td>
<td>Stanley</td>
<td>Gaston</td>
</tr>
<tr>
<td>28117</td>
<td>Mooresville</td>
<td>Iredell</td>
</tr>
<tr>
<td>28214</td>
<td>Charlotte</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28027</td>
<td>Concord</td>
<td>Cabarrus</td>
</tr>
<tr>
<td>28262</td>
<td>Charlotte</td>
<td>Mecklenburg</td>
</tr>
<tr>
<td>28120</td>
<td>Mt Holly</td>
<td>Gaston</td>
</tr>
<tr>
<td>28080</td>
<td>Iron Station</td>
<td>Lincoln</td>
</tr>
<tr>
<td>28037</td>
<td>Denver</td>
<td>Lincoln</td>
</tr>
</tbody>
</table>
Population
Mecklenburg County is the center of the country’s fifth largest urban area with over seven million people living within a 100-mile radius. The county consists of a large urban center surrounded by smaller, more rural communities.

Mecklenburg County Population by Race & Ethnicity (2014)

<table>
<thead>
<tr>
<th></th>
<th>Mecklenburg County</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Estimate</td>
<td>1,012,539</td>
<td>9,943,964</td>
</tr>
<tr>
<td>Persons Under 5 Years, percent 2014</td>
<td>7.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Persons Under 18 Years, percent 2014</td>
<td>24.6%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Person 65 Years &amp; Over, percent 2014</td>
<td>10.0%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Female Persons, percent 2014</td>
<td>51.9%</td>
<td>51.3%</td>
</tr>
<tr>
<td>White Alone, percent 2014</td>
<td>59.2%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Black/African-American Alone, percent 2014</td>
<td>32.2%</td>
<td>22.1%</td>
</tr>
<tr>
<td>American Indian &amp; Alaska Native Alone, percent 2014</td>
<td>0.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Asian Alone, percent 2014</td>
<td>5.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Native Hawaiian &amp; Other Pacific Islander Alone, percent 2014</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Two or More Races, percent 2014</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Hispanic or Latino, percent 2014</td>
<td>12.7%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau (2014).

Children and adolescents make up over one-third (31.6%) of the population in Mecklenburg County, while seniors only make up 10% of the population. From 2010 to 2020, the population of Mecklenburg County is 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 (53.5%) of the racial demographic in Mecklenburg County.

<table>
<thead>
<tr>
<th>Median Income by Educational Attainment</th>
<th>Population Educational Attainment (≥ 25 yrs old)</th>
<th>Poverty Rate by Educational Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; High School diploma</td>
<td>&lt; HS diploma/GED 11.2%</td>
<td>Less than high school graduate 31%</td>
</tr>
<tr>
<td>High school Graduate</td>
<td>HS diploma/GED 18.7%</td>
<td>High school graduate (includes equivalency) 16%</td>
</tr>
<tr>
<td>Some college or associate's degree</td>
<td>Some college or associate's degree 28.2%</td>
<td>Some college, associate's degree 12%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>Bachelor's degree 28.3%</td>
<td>Bachelor's degree or higher 5%</td>
</tr>
<tr>
<td>≥ Graduate or professional degree</td>
<td>≥ Graduate degree 13.6%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Mecklenburg County 2015 Community Pulse

Mecklenburg County residents with graduate or professional degrees earn a median income that is 2.5 times higher than the median income for someone with only a high school education.\(^2\) According to the U.S. Census 2009-2013 data, the median household income in Mecklenburg County is $55,444. A key indicator to evaluate economic condition of Mecklenburg County is the poverty rate. The poverty rate for Mecklenburg County residents decreases as the amount of education increases, with 26% gap in poverty between residents who are not high school graduates and residents who have a bachelor’s degree or higher.

II. Prioritized Health Needs

**Identified Significant Health Needs**

From participant responses, it was apparent that mental health, chronic disease prevention, access to care and violence prevention were the most important concerns of Mecklenburg County residents. Other key data points included:

- When asked to identify specific health behaviors residents are trying to change, respondents identified 1) eating or drinking healthier foods (89.7%), 2) being more active (84.5%), 3) managing stress (50.1%), 4) reducing chances for injury (33.2%), and 5) limiting alcohol consumption (11.8%).
- When asked to identify the greatest health related concerns, respondents identified 1) none (62.6%), 2) some or all family members without health insurance (30.4%), 3) irregular dental care because of cost (30.2%), 4) irregular eye exams/new glasses because of cost (22.0%), and costs related to being uninsured (15.8%).
- When asked to identify things that could help residents who smoke to stop smoking, respondents identified 1) access to nicotine substitutes (26.7%), 2) support group/cessation classes (22.5%), 3) access to medications (19.4%), 4) free 24-hour help line/Quitline (14.8%), and 5) tobacco free policy at my workplace (14.4%).
- When collectively reviewing all the responses, residents identified the community’s greatest health issues as mental health (55.6%), chronic disease prevention (55.6%), access to care (50.5%), violence prevention (46.5%), substance abuse prevention (43.8%), healthy environment (41.3%), sexual behavior (26.6%), injury prevention (23.0%), and maternal and child health (21.5%).

**a) County Prioritization**

On October 25, 2013 117 individuals representing diverse number of community agencies and groups attended a formal CHA Priority Setting meeting. Participants were asked to score identified health issues after viewing a presentation on data specific to the nine priority areas. The nine priority areas are listed as follows:

1) Access to Care  
2) Chronic Disease and Disability

\(^2\) Mecklenburg County: Community Pulse 2015.  
Participants then scored the areas from 1 (least weight) to 10 (most weight) using the following five criteria: magnitude, severity, intervention effectiveness, public concern and urgency. The calculated scores were used to rank the focus areas, and the weighted rankings from the community opinion surveys and the priority focus exercise were combined with the following results:

1) Chronic Disease and Disability
2) Mental Health
3) Access to Care
4) Violence
5) Substance Abuse
6) Environmental Health
7) Maternal Child Health
8) Responsible Sexual Behavior
9) Injury

**Recommended Prioritized Health Outcomes**
For each of the identified areas, recommendations were made for the top four prioritized health needs. Below is a summary of those recommendations:

- **Preventing Chronic Disease and Disability**: increase opportunities for physical activity through safe community spaces, improve access to healthy foods and food choices, create policies to support increased physical activity and healthier food choices, increase access to healthcare providers.
- **Mental Health**: work to decrease stigma associated with seeking mental health care, promote communication and collaboration among healthcare providers, promote mental health first aid, and limit access to firearms.
- **Access to Care**: address barriers to access other than funding such as transportation, non-traditional hours, cultural competence, health literacy awareness and training, improved and reliable funding for free or low cost health services, and improved communication and awareness of services and how to access them.
- **Violence Prevention**: change norms regarding violence, promote efforts that help create community bonds, expand community partnerships, begin violence prevention education at the pre-K level, increase after school activities to keep kids active and engaged, use violence assessment tools to ensure consistent messages to encourage healthcare professionals to ask about safety at each encounter, increase awareness of the importance of reporting child abuse, and increase efforts to address domestic violence.

**b) 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 January – July 2015.
### Novant Health Huntersville Medical Center Emergency Department

#### Top 5 Diagnoses YTD Jan-July 2015

<table>
<thead>
<tr>
<th>Inpatient</th>
<th>Volume</th>
<th>Outpatient</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Septicemia NOS</td>
<td>254</td>
<td>Chest pain NOS</td>
<td>494</td>
</tr>
<tr>
<td>Urinary tract infection NOS</td>
<td>38</td>
<td>Chest pain NEC</td>
<td>477</td>
</tr>
<tr>
<td>Syncope and collapse</td>
<td>14</td>
<td>Headache</td>
<td>387</td>
</tr>
<tr>
<td>Chest pain NOS</td>
<td>12</td>
<td>Urinary tract infection NOS</td>
<td>385</td>
</tr>
<tr>
<td>Chest pain NEC</td>
<td>5</td>
<td>Acute urinary tract infection NOS</td>
<td>350</td>
</tr>
</tbody>
</table>

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 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 four significant health priorities for Novant Health Huntersville Medical Center:

1. Diabetes
2. Obesity
3. Other Chronic Diseases
4. Maternal and Infant Health

#### III. Issues for remediation

In the following section Novant Health Huntersville Medical Center will address each of the top four prioritized needs. Each need includes actions that must be taken to achieve improved community health. Outlined within each need, Novant Health Huntersville Medical Center will identify the description of need, programs, resources and intended actions, anticipated impact, priority populations, evaluation plan, intervention strategies, tactics for achievement, growth targets, and community partners.

The following action plans were developed through evaluation of Novant Health Huntersville Medical Center programs and the U.S. Department of Health and Human Services “Healthy People 2020” topics.
To determine anticipated impact, Healthy People 2020 objectives were reviewed and integrated into each priority area. As a leader committed to improving the nation’s health, it is imperative to Novant Health Huntersville Medical Center that our guiding principles in defining our role in community health outreach and advocacy be well aligned with the Healthy People’s goal of achieving health equity and eliminating disparities. (See Appendix A for Healthy People 2020 objectives that were evaluated.)

a) **Priority 1: Diabetes**

Since 2010, Diabetes has moved up as a leading cause of death in Mecklenburg County and disproportionately affected African-Americans. Based on the same statistics, diabetes ranked as the fourth most common cause of death in non-whites.

**Programs, resources and intended actions to address diabetes:** Novant Health Huntersville Medical Center offers community based services including education for diabetes prevention and diabetes management, as well as glucose and A1C screenings. All of the these programs are intended to increase awareness of diabetes, promote healthy lifestyles that prevent disease, provide education around management and monitoring techniques and support patients through the initial stages of diagnosis and treatment.

<table>
<thead>
<tr>
<th>SIGNIFICANT HEALTH NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNITY BENEFIT ACTIONS</strong></td>
</tr>
<tr>
<td>Community A1C screenings</td>
</tr>
<tr>
<td>Community diabetes education</td>
</tr>
</tbody>
</table>

b) **Priority 2: Obesity**

In the Community Health Assessment, residents were asked a series of questions related to health behavior choices. In 2012, over 59% of Mecklenburg adult residents were reportedly overweight or obese, and approximately 20% of adults reported some physical activity in the past month. In 2011, only 18% of Mecklenburg County adults consumed five or more servings of fruits and vegetables a day, and one third of teens reported spending three hours or more per day playing video games or using a computer for something other than school work on an average school day.

**Programs, resources and intended actions to address obesity:** Novant Health Huntersville Medical Center offers programs to address obesity, including body mass index screenings, and nutrition education. Additionally, Novant Health Huntersville Medical Center collaborates with various community partners to support other nutrition and fitness programs throughout Mecklenburg County.
All programs and partnerships are intended to increase exposure and access to healthy foods, decrease weight loss and lower overall health risk factors.

<table>
<thead>
<tr>
<th>SIGNIFICANT HEALTH NEED: OBESITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNITY BENEFIT ACTIONS</strong></td>
</tr>
<tr>
<td>Community Body Mass Index (BMI) screenings</td>
</tr>
<tr>
<td>Community nutrition education</td>
</tr>
</tbody>
</table>

**c) Priority 3: Other Chronic Diseases**

Cancer and heart disease are ranked the first and second leading causes of death, respectively, in Mecklenburg County and in the state of North Carolina. The number of cancer deaths decreased 3.9% from 2010 to 2011. Cancer deaths decreased 10.3% for men and increased 3.2% for women in Mecklenburg County. In addition, women tend to die of higher rates of Alzheimer’s and other chronic diseases than men in Mecklenburg County.

Programs, resources and intended actions to address other chronic diseases: Novant Health Huntersville Medical Center provides mobile mammography services and clinical breast exams to uninsured/underinsured women. All of these screenings are designed to increase early detection of cancer. Additionally, Novant Health Huntersville Medical Center offers heart risk assessments, vascular screenings, and cardiac education that are designed to increase the community’s awareness of risk factors, prevent unnecessary cardiac related problems, and connect individuals to prevention and management services.

<table>
<thead>
<tr>
<th>SIGNIFICANT HEALTH NEED: OTHER CHRONIC DISEASES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNITY BENEFIT ACTIONS</strong></td>
</tr>
<tr>
<td>Community Cancer screenings</td>
</tr>
</tbody>
</table>
**Community education** | Lectures on healthy lifestyles and chronic disease and/or cancer prevention | Knowledge level of participants will increase and participants will learn new skills to change unhealthy behaviors
---|---|---
**Cardiac screenings** | Heart and vascular screenings for community-at-large | Detection of undiagnosed heart disease risk factors among participants will increase

*d) Priority 4: Maternal and Infant Health*

The weight and gestational age of a newborn infant are the most important predictors for his or her subsequent health and survival. Infants born preterm (<37 weeks) and or at low birth weight (<2,500g or 5 lbs. 8 oz.) have a much greater risk of death and both short and long-term disability than full term infants. In 2011, black preterm and low birth weight rates remained the highest of all race/ethnic groups in Mecklenburg County. Additionally, of concern is the considerable gap between the mortality rates for white infants and infants of other races. From 2007-2011 the rate for non-Hispanic black infants (11.1 per 1,000 live births) was 3 times greater than the rate for non-Hispanic white infants (3.1). Another area for concern is the number of infant deaths caused by Accidental Suffocation. These deaths are due to unsafe sleep practices and are preventable.

**Programs, resources and intended actions to address maternal and infant health:** Novant Health Presbyterian Medical Center offers community education on healthy pregnancy and breastfeeding basics, along with courses in prepared childbirth, sibling preparation and infant care. All services are intended to increase knowledge of healthy pregnancy, risk factors related to low birth weight babies and provide parents-to-be with education and resources related to raising a healthy infant.

<table>
<thead>
<tr>
<th><strong>SIGNIFICANT HEALTH NEED</strong></th>
<th><strong>MATERNAL AND INFANT HEALTH</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNITY BENEFIT ACTIONS</strong></td>
<td><strong>PROGRAM</strong></td>
</tr>
</tbody>
</table>
| Prepared childbirth classes | Lectures on healthy pregnancy, reducing risk factors and infant care | Knowledge level of participants will increase and participants will learn new skills and decrease risk factors

**IV. Unaddressed health needs**

Although Novant Health Huntersville Medical Center is working to address several significant needs in the community, we are unable to impact all identified county priorities, but will support community partners as appropriate with the following known issues:
### Health Needs
- **Access to care**
- **Chronic disease and disability**
- **Maternal and infant health**
- **Responsible sexual behavior**

### Local Community Resources Addressing Needs
- CW Williams Health Center
- Charlotte Community Health Clinic
- Charlotte Volunteers in Medicine Clinic
- Care Ring
- CMC Biddle Point
- CMC Elizabeth Family Practice
- CMC Meyers Park
- CMC North Park
- Free Clinics of Our Town (Davidson)
- Matthews Free Medical Clinic
- Mecklenburg County Health Department
- NC MedAssist
- Lake Norman Community Health clinic
- Physicians Reach Out (administered by Care Ring)
- Shelter Health Services
- Bethesda Health Center

### Community resources addressing:
- **Environmental health**
- **Injury**
- **Mental health**
- **Substance abuse**
- **Violence**

### Local Community Resources Addressing Needs
- Children’s Alliance
- Charlotte Mecklenburg Drug Free Coalition
- Community Domestic Violence Review Team
- Community Child Fatality Prevention and Protection Team
- Charlotte Housing Authority
- Homeless Services Network
- HIV Community Task Force
- Mecklenburg Safe Routes to School
- MAPPR – Mecklenburg Area Project for Primary Care Research
- Mecklenburg Food Policy Council
- Mecklenburg Fruit & Vegetable Coalition
- MedLink of Mecklenburg

### V. Role of the board and administration
The Novant Health Southern Piedmont Region Board of Trustees and Novant Health Huntersville Medical Center administration are active participants in the community benefit process. Through strategic planning initiatives focused on chronic disease, community health outreach, and access to care, leadership provides direction on actions and intended impact, and serves as the approving body for the community health needs assessment and community benefit implementation plan. Administrative leaders serve on the County assessment process teams, priority setting committee and action planning team and hospital board members participate and provide influence to the community benefit plans. All
members are actively involved in the priority setting discussion and outreach planning process. Additionally, community benefit reports are provided to the board and facility leadership teams throughout the calendar year for ongoing education.
Appendix A: Healthy People 2020 Indicators

Diabetes
- Increase the proportion of persons with diabetes whose condition has been diagnosed (Healthy People 2020; D-15).
- Increase the proportion of persons with diagnosed diabetes who receive formal education (Healthy People 2020; D-14).

Obesity
- Increase the proportion of adults who are at a healthy weight (Healthy People 2020; NWS-8).
- Reduce the number of children and adolescents who are considered obese (Healthy People 2020; NWS-10).

Heart Disease and Stroke
- Increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high (Healthy People 2020; HDS-4)
- Reduce the proportion of persons in the population with hypertension (Healthy People 2020; HDS-5)

Cancer
- Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines (Healthy People 2020; C-17).

Infant Mortality
- Increase the proportion of pregnant women who attend a series of prepared childbirth classes (Healthy People 2020; MICH-12)