Community Health Needs Assessment

FY 2013 – FY 2015

NORTHSIDE HOSPITAL
CHEROKEE

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Executive Summary

About Us

In 1960, R.T. Jones Memorial Hospital was established by the Cherokee County Hospital Authority as a 64-bed general acute care hospital. Today, Northside Hospital, Inc. is the owner and operator of the 84-bed general acute care hospital now known as Northside Hospital-Cherokee. As the only hospital in Cherokee County, NHC provides critical access services such as emergency services, neonatal intermediate care services and therapeutic cardiac catheterization services in addition to other important hospital-based services such as surgery, cancer care and radiology. NHC is committed to serving all patients regardless of their ability to pay as evidenced by the $24.2 million in indigent and charity care provided in 2011. This amount represents 11.7% of the hospital's 2011 adjusted gross revenue.

Our Community

Located in Cherokee County, NHC is the sole-county provider and primarily serves the residents of Cherokee and Pickens counties. In fact, these two counties[1] represent 84% of total inpatient and outpatient volume. Thus, for this Community Health Needs Assessment ("CHNA"), NHC defined its "Community" based on these two counties. It is important to note that no high-priority populations, (e.g., indigent, minority, medically underserved or those with chronic conditions) were excluded from NHC's definition of Community.

Currently, Cherokee County is the seventh largest county in Georgia and is projected to be the state's fifth largest county by 2020. In 2011, an estimated 250,000 people resided in NHC's Community and the median age was 36; slightly higher than the median age for Georgia's total population. A significantly higher percentage of the Community is Caucasian (86%) compared

[1] Inclusive of ZIP codes contained in whole or in part in Cherokee and Pickens counties.

to the state (61%). The percentage of the Community's total population that is Hispanic or Latino is the same as Georgia's statewide rate of nine percent (9%).

The Community's educational attainment is higher than Georgia's experience as 23% of the Community's population hold bachelors' degrees compared to 18% for Georgia. Forty-seven percent (47%) of the Community's population had 2011 household incomes between $25,000 and $74,999 as did Georgia. The Community is insulated from unemployment more so than the state as nearly 65% of the Community's working-age population is employed compared to 59% for Georgia. Accordingly, the Community's poverty rate (6%) is considerably lower than Georgia's poverty rate (12%).

NHC's Community has a strong middle-class population who are adversely affected by the current broader economic conditions. As stated by one of the Community's stakeholders, *"We are not seeing only the "typical" patients of yester-year, we are seeing a new population emerge from an economy that has devastated middle class families."* For those families in poverty or those who are considered working poor, it often is difficult for them to identify and obtain the emergency relief needed given that they reside in a northern, somewhat mountainous area removed from the densely populated metro Atlanta area.

Our Community's Access to Care

An estimated 18% of the Community's population under the age of 65 is uninsured.[2] There are two (2) general acute care hospitals located within the Community and in 2011, these hospitals provided $36.5 million in total indigent and charity care combined. In fact, NHC provided the higher dollar amount of indigent and charity care. Also, given the Community's rapid population growth, particularly the rapidly growing 65+ population, these two hospitals have insufficient inpatient bed capacity to meet the Community's inpatient demand.

[2] U.S. Census Bureau, Small Area Health Insurance Estimates, 2010 data.

According to the U.S. Department of Health and Human Services, a large portion (if not the majority) of NHC's Community has an insufficient number of primary care physicians per population; therefore, all of Pickens County and northeastern Cherokee County are designated as Medically Underserved Areas ("MUAs"). In terms of patient access to physicians, minority respondents appear more satisfied with their access to medical care when needed (i.e., physician visit) compared to Caucasian respondents. To illustrate, 7% of Caucasian respondents reported dissatisfaction with their access to medical care when needed compared to 0% of Black or African American respondents and 0% of Hispanic respondents. These results are atypical to Georgia's experience and may be attributed to the disproportionately high percentage of Caucasians in the Community.

In the Community, there appears to be an inverse relationship between emergency room ("ER") utilization and household income: 41% of households with income under $25,000 reported ER utilization compared to just 26% of households with income over $75,000, indicating that the ER serves as the primary source of healthcare access for many low-income residents. Similarly, 24% of uninsured respondents reported ER utilization but only 21% reported utilizing outpatient or same day surgery. Thus, there appear to be barriers to routine, outpatient care which lead to higher utilization of the ER, likely for many non-emergent services, for low-income and uninsured members of the Community.

Our Community's Health Status

Healthy lifestyle behaviors such as eating a balanced diet with plenty of fresh fruits and vegetables, getting regular exercise and not smoking all help increase a person's or community's health status. NHC's Community underperforms many of the national and state benchmarks for healthy lifestyle behaviors; therefore, there is opportunity for improvement as risk for many diseases such as cancer and cardiovascular disease can be reduced with increased health lifestyle behaviors.

Much like ER utilization and household income, an inverse relationship exists between household income and self-reported health status. For example, 50% of Community respondents with household income less than $25,000 reported their health status as Fair or Poor compared to only 22% of households with income over $75,000.

Not surprisingly, the number of chronic conditions reported increased with age as Community respondents' ages 18-34 reported 2.4 chronic conditions compared to 4.5 chronic conditions reported for respondents' age 65-and-older. Smoking, high blood pressure, high cholesterol, and depression/anxiety disorder affect *all segments* of the Community.

As with chronic conditions, the number of preventive health behaviors ("PHBs") reported by Community respondents also increased with age: Respondents' age 18-34 reported 3.5 PHBs compared to 5.1 behaviors for respondents' age 65-and-older. Not surprisingly, lower income households reported fewer PHBs (2.7) than did higher income households (5.2). Numerous analyses were performed on the PHBs data by select populations (e.g., uninsured, low income and minority) a couple noteworthy observations follow. First, carotid artery screening, pre-natal care and stop smoking programs are the least utilized PHBs among all segments of the Community; including vulnerable populations. Second, there do not appear to be any disparities in utilization of PHBs among Black or African American respondents as this population reported PHB utilization similar to Caucasians: 4.1 vs. 4.3.

The top two leading causes of death for NHC's Community are major cardiovascular disease and cancer; particularly lung. It is worth noting that while African Americans are at higher risk of developing certain diseases such as cardiovascular disease, prostate cancer and colorectal cancer, important preventive health screenings for these diseases are among the lowest utilized PHBs by the Community's African American population.

Another important measure of our Community's health status is the health status of our Community's mothers and babies. In 2010, 2.4% of Georgia's babies were born to a mother

who resided in a NHC Community county. The rate of premature babies for our Community was 9%, which is lower than the state-wide rate of twelve percent 12%.

Community Stakeholders

NHC sought input from stakeholders representing the broad interests of the community with particular emphasis on those representing vulnerable populations and/or with special knowledge in health care. A total of thirteen (13) interviews were conducted with stakeholders from various segments of the Community including business, local governments, health experts, and community organizations.

The stakeholders received a standard discussion guide to ensure a consistent methodology was utilized across all interviews. Among other issues, the discussion guide sought to uncover (A) the top issues negatively impacting the Community's health and (B) if the top issues mentioned were not health related, the top health issues facing the Community. A summary of the responses is provided below.

(A) Top issues negatively impacting the Community's health.

1. Lack of healthcare insurance
2. Ignorance about healthcare options
3. Transportation
4. Access to affordable care
5. Poverty

(B) Top health-related issues impacting the Community.

1. Obesity/diabetes/poor nutrition
2. Dental care
3. Lack of pre-natal care/infant mortality/prematurity
4. Cardiovascular health
5. Mental health

Needs We Will Address

NHC assessed the health needs of its Community through a variety of “lenses”: (1) overall access to health care, (2) the current health status of the Community and (3) important needs as identified by Community stakeholders. In total, 26 needs were identified. NHC consolidated the needs into different categories and then developed a five-step process for prioritizing the identified needs. The analysis resulted in the following list of needs that NHC will focus on based on the magnitude of the issue, the severity of the issue, the fit of the issue with NHC’s mission/expertise, the effect improvement will have on the broader Community and last, the effect improvement will have on vulnerable populations.

1. Healthy Lifestyle Behaviors
2. Cardiovascular Disease
3. Preventive Health Services
4. Primary Care
5. Cancer

Needs We Will Not Address

Unfortunately, NHC is unable to address directly all of the Community’s identified needs due to limited resources, magnitude/severity of the issue, existing resources available to meet the need, etc. The identified Community needs that NHC is not going to directly address at this time include: 1) affordable care, 2) maternal and infant health, 3) specialty care, 4) obesity, 5) mental health, and 6) transportation.

Some of the needs not selected (i.e., obesity) likely will benefit from activities undertaken to meet selected needs (i.e., healthy lifestyle behaviors, preventive health services and primary care). Needs not selected such as affordable care and transportation are not within NHC’s expertise and therefore NHC would be unable to effectively influence improvement. NHC already is serving as a resource, especially for vulnerable populations, for other needs identified but not adopted as part of this CHNA (i.e., maternal and infant health and mental health). In

addition, there are existing Community resources available to also meet these identified needs. Thus, in order to maximize its resources, NHC has not selected maternal and infant health and mental health as needs on which to focus further. Lastly, while specialty care was identified as a Community need, NHC has existing programs and efforts in place to increase the number of specialists associated with the hospital and has more than doubled the medical staff over the past several years. NHC will indirectly address the identified need for additional specialists through its existing and ongoing medical staff development efforts.

Overview of Our Implementation Strategy

While all of the identified needs affect the broader community, certain needs disproportionately impact vulnerable populations such as low-income persons or minority populations. Accordingly, NHC's implementation strategy will reflect the unique dynamics of each identified need and will employ tactics to ensure appropriate distribution of resources.

NHC intends to utilize myriad strategies to address the Community's needs including:

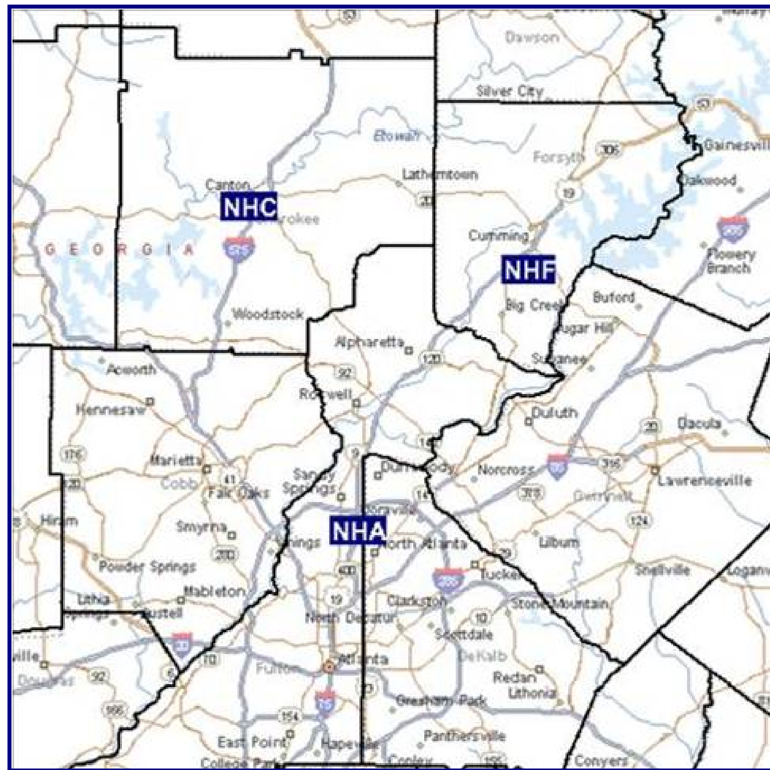
1. Financial assistance on behalf of uninsured, underinsured and low-income persons.
2. Community health improvement services:
    - Community health education outreach.
    - Community health screenings.
    - Support groups.
    - Community-based clinical services for reduced cost or free.
    - Health care support services such as enrollment assistance for government-funded health programs.
3. Collaborating with other mission-driven organizations to address health disparities and improve the Community's health status.
4. Financial and in-kind contributions for community benefit.
5. Reinvesting capital to expand or establish services and/or facilities in response to Community need.

Northside Hospital Cherokee

I. Introduction

About Us

The Northside Hospital System (“Northside”) is composed of three not-for-profit hospitals located across the northern metropolitan Atlanta area: 1) Northside Hospital-Atlanta (“NHA”), 2) Northside Hospital-Cherokee (“NHC”), and 3) Northside Hospital-Forsyth (“NHF”).



Naturally, given the hospitals’ proximity to one another and each hospital’s patient catchment area, there is some degree of overlap among the three hospitals’ service areas. However, in accordance with the Patient Protection and Affordable Care Act of 2010 (the “Affordable Care Act”) and Internal Revenue Service Notice 2011-052, each hospital developed its own Community Health Needs Assessment (“CHNA” or “Assessment”) reflective of the Community it serves. This Assessment specifically addresses the needs identified for NHC’s Community.

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Cherokee. As the only hospital in Cherokee County, NHC provides critical access services such as emergency services, neonatal intermediate care services and therapeutic cardiac catheterization services in addition to other important hospital-based services such as surgery, cancer care and radiology. Also, NHC has several outpatient centers located throughout its Community.

NHC is committed to serving all patients regardless of their ability to pay as evidenced by the $24.2 million in indigent and charity care provided in 2011. This amount represents 11.7% of the hospital's 2011 adjusted gross revenue.

Our Mission

Northside Hospital is committed to the health and wellness of our Community. As such, we dedicate ourselves to being a center of excellence in providing high-quality health care. We pledge compassionate support, personal guidance and uncompromising standards to our patients in their journeys toward health of body and mind. To ensure innovative and unsurpassed care for our patients, we are dedicated to maintaining our position as regional leaders in select medical specialties. And to enhance the wellness of our Community, we commit ourselves to providing a diverse array of educational and outreach programs.

Our Values

Northside's outstanding reputation in its industry is fueled by an instinctive devotion to a unique set of values. This statement of values defines and communicates those guiding, motivating philosophies that have led us to distinction.

- Excellence
- Compassion
- Community
- Service
- Teamwork
- Progress and Innovation

Our Community Health Needs Assessment Process

Northside developed a standardized process for conducting each hospital's CHNA. In short, Northside's Assessment process includes:

1. Review of hospital internal data.
2. Review of publicly available health data.
3. Review of proprietary quantitative consumer research data.
4. Stakeholder input from a variety of stakeholders representing the broad interests of the Community.
5. Summary and prioritization of needs identified.
6. Development of an implementation plan to address the needs identified.
7. Presentation of Assessment and implementation plan to Board of Directors of Northside Hospital, Inc.
8. Public access to each hospital's Assessments.

Dedicated to Serving Our Community

II. Our Community

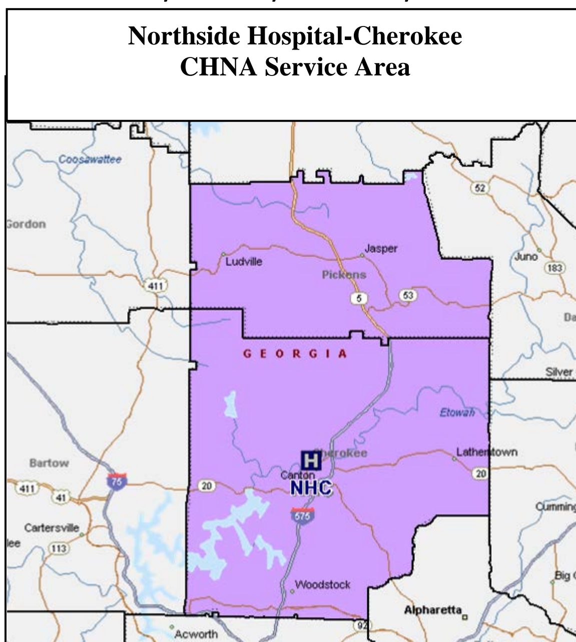
How We Defined Our "Community"

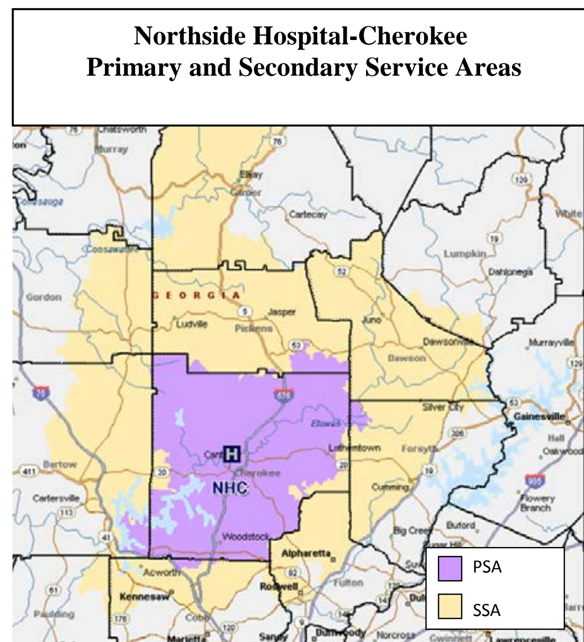
Located in Cherokee County, Georgia, NHC is the sole-county provider and primarily serves the residents of Cherokee and Pickens counties. In fact, these two counties[3] represent 84% of total inpatient and outpatient volume. Thus, for this CHNA, NHC defined its "Community" based on these two counties. It is important to note that no high-priority populations (e.g., indigent, minority, medically underserved or those with chronic diseases) were excluded from the definition. The below chart lists the counties that comprise the NHC Community.

Northside Hospital-Cherokee CHNA Community Definition	% Total Cases
CHEROKEE COUNTY PICKENS COUNTY	84%

Note: Composed of ZIP codes assigned to and crossing into Cherokee and Pickens counties.

As the maps below illustrate, the Community definition used for NHC's CHNA, is similar to the hospital's service area. Thus, the CHNA Community definition is an accurate representation of the Community actually served by NHC.





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[3] Inclusive of ZIP codes contained in whole or in part in Cherokee and Pickens counties.

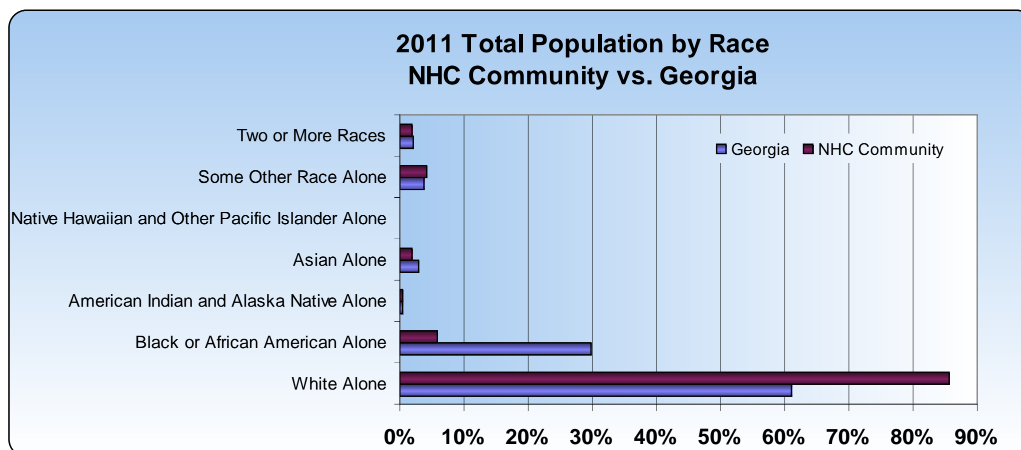
Demographic Characteristics of Our Community

Age and Gender

Currently, Cherokee County is the seventh largest county in Georgia and is projected to be the state's fifth largest county by 2020. In 2011, an estimated 250,000 people resided in NHC's Community.[4] The gender ratio was balanced, essentially 50/50, and the median age was 36; slightly higher than the median age for Georgia's total population. Females 15-44 represented 22% of the Community's total population compared to 21% of Georgia's and the 65+ age group represented 10% of the Community's total population compared to 11% for the state.

Race and Ethnicity

NHC's Community predominately is Caucasian with African Americans comprising the largest minority population. The chart below compares the racial composition of NHC's Community to Georgia. A significantly larger percentage of NHC's Community (86%) is Caucasian as compared to the state (61%). Six percent (6%) of the Community's population is Black or African American compared to thirty percent (30%) for the state. Lastly, the Community's percentage of Hispanic or Latino population is the same as Georgia's statewide rate of 9%.

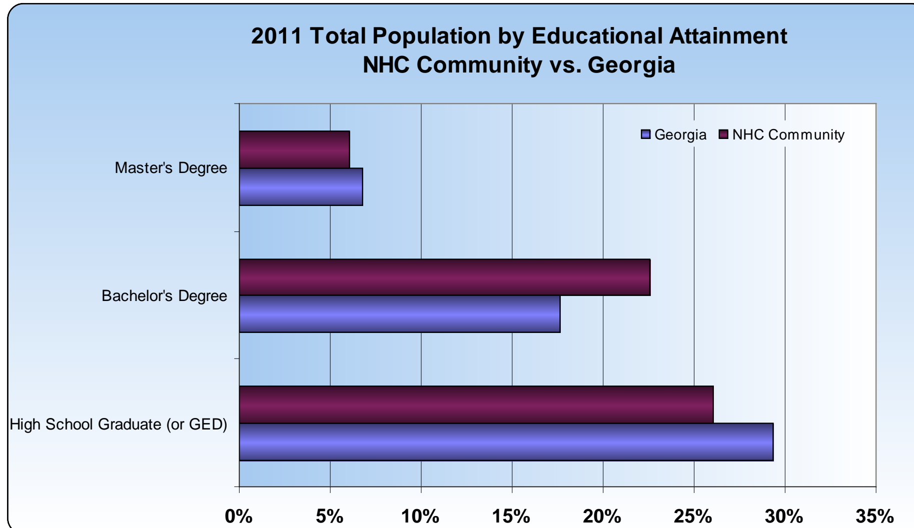


Source: Nielsen Claritas

[4] Source: Nielsen Claritas

Educational Attainment and Financial Status

As post-secondary education increases, so too does earning potential. NHC's Community can be categorized as middle-class in terms of the highest educational attainment achieved, household income and housing values. As illustrated in the chart below, the percentage of NHC's Community with a bachelor's degree (23%) is higher than the state-wide rate (18%) and the percentage of NHC's Community that has obtained master's degrees (6%) is fairly similar the state of Georgia (7%). Also, it is worth noting that the educational attainment of the Hispanic or Latino population in NHC's Community is very consistent with the state-wide rates with one primary exception: The percentage of Hispanics or Latinos with bachelor degrees in NHC's Community is 11% compared to 10% for Georgia.



Source: Nielsen Claritas

Given that the educational attainment of the population is fairly aligned with the state of Georgia, it is not surprising that the household income and housing values in NHC's Community are aligned with the state-wide rates as well. The largest percentage of the population in NHC's Community had 2011 household incomes between $25,000 and $49,000; consistent with Georgia. For Housing Unit value, nearly 52% of homes in the Community were valued between $100,000 and $199,999 compared to 43% for Georgia.

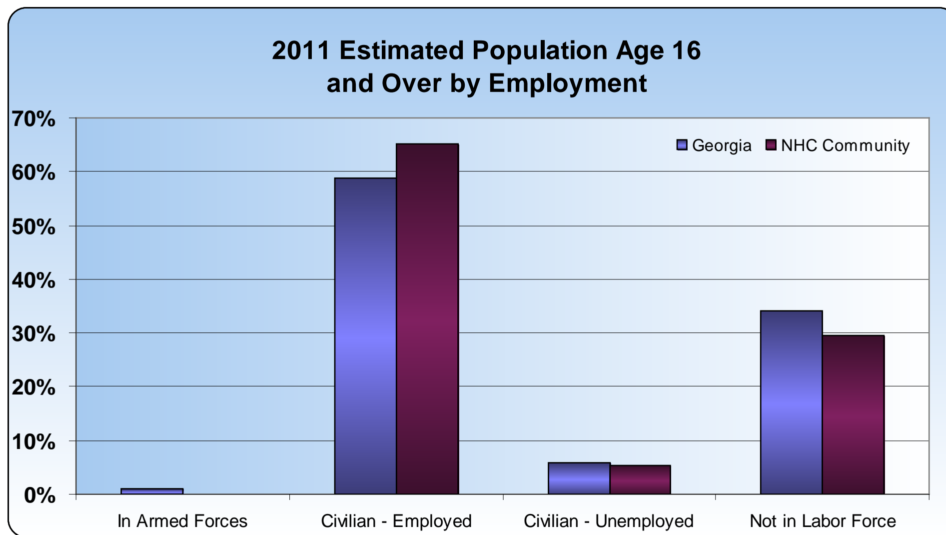
2011 Estimate Household Income	Georgia	NHC Community
Less than $24,999	24%	14%
$25,000 to $49,999	27%	24%
$50,000 to $74,999	20%	23%
$75,000 to $99,999	12%	16%
$100,000 or more	17%	23%

2011 Estimate All Owner-Occupied Housing Units by Value	Georgia	NHC Community
Less than $100,000	27%	12%
$100,000 to $199,999	43%	52%
$200,000 to $399,999	22%	30%
$400,000 or more	7%	6%

Source: Nielsen Claritas

Employment

NHC's Community has a higher percentage of the working-aged population (i.e., age 16-and-older) employed than state wide. In fact, 65% of the Community's population age 16-and-older is employed in non-military positions compared to 59% for Georgia. The Community also enjoys lower civilian unemployment and has a lower percentage of residents "not in the labor force"; not in the labor force includes all persons 16-and-older who are not employed or looking for employment.

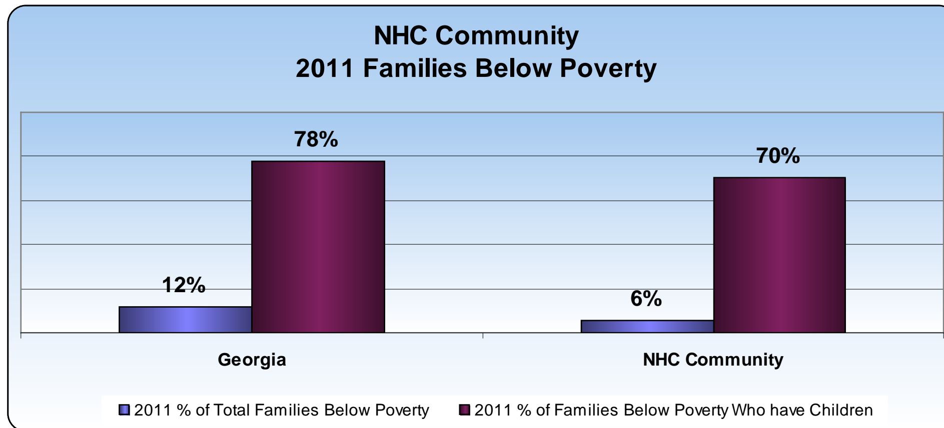


Source: Nielsen Claritas

Poverty

While forty-seven percent (47%) of the Community's households are middle-income households (identical to Georgia) only fourteen percent (14%) of the Community's households have income less than $25,000 compared to twenty-four percent (24%) of Georgia's households. Therefore, it is not surprising that the rate of poverty in the Community is lower

than the state-wide rate[5]. In 2011, an estimated 4,000 families, or 6% of NHC's Community, were below the poverty level compared to nearly 12% of Georgia's families. One slight difference between the areas, however, is that in NHC's Community a lower percentage of families below poverty have children.



Source: Nielsen Claritas

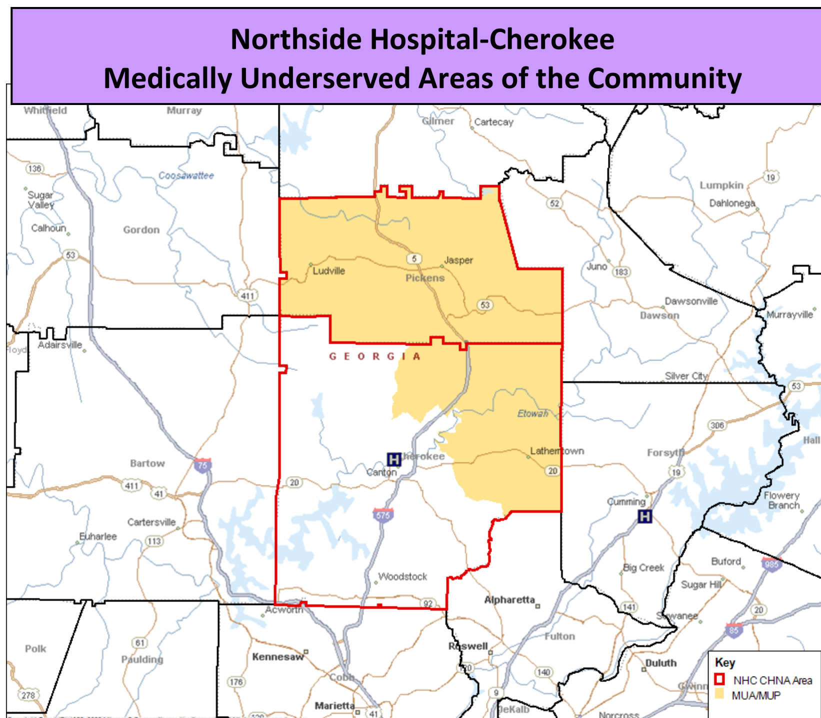
NHC's Community has a strong middle-class population who are adversely affected by the current broader economic conditions given that the Community is located on the northern edge of metro Atlanta removed from a large concentration of job opportunities as well as relief organizations. As stated by one of the Community stakeholders, *"We are not seeing only the "typical" patients of yester-year, we are seeing a new population emerge from an economy that has devastated middle class families."* Thus, while the demographic data paints a picture of NHC's Community as one with slightly higher economic metrics (e.g., household income, housing value and educational attainment), poverty does exist. For those families in poverty or those who are considered working poor, it often is difficult for them to identify and obtain the emergency relief needed given that they reside in a northern, somewhat mountainous area removed from the densely populated metro Atlanta area.

[5] Poverty is based on the U.S. Census Bureau's *Poverty Thresholds for 2011 by Size of Family and Number of Related Children Under 18 Years.*

Our Community's Access to Health Care

Health Professional Shortage Areas and Medically Underserved Areas

By definition, Medically Underserved Areas ("MUA") may be a whole county or a group of contiguous counties, a group of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services.[6] Approximately forty percent (40%) of Cherokee County's total population resides in the southern-most portion of the county; therefore it is not surprising that only the less densely populated northeastern portion of the county is designated as a MUA by the U.S. Department of Health and Human Services. In addition, all of Pickens County is designated as a MUA as shown on the map below.



NHC supplemented publicly-available health data from national and state-level agencies with proprietary consumer market research data collected, tabulated and reported by the National Research Corporation[7] ("NRC"). Annually, the NRC conducts a Community Health Needs Assessment ("NRC Survey") using a proprietary questionnaire designed by NRC. Based on a

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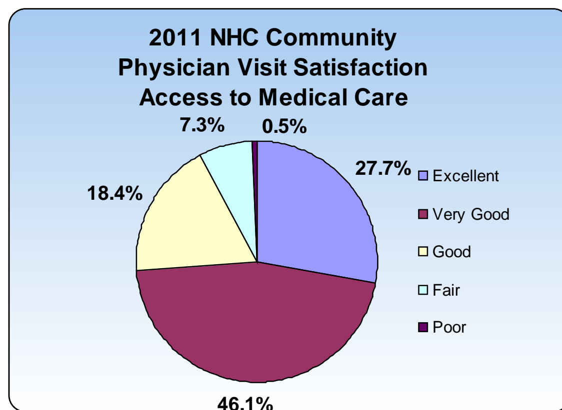
[6] http://www.hrsa.gov/shortage/

[7] Founded in 1981, the National Research Corporation is a healthcare research and quality improvement firm with extensive experience in designing, conducting, tabulating and reporting consumer market research. With a client roster including more than 2,000 hospital facilities and 6,000 long-term care providers, NRC is well-respected in the healthcare industry.

representative sample of people residing in a NHC Community county, this proprietary data set includes consumers' feedback on their utilization of healthcare services, overall health status, chronic health conditions, preventable health behaviors, satisfaction with their health care providers and many other topics.

Physician Access by Community Member's Age

Seventy-four percent (74%) of NRC Survey respondents from NHC's Community indicated that they thought their access to medical care when needed (i.e., physician visit) was either Excellent or Very Good; this is higher than the state-wide percentage (66%). The NRC survey stratifies the responses by respondent age group – 18-34, 35-44, 45-64 and 65+ – interestingly, only four percent (4%) of respondents' age 65-and-older indicated that their access to medical care when needed was either Fair or Poor compared to a range of five to eleven (5-11%) percent for all other age cohorts. When compared to the state-wide responses, again only three percent (3%) of state-wide respondents' age 65-and-older indicated their access to medical care when needed was Fair or Poor compared to eight to ten percent (8-10%) of all other state-wide age cohorts. For the Community population, the 35-44 age cohort expressed the highest percent of dissatisfaction with access to medical care when needed (i.e., physician visit); whereas, for the state the 18-34 age cohort reported the highest dissatisfaction.



NHC Community - Snapshot

- 4% of 65+ pop thinks access to care Fair or Poor

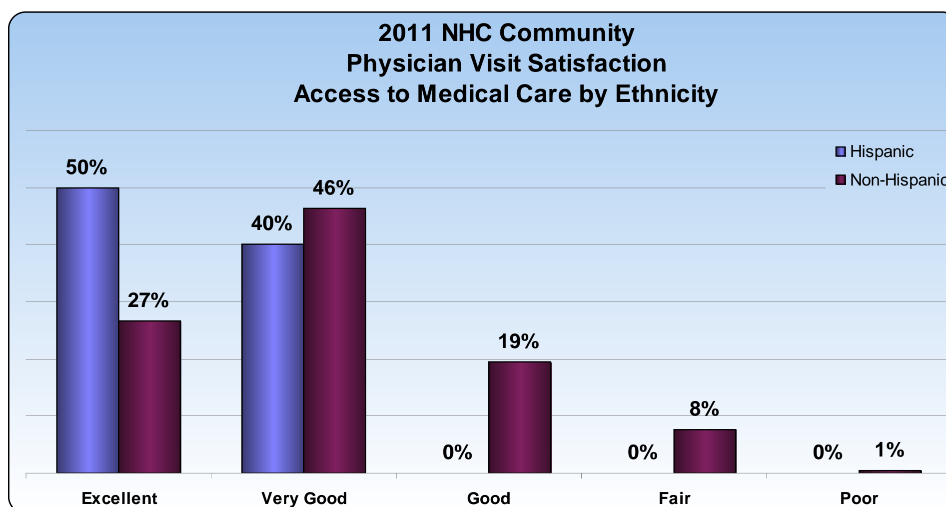
Vs.

- 5-11% all other age cohorts

Source: National Research Corporation, 2011 Community Health Needs Assessment

Physician Access by Community Member's Ethnicity

Ninety percent (90%) of Hispanic NRC Survey respondents reported their access to medical care when needed (i.e., physician visit) as either Excellent or Very Good which was significantly higher than the (73%) of Non-Hispanic respondents. The Community's Hispanic population reported a higher satisfaction with their access to medical care than the State-wide Hispanic population[8]. A Federally Qualified Health Center ("FQHC") is located in the Community and, perhaps, is a key driver of these atypical findings.



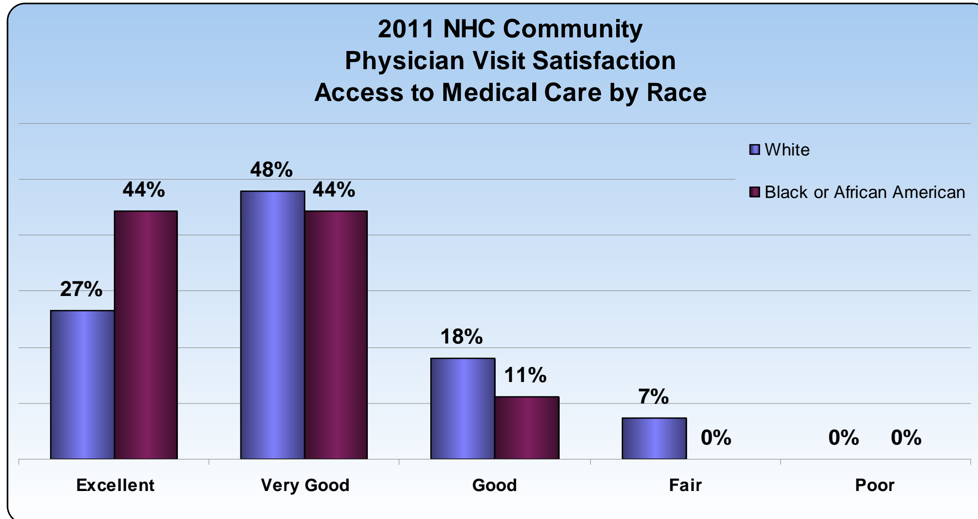
Source: National Research Corporation, 2011 Community Health Needs Assessment

Physician Access by Community Member's Race[9]

Of Community respondents, Black or African American respondents reported the highest satisfaction with their access to medical care when needed (i.e., physician visit). As illustrated in the graph below, 88% of Black or African American respondents categorized their access to medical care when needed as Excellent or Very Good compared to 75% of White respondents. In terms of dissatisfaction with access to medical care when needed, zero percent (0%) of Black or African American respondents reported dissatisfaction compared to seven percent (7%) of White respondents. From this data it appears that White members of the Community are the least satisfied with access to physicians.

[8] State-wide, 62% of Hispanic respondents indicated their access to medical care when needed (i.e., physician visit) was either Excellent or Very Good.

[9] The Asian population comprises two percent of the Community's total population. Asian responses to the NRC Survey are not sufficient to report separately and would have to be combined with all other races; therefore, only Black or African American responses are reported in this CHNA.



Source: National Research Corporation, 2011 Community Health Needs Assessment

Satisfaction with access to medical care when needed (i.e., physician visit) among Whites and Blacks or African Americans in Georgia and the Community is very similar. The most notable difference in satisfaction is between the state-wide Black or African American population's response of six percent (6%) indicating their access to medical care as Fair or Poor compared to zero percent (0%) of Community Black or African American respondents.

2011 Physician Visit Satisfaction
Access to Medical Care GA vs. Community

	Georgia		NHC Community	
Satisfaction	**White**	**Black or African American**	**White**	**Black or African American**
Excellent	31%	27%	27%	44%
Very Good	38%	38%	48%	44%
Good	24%	28%	18%	11%
Fair	5%	6%	7%	0%
Poor	2%	1%	0%	0%

Source: National Research Corporation, 2011 Community Health Needs Assessment

Percent Population Uninsured

In 2011, an estimated 250,000 people resided in NHC's Community of which approximately 182,000 were eighteen-or-older. The counties comprising NHC's Community (i.e., Cherokee and Pickens) experienced uninsured rates of an estimated 18% of the population under the age of 65.[10] The uninsured rate of NHC's Community is slightly lower than that of Georgia which was an estimated 22%.

Hospitals and Number of Beds per 10,000 Population

There are two (2) general acute care hospitals with a total of 136 beds located in NHC's Community. In 2011, there were 5.4 general acute care beds per 10,000 adults in the Community compared to 32.8 general acute care hospital beds per 10,000 adults for the state. NHC's Community generated more than 89,000 adult (i.e., 18-and-older) general acute care inpatient days. Based on an optimal utilization level of 75%[11], the Community generated total need for 324.3 general acute care inpatient beds. Therefore, there is a net need of 188 general acute care inpatient beds in the Community as defined by the GA DCH.[12]

Percent Admissions by Payer

In 2011, the two (2) hospitals located in the Community reported 7,589 total admissions. The percent of total admissions by government and non-government payer is presented below. Given NHC's obstetrics program, the hospital's Medicare percentage was slightly lower than the other provider in the Community. Conversely, NHC had the higher percentage of 2011 Medicaid admissions in the Community, also likely attributable to its obstetrics program.

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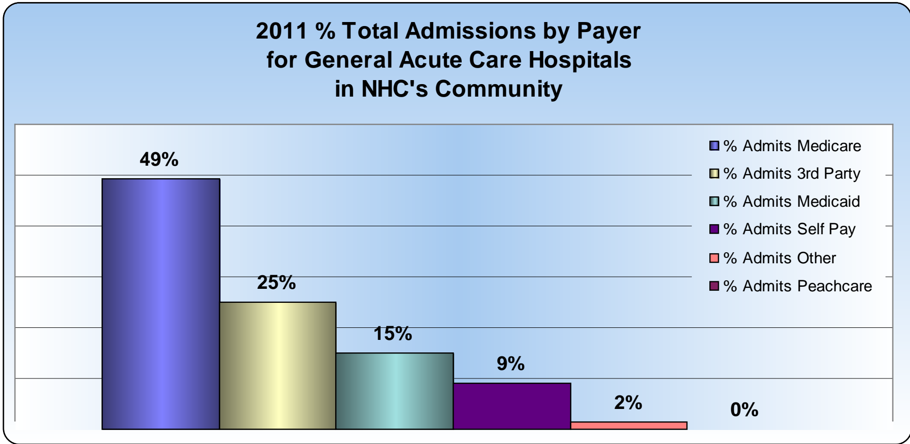
[10] U.S. Census Bureau, Small Area Health Insurance Estimates, 2010 data.

[11] The Georgia Department of Community Health's ("GA DCH") Short-Stay General Hospital Beds Rule defines optimal occupancy rate for hospitals located in a non-rural county as seventy-five percent (75%).

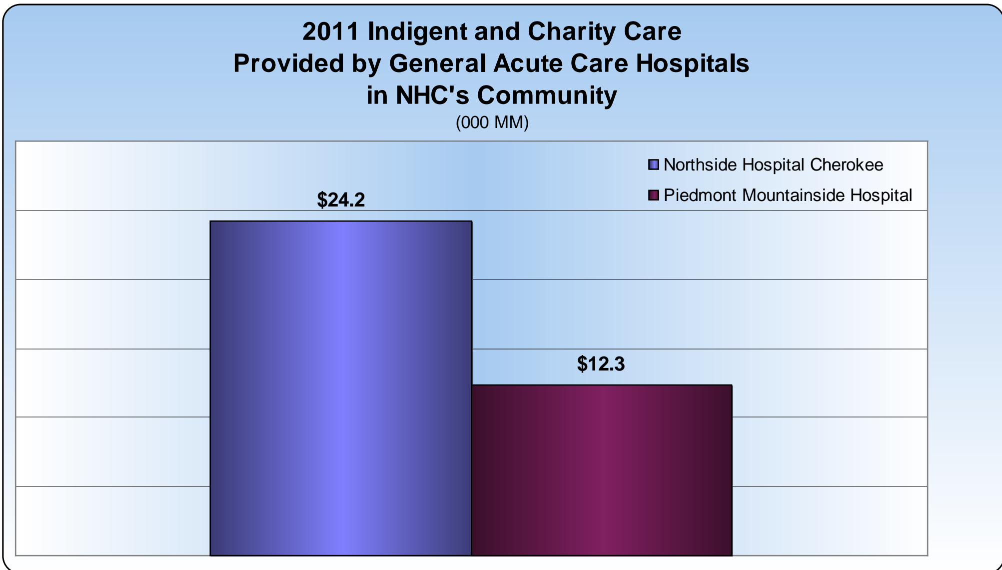
[12] The bed need calculation includes total adult inpatient days generated by residents of the Community including those services not currently available in the Community (e.g., open heart surgery).



Source: 2011 Georgia Department of Community Health, Annual Hospital Questionnaire

Percent Indigent and Charity Care Provided by Hospitals in the Community

Indigent and charity care is often used as a metric for assessing a community's access to healthcare services, particularly for those with limited financial means. The level of indigent and charity care provided by the two (2) general acute care hospitals in NHC's Community varies widely. In 2011, the two (2) general acute care hospitals in NHC's Community provided more than $36.5 million in indigent and charity care combined. NHC provided the larger dollar amount of indigent and charity care of both general acute care providers in the Community, demonstrating that it is providing community benefit and serving all patients regardless of their ability to pay.

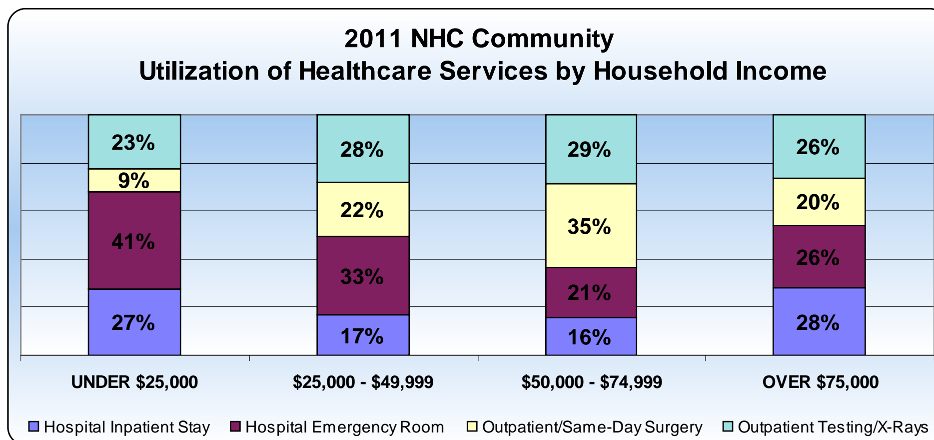


Source: 2011 Georgia Department of Community Health, Annual Hospital Financial Survey

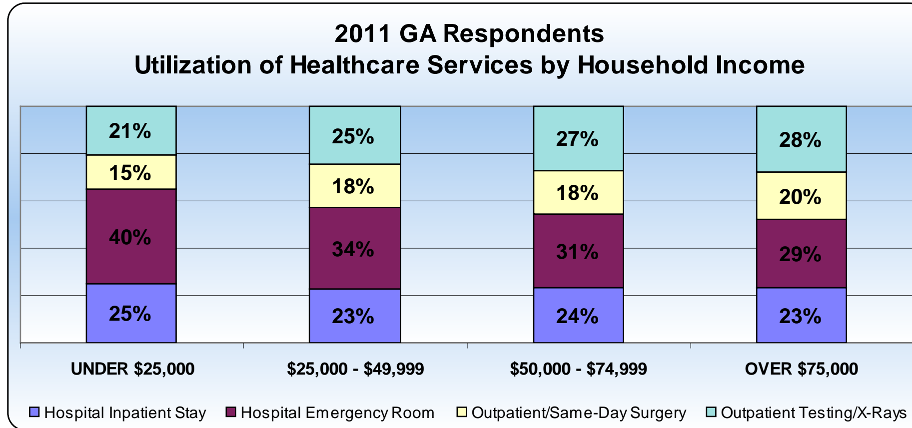
As noted previously, NHC supplemented publicly-available health data from national and state-level agencies with proprietary consumer market research data collected, tabulated and reported by NRC.

Healthcare Utilization by Household Income and Race

The NRC Survey asked households to report their healthcare utilization by type of service (i.e., Hospital Inpatient Stay, Hospital Emergency Room, Outpatient/Same-Day Surgery and Outpatient Testing/X-Rays). In 2011 across all income levels, the hospital emergency room ("ER") was the most frequently utilized healthcare service, with the exception of the $50,000-$74,999, which utilized the Outpatient/Same-Day Surgery most. While households of all income levels reported having access to the four categories of healthcare services, it is important to note that a larger percentage of households with incomes under $25,000 reported utilizing the hospital ER compared to higher income brackets: As income increases the percentage of households reporting hospital ER utilization decreases. Additionally, as household income increases so too does utilization of Outpatient/Same-Day Surgery and Outpatient Testing/X-Rays indicating possible access barriers to care to these services for lower- income households in NHC's Community. The experiences of NHC's Community mirror those of Georgia residents as a whole, as indicated in the graphs below.



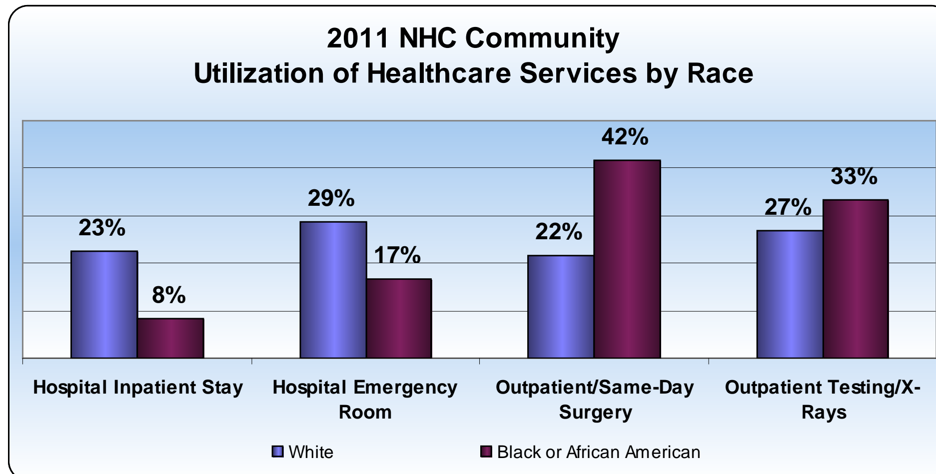
Source: National Research Corporation, 2011 Community Health Needs Assessment



Source: National Research Corporation, 2011 Community Health Needs Assessment

When analyzing healthcare utilization by race, the responses were fairly homogenous for each type of service with the exception of one racial group having slightly higher utilization within each service as summarized below:

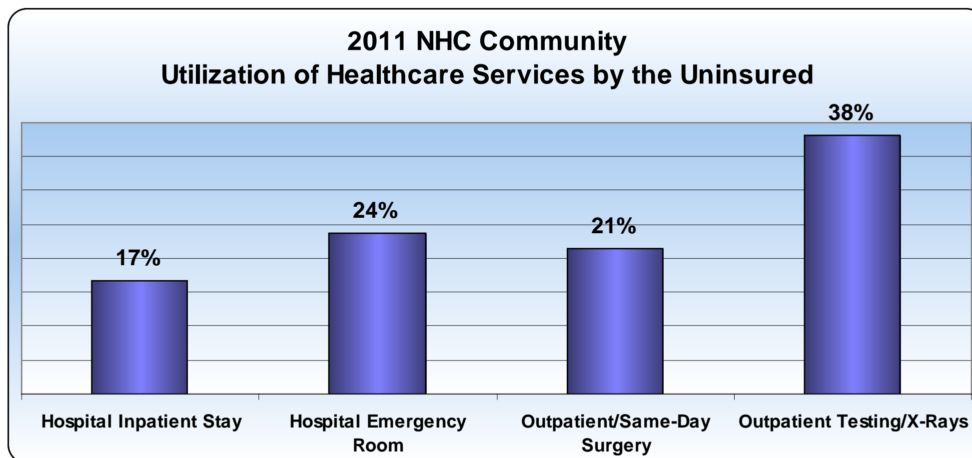
1) Hospital inpatient Stay – White
2) Hospital emergency room – White
3) Outpatient/same-day surgery – Black or African American
4) Outpatient testing/x-ray – Black or African American



Source: National Research Corporation, 2011 Community Health Needs Assessment

Healthcare Utilization by the Uninsured

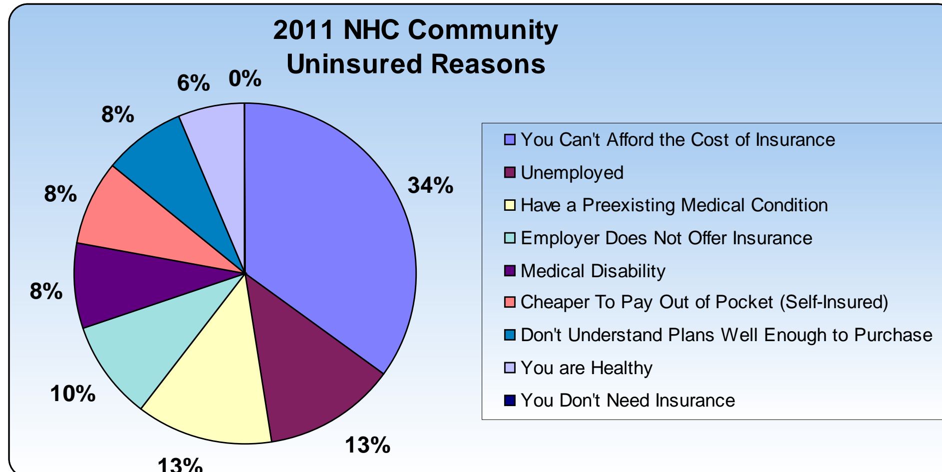
While the NRC Survey captures healthcare utilization by a variety of health plans – HMO, fee-for-service ("FFS"), preferred provider organizations ("PPO"), point-of-services plans ("POS"), Medicare, Medicaid, and Uninsured – NHC elected to focus on the uninsured population. As noted in the chart below, the Outpatient Testing/X-Rays was the service most frequently cited by the uninsured respondent followed by ER services. The results are somewhat counter intuitive as one would expect the ER to be the most frequently used service among the uninsured as the ER often is the only means of accessing health care for this segment of the population.



Source: National Research Corporation, 2011 Community Health Needs Assessment

Reasons for being Uninsured

Not unlike the national landscape, the most frequently cited reasons why uninsured respondents from the Community lacked insurance were because respondents could not afford insurance and/or they were unemployed. The remaining reasons for lack of insurance are summarized in the chart below.



Source: National Research Corporation, 2011 Community Health Needs Assessment

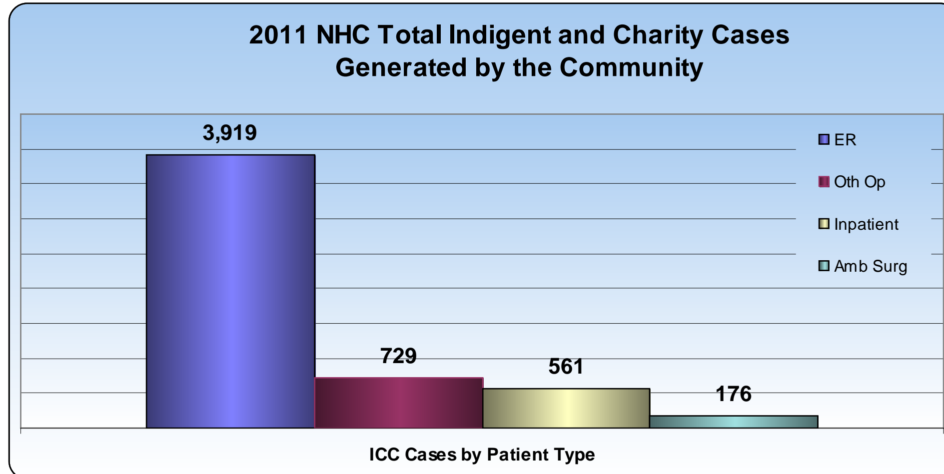
Our Community's Health Status

NHC utilized a variety of data sources to attempt to assemble as comprehensive an overview of the Community's health status as possible. Extra care was taken to ensure that all populations – general, financially disadvantaged, minority – were represented in the data. Sources utilized include NHC internal data, NRC proprietary data and public health data.

NHC's Indigent and Charity Care Patients

In 2011, NHC provided $21.6 million in indigent and charity care to the Community.[13] Broadly, services rendered can be grouped into ambulatory surgery, emergency room, inpatient services and other outpatient services with approximately 86% of indigent/charity care cases falling into the emergency room and other outpatient services as depicted in the chart below.

[13] It is important to note that this figure only includes indigent and charity care provided to residents of the Community, representing 89% of the hospital's total indigent and charity care (i.e., all patients served by the hospital regardless of residence). In 2011, NHC provided a total of $24.2 million in indigent and charity care.



Source: NHC internal records Note: Includes newborns

In 2011, seventy-three percent (73%) of NHC's indigent and charity care cases were ER cases. It is challenging to identify a leading cause or two of ER utilization by NHC's indigent and charity population from the Community as the 3,919 emergency charity cases had a very large range of principal diagnoses; in fact, too numerous to list separately[14]. The top ten diagnoses by case volume represented approximately nineteen percent (19%) of total indigent and charity emergency cases and are summarized in the table below.

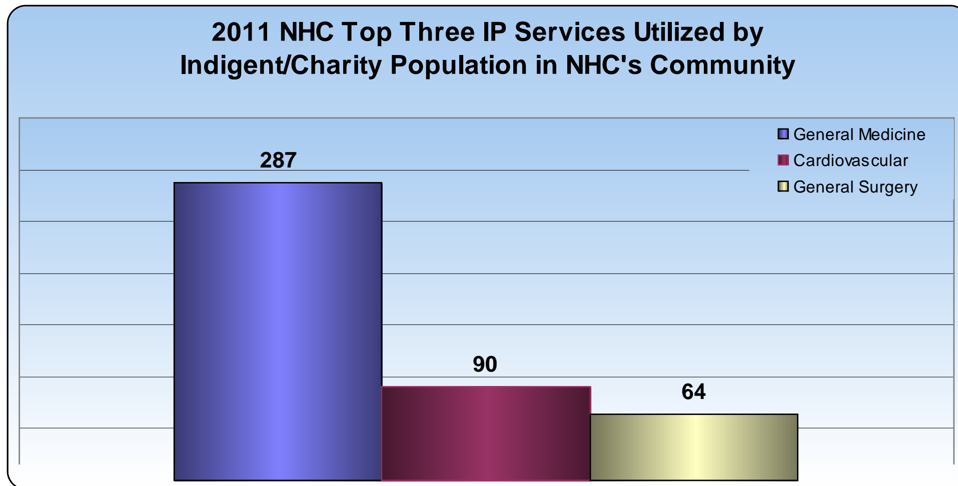
2011 NHC Community ICC - ER Cases Top 10 Diagnoses			
Princ Dx	**Description**	**Cases**	**% to Total**
346.9	Migrne unsp wo ntrc mgrn	118	3.01%
789	Abdmnal pain unspcf site	102	2.60%
786.59	Chest pain NEC	94	2.40%
599	Urin tract infection NOS	80	2.04%
462	Acute pharyngitis	65	1.66%
847.2	Sprain lumbar region	59	1.51%
784	Headache	55	1.40%
490	Bronchitis NOS	55	1.40%
525.9	Dental disorder NOS	52	1.33%
724.5	Backache NOS	50	1.28%
Total Top 10 Diagnoses		**730**	**19%**

Source: NHC internal records

Upon further analysis of the other outpatient services utilized by the indigent and charity population, sixty-four percent (64%), or 465 of the 729 indigent and charity cases, utilized NHC's radiology department services.

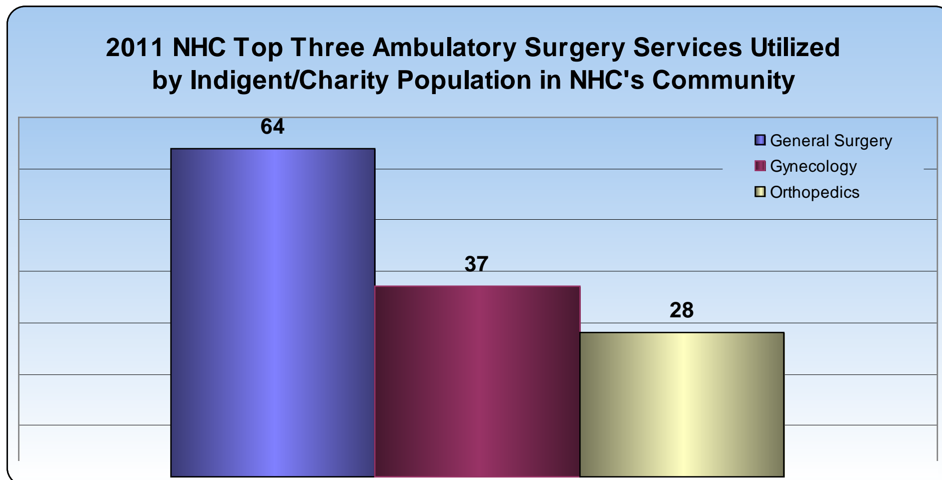
[14] It is worth noting that NHC had the highest number and percent of total ER visits related to mental health issues of any Northside Hospital. In 2011, 505 NHC ER visits or 1.6% of total ER visits were for mental health issues compared to 0.88% respectively for NHA and NHF.

On the inpatient side, the Community's indigent and charity population had the highest utilization of general medicine, cardiovascular and general surgery services. These three inpatient service lines represented seventy-nine percent (79%) of the Community's inpatient indigent and charity utilization.



Source: NHC internal records

Similar to the demand for inpatient services, demand for outpatient surgical services is concentrated among three service lines as indicated in the graph below. Together, these three service lines comprise seventy-three percent (73%) of the Community's need for indigent and charity ambulatory surgical services.



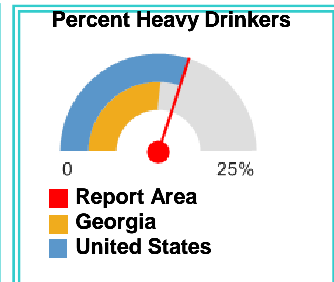
Source: NHC internal records

The Community's Lifestyle/Health Behaviors

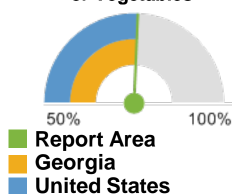
NHC relied upon CHNA.org for certain of its community health status data. CHNA.org is a free web-based program that compiles data from the Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011 into an easy-to-use web-based tool. Data only is available at the county level so the "Report Area" captured in the data below are the counties comprising NHC's Community: Cherokee and Pickens.

Poor health behaviors such as poor diet, lack of exercise, and substance abuse can contribute to an individual's and community's poor health status. Below are several measures of the Community's health status from CHNA.org. Overall, the Community's health indicators are either worse than state and/or national benchmarks or equivalent to these benchmarks.

For the heavy consumption of alcohol the Community underperforms the state benchmark. The percentage of Community adults' age eighteen-and-older who self-reported as being heavy drinkers* is 15% which is higher than the Georgia-wide rate of 13% but equivalent to the national rate of nearly 15%. This indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.



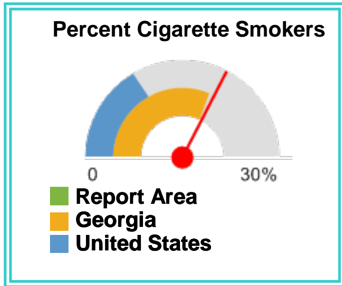
Respondents are considered heavy drinkers if they were male and reported having more than 2 drinks per day, or females that reported having more than 1 drink per day



It is widely-known that a well-rounded diet including several daily servings of fruits and vegetables helps promote a healthy lifestyle and reduces the risks of numerous chronic diseases such as cancer, diabetes and heart disease to name a few examples. Seventy-six percent (76%) of adults in the Community self-reported a diet consisting of few fruits and vegetables compared to 76% for both Georgia and the U.S.*

**82% of Pickens County respondents reported consuming few fruits and vegetables. Percentages are based on respondents reporting the consumption of five or more servings of fruits and vegetable per week.*

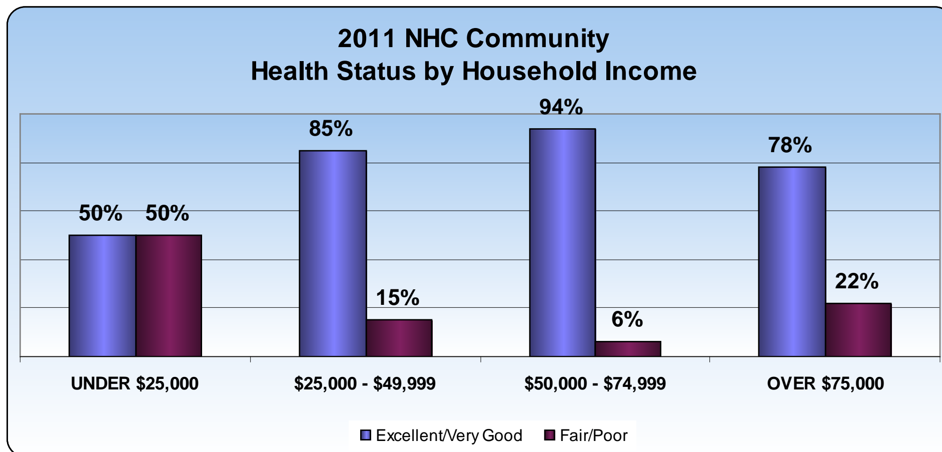
A sedentary lifestyle can lead to significant health problems such as obesity or cardiovascular disease. This metric compares the inactivity level of the State of Georgia and the U.S; it was unavailable for the Community. 25% of adults reported no time for leisure activities in the State of Georgia and the U.S.



Cigarette smoking is linked to leading causes of death such as cancer and cardiovascular disease. Also, according to the National Institutes of Health, the most common irritant in the United States that causes chronic obstructive pulmonary disease is cigarette smoke. Nineteen percent (19%) of adults in NHC's Community self-reported themselves as smokers compared to nineteen (19%) of adults in Georgia and ten (10%) across the U.S.

Health Status by Household Income

A significantly higher percentage (78-94%) of households with incomes of $25,000 or more reported that their overall health status was Excellent/Very Good compared to only fifty percent (50%) of households earning less than $25,000. Thus, there appears to be a correlation between a positive health status self-assessment and higher household income. The health status of NHC's Community by household income was similar for the three lower brackets to that of respondents from across Georgia.



Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Top Chronic Conditions

The NRC provides a comprehensive list of chronic conditions to respondents of its NRC Survey. Respondents are asked "Has ANY HOUSEHOLD MEMBER been diagnosed as having any of the following health problems? (Select as many as apply.)"

National Research Corporation List of Chronic Conditions Provided to Community Health Needs Assessment Survey Respondents			
Allergies-Hay Fever	Chronic Headaches	High Cholesterol	Sciatica/Chronic Back Pain
Allergies-Other	Chronic Heartburn	Indigestion/Irritable Bowel	Sinus Problem
Arthritis	Depression/Anxiety Disorder	Migraines	Skin Cancer
Asthma	Diabetes	No Chronic Conditions in HH	Sleep Problem/Insomnia
Attention Deficit Disorder	Eating Disorder	Obesity/Weight Problems	Smoker
Cancer (Other than Skin)	Heart Disease	Osteoporosis	Stomach Ulcer
Cataract	High Blood Pressure	Other Chronic Condition	Stroke

Given that this particular question applies to any member in the household and not just the NRC Survey respondent, the chronic conditions summarized in the following sections are a very good representation of the Community's health status.

Our Community's Top Chronic Conditions – By Age

The top ten chronic conditions (i.e., the most frequently mentioned) for all respondent age groups in NHC's Community are summarized below. As respondent age increases, so too do the number of chronic conditions reported per household. Respondents' age 18-34 reported an average of 2.4 chronic conditions for their household and the rate increased to 3.2 among the 35-44 and slightly decreased to 3.1 for the 45-64 age cohorts culminating with an average of 4.5 chronic conditions reported for respondents' age 65-and-older. Also, Smoker and High Cholesterol were in the top five chronic conditions across three of the four age cohorts.

2011 NHC Community Top Ten Chronic Conditions, All Ages	
Chronic Condition	**Average Age**
Smoker	47
No Chronic Conditions in HH	40
High Cholesterol	54
High Blood Pressure	53
Depression/Anxiety Disorder	43
Allergies-Other	40
Allergies-Hay Fever	45
Arthritis	57
Asthma	45
Migraines	43

Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Top Chronic Conditions – By Household Income

NHC analyzed the top ten chronic conditions (i.e., the most frequently mentioned) by household income to see if there were any differences between households of all incomes and low-income households.[15] While many chronic conditions affecting all households also affect low-income households, there are subtle differences in the ranking or hierarchy of the chronic conditions. Of note is that No Chronic Conditions in HH is the number one chronic condition for low-income households. After that is Smoker; cigarette smoking is linked to heart disease and hypertension. Also, it can increase blood pressure. In fact, about 30% of all deaths from heart disease in the U.S. are directly related to cigarette smoking.[16] Cigarette smoking is also linked to lung cancer; it is the number one risk factor for lung cancer. In the United States, cigarette smoking causes about 90% of lung cancers[17].

2011 NHC Community Top Ten Chronic Conditions All Households
Smoker
High Cholesterol
Depression/Anxiety Disorder
High Blood Pressure
No Chronic Conditions in HH
Allergies-Other
Allergies-Hay Fever
Arthritis
Asthma
Migraines

2011 NHC Community Top Ten Chronic Conditions Low-Income Households
No Chronic Conditions in HH
Smoker
Depression/Anxiety Disorder
High Cholesterol
Arthritis
Cataract
Heart Disease
High Blood Pressure
Sinus Problem
Asthma

Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Top Chronic Conditions – Uninsured

As illustrated in the bar graph below, the most frequently cited chronic condition by uninsured respondents was No Chronic Conditions in Household. A plausible explanation for this response could be that uninsured respondents lack access to routine health care and therefore may have an undiagnosed chronic condition. Alternatively, as stated previously in this CHNA, six percent (6%) of uninsured respondents indicated that they do not have insurance because they are healthy and therefore do not "need" insurance.

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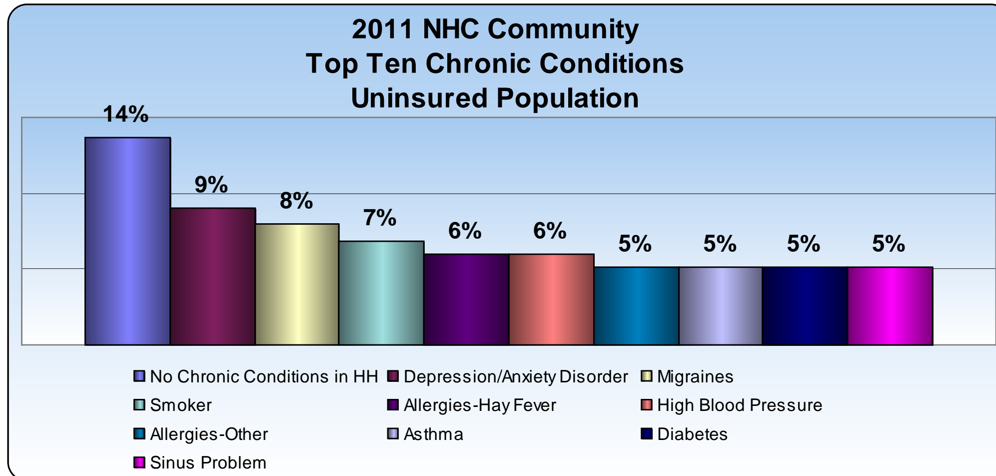
[15] Low-income households are defined as those households with income under $25,000.
[16] Source: http://www.webmd.com/hypertension-high-blood-pressure/guide/kicking-habit
[17] Source: http://www.cdc.gov/cancer/lung/basic_info/risk_factors.htm

There are several similarities between the top chronic conditions (i.e., the most frequently mentioned) among low-income households and the uninsured; namely No Chronic Conditions, Smoking, Depression/Anxiety Disorder, High Blood Pressure, Sinus Problem, and Asthma.



Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Top Chronic Conditions – By Ethnicity

No Chronic Conditions in Household was the only cited chronic condition for Hispanic residents. This was also one of the top ten chronic conditions for the Non-Hispanic respondents. The Non-Hispanic respondents list was much like the list of the other population groups analyzed, (e.g., all ages, all household incomes and low-income households).

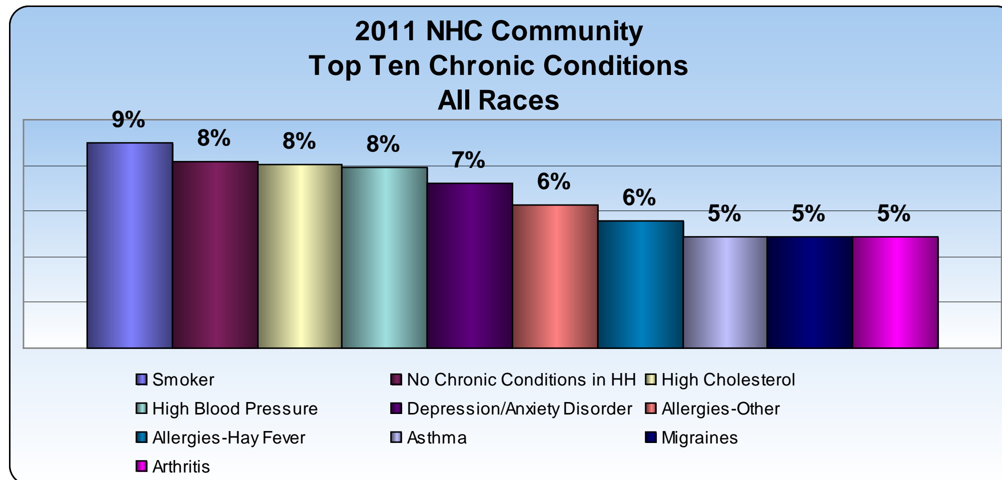
2011 NHC Community Top Ten Chronic Health Conditions Hispanic
No Chronic Conditions in HH

2011 NHC Community Top Ten Chronic Health Conditions Non-Hispanic
High Cholesterol
High Blood Pressure
Depression/Anxiety Disorder
No Chronic Conditions in HH
Allergies-Other
Allergies-Hay Fever
Arthritis
Asthma
Migraines
Diabetes

Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Top Chronic Conditions – By Race

The most frequently cited chronic conditions for all races are very similar to those cited by all ages. This similarity is likely due to the fact that NHC's Community is predominately White and the NRC research is representative of the Community.



Source: National Research Corporation, 2011 Community Health Needs Assessment

There are more similarities than differences between the top ten chronic conditions (i.e., most frequently cited) among White and Black or African American respondents as noted in the tables below. Specifically, the similarities include:

1. Smoking
2. High Cholesterol
3. High Blood Pressure
4. Allergies Other
5. Allergies Hay Fever
6. No Chronic Conditions
7. Migraines
8. Arthritis

The two top ten chronic conditions unique to White respondents are 1) Depression/Anxiety Disorder and 2) Asthma while the unique chronic conditions among Black or African American respondents are 1) Sinus Problem and 2) Obesity/Weight Problem.

2011 NHC Community Top Ten Chronic Conditions White Respondents
Smoker
High Cholesterol
High Blood Pressure
Depression/Anxiety Disorder
Allergies-Other
No Chronic Conditions in HH
Allergies-Hay Fever
Migraines
Arthritis
Asthma

2011 NHC Community Top Ten Chronic Conditions Black or African American Respondents
Allergies-Hay Fever
Sinus Problem
High Blood Pressure
Allergies-Other
Migraines
Arthritis
Obesity/Weight Problems
Smoker
High Cholesterol
No Chronic Conditions in HH

Our Community's Preventive Health Behaviors

The NRC provides a comprehensive list of preventive health behaviors (PHBs) to respondents of its NRC Survey. Respondents are asked "Has ANY HOUSEHOLD MEMBER used or had any of the following health care services or tests in the last 12 months? (Select as many as apply.)"

National Research Corporation List of Preventive Health Behaviors Provided to Community Health Needs Assessment Survey Respondents			
Blood Pressure Test	CT Scan	Mammogram	Routine Physical Exam
BMI (Body Mass Index) Screening	Eye Exam	MRI	Stop Smoking Program
Cardiovascular Stress Test	Dental Exam	Osteoporosis Testing	Weight Loss Programs
Child Immunizations	Diabetes Screening	Pap Smear	Other Preventive Service or Test
Carotid Artery Screening	Flu Shot	PET Scan	No Preventive Service or Test in Household
Cholesterol Test	Hearing Test	Pre-Natal Care	
Colon Screening	Mental Health Screening	Prostate Screening	

Given that this particular question applies to any member in the household and not just the NRC Survey respondent, the PHBs summarized in this section are a very good representation of the Community's health status.

Our Community's Preventive Health Behaviors – By Age

The top ten PHBs (i.e., most frequently utilized) for all respondent age groups in NHC's Community are summarized below. As respondent age increases, so too do the number of PHBs reported per household. Respondents' age 18-34 reported an average of 3.5 PHBs for their households and the rate steadily increased among respondents' age 35-44 and had a slight decrease in the 45-64 age cohorts; however, the rate culminated with an average 5.1 PHBs for respondents' age 65-and-older. Also, Flu Shot, Dental Exam, Eye Exam, and No Service or Test were in the top five PHBs across all four age cohorts.

2011 NHC Community Top Ten Preventive Health Behaviors, All Ages	
Preventive Health Behavior	Average Age
Blood Pressure Test	50
Eye Exam	48
Dental Exam	46
Routine Physical Exam	46
Cholesterol Test	51
Flu Shot	47
Pap Smear	44
No Service or Test	42
Mammogram	55
Child Immunization	36

Source: National Research Corporation, 2011 Community Health Needs Assessment

It is interesting to review the Community's bottom five PHBs (i.e., least utilized) as possible opportunities for improving access to care and the overall health status of the Community. The table below summarizes the bottom five PHBs; meaning, these behaviors were cited the fewest times as having been used by the Community's households over the NRC Survey's time period.

2011 NHC Community Bottom Five Preventive Health Behaviors, All Ages	
Preventive Health Behavior	Average Age
Weight Loss Programs	49
Osteoporosis Testing	55
Carotid Artery Screening	64
Pre-Natal Care	28
Stop Smoking Program	20

Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Preventive Health Behaviors – By Household Income

Not surprisingly, low-income households reported the fewest PHBs per household of all the income brackets.[18] Households with income under $25,000 reported an average 2.7 PHBs per household compared to an average of 5.2 PHBs reported for households with income over $75,000. Given this stark difference, NHC analyzed the least utilized PHBs by household income to see if there were any differences between households of all incomes and low-income households. Other Service or Test, Carotid Artery Screening, Stop Smoking Program and Pre-Natal Care were in the bottom five PHBs for all households and low-income households.

[18] *Ibid.*

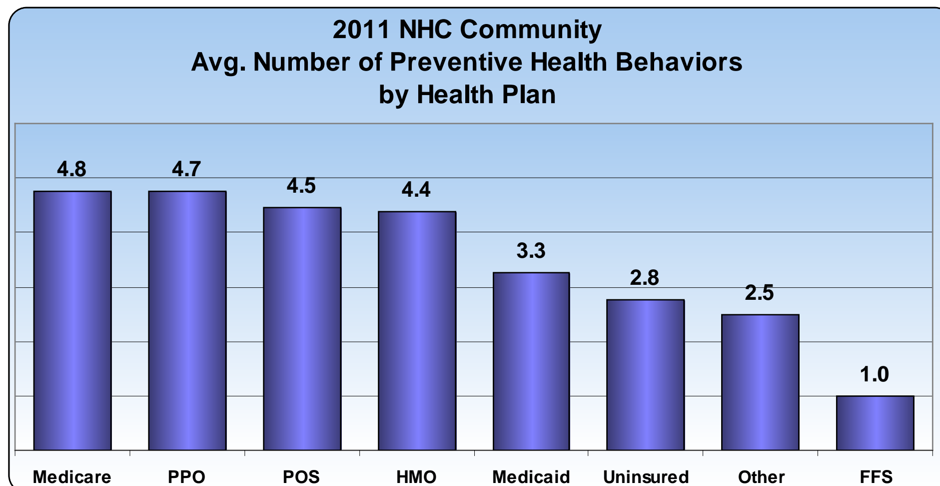
2011 NHC Community Bottom Five Preventive Health Behaviors All Households
Other Service or Test
Osteoporosis Testing
Carotid Artery Screening
Pre-Natal Care
Stop Smoking Program

2011 NHC Community Bottom Five Preventive Health Behaviors Low-Income Households
Carotid Artery Screening
Stop Smoking Program
Diabetes Screening
Other Service or Test
Pre-Natal Care

Source: National Research Corporation, 2011 Community Health Needs Assessment

Our Community's Preventive Health Behaviors – Uninsured

The Community's uninsured population reported the third lowest number of PHBs per household; followed by Other and FFS. The Medicare population reported the highest number of PHBs per household. Likely there are numerous reasons as to why the uninsured has one of the lowest utilization of preventive health services; namely lack of insurance but also the perception that they are healthy or possibly certain barriers to care based on financial, cultural, linguistic or other barriers.[19]

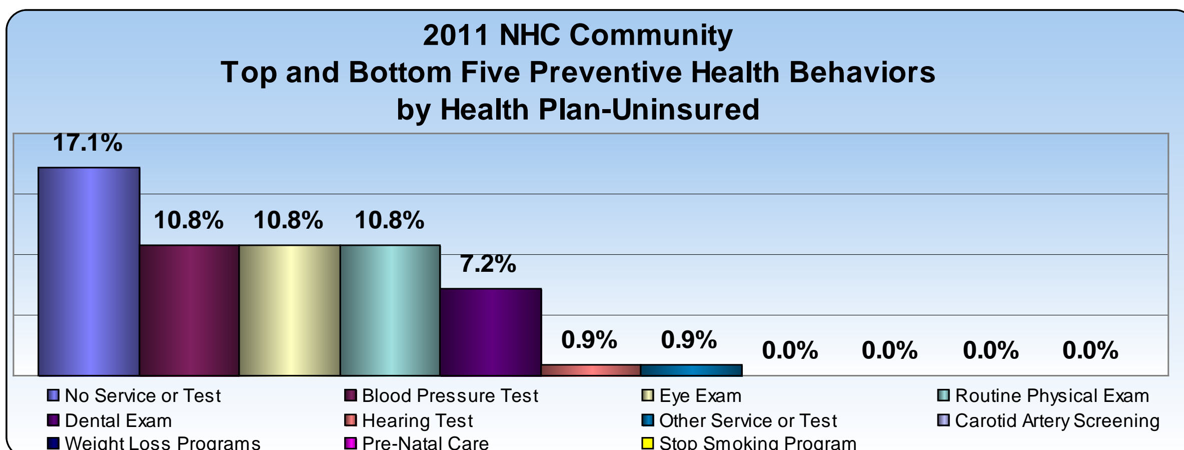


Source: National Research Corporation, 2011 Community Health Needs Assessment

The mix of least used PHBs for the uninsured respondents in the Community are the same mix when reviewed by age and household income. The only difference is the ranking or hierarchy of the behavior. The graph below summarizes the top and bottom five PHBs for the uninsured respondents. It is important to note that No Service or Test was cited seventeen percent (17%) out of all the PHBs for the uninsured compared to five percent (5%) for all households (income)

[19] Six percent (6%) of uninsured respondents indicated that they did not have health insurance because they were healthy.

and five percent (5%) based on age; thus demonstrating the uninsured's lack of access to preventive care which is not dissimilar to the national experience.



Source: National Research Corporation, 2011 Community Health Needs Assessment
Notes: Two PHBs in the chart were given a tie of 0.9% utilization for Hearing Test and Other Service or Test. 4 PHBs in the chart were give a tie of 0% utilization for Carotid Artery Screening, Weight Loss Programs, Pre-Natal Care, and Stop Smoking Program.

Our Community's Preventive Health Behaviors – By Race

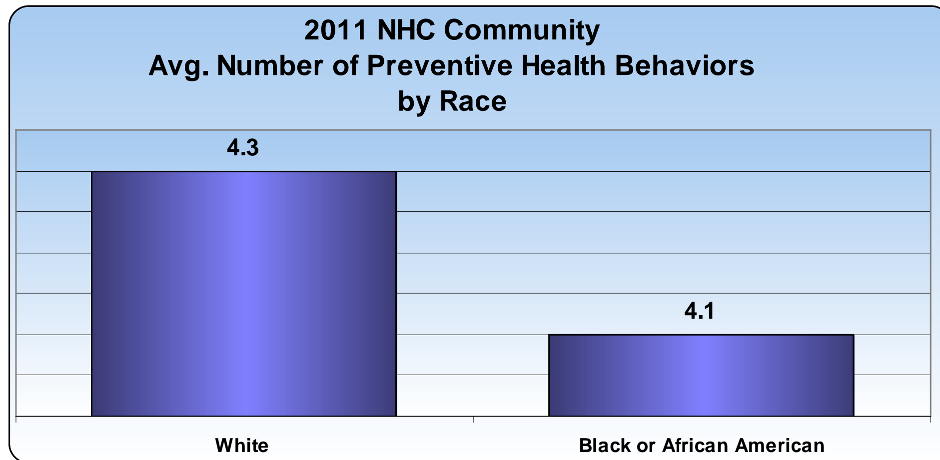
The top PHBs (i.e., most frequently utilized) for all races are identical to the top ten PHBs for all ages. Likewise, the bottom five (i.e., least utilized) PHBs for all races are identical to those for all age groups.

2011 NHC Community Top Ten Preventive Health Behaviors All Races
Blood Pressure Test
Eye Exam
Dental Exam
Routine Physical Exam
Cholesterol Test
Flu Shot
Pap Smear
No Service or Test
Mammogram
Child Immunization

2011 NHC Community Bottom Five Preventive Health Behaviors All Races
Weight Loss Programs
Osteoporosis Testing
Carotid Artery Screening
Pre-Natal Care
Stop Smoking Program

Source: National Research Corporation, 2011 Community Health Needs Assessment

Given that the NRC's research is representative of the Community and the Community is predominately White, PHBs of White respondents may be masking some unique utilization patterns of PHBs for Black or African American respondents. Thus, further analysis is warranted. As noted below, it does not appear that there are any disparities in the average number of PHBs reported by White respondents and Black or African American respondents in the Community as each race reported roughly four (4) PHBs per household.



Source: National Research Corporation, 2011 Community Health Needs Assessment

Several aspects of the Community's health status by race warrant highlighting. As expected, several PHBs – top and bottom five – are frequently cited among White and Black or African American respondents just perhaps in a different hierarchy. For example, four out of the five top PHBs for White and Black or African American respondents are as follows:

1) Blood Pressure Test
2) Eye Exam
3) Dental Exam
4) Routine Physical

The difference is that White respondents reported Cholesterol Test in their top five while Black or African Americans reported Pap Smear in their top five PHBs.

The bottom five PHBs (i.e., least utilized) among White and Black or African American respondents is summarized below. Thus, any efforts concentrated in the areas listed below will help improve the health status of the broader Community and a minority population.

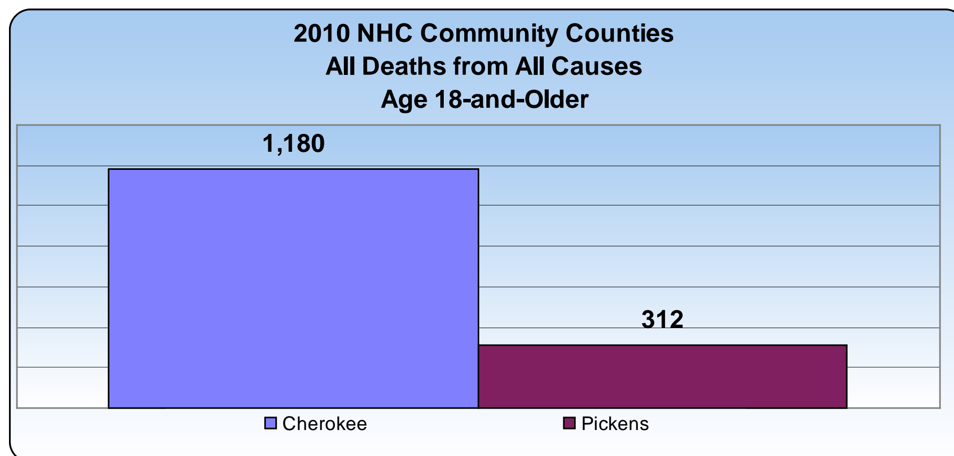
1) Osteoporosis Testing
2) Carotid Artery Screening
3) Pre-Natal Care
4) Stop Smoking Program

Alternatively, the least used PHBs unique to Black or African American respondents are listed below. Thus, any efforts in these areas will help to improve the health status of a minority population

1) Hearing Test
2) Prostate Screening
3) Flu Shot
4) Child Immunization

Our Community's Leading Causes of Death

According to the Georgia Department of Public Health, in 2010 there were 68,468 deaths in Georgia.[20] NHC's Community (i.e., Cherokee and Pickens) accounted for approximately 2% of Georgia's deaths (1,492) with 1,180 deaths attributed to Cherokee County and 312 deaths attributed to Pickens County. Cherokee County also has the higher total population within the Community's Counties.



Source: OASIS, Georgia Department of Public Health, Office of Health Indicators for Planning

Pickens County had the higher raw death rate per 100,000 population of the Community's counties (i.e., Cherokee and Pickens). Given that the rates are raw rates and not age-adjusted no further comparison or real inferences are made other than to note the rates as a baseline measure for 2010 and to monitor each county's death rate in subsequent Assessments.

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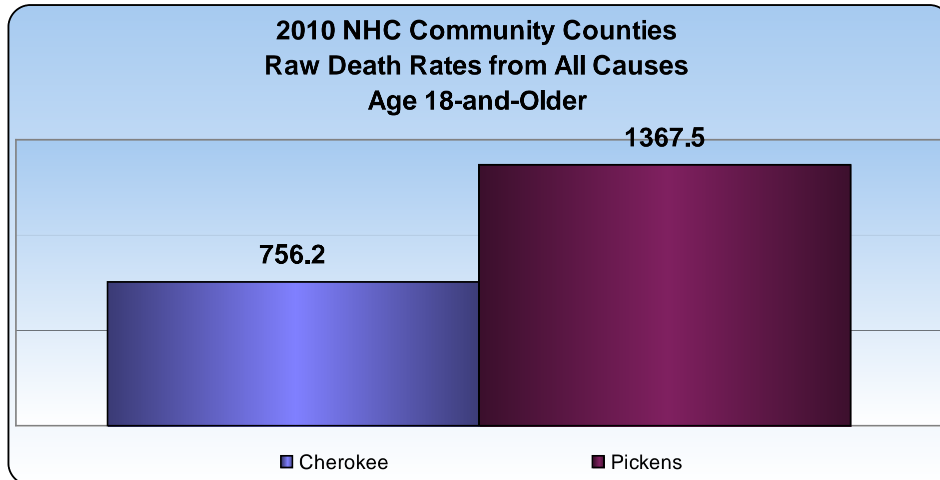
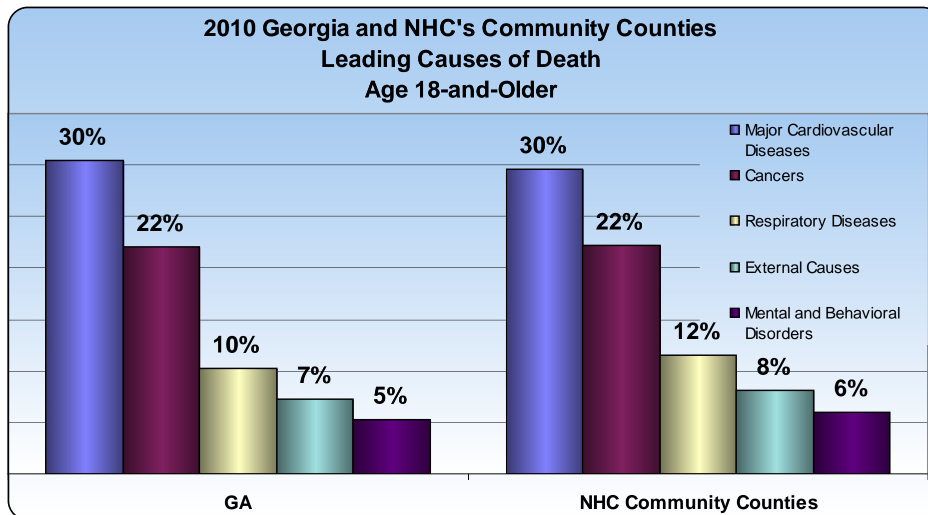
[20] 2010 State data is the most recent data available at the time this CHNA was conducted. The data includes all causes, all races and is based on deaths for population age eighteen-and-older for all causes except obstetric/infant related causes which are based on all ages.



Source: OASIS, Georgia Department of Public Health, Office of Health Indicators for Planning

Seventy-five percent (75%) of deaths in Georgia and in the Community are attributed to the same five (5) causes, as indicated in the chart below. The Community has slight differences from the state's experience such as a slightly higher percentage of deaths are caused by Respiratory Diseases, External Causes and Mental and Behavioral Disorders.



Source: OASIS, Georgia Department of Public Health, Office of Health Indicators for Planning

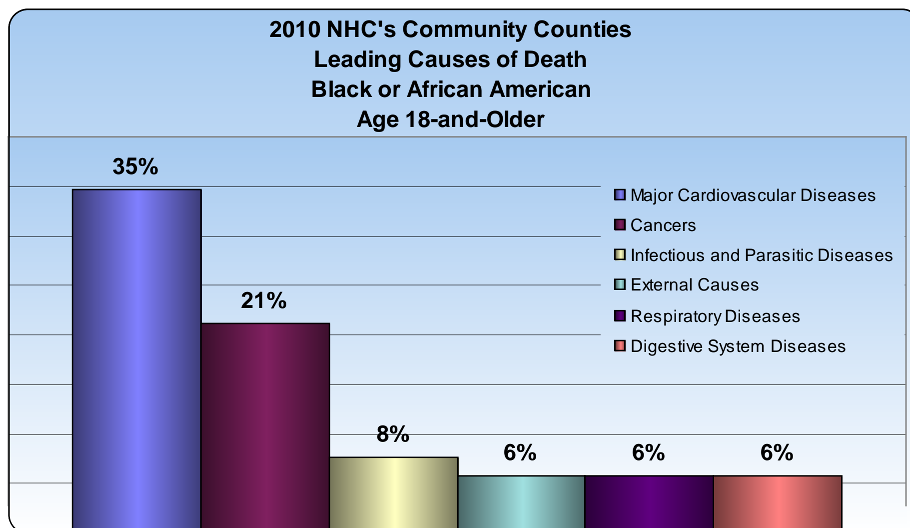
Our Community's Leading Causes of Death – By Race

In 2010, there were nearly 18,000 Black or African American deaths in Georgia due to all causes. NHC's Community counties represented roughly one-third of a percent (0.3%) of these deaths. Similar to the Community as a whole, Major Cardiovascular Diseases and Cancers are

the top two leading causes of death for Black or African American residents; in fact, these two categories represent 56% of deaths among this population. The leading causes of cancer deaths for the Black or African American community (9 cases) are:

1. Colon Cancer – 3
2. Lung Cancer – 2
3. Breast Cancer – 1
4. Prostate Cancer – 1
5. Pancreatic Cancer – 1
6. Stomach Cancer – 1

The remaining leading causes of death for the Black or African American population in the Community mirror those for the Community as a whole with two exceptions: Infectious and Parasitic Diseases and Digestive System Diseases. Infectious and Parasitic Diseases is the third leading cause of death in the African American population and Digestive System Diseases is the sixth leading cause of death but neither one appear in the top five leading causes of death for the total population. Infectious and Parasitic Diseases include subcategories such as Blood Poisoning, HIV/AIDs, TB, and Meningitis. Digestive System Diseases include subcategories such as Alcoholic Liver Disease, Other Chronic Liver Disease and Cirrhosis.



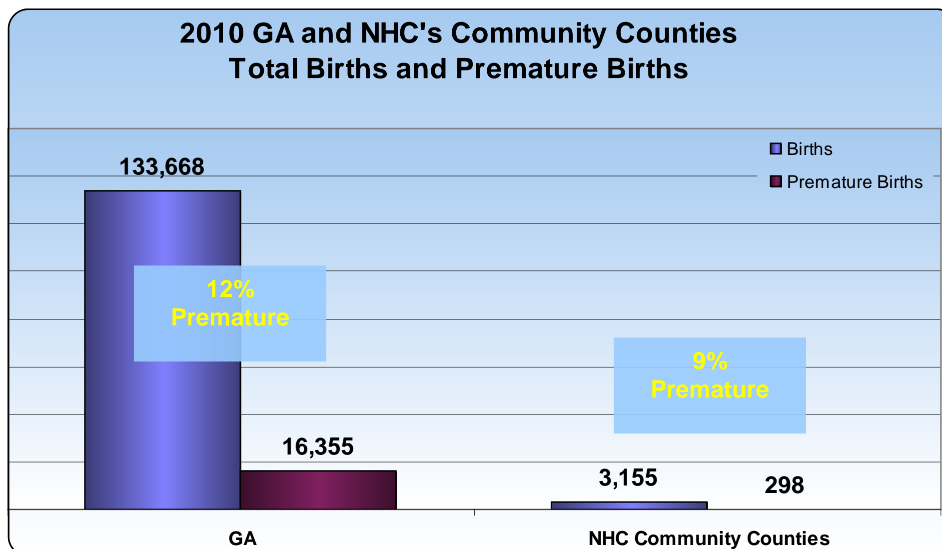
Source: OASIS, Georgia Department of Public Health, Office of Health Indicators for Planning

In 2010, there were 3 Asian deaths due to all causes, within NHC's Community. Given this low number of deaths, no further analysis was undertaken.

Our Community's Health Status – Maternal Child Health

Northside is the leading provider of obstetrical and newborn services in Georgia, often delivering more babies than any other hospital in the state. NHC provides high quality, locally-accessible neonatal intermediate care services to the Community.

In 2010, there were nearly 134,000 births across Georgia of which 3,155 or two percent (2%) occurred in the Community's counties.[21] Of the total births in Georgia, twelve percent (12%) or 16,355 were premature while nine percent (9%) of the Community's births were premature as depicted in the graph below.[22]



Source: OASIS, Georgia Department of Public Health, Office of Health Indicators for Planning

When analyzing premature births among high-priority populations within the Community:

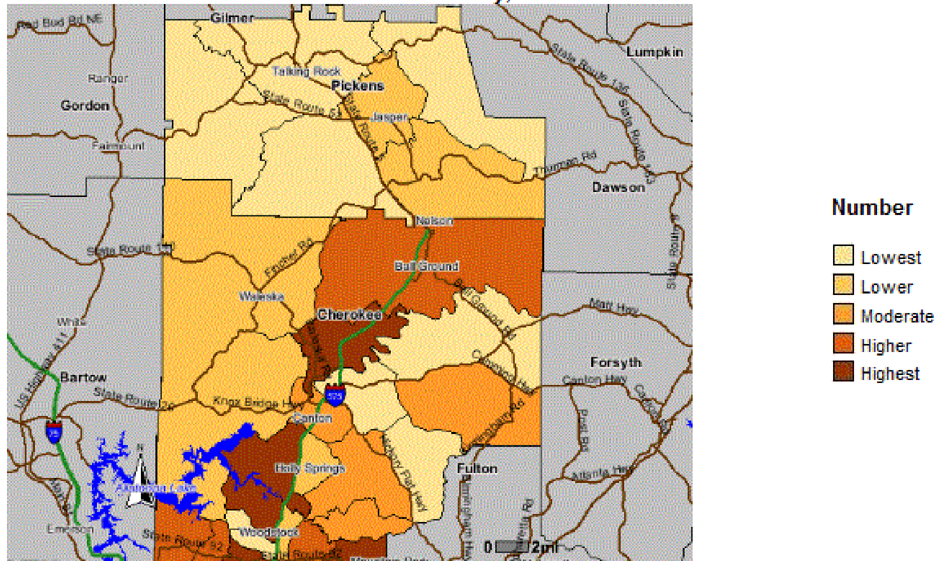
- Fifteen percent (15%) of all Black or African American births were premature
- Twelve percent (12%) of all Asian births were premature
- Ten percent (10%) of all Hispanic or Latino births were premature

As depicted in the maps below, the highest concentration of very premature births and premature births is in the central and southern regions of NHC's Community.

[21] 2011 data is not available for all metrics such as prematurity so 2010 data is used for births as well as all other mother and baby health status data.

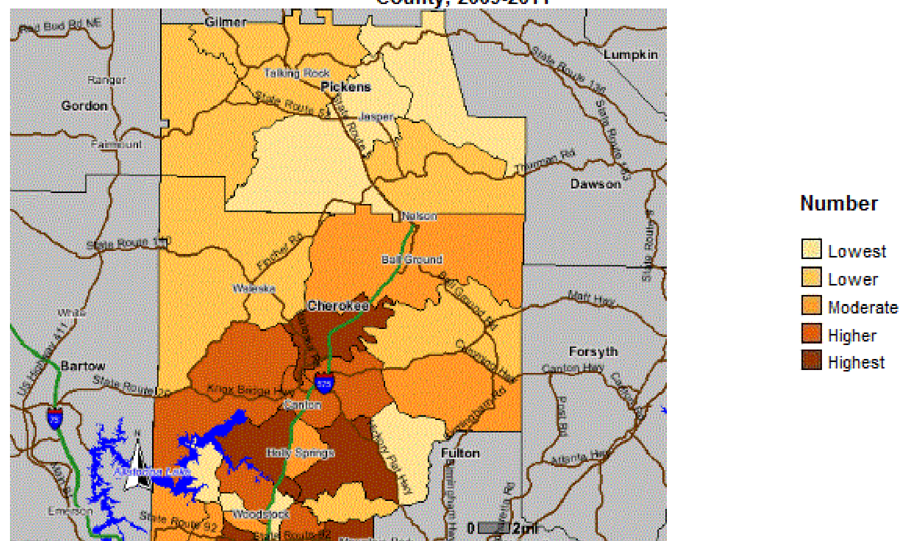
[22] Premature is defined by the Georgia Department of Public Health as less than 37 weeks gestation.

Number of Births, Very preterm (less than 32 weeks) by Census Tract, Cherokee County, Pickens County, 2009-2011



Source: OASIS Mapping Tool, Georgia Department of Public Health, Office of Health Indicators for Planning

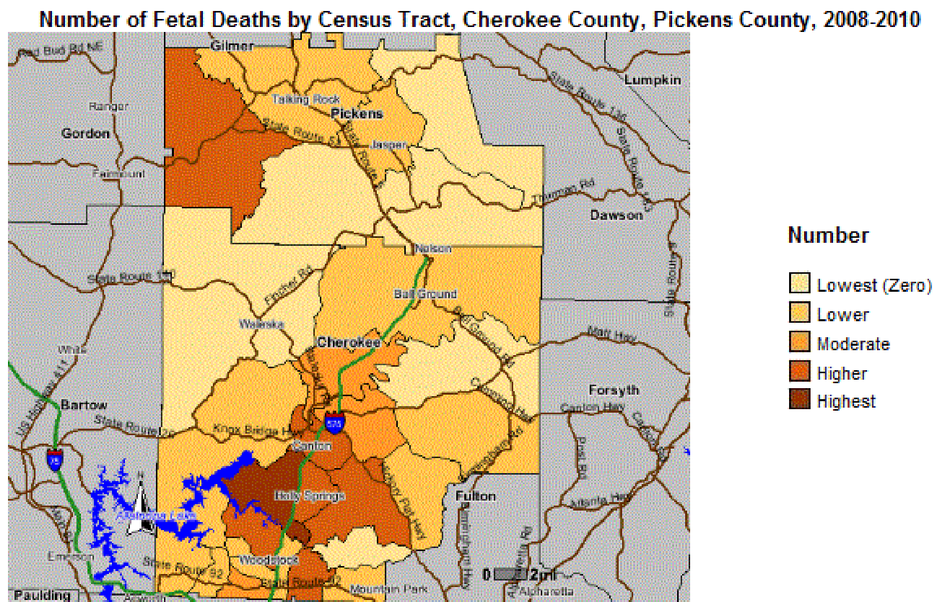
Number of Births, Preterm (32-36 weeks) by Census Tract, Cherokee County, Pickens County, 2009-2011



Source: OASIS Mapping Tool, Georgia Department of Public Health, Office of Health Indicators for Planning

In 2010, there were a little more than 1,000 fetal deaths in Georgia of which two percent (2%) or 23 occurred in the Community, including twenty one (21) Cherokee County fetal deaths. Given the concentration of very preterm and preterm births in the central/southern region of NHC's Community, it is not surprising that the concentration of fetal deaths is very similar. There is a concentration of fetal deaths in the northwestern portion of Pickens County where

there were seven (7) fetal deaths from 2008-2010; whereas, Cherokee County had fifty seven (57) fetal deaths during the same time period.



Source: OASIS Mapping Tool, Georgia Department of Public Health, Office of Health Indicators for Planning

Stakeholders Representing the Broad Interests of Our Community

III. Community Stakeholders

Process for Identifying Stakeholders

NHC identified community stakeholders who broadly represented the interests of the Community and specifically sought to identify stakeholders with special knowledge of or expertise in public health. NHC then developed the Stakeholder Assessment Discussion Guide, a copy of which is included in Appendix A, and conducted, either in person or by telephone, interviews with a qualified representative of each identified stakeholder. The table below summarizes the completed stakeholder interviews from NHC's Community. [23]

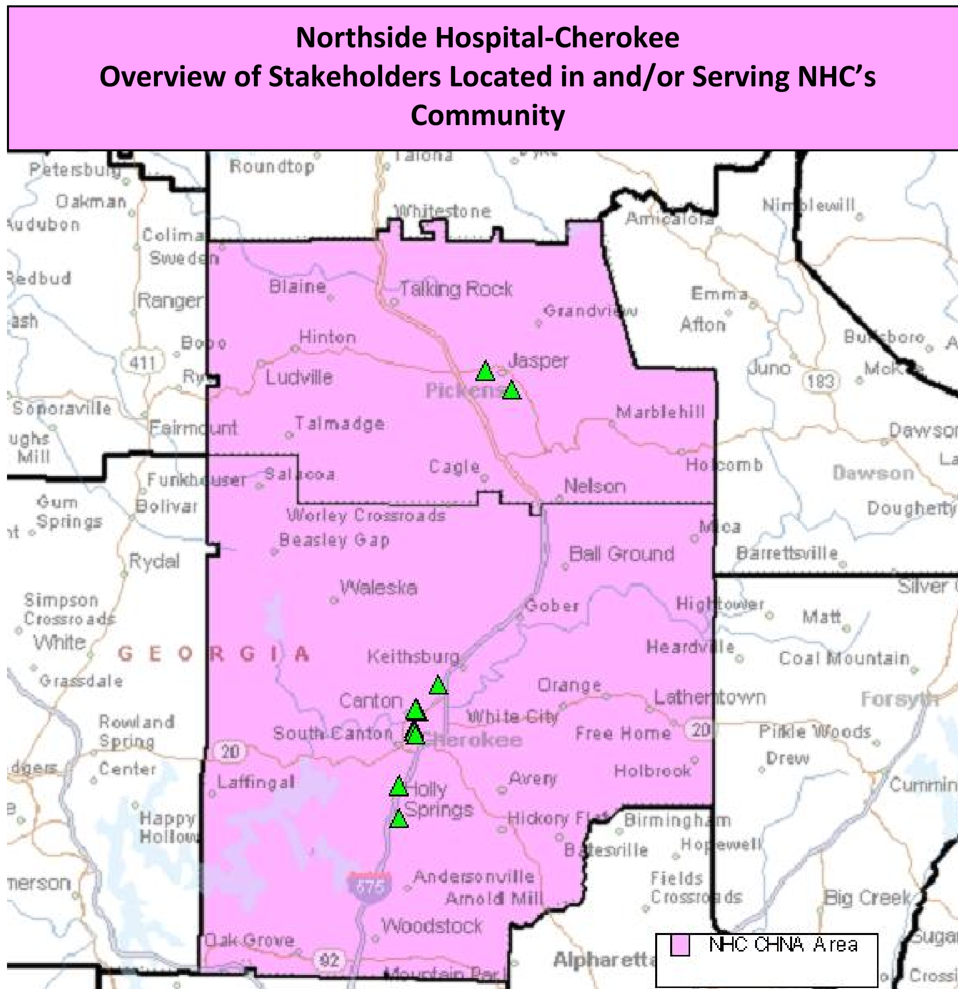
Northside Hospital-Cherokee Community Health Needs Assessment Summary of Stakeholder Interviews			
Business Community	**Local Government**	**Health Experts**	**Community Organizations**
Cherokee County Chamber of Commerce	Cherokee County Government	Bethesda Community Clinic	United Way - Cherokee County
Pickens Chamber of Commerce	Cherokee County Schools	March of Dimes	HomeStretch
	City of Canton	Georgia Highlands Medical Services	M.U.S.T. Ministries
		Good Samaritan Health Center Pickens	
		Visiting Nurse Health System	

Description of Our Participating Stakeholders

The map below is a general representation of various Community stakeholders from whom NHC sought input during the CHNA process. The map includes the stakeholder's office location; however, the office locations do not always represent the area the stakeholder serves. Additionally, not all stakeholders are depicted on the map as some (e.g., March of Dimes) have an office located outside of NHC's Community but they serve the Community. Thus, the map is

[23] It should be noted that the table above does not reflect the entire list of stakeholders who were contacted to participate; it only reflects those stakeholders who elected to participate in NHC's CHNA process.

not intended to be a literal representation of the population served by NHC's Community stakeholders.



NHC spoke with thirteen (13) stakeholders from across the Community. The stakeholders represented a broad range of perspectives from local governments, business, social services agencies, public health, safety net clinics and more. The table below summarizes the entity contacted; the entity's mission, population served and geographic area served; and the representative's area of responsibility within the stakeholder entity.

Northside Hospital-Cherokee Stakeholder Descriptions				
Entity	**Entity Mission**	**Population Served by Entity**	**Geographic Area Served by Entity**	**Representative Title**
Bethesda Community Clinic	To demonstrate the compassion of Christ by providing quality healthcare to those in need, to be a healthcare home for people in need of affordable care and a solution for our growing county's burdened healthcare system.	Uninsured/underinsured; Low to moderate income; All ages	Cherokee County and surrounding areas	Executive Director
Cherokee County Chamber of Commerce	The mission of the Chamber is to promote business and the community, while expanding the economy and enhancing the quality of life.	1,400 Chamber members representing nearly 1000 employers; mostly small businesses	Cherokee County	President & CEO
Cherokee County Government	The Cherokee County Board of Commissioners is dedicated to providing a "Superior Quality of Life" for its residents.	Approximately 1,300 county employees	Cherokee County	Manager
United Way - Cherokee County	United Way of Greater Atlanta engages all segments of our community to drive sustainable change in education, income, health and homelessness while continuing to address urgent and basic human care.	80,000+ individuals and families	Butts, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding and Rockdale Counties	Development Officer
Cherokee County Schools	The Cherokee County School District consists of 41 schools: 12 elementary, grades kindergarten through 6; eight elementary, grades kindergarten through 5; three elementary, grades kindergarten through 4; one intermediate school, grades 5 and 6; four middle schools, grades 7 and 8; three middle schools, grades 6 through 8; six high schools; Ralph Bunche for Head Start, ACE Academy, Polaris Evening Program and L.R. Tippens Educational Center.	Cherokee County Residents	Cherokee County Residents	Director, Public Information, Communications and Partnerships
City of Canton	City government and services for the residents of Canton.	Residents and business of Canton	City of Canton	Mayor
Pickens Chamber of Commerce	To connect the businesses of Pickens County.	Businesses/Residents of Pickens	Pickens County	President
Georgia Highlands Medical Services	We are a non-profit Community Health Center designed to deliver quality comprehensive family medical services to persons in need of healthcare regardless of their ability to pay.	We are a non-profit Community Health Center designed to deliver quality comprehensive family medical services to persons in need of healthcare regardless of their ability to pay.	Primarily Forsyth and Cherokee Counties	Executive Director
Good Samaritan of Pickens County	The mission of this not-for-profit health and wellness center is to provide the medically underserved in our community with compassionate and individualized health care and related services in an atmosphere of respect and dignity.	The Center serves those who (1) live or work in Pickens County, (2) meet the financial eligibility standards, and (3) have no insurance for the service being sought. All patients are screened for eligibility.	Pickens County	Executive Director
HomeStretch	To guide working homeless families to permanent stability through transitional housing, life skills classes, mentoring and active case management.	Homeless families	North Metro Atlanta	Program Director
M.U.S.T. Ministries	Serving our neighbors in need… transforming lives and communities in response to Christ's call. Vision to become Georgia's most respected Servant Leader - Restoring lives one person and one community at a time.	Residents who are struggling and need groceries, hot meals, emergency shelter, supportive housing, clothing, access to medical care, education and employment services and more.	Cherokee and Cobb Counties	Senior Director of Program Development
March of Dimes	We help moms have full-term pregnancies and research the problems that threaten the health of babies.	Women/Pregnant women of childbearing age	North Metro Atlanta	State Director
Visiting Nurse Health System	When patients face a life-limiting illness, we know they and their families need a special kind of care. We strive to ensure that every patient is cared for compassionately, comfortably and with dignity and that every family receives the support they need during this difficult time.	60% of patients served are 65+ and 74% of patients served are home health patients	Fulton, DeKalb, Gwinnett, Cobb, Clayton, Cherokee, Fayette, and Forsyth Counties	President & CEO

Summarize Stakeholder Input

The following sections summarize the stakeholders' responses to the Stakeholder Assessment Discussion Guide. While NHC's stakeholders provided a wide range of responses to all questions, there were several recurring themes or sentiments which were mentioned more frequently than others. Thus, when reviewing and prioritizing the Community's needs, NHC focused on the responses with the higher frequency in an effort to strike a balance between meeting the Community's needs and maximizing NHC's resources.

Based on your experience, what are the top three issues that negatively impact the health of the community you serve?

Northside Hospital-Cherokee Stakeholder Interview Summary	
Stakeholder Responses	**Frequency**
Lack of Insurance	8
Ignorance (Several Meanings: Not knowing resources are available; Ignorance to basic healthy lifestyle choices, i.e. nutrition; High School graduation rates	7
Transportation	5
Access to Affordable Care	5
Financial/Poverty	4
Availability of Services (language barriers, work hours, wait times)	4
Pre-Natal Care	3
Lack of Access to Fitness Programs or Affordable Places to Exercise	3
Poor Nutrition	3
Lack of Specialty Care Locally	3
Lack of Sufficient # of MDs	2
Cost of Housing	2
Poor Economy	1
Fatigue and Stress	1

If all of the issues identified above are not health-related, what are the top three health-related issues that negatively impact the health of the community you serve?

Northside Hospital-Cherokee Stakeholder Interview Summary	
Stakeholder Responses	**Frequency**
Obesity/Diabetes/Poor Nutrition	5
Dental	4
Lack of Pre-Natal Care/Infant Mortality/Prematurity	3
Cardiovascular Health	2
Mental Health	2
Affordable Prescriptions	2
Smoking	1
Substance Abuse	1
Lack of Home Health/Palliative Care Services	1
Unintentional Injuries/Motor Vehicle Accidents	1

Thinking about the people your organization serves, do they face any barriers to obtaining health care services?

This question asked stakeholders to think about barriers to care for preventive or routine care and specialty care separately as there may be different types of barriers to care depending on the type of care sought. The following tables summarize the frequency of mentions for each barrier. As with previous questions, there are several common barriers for both preventive and specialty care as summarized in the table below.

Common Barriers for Preventive and Specialty Care

Northside Hospital-Cherokee Stakeholder Interview Summary	
Stakeholder Responses	**Frequency**
Transportation	4
Lack of Insurance	4
Affordable Access	4

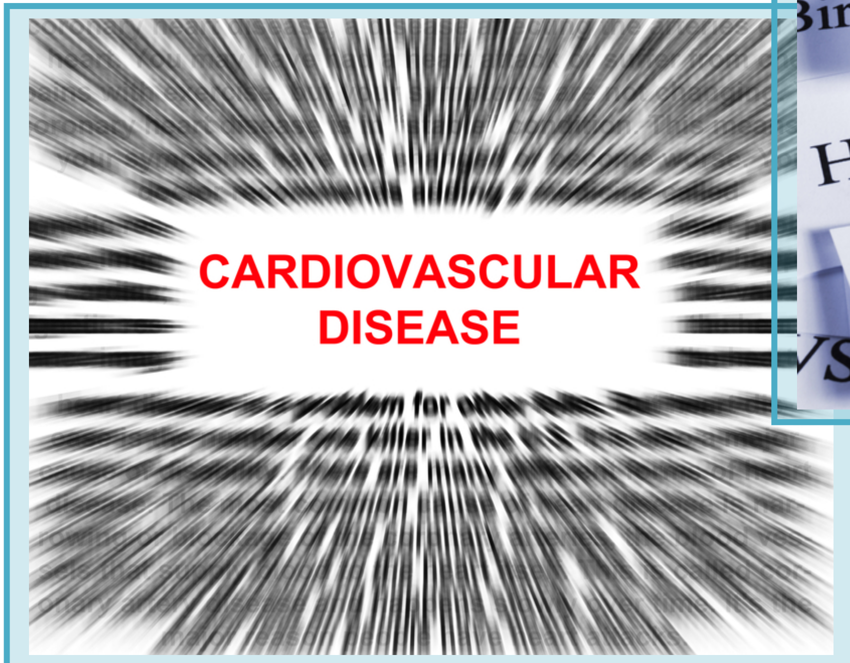
Preventive Care Barriers Summary

Northside Hospital-Cherokee Stakeholder Interview Summary	
Stakeholder Responses	**Frequency**
Wait Lists at Free/Sliding Scale Clinics	6
Lack of Providers	4
Low Income	3
Ignorance (Not knowing how to access resources)	3
Behavioral	1

Specialty Care Barriers Summary

Northside Hospital-Cherokee Stakeholder Interview Summary	
Stakeholder Responses	**Frequency**
Provider Limited Availability	3
Dental	3
Pediatrics	2
Pallative Care	1
Home Health	1

Our Community's Health Needs



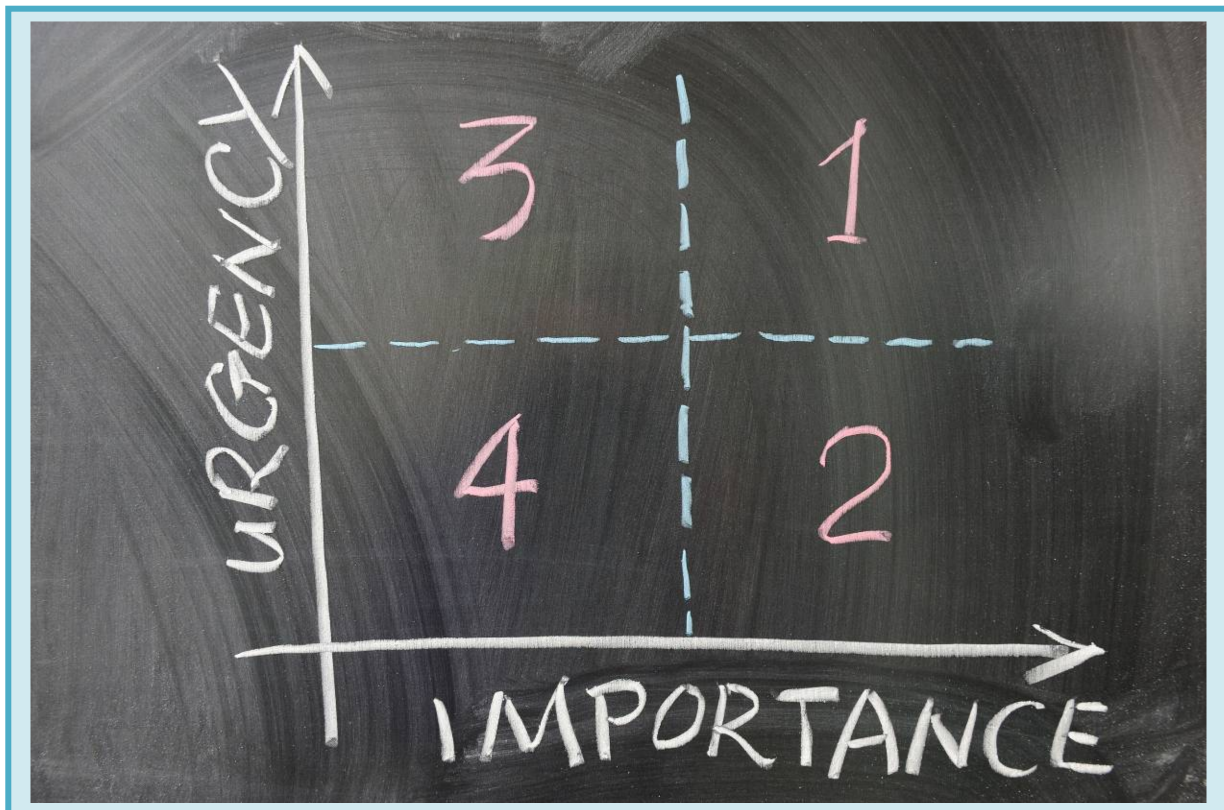
IV. Summary of Needs Identified

Our Community's Needs

NHC's CHNA process assessed the Community's needs through a variety of "lenses": (1) overall access to health care, (2) the current health status of the Community and (3) important needs as identified by Community stakeholders. The table below summarizes all of the needs identified from each of the three perspectives. It is important to note that this table is a raw list of all of the needs identified through the CHNA process and is not prioritized.

	Access Needs
1	Improve inpatient bed capacity
2	Improve access to primary care services
3	Decrease utilization of emergency room for routine care among low income and uninsured residents
4	Improve access to same day surgery services for low income and uninsured residents
	Health Status Needs
5	Decrease alcohol consumption
6	Decrease prevalence of smoking as it impacts all segments of the Community including low-income residents
7	Increase consumption of healthy foods like fruits and vegetables
8	All segments of the Community are affected by Smoking, High Blood Pressure, High Cholesterol, and Depression/Anxiety
9	Depression/Anxiety Disorder was the second most cited chronic condition among the uninsured
10	The least used preventive health behaviors among all ages, all races, all incomes (including low income) and the uninsured are Carotid Artery Screening, Pre-Natal Care and Stop Smoking Program
11	The least used preventive health behaviors unique to Black or African American residents include Hearing Test, Prostate Screening, Flu Shot, and Child Immunizations
12	52% of deaths in the Community's counties are attributed to Major Cardiovascular Diseases and Cancers
13	56% of African American or Black deaths are attributed to Major Cardiovascular Diseases and Cancers
14	9% of births in the Community's counties are premature and the percent of minority births that are premature exceeds the Community-wide rate
	Stakeholder Identified Needs
15	i.e. nutrition
16	Access to affordable care
17	Availability of Services (language barriers, work hours, wait times)
18	Transportation
19	Obesity/Diabetes/Poor Nutrition
20	Dental Health
21	Cardiovascular Health
22	Mental Health
23	Lack of Pre-Natal Care/Infant Mortality/Prematurity
24	Lack of primary care providers
25	Need for more specialty care providers
26	Access to affordable places to exercise

Establishing Our Priorities



V. Prioritize the Health Needs Identified

Our Prioritization Process

NHC developed a five-step process for prioritizing the health needs identified through the CHNA as illustrated and described below.

Step 1: Create a crosswalk of all the identified needs

An array of specific health needs was identified through NHC's CHNA process. Oftentimes, the identified needs were very specific (i.e., improving access to same-day-surgery services for low-income residents) other times the identified needs were broader in nature (i.e., Cardiovascular Disease). Thus, NHC created a needs crosswalk which groups all twenty-six specific needs into broader need categories such as primary care, specialty care or preventive health services. Also, the crosswalk defines the population impacted by each of the identified needs. This process resulted in eleven different categories of identified needs. A copy of the crosswalk is included in Appendix B.

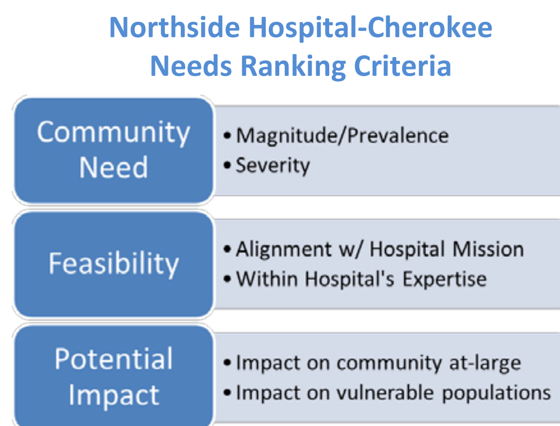
NHC-CHNA Need Categories
Affordable Care
Cancer
Cardiovascular Disease
Healthy Lifestyle Behaviors
Maternal and Infant Health
Mental Health
Obesity
Preventive Health Services
Primary Care
Specialty Care
Transportation

Step 2: Define the criteria used to guide the ranking process

After researching different methodologies for establishing the criteria against which the identified needs would be scored, NHC adopted the Catholic Health Association's ("CHA") guidance.[24] According to the CHA, examples of criteria could include:

1. Magnitude: the number of people impacted by the problem.
2. Severity: the risk of morbidity and mortality associated with the problem.
3. Historical trends.
4. Alignment of the problem with the organization's strengths and priorities.
5. Impact of problem on vulnerable populations.
6. Importance of problem to the community.
7. Existing resources addressing the problem.
8. Relationship of problem to other community issues.
9. Feasibility of change, availability of tested approaches.
10. Value of immediate interventions vs. any delay, especially for long-term or complex threats.

NHC elected to focus on criteria that tied to 1) community need, 2) feasibility and 3) potential impact. Specifically, NHC's criteria are presented below.



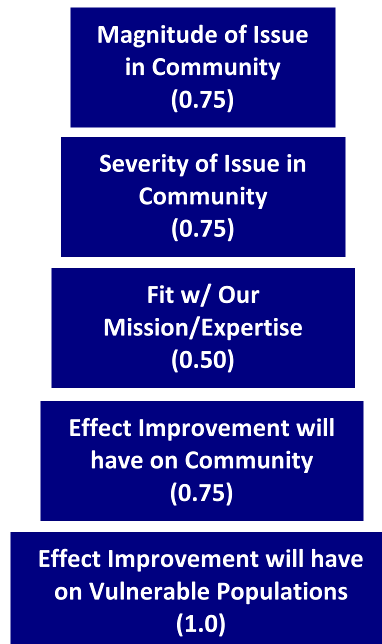
[24] *A Guide for Planning and Reporting Community Benefit*, Establish criteria for priority setting, pg. 153.

Step 3: Determine the weight of each criterion

Again after much research, NHC turned to the National Association of County and City Health Officials ("NACCHO") for guidance regarding common practices used by county and city health departments for prioritizing the needs in their communities. The NACCHO outlined five (5) commonly-used prioritization techniques:

1. Multi-Voting Technique
2. Strategy Grids
3. Nominal Group Technique
4. The Hanlon Method
5. Prioritization Matrix

NHC adopted the Prioritization Matrix methodology given the number of prioritization criteria selected and the number of community needs identified. This methodology will assist NHC in maximizing its resources to address those needs which have the greatest impact on the Community. NHC's prioritization criteria and their assigned weights are summarized below.



Step 4: Rate each identified need against the prioritization criteria

Throughout the CHNA process, NHC compiled and analyzed a variety of quantitative and qualitative data from a myriad of sources. After thoughtful consideration of the prevalence, frequency and severity of the identified needs combined with any disparities and disproportionate impact an identified need may have on vulnerable populations, NHC evaluated each need category against each prioritization criterion and assigned that need category a priority score of 1 through 4.

1. Not a priority.
2. Low priority.
3. Medium priority.
4. High priority.

The table below summarizes the rating of each identified need for NHC's Community.

Northside Hospital-Cherokee CHNA Prioritization Matrix					
NHC-CHNA Need Categories	Magnitude of Issue in Community	Severity of Issue in Community	Fit w/ Our Mission/ Expertise	Effect Improvement will have on Community	Effect Improvement will have on Vulnerable Populations
Weight	**0.75**	**0.75**	**0.50**	**0.75**	**1.00**
Affordable Care	4	3	2	4	4
Cancer	3	3	4	3	4
Cardiovascular Disease	4	4	3	4	4
Healthy Lifestyle Behaviors	4	4	4	4	4
Maternal and Infant Health	3	3	4	3	4
Mental Health	3	3	2	3	3
Obesity	3	3	3	3	4
Preventive Health Services	4	3	4	4	4
Primary Care	4	3	4	4	4
Specialty Care	3	3	4	3	4
Transportation	3	2	1	2	4

Step 5: Summarize the identified needs according to the prioritization methodology employed

The table below summarizes the final prioritization score of each identified need. The priority score of each need (e.g., 1, 2, 3, or 4) is multiplied by the prioritization criterion's assigned weight (e.g. 0.50, 0.75 or 1.00); the results are then summed for the total priority score for each identified need.

Northside Hospital-Cherokee CHNA Prioritization Matrix						
NHC-CHNA Need Categories	Magnitude of Issue in Community	Severity of Issue in Community	Fit w/ Our Mission/ Expertise	Effect Improvement will have on Community	Effect Improvement will have on Vulnerable Populations	Total Score
Weight	0.75	0.75	0.50	0.75	1.00	
Healthy Lifestyle Behaviors	4	4	4	4	4	15.0
Cardiovascular Disease	4	4	3	4	4	14.5
Preventive Health Services	4	3	4	4	4	14.3
Primary Care	4	3	4	4	4	14.3
Affordable Care	4	3	2	4	4	13.3
Cancer	3	3	4	3	4	12.8
Maternal and Infant Health	3	3	4	3	4	12.8
Specialty Care	3	3	4	3	4	12.8
Obesity	3	3	3	3	4	12.3
Mental Health	3	3	2	3	3	10.8
Transportation	3	2	1	2	4	9.8

The Needs We Will Address

Ideally, NHC would have unlimited resources to address all of the Community's identified needs. However, it is not realistic for any single organization to address all of a community's needs, hence the importance of prioritizing the identified needs. NHC selected those needs that impact the greatest number of people in the Community; those needs that disproportionately impact the most vulnerable populations; those needs that are most severe and/or prevalent; and those needs that Northside has the wherewithal to address.

1. Healthy Lifestyle Behaviors
2. Cardiovascular Disease
3. Preventive Health Services
4. Primary Care
5. Cancer

Northside Hospital-Cherokee CHNA Prioritization Matrix						
NHC-CHNA Need Categories	**Magnitude of Issue in Community**	**Severity of Issue in Community**	**Fit w/ Our Mission/ Expertise**	**Effect Improvement will have on Community**	**Effect Improvement will have on Vulnerable Populations**	**Total Score**
Weight	**0.75**	**0.75**	**0.50**	**0.75**	**1.00**	
Healthy Lifestyle Behaviors	4	4	4	4	4	15.0
Cardiovascular Disease	4	4	3	4	4	14.5
Preventive Health Services	4	3	4	4	4	14.3
Primary Care	4	3	4	4	4	14.3
Affordable Care	4	3	2	4	4	13.3
Cancer	3	3	4	3	4	12.8
Maternal and Infant Health	3	3	4	3	4	12.8
Specialty Care	3	3	4	3	4	12.8
Obesity	3	3	3	3	4	12.3
Mental Health	3	3	2	3	3	10.8
Transportation	3	2	1	2	4	9.8

Available Resources in Our Community

As summarized in the table below there are nearly 100 existing organizations available to serve as resources in the Community to help meet the identified needs. The definition used to group the various resources into the summary categories along with a list of the existing Community resources is included in Appendix C.

Northside Hospital-Cherokee Existing Resources to Meet Community Needs	
Social Environment	25
Healthcare Services	14
Diseases: Chronic/Communicable/Acute	12
Aging Services	10
Disabilities	8
Healthy Lifestyle Organizations	8
Youth	8
Pregnancy	7
Injury Prevention	4
Behavioral and Mental Health	2
NHC-Community Resources	**98**

The Needs We Will Not Address

Unfortunately, NHC is unable to address directly all of the identified community needs due to limited resources, magnitude/severity of the issue and existing resources available to meet the need. The identified Community needs enumerated below will not be addressed as part of NHC's CHNA:

1. Affordable Care
2. Maternal and Infant Health
3. Specialty Care
4. Obesity
5. Mental Health
6. Transportation

1. Affordable Care

Much of the quantitative and qualitative data regarding affordable care centered primarily on the cost of insurance and the inability in the Community, particularly those with limited financial means, to afford healthcare insurance. Clearly, Northside does not have any influence over the cost of insurance and therefore would be unable to affect change. Although NHC is unable to help patients better afford insurance, the hospital provided $24.2 million of indigent and charity care in 2011 and will continue to serve all patients regardless of their ability to pay. There is not much more NHC can do to assist patients with access to healthcare insurance, as it already makes care available to both uninsured and underinsured patients.

2. Maternal and Infant Health

Northside is a leading provider of obstetrical services in Georgia and as such offers a wide-variety community benefit services for this patient population. For example, if a pregnant woman presents to NHC's ER and is not under the care of an OB/GYN, NHC assigns an affiliated OB/GYN who will assume caring for the woman throughout the remainder of her pregnancy; oftentimes these "unassigned" patients are Medicaid beneficiaries or are uninsured. Also NHC provides comprehensive, free educational materials on pre-natal care, nutrition and medication, life during pregnancy, potential complications, and special care conditions. These materials, offered in English and Spanish, are made widely-available to the public in addition to being distributed to patients. These efforts along with the fact that a lower percentage of the Community's births are premature compared to Georgia, demonstrate that NHC already is serving as resource to meet this Community need; therefore, NHC will not adopt maternal and infant health as an official need but the hospital will continue providing the aforementioned community benefit services.

3. Specialty Care

In 2000 there were less than 100 total physicians on staff at NHC. Today, there are nearly 250 *specialists* (excluding anesthesiology, emergency medicine, family medicine, internal medicine, OB/GYN and pediatrics) on staff at NHC. Thus, NHC has grown the number of specialists

practicing at the hospital and serving the Community. Although not adopted as an official need NHC will address through this CHNA, it is anticipated that NHC will continue to grow the number of specialists on staff through its existing and ongoing medical staff development efforts. Also, there are several existing resources located in the Community to meet this need, such as fourteen (14) existing community resources for healthcare services (including two (2) general acute care hospitals) as well as additional resources serving select populations such as people with disabilities (8) and the aged (10).

4. Obesity

While not adopted officially as a need that NHC will address as part of this CHNA, it is highly likely that some of Northside's CHNA efforts (i.e. improving healthy lifestyle behaviors, primary care and preventive health services) also will help address the obesity need in the Community.

5. Mental Health

After analyzing various quantitative and qualitative external data sets, mental health was not determined to be a high priority, pervasive need in NHC's Community. While Depression/Anxiety Disorder was the second most frequently cited chronic condition for the uninsured population in the Community, an analysis of NHC's internal data did not reveal high utilization of mental health services among its indigent and charity care population. In fact, in 2011, NHC had zero other outpatient indigent and charity care mental health cases and only fifteen (15) inpatient cases, or three percent (3%) of NHC's total indigent and charity care inpatient cases. NHC did care for approximately 500 mental health ER cases in 2011 which represented 1.6% of the hospital's total ER visits. Thus, NHC already is providing services to meet this identified need. In addition, there are two (2) organizations in the Community aimed at helping those with mental and behavioral health issues. Thus, in order to efficiently utilize its resources in order to make the biggest positive impact on the Community's health, NHC is not directly addressing mental health as part of this CHNA's initiatives.

6. Transportation

Although transportation was cited as a barrier to care by Community stakeholders, particularly for vulnerable populations, NHC does not have the expertise or resources to adequately address this issue. That being said, the hospital will be cognizant of this barrier to care as it develops its implementation strategy and action plans seeking to make its healthcare services more accessible, locally, to vulnerable populations.

Creating Our Implementation Plan

Overview of our Implementation Strategy

Through the CHNA, NHC identified five (5) community needs that it will focus on addressing: 1) Healthy Lifestyle Behaviors, 2) Cardiovascular Disease, 3) Preventive Health Services, 4) Primary Care, and 5) Cancer. While all of these needs affect the broader Community, certain needs disproportionately impact vulnerable populations such as low-income persons or minority populations. Accordingly, NHC's implementation strategy will reflect the unique dynamics of each identified need and will employ tactics to ensure appropriate distribution of resources.

NHC intends to utilize myriad strategies to address the Community's needs including:

1. Financial assistance on behalf of uninsured, underinsured and low-income persons.
2. Community health improvement services:
    - Community health education outreach.
    - Community health screenings.
    - Support groups.
    - Community-based clinical services for reduced cost or free.
    - Health care support services such as enrollment assistance for government-funded health programs.
3. Collaborating with other mission-driven organizations to address health disparities and improve the Community's health status.
4. Financial and in-kind contributions for community benefit.
5. Reinvesting capital to expand or establish services and/or facilities in response to community need.

Appendix A

NORTHSIDE HOSPITAL

Atlanta • Forsyth • Cherokee

Northside Hospital, Inc.
Community Health Needs Assessment
Stakeholder Assessment Discussion Guide

Stakeholder Assessment Questions

1. Based on your experience, what are the top three issues that negatively impact the health of the community you serve?

2. If all of the issues identified above are not health-related, what are the top three health-related issues that negatively impact the health of the community you serve?

3. Thinking about the people your organization serves, do they face any barriers to obtaining health care services?
   - Preventive/Routine
   - Specialty
   - Please explain any barriers identified

4. Hypothetically speaking, if you had unlimited resources, what program(s) or service(s) would you develop in order to meet the health needs of the community you serve?

5. Please feel free to share any comments or observations you may have about the health status/needs of the community.

Stakeholder Background

Entity Name:

Entity Address:

Entity Representative Name and Position:

Entity Mission:

Population Served by Entity:

Geographic Area Served by Entity:

Appendix B

Northside Hospital-Cherokee Community Health Needs Crosswalk			
Number	Specific Need	Need Category	Population Impacted
1	Improve inpatient bed capacity	Primary Care/Specialty Care	All
2	Improve access to primary care services	Primary Care	All
3	Decrease utilization of emergency room for routine care among low income and uninsured residents	Preventive Health Services	All
4	Improve access to same day surgery services for low income and uninsured residents	Preventive Health Services	Low Income/Uninsured
5	Decrease alcohol consumption	Healthy Lifestyle Behaviors	All
6	Decrease prevalence of smoking as it impacts all segments of the Community including low-income residents	Healthy Lifestyle Behaviors	Low Income/Uninsured
7	Increase consumption of healthy foods like fruits and vegetables	Healthy Lifestyle Behaviors	All
8	All segments of the Community are affected by Smoking, High Blood Pressure, High Cholesterol, and Depression Anxiety	Preventive Health Services	All
9	Depression/Anxiety Disorder was the second most cited chronic condition among the uninsured	Preventive Health Services	Uninsured
10	The least used preventive health behaviors among all ages, all races, all incomes (including low income) and the uninsured are Carotid Artery Screening, Pre-Natal Care and Stop Smoking Program	Preventive Health Services/Maternal and Infant Health/Healthy Lifestyle Behaviors	All
11	The least used preventive health behaviors unique to Black or African American residents include Hearing Test, Prostate Screening, Flu Shot, and Child Immunizations	Preventive Health Services	Minority
12	52% of deaths in the Community's counties are attributed to Major Cardiovascular Diseases and Cancers	Cardiovascular Disease	All
12	52% of deaths in the Community's counties are attributed to Major Cardiovascular Diseases and Cancers	Cancer	All
13	56% of African American or Black deaths are attributed to Major Cardiovascular Diseases and Cancers	Cardiovascular Disease	Minority
13	56% of African American or Black deaths are attributed to Major Cardiovascular Diseases and Cancers	Cancer	Minority
14	9% of births in the Community's counties are premature	Maternal and Infant Health	All
14	The percentage of minority births (Black or African American, Asian and Hispanic) is higher than the Community	Maternal and Infant Health	Minority
15	Education about what community resources are available; how to make basic healthy lifestyle choices, i.e. nutrition	Healthy Lifestyle Behaviors	All
16	Access to affordable care	Primary Care	Low Income/Uninsured
17	Availability of Services (language barriers, work hours, wait times)	Primary Care	All
18	Transportation	Transportation	Low Income/Uninsured
19	Obesity/Diabetes/Poor Nutrition	Obesity	All
20	Dental Health	Primary Care	Low Income/Uninsured
21	Cardiovascular Health	Cardiovascular Disease	All
22	Mental Health	Mental Health	All
23	Lack of Pre-Natal Care/Infant Mortality/Prematurity	Maternal and Infant Health	All
24	Lack of primary care providers	Primary Care	All
25	Need for more specialty care providers	Specialty Care	All
26	Access to affordable places to exercise	Healthy Lifestyle Behaviors	Low Income/Uninsured

Appendix C

Northside Hospital-Cherokee Community Resources Category Definitions	
Category	***Definitions***
Aging Services	Adults Age 65 and over
Behavioral and Mental Health	Addiction: Alcohol and Drugs, Suicide, Depression and other Mental Health Disorders
Disabilities	Adults and Children living with Developmental Disabilities
Diseases	Chronic/Communicable/Acute
Healthcare Services	Hospitals/Clinics/Public Health Departments/Prescription Programs
Healthy Lifestyle Organizations	Physical Activity, Parks and Recreation Centers, Nutrition/Weight Loss
Injury Prevention	Intentional and Unintentional injuries: Falls, Poison, Motor Vehicle Collisions, Abuse
Pregnancy	Conditions related to pregnancy, teen pregnancy, premature infants
Social Environment	Community Centers, Food Pantries, Donations, Spiritual Needs, and Housing
Youth	Education, Libraries, Housing, Delinquency and Violence, Nutrition

Disabilities	**Injury Prevention**
Center for Low Vision Services	Cherokee Family Violence Center, Inc.
Cherokee Day Training Center, Inc.	Pickens County Council on Child Abuse Inc
Families of Autism/Asperger's syndrome Care, Educate and Support (FACES)	Highland Rivers Center for Mental Health
Families of Disabled Adults and Children	AIDS and Substance Abuse Speakers Network
Georgia Council of the Blind-Metro Atlanta Chapter	**Pregnancy**
Heavenly Wheels, Inc.	Babies Can't Wait
MS Center of Atlanta	Georgia Right to Life
Prevent Blindness Georgia	HOPE Center, Inc.
Youth	Option Line
Cherokee County Cooperative Extension Service	Pickens Pregnancy Center Inc
Cherokee Learning Center	Right from the Start Medicaid
Ralph Bunche Center	WIC programs
Boys & Girls Club of Metro Atlanta	**Social Environment**
Cherokee County Library	Cherokee County Recycling
Georgia Department of Education - School Districts	Cherokee Recreation and Parks Authority
DreamPower Therapeutic Equestrian Center, Inc.	Faith Assembly of God
Georgia Division of Family and Children Services/DFCS	Timothy Lutheran Church - Timothy's Cupboard
Healthcare Services	Cherokee County Victim-Witness Assistance Program
Cherokee County Health Department	Georgia Department of Veteran Services
Georgia Highlands	Office of Child Support Services
Georgia Department of Health & Human Services - Centers for Medicare	Appalachian Childrens Emergency Shelter-Pickens Assessment Center Aces Pickens
Georgia Mountains Hospice Inc	Canton Housing Authority
Grady Health System Poison Center	Cherokee County Habitat for Humanity - North Central Georgia
Visiting Nurse Health System	Habitat for Humanity International Inc Pickens Co Inc Hfh
Good Samaritan Health & Wellness Center Inc	MUST Marietta - Ministries United for Service and Training
Grady Health System	North Georgia Angel House, Inc.
Piedmont Hospital Mountainside	Cherokee County DUI/Drug Court
Children's Healthcare of Atlanta Egleston	Georgia Court Appointed Special Advocates/Georgia CASA
Children's Healthcare of Atlanta Hughes Spalding	Sequoyah Regional Library
Children's Healthcare of Atlanta Scottish Rite	Goodwill Industries of North Georgia, Inc.
Bethesda Community Clinic Inc.	Cobb Kingdom GA
	Atlanta Food Bank
	Boys & Girls Clubs of North Georgia
	Family Promise
	Jewish Federation of Greater Atlanta - (JFGA)
	Marcus Jewish Community Center of Atlanta
	North Georgia Community Action Inc
	Salvation Army
	Woodstock Jaycees