2017 Community Health Needs Assessment Report

PREFACE

The Community Health Needs Assessment (CHNA) serves as a foundation for improving and promoting community health. The CHNA describes the health of the community by presenting information on health status, community health needs, resources, and other current health problems. The CHNA helps identify areas where better information is needed, especially evidence of health disparities among different subpopulations, quality of health care, access to care and public health preparedness.

IRS Section 501(r)(3) requires a hospital organization to conduct a Community Health Needs Assessment every third year and adopt an implementation strategy to meet the health needs identified through the health assessment. The assessment identifies factors that affect the health of the population and the availability of resources within the community to adequately address these issues.

The CHNA tool is an excellent resource for evaluating health resources, identifying health problems, and developing strategies to address health. The CHNA serves as the foundation for local public health planning and for improving the health status of the community with the creation of a strategic implementation plan.

EXECUTIVE SUMMARY

From community perceptions about health services to statistical data detailing the most evident health issues, the following report provides a comprehensive analysis of the health of Sampson County. The Community Health Needs Assessment (CHNA) uses both primary and secondary data to identify health trends, needed resources, and opportunities related to improving the health of Sampson County.

**Primary data** was collected through a 55-question survey tool provided by the Office of Healthy Carolinians that contained questions that addressed health related topics such as diet/nutrition, exercise, tobacco use, alcohol consumption, access to care, and lifestyle habits. The survey aimed to collect data that was representative of Sampson County’s diverse population.

The survey tool was used to collect data, demographics, and other information for all participants, as well as public comments. Approximately 1,000 surveys were distributed, and 960 were returned. The survey was available electronically and in hard copy. The final survey data provided insight about the factors that survey participants considered as the highest priorities related to the health and well-being of the residents of Sampson County residents.

Relating to the health and well-being, on the 2017 CHNA survey, the questions were asked:

In your opinion, which ONE health behavior do people in your community need more information?

1. **Eating well/Nutrition** – 20.2 %
2. Substance abuse/prevention – 15.8 %
3. Going to the doctor for yearly check-ups – 7.9%
4. Exercising/fitness – 7.7 %
5. Managing weight – 7.1 %

Which of the following do your children need more information about? (may choose multiple answers)

1. **Nutrition** – 40%
2. Drug Abuse – 37.4%
3. Reckless Driving/Speeding – 26.7 %
4. Sexually transmitted diseases – 21.7 %
5. Alcohol – 20.9 %
According to the Community Health Needs Assessment, the top two issues people want more information about are Eating well/Nutrition and Substance abuse/prevention. Also, people want their children to have more information about the same issues, Nutrition and Drug Abuse.

Secondary data is information collected by the government and other credible sources. Data is compiled to provide statistical analysis of facts and figures as they relate to the health of Sampson County. For the purposes of the CHNA, data was collected from a variety of sources, such as the North Carolina State Center for Health Statistics, Center for Disease Control and the US Census Bureau.

A summary of some data collected about Sampson County residents includes: leading causes of deaths for Sampson County residents, cancer death rates, heart and stroke death rates, diabetes death rates, obesity rates, and socio-economic factors like poverty, unemployment and education.

These are key health indicators in our community and this information should help us find ways to improve the health of our community and lower chronic disease and death rates. The key health indicators in Sampson County are seen at alarmingly higher rates than at the state and national levels.

Leading Causes of Death are key health indicators. Most of these causes of death are the result of preventable health risk factors, such as smoking, poor diet, and physical inactivity.

*Rates = unadjusted death rate per 100,000 population (2011 – 2015)*

Sampson County’s death rates are much higher than North Carolina death rates for the same causes of death. Diabetes ranks as the fourth leading cause of death in Sampson County and is more than twice the state rate. Diabetes as Cause of Death has steadily climbed with each survey year.

(source: State Center for Health Statistics (2017). County health data book)
Obesity has emerged as a priority in chronic disease prevention. Obesity increases the likelihood of certain diseases and other health problems such as heart disease, cancer, diabetes, high blood pressure, high cholesterol, and stroke.

**Sampson County’s adult obesity rates are concerning.** County obesity rates are higher and climbing faster than state and national levels.

The priorities to be addressed in the 2017 Community Health Needs Assessment Implementation Plan are **diabetes and obesity**. Diabetes, obesity and other chronic diseases are changeable with lifestyle improvements like consistent healthy eating habits and regular physical activity. Sampson Regional Medical Center, working through The Center for Health + Wellness, will develop lifestyle change programs to help improve the health of the citizens of Sampson County.
OVERVIEW OF SAMPSON COUNTY

History
Sampson County was established in April 1784, by the North Carolina General Assembly from an area taken from neighboring Duplin County. Land from Wayne and New Hanover counties would be annexed later. Our early settlers were Scotch-Irish immigrants from North Ireland, many who came to the colony of North Carolina under the protection and inducements of Henry McCulloch, a wealthy London merchant. In 1745, McCullough obtained grants from the British Crown covering some 71,160 acres of land "lying and situated on the branches of the North East and Black River."

One of the many Scotch-Irish drawn to the county in search of rich farmland and flowing rivers was John Sampson. He served as a Lt. Colonel and then a Lt. General in the county's militia and was later the first mayor of Wilmington, North Carolina. Immigrating with John Sampson was stepson, Richard Clinton. Like his stepfather, Richard Clinton distinguished himself in governmental and military service, serving as Duplin County's Register of Deeds and then in the Provincial Congress held at Hillsboro. In 1776, Richard Clinton organized a company of militia minutemen from upper Duplin and led them in the defense of Wilmington against the British. He was appointed Colonel of Calvary and Brigadier General of the Fayetteville District.

Upon the establishment of the state government of North Carolina by the Halifax Constitution of 1776, Richard Clinton served as one of the first members of the House of Commons, representing the County of Duplin. Clinton continued as a representative of Duplin County until the creation of Sampson County in 1784. Clinton secured the passage of the act creating the new county and proposed the name "Sampson" in honor of John Sampson, his stepfather and benefactor.

Other Sampson County historical figures include:
- William Rufus King, Ambassador to England & France; 13th Vice President of the United States
- Micajah Autry, who battled and died with Davy Crockett at the Alamo
- Theophilus Homes, Lieutenant General in the Confederate Army (highest ranking North Carolinian officer during the Civil War)
- James Kenan, planter, soldier and legislator
- Robert Herring Wright, first President of East Carolina Teachers College

Geography
Sampson County is one of the largest counties in North Carolina and has eight incorporated towns: Roseboro, Autryville, Salemburg, Turkey, Garland, Harrells, Newton Grove, and Clinton. Sampson County stretches sixty miles long and thirty-five miles wide. At 963 total square miles, with two miles being water, Sampson County is just about the size of the State of Rhode Island but without a public transit system. The county is drained by the Black and South rivers, as well as Six Run Creek.

Tucked into the southeast corner of the state known as the coastal plains, our county boasts gently rolling hills, rich farmland, and friendly, bustling communities. The counties that are adjacent to Sampson County include Bladen, Duplin, Wayne, Pender, Cumberland, Johnston, and Harnett.

Sampson County is minutes from the intersection of two major U.S. interstate highways, I-40 and I-95. I-40 runs east/west through Sampson County and stretches a total of 2,500 miles from coast to coast. I-95 is a north/south interstate that stretches from Miami to Maine. In addition to interstate access, Sampson County has three major US Highways as well—US HWY 701, US HWY 421 and US HWY 13.
Clinton is the oldest and largest municipality in Sampson County, incorporated in 1852, and named for American Revolution General Richard Clinton. Clinton is the county seat and the home of the Sampson County Health Department and the only hospital within the county, Sampson Regional Medical Center. In 2007, Clinton was recognized as an All-America city.

Roseboro was incorporated in 1891, and is named after John M. Rose, the Secretary of the Cape Fear and Yadkin Valley Railway. Roseboro is 12 miles from Clinton and 22 miles east of Fayetteville. It is the second largest town in Sampson County.

Autryville was founded by Captain James L. Autry who was instrumental in the location of the Cape Fear and Yadkin Valley Railroad. Autryville is located 13 miles east of Fayetteville, 10 miles east of I-95, and 22 miles west of Clinton on Hwy. 24.

Salemburg was founded on the basis of religion and education. It was incorporated in 1905. Salemburg was named the first Model Community in the United States in 1914, by the Rockefeller Foundation. Salemburg is located on N.C. 242 between N.C. 24 and N.C. 24, 12 miles west of Clinton, 20 miles east of I-40, and 20 miles west of I-95.

Turkey sits on the east side of Sampson County, just before entering Duplin County. The Turkey Township was named for Turkey Creek, so called because of the larger number of turkeys in the region during Colonial times. Turkey was incorporated in 1913, and is home of several farm related industries.

Garland is located 17 miles south of Clinton, 11 miles north of White Lake and 36 miles southeast of Fayetteville. While the town only occupies one square mile, it is home to approximately 45 small businesses.

Harrells straddles Sampson and Duplin Counties. It was incorporated in 1943, as Harrells Store. The town Changed its name to Harrells in 1952. The southern-most town in Sampson County, it is home to Harrells Christian Academy, the county’s largest private school.

Newton Grove is located at the northern end of the county and is 40 miles southeast of Raleigh, 30 miles east of Fayetteville and 25 miles west of Goldsboro. Major roads are U.S. 13, NC 701, and NC 50-55. I-40 runs around the southwest side of Newtown Grove and gives easy access to some of the fastest growing metropolitan areas in the southeast.
The road network and our central east coast location allows Sampson County residents easy access to major attractions and destinations within an hour. Sampson County’s roads provide convenient access to the state’s capitol city, shopping malls and outlets, museums, beaches, and regional and international airports. Also, its size and location in the fertile coastal plain combine to make Sampson County one of the most productive agricultural counties in the Southeast.

**Demographics**
A decent quality of life and convenient location on Interstate 40—near the I-95 interchange—has helped fuel the growth of Sampson County and its eight towns to over **63,000 people**.

### 2015 Population and Growth in Municipality

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Apr-10</th>
<th>Jul-15</th>
<th>Growth Amount</th>
<th>Growth Percent</th>
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<tbody>
<tr>
<td>North Carolina</td>
<td>9,535,692</td>
<td>10,056,683</td>
<td>520,991</td>
<td>5.46</td>
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<tr>
<td>Sampson Co</td>
<td>63,431</td>
<td>63,993</td>
<td>562</td>
<td>0.99</td>
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<tr>
<td>Autryville</td>
<td>196</td>
<td>199</td>
<td>3</td>
<td>1.53</td>
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<tr>
<td>Clinton</td>
<td>8,639</td>
<td>8,647</td>
<td>8</td>
<td>0.09</td>
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<tr>
<td>Garland</td>
<td>625</td>
<td>639</td>
<td>14</td>
<td>2.24</td>
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<tr>
<td>Harrells</td>
<td>179</td>
<td>179</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Newton Grove</td>
<td>569</td>
<td>561</td>
<td>-8</td>
<td>-1.41</td>
</tr>
<tr>
<td>Roseboro</td>
<td>1,191</td>
<td>1,192</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Salemburg</td>
<td>435</td>
<td>436</td>
<td>1</td>
<td>0.23</td>
</tr>
<tr>
<td>Turkey</td>
<td>292</td>
<td>307</td>
<td>15</td>
<td>5.14</td>
</tr>
</tbody>
</table>

*Source: State Center for Health Statistics (schs.state.nc.us/data/databook)*

**Population by Race** - In 2015, Sampson County had an estimated population of **63,724** with 52% of Sampson County residents being non-Hispanic white, 26% non-Hispanic African-American and 19% Hispanic.

*Source: State Center for Health Statistics schs.state.nc.us/interactive/query/population*
Population by Age - In 2015, there were more elderly people (ages 65+) and less young people (Ages 18-34) in Sampson County than the North Carolina percentages.

Population by Gender - The 51% female population is slightly higher than the 49% male population, which is virtually the same as it is throughout the state.

Income – Median household income is the middle income of all households and includes the incomes of all family members age 15 and up. In Sampson County, the median income is $43,946, compared to the state’s median income of $57,856. Per Capita Income is the income per person in a population. Sampson County’s per capita income is $19,062, compared to the state’s per capita income of $25,920. Per capita income includes all reported income from wages and salaries as well as from self-employment, interests or dividends, public assistance, and retirement.

HEALTH DATA

General health status measures the health of an entire population. Throughout the years Sampson County Health Department, Sampson Regional Medical Center, Sampson County Partners for Healthy Carolinians, and other community partners have assessed the general health status of Sampson County residents by monitoring life expectancy, physically and mentally unhealthy days, self-assessed health status, limitation of physical activity, and leading causes of death.

Using the Community Health Needs Assessment survey, Sampson County residents responded to the following survey questions about their general health:

**Question 16** in the community survey asked: Would you say, in general, your health is: Approximately 45.6% of respondents stated “good,” 24.6% said “very good”, and 14.9% said “fair.”

**Question 18** asked: In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal day or activities? Approximately 74.7% of the respondents stated “no” and 17.8% said “yes.”

**Question 19** asked: In the past 30 days, have you had any physical pain or health problems that made it hard for you to do your usual activities such as driving, working around the house, or going to work? Approximately 74.2% of respondents stated, “no” and 23.6% said “yes.”
**Life Expectancy** - While most residents believe that their general, mental, and physical health is good, the total life expectancy at birth (both sexes) is lower in Sampson County (age 75.74) than North Carolina (age 77.86) and United States average (age 79.08).

![Life Expectancy Chart]

*Source: State Center for Health Statistics (2017). County health data book*

**Leading Causes of Death in Sampson County**

Leading Causes of Death are key health indicators. Most of these causes of death are the result of preventable health risk factors, such as smoking, poor diet, and physical inactivity. The five leading causes of death among all ages in Sampson County are:

1. **Cancer**
2. **Heart disease**
3. **Cerebrovascular disease (stroke)**
4. **Diabetes mellitus**
5. **Chronic lower respiratory diseases**

Since the last (2014) Community Health Needs Assessment (CHNA) the top five causes of death remain the same but the order switched slightly, with Diabetes Mellitus climbing with every assessment and moving ahead of chronic lower respiratory disease.

*2011 – 2015 *Rates = unadjusted death rate per 100,000 population

![Top 5 Leading Causes of Death]

*Source: State Center for Health Statistics (2017). County health data book*
Observations:
- Cancer, Heart disease and stroke have been in the top three for over a dozen years.
- Diabetes, as a cause of death, is slowly rising higher with each survey – In 2011, Diabetes was ranked #6; In 2014 diabetes climbed to #5; In 2017, Diabetes was at an all-time high with a ranking of #4.

Trends: The trend for heart disease is moving in the right direction.

Trends: The trend for Diabetes Mellitus is moving in the wrong direction at an alarming rate.

Most causes of chronic disease, like heart disease and diabetes, are the result of preventable risk factors, such as smoking, poor diet, and physical inactivity.

The top leading causes of death among infants, children, and teenagers include conditions originating during the perinatal period (time immediately before and after birth), birth defects, unintentional injuries, motor vehicle accidents, and homicide.

2011 – 2015 *Rates = unadjusted death rate per 100,000 population

Source: State Center for Health Statistics (2017). County health data book
The top leading causes of death among all adult age groups are heart disease and cancer, except ages 20 – 39, where motor vehicle accidents and other unintentional injuries outrank everything else.

Among young adults the top leading causes of death are motor vehicle injuries and unintentional injuries.

![Leading Causes of Death Ages 20 - 39](image)

*Source: State Center for Health Statistics (2017). County health data book*

This trend quickly switches among middle-age and senior adults, where the leading causes of death are cancer and heart disease.

![Leading Causes of Death Ages 40 - 64](image)

![Leading Causes of Death Ages 65 - 84](image)
Leading Causes of Death in Sampson County According to Race and Gender

For white males, diseases of the heart and cancer account for over 70% of deaths. The top five causes of death among white males in North Carolina are, in order: heart disease, cancer, chronic lower respiratory diseases, diabetes mellitus, with motor vehicle injuries and all other intentional injuries tied for 5th place.

For Minority Males, the leading cause of death is cancer, with heart disease a strong second. Followed by cerebrovascular disease (stroke), diabetes mellitus, and motor vehicle injuries.
For white females, the top two causes of death are cancer and heart disease. Chronic lower respiratory diseases, diabetes mellitus and Alzheimer's disease follow for the top five causes of death.

Among minority females heart disease and cancer are top two causes, followed by cerebrovascular disease, diabetes mellitus, chronic lower respiratory disease and nephritis/nephrotic syndrome/nephrosis tied for fifth.

Observation: Among minority males and females, cerebrovascular disease (stroke) ranks as third leading cause of death but does not make the top five for white males and females.
Infant Mortality
Sampson County’s total infant death rate trend is moving in the right direction. For years it has been well above state average but the gap is narrowing.

![Infant Deaths per 1,000 Live Births](chart)

Source: NC-DHHS State Center for Health Statistics

Chronic Diseases
In the United States, chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability. Seven of the top 10 causes of death in 2014 were chronic diseases. Two of these chronic diseases—heart disease and cancer—together accounted for nearly 46% of all deaths.

Treating people with chronic diseases accounts for 86% of our nation’s health care costs. Chronic diseases such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis are among the most common, costly, and preventable of all health problems in the U.S.

Obesity has emerged as a priority in chronic disease prevention and has been linked to increased risk for heart disease, high blood pressure, type 2 diabetes, arthritis-related disability, and some cancers.

- In 2014, more than one-third of adults (36%), or about 84 million people, were obese (defined as body mass index [BMI] ≥30 kg/m²).
- About one in six youths (17%) aged 2 to 19 years was obese (BMI ≥95th percentile).

Some other interesting facts about chronic diseases, according to the Center for Disease Control:

- As of 2012, about half of all adults—117 million people—had one or more chronic health conditions.
- One in four adults had two or more chronic health conditions.
- Diabetes is the leading cause of kidney failure, lower-limb amputations other than those caused by injury, and new cases of blindness among adults.

Cancer
Cancer is the leading cause of death in Sampson County and will soon be the leading cause of death in the United States. By 2020, the number of new cancer cases is expected to increase to nearly 2 million a year. Each year in the United States, more than 1.5 million people are diagnosed with cancer, and more than 500,000 dies of the disease.

Research shows that more than half of cancer deaths could be prevented through healthy choices, screening, and vaccinations. Not smoking, drinking alcohol in moderation or not at all, getting enough sleep, eating a diet rich in
fruits and vegetables and low in red meat, and getting enough physical activity have been shown to improve overall health and lower the risk of developing some cancers.

**Age Adjusted Cancer Death Rates (2011 - 2015, per 100,000 population)**

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**Cancer - All Sites**

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>North Carolina</th>
<th>Sampson County</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites</td>
<td>190.6</td>
<td>222.3</td>
</tr>
</tbody>
</table>

*Source: State Center for Health Statistics (2017). County health data book*

**Observation:** Sampson County’s cancer age adjusted death rate of 222.3 is well above the state rate of 190.6.

**Smoking** causes about 90% of lung cancer deaths in men and nearly 80% in women. Smoking also causes cancer of the voice box (larynx), mouth and throat, esophagus, bladder, kidney, pancreas, cervix, colon, and stomach, as well as a type of blood cancer called acute myeloid leukemia. (Center for Disease Control, 2016).

**According to cancer site,** Sampson County exceeds the North Carolina mortality rate in colon/rectum, lung, and prostate cancer. For female breast cancer, the state rate and the county rate are virtually the same.

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**Age Adjusted Cancer Death Rates by Site (2011 – 2015, per 100,000 Population)**

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**Cancer Mortality Rates**

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>North Carolina</th>
<th>Sampson County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colon/Rectum</td>
<td>14</td>
<td>16.1</td>
</tr>
<tr>
<td>Lung/Bronchus</td>
<td>49</td>
<td>53.8</td>
</tr>
<tr>
<td>Female Breast</td>
<td>21.3</td>
<td>21.4</td>
</tr>
<tr>
<td>Prostate</td>
<td>20.7</td>
<td>24.7</td>
</tr>
</tbody>
</table>

*Source: State Center for Health Statistics (2017). County health data book*
Cancer can strike many parts of the body and then lead to death. Almost half of deaths by cancer are attributed to a variety of body sites. According to Site, Lung/Bronchus Cancer accounts for 27% of all Cancer deaths.

**Sampson County Age Adjusted Cancer Death Rates by Site (2015, per 100,000 Population)**

![Sampson County - Cancer Deaths by Site](source)

**2017 Projected New Cancer Cases Sampson County Age Adjusted Cancer Death Rates by Site**

![2017 Projected Cancer Cases Sampson County](source)
**Heart Disease and Stroke**

Heart disease and stroke are the second and third most common causes of death in Sampson County. (Cancer narrowly edged heart disease out for top spot in 2011-2015 data). In the United States, they are ranked first and fifth leading causes of death.

- Every 42 seconds, someone in the United States has a heart attack
- Every 4 minutes, someone dies of stroke
- 1 in 3 deaths in the United States in 2014 were due to cardiovascular disease (CVD), which includes heart disease, stroke, and related conditions.
- CVD cost the United States an average of $317 billion annually during 2011–2012

Heart disease and stroke can also lead to serious illness, disability, and lower quality of life. Heart disease and stroke are among the most widespread and costly health problems facing our nation today. They are also among the most preventable. About half (47%) of US adults have at least one of three major risk factors for cardiovascular disease (CVD), which includes heart disease, stroke, and related conditions.

The top risk factors include:

- uncontrolled high blood pressure
- uncontrolled high LDL (low-density lipoprotein) cholesterol
- current smoking

Other associated risk factors include like diabetes, obesity, and physical inactivity. Lifestyle Changes can greatly reduce the risk for heart disease and stroke. Controlling these factors could reduce a person’s risk of heart attack or stroke by up to 80%.

The economic costs of CVD are high—more than $317 billion each year.

- Direct medical expenses were $193.1 billion per year on average during 2011–2012
- another $123.5 billion annually was attributed to lost productivity due to premature death from CVD
- Treatment of CVD accounts for about $1 of every $6 spent on health care in this country.

In Sampson County, the Heart Disease death rate (per 100,000) of 208.2 far exceeds the state rate of 178.9. Exceeding the state’s heart disease rate seems to be a trend as Sampson County has ranked significantly higher in deaths from heart disease for the past ten years. According to the 2007 CHNA, Sampson County’s heart disease rate was 245.5 whereas the state rate was 233.9. Also, Sampson County’s stroke death rate of 63.1 is significantly higher than the state rate of 46.4

**Age Adjusted Heart Disease and Stroke Death Rates (2011-2015, per 100,000 population)**

![Heart Disease Rates](chart.png)

*Source: State Center for Health Statistics (2017). County health data book*
Health Disparities in Cardiovascular Disease (CVD)
Cardiovascular disease, which includes heart disease, stroke, and related conditions is the leading cause of death for people of most racial and ethnic groups in the United States, but risk is highest for certain racial minority groups. African Americans have the highest prevalence of high blood pressure of all US population groups. Nearly half of all African American men and women have some form of Cardiovascular disease. African Americans are twice as likely as whites to die of preventable heart disease and stroke.

Heart Disease & Stroke Death Rates 2011 - 2015, Race & Gender Specific per 100,000 population

Observations: African American males have highest death rate for heart disease and stroke. African American population has a much higher stroke death rate than the white population.

High Blood Pressure and High Cholesterol
High blood pressure and high cholesterol are two of the biggest risk factors for heart attack, stroke, and other cardiovascular diseases.

- 68 million U.S. adults have high blood pressure.
- 71 million U.S. adults have high LDL cholesterol.
- Nearly 2 out of 3 adults with high LDL cholesterol and about half of adults with high blood pressure don’t have their condition under control.
In Sampson County, 34% of adults have high blood pressure, this is higher than the state average (29.70%) and the national average (28.16%). On the survey, **38.9% of adults responded that they have been told by a health professional that they have high blood pressure.**

In Sampson County, **28.45%** of adults have high cholesterol, this is lower than the state average (38.52%) and the national average (38.52%). On the survey 31.7% of adults responded that they have been told by a health professional that they have high cholesterol.

<table>
<thead>
<tr>
<th>Comparison - High Blood Pressure and High Cholesterol</th>
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</thead>
<tbody>
<tr>
<td><strong>ADULTS WITH HIGH BLOOD PRESSURE</strong></td>
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<tr>
<td>Sampson County, NC</td>
</tr>
<tr>
<td>34%</td>
</tr>
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</table>

*Source: State Center for Health Statistics. County health data book*

**Diabetes**
People with diabetes either don’t make enough insulin (type 1 diabetes) or can’t use insulin properly (type 2 diabetes). Insulin allows blood sugar (glucose) to enter cells, where it can be used for energy. When the body doesn’t have enough insulin, or can’t use it effectively, blood sugar builds up in the blood. High blood sugar levels can lead to heart disease, stroke, blindness, kidney failure, and amputation of toes, feet, or legs.

**Type 2 diabetes** accounts for about 90% to 95% of all diagnosed cases of diabetes. Diabetes can cause serious health problems including heart disease, blindness, kidney failure, and lower-extremity amputations. Some of the risk factors for diabetes include the following:

- being overweight or obese
- having high blood pressure measuring 140/90 or higher
- having abnormal cholesterol levels - with HDL ("good") cholesterol of 35 or lower, or triglyceride level of 250 or higher
- being physically inactive—exercising fewer than three times a week
- having unhealthy eating habits
- being African American, American Indian, Asian American, Pacific Islander, or Hispanic American/Latino heritage

Both the health and economic costs for diabetes are enormous:

- Diabetes was the seventh leading cause of death in the United States in 2013 (and may be underreported). In Sampson County, it ranks fourth and has been steadily climbing the ranks over the past dozen years as a leading cause of death.
- Diabetes is the leading cause of kidney failure, lower-limb amputations, and adult-onset blindness.
- More than 20% of health care spending is for people with diagnosed diabetes.
• More than 29 million Americans are living with diabetes, and 86 million are living with prediabetes, a serious health condition that increases a person’s risk of type 2 diabetes and other chronic diseases.
• Up to 25% of US adults who have diabetes don’t know that they have it or that they could be developing serious complications.
• People with diabetes are twice as likely to have heart disease or a stroke as people without diabetes—and at an earlier age.

The diabetes death rate in Sampson County is climbing.
• Sampson County’s diabetes death rate has increased from
  o 32.1 per 100,000 population in 2009 to
  o 36.1 per 100,000 population in 2012 to
  o 57 per 100,000 population in 2015
• Diabetes ranks as fourth leading cause of death in Sampson County, and has steadily climbed in ranking. Diabetes was fifth leading cause of death in 2012, and sixth leading cause in 2009.

![Diabetes Death Rate Climbing](image)

There is racial and gender disparity in Diabetes death rates. Sampson County’s African American males have the highest diabetes death rate of 69.3, and African American females follow closely with a death rate of 54.5.

2011-2015, Race and Gender-Specific Diabetes Death Rates per 100,000 Population

![Race and Gender Disparities](image)
Local Economic Impact of Diabetes – The economic impact in Sampson County is staggering. At SampsonRMC, the cost of diabetes related stays in 2016 are as follows:

- 2016 Diabetes-Related Hospital Discharges:
  - Primary Diagnosis of Diabetes: 79 patients generating charges of $947,125 with $422,588 as estimated reimbursement.
  - Any Mention of Diabetes: 1,159 patients generating charges of $19,678,545, with $7,307,772 as estimated reimbursement.

Obesity and Overweight Ranges

Overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems such as heart disease, cancer, diabetes, high blood pressure, high cholesterol, and stroke.

Sampson County’s adult obesity rate is climbing at an alarming rate. County obesity rates are higher and climbing faster than state and national levels.

Adult Obesity Ranges for Adults

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index" (BMI). An adult who has a BMI between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese.

Source: State Center for Health Statistics (2017). County health data book
In 2016, 39% of Sampson County adults were obese compared to 29% of North Carolina residents and 27.5% of all United States residents. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

**Obesity by Gender**

In 2016, Sampson County 38.10% females were considered obese, which is considerably higher than 35.10% of Sampson County males. Gender obesity is virtually the same in the state and the nation, but females outweigh the males by 3% here in Sampson County.

**Adult Obesity Peer County Comparison**

Sampson County ranks second with obesity rates compared to counties with similar demographics, like population size, population density, and people living below poverty level.
**Overweight**

According to the CDC Behavioral Risk Factor Surveillance System, 35% of Sampson County adults aged 18 and older self-reported that they have a body mass index (BMI) between 25 and 30, which puts them in the overweight category. This is in line with the state (36%) and national (35.8%) average.

According to 2017 Sampson County CHNA survey question #17, 32.1% of participants stated that they have been told by a health professional that they are overweight or obese.

**Obesity and Overweight Ranges Among Children**

Childhood overweight and obesity is measured by BMI. It is calculated using a child's weight and height. BMI does not measure body fat directly, but it is a reasonable indicator of body fatness for most children and teens.

A child's weight status is determined using age and sex-specific percentile for BMI rather than BMI categories used for adults because children's body composition varies as they age and varies between boys and girls.

For children and adolescents (ages 2-19) overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

**Childhood Obesity** - Obese children are more likely to develop diabetes, breathing problems such as sleep apnea or asthma, high blood pressure and cholesterol which cause heart disease, fatty liver disease, gallstones, heartburn, and poor self-esteem, which can expand into adulthood.

**Statewide Comparison of Prevalence in Children – Obese or Overweight, Healthy Weight, and Underweight**

![Childhood Weight Concerns](source)
**HEALTH CARE**

**Sampson Regional Medical Center**

Sampson Regional Medical Center (SampsonRMC) is a progressive healthcare facility that serves the medical needs of Sampson County and surrounding areas. Opened in 1950, SRMC’s 146-bed facility is accredited by The Joint Commission and provides a full range of medical services—from outpatient surgery, radiology and nuclear medicine to cardiopulmonary and pediatrics.

The hospital also operates outpatient services and medical practices, including Sampson Home Health, Outpatient Diagnostics Center, Outpatient Rehabilitation Center, The Center for Health + Wellness, Sampson Medical Group, Sampson Women’s Center, Carolina Pain Center, Clinton Urgent Care, Wound Care & Hyperbaric Center, and Rest Assured Sleep Lab.

The hospital’s medical staff is composed of physicians representing a variety of specialty areas including family practice, pediatrics, anesthesiology, hospital medicine, internal medicine, obstetrics and gynecology, orthopedics, general surgery, urology, oncology, and ophthalmology. SampsonRMC is committed to providing the most up-to-date medical care available, close to home for Sampson County residents. And to keep quality care close to home, the hospital is constantly evaluating new opportunities to improve access to care.

SampsonRMC is committed to improving the health of the community and offers free outpatient education classes, support groups, senior citizen programs, and wellness classes throughout the year. Sampson Regional Medical Center provides comprehensive hospital and community-based services that preserve and restore health, provide comfort, and maintain dignity for all who seek care.

**Insurance Coverage Rates**

According to the survey, when respondents were asked what type of insurance coverage they had, over 50% responded that they had either Blue Cross/Blue Shield or other private health insurance provided by their employer. Over 15% responded that they Medicaid or Medicare.
SampsonRMC payer mix is largely made up of Medicare and Medicaid insured patients.

- Medicare and Medicaid combine for more than 65% of the hospital’s payer mix.
- Blue Cross & Blue Shield and commercial insurers account for just about 25% of the payer mix
- Self-pay and other payers combine for about 9-10%.

Uninsured

Many county residents are uninsured or underinsured. The lack of health insurance is considered a key driver of health status. According to the US Census Bureau, **23.66% of Sampson County residents are uninsured**. This is compared to the state average of 16.21% and the national average of 13.21%.

According to the community survey, the lack of insurance or inadequate insurance appears to be one of the greatest barriers to access healthcare in Sampson County.

Question 34 in the community survey asked: “In your opinion, what do you think is the main reason that keeps people in your community from getting necessary health care?”
• 31% of respondents named “no health insurance” as the main reason people do not get the health care they need.
• 18.7% of people stated, “Insurance didn’t cover what was needed”
• 17.5% stated “share of cost was too high”
• And a total of 26% stated that “doctor, pharmacy, dentist or hospital would not take their insurance/Medicaid”

According to the community survey, the lack of insurance or inadequate insurance appears to be one of the greatest barriers to access healthcare in Sampson County.

Question 31 asked: “What is your primary health insurance plan?”
• Blue Cross & Blue Shield, state employee health plan, or other private health insurance plans accounted for 65.6% of responses.
• Medicare, Medicaid and other military or government programs accounted for 18.8% of the responses.
• The remaining 15.6% refused to answer, did not know or did not have any health plan of any kind.

Barriers in Access to Healthcare

Along with the lack of health insurance coverage, another barrier in access to health care has been the availability of primary care physicians and specialists who are accepting new patients and are available to schedule more immediate appointments.

Question 32 of the CHNA survey asked: “In the past 12 months, did you have a problem getting the health care you needed personally or for a family member from any type of health care provider, dentist, pharmacy, or other facility?”
• 83% of respondents answered YES they had a problem getting the health care they needed
• In the previous (2014) survey, only 13% of respondents answered yes that they had a problem getting the health care they needed.

With 83% of respondents claiming they had difficulty getting the healthcare that they needed, this is a significant increase of barriers in access to healthcare. When asked what type of provider there was difficulty in getting care - Dentist, general practitioner, eye care/ophthalmologists were top three choices.

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Difficulty Being Seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practitioner</td>
<td>30.00%</td>
</tr>
<tr>
<td>Dental</td>
<td>36.25%</td>
</tr>
<tr>
<td>Eye Care</td>
<td>22.50%</td>
</tr>
<tr>
<td>Medical Clinic</td>
<td>18.75%</td>
</tr>
<tr>
<td>Pharmacy/Prescriptions</td>
<td>17.50%</td>
</tr>
<tr>
<td>Hospital</td>
<td>15.00%</td>
</tr>
<tr>
<td>Specialist</td>
<td>13.75%</td>
</tr>
</tbody>
</table>
Cost of Healthcare
The major barriers to access to care at Sampson Regional Medical Center are consistent with the same barriers reported through the community survey conducted as part of the Community Health Needs Assessment.

Question 34 in the community survey asked: “In your opinion, what do you think is the main reason that keeps people in your community from getting necessary health care?” Cost of health care is the prevailing theme of why respondents do not get the health care that they need.

- 31% of respondents named “no health insurance” as the main reason they do not get the health care they need.
- 18.7% of people stated, “Insurance didn’t cover what was needed”
- 17.5% stated “share of cost was too high”
- And a total of 26% stated that “doctor, pharmacy, dentist or hospital would not take their insurance/Medicaid”

Many county residents are uninsured or underinsured. According to the community survey conducted as part of the Community Health Needs Assessment process, the lack of insurance or inadequate insurance appears to be one of the greatest barriers of access to healthcare in Sampson County.

Causes of Emergency Room Visits
Chief causes of emergency room visits include abdominal pain, chest pain, headache, limb pain, and cough. The Chart below identifies the top 20 common causes of emergency room visits between 2014 - 2016 at Sampson Regional Medical Center.

<table>
<thead>
<tr>
<th>Top 20 causes of ER visits (2014 - 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Abdominal pain</td>
</tr>
<tr>
<td>2. Chest Pain Unspecified</td>
</tr>
<tr>
<td>3. Cough</td>
</tr>
<tr>
<td>4. Pain in Limb</td>
</tr>
<tr>
<td>5. Headache</td>
</tr>
<tr>
<td>6. Urinary tract infection, site not specified</td>
</tr>
<tr>
<td>7. Fever unspecified</td>
</tr>
<tr>
<td>8. Encounter for administrative examinations, unspecified</td>
</tr>
<tr>
<td>9. Urinary tract infection, site not specified</td>
</tr>
<tr>
<td>10. Backache, unspecified</td>
</tr>
<tr>
<td>11. Acute upper respiratory infection, unspecified</td>
</tr>
<tr>
<td>12. Acute upper respiratory infections of unspecified site</td>
</tr>
<tr>
<td>13. Other malaise and fatigue</td>
</tr>
<tr>
<td>14. Shortness of Breath</td>
</tr>
<tr>
<td>15. Rash and other nonspecific skin eruption</td>
</tr>
<tr>
<td>16. Acute bronchitis</td>
</tr>
<tr>
<td>17. Vomiting alone</td>
</tr>
<tr>
<td>18. Headache</td>
</tr>
<tr>
<td>19. acute pharyngitis</td>
</tr>
<tr>
<td>20. Nausea with vomiting</td>
</tr>
</tbody>
</table>
**Emergency Room Visits by Gender**

The top common causes of Emergency Room (ER) visits vary according to age and gender.

![Top Causes of ER Visits by Gender](chart)

*Source: Sampson Regional Medical Center, Emergency Department*

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**Emergency Room Visits by Age**

Children and teens ages 0-17 most commonly visit the ER for cough. Abdominal pain ranks as top reason for ages 18-34 and for ages 35 – 49 and those over 65.

![Top 5 ER Visits by Age](chart)

*Source: Sampson Regional Medical Center, Emergency Department*

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**Satisfaction with Healthcare**

Measurements of patient satisfaction are key to improving the delivery of healthcare. Sampson Regional Medical Center measures patient satisfaction using a third party, Press Ganey. The Press Ganey patient survey is used throughout the nation by hospitals to measure how patients feel about a hospital’s performance.

Sampson Regional Medical Center routinely sends surveys to a random sample of both inpatients and outpatients. The hospital monitors survey feedback to identify opportunities for improvement and to address patient concerns.
The survey asks patients to evaluate the hospital using a five-point scale (1 being very poor to 5 being very good) for various areas that impact patient care. The following are examples of questions asked:

- Speed of admission, courtesy of person admitting, pre-admission process
- Pleasantness of room décor, room cleanliness, courtesy of person cleaning room, room temperature, noise level in and around room, TV call button etc. worked
- Special/restricted diet explained, temperature and quality of the food, courtesy of person serving
- Friendliness/courtesy of the nurses, promptness of response to call, nurses’ attitude toward requests, attention to special/personal needs, nurses kept you informed, skill of the nurses
- Wait time for tests or treatments, concern for comfort during testing and treatment, explanations of what will happen during testing and treatment
- Time physician spent with you, physician concern for questions/worries, physician kept you informed, friendliness/courtesy of physician, skill of physician
- Staff concern for your privacy, staff sensitivity to inconvenience, how well your pain was controlled, staff addressed emotional needs, response toward concerns/complaints
- Overall cheerfulness of hospital, staff worked together to care for you, likelihood of recommending hospital, overall rating of care given, professional appearance of employees

\[ 	ext{Press Ganey Patient Satisfaction Mean Scores} \]

\[ egin{array}{ccc}
\text{2014} & \text{2015} & \text{2016} \\
\text{InPatient} & \text{94.8} & \text{95} & \text{94.2} \\
\text{OutPatient} & \text{86.2} & \text{87} & \text{86.9} \\
\end{array} \]

Source: Sampson Regional Medical Center, Press Ganey Report, Service Excellence Department

\[ \text{DETERMINANTS OF HEALTH} \]

\[ \text{Individual Behavior} \]

\[ \text{Overweight/Obesity} \]

Obesity has become a real public health challenge. Obesity prevention requires approaches that ensure an adequate and nutritious food supply, an environment that has easy access to healthier food, participation in physical activity, and a family, educational, and work environment that positively reinforces healthy living.

Positive advances have been made to reduce obesity. For example, bans have been placed on advertisements for foods high in fats, sugars, and salt during television programs aimed at children. However, a significant challenge remains to partner and engage multiple organizations outside of health in areas such as trade, employment, and education if the county is to redress the obesity epidemic.
To avoid the health consequences of obesity such as chronic diseases, high blood pressure and cholesterol, gallbladder and liver disease, sleep apnea, osteoarthritis, and infertility, residents must consistently eat healthier and exercise.

**Healthy Eating**
Consistently eating a diet rich in fruits and vegetables is a problem here in Sampson County and contributes to the obesity problem. According to the survey, most people are not getting enough fruits and vegetables.

**Question #24** asked “How many cups of fruits and vegetables would you say you eat per week?”
- 3.5 cups of fruit per week
- 5.2 cups of vegetables per week

This equates to less than 1 cup of fruit per day and less than ½ cup of vegetables per day. According to the survey, respondents realize that healthy eating is a behavior that is lacking.

**Question #11** asked “In your opinion, which **ONE** health behavior do people in your community need more information about?”
- The top answer was **Eating well/Nutrition**, with over 20% choosing this as a top concern.

**Question #15** asked “Which of the following do you think your children need more information about?”
- An overwhelming 40% chose **Nutrition**.

**Physical Activity**
On the community survey, 65% of respondents stated they engage in physical activity for at least 30 minutes, during a normal week, other than their regular job. (Question #20)

Almost 30% of these respondents stated they regularly exercised 3 times a week and almost 18% stated they exercised 5 times a week. (Question #21) Most people stated they exercised at home.

Where do people exercise?

- 43% Home
- 14% TCHW
- 11% Park
- 10% Private Gym
- 4% Other
- 4% Public Rec Ctr
Other Findings from the Survey

According to the survey (question #16), most Sampson County residents feel good about their own health, with over 70% of respondents stating their health is either good (45.6%) or very good (24.6%).

And the overall feel from respondents is a positive one in relation to the quality of life in Sampson County.

- 44% agree that there is good health care offered in Sampson County. (question #4)
- 53.6% agree that Sampson County is a good place to raise children. (question #5)
- 48.3% agree that Sampson County is a good place to grow old. (question #6)
- 55% agree that Sampson County is a safe place to live. (question #8)
- 46.3% agree that there is plenty of help for people in times of need. (question #9)

When asked which one issue most affects the quality of life, the overwhelming top responses were:

- Substance abuse, which ranked #1 with 44.8 %
- Low income/poverty, which ranked #2 with 41.3%

When asked to choose one service that needed the most improvement, the answers were more evenly distributed:

- Higher paying employment - 19.6%
- Positive teen activities - 11.7%
- Availability of employment - 10.3%
- Better/more recreational facilities - 8.3%
- More affordable health services - 6.3%

Availability of Resources

Other issues addressed in the survey were availability and quality of resources in Sampson County. This question focuses on needed resources that are lacking in our community.

When asked which ONE of the following services need the most improvement in the community, top responses were:

- Higher paying employment - 19.6%
- Positive teen activities - 11.7%
- Availability of employment - 10.3%
- Better/more recreational facilities - 8.3%
- More affordable health services - 6.3%

Needs Improvement
Social Economic Factors
Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community’s ability to engage in healthy behaviors. Ensuring access to social and economic resources provides a foundation for a healthy community. Having a lack of resources can contribute to the determinants of health.

- No income or low income directly affects education levels, which influence where people live, social status, behaviors, lifestyle, and overall health status.
- By providing and promoting positive teen activities, teens can improve teen pregnancy, childhood obesity, and crime rates in Sampson County.

Teen Pregnancy and Teen Birth Rates are key health indicators. The teen pregnancy rates in Sampson County are higher than the state rates per 1000 population. This indicator is relevant because in many cases, teen pregnancy leads to teen parents who need unique social, economic, and health support services.

2015 Statewide Comparison of Teen Pregnancy Rates

Teen Pregnancy Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>North Carolina</th>
<th>Sampson County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-2005</td>
<td>30.2</td>
<td>50.8</td>
</tr>
<tr>
<td>2006-2010</td>
<td>45</td>
<td>66.5</td>
</tr>
<tr>
<td>2011-2015</td>
<td>28.8</td>
<td>49.9</td>
</tr>
</tbody>
</table>

Teen Birth Trends - Although the trend is moving in the right direction, Sampson County teen pregnancy and teen birth rates are much higher than in North Carolina or United States.
Poverty
In Sampson County, 25.46% of individuals are living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

![Population in Poverty](image)


Children eligible for Free/Reduced Price Lunch – In Sampson County, 70.73% of public school students are eligible for Free/Reduced Price lunch. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs.

Education
Education is relevant because educational attainment is linked to positive health outcomes. In Sampson County, 24.8% of the total population aged 25 and older does not have a High School diploma.

![No High School Diploma](image)


Population with Bachelor's Degree or Higher – In Sampson County, only 12.35% of the population aged 25 and older, have obtained an Bachelor's level degree or higher.

![Bachelor's Degree](image)

**Unemployment**
Total unemployment in the report area for the current month (April 2017) was 1,428, or 4.8% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

**Physical Environment**

**Physical Activity Resources and Recreation**
Sampson County has two recreation and parks divisions, Clinton City and Sampson County Parks and Recreation Departments. Recreational districts are based on high school attendance boundaries used by the local school systems.

**City** - The Clinton Recreation and Parks Department maintains four city outdoor parks - Royal Lane Park, Fisher Drive Park, Sampson Center Park, and Newkirk Park. Bellamy Recreation Center and Sampson Center provide indoor leisure activities and programs to our citizens.

**County** - The county is divided into 5 geographical areas (Northern, Eastern, Central, Western, and Southern). with both youth and adult community programming for all ages.

<table>
<thead>
<tr>
<th>City of Clinton, Recreation and Parks</th>
<th>Sampson County Parks and Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility Type</strong></td>
<td><strong>Facility Type</strong></td>
</tr>
<tr>
<td>Parks</td>
<td>Parks</td>
</tr>
<tr>
<td>Recreation Centers</td>
<td>Roseboro</td>
</tr>
<tr>
<td>Gymnasiums</td>
<td>Clement</td>
</tr>
<tr>
<td>Walk Tracks &amp; Trails</td>
<td>Newton Grove</td>
</tr>
<tr>
<td>¼ mile</td>
<td></td>
</tr>
<tr>
<td>½ mile</td>
<td>1</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>Trails</td>
</tr>
<tr>
<td>Indoor</td>
<td>2</td>
</tr>
<tr>
<td>Outdoor</td>
<td>3</td>
</tr>
<tr>
<td>Tennis Courts (outdoor &amp; lighted)</td>
<td>5</td>
</tr>
<tr>
<td>Basketball Courts (outdoor)</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Picnic Areas</td>
<td>Picnic Shelters</td>
</tr>
<tr>
<td>Sheltered</td>
<td>Roseboro</td>
</tr>
<tr>
<td>Open</td>
<td>Newton Grove</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>Playgrounds</td>
</tr>
<tr>
<td>10</td>
<td>Roseboro</td>
</tr>
<tr>
<td>Horseshoe Pits</td>
<td>Newton Grove</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Shuffleboard Courts (outdoor)</td>
<td>Stages</td>
</tr>
<tr>
<td>3</td>
<td>Newton Grove</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>4</td>
</tr>
<tr>
<td>Recreation Centers</td>
<td>2</td>
</tr>
<tr>
<td>Gymnasiums</td>
<td>2</td>
</tr>
<tr>
<td>Walk Tracks &amp; Trails</td>
<td>5</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>1</td>
</tr>
<tr>
<td>Indoor</td>
<td>0</td>
</tr>
<tr>
<td>Outdoor</td>
<td>1</td>
</tr>
<tr>
<td>Tennis Courts (outdoor &amp; lighted)</td>
<td>8</td>
</tr>
<tr>
<td>Basketball Courts (outdoor)</td>
<td>3</td>
</tr>
<tr>
<td>Picnic Areas</td>
<td>12</td>
</tr>
<tr>
<td>Sheltered</td>
<td>9</td>
</tr>
<tr>
<td>Open</td>
<td>3</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>10</td>
</tr>
<tr>
<td>Horseshoe Pits</td>
<td>7</td>
</tr>
<tr>
<td>Shuffleboard Courts (outdoor)</td>
<td>3</td>
</tr>
</tbody>
</table>
Facilities – The Center for Health + Wellness
Sampson Regional Medical Center’s The Center for Health + Wellness is a 42,000 square foot facility featuring state-of-the-art fitness equipment and fitness specialists. The Center for Health + Wellness is membership-based; however, the Center makes many services available to non-members as well. The Center opens its indoor walking track to the community for the “Walk-n-Talk” program. Non-members may walk for free on the walking track at various times throughout the day.

The Center also partners with local agencies, such as the Department of Aging and Clinton Recreation Department, to offer free classes each month. Classes have included Tai Chi, Water Aerobics, and Yoga.

Local non-profit organizations utilize the Center’s classroom (free of charge) for meetings and wellness programs. In addition to the classroom with a demonstration kitchen, the center provides treadmills, elliptical trainers, upright and recumbent bikes, rowing machines, strength training equipment, group fitness classes, childcare, and locker/towel service. Also, the Center offers:

<table>
<thead>
<tr>
<th>The Center for Health + Wellness</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 lane, 25 yard heated swimming pool</td>
<td>1</td>
</tr>
<tr>
<td>Warm water therapy pool</td>
<td>1</td>
</tr>
<tr>
<td>2 lane indoor cushioned walking track</td>
<td>1</td>
</tr>
<tr>
<td>Basketball/Volleyball Court</td>
<td>1</td>
</tr>
<tr>
<td>Racquetball Court</td>
<td>1</td>
</tr>
<tr>
<td>Spinning Studio</td>
<td>1</td>
</tr>
</tbody>
</table>

PREVENTION AND HEALTH PROMOTION
Approximately 95% of the $1.4 trillion that the nation spends on health goes to direct medical services, while only approximately 5% is allocated to preventing disease and promoting health. This approach is equivalent to waiting for your car to break down before you take it in for maintenance. By changing how we view our health, we can move from a disease care system to a true health care system.

Quality preventive care holds the promise of greatly reducing the nation’s health care costs and overall burden of disease. Sampson County Health Department and Sampson Regional Medical Center are key players in addressing and creating prevention and health promotion programs. By working together at a local level - developing initiatives and seeking resources to help prevent chronic diseases like heart disease, stroke, cancer, and diabetes – we can successfully improve the health of our community.

Community Initiatives and Activities
Sampson County Partners for Healthy Carolinians consists of public-private partnerships representing public health, health and human service agencies, churches, schools, and other community members. The mission is to improve the health and quality of life for Sampson County’s citizens.

Fitness Renaissance is an awards program designed to reward achievement of fitness goals among local elementary students. The overall goal is to reduce the rate of childhood obesity and the program reaches over 4,000 students annually in grades K-3 in Clinton City Schools, Sampson County Schools, and Harrells Christian Academy.
**Sampson Regional Medical Center’s Sugar Buddies Diabetes Support Group** - Sugar Buddies diabetes support group is free and open to the public and does not require a physician referral. The support group meets at The Center for Health + Wellness on the first Tuesday of each month. The focus of the group is to help diabetics take care of themselves and better manage their diabetes. Sugar Buddies program has supported 300 diabetes patients in the past two years.

**Senior + Program** - SampsonRMC Senior+ is a resource for those age 60+ that enriches their lives by providing knowledge and support through a variety of wellness and health related activities. The core of the program is to encourage healthy and active lifestyles for seniors and programs have included: healthy cooking workshops, lunch-n-learn educational talks on health topics of interest-like anesthesia and wound care, National Senior Fitness Day Celebration, Bone Density Screenings.

**Free Community Exercises classes include:**
- Falls Prevention
- Sit and Be Fit
- Bellamy Center Chair Yoga, held at the Bellamy Center and there is a facility fee of 50 cents
- Line Dancing, donations are accepted for SampsonRMC Foundation

**Health Fairs** Healthy living presentations and health fairs have been conducted by multiple health agencies throughout the county, covering health issues and topics such as STDs, diabetes, nutrition, breast and cervical cancer, immunizations, child health, preventive care, tobacco, teen health and general wellness.

**Healthy Carolinians sub-committee on Obesity** – This committee was formed in response to community concerns about obesity and the effects it is having on the health of our people. Through research and discussions with individuals working in organizations to promote healthy lifestyles, the following observations were found:

- There are groups promoting healthy lifestyles, it is difficult to get the groups to work together.
- Limited usage of available programs such as those provided by the Center for Health and Wellness and employer incentives.
- The health care system’s focus has become curative rather than preventive.
- Health care services are fractured and extend limited patient education at time of service.
- Reduced funding has resulted in reduced personnel to deliver preventative educational programming. Examples include:
  - Health Dept. now has only one health educator that also has other responsibilities, there were two health educators in years past.
  - The Cooperative Extension Service, Foods and Nutrition Educator is shared with Duplin County.
  - SampsonRMC has only one dietician, instead of two, and there are no outpatient nutrition services available.
  - SampsonRMC restructured its own diabetes education program because of limited nursing and dietician resources.
- Poor attendance and participation in structured educational programs. Example:
  - Mind, Body and Soul began with 10 individuals, by the third session there was only one person attended.
  - Journey to Health began with 84 participants. Only 4 participants completed the program.
- Eat Smart, Move More, Weigh Less initiative requires certification to use the materials, but is no longer offering certification. Program is now offered only online.
Review of Past Implementation Plan

In 2014, the Sampson Regional Medical Center identified Diabetes and Obesity as the top health priorities to be addressed and its implementation plan included creating a Diabetes Education program to address Diabetes and creating Journey to Health, a lifestyle change program to address obesity.

2014 Initiative Overview – Diabetes – Diabetes Education

Diabetes Self-Management Education (DSME) - Sampson Regional Medical Center’s Diabetes Self-Management Education program was successfully implemented in January 2015 and over the course of the next two years saw over 215. As an extension of the program, which was offered monthly for a two-part group class, a quarterly nutrition review class was established. 75 diabetes patients attended quarterly review sessions over the course of the two-year program. 34 patients who completed the program in its entirety and submitted two HgbA1c readings, had an average decrease in HgbA1c of 2.31.

The program was recognized by the American Diabetes Association (ADA) as meeting the National Standards for Diabetes Self-Management and Support. As part of the recognition, specific Certified Diabetes Educator (CDE) Eligible professional staff is required to do initial patient assessments. Upon review of ADA recognized program staffing requirements, Sampson Regional Medical Center chose to merge its program with the Sampson County Health Department (SCHD) Diabetes Self-Management Education program.

SampsonRMC refers patients to SCHD, who in turn does initial assessments then conducts classes at The Center for Health + Wellness. SampsonRMC and SCHD staff jointly teaches the two-part group class at The Center for Health + Wellness. Since February 2017, the group class has averaged 6 participants per month.

To be eligible for the program, a patient must have a diagnosis of diabetes or pre-diabetes and have a signed referral from their physician. After the referral is received, an appointment is set up with the patient through the Sampson County Health Department. During this hour-long assessment, general information, medical history and diabetic history is obtained.

The patient is scheduled to attend the two-part interactive class, which consists of education on the disease process, healthy eating, exercise, blood sugar control, medications, managing complications, problem-solving and goal setting skills. Once the class is completed, the patient is set up for a 3-month reassessment and will be followed through face to face and phone interviews to assure continued success.

One of the goals of the Diabetes Self-Management Education and Support program is to continue the relationship with the patient by encouraging and inviting them to attend the monthly Sugar Buddies Diabetes Support Group programs. Participants are encouraged to bring their family members too.

2014 Initiative Overview - Obesity - Journey to Health

Journey to Health was designed to get Sampson County healthier through fitness and education. Chronic diseases like heart disease, diabetes and obesity are preventable through lifestyle changes that included consistent healthy eating and exercise.

The target audience was all ages that deal with obesity and may not have the means to participate in paid physical activity programs offered throughout the county. The mission was to help lead our community towards a healthier lifestyle by encouraging regular physical activity and healthy eating.

The Journey to Health program never really established itself and was discontinued shortly after it began. Lack of participation (84 participants began the program and only 4 completed it) and lack of dedicated staff contributed to its demise.
COMMUNITY HEALTH CONCERNS & PRIORITIES

Procedures/Steps to Select Health Priorities
After collecting the primary and secondary data, SRMC’s internal advisory group reviewed the findings to determine the top priorities to be presented to SRMC’s administrative team. These recommendations are to be presented to SRMC’s administrative team for final approval. The two chosen priorities to be approved for Sampson Regional Medical Center to cover over the next three years will be: **Diabetes and Obesity**.

A productive and successful Diabetes Education program was developed as part of the 2014 Community Health Implementation Plan. To make note as 2017 planning continues:

- **Diabetes continues to climb at an alarming rate as a leading cause of death**
- **Obesity is a risk factor for diabetes and for other chronic diseases like cancer, heart disease and stroke, which are the top three leading causes of death in Sampson County.**

For 2017, **Diabetes and obesity** will be addressed. Lifestyle change programs, such as the Center for Disease Control (CDC) National Diabetes Prevention Program (NDPP), have proven to be effective in delaying or preventing type 2 diabetes. NDPP is an evidence-based lifestyle change program which has been demonstrated to delay or prevent the development of type 2 diabetes among people at considerable risk. The CDC's National Diabetes Prevention Program is an evidence-based behavioral change program, designed to support lifestyle balance, healthy eating, physical activity and exercise, and motivational support.

**Nutrition education and healthy eating initiatives** will be developed to be sure our community has resources available to help people have access to healthy foods and they develop healthy eating habits. Healthier eating habits, along with consistent exercise help combat obesity. **Obesity is a major risk factor for type 2 diabetes.**

Primary data (2017 Community Health Needs Assessment Survey results) along with secondary data (key health indicators for our community) were used to determine health priorities on which to focus. The health priorities were determined based on the magnitude and seriousness of the problem and the feasibility of a successful intervention.

**CONCLUSION**
Health problems or “disease burdens” for Sampson County and its residents continue to grow and be of critical concern. The county’s leading causes of death and key health indicators are overwhelmingly worse than state and national rates. Chronic diseases like cancer, heart disease, stroke and diabetes are the leading causes of death. Most chronic diseases are preventable and reversible with lifestyle changes. Chronic diseases affect all races, genders, and income groups. Most chronic disease risk factors such as high blood pressure, tobacco use, high blood glucose, physical inactivity, and obesity, are changeable. These risk factors are primarily responsible for increasing the likelihood of chronic diseases such as heart disease, diabetes, cerebrovascular disease (stroke), and cancers.

Sampson Regional Medical Center will formulate a plan to address issues identified in this document. The plan, which will focus on **obesity and diabetes prevention**, will be a collaboration involving community partners over the next three years. The goal is to help Sampson County citizens lead a healthier lifestyle. Again, most chronic diseases are preventable and reversible with lifestyle changes. These lifestyle changes will help prevent chronic disease and chronic disease related deaths. As a result, Sampson County will be a healthier community.
**Dissemination of Information**
The CHNA document has valuable information about the county. It is important for county residents to be aware of this information, how to access and use it, and how to become a part of the community response to the information collected.

Sampson Regional Medical Center will distribute the document to other community partners, government agencies, stakeholders, and the public. The goal is to use the document to enable various agencies and stakeholders to use the information to assist with meeting the needs of the public and improving and promoting the health and well-being of the citizens of Sampson County.

Dissemination of the Community Health Needs Assessment document will include, but not limited to: Sampson County Partners for Healthy Carolinians members, Sampson County Health Department, Sampson County Public Libraries, Sampson Regional Medical Center Website, Sampson Regional Medical Center Social Media sites, and press releases to The Sampson Independent, The Sampson Weekly, and El Mercado newspaper.

To ensure that Sampson County residents know how to get involved and stay informed about latest information and trends, SampsonRMC will share this report with Sampson County Partners for Healthy Carolinians, which meets monthly at The Center for Health + Wellness, 417 East Johnson, St., Clinton, NC, at 1:30pm on the 3rd Tuesday of every month. Also, per requests, presentations or participation at community events is available.
REVIEW OF HEALTH DATA COLLECTION PROCESS

The Community Health Needs Assessment (CHNA) requires community input (primary data collection from Community Health Surveys) and secondary data to identify health-related trends and other issues that affect the health and well-being of Sampson County residents.

To collect primary data surveys were distributed to multiple sites in the county, including senior nutrition sites, churches, libraries, physician offices, the hospital, community college, and area high schools.

Approximately 1,000 surveys were distributed, and 960 were returned, either by hard copy or electronic submission on Survey Monkey.

The following Charts provide the demographics for respondents who completed the survey:

**Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>17.30%</td>
</tr>
<tr>
<td>25-39</td>
<td>19.90%</td>
</tr>
<tr>
<td><strong>40-54</strong></td>
<td><strong>29.90%</strong></td>
</tr>
<tr>
<td>55-69</td>
<td>22.20%</td>
</tr>
<tr>
<td>70+</td>
<td>9.90%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.40%</td>
</tr>
</tbody>
</table>

**Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>51.80%</td>
</tr>
<tr>
<td>Male</td>
<td>46.50%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.70%</td>
</tr>
</tbody>
</table>

**Race**

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>60.60%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>24.60%</td>
</tr>
<tr>
<td>Refused to answer</td>
<td>7.30%</td>
</tr>
<tr>
<td>Other</td>
<td>7.10%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>2.90%</td>
</tr>
<tr>
<td>Other Asian, Japanese, Chinese, Korean</td>
<td>0.70%</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>0.10%</td>
</tr>
</tbody>
</table>

**Of Hispanic, Latino, or Spanish Origin**

<table>
<thead>
<tr>
<th>Hispanic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8.40%</td>
</tr>
<tr>
<td>No</td>
<td>88.30%</td>
</tr>
<tr>
<td>Unknown</td>
<td>3.30%</td>
</tr>
</tbody>
</table>

**Of the 8.4% with Hispanic, Latino, or Spanish Origin**

<table>
<thead>
<tr>
<th>Specific Hispanic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican, Mexican American, or Chicano</td>
<td>68.60%</td>
</tr>
<tr>
<td>Other Hispanic or Latino</td>
<td>20.90%</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>6.80%</td>
</tr>
<tr>
<td>Unknown</td>
<td>5.80%</td>
</tr>
<tr>
<td>Cuban</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
**SURVEY RESULTS AND DATA**

**Sampling of questions:**

There is good healthcare in Sampson County. Consider the cost and quality, number of options, and availability of healthcare in the county.

![Graph](image1)

"Sampson County is a good place to raise children." Consider the quality and safety of schools and child care programs, after school programs, and places to play in this county.

![Graph](image2)

"Sampson County is a good place to grow old." Consider the county's elder-friendly housing, transportation to medical services, recreation, and services for the elderly.

![Graph](image3)
"There is plenty of economic opportunity in Sampson County." Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in the county.

"Sampson County is a safe place to live." Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks, and shopping centers in the county.

"There is plenty of help for people during times of need in Sampson County." Consider social support in this county: neighbors, support groups, faith community outreach, community organizations, and emergency assistance.
In your opinion, which one issue most affects the quality of life in Sampson County? (Please choose one.)

![Pie chart for What Affects the Quality of Life](chart_url)

In your opinion, which one of the following services needs the most improvement in your neighborhood or community? (Please choose only one)

![Pie chart for What Needs Most Improvement](chart_url)

In your opinion, which one health behavior do people in your own community need more information about?

![Pie chart for Need More Information](chart_url)
Where do you get most of your health-related information? (Please choose only one)

- Doctor/nurse: 42%
- Internet: 23%
- Friends and family: 14%
- Other (please specify): 3%
- Hospital: 2%
- TV: 2%

Which of the following health topics do you think your children need more information about? (Check all that apply)

- Nutrition: 18%
- Drug Abuse: 16%
- Reckless driving/speeding: 12%
- Sexually Transmitted Diseases: 9%
- Sexual Intercourse: 6%

Would you say that, in general, your health is...(Choose only one)

- Excellent: 0%
- Very good: 10%
- Good: 20%
- Fair: 20%
- Poor: 10%
- Don’t know/Not sure: 10%
- Refuse to answer: 5%
Have you ever been told by a health professional that you have any of the following health conditions?

- Cancer
- Angina/Heart Disease
- Overweight/Obesity
- Osteoporosis
- Diabetes (not during pregnancy)
- High Cholesterol
- High Blood Pressure
- Depression or anxiety
- Asthma

In the past 30 days, have there been any days when feeling sad or worried kept you from your normal activities?

- Refuse to Answer
- Don't Know
- No
- Yes
In the past 30 days, have you had any physical pain or health problems that made it hard for you to do your usual activities such as driving, working around the house, or going to work?

![Too Much Physical Pain?](chart)

During a normal week, other than your regular job, do you engage in any physical activity or exercise that lasts at least a half an hour?

![Do You Get Regular Exercise?](chart)

Not counting potato products, think about how often you eat fruits and vegetables in an average week. How many cups of fruits and vegetables would you say you eat per week? (Write # cups)

![How Many Cups of Fruit Do You Eat Each Week?](chart)
Do you currently smoke?

An influenza/flu vaccine can be a "flu shot" injected into your arm or spray like "FluMist" which is sprayed into your nose. During the past 12 months, have you had a seasonal flu vaccine?

Where do you go most often when you are sick? (Choose only one)
What is your primary health insurance plan? (Choose only one)

![Pie chart showing primary health insurance plans](chart.png)

In the past 12 months, did you have a problem getting the health care you needed for you personally or for a family member from any type of health care provider, dentist, pharmacy, or other facility?

![Bar chart showing trouble getting health care services](chart.png)

What is the highest level of school, college, or vocational training that you have finished? (Choose only one)

![Bar chart showing highest level of education](chart.png)
What was your total household income last year, before taxes? (Choose only one)

- Refuse to answer
- Less than 10,000
- $10,000 to $14,999
- $15,000 to $24,999
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 or more

What is your employment status? (Check all that apply)

- Refuse to answer
- Employed full-time
- Employed part-time
- Self-employed
- Homemaker
- Student
- Disabled
- Retired
- Unemployed for 1 year or less
- Unemployed for more than 1 year
- Armed forces
ACKNOWLEDGEMENTS

Sampson Regional Medical Center express gratitude to the Sampson County Health Department, Sampson County Partners for Healthy Carolinians, all community partners, and volunteers who have assisted in the collection process for this document. Their support has helped shape the 2017 Sampson County Community Health Needs Assessment.

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Sampson Regional Medical Center – Accounting, Emergency, Patient Satisfaction Departments