



SCOTLAND  
HEALTH CARE SYSTEM

*Excellence is Our Specialty*



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# Table of Contents

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<b>I. Executive Summary</b>	<b>3</b>
<b>a. Summary of Findings</b>	<b>3</b>
<b>b. Identified Health Priorities</b>	<b>4</b>
<b>II. About the Research</b>	<b>6</b>
<b>III. Community Served - Scotland County</b>	<b>7</b>
<b>IV. General State of Our Community's Health</b>	<b>9</b>
<b>a. Summary of Findings</b>	<b>9</b>
<b>b. County Health Rankings</b>	<b>12</b>
<b>c. Healthy Lifestyles and Behaviors</b>	<b>15</b>
<b>d. Health Environment</b>	<b>17</b>
<b>e. Health Risk Factors</b>	<b>18</b>
<b>f. Health Outcomes – Morbidity &amp; Mortality</b>	<b>19</b>
<b>g. Health Services - Preventive Clinical and Access</b>	<b>22</b>
<b>V. Community Feedback – Community Health Survey</b>	<b>25</b>
<b>VI. Identified Priority Health Needs &amp; Related Assets</b>	<b>35</b>
<b>VII. Implementation Strategies</b>	<b>37</b>
<b>VIII. Appendix:</b>	<b>44</b>
<b>a. Map of Scotland Health Care System</b>	<b>44</b>
<b>b. Map of Scotland County</b>	<b>45</b>
<b>c. Data Sources</b>	<b>46</b>
<b>d. CHNA Team</b>	<b>47</b>

# Executive Summary

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## Background and Purpose

Scotland Health Care System, located in Scotland County, North Carolina, is the leading health care provider serving the health care needs of those in the Scotland County area. With the mission and vision of Scotland Health Care System *to provide high quality, compassionate healthcare, and to be the community's health care provider of choice*, Scotland Health Care System is dedicated to improving the health of the community and to providing gold standard, excellent care.

In the fall of 2012, Scotland Health Care System and Scotland County Department of Public Health began the implementation of a Community Health Needs Assessment (CHNA) for Scotland County. The effort focused on assessing community health needs, local health resources, barriers to care, gaps in services, and trends regarding health and healthy lifestyles. The resulting CHNA will be utilized to document community need and link those needs to community benefit efforts of the health system. The needs assessment will be utilized to assist the hospital in planning and prioritizing its community benefit investments.

## Summary of Findings

<b>Getting Better</b> <b>(Compared to Scotland County past)</b>	<b>Getting Worse</b> <b>(Compared to Scotland County past)</b>
<ul style="list-style-type: none"> <li>• Smoke Free Restaurants and Government Buildings</li> <li>• Cholesterol Screenings</li> <li>• Industrial Wellness Programs</li> <li>• Scotland County Emergency Awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Heart Disease</li> <li>• Overweight and obesity</li> <li>• Exercise and nutrition</li> <li>• Diabetes</li> <li>• Cancer</li> <li>• Unemployment rate</li> <li>• Infant mortality</li> </ul>
<b>Positive Highlights</b> <b>(Incorporating comparisons to state, nation and community feedback)</b>	<b>Areas of Concern</b> <b>(Incorporating comparisons to state, nation and community feedback)</b>
<ul style="list-style-type: none"> <li>• Environment: Air quality, # of recreation facilities and access to healthy food</li> <li>• Preventive Screenings</li> <li>• Vaccines and immunizations</li> </ul>	<ul style="list-style-type: none"> <li>• Healthy living habits – exercise, nutrition, weight</li> <li>• Diabetes</li> <li>• Heart Disease</li> <li>• Cancer</li> <li>• Asthma</li> <li>• High Blood Pressure</li> </ul>

## Identified Health Priorities

A variety of data and information was collected and analyzed in order to identify key priority health needs of the community. The prioritization process included review and analysis of:

- 1) Secondary, quantitative statistical data,
- 2) Primary, qualitative community feedback, and
- 3) Scotland Health Care System-specific assets.

In addition to review of the above, additional meetings with stakeholders and community members were facilitated to identify priorities and potential action plans. To select priorities and related strategies, the following criteria were considered:

- Data and community feedback indicated the issue as an important community need
- Scotland Health Care System has the capacity to impact the issue
- Addressing a selected issue holds the potential to affect other key health conditions, therefore creating a multiplying effect
- Strategies selected align with and support Scotland Health Care System's mission and vision
- Strategies selected take in consideration current assets in both the community and within Scotland Health Care System

In considering the above, the following priorities were selected:

### 1. Hypertension

High blood pressure affects about 65 million or one in three American adults. Hypertension can lead to stroke, heart failure, or kidney damage. According to the North Carolina State Center for Health Statistics 2010, the number of deaths in Scotland County for heart disease was **91** and **14** deaths for cerebrovascular disease. Hypertension should be monitored through a physician with regular blood pressure screenings. Increased physical activity and healthy eating are also important steps to preventing high blood pressure as well as maintaining a healthy weight

One identifiable contributing factor included obesity. Obesity is a condition affecting many residents in Scotland County and is the number one health problem in children. In Scotland County, 14.1% of children 2-4 years of age are overweight and 13.6% are obese, ranking us 25th in the State (NC-NPASS 2010). The 2011 North Carolina Child Health Report Card (NC Institute of Medicine) states in 2010, 30.1% of children ages 10-17 yrs. were overweight or obese compared to 32.0% in 2005.

### 2. Diabetes

In Scotland County, diabetes was listed as the fourth leading cause of death in 2009 and in North Carolina the seventh leading cause of death. Diabetes, ranked 5th as the primary cause of mortality, from 2006-2010, **70** deaths ranked Scotland County twenty-first highest in North Carolina with a rate of 38.5 (per 100,000 population) compared to the rate of 23.2 (per 100,000 population) for the State of North Carolina. (NC SCHS, 2010). Diabetes is also a

significant contributing factor to other causes of death, such as heart disease, stroke, high blood pressure and cholesterol, visual impairment and kidney failure with risk factors of obesity, physical inactivity, unhealthy diets and smoking. On average persons with diabetes have approximately 2.3 times higher medical costs than those without diabetes.

### **3. Heart Disease**

Heart disease and stroke – the principal components of cardiovascular disease – are the second and third leading causes of death for men and leading cause of death among women. Heart disease attributed to 17,090 deaths in North Carolina in 2010, and **91** deaths in Scotland County (NCSCHS, 2010). While high blood cholesterol, high blood pressure, smoking and physical inactivity are considered four major risk factors, several other factors such as obesity and diabetes are also considered risk factors.

Community assets related to these needs have been identified in the *Identified Priority Health Needs & Related Assets* section of this report (starting on page 35).

Strategic initiatives to address each of these identified needs have been developed and are included in the *Scotland Health Care System's Community Health Needs Assessment – Implementation Strategy* document. This will be reported annually to the IRS on Form 990.

This CHNA report will be made widely available to the public and will be posted on Scotland Health Care System's website: [www.scotlandhealth.org](http://www.scotlandhealth.org).

## About the Research

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Community research was conducted by a Community Health Assessment Committee of team members consisting of community members and key stakeholders from Scotland Health Care System, Scotland County Health Department, and various local businesses. A community-based approach was taken to complete the community health needs assessment. National, state, regional and county-specific data were collected from a broad set of data sources. Special emphasis was placed on assessing Healthy People 2020 Leading Indicators, medically underserved areas and gathering information from community residents, providers of health and human services, and other stakeholders and representatives of Scotland County.

Efforts were made to ensure that the research was conducted in a manner that was representative of the communities within Scotland Health Care's primary service area. The primary service area and focus of the CHNA is Scotland County as approximately 53.0% of Scotland Health Care System's inpatient, outpatient, and emergency room discharges were from residents of Scotland County.

Research methods were conducted in approach that incorporated both quantifiable and qualitative data to get a well-rounded view of the state of the community's health.

- 1) Collection of **statistical (secondary, quantitative) data** at national, state, regional and local levels – key data sources included Healthy People 2020, County Health Rankings, National Health Indicators Warehouse, CDC and North Carolina DHEC biostatistics, and hospital discharge data. Dates of data collected ranged from 2008 – 2011. For each indicator, data was pulled for the most recent year available. In addition, data was pulled, when available, from previous years in order to assess progress. A more detailed list of data sources is included in the appendix of this report.
- 2) Collection of **qualitative data** through a community health assessment survey was distributed throughout Scotland County via web link and hard copies of the survey.

The assessment was completed in partnership and with much input from the local public health professionals, health and human service agencies and Scotland Health Care System's leaders and board.

# Community Served-Scotland County

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The geographic service area and focus of the Scotland Health Care System’s CHNA is Scotland County as approximately 53.0% of Scotland Memorial Hospital’s inpatient, outpatient and emergency room discharges were from those who reside in Scotland County.

## Population Growth

According to the North Carolina State Census Quick Facts, Scotland County’s population was estimated at **36,861** people in July 2011. This reflects a change of -0.8% since April 1, 2010. Population density is 113.4 per square mile. Designated as “rural” in the United States Census, Scotland County, made up of Laurinburg, East Laurinburg, Laurel Hill, Gibson and Wagram, is ranked 64th largest in North Carolina.

## Scotland County

**Population = 36,861**

**Growth Rate 2010-2012 = -0.8%**

## North Carolina

**Population =9,752,073**

**Growth Rate 2000-2010 =2.3%**

## Race

Racial makeup is almost exclusively white and African American with other minorities accounting for 14.2% of the total population 2011 population breakdown is:

Race	Scotland County	Peer County	North Carolina
White	46.0%	54.5%	65.0%
Black	38.8%	35.4%	22.0%
American Indian	11.0%	2.6%	1.5%
Hispanic	2.4%	7.2%	8.6%

Gender	Male	Female
Scotland County	48.4%	51.6%
North Carolina	48.7%	51.3%

(Scotland County Quick Facts from US Census Bureau 2011 estimate)

## Education

Educational attainment for Scotland County has remained below the state and national levels. The current high school graduation rate is 77.3% in Scotland County, with the North Carolina average being 84.1% for the state. The national average remains slightly higher than the state's at a rate of 85.4%.

(quickfacts.census.gov)

## Income and Poverty

### Scotland County Poverty Rate: (2006-2010) 29.5% North Carolina: 15.5%

The median household and per capita income in Scotland County are lower than that of the state and nation.

- Median household income
  - \$30,465 Scotland
  - \$46,291 N.C.
  - \$52,762 US
  -
- Per Capita Income
  - \$16,526 Scotland
  - \$25,256 N.C.
  - \$27,334 US

With the downturn in the economy over the past several years, poverty rates have climbed at an alarming rate and are much higher than the nation's 14.3% poverty rate. Scotland County's poverty rate has dramatically increased to 29.7% when compared to the state's poverty level of 16.1%. (US Census Bureau, 2007-2011).

## Unemployment

According to the NC Employment Security Commission (ESC) Workforce Website:

- **Unemployment rate in Scotland County in: 2010, 2011, 2012**  
14.8%, 17.3%, 17.2%
- **Unemployment rate in North Carolina** 9.1% 10.0% 8.9%

### Scotland County's Labor Force: (NC Dept. of Commerce-Labor Market 2012)

December 2010: 13,625 (2,137 unemployed)

December 2011: 13,336 (2,310 unemployed)

September 2012: 12,862 (2,203 unemployed)

# General State of Our Community's Health

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## Summary of Findings

### General Social Characteristics

- Scotland County's population has experienced a slight decline since 2011, with 2012 population estimates being 36,094 according to the U.S. Census Bureau.
- Educational attainment remains approximately 7% lower the state's level.
- Scotland County continues to reflect a more diverse population than the state and nation.
- Median household income has remained stagnant over the past 10 years and is lower than the state and nation. Poverty rates have increased at an alarming rate.
- Unemployment remains consistently higher than the state and national average.

### General Health Rankings

- Scotland County is one of the least healthy counties among most other parts of the state of North Carolina. It ranks 93rd out of 100 counties among the health outcomes ratings (morbidity, mortality) and 99th among the health factors ratings (social, economic, environment, health behavior factors).

### Healthy Lifestyles

- Smoke Free Restaurants and Government Buildings
- Cholesterol Screenings
- Industrial Wellness Programs
- Scotland County Emergency Awareness
- Nearly all restaurants and bars in North Carolina and many lodging establishments that prepare and serve food and drink became smoke-free, thanks to S.L. 2009-27 (G.S.130A-496), otherwise known as North Carolina's Smoke-Free Restaurants and Bars Law. A news release from November 9, 2011, from the North Carolina Department of Health and Human Services/Office of Public Affairs reported that emergency room visits by North Carolinians experiencing heart attacks have declined by 21% since the January 2010 start of the state's Smoke-Free Restaurants and Bars Law. Scotland County has made great strides in creating a culture that influences a steady decline in smoking.
- During the past twenty years, there has been a dramatic increase in obesity in the United States and rates remain high. Lack of physical activity and poor nutritional habits are major factors in overweight and obesity.
- In Scotland County, the number of teen pregnancies in 2010 for 15 to 19 year olds was 100 and decreased in 2011 to 93 pregnancies for this age group. The county rate is 81.3 compared to the NC state rate of 56.0 (per 1000 population). Scotland County continues to have one of the highest teen pregnancy rates in NC and ranks 2nd highest in the State tied with Montgomery County.
- Community Perceptions: Feedback from the community health assessment surveys indicated that most people have a general knowledge of how lifestyle choices impact

health; however most report that for reasons related to cost, access, and convenience it is difficult to consistently eat a healthy diet, get enough physical activity, and seek medical care.

### Health Environment

- Overall, Scotland County offers a health environment that is conducive to healthy lifestyles such as its natural resources that offer clean, safe drinking water and increased access to outdoor recreation. Recently, increases in county recreation facilities and physical activity opportunities have decreased barriers for sedentary lifestyles
- A healthy environment is critical for healthy people. The Environmental Health Section of the Scotland County Health Department protects and improves the public's health by controlling the environmental factors, which can adversely affect human health. Scotland County offers many natural resources and outside recreational activities with recent recreational gyms built within the community.

### Health Risk Factors

- Prevalence of diabetes continues to climb, and Scotland has a higher rate than both the state and nation.
- Infant mortality and preterm births increased in Scotland County in 2011. In Scotland County the infant death rate for the period 2006-2010 was 8.8 (per 1000 population) compared to the state rate of 8.3 (per 1,000 population). In 2011, seven infant deaths were reported in Scotland County, a rate of 15.3 (per 1,000 population), compared to North Carolina's infant death rate of 7.2 (per 1,000 population), an increase for Scotland County's infant death rate in 2009 of four deaths.
- Hypertension rates continue to increase. Hypertension, high blood cholesterol, smoking and physical inactivity are considered four major risk factors for heart disease.
- Community Perceptions: The community health assessment surveys consistently reported that hypertension, diabetes, and heart disease were the number one health problems in Scotland County.

### Health Outcomes - Morbidity and Mortality

- Hypertension is one of the top five health conditions diagnosed by Scotland Health Care's Emergency Department while rating first among the top five reasons for outpatient visits to Scotland Health Care Network Practices. Hypertension also ranks as the top four diagnoses for Scotland Health Care's inpatient hospital stays.
- Cancer is one of the leading causes of death among adults. Lung and colorectal cancers are of particular concern. In Scotland County, screening and removal of malignant neoplasm are among the top two diagnostic reasons for seeking general surgery.
- Diabetes prevalence and death rates are increasing.
- Heart disease and stroke – the principal components of cardiovascular disease – are the second and third leading causes of death for men and leading cause of death among women. Heart disease attributed to 17,090 deaths in North Carolina in 2010, and **91** deaths in Scotland County

### Mental Health

- Scotland continues to be served by Southeastern Regional Mental Health, Developmental Disabilities, and Substance Abuse Services Local Management Entity (LME). As of October 2010, there are 18 private providers (for-profit and non-profit) endorsed by them to provide at least one service related to mental health, developmental disabilities, and substance abuse. Several services remain in short supply – psychiatric services, outpatient substance abuse services, intensive in home services, and day treatment programs. Often, clients need to go to more than one provider to receive services determined to be medically necessary and appropriate.
- Feedback from the community indicates that mental health screenings and educational services are needed within the community due to a growing need for mental health services.
- In 2013, Scotland Health Care System began renovating several rooms in the Emergency Department to provide dedicated exam rooms specifically for patients suffering from mental health illnesses. These rooms will increase patient safety while providing ED staff with continuous monitoring capability.

### Health Services

- Due to the lower-income status of the county, Scotland County is designated as medically indigent with a Health Professional Shortage Area (HPSA) Score of 21 in primary care due to a rate of 20.5% of the population living below poverty.
- Scotland has improved and fares comparable to the state and nation in preventive clinical services such as diabetic and mammography screenings with rates of 83% and 67% compared to state percentages of 88% and 69%.
- With increases in unemployment in Scotland County, the community reports that access to care remains an issue, due mostly to lack of insurance and inability to pay for medical care.
- Hospital data shows ER usage rates have increased by approximately 11.25% from 2011 – 2012.
- Community Perceptions from the Community Health Assessment Surveys included the most frequently reported issues with access to care, the lack of funds for health insurance and, medicine, and transportation being included in the top three.
- The community reported an increase in job opportunities would improve the health of their family, neighbors, and friends, while decreasing barriers to health care.
- The community reported a need for more health screenings and/or education services related to cholesterol, blood pressure, diabetes, and cancer being among the top four.

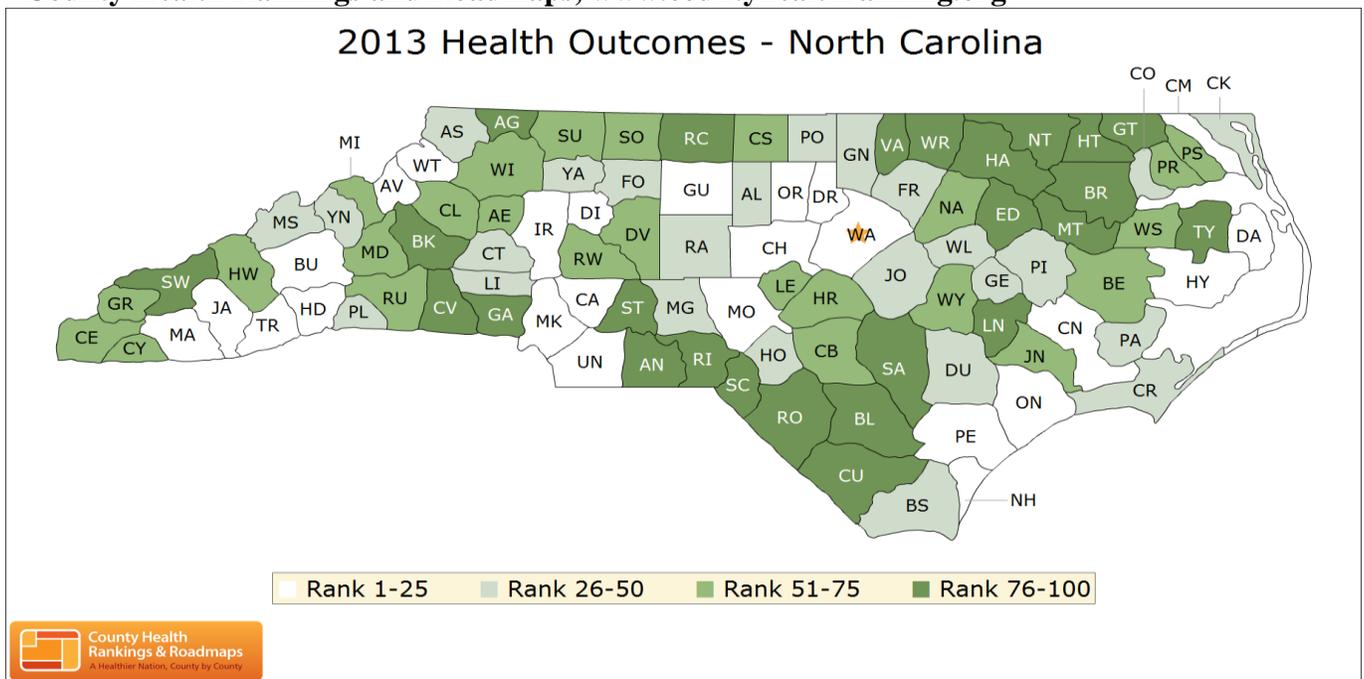
### Children's Health

- Obesity is a condition affecting many residents in Scotland County and is the number one health problem in children. In Scotland County, 14.1% of children 2-4 years of age are overweight and 13.6% are obese, ranking us 25th in the State. (NC-NPASS 2010).
- While asthma does not cause many deaths among children in North Carolina, it is one of the most prevalent chronic diseases in our state among children. In 2010, the numbers of hospitalizations for asthma diagnosis in Scotland County were: 82 for all ages and 32 for children ages 0-14 years. (NCSCHS 2011)

# County Health Rankings

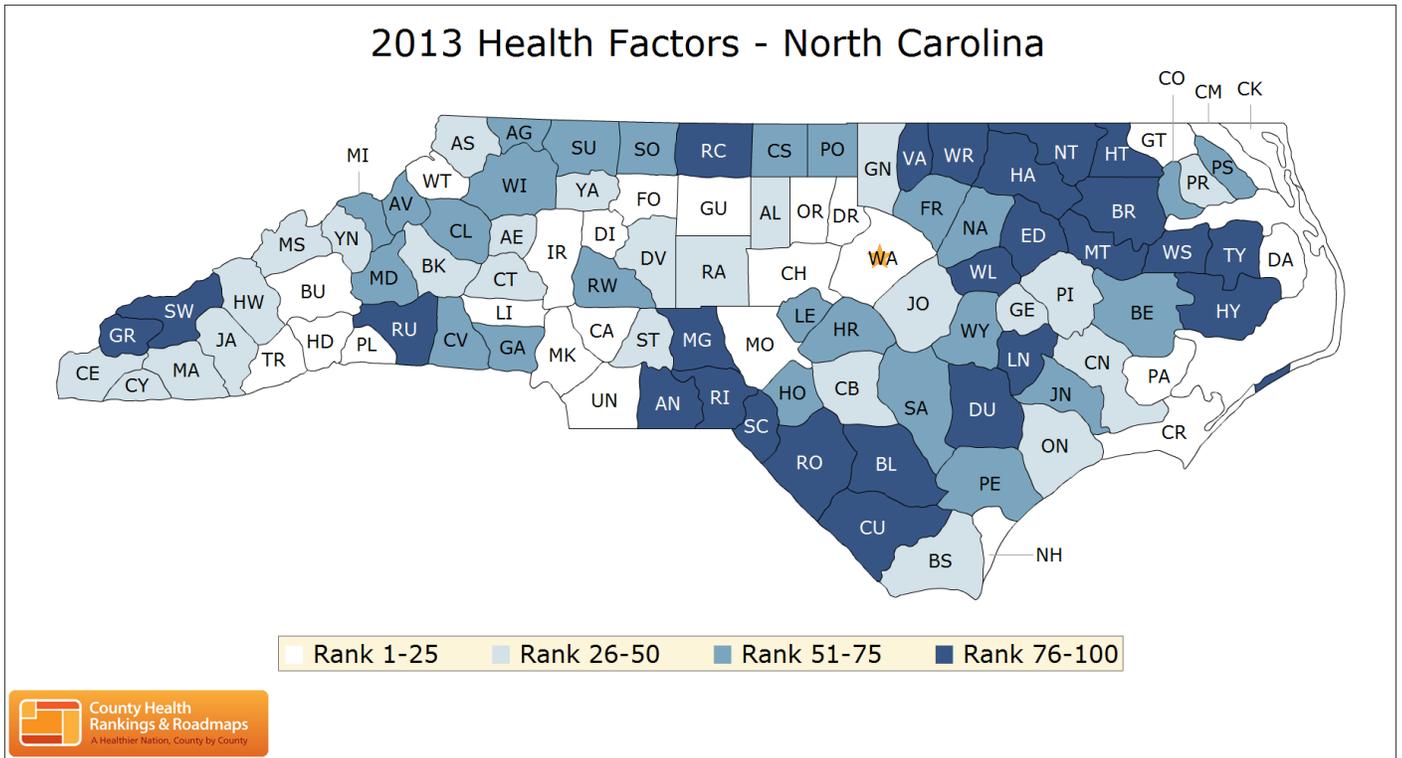
The *County Health Rankings* rank the health of nearly every county in the nation and show that much of what affects health occurs outside of the doctor's office. Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the *Rankings* help counties understand what influences how healthy residents are and how long they will live. The *Rankings* confirm the critical role that factors such as education, jobs, income, and environment play in influencing health. The Rankings look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation rates, access to healthier foods, air pollution levels, income, and rates of smoking, obesity and teen births. The *Rankings*, based on the latest data publically available for each county, are unique in their ability to measure the overall health of each county in all 50 states on the multiple factors that influence health.

## - County Health Rankings and Roadmaps, [www.countyhealthranking.org](http://www.countyhealthranking.org)

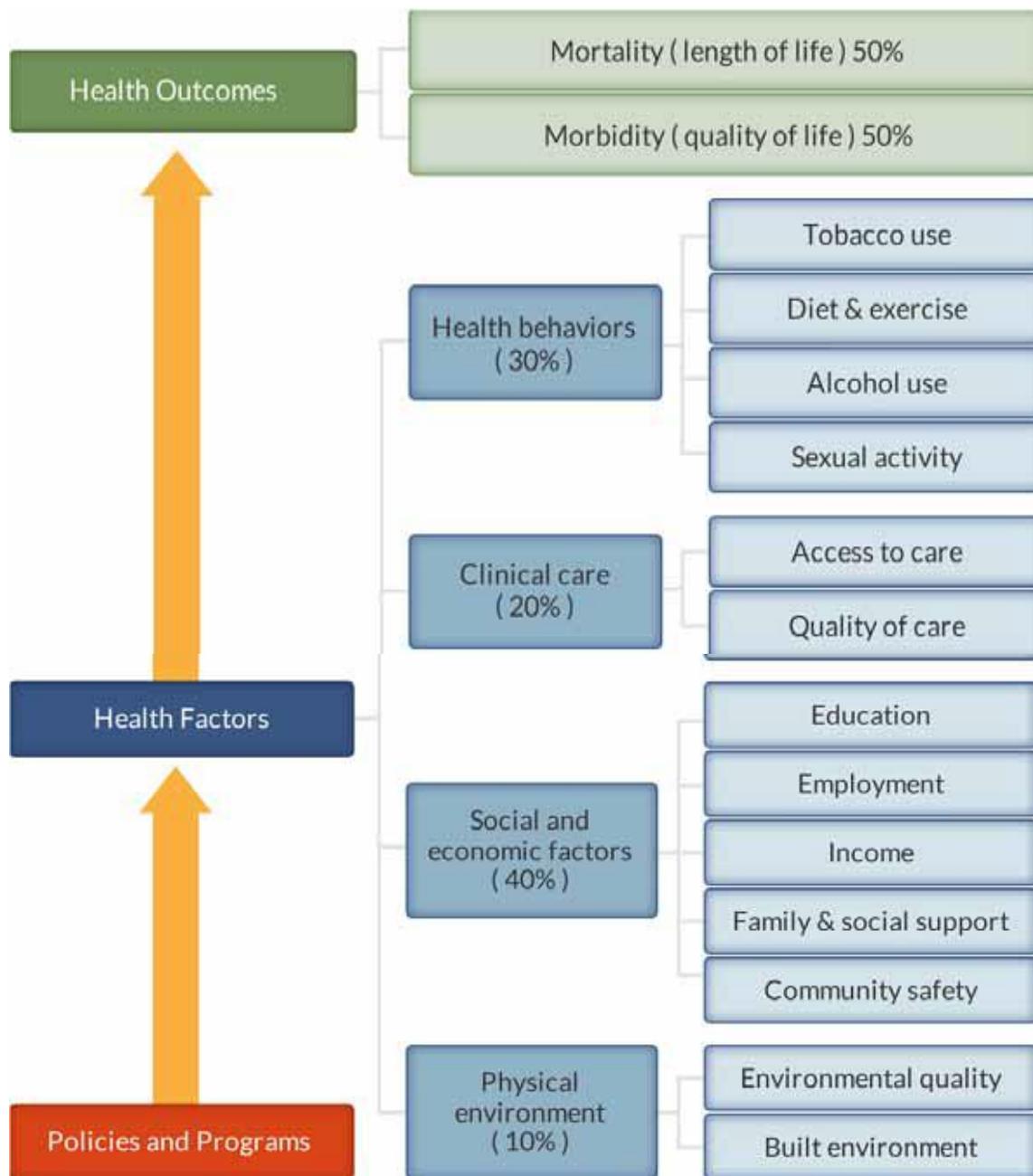


Scotland County (SC) ranked 93rd with rankings 1-25 having the highest, favorable outcomes and rankings of 76-100 having the least favorable outcomes. ([County Health Rankings and Roadmaps, www.countyhealthranking.org](http://www.countyhealthranking.org))

Based on the County Health Rankings, Scotland County ranks high among unhealthy outcomes for the county when compared to most counties in other parts of the state of North Carolina. It ranks 93rd out of 100 counties among the health outcomes ratings and 99th among the health factors ratings. Scotland County has slightly worsened over the past 2 years in its “health outcomes ranking” and “health factors” with previous ratings of 91% and 96%.



Scotland County (SC) ranked 99th with rankings of 1-25 having the most favorable health factors and rankings of 76-100 having the least favorable health factors. (County Health Rankings and Roadmaps, [www.countyhealthranking.org](http://www.countyhealthranking.org))



County Health Rankings model ©2012 UWPHI

The summary health factor rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown in parentheses in the figure) are based upon a review of the literature and expert input, but represent just one way of combining these factors.

(County Health Rankings, 2013).

## Healthy Lifestyles and Behaviors

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Indicator	Scotland County Current	Scotland Past	North Carolina	Nation	Healthy People 2020 Goal
Smoking (adults age 18+)	23.4%	BETTER 26.4%	WORSE 22.9%	BETTER 25%	12%
Excessive Drinking (% adults reporting excessive drinking)	9.2%	WORSE 6.3%	BETTER 13.2%	BETTER 28%	25.3%
Nutrition (adults not eating 5 servings of fruits/vegetables daily)	79.0%	BETTER 80.1%	BETTER 79.4%		
Adults obese or overweight	35.4%	WORSE 34.0%	WORSE 28.6%	BETTER 35.7%	Increase proportion of adults at a healthy weight (30.8%-33.9%)
Teen Pregnancy	81.3%		WORSE 56.0%		

Sources: National health Indicators Warehouse (HIW), Healthy People 2020

## **Obesity and Related Health Habits**

During the past twenty years, there has been a dramatic increase in obesity in the United States and rates remain high. More than one-third of US adults (35.7%) and approximately 17% (or 12.5 million) of children and adolescents ages 2-19 yrs. are obese. (CDC/Centers for Disease Control, 2011). In 2008, North Carolina ranked 14th in the nation in childhood overweight and obesity for youth ages 10 to 17 yrs. Today, almost one in three children ages 2-19 yrs in the United States are overweight compared to one in five in 2002. At its current rate, it will soon become the costliest disease, surpassing cardiovascular diseases. Despite the medical advances of the past 100 years, our children's life expectancy will likely decrease due to overweight and associated diseases.

Obesity is a condition affecting many residents in Scotland County and is the number one health problem in children. In Scotland County, 14.1% of children 2-4 years of age are overweight and 13.6% are obese, ranking us 25th in the State. (NC-NPASS 2010). The 2011 North Carolina Child Health Report Card (NC Institute of Medicine) states in 6 2010, 30.1% of children ages 10-17 yrs. were overweight or obese compared to 32.0% in 2005.

Lack of physical activity and poor nutritional habits are major factors in overweight and obesity. The North Carolina Child Health Report Card 2011 reported only 31.2% of students, ages 10-17 years, were physically active a total of 60 minutes or more per day on five days or more.

## **Alcohol Use Among Adults**

National Health Indicators Warehouse reported that 9.2% of adults in Scotland County reported excessive alcohol drinking. This result was significantly lower than the state of North Carolina at 13.2% although it has increased from its 2008-2010 rates of 6.3%.

## **Teen Pregnancy Rates**

In Scotland County, the number of teen pregnancies in 2010 for 15 to 19 year olds was 100 and decreased in 2011 to 93 pregnancies for this age group. The county rate is 81.3 compared to the NC state rate of 56.0 (per 1000 population). Scotland County continues to have one of the highest teen pregnancy rates in NC and ranks 2nd highest in the State tied with Montgomery County.

## **Health Environment**

A healthy environment is critical for healthy people. The Environmental Health Section of the Scotland County Health Department protects and improves the public's health by controlling the environmental factors, which can adversely affect human health. Lead poisoning, air, soil, water quality, and exposure to hazardous agents contribute to illness and development of disabilities and, therefore, must be monitored. Environmental Health provides preventive health through inspections, education, and enforcement of state and local rules in programs for food and lodging, on-site wastewater disposal, pools, tattoo establishments and institutions, poisoning and animal control. Scotland County Health Department has three Environmental Health Specialists and two Animal Control Officers to provide services for the county. In F/Y 2011-2012, the Environmental Health Department provided 35 new well permits; 120 on-site wastewater improvement permits; 465 food and lodging establishment inspections, 30 swimming pool inspections, 56 day care inspections with one child lead exposure and responded to 15 sewage complaints.

# Health Environment

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Scotland County offers an environment that supports and encourages healthy living.

## **Air Quality**

The annual number of days with daily 8-hour maximum ozone concentration over the National Ambient Air Quality Standard in Scotland County was 0 days in 2006, compared to 3 days in 2003 and 12 days in 2002.

## **Access to Recreation**

The availability of recreational facilities can influence individuals' and communities' choices to engage in physical activity. Proximity to places with recreational opportunities is associated with higher physical activity levels, which in turn is associated with lower rates of adverse health outcomes associated with poor diet, lack of physical activity, and obesity.

In 2013, Scotland Health Care System opened its own exercise facility increasing availability and access for physical activity of its employees, open 7 days a week. During November 2009, a new recreation center opened in Wagram providing a variety of fitness opportunities to Scotland County residents. The Morgan Recreation Complex of Scotland County Parks and Recreation features a variety of outdoor recreational opportunities such as baseball, softball, and soccer to residents of all ages.

More information on Scotland County Parks and Recreation can be found at [www.scotlandcounty.org](http://www.scotlandcounty.org)

## Health Risk Factors

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Indicator	Scotland County Current	Scotland Past	North Carolina	Nation	Healthy People 2020 Goal
Smoking	23.4%	BETTER 26.4%	WORSE 22.9%	BETTER 25%	12%
Diabetes	21.0%	-	BETTER 23.2%	WORSE 8.3%	25.3%
Hypertension	32.7	WORSE 32.0	WORSE 29.5	WORSE 29.9	26.9%
Infant Mortality	15.3%	WORSE 11.9%	WORSE 7.2%	BETTER 7%	6.0%

Sources: National health Indicators Warehouse (HIW), Healthy People 2020

### Health Risk Factors

Health, well-being, and quality of life are affected by a variety of genetic, environmental, and behavioral risk factors. Many risk factors are related and interdependent of each other. For several of the risk factors that are most commonly associated with poor health, disability and premature death, Scotland County typically fares worse than the rest of the state and is below the national average as well as the Healthy People 2020.

# Health Outcomes-Mortality and Morbidity

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## **Leading Causes of Death**

The leading causes of death for Scotland County are similar to those of North Carolina and the US. Cancer and heart disease account for approximately half of all deaths at the county, state, and national level.

## **Cancer**

The N.C. Division of Public Health reports that cancer is now the leading cause of death in North Carolina surpassing heart disease. According to newly released 2010 statistics, cancer claimed the lives of 18,013 North Carolinians and 80 in Scotland County. The majority of cancer deaths occur at five sites: lung, colon, female breast, prostate and pancreas. In 2010, Scotland County's cancer deaths by site were: lung - 21, female breast - 6, colon - 10, and prostate – 6 (NCSCHS 2010). Smoking by far is the leading risk factor for developing lung cancer. Other risk factors include poor nutrition and lack of physical activity. Eating a healthy diet and being active can reduce the risk of developing cancer.

Scotland Health's Cancer Center provided chemotherapy services for 289 new patients in 2012 and radiation therapy to 155 new patients.

## **Heart Disease**

Heart disease was responsible for 16,959 deaths in North Carolina, which resulted in a death rate of 175.6 for 2011. The N.C. State Center for Health Statistics reported 88 deaths due to heart disease in Scotland County during the year of 2011, which resulted in a death rate of 245.4. Scotland County is improving health care outcomes by offering blood pressure screenings and education through community health fairs, business and industry health screenings, the health department, Emergency Medical Service (EMS), local pharmacies, at the hospital, and through Healthy Carolinians. (NCSCHS, 2010).

## **Stroke**

Cerebrovascular disease, or stroke, is the fourth leading cause of the death in the nation. While it does not cause as many deaths in Scotland County as heart disease or cancer, it can cause significant disability such as paralysis, speech impairment, and emotional/psychological problems. Lifestyle changes and, in some cases, medication can significantly decrease risk of stroke. Scotland's stroke mortality rate\* is 61.3 per 100,000, an increase from the state rate of 44.4 and national rate of 40.5.

*\*North Carolina Center for Health Statistic, 2011*

## **Diabetes**

As mentioned earlier in the Health Risk Factors section of this report, diabetes was listed as the fourth leading cause of death in 2009 in Scotland County and the seventh leading cause of death in North Carolina. Diabetes is a major cause of death and disability in North Carolina and the nation. With a greater prevalence of obesity and an increasing elderly population, diabetes is approaching epidemic proportions in North Carolina. According to the BRFSS survey, the

prevalence of diagnosed diabetes in North Carolina increased from 6.4 percent of the adult population in 1998 to 9.6 percent in 2009, an increase of 50% in the last decade.

### **Asthma**

While asthma does not cause many deaths among children in North Carolina, it is one of the most prevalent chronic diseases in our state among children. In 2010, the numbers of hospitalizations for asthma diagnosis in Scotland County were: **82** for all ages and **32** for children ages 0-14 years. (NCSCHS 2011). In 2011-2012, The Purcell Pediatric Clinic, in Scotland County, diagnosed or screened over 700 patients with asthma in 2011-2012.

### **Infant Mortality**

An additional mortality issue affecting the county is infant mortality. In Scotland County the infant death rate for the period 2006-2010 was 8.8 (per 1000 population) compared to the state rate of 8.3 (per 1,000 population). In 2011, seven infant deaths were reported in Scotland County, a rate of 15.3 (per 1,000 population), compared to North Carolina's Infant death rate of 7.2 (per 1,000 population), an increase for Scotland County's infant death rate in 2009 of four deaths. According to the America's Health Rankings 2010 report, North Carolina ranked among the 10 worst in the nation for infant mortality, with a rank of 44<sup>th</sup>.

### **Leading Causes of Death for Children**

In 2009, motor vehicle injuries were the leading cause of death for North Carolina youth, ages five through 24 years, amounting to approximately one-third of all deaths in this age group. Among youth ages 10–17, suicide was the second leading cause of death in 2009, resulting in 35 deaths. According to North Carolina resident death certificates, unintentional injuries resulted in a total of 206 deaths to children ages 0–17 in 2009. More than half of these deaths (55%) involved motor vehicle injuries.

State Center for Health Statistics, 2011

## Health Outcomes Summary-Mortality and Morbidity

Indicator	Scotland County Current	Scotland Past	North Carolina	Nation	Healthy People 2020 Goal
Cancer Mortality Per 100,000	189.6	BETTER 236.7	WORSE 188.5	WORSE 178.7	160.6
Heart Disease Death Rate Per 100,000	245.4	BETTER 253.3	WORSE 175.6	WORSE 185.2	100.8
Stroke Mortality Per 100,000	61.3	BETTER 62.4	WORSE 44.4	WORSE 40.5	33.8
Diabetes Prevalence	15.1%	WORSE 14.9%	WORSE 9.8%	WORSE 8.3%	NA
Diabetes Mortality Per 100,000	50.2	WORSE 42.5	WORSE 23.6	--	65.8
Years of Life Lost before age 75	11,099.8	BETTER 12,291.4	WORSE 7,480.3	WORSE 6,811.2	NA
Physically Unhealthy Days	3.4	BETTER 3.6	BETTER 3.7	BETTER 3.5	NA
Mentally Unhealthy Days	1.9	BETTER 3.0	BETTER 3.6	BETTER 3.7	2.8
Fair or Poor Health	19.2%	BETTER 24.5%	WORSE 18.1%	WORSE 14.9%	NA
Infant Mortality (per 1000)	15.3%	WORSE 11.9%	WORSE 7.2%	WORSE 6.6%	6.0

Sources: National health Indicators Warehouse (HIW), Healthy People 2020

# Health Services-Preventive Clinical and Access

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Due to the lower-income status of the county, the United States Census designates Scotland County as “rural”.

Scotland County ranks first in the state unemployment rate (2011), is considered a Tier I county, which means it’s economically depressed by the State Department of Commerce, and ranks 86th out of 100 for health outcomes in North Carolina (County Health Rankings, March 2012).

## **Clinical Preventive Services**

### **Screenings**

Scotland County screening rates for some of the most widely recommended screenings are better than the state and national rates. In 2012, Scotland Health Care System provided various free community health screenings: bone density- **106**, cholesterol- **211**, blood pressure checks – **392**, PSA’s - **96** on the health care system’s mobile. Scotland Health Care System also hosted a *Women’s Health Event*, February 2012, which included **83** cholesterol screenings, **37** bone density screenings, and **87** height/weight and body fat screenings, **89** blood pressure assessments, as well as a full day of educational sessions on various health topics for over 200 women. In June 2012, Scotland hosted a *Men’s Health Event*, which included **84** PSA tests, **82** cholesterol screenings, **84** blood pressure screenings and **84** rectal exams by a local urologist. The event included several informative speakers related to men’s health issues.

Through partnership with Scotland County Health Department, free immunizations were given to many community residents to ensure access to preventative health care services. In 2012, **405** Influenza vaccinations were administered to the general public along with **409** PPD Tuberculin skin tests, which also included Scotland High School students. A total of **1,381** immunizations were administered to infants, children and adults.

## **Primary Care**

### **Primary Care Physician Rate**

Primary care physician rate is higher in Scotland County than other parts of the state and country, but more people report delaying care due to cost.

### **Usual Primary Care Provider**

Individuals who have identified a usual primary care provider are more likely to get routine medical screenings. Though county level data is not available for people who have a usual primary care provider, data indicates that people in the South are less likely than other regions of the country to have a usual primary care provider.

### Emergency Room Usage

Emergency Departments are increasingly being used for primary care not only by individuals who do not have insurance, but by those with insurance (either through employment or through Medicaid and Medicare) who have difficulty getting an appointment with a regular primary care provider. In Scotland County, the number of ER visits has increased by approximately 38.51% from 2011 to 2012.

Physician offices are concentrated in the zip code 28352, with most of the offices in the center of the county.

<b>Indicator</b>	<b>Scotland County Current</b>	<b>Scotland Past</b>	<b>North Carolina</b>	<b>Nation</b>	<b>Healthy People 2020 Goal</b>
Mammogram based on guidelines	88.3% (2006-2010)	BETTER 86.8%	BETTER 81.0%	BETTER 75.4%	81.1%
Colonoscopy/Sigmoidoscopy (adults 50+)	64.5% (2004-2010)	NA	69.4%		
Flu Vaccine 65+	NA	NA	69.7%	67%	90%
Pneumococcal vaccine	NA	NA	71.2%	60%	90%

Sources: National health Indicators Warehouse (HIW), Healthy People 2020

## Health Care Access

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<b>Indicator</b>	<b>Scotland County Current</b>	<b>Scotland Past</b>	<b>North Carolina</b>	<b>Nation</b>	<b>Healthy People 2020 Goal</b>
Emergency Department Visits	43,349 (2012)	39,498 (2011)	854,692 (2011)	21,830,300 (2011)	
Primary Care Provider Rate (per 100,000)	91.3	WORSE 93.1	BETTER 85.7	NA	(Objective Being Developed)
Physician use delayed due to cost	18.1% (2008-2010)	BETTER 19.7%	WORSE 17.5%	WORSE 4.7%	4.2%
Uninsured	18.7% (2010)	WORSE 18.5%	BETTER 19.1%	WORSE 15.5%	100% Covered

Sources: National health Indicators Warehouse (HIW), Healthy People 2020

# Community Feedback- A Community Survey

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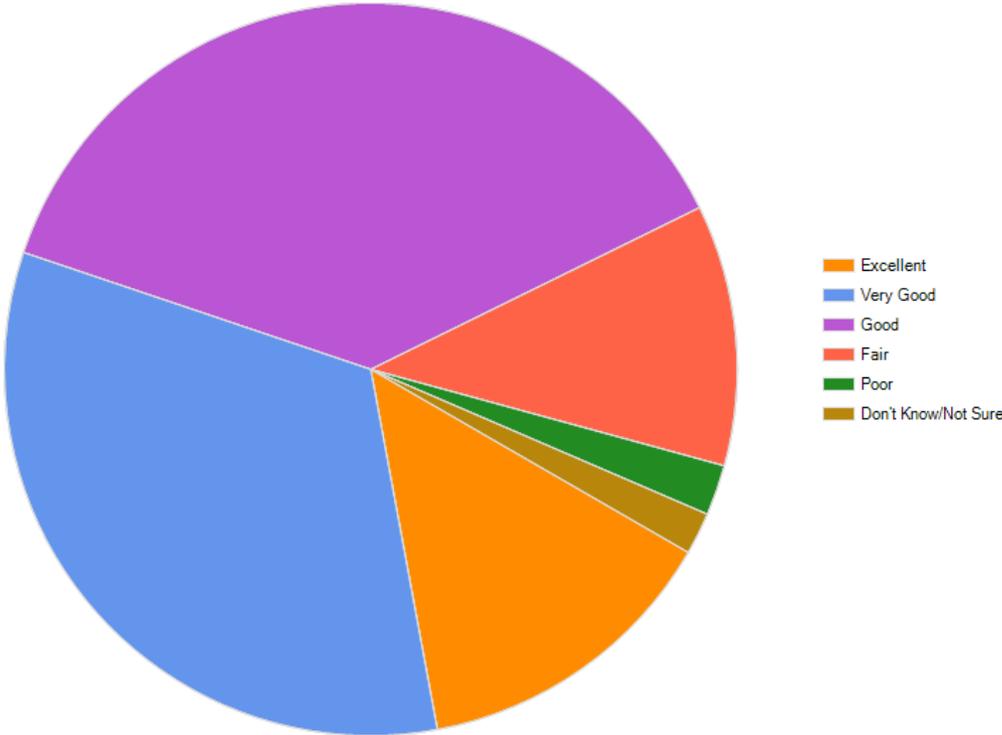
## Community Survey

Qualitative data was gathered by conducting a community survey with a total of 534 responses from community members. The prioritization process included review and analysis of this primary, qualitative community feedback to determine priorities for healthcare interventions within Scotland County.

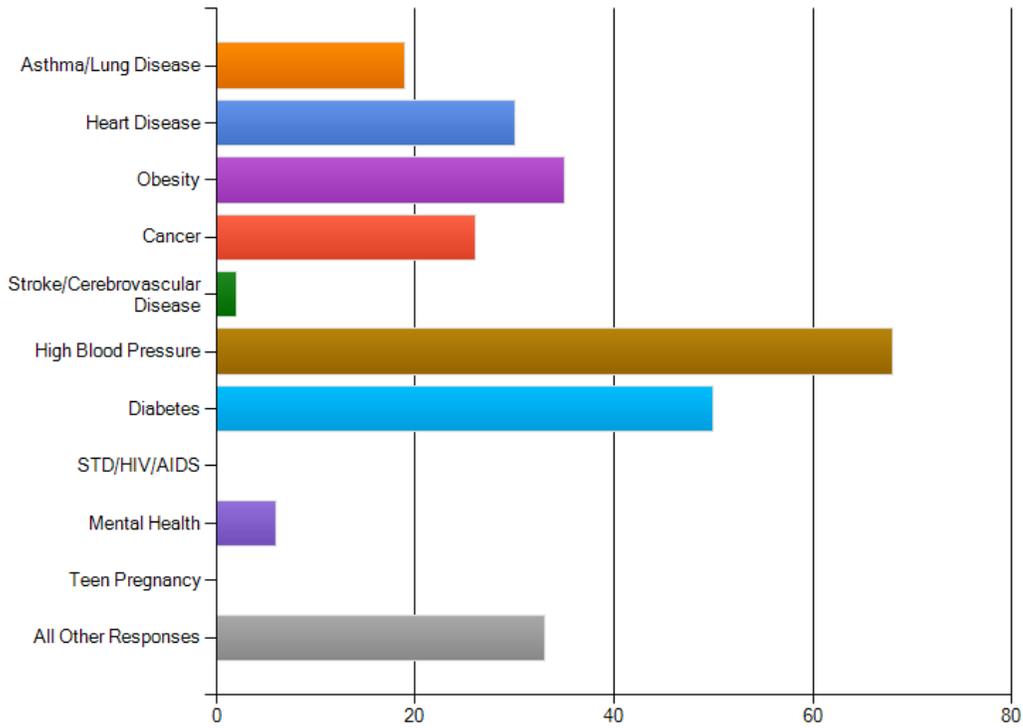
## Community Health Survey Results

(Also See Appendix)

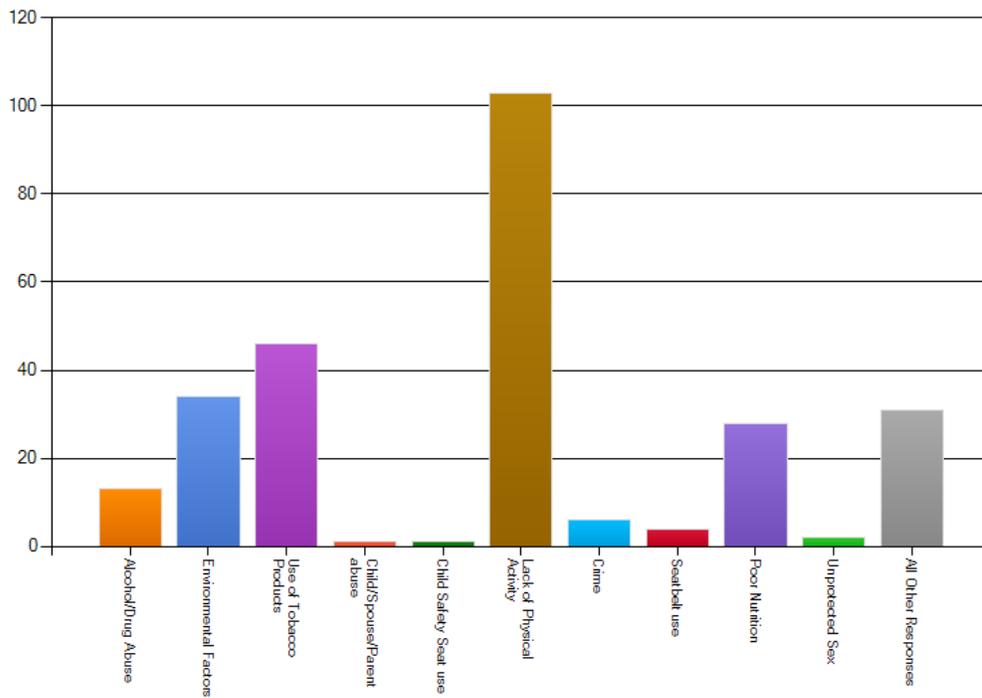
How do you rate your own health? (Check only one)



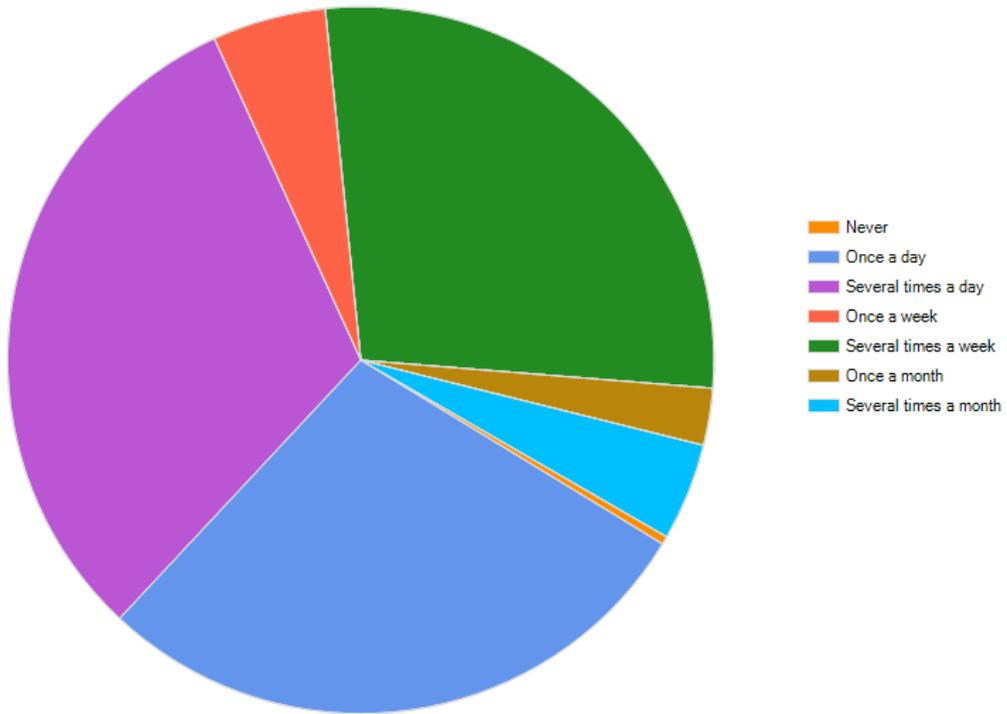
**What is the biggest health issue in your family? (Check only one)**



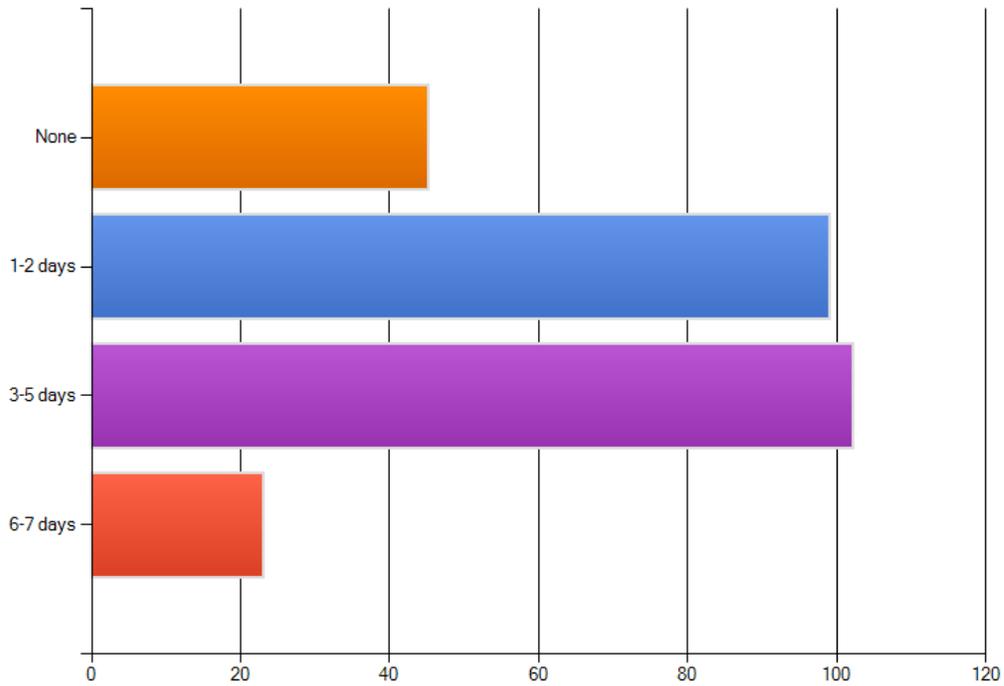
**What is the biggest behavior risk factor that impacts your family? (check only one)**



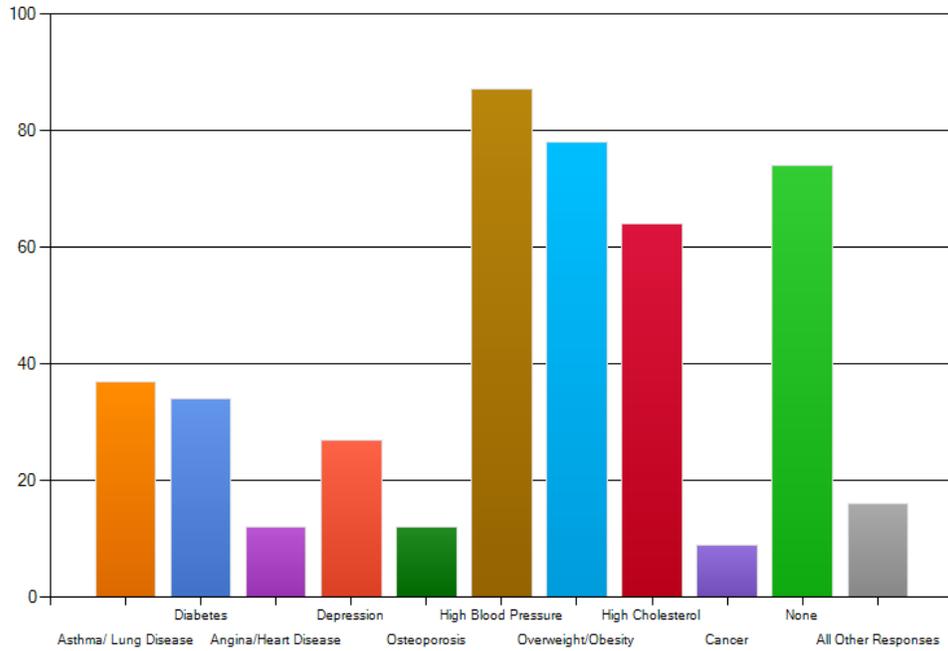
On average, how often do you eat fruits or vegetables? (check only one)



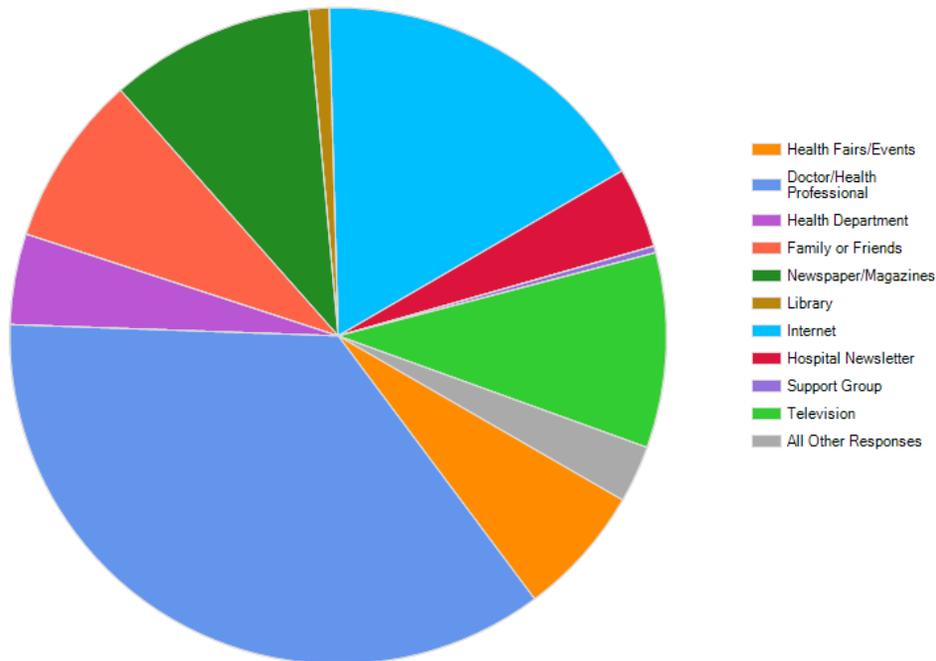
On average, how often do you participate in any physical activities/exercises such as running, golf, gardening, or walking for exercise per week? (check only one)



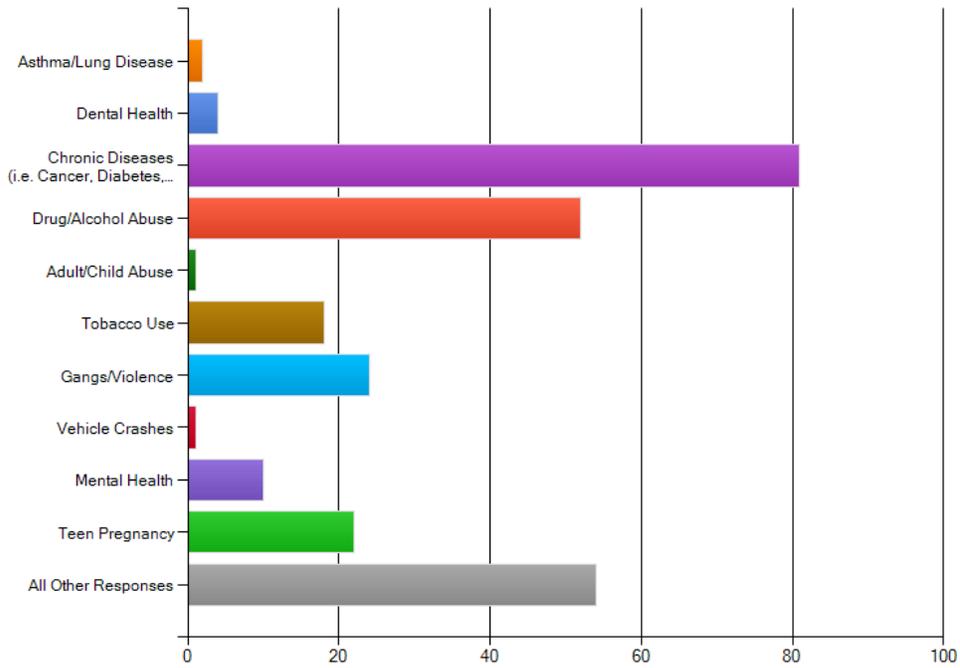
Have you ever been told by a doctor, nurse, or health professional that you have any of the following? (check all that apply)



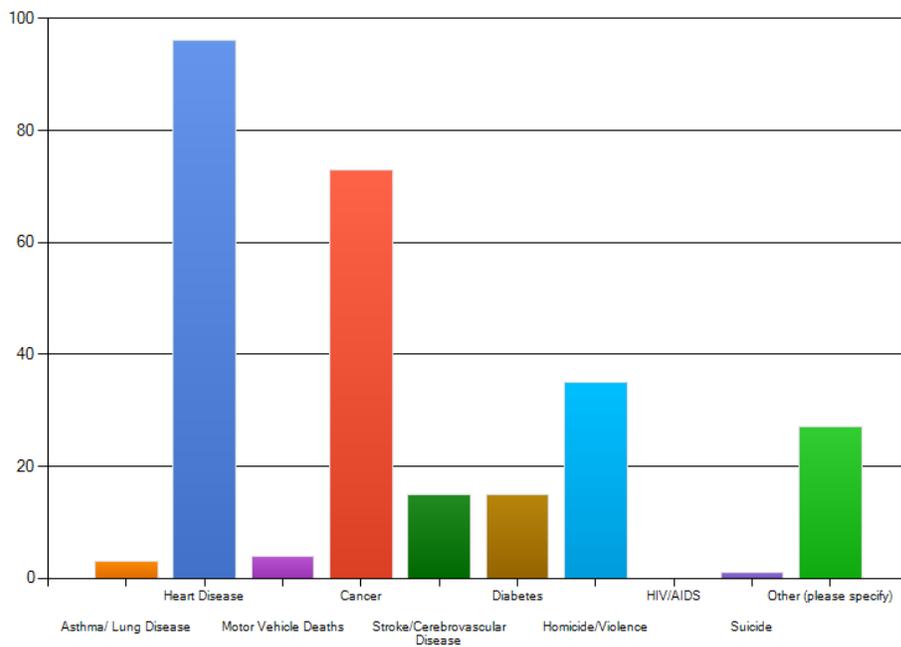
Where do you and your family get most of your health information? (Check all that apply)



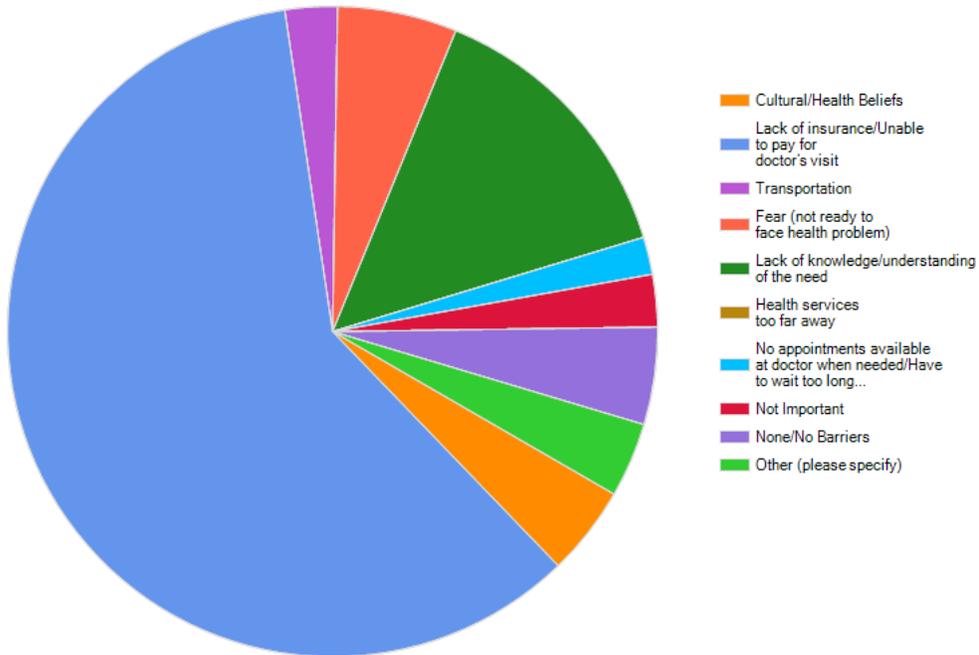
**In your opinion, what is the biggest health issue in your community? (Check only one)**



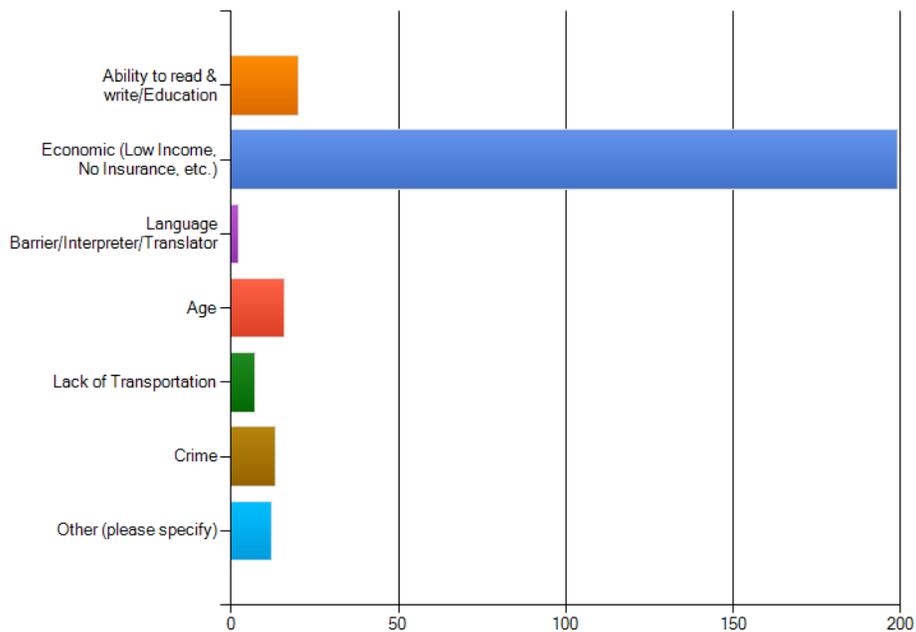
**In your opinion, what do most people die from in your community? (Check only one)**



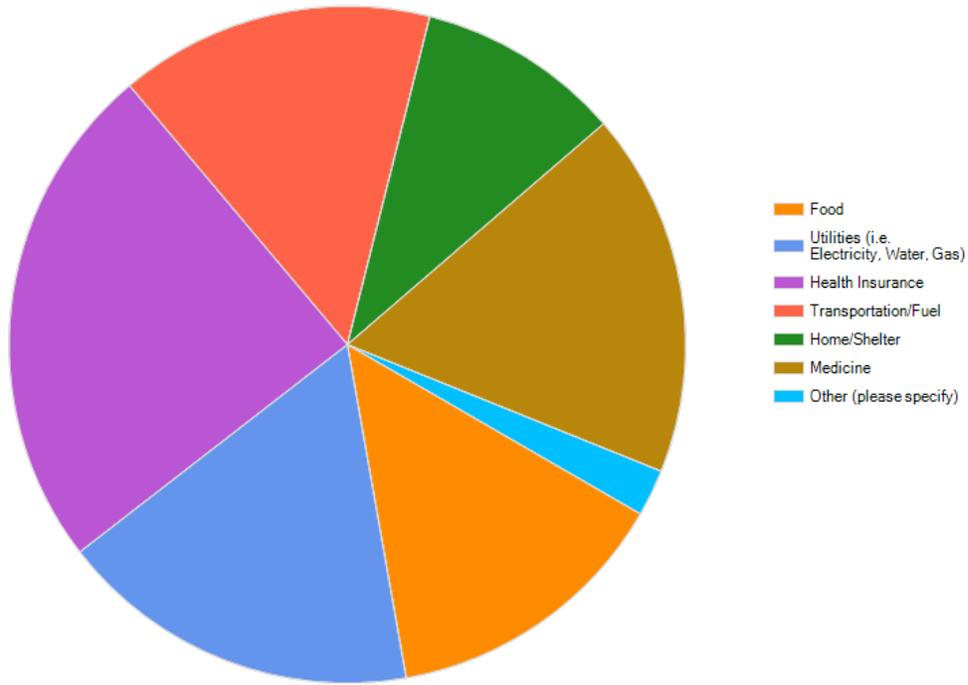
In your opinion, what do you think is the main reason that keeps people in your community from seeking medical treatment?  
(Check only one)



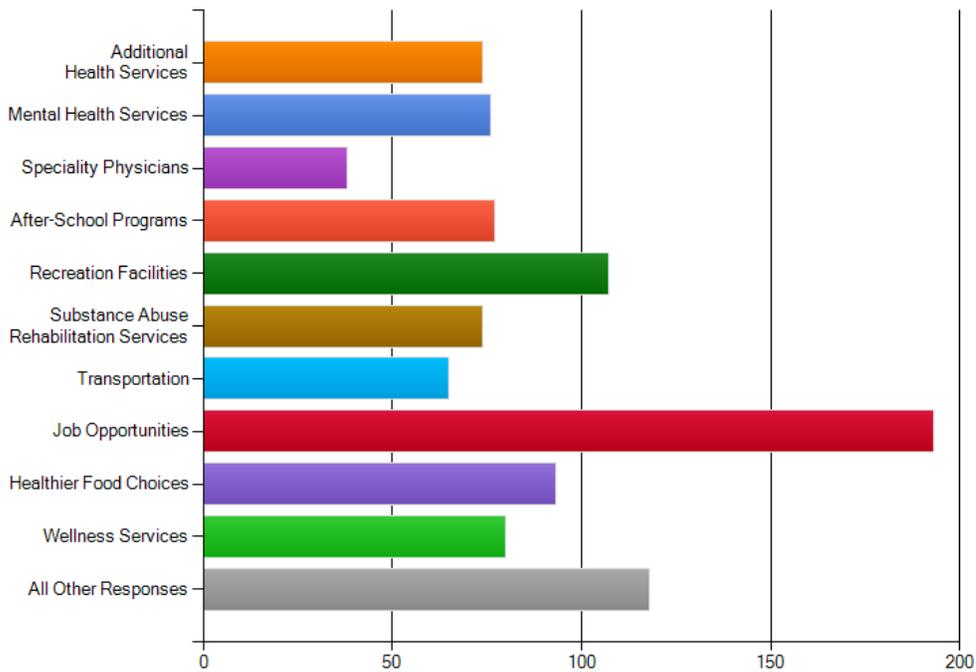
Which factor do you feel most affects the quality of life for people in your community?  
(Check only one)



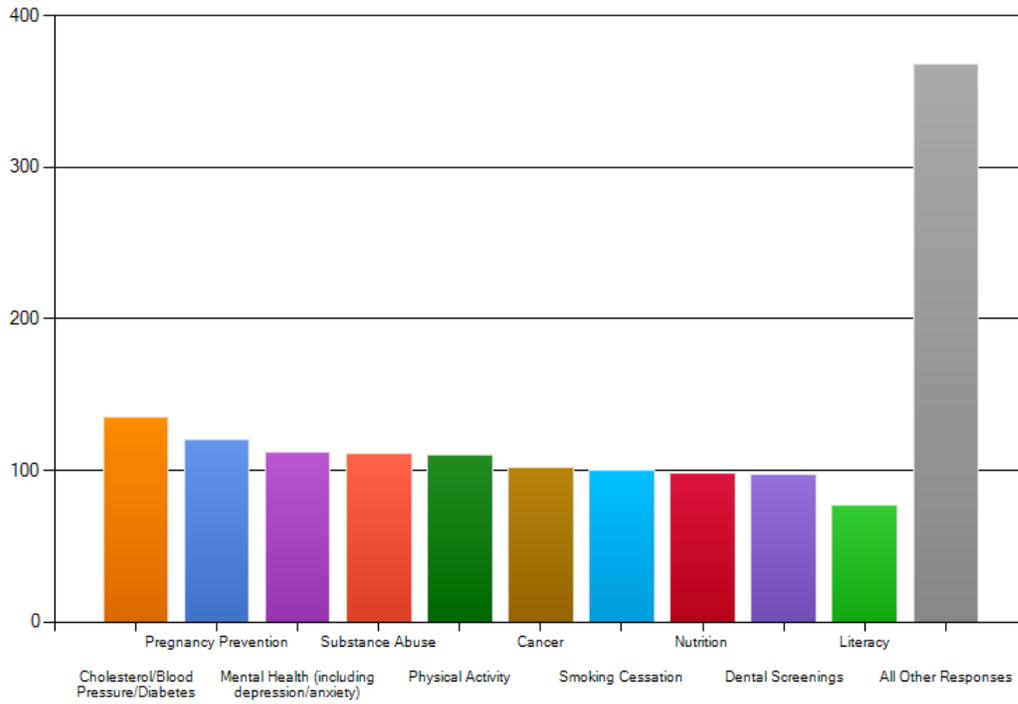
**In your opinion, do you feel people in your community lack the funds for any of the following: (Check all that apply)**



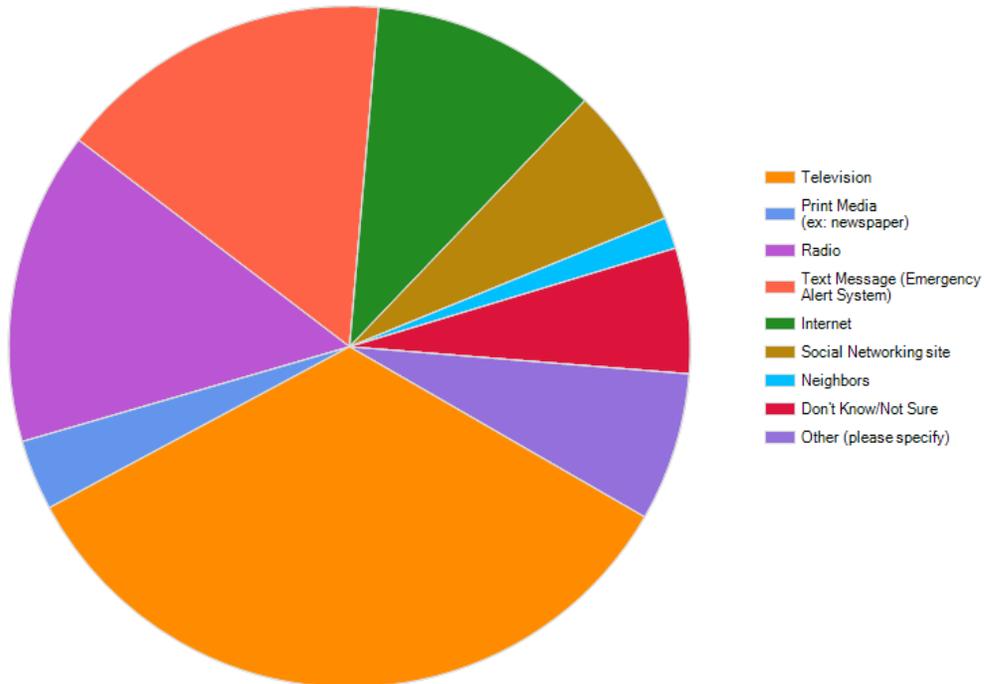
**What does your community need to improve the health of your family, friends, and neighbors? (Check all that apply)**



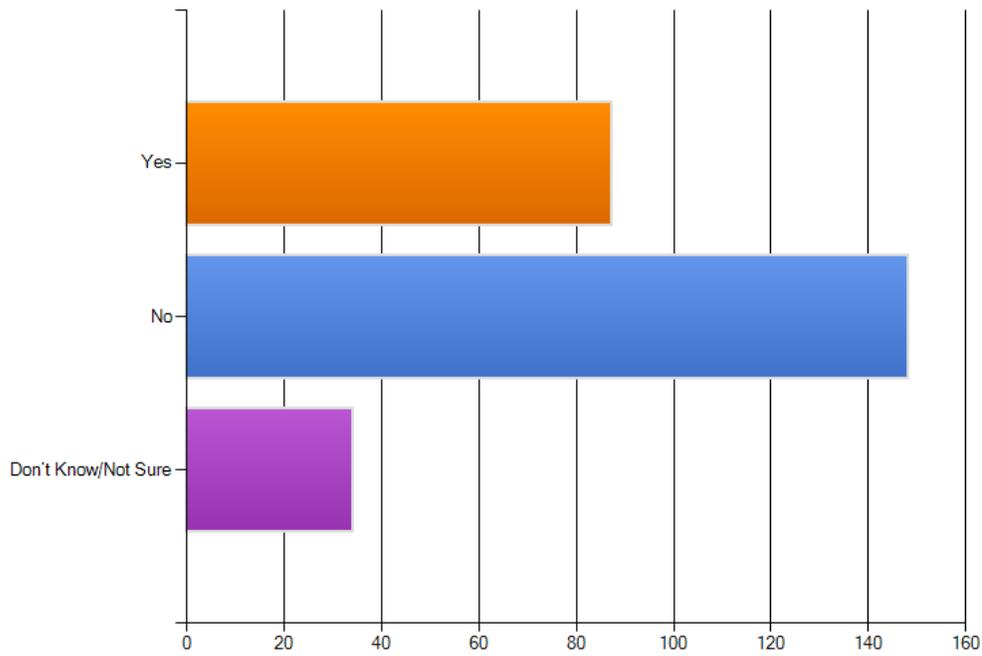
**What health screenings or education/information services are needed in your community? (Check all that apply)**



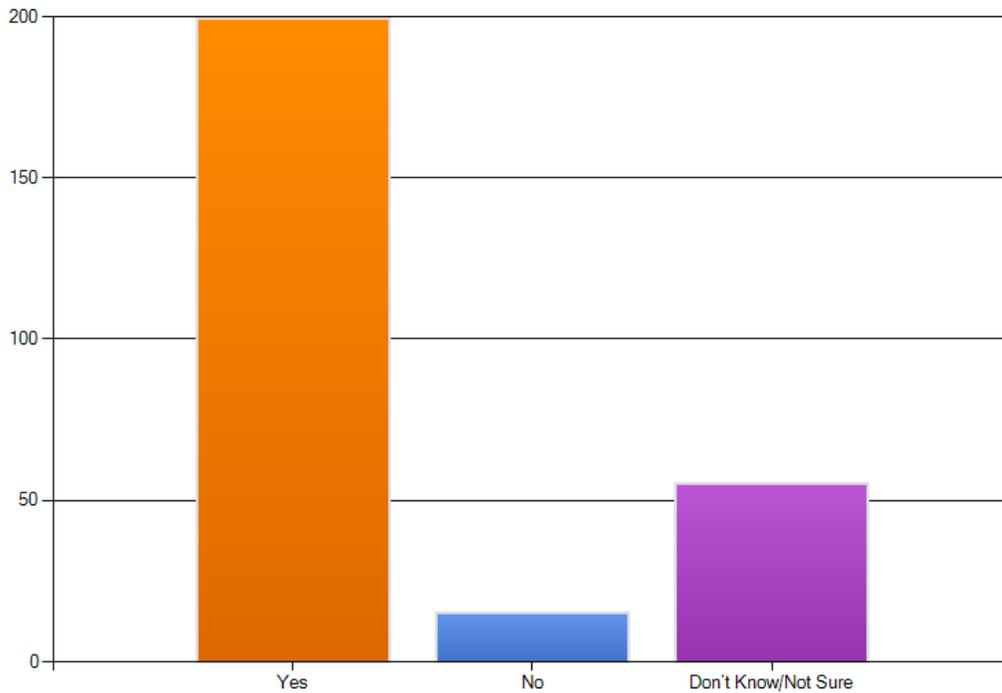
**What would be your main way of getting information from authorities in a large-scale disaster or emergency?(Check only one)**



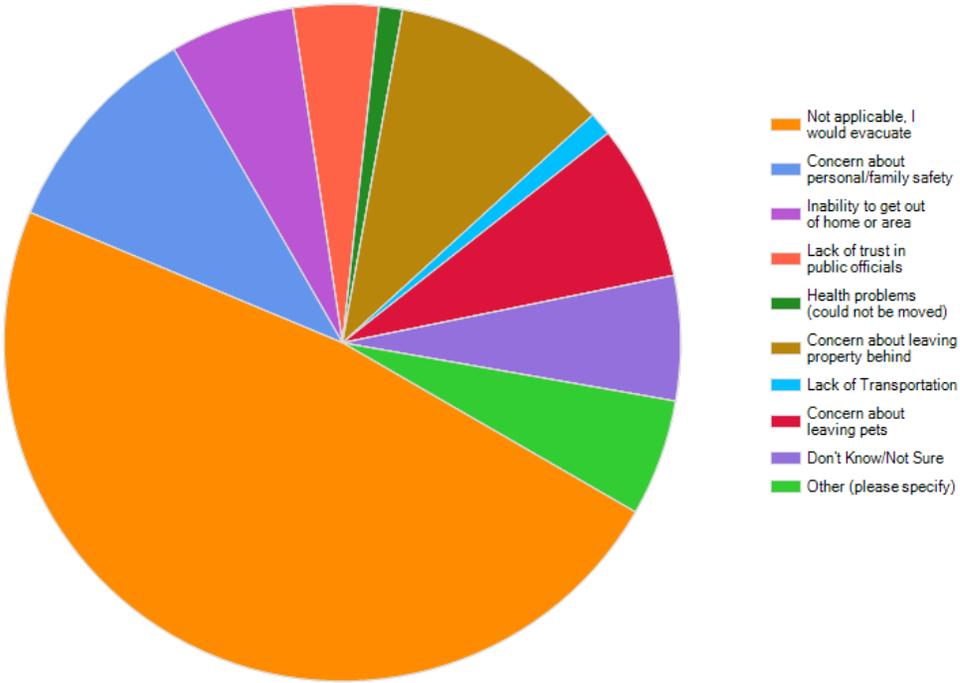
**Does your family have a basic emergency supply kit? (These kits include water, non-perishable food, any necessary prescriptions, first aid supplies, flashlights and batteries, non-electric can opener, blanket, etc.)**



**If public authorities announced a mandatory evacuation from your neighborhood or community due to a large-scale disaster or emergency, would you evacuate?(Check only one)**



**What would be the main reason you might not evacuate if asked to do so?(Check only one)**



# Identified Priority Health Needs & Related Health Assets

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To select priorities and related strategies, the following criteria were considered:

- Data from the Community Health Assessment Survey indicated the issue as an important community need
- Scotland Health Care System has the capacity to impact the issue
- Addressing a selected issue holds the potential to affect other key health conditions, therefore creating a multiplying effect
- Strategies selected align with and support Scotland Health Care System's mission and strategic direction
- Strategies selected take in consideration current assets in both the community and within Scotland Health Care System

In considering the above, the following priorities were selected:

## 1. Hypertension

High blood pressure affects about 65 million or one in three American adults. Hypertension can lead to stroke, heart failure, or kidney damage. According to the North Carolina State Center for Health Statistics 2010, the number of deaths in Scotland County for heart disease was **91** and **14** deaths for cerebrovascular disease. Hypertension should be monitored through a physician with regular blood pressure screenings. Increased physical activity and healthy eating are also important steps to preventing high blood pressure as well as maintaining a healthy weight. Blood pressure screenings and/or education are often provided through community health fairs, business and industry health screenings, the health department, Emergency Medical Service (EMS), local pharmacies, at the hospital, and through Healthy Carolinians. (NCSCHS, 2010). (OURS-PREVENTATIVE).

One identifiable contributing factor included obesity. Obesity is a condition affecting many residents in Scotland County and is the number one health problem in children. In Scotland County, 14.1% of children 2-4 years of age are overweight and 13.6% are obese, ranking us 25th in the State. (NC-NPASS 2010). The 2011 North Carolina Child Health Report Card (NC Institute of Medicine) states in 2010, 30.1% of children ages 10-17 yrs. were overweight or obese compared to 32.0% in 2005.

## 2. Diabetes

In Scotland County, diabetes was listed as the fourth leading cause of death in 2009 and in North Carolina the seventh leading cause of death. Diabetes, ranked 5th as the primary cause of mortality, from 2006-2010, **70** deaths ranked Scotland County twenty-first highest in North Carolina with a rate of 38.5 (per 100,000 population) compared to the rate of 23.2 (per 100,000 population) for the State of North Carolina. (NC SCHS, 2010). Diabetes is also a significant contributing factor to other causes of death, such as heart disease, stroke, high

blood pressure and cholesterol, visual impairment and kidney failure with risk factors of obesity, physical inactivity, unhealthy diets and smoking. On average persons with diabetes have approximately 2.3 times higher medical costs than those without diabetes.

### **3. Heart Disease**

Heart disease and stroke – the principal components of cardiovascular disease – are the second and third leading causes of death for men and leading cause of death among women. Heart disease attributed to 17,090 deaths in North Carolina in 2010, and **91** deaths in Scotland County (NCSCHS, 2010). While high blood cholesterol, high blood pressure, smoking and physical inactivity are considered four major risk factors, several other factors such as obesity and diabetes are also considered risk factors.

# Implementation Strategies

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After identification of health care priorities, additional planning meetings were facilitated with Scotland Healthcare System leaders and the Community Health Assessment Committee to develop strategic initiatives to address the health care need priorities.

Implementation strategies were identified for Scotland Health Care System.

## **Scotland Health Care System's Implementation Strategies include:**

1. Hypertension- To address hypertension, Scotland Health Care System will focus on 1) Education, 2) Implementing blood pressure screening and care protocols into current community benefit-related programs (such as heart and community programs), and 3) participating with current community efforts that are taking a policy, systems and environmental approach to addressing hypertension in all facets of the community. More specifically, initiatives include:
  - a) Provide community education programs on topics related to effective and safe treatment for hypertension, screenings, preventative measures such as physical exercise and weight loss. Hypertension should be monitored through a physician with regular blood pressure screenings. Increased physical activity and healthy eating are also important steps to preventing high blood pressure as well as maintaining a healthy weight. Blood pressure screenings and/or education are provided through community health fairs sponsored by Scotland Health Care System and Scotland Memorial Foundation and industrial health screenings provided by Scotland Health's Mobile Health Department. Scotland's Mobile health care clinic provided 211 free blood pressure screenings to community members during 2012. Preventative screenings and education measures have continued to increase through partnership with Scotland County's Health Department, Scotland County's Emergency Medical Service (EMS), local pharmacies, and through Healthy Carolinians.
  - b) Scotland Health Care's Associate Health developed an annual associate wellness program based on wellness labs, immunization compliance, and identification of hypertension and other chronic illnesses for all Scotland Health Care Associates. Associates are screened annually by the Associate Health Department under supervision of the Medical Director.
  - c) Implement hypertension screenings and education into current community programs such as medical outreach van screenings, health fairs, and other heart related screening programs. Work in collaboration with Scotland County Health Department and Scotland County Parks and Recreation Department to increase opportunities for recreational activities while increasing physical activity and promoting healthy weight loss, which ensures positive outcomes on hypertension management. Scotland County is fortunate to have existing and newly developed resources. These collaborations include programs such as the Cooperative Extension's Expanded Food

and Nutrition Education Program (EFNEP) for youth and adults; Parks and Recreation Youth Sports, the “Lunch & Learn Healthy Lifestyles” Program and the “WOW!” (Workouts for Women) programs through Healthy Carolinians. In addition, WIC New Food Packages addresses public health nutrition concerns by offering foods that give participants a greater balance and variety. Others such as Weight Watchers are available to address nutrition and obesity. Scotland County Parks and Recreation also has sixteen area parks conducive to physical activity such as walking trails, athletic and summer programs for youth age 5 to 15, senior games and exercise classes and a newly opened Recreation Center in Wagram conducive to physical activities, sports, and education.

- d) Scotland Health Care System has formed a committee to review and implement a Fit/Walking Trail on the hospital grounds with free access to all community members. The Fit/Walking Trail will provide a safe, well-lit area for leisure and/or aerobic walking along with the opportunity to use permanent exercise stations located along the Fit Trail. The Fit Trail will encourage increased physical activity for all community members.
  - e) Scotland Health Care System provided a Farmer’s Fresh Market in 2012 during the summer months to increase community access to fresh produce and vegetables. The Fresh Market proved successful, allowing patients, associates, and community members a safe, comfortable, convenient place to obtain fresh, healthy foods. Scotland Health Care System is working with The Wellness Committee to provide the 2013 Farmer’s Fresh Market for 6 weeks during the summer months to increase awareness of healthy eating.
  - f) Scotland Health Care encourages healthy weight and exercise to improve hypertension through its annual Weight Loss Challenge open to all associates and community members. Starting May 2013, Scotland Health Care System Wellness Committee offered its first Weight Watcher’s Program for associates as well as community members. This program will consist of 12 weeks of healthy diet and exercise with body fat and BMI measurements.
  - g) Scotland Health Care System opened its Fitness Center in 2013, free to all associates, encouraging physical activity and healthy living. Scotland’s Fitness Center offers Yoga, Zumba, and low-impact aerobic classes to associates as well as partnering with a local area business to increase access to community members.
  - h) In 2013, Scotland Health Care System and the Wellness Committee formed a Walking group for associates and community members. The Walking group also helps members train for the “2013 Fund Run”. This proved successful in encouraging community members to join the group while increasing participation in the “Fund Run” community event.
2. Diabetes-Scotland Health Care System will address Diabetes by 1) increasing education  
2) Identifying ways to decrease barriers to treatment of Diabetes for community members

such as facilitating access for healthcare for patients without insurance or ability to pay 3) participate and offer community events to provide free screenings for patients at risk for this chronic disease while offering resources for management and treatment options.

- a) Scotland Health Care System increased community awareness through education of Diabetes signs and symptoms, treatment options, and preventative measures at monthly support group meetings. Provided space and/or financial support through Scotland Memorial Foundation for Diabetes monthly support group along with other groups including Alzheimer's, Amputee, Pain Management, Cancer, Stroke, and Multiple Sclerosis. Scotland Health Care System provided individual education and self-management for persons with diabetes through one on one dietician nutritional counseling. Scotland Health Care System collaborated with Scotland County Healthy Carolinians in providing the Community Diabetes Support Group programs and participated on the Healthy Carolinians Steering Committee.
- b) Scotland Community Health Clinic (SCHC), a 501(c)(3) non-profit organization, opened July 2007 as a free clinic and medical safety net facility for uninsured Scotland County residents, aged 18 – 64, who are at or below 150% FPL. A member of the NC Association of Free Clinics (NCAFC) and the National Association of Free and Charitable Clinics (NAFC), SCHC's mission is to deliver compassionate, high quality evidence-based, primary care and prescription assistance to the uninsured and most needy residents of the county. Scotland Community Health Clinic is not connected with any local, state or federal agencies and must rely primarily on local donations, and assistance from grants and foundations. Collaboration and support from Scotland Health Care System, along with other donations from community business and affiliates, 3000 patient have been served and as well as 1400 active patients. Thousands of dollars of services have been donated by Scotland County Imaging and Scotland Memorial Hospital. The Scotland Memorial Foundation has written and received grants, which provide free mammograms. Currently this collaboration has enabled the Scotland Community Health Clinic to provide a Diabetes Care Program to help patients manage their diabetes more effectively. In addition to closer following, participants have access to various classes to help manage their diabetes.
- c) Scotland Health Care System funds and provides *A Diabetes Education Health Fair* serving nearly 125 participants during 2012, in collaboration with The Scotland County Department of Public Health/Healthy Carolinians and funded by Scotland Memorial Foundation, which has become an annual event. Hemoglobin A1C blood test were offered free to community members at four local community sites, including churches and lodges, to increase screening measures for diabetes and decrease barriers to health care. Education was provided to community members about management and treatment options during these screenings. The increase in events are funded by Scotland Health Care System in hopes of reaching disadvantaged community members and increase access to care, while increasing knowledge of this chronic disease.

- d) Scotland Health Care System and Scotland Memorial Foundation raised funds with their annual “FUNd Run-4-Life” to support The Diabetes Education Fund. Currently, this fund is sponsoring the 2013-2014 Diabetes Bus Initiative, which includes weekly Diabetes Self Management classes to be hosted at Scotland Health Care System. The classes are free to community members and focus on Diabetes treatment and management, healthy low carb eating choices, and prevention of diabetes complications. The classes are provided to small groups during evening hours to provide convenient times for working and active community members.
  - e) Scotland Health Care collaborates with the Scotland Health Department in assisting patients with education and management of diabetes by referring patients and community members to the Diabetes Self-Management Education Class. A Diabetes Educator performs these individualized assessments. The classes consist of 4 hours of classroom education and 3-month follow- ups.
3. Heart Disease- To address heart disease, Scotland Health Care System will focus on
- 1) Community education and efforts to increase early heart disease awareness and detection
  - 2) increase at risk population screenings for heart disease,
  - 3) support and seek funding for improving and providing additional vascular procedures, increasing early identification of heart disease and at risk populations.
- a) Scotland Health Care System and Scotland Memorial Foundation provided and sponsored 211 cholesterol screenings and 392 blood pressure checks throughout the community during their Heart Healthy Month in February 2012 along with 83 cholesterol screenings, 89 blood pressure assessments, and 87 body fat and BMI screenings during the Annual Women’s Health Event in 2012. These screenings included collaboration with business partners to increase awareness of heart disease and multiple break- out education sessions provided by local area physicians.
  - b) Through collaboration with the Scotland County Department of Public Health and EMS, blood pressure screenings were provided free on site throughout various sites within the community. Ongoing progress to increase heart disease education and early detection continues through the partnership of Scotland Health Care System and Scotland County Healthy Carolinians, which has increased its programs for education and effects on heart disease initiatives.
  - c) Scotland Health Care System opened their new Scotland Cardiovascular Center, a joint venture with First Health of the Carolinas in 2011. The center offers cardiac catheterizations and vascular procedures in a state-of-the-art facility and also offers inpatient and outpatient cardiology services, a cardiac/pulmonary rehabilitation center where supervised exercise, nutrition, stress management, vocational assessment and cardiovascular education are provided, and screenings for high blood pressure and cholesterol.
  - d) Scotland Health Care System is also helping to expand accessibility to health care by increasing local physician offices and specialty practices. Scotland Health Care System added thirteen new physicians to the active medical staff in the specialties of

Gastroenterology, Internal Medicine, OB/GYN, General Surgery, Hospitalist, Podiatry, Anesthesiology/Pain Management, Medical Oncology, Radiology, and Physiatry/Pain Management.

- e) Scotland Memorial Foundation has written a grant for funding of a Community Health/Patient Navigator full time position. If awarded, this position would serve as a community educator to increase patient knowledge of heart disease, diabetes, hypertension, along with many other chronic diseases, improve compliance of individualized treatment plans, decrease barriers to health care, and connect patient with additional resources to improve patient outcomes. The position would also increase and help assist patients with navigating follow up care.
  
- f) Through partnership with Sandhills Community Health Network, Scotland Health Care System is increasing access for medical care of chronic diseases, ensuring individualized treatment plans, and optimizing patient's awareness of follow up care and preventative services. Sandhills Community Health Network identifies patients with chronic medical illness such as heart disease through ER visits, provider, and Associate referral. Case managers are assigned to patients who meet the chronic disease criteria in order to assist with improvements in patient compliance and outcomes. Local providers were given information and in-services about this partnership with Sandhills Community Health Network and the resources available.
  
- g) Through implementation of Scotland Health Care Network's EMR system by Cerner, meaningful use is being tracked for continuous monitoring of chronic disease management such as heart disease, hypertension, healthy weight, diabetes mellitus, and other chronic diseases at all network practices. All providers and staff received adequate training on meaningful use protocols and EMR usage.

**Community Health Needs Assessment: Implementation Strategy: Scotland Health Care System**

<b>CHNA Priority</b>	<b>Community Assets/Efforts</b>	<b>Scotland Health Care Programs, Services &amp; Community Benefit Activities</b>	<b>Process &amp; Internal Metrics to Track</b>	<b>Long-Term Community Indicators to Track</b>
<b>1.Hypertension</b>	<ul style="list-style-type: none"> <li>-Scotland County EMS</li> <li>-Local pharmacies</li> <li>-Healthy Carolinians</li> <li>-Scotland County Health Department</li> <li>-Scotland County Parks &amp; Recreation</li> <li>-WOW!</li> <li>-Wagram Recreation Center</li> </ul>	<ul style="list-style-type: none"> <li>-Scotland Mobile Health Community Van</li> <li>-February Healthy Heart Month</li> <li>-Women’s Health Fair</li> <li>-Men’s Health Fair</li> <li>-Other Health Fair Screenings &amp; Educational Programs</li> <li>-Employee Fitness Center</li> <li>-Employee Weight Loss Challenge</li> <li>-Scotland Health Fit/ Walking Trail</li> <li>-Fresh Farmer’s Market</li> <li>-Annual Associate Wellness Program</li> </ul>	<ul style="list-style-type: none"> <li># education sessions &amp; screenings in the community, # people attended, # educational seminars provide to health providers</li> <li># Scotland Health programs implementing Hypertension education &amp; control messaging</li> <li># employees who participate in Fitness Center, weight loss challenge, &amp; wellness program</li> </ul>	<ul style="list-style-type: none"> <li>% of population with hypertension and BMI/Body Fat</li> <li>County Health Factor Rankings</li> <li>County Health Outcomes Rankings</li> <li>Hypertension prevalence and mortality</li> <li>Heart Disease and stroke death rates</li> </ul>
<b>2.Diabetes</b>	<ul style="list-style-type: none"> <li>-Scotland Community Health Clinic (SCHC)</li> <li>-Healthy Carolinians Steering Committee</li> <li>-The Diabetes Bus Initiative</li> <li>-Diabetes Self-Management Education Class, Scotland County Health Department</li> </ul>	<ul style="list-style-type: none"> <li>-Monthly Diabetes Support Group</li> <li>-Scotland Memorial Foundation partnership and funding of SCHC</li> <li>-Fund Run Event</li> <li>-Diabetes Education Fund</li> <li>- Diabetes Bus Initiative</li> <li>-Diabetes Health Fair</li> <li>-Free Community A1C Screenings</li> </ul>	<ul style="list-style-type: none"> <li># education/support group classes</li> <li># referrals to Diabetes Bus Initiative</li> <li># referrals to Diabetes Self-Management Education</li> <li># of community participates in Community A1C Screenings/Health Fair</li> </ul>	<ul style="list-style-type: none"> <li>% of population with Diabetes</li> <li>Diabetes Prevalence and mortality</li> <li>Diabetes Complications prevalence and mortality</li> <li>County Health Factor Rankings</li> <li>County Health Outcomes Rankings</li> </ul>

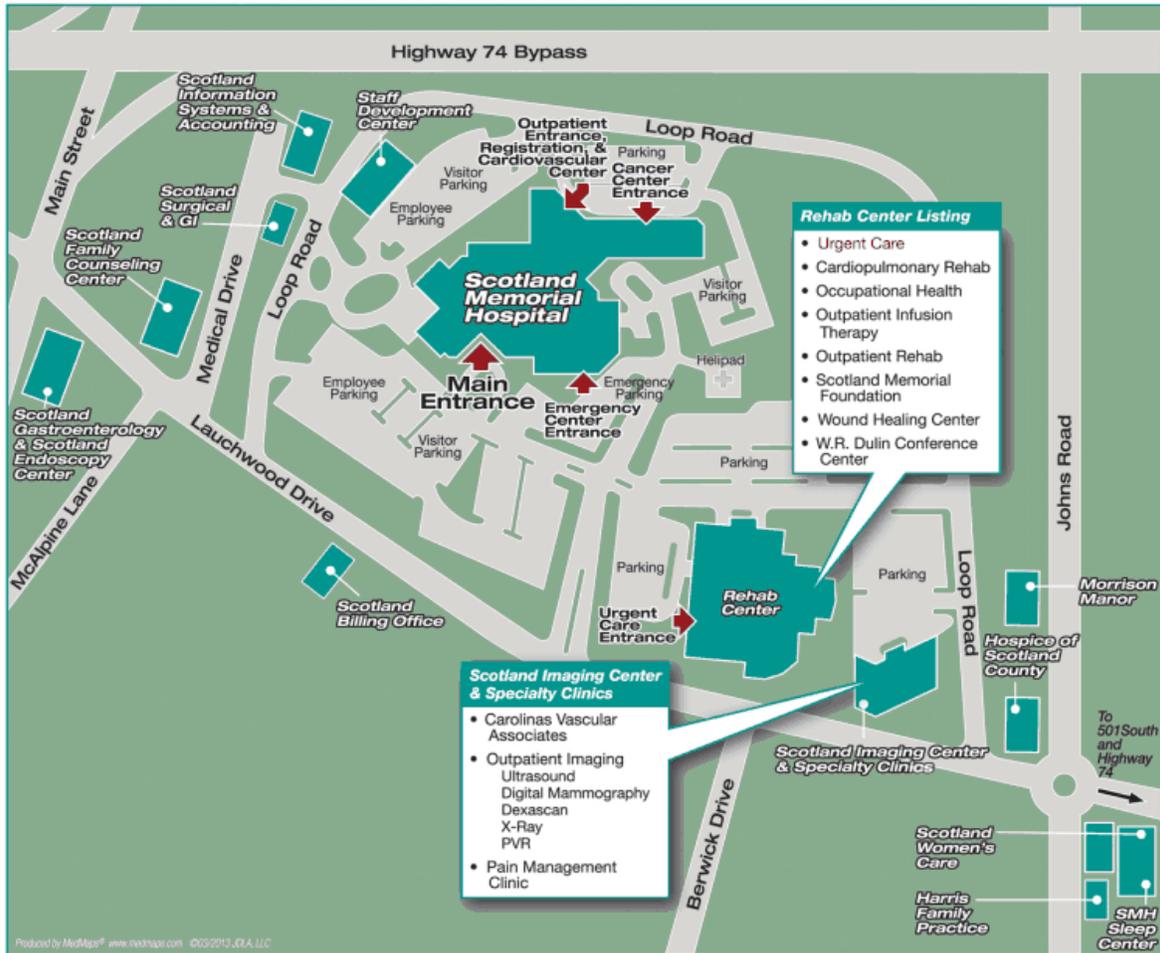
CHNA Priority	Community Assets/Efforts	Scotland Health Care Programs, Services & Community Benefit Activities	Process & Internal Metrics to Track	Long-Term Community Indicators to Track
<b>3.Heart Disease</b>	<ul style="list-style-type: none"> <li>-Scotland County Department of Public Health</li> <li>-Scotland County EMS</li> <li>-Scotland County Healthy Carolinians</li> <li>-First Health of Carolinas</li> <li>-Sandhills Community Health Network</li> </ul>	<ul style="list-style-type: none"> <li>-Scotland Health Care Heart Healthy Community Screenings</li> <li>-Scotland Cardiovascular Center</li> <li>-Scotland Health Care Network Physicians' Practices</li> <li>-Case management referrals</li> <li>-Community Health/Patient Navigator</li> <li>-Scotland Health Care Cerner EMR</li> </ul>	<ul style="list-style-type: none"> <li># community health care screenings and education sessions</li> <li># patients seen at Cardiovascular Center</li> <li># of patients referred for case management</li> <li># patients diagnosed with heart disease and monitoring of meaningful use criteria</li> <li># of patients seen at physicians practices with heart disease</li> </ul>	<ul style="list-style-type: none"> <li>% of population with heart disease</li> <li>Heart disease prevalence and mortality rates</li> <li>County Health Factor Rankings</li> <li>County Health Outcomes Rankings</li> </ul>

# APPENDIX



500 Lauchwood Drive  
Laurinburg, North Carolina 28352  
910-291-7000  
scotlandhealth.org

Here at Scotland Health Care System, we understand that healthcare is evolving. Advances in medicine and strides in technology are providing local communities access to better healthcare. It is our desire to provide the best care in our region. Our staff will be here to help you and your loved ones when the need arises. The comfort and care of our patients is our major goal.



## Directions to Scotland Health Care System

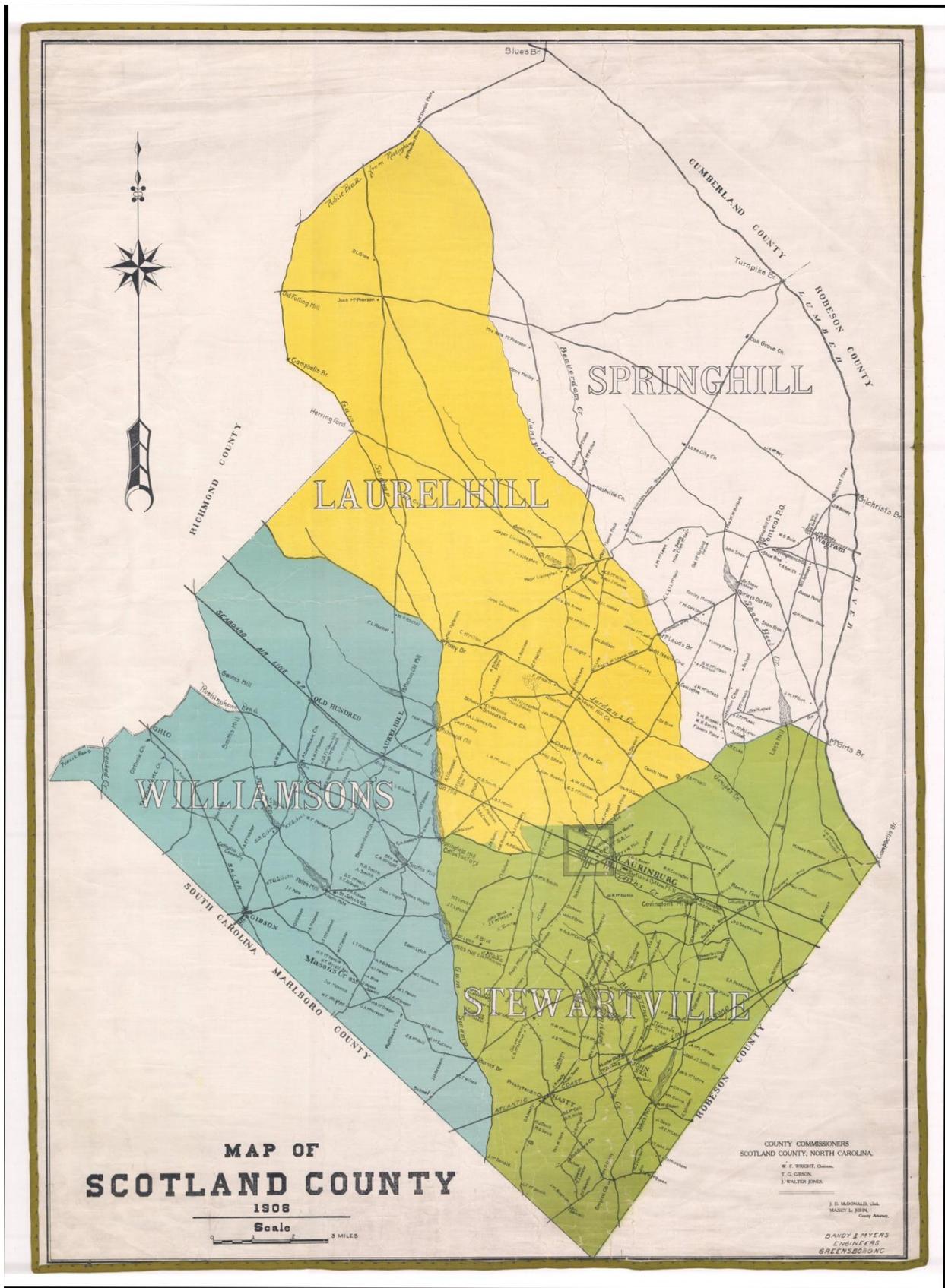
**From Bennettsville & Cheraw** – Traveling North on Hwy 401, veer right on 401 Business (Main Street). At the first traffic light (intersection of Main Street and Lauchwood Drive) turn right onto Lauchwood Drive. The entrance to the Hospital is approximately 1/2 mile on the left.

**From Raeford & Wagram** – Traveling South on Hwy 401, stay on 401S Bypass past Walmart. Continue past the Jameson Inn to the next traffic light. Turn left at the light and then right at the next traffic light onto Main Street. Turn left onto Lauchwood Drive at the first traffic light. The Hospital is on the left about 1/2 mile.

**From Rockingham & Hamlet** – Traveling East on Hwy 74 Bypass: Exit onto 501 South (Caledonia Road). Turn right onto Hwy 501 and proceed through the roundabout, taking the second exit to Lauchwood Drive. The Hospital is on the right about 1/8 mile.

**From Pembroke & Lumberton** – Traveling West on Hwy 74 Bypass: Exit onto 501 south (Caledonia Road). Turn left onto 501 and proceed through the roundabout, taking the second exit to Lauchwood Drive. The Hospital is on the right about 1/8 mile.

**From Red Springs** – Traveling towards Maxton on Hwy 71 merge onto US-74 W Bypass. Exit onto Hwy 501 South (Caledonia Road). Turn left onto Hwy 501, proceed through the roundabout, taking the second exit to Lauchwood Drive. The Hospital is on the right about 1/8 mile.



## Data Sources

1. National Health Indicators Warehouse  
<http://healthindicators.gov/>
2. County Health Rankings 2012  
<http://www.countyhealthrankings.org/>
3. Healthy People 2020  
<http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>
4. North Carolina State for Health Statistics  
<http://healthstats.publichealth.nc.gov/home>
5. Center for Disease Control  
<http://www.cdc.gov/DataStatistics/>
6. US Census Bureau
  - a. 2000, 2010 US Census Data
  - b. <http://www.cdc.gov/DataStatistics/>
  - c. 2005-2009, 2010 American Community Survey  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
  - d. County and State Quick Facts
  - e. <http://quickfacts.census.gov/qfd/index.html>
7. NC Campaign for the Prevention of Teen Pregnancy  
<http://www.teenpregnancync.org/>
8. NC Department of Education  
<http://ed.nc.gov/>
9. National Cancer Institute, State Cancer Profiles  
<http://statecancerprofiles.cancer.gov/>
10. American Diabetes Association  
<http://www.diabetes.org/>
11. NC Department of Employment and Workforce  
<http://dew.nc.gov/about-lmi.asp>
12. NC Behavioral Risk Factor Surveillance System  
[http://www.ncdhec.gov/hs/epidata/brfss\\_index.htm](http://www.ncdhec.gov/hs/epidata/brfss_index.htm)

# CHNA Team

## **Scotland Health Care System Leadership Groups**

Scotland County Community Health Assessment Committee

Scotland County Board of Trustees

## **Public Health Officials - NC Dept. of Health and Environmental Control - Public Health Dept**

Kathy Cox, B.S., CHES, RHed, Healthy Carolinians Coordinator, PIO

Scotland County Health Department Health Educator II

Danny Sprouse, Environmental Health Coordinator

Cardra Burns, WIC Director, Breastfeeding Programs Manager

Danielle Wilkins, RN, Accreditation Agency Coordinator, Quality Assurance Coordinator

Tina Clark, Director of Nursing

Wayne Raynor, Health Director

## **Scotland Health Care System Staff**

Jennifer Coughenour, RN MSN, CNL, Coordinator of Mobile Services

Jeanne Kreuser, RN BSN, Industrial Business

Andrea Fields, RN BSN, Director, Scotland Physicians Network

Tammy Holloway, RN BSN, Asst. Director of Associate Health

Ivy McLaurin, Grant Writer, Scotland Memorial Foundation

Kirsten Dean, Executive Director of Scotland Memorial Foundation

Karen Gainey, Marketing Coordinator

## **Scotland County School System**

Summer Stanley, MSW, Social Work/Facilitator

Gina Stocks, RN Lead Nurse

## **Scotland Community Health Clinic**

Andy Kurtzman, Director

## **Scotland County Parks and Recreation**

Shannon Newton, Director

## **Community Members**

Walter Brown

William Matthews

\*Public health officials represent the broad health interests of the community, especially Scotland County residents served by the public health department. The public health officials listed above reviewed the secondary data and concurred with the assessment of the key priorities. Curriculum vitae of these individuals are available upon request.