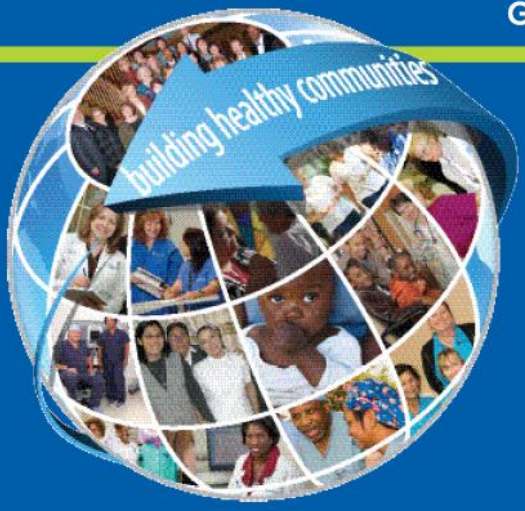


BON SECOURS HEALTH SYSTEM

Community Health Needs Assessment

Bon Secours St. Francis – Eastside

Bon Secours St. Francis Health System

Executive Summary

Bon Secours St. Francis – Eastside (BSSF-Eastside) is a 93-bed healthcare facility located on the eastside of Greenville County. BSSF-Eastside offers extensive care, including obstetrics and gynecology, orthopedics, imaging and radiology services, and general medical, surgical and critical care. This facility also features a Neonatal Care Unit, which offers 24/7 coverage by a board-certified neonatologist. Access to 24-hour Emergency department and fast-track emergency services is also a feature of this facility. Bon Secours St. Francis – Eastside is proud to be a part of the Bon Secours St. Francis Health System (BSSFHS).

BSSFHS is comprised of two general acute care hospitals: BSSF-Eastside and Bon Secours St. Francis – Downtown (BSSF-Downtown), a physician joint-ventured ambulatory surgery center (Upstate Surgery Center) and offices at the Millennium medical office building; all of which are located in Greenville, South Carolina. BSSF-Eastside and BSSF-Downtown serve approximately 450,000 residents in Greenville, SC.

As a member of the Bon Secours Health System, our mission is to bring compassion to health care and to be Good Help to Those in Need®, especially those who are poor and dying. As a system of caregivers, we commit ourselves to help bring people and communities to health and wholeness as part of the healing ministry of Jesus Christ and the Catholic Church.

This CHNA was conducted in conjunction with BSSF-Eastside, BSSF-Downtown, Greenville Health System (GHS), Greenville Forward, and the South Carolina Department of Health and Environmental Control (SCDHEC)-Upstate Region over a period of one year for Greenville County. Greenville County comprises the largest portion of service areas for BSSF-Eastside and BSSF-Downtown. This CHNA included a community telephone survey, secondary data analysis, and focus groups. This was completed with input provided by those with public health knowledge. Additional groups were well-represented throughout the conduct of this CHNA, including individuals representing the broad interests of the community, persons with special knowledge of the medically underserved, low-income, minority, and chronic disease populations.

This comprehensive assessment determined that the most significant health needs of our service area are those of a chronic nature (chronic lower respiratory disease - CLRD, stroke, heart disease, cancer, diabetes, and hypertension). These chronic conditions correspond to Greenville's behavioral risk factor profile presenting growing overweight and obesity rates due to physical inactivity and poor eating habits. Additionally, through qualitative review, dental needs, asthma, mental health and alcohol/substance abuse surfaced as growing or existing concerns in the Greenville community. Through further investigation, weaknesses in the public health infrastructure were also identified and specifically relate to the use and communication of population-based data, evaluation of programs and services, and policy development.

In this report, we have identified a wide range of community resources that can assist in addressing the health needs of our community. We will work with many of these organizations to develop plans and support programs to improve the health of our community.

If you would like additional information on this Community Health Needs Assessment please contact us at 864.675.4302.

BON SECOURS VISION AND FACILITY DESCRIPTIONS

BSSFHS perpetuates a rich Catholic Social Tradition in health care. Inspired by the healing ministry of Jesus Christ and the Charism of Bon Secours, this is reflected in the Bon Secours Vision statement:

As a prophetic Catholic health ministry we will partner with our communities to create a more humane world, build health and social justice for all, and provide exceptional value for those we serve.

BSSFHS is comprised of two general acute care hospitals (BSSF-Eastside & BSSF-Downtown), a physician joint-ventured ambulatory surgery center (Upstate Surgery Center) and leased space in the Millennium medical office building; all of which are located in Greenville, South Carolina.

BSSF-Eastside is located in a suburb of Greenville County, considered to be a fast growing area with respect to residential and commercial growth. This facility has 93 licensed beds (13 of which are Labor/Delivery/Recovery rooms), an Intermediate NICU and eight operating rooms. Core clinical areas of excellence include OB/GYN, ENT, and orthopedics. BSSF-Downtown is located in downtown Greenville and has 245 licensed beds, 16 operating rooms and offers a full range of medical/surgical services. Core clinical areas of excellence include cardiology/CV surgery, orthopedics, and general surgery. The health system operates two emergency departments at each facility to ensure that all persons, regardless of their ability to pay, have access to emergency care. Approximately 38,000 sq. ft. of space is leased in the Millennium medical office complex to support community education, cardiac rehab, and diagnostic services.

Finally, BSSFHS has two joint-ventured outpatient surgery centers. The Upstate Surgery Center is located on the eastside of Greenville County, very close in proximity to BSSF-Eastside. This facility has two licensed operating rooms, focusing on ambulatory surgeries related to orthopedics, podiatry, oral surgery, plastic surgery, general surgery, gynecological, and ear, nose and throat procedures. The Bon Secours St. Francis Surgery Center, also close to BSSF-Eastside, has two operating suites designated for orthopedic and upper extremity surgeries.

SECTION I. FACILITY SERVICE AREA AND DESCRIPTION OF COMMUNITY

GREENVILLE COUNTY SERVICE AREA/POPULATION DEMOGRAPHICS.

Greenville County is home to approximately 450,000 residents and is the largest, and one of the fastest growing counties in South Carolina (with a nearly 18% increase in population over the past decade. All contributing partners agreed to complete this CHNA for the service area of Greenville County; therefore the subject service area and identified needs overlap both BSSF-Eastside and BSSF-Downtown facility CHNAs. While BSSF-Eastside and BSSF-Downtown will be referenced individually in separate documents, both BSSF-Eastside and BSSF-Downtown work together to fulfill the mission of BSSFHS and will contribute to each other's Implementation Plans.

As of 2011, the median household income for Greenville County ($48,147) was higher than the median income of South Carolina ($44,695), yet a greater percentage of people (18.6%) are in poverty than the state poverty rate (17%).**Error! Bookmark not defined.** Approximately 21% of children under the age of 18 live in poverty.[1] It is estimated that 27% of the county's population, or an estimated 117,578 people, are considered medically uninsured, a higher percentage of residents (27%) than the state percent of uninsured as a whole (23.5%).[2]

TABLE 1. Demographic Profile[Error! Bookmark not defined.,1,3]

	GREENVILLE COUNTY	SOUTH CAROLINA
Population Size (2012 est.)	451,219	4,723,723
AGE DISTRIBUTION (2010)		
<18	25%	24%
18-44	37%	36%
45-64	26%	26%
65-84	11%	12%
85+	2%	2%
RACE (2010**)**		
White persons, not Hispanic	69.9%	64%
Black	18.4%	28.1%
Persons of Hispanic or Latin origin	8.5%	5.3%
Other	3.2%	2.6%
EDUCATION (2007-2011**)**		
High school graduate or higher, percent of persons age 25+	85.7%	83.6%
Bachelor's degree or higher, percent of persons age 25+	39.2%	24.2%
INCOME (2007-2011**)**		
Median Income	$48,147	$44,695
Persons below poverty level	18.6%	17%

The Hispanic population has had the greatest growth rate, increasing by over 147% in a single decade.[5] Figures 1 and 2 show this growth. Figure 2 specifically shows the concentrated areas of growth.

Figure 1. Hispanic Population 1990[4]

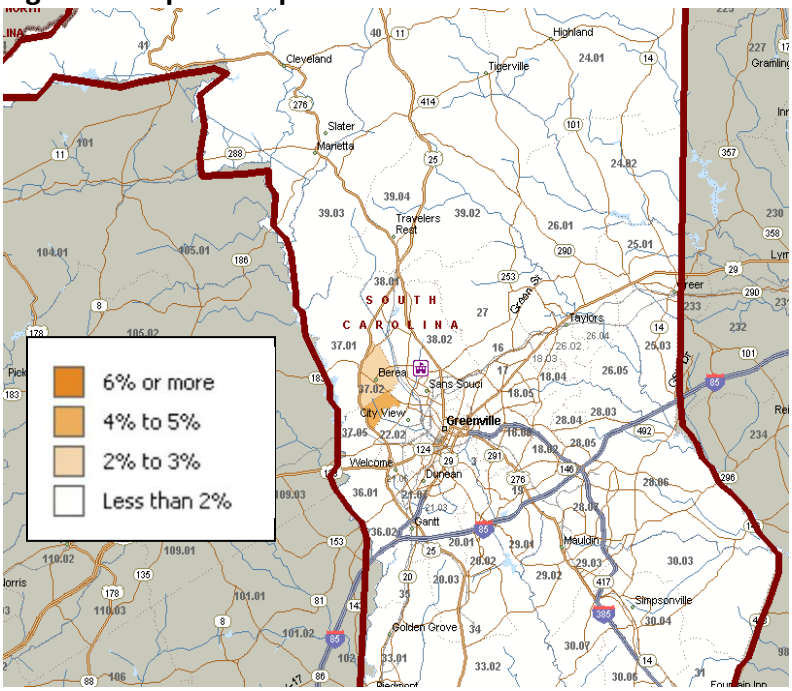
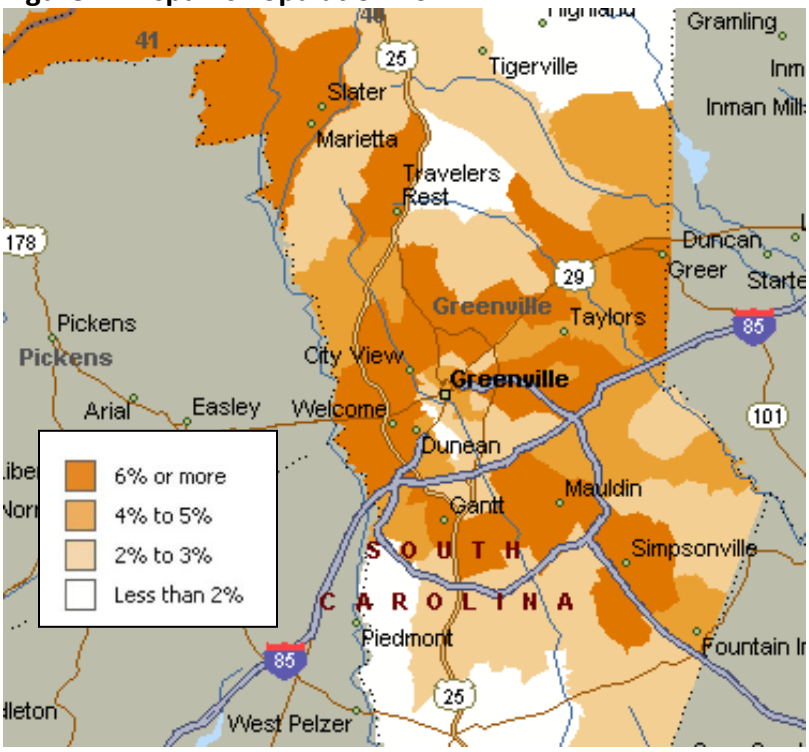


Figure 2. Hispanic Population 2011[5]



This demographic change in the BSSF-Eastside service area warrants a re-evaluation of programs and services designed to meet the growing needs of this population. (Please see Implementation Plan for further detail.)

SECTION II. METHODOLOGY

BSSF-Eastside worked in collaboration with Greenville Forward (an organization designed to make Greenville one of the most vibrant and healthiest places to live), the SCDHEC–Upstate Region and GHS to develop a community telephone survey instrument used to assess health perceptions in Greenville County, as well as complete a national assessment tool to obtain expert interviews. Secondary data analysis and focus groups were conducted by BSSF-Downtown to supplement the survey instruments used. Please refer to Process Timeline in Appendix A.

KEY DATA SOURCES

A **Community Telephone Survey** instrument was developed under the guidance of Greenville Forward to assess the health perceptions of Greenville County residents. BSSF-Eastside was able to provide input on questions. Random samplings of 802 telephone surveys were completed, (minority and low-income individuals were purposely over-sampled). Previous Community Telephone Surveys from 2003 and 2008 were also used to evaluate trends. Please see Appendix C for specific qualifications of Russell Stall, Executive Director of Greenville Forward.

Expert Interviews were conducted using the NPHPSP (National Public Health Performance Standards Program) Local Public Health System Performance (LPHSA) assessment instrument (please see Appendix D for a description). This instrument evaluated responses from key experts in the community, measuring how well Greenville County provides the 10 Essential Public Health Services. A series of 8 group interviews were conducted.

A **Secondary Data** analysis was conducted to determine incidence and prevalence rates of chronic conditions, as well as mortality rates through state data sets. State data was accessed and benchmarked with national data. Emergency department and inpatient frequencies were also studied to determine most common diagnoses. Finally, specific data sets from the behavioral risk factor profile for Greenville County were examined. (For a complete list of secondary data sources, please see Appendix B.)

Two **Focus Groups** were conducted in November of 2012 to specifically assess the chronic disease needs of the county. Participants included representatives from Taylors Free Medical Clinic, The Greenville Free Medical Clinic, BSSFHS, Faces and Voices of Recovery (substance abuse recovery program), Carolina Centers for Behavioral Health, community residents suffering from chronic disease, AID Upstate, the Greenville County Medical Society, New Horizon Family Health Services, Cancer Society of Greenville, Greenville County EMS and SCDHEC. These focus groups generated insightful perspective on the challenges that individuals experience in managing a chronic disease in Greenville County. Representatives also discussed common traits and characteristics of the current populations they serve. (Please see Appendix E for list of participating organizations.)

SECTION III. KEY FINDINGS/IDENTIFIED HEALTH NEEDS

SECONDARY DATA

General Population

MORTALITY

The majority of deaths in Greenville County are caused by preventable diseases (cancer, heart disease, stroke, chronic lower respiratory disease – "CLRD", and diabetes). TABLE 2 (below) displays mortality rates for the top 5 of these preventable conditions in comparison to the state and the nation. Greenville has a significant advantage in mortality cases for these chronic conditions, yet these preventable conditions contribute to frequent hospitalizations, poor quality of life, and premature death.

TABLE 2. Mortality (age-Adjusted death rate per 100,000)[3,6]

HEALTH CONDITION	GREENVILLE	SOUTH CAROLINA	NATIONAL
Cancer (all)	167.0	182.9	184.9
Heart Disease	161.3	188.9	172.8
Stroke	46.7	47.7	42
CLRD	43.3	46.2	42.2
Diabetes	17.2	22.5	20.8

MORBIDITY

Predictably, the most recent health data for Greenville County also suggests that chronic conditions are causing the greatest incidence of sickness. From state data, the most prominent cases of morbidity in Greenville are hypertension, heart disease, stroke, diabetes, chronic lower respiratory disease, and cancer (see TABLE 3 below). Compared with the state, Greenville's prevalence of hypertension, cardiovascular disease, stroke and diabetes are far below that of the state; however, these conditions along with CLRD (prevalence rates unavailable) accounted for over 116,000 hospitalizations in 2010.[3]

TABLE 3. Population Prevalence of Chronic Conditions[3,7]

HEALTH CONDITION	GREENVILLE	SOUTH CAROLINA	NATIONAL
Hypertension	24.6%	34.5%	33%
Cardiovascular disease	2.1%	4.6%	3.8%
Stroke	1.4%	3.7%	2.7%
Diabetes	6.9%	10.7%	8.2%

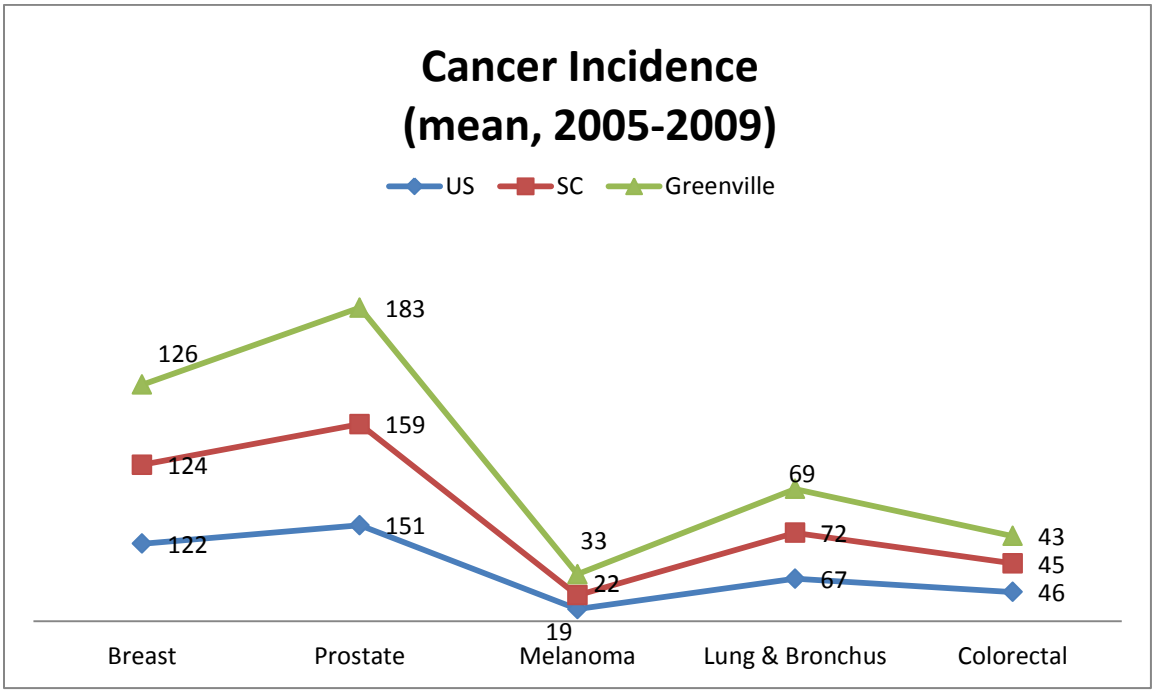
While hypertension and diabetes present themselves as unique conditions in the data, they are also major risk factors for heart disease and stroke. Many individuals who have diabetes, also have co-morbid conditions related to hypertension and/or high cholesterol.[8]

CLRD includes three major conditions: asthma, chronic bronchitis, and emphysema. With the exception of asthma, chronic bronchitis and emphysema (conditions that define Chronic Obstructive Pulmonary Disease) are most often caused by smoking.[9] According to the 2012 County Health Rankings, 20% of Greenville residents over 18 smoke. This significantly surpasses the national average of 15%.[1]

From the comparative data, it may appear that Greenville County is healthier on average than the state of South Carolina or the nation as a whole. However, the prevalence of smoking and occurrence of corresponding health conditions indicates that the population has an opportunity for substantial improvement in health.

Incidence rates reveal that Greenville exceeds state and national 4-year averages for newly reported cases of breast, prostate, and melanoma cancers (see FIGURE 3 below).

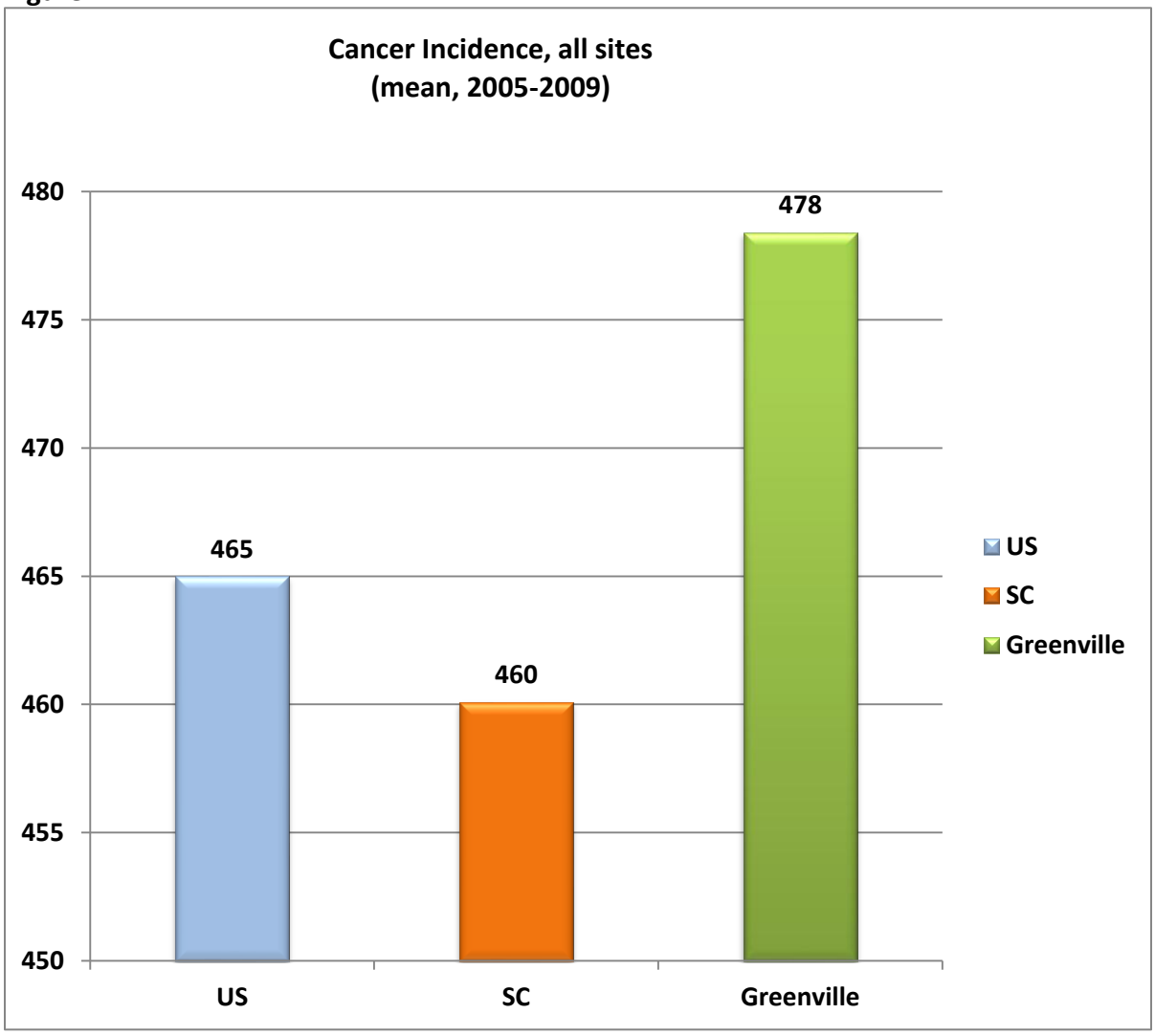
Figure 3[10]



SITE	GREENVILLE	SC	US
Breast	125.7	124.4	122
Prostate	182.8	159	151.4
Melanoma	32.7	22.4	19.2
Lung & Bronchus	68.9	72	67.2
Colorectal	42.7	44.7	46.2

Overall, Greenville County has seen a greater incidence rate of cancer than the US and SC. Figure 4 shows a significant discrepancy in cancer incidence rates reported for Greenville, SC and the US in a 4-year average.

Figure 4[10]



In addition to county, state and national-level morbidity and mortality data, BSSF-Eastside investigated frequencies of emergency department use and inpatient admissions due to chronic conditions.

Utilization of Hospital Services

Frequency in emergency department utilization was analyzed. Table 3 (below) shows the top 10 reasons Greenville County residents access the emergency department.

TABLE 3. Top 10 Emergency Department Chronic Conditions[11]

	Chronic Condition	Greenville County Frequencies (total ED visits)	BSSF – Downtown & BSSF-Eastside (combined ED visits)
		FY11	**FY11**
1	Asthma	1,927	854
2	Migraine	1,532	656
3	Nondependent drug abuse (Alcohol abuse)	1,491	293
4	Neurotic disorders	1,383	499
5	Essential hypertension (Malignant hypertension)	1,307	637
6	Diabetes Mellitus	1,021	487
7	Cardiac dysrhythmias	738	644
8	Chronic bronchitis	676	447
9	Diseases of esophagus	623	347
10	Epilepsy	588	158

As indicated in TABLE 3 above, **asthma** is the number one reason for utilization of the emergency room by Greenville County residents. BSSF-Eastside and BSSF-Downtown emergency department facilities saw nearly half (854) of these cases in fiscal year (FY) 2011. Although asthma is the primary reason for emergency department utilization in Greenville County, there has been a 9% decrease in overall cases since 2009, indicating some improvement. In broad comparison, asthma affects approximately 293,000 adults and over 90,000 children in South Carolina. In 2011, 1.2% of all hospitalizations (5,975) were attributable to asthma in SC. It is also the leading cause of hospitalization for children under 18.[12]

Nondependent drug abuse (**alcohol/substance abuse**) has increased by 11% since 2009. Between FY2009 and FY2011, BSSF-Downtown and BSSF-Eastside emergency departments saw a 37% increase in cases, although only averaging about 20% of the cases for the County as a whole. This was cross-referenced with the County Health Rankings report showing that binge/excessive drinking in Greenville County rose from 12% 2010 to 14% 2012. This rate is much higher than the reported 8% for the nation.[1] An increase in neurotic disorders (**mental health**) also surfaced in the frequency list. Although there was an 11% increase in neurotic disorder cases in the emergency department for Greenville County, BSSF-Eastside and BSSF-Downtown emergency departments saw an 8% decrease between FY09-FY11. Considering the high co-morbidity between alcohol/substance abuse and mental health, it is likely that BSSF-Eastside and BSSF-Downtown emergency departments are seeing a smaller percentage of alcohol/substance abuse cases and a decrease in neurotic disorders due to Greenville Health System's specialty services related to treatment of alcohol/substance abuse mental health.

Frequency of the most common conditions related to inpatient discharges was also analyzed. Table 4 (below) shows the top 10 diagnoses for inpatient discharges in Greenville County.

TABLE 4. Top 10 Inpatient Chronic Conditions[11]

	Chronic Condition	Greenville County Frequencies	BSSF – Downtown & BSSF-Eastside
		FY11	**FY11**
1	Osteoarthrosis, ET AL	1,439	1,394
2	Heart failure	1,167	639
3	Other chronic ischemic heart disease	1,157	779
4	Cardiac dysrhythmias	941	657
5	Acute myocardial infarction	688	348
6	Diabetes mellitus	587	180
7	Cerebral artery occlusion	532	260
8	Affective psychoses	531	3
9	Chronic bronchitis	522	249
10	Asthma	380	197

While cases of migraines, diseases of the esophagus and epilepsy appeared in this list, these diagnoses cannot be specifically explained or linked to other findings at this time. Essential hypertension, diabetes mellitus, cardiac dysrhythmias and chronic bronchitis can all be associated with one or more of the chronic conditions described in the morbidity and mortality findings.

Analysis of the most frequent diagnoses for inpatient discharges produced conclusions similar to frequencies in emergency room utilization. With an aging population, it is no surprise that osteoarthritis is the number one reason for inpatient discharge. BSSF-Eastside and BSSF-Downtown see the majority of these cases. This could be attributable to BSSFHS being established as a leader in orthopedic care, most specifically joint replacement. Heart failure, other chronic ischemic health disease, cardiac dysrhythmias, acute myocardial infarction, diabetes mellitus, cerebral artery occlusion affective and chronic bronchitis can all be linked to preventable chronic conditions. Increasing cases of asthma and affective psychoses (mental health), continue to cause inpatient admissions and parallel emergency department utilization frequencies.

The Uninsured

According to the Health System Profile for Greenville County completed in 2010, the 5 top reasons for ambulatory care sensitive conditions (ACSC) resulting in hospital inpatient discharges for uninsured Greenville residents are related to chronic diseases that can be controlled with early intervention. These conditions are diabetes, bacterial pneumonia, congestive heart failure, chronic obstructive pulmonary disease and asthma. In 2008, these conditions accounted for 408 admissions for 280 persons with charges of nearly $11 million.[2]

The top 5 reasons for Emergency Room visits for uninsured Greenville County residents for ACSC/avoidable reasons were severe ENT infections, dental conditions, kidney/urinary infections, gastroenteritis and cellulitis. These conditions accounted for 5,846 ED visits for 3,732 persons with charges of over $5.5 million in 2008.[2]

This profile also underscored the chief barriers in accessing health care services in Greenville County. These barriers are related to transportation, lack of knowledge by uninsured patients on where to receive care, cost of care received, and inconvenient hours of operation.[2] The qualitative data below reveals similar findings.

QUALITATIVE DATA

Community Telephone Survey (May-October 2011)

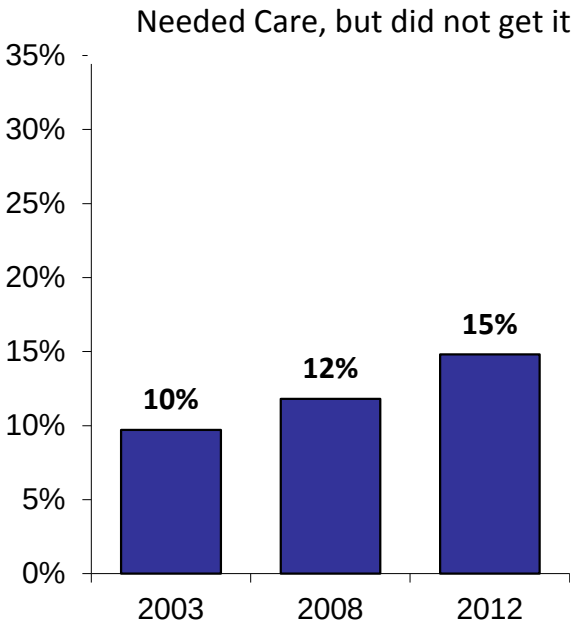
The community health telephone survey conducted by Greenville Forward revealed that because of cost, residents are skipping recommended medical tests or treatment (23%), delaying medical care (27%) and dental care (25%), some regardless of insurance. Fifteen percent do not have a personal doctor. Of those who are considered uninsured:

- 39% are habitually uninsured (5+ years)
- 21% cannot pay for medical expenses
- 15% needed medical attention in the last year, but either postponed or did not get it
- 29% needed medical care in the past 12 months, and postponed it
- 81% delay medical care because of the cost
- 58% reported that their medical condition became worse because they postponed care

Additionally, one-fifth of individuals admitted it is either [difficult] or [very difficult] to receive drug and alcohol treatment and/or mental health counseling services. Considering the previous review of utilization of hospital services, this is finding is not unexpected.

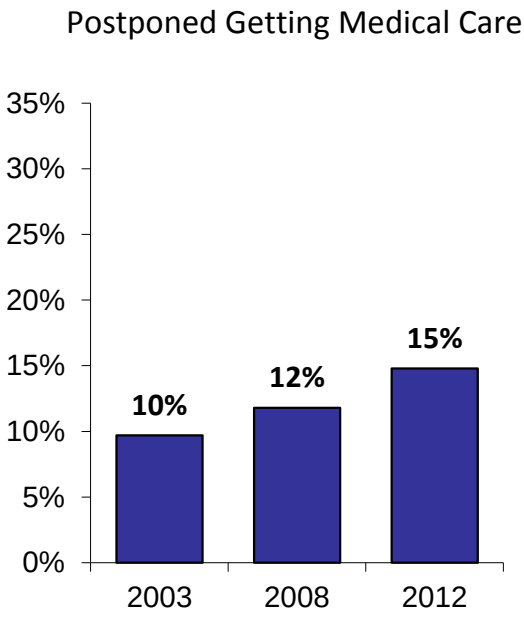
The figures below show the growing trend in residents of Greenville County not pursuing or postponing medical care. As previously mentioned, this is often due to cost.

FIGURES [4,5,13]



Q7.02. Was there any time in the past 12 months when you or someone in your family needed medical care, but did not get it?

FIGURE 6 [4,5,13]



Q7.03 And was there any time in the past 12 months when you postponed getting medical care though you needed it?

Focus Groups (November 2012)

Similar perceptions resonated in the chronic disease-based focus groups. Participants stated that patients/clients are approaching organizations and agencies younger and sicker. The patient/client load has increased, often bringing an increased need and severity for mental health and/or substance abuse treatment. Additionally, from diagnoses to rehabilitation, there appears to be an interruption in the continuity of individual care. It was voiced that treating patients holistically, rather than acutely would help determine the more underlying causes of illness (i.e. mental health issues, substance abuse). Participants also expressed a need to connect patients/clients with individual medical homes; however, they are often dissuaded because of insurance status or cost. The overall consensus was that access to quality health services was a paramount need of those with chronic illness. Individual compliance was seen as a large barrier to treatment and management for those with chronic diseases. It was suggested that research in understanding individual motivators and behavior logic models would create more efficiency in community programming and services.

Expert Interviews (July, 2012)

The Local Public Health System Assessment (LPHSA) revealed interesting findings about our Greenville public health infrastructure and where it lies within the 10 Essential Services of Public Health. Areas of weakness were as follows:

1.2. Access to and utilization of current technology to manage, display, analyze and communicate population health data. (Essential Service 1: *Monitor health status to identify community health problems.*)

3.1 Health education and promotion (Essential Service 3: *Inform, educate, and empower people about health issues*.)

5.2 Public health policy development (Essential Service 5: *Develop policies and plans that support individual and community health efforts.*)

9.1 Evaluation of population-based health services and 9.2 Evaluation of personal health care services (Essential Service 9: Evaluate effectiveness, accessibility, and quality of personal and population-based health services.)

The results from this assessment reveal areas of potential improvement in the local public health system in meeting the needs of the community. Strengthening these could have significant impact on the health of residents in the Greenville community.

Section IV. PRIORITIZED NEEDS

PROCESS OF PRIORITIZATION

The process for prioritizing needs was accomplished by a steering committee. The committee was comprised of representatives from BSSFHS, SCDHEC, and Furman University, with three individuals having specific public health knowledge. (For specific qualifications of those with Public Health knowledge, please see APPENDIX F)

Once all data was compiled, the committee developed specific criteria for determining priorities, taking into account:

- Top hospitalization frequencies
- Major causes of death
- Major disease trends
- Reoccurring focus group themes
- Community Telephone Survey results
- Results of the LPHSA

As needs traversed data sets, some needs were grouped together based on inferences from the data (i.e. alcohol and substance abuse showing co-morbidity; common chronic diseases sharing the same risk factors for prevention). The committee then employed a strategy grid with defined quadrants to help prioritize needs. Considerations of needs placed in quadrants were made based on BSSF-Eastside's ability to provide a direct service or program to mitigate the need. (The Implementation Plan further details strategies for priority needs being addressed, whereby non-priority needs may be addressed indirectly.)

Quadrant Definitions (*definitions derived from NAACHO's Guide to Prioritization Techniques http://www.naccho.org/topics/infrastructure/accreditation/upload/Prioritization-Summaries-and-Examples-2.pdf*)

High Need/High Impact: With a high demand and high return on investment, the committee determined these needs were not only critical, but where BSSF-Eastside could have the greatest influence in the community.

Low Need/High Impact: Often politically important and difficult to eliminate, these needs would require programs and services to be re-designed to reduce investment while maintaining impact. (The committee did not feel any needs fit into this category).

High Need/Low Impact: The committee felt that needs in this quadrant were equally as important as needs in the High Need/High Impact quadrant; however, without the resources to address them, BSSF-Eastside would have little impact on the community. Other agencies and organizations were identified in addressing these needs more appropriately.

Low Need/Low Impact: With minimal return on investment, the committee felt these were the lowest priority items and efforts and resources should be focused on higher priority items.

BSSF - Eastside Strategy Grid

LOW NEED/HIGH IMPACT	**HIGH NEED/HIGH IMPACT (PRIORITIES)**
	• Chronic Disease Prevention • Health Education and promotion • Oral Health • Access to Quality Health Care Services • Population-based health data management and evaluation
LOW NEED/LOW IMPACT • Priorities focused on multiple specific chronic disease strategies in the community	**HIGH NEED/LOW IMPACT (PRIORITIES)** • Asthma • Mental health • Alcohol/substance abuse • Current technology to manage and communicate population health data to the public • Public health policy development

The outcome of this allowed the committee to highlight activities where BSSF-Eastside could have the greatest impact, and identify those needs that could not be met through BSSF-Eastside current capacity, but perhaps a trusted partner organization in the community. Additional detail regarding priorities is provided in the following sections..

CHRONIC DISEASE PREVENTION

Chronic Diseases

Chronic diseases were pervasive throughout the review of secondary data sources. In 2010, these diseases accounted for over 2,100 deaths in Greenville County.[3] TABLE 5 (below) highlights the impact chronic disease has on the health outcomes of residents in Greenville County.

TABLE 5. CHRONIC DISEASE in GREENVILLE COUNTY, 2010[3]

	Prevalence (Per 100,000)	Number of Hospitalizations	ER Visits	Number of Deaths
Cancer	------	1,495	-------	852
Heart Disease	2.1	4,988	1,498	751
Stroke	1.4	1,140	421	211
Diabetes	6.9	603	1,032	82
Hypertension	24.6	317	1,229	42
CLRD	-------	894	3,234	196
Total				2,134

The burden of chronic disease can be explained through the behavioral risk profile for Greenville County in TABLE 6 (below).

TABLE 6. Risk Factors (% population)[1,3,14,15]

Health Behavior	Greenville	South Carolina	National
Adult Smoking	20%	22%	**15%**
Overweight & Obesity	65%	67%	**68.8%**
Physical Inactivity	22%	28%	**25.4%**
High Cholesterol	37%	42%	**15%**
Excessive Drinking	14%	14%	**8%**
Less than 5-A-Day (2009)	**86%**	**83%**	**NA**

Table 6 shows that two-thirds of Greenville County is considered overweight or obese. This can be attributed to poor nutrition (86% of residents eat less than the recommended 5 servings a day) and lack of physical activity (22% report an inactive lifestyle).

According to national evidence-based reports, smoking is the number one cause of preventable death in the United States.[16] As evidenced above, the percentage of Greenville residents who smoke is 20%, exceeding the national rate of 15%.

One unexpected discovery was the percentage of the population that drinks excessively in the County (14% as compared to 8% nationally). This statistic mirrors the frequency of substance abuse cases coming through the emergency department and the feedback from focus groups.

Reducing the number of risk factors an individual has will also reduce the chance of developing one or more chronic disease. While Greenville presents itself better (statistically) to the state in several areas of health, the growing prevalence of these unfavorable risk factors indicates Greenville will inevitably experience an increase in death in disease if these risks factors are not addressed.

Rather than focusing on individual diseases, BSSF-Eastside has chosen to group chronic diseases and the prevention of them under one priority effort: Chronic Disease Prevention. Focusing on prevention of these controllable risk factors will provide a greater impact on the community. Additionally, with the growing Hispanic population, tailoring programs and services to minimize these controllable risk factors could have a positive impact on this significantly growing part of the Greenville County population. (See implementation plan for further detail.)

ORAL HEALTH

Dental needs are also an evident in Greenville Community. In 2012, BSSF-Eastside saw over 1,400 patients through the emergency departments having a principal diagnosis related to a dental ailment. Often these patients do not have a routine dental home to get treatment, wait until the pain is unbearable, and then utilize the emergency department. Qualitative data showed that 25% of Greenville residents have not visited a dentist in the past year due to cost. Nineteen percent said it's either difficult or very difficult to get dental services in the area.

ACCESS TO QUALITY HEALTH CARE SERVICES

Access to quality health care services was a consistent theme throughout the qualitative feedback received. Connecting individuals to primary medical and dental homes that accept patients with precarious circumstances was seen as a critical need. Additional barriers include factors unrelated to health: cost, language, transportation, trust, uninsured/underinsured status, and/or patients' inability to navigate the health system. These barriers often caused unnecessary use of the ER, mostly by those uninsured (5,846 ED visits for Greenville County in 2008).[2] As mentioned above, many individuals not only neglect treatment of chronic ailments, but also routine care (such as dental check-ups).

The quality of health services for residents was also seen as an area for improvement. It was noted that many individuals need to have their social needs addressed, in order to effectively treat health needs. Addressing the social issues would provide a more holistic approach to care, rather than the acute needs and then sending them back into the community. Additionally, appropriately navigating the health needs of the individual would also minimize an interruption in care.

ASTHMA

Asthma, a chronic lower respiratory disease, was an obvious theme in the data. A 2010 report on asthma suggested that 43, 512 (12.8%) of adults suffer from asthma annually in Greenville County.[17] Of the 3,234 visits to the ER for chronic lower respiratory disease in 2011, it is estimated that over half are attributable to asthma.[3],[11] Children suffer the most from asthma. Asthma/bronchitis is the leading cause of hospitalization in Greenville County for children under the age of 18.[17]

MENTAL HEALTH and ALCOHOL/SUBSTANCE ABUSE

Qualitative data suggests high co-morbidity between mental health and alcohol/substance abuse**.** Issues associated with these conditions were seen throughout the data, causing unnecessary ER visits and inpatient admissions. Candid dialogue from the focus groups revealed mental health issues and alcohol/ substance abuse dependence are likely underlying causes to the many other needs in the community, including chronic illness. Non-dependent drug abuse (mostly alcohol abuse) and neurotic disorders had the 3rd and 4th highest frequencies in emergency department admissions.[11] Paradoxically, one-fifth of individuals reported in the community telephone survey that it is either difficult or very difficult to receive drug and alcohol treatment and/or mental health counseling services

The following priorities are based on analyzed results of the Local Public Health System

Assessment, and recommendations from the NPHPSP.

HEALTH EDUCATION AND PROMOTION

Model Standard 3.1 of the 10 Essential Health Services indicates a need for health information, health education, and health promotion activities designed to reduce health risk and promote better health. Suggested activities include having accessible health information and resources for the community, and pursuing additional partnerships within the community to further implement and reinforce health promotion programs and messages.

POPULATION-BASED HEALTH DATA MANAGEMENT AND PERSONL HEALTH SERVICE EVALUATION

Model Standard 9.1 of the 10 Essential Health Services was also highlighted as a weakness thought the LPHSA instrument. Characteristics of meeting this need include measuring and monitoring health data to determine trends and impact. It also includes evaluating services to determine efficacy, accessibility, and quality received.

CURRENT TECHNOLOGY TO MANAGE AND COMMUNICATE POPULATION HEALTH DATA TO THE PUBLIC

Model Standard 1.2 of the 10 Essential Health Services focuses on improving on the use of technology to monitor trends and variables of the community. Using tools that help provide clear understanding of this data would enhance communication. Having web-based technology to deliver this information through the web would also better serve agencies and organizations in recognizing and understanding the needs of the community.

PUBLIC HEALTH POLICY DEVELOPMENT

Model Standard 5.2 of the 10 Essential Health Services describes policy development as a process that enables informed decisions to be made concerning issues related to the community's health. Working with the community to identify policy needs and a process for development is crucial. Alerting policy makers and the public of ongoing potential health impacts from current or proposed policies and reviewing existing policies every 3- 5 years is also essential for success.

SECTION V. EXISTING RESOURCES TO MEET IDENTIFIED NEEDS

Through the mission of Bon Secours Health System, we are led to care for disenfranchised populations. BSSFHS often capitalizes on collaborative partnerships to collectively meet the needs of the medically and socially underserved in Greenville County. Through these strategic partnerships with local, trusted agencies and organizations, BSSF-Eastside is able to improve the health of the community. Below are just a few of the many organizations that work to improve the health of Greenville and surrounding counties. The agencies and organizations listed work specifically to meet the currently identified needs of Greenville County.

IDENTIFIED PRIORITY NEEDS

BSSF-Eastside AND COMMUNITY PARTNER PRIORITIES

- Chronic Disease Prevention
- Health Education and promotion
- Oral Health
- Access to Quality Health Care Services
- Population-based health data management and evaluation

COMMUNTIY PARTNER PRIORITIES

- Asthma
- Mental health
- Alcohol/substance abuse
- Current technology to manage and communicate population health data
- Public health policy development

COMMUNITY RESOURCES AVAILABLE TO MEET IDENTIFIED NEEDS

AccessHealth Greenville County

http://www.scha.org/accesshealth-greenville-county

Access to Quality Health Services

AccessHealth Greenville County is a network created as the result of a collaborative partnership between Safety Net Providers, Community Partners, and funding from The Duke Endowment. The aim of the network is to connect low income uninsured residents of Greenville County to a medical home. The common vision shared by AccessHealth SC and networks is to develop and sustain a coordinated system-wide network that results in better health outcomes and increased access to safe, timely, efficient, equitable, and patient-centered care for low-income uninsured residents.

The Goals of AccessHealth Greenville County are to:

- Change how participants access and utilize the healthcare system
- Improve health outcomes in our low-income uninsured population
- Improve health quality of life for program participants
- Reduce the cost of care

AccessHealth Greenville County plays an integral role in meeting the social and medical needs of the uninsured. BSSF-Eastside has a strong relationship with AcessHealth Greenville County through many collaborative efforts. BSSF-Eastside will continue to work with AccessHealth Greenville County in meeting their goals for increasing **access to quality health services**.

Bon Secours St. Francis Health System

www.stfrancishealth.org

Chronic Disease Prevention

BSSFHS powerfully believes in early detection of disease. Because of this, we focus on evidence-based disease screenings and education that will make the greatest impact on the community.

Through the Breast Health Program, BSSF - Eastside had developed the *Screen for Life* program. This Susan G. Komen Breast Cancer Foundation-funded program provides free mammography screenings and diagnostics to women who either do not have medical insurance or are financially unable to pay. The program seeks to alert high-risk populations in the Upstate, such as African American and Latina women, of the benefits of early breast cancer detection. Breast Health navigators are assigned to patients following them through the process of screening, diagnosis and treatment.

As part of the Breast Health Program, BSSF - Eastside created a new Mobile Mammography Coach that will travel to locations in Greenville and surrounding counties to provide digital mammograms to thousands of Upstate women, minimizing barriers to access. The digital mammography offered by the mobile coach is a more accurate screening tool for many women, especially those with dense breast tissue. In its first year of operation, more than 2,000 women are expected to visit the Bon Secours St. Francis Mobile Mammography Coach.

BSSF-Downtown also hosts cancer screenings specific to skin, prostate, breast and colon-rectum. For example, BSSF-Downtown collaborates with GHS to bi-annually host the skin cancer screening, where nearly 200 people are screened, regardless of ability to pay.

Chronic Disease Prevention & Access to Quality Health Services

The BSSF-Downtown *Community Health Outreach Program* partners with the Greenville community to provide community-based nursing and social work services in the community setting that engage and empower those in our community experiencing the harsh impact of poverty. With the support of collaborative community partnerships, three nurses and a social worker provide health education, community advocacy, assistance with access to health care, and a healing presence in satellite offices at San Sebastian, Triune Mercy Center, Mulberry Court Mercy Housing, and Sterling Hope Center. Clients are received through referrals from the health system, community partners, and word of mouth. They are assessed by a registered nurse and/or social worker to receive a holistic plan of care including referrals to the social worker and/or nurse, primary and specialty care, community agencies, faith communities, health systems, and government agencies. Trusting relationships are established with clients by attending to the whole person, promoting and defending their dignity, and providing pastoral care. Education on disease prevention and management are provided through group presentations, distribution of written materials, and screenings. The staff is committed to addressing health care disparities in the community, and educating the community-at-large on the harsh impacts of poverty on health. The program is designed to assist clients with urgent short-term needs while supporting them to establish long-term sustainable plans of care.

Clients are engaged and empowered through their active participants in their plan of care. Through this model of care, outcomes include: increased and improved client-physician relationships, decreased inappropriate use of emergency department with increased appropriate use of primary and specialty care, and improved health of the community.

"**A Healthy You**" was adopted by BSSF-Downtown in 2006 to provide a comprehensive resource manual, listing over 200 health topics including chronic disease and prevention for high-risk families in Greenville County. This manual is distributed to every family with a child in the K4 program of Greenville County Schools, a program provided to mostly low-income or learning delayed children. Of the approximate 1,200 families that received a copy of the manual in 2011, 47% reported that they were able to avoid one or more visits to the doctor in the past 6 months because of this resource. Furthermore, 37% indicated a decrease in the number of emergency room visits. This powerful tool empowers families to take their health into their own hands, by determining when to see a doctors or when a conditions can be simply treated at home. The book also highlights powerful tools and prevention strategies for reducing chronic disease risks.

Oral Health

BSSF-Downtown's *Oral Health Program* works to meet the needs of the dentally underserved in Greenville. This comprehensive program includes strong partnerships with several different entities, a mobile dental unit, a mobile dental unit driver, a dentist, and a mobile projects coordinator. Since 2006, over 19,000 men, women and children have been reached through this powerful initiative. Just last year, more than 300 patients have benefitted from this program, with estimated services valued at more than $43,000, provided at no charge to the patient.

Cancer Society of Greenville County

http://www.cancersocietygc.org/index.php

Chronic Disease Prevention & Access to Quality Health Services

The Cancer Society of Greenville County's mission is to improve the quality of life of local cancer patients and their families and to improve the health of the general public. To accomplish this, the agency provides financial, physical, educational, and emotional assistance to local cancer patients and their families, as well as cancer awareness and prevention programs and materials to the general public.

Carolina Center for Behavioral Health

www.thecarolinacenter.com

Mental Health

The Carolina Center for Behavioral Health specializes in psychiatric and chemical dependency treatment for adolescents, adults and senior adults. To meet the needs of the community, an array for inpatient, partial hospitalization and outpatient programs focuses on mental health and substance abuse treatment are available. Available programs include adult and adolescent psychiatry, adult addiction, adult crisis stabilization, geriatric, and electroconvulsive therapy and outpatient services. Program specialties emphasize a multi-disciplinary, integrated treatment approach, allowing for comprehensive care for individuals suffering from a variety of diagnoses.

FAVOR (Faces and Voices of Recovery)

http://favorgreenville.org/

Alcohol/Substance Abuse

The mission of FAVOR Greenville is to promote long-term recovery from substance use disorders through education, advocacy and recovery support services, resulting in healthier individuals, families, and communities.

FAVOR Greenville is made up of individuals, families, and entire communities seeking recovery. FAVOR Greenville plans to open a recovery community center soon, which will be staffed by recovering people that will link individuals and families to long-term recovery through information and referral, public education, and recovery support services.

Greenville County Medical Society

http://www.greenvillemedicalsociety.org/

The Greenville County Medical Society (GCMS) is the third tier of organized medicine that connects the physician to their patients and community. GCMS serves patients by providing information about local physicians and health care services. The Society serves physicians and patients by advocating for the physician patient relationship. GCMS members enable the *Physician Referral Service* to be available to the community at no cost. This resource is utilized by individuals, hospitals and various health related entities. The Society serves our physicians by

recognizing and supporting the highest quality of medical care through advocacy, ethics, education, and engagement in our community. Provides information and updates on local issues as well as information from the SCMA and AMA.

GCMS physicians are devoted to consistently delivering Care, Compassion, Commitment and Collaboration with respect to the healthcare of all patients.

Greenville Forward

http://www.greenvilleforward.com/index.htm

Current Technology to Manage and Communicate Population Health Data

Greenville Forward enhances the quality of life for greater Greenville by engaging all citizens in continually updating, promoting, and facilitating a community vision for 2025 and beyond. Greenville Forward was created in January 2006 to help Greenville achieve Vision 2025, the bold, comprehensive, and aggressive plan to create a vibrant Greenville in the next generation. Greenville Forward has many areas of focus to fulfill the vision for 2025, once specifically being Health and Wellness. Achieving this vision is made possible by achieving the following goals:

- Building a Better Understanding of Greenville's Greatest Needs
- Creating Dialogue
- Measuring Progress
- Facilitating Change in Community Projects
- Inspiring Leadership

Greenville Forward has provided assistance over the past decade in using current technology to **manage and communicate population health data**, through their involvement with previous health assessments. Their latest endeavor provides support to managing and communicating data involves the *Greenville Indicators* project. This project provides a portal for monitoring and reporting data that provide a balanced perspective on the health, prosperity, vibrancy, and caring of Greenville. The *Greenville Indicators* project will explore all available measures to create a comprehensive profile of Greenville. For more information on this, please visit: http://www.greenvilleindicators.com/.

Greenville Free Medical Clinic

http://www.greenvillefreeclinic.org/home/

Access to Quality Health Services

Greenville Free Medical Clinic is an integral part of the health care delivery system in the Greenville community. For twenty-five years, the Clinic has been providing health care and wellness services at no charge to people who cannot pay for care and to those who do not have insurance available to them.

The mission of the Greenville Free Medical Clinic is to promote wellness and to provide caring, quality primary medical care and dental services, health education and prescription medications without charge to eligible low-income uninsured Greenville County residents.

In the decades since the Clinic's opening, tens of thousands of low-income uninsured patients have received care from volunteer physicians, dentists and nurses at the four clinic sites operated by the organization. Nearly 600 volunteers give of their time and talent each year.

BSSFHS and the Greenville Free Medical Clinic share the same desire and mission to serve the underserved. Through contracts, services and frequent collaborations, BSSF-Downtown and the Greenville Free Medical clinic work diligently to increase **access to quality health care services** in Greenville County for the uninsured.

Greenville Health System (GHS)

http://www.ghs.org/

Mental Health

The Department of Psychiatry & Behavioral Medicine of Greenville Health System provides a complete spectrum of care to diagnose and treat emotional and psychological disorders in children, adolescents, and adults. Individuals and families coping with complex mental illness,

including severe mood, personality, anxiety and addictive disorders are given a full continuum of care.

The Department of Psychiatry & Behavioral Medicine of Greenville Health also works closely with National Alliance on Mental Illness (NAMI) – Greenville to offer support, education and advocacy for families and friends of people with serious mental illness and for persons with serious mental illnesses.

The mission of NAMI Greenville is to improve the quality of life and treatment for those who suffer from mental illness and their family members through education, support and advocacy. www.Namigreenvillesc.org

LiveWell Greenville

http://livewellgreenville.org/

Public Health Policy Development

LiveWell Greenville is an organization that champions, supports, and advocates for policies, systems and environments that support a healthy community. Goals of this organization include:

- Increase healthy eating
- Increase physical activity
- Decrease obesity
- Decrease prevalence of chronic disease
- Create healthier adults, healthier children, and a healthier community

LiveWell Greenville has approached this task by developing a partnership of private businesses, local governments, non-profit organizations and engaged citizens. This broad coalition has allowed LiveWell to engage key community leaders and financial supporters with LiveWell's distinctive message of addressing policies, systems and environments that impact the overall health of the community.

New Horizon Family Health Services

(http://www.newhorizonfhs.org/html/about_us.html)

Access to Quality Health Services

New Horizon Family Health Services is a federally qualified health center (FQHC) that offers services of or relating to primary medical care, preventive health, limited specialty care, laboratory, pharmacy, behavioral health services, chronic disease management, health education & nutrition counseling. With this, New Horizon Family Health Services aims to improve and to promote the health of our communities by providing and maintaining quality, affordable, compassionate, patient-centered health care.

Oral Health

New Horizon Family Health Services also operates New Horizon Family Dental Care, which offers high quality, affordable family dental care through a team of professional dentists, hygienists and support staff. A full range of preventive and restorative services are available to adults and children.

The Phoenix Center

http://www.phoenixcenter.org

Alcohol/Substance Abuse

The Phoenix Center's mission is to assist the citizens of Greenville County and surrounding areas in maintaining a healthy lifestyle through a continuum of effective and affordable prevention and treatment services and an extensive initiation into recovery.

The Phoenix Center's strategic vision specifically outlines the call to address the substance needs in Greenville. It also lists specific services prevention measures the Phoenix Center has planned to mitigate this need. For a very detailed report of The Phoenix Center's strategic vision and specific impact on Greenville County, please visit:

http://www.phoenixcenter.org/phoenixcenter/pdf/Greenville%20Strategy%202011%20-%202013,%20final.pdf

Project Breathe Easy

http://www.familyconnectionsc.org/project-breathe-easy.html

Asthma

Project Breathe Easy (PBE) is an award-winning program through Family Connection SC that provides emotional and informational support to parents who have children with asthma. The primary goal of PBE is to provide parent-to-parent support and to empower the parent to be the

child's best advocate. Community Parents are the Support Parents in this program and work in housing communities and low-income neighborhoods in Anderson, Calhoun, Charleston, Columbia, Fairfield, Florence, Greenville, Newberry and Orangeburg. Through visits, educational tools, environmental assessments, mattress/ pillow encasements and parent support, PBE results in better healthcare, fewer and shorter hospitalizations or emergency room visits, fewer missed school days for kids and fewer missed work days for parents.

South Carolina Department of Health and Environmental Control (SCDHEC)

http://www.scdhec.gov/index.htm

SCDHEC promotes and protects the health of the public and the environment. They are a strong community partner in several areas of need. SCDHEC has systems in place to address the following needs presented in the assessment:

Public Health Policy development

- Advise legislators on health and environmental consequences of proposed laws
- Develop and enforce regulations that carry out state and federal laws concerning public health and the environment

Chronic Disease Prevention

- Administer the Best Chance Network, which pays for breast and cervical cancer screenings for more than 10,000 15,000 low income and uninsured women ages 40-64
- The Division of Nutrition, Physical Activity, and Obesity (DNPAO) is charged to lead South Carolina's public health efforts to reduce obesity and obesity-related chronic conditions. The program efforts focus on policy, systems, and environmental approaches for healthy eating and active living. DNPAO works with partners at the state and local level providing content expertise, technical assistance, evaluation, and surveillance support.
- SCDHEC additionally provides programming for specific chronic conditions (i.e. heart health, diabetes)

Access to Quality Health Services

- Operate a statewide network of public health clinics, serving more than 400,000 individuals
- Provide home health care services to residents in underserved areas

Health Prevention and Promotion

- Provide nutrition counseling and food supplements to women and children through the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) serving an average of 134,000 clients per month
- Educate children about dental health
- Operate tobacco-prevention programs and help youth and adults quit smoking

Current technology to manage and communicate population data

SCDHEC provides a web-based format for communicating the most recent morbidity and mortality statistics. Additionally SCDHEC:

- Investigates infectious disease outbreaks of public health significance affecting more than 4,000 residents statewide
- Analyzes data on births and deaths to assess the state's health status

SCDHEC has also been instrumental in facilitating Greenville County's MAPP process. MAPP stands for **Mobilizing for Action through Planning and Partnerships**. It is a community-driven strategic planning process for improving community health. The process was facilitated by one of SCDHEC's strong public health leaders.

The MAPP framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. MAPP is not an agency-focused assessment process; rather, it is an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems. The four MAPP Assessments and the issues they address are described below:

1. The Community Themes and Strengths Assessment provide a deep understanding of the issues that residents feel are important.

2. The Local Public Health System Assessment (LPHSA) focuses on all of the organizations and entities that contribute to the public's health.
3. The Community Health Status Assessment identifies priority community health and quality of life issues.
4. The Forces of Change Assessment focuses on identifying forces such as legislation, technology, and other impending changes that affect the context in which the community and its public health system operate.

BSSFHS partnered with the SCDHEC-Upstate Region, and GHS to conduct the MAPP process for Greenville County and surrounding catchment areas. The first phase of MAPP involved two critical and interrelated activities: organizing the planning process and developing the planning partnership. Under the facilitation of the SCDHEC public health leader, BSSF-Eastside and Greenville Health System met several times to plan and organize the process. Visioning, the second phase of MAPP, guides the community through a collaborative, creative process that leads to a shared community vision and common values. Each partner brought their agency visions to the process and developed one vision to assess the community's health and share data.

SCDHEC has helped facilitate the first three phases of this model. Following completion of the third phase, each partner will start the final phase of MAPP. This will be a recurring 3-year cycle in planning, implementing, and evaluation of this process.

APPENDICES

APPENDIX A. Process Timeline

	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Process Discussion/Collaboration forming																				
Telephone Survey Development																				
Survey collection																				
LPHSA																				
Analysis and Synthesis of Survey																				
Community Presentation and Roll-Out																				
Secondary Data Collection																				
Focus Groups																				
Prioritization																				
Compilation of Report																				
Development of Implementation Plan																				
Presentation to Board																				

APPENDIX B. Secondary Data Sources

1. US Census Bureau, 2010
2. County Health Rankings, 2012
3. Health System Profile for Greenville County, 2010
4. State of South Carolina, Department of Health and Environmental Control, Bureau of Community Health and Chronic Disease Prevention, County Chronic Disease Fact Sheet, April 2012
5. Greenville County Health Assessment, 2008
6. Greenville County Health Assessment, 2012
7. Hoyert DL, Xu JQ. Deaths: Preliminary data for 2011. National vital statistics reports; vol 61 no 6. Hyattsville, MD: National Center for
8. Health Statistics. 2012.
9. www.cdc.gov
10. Office of Chronic Disease Epidemiology and Evaluation, Bureau of Community Health and Chronic Disease Prevention, 2010
11. www.nhlbi.gov
12. The National Cancer Institute, State Cancer Profiles (hhtp://statecancerprofiles.cancer.gov)

    Greenville Count:

    - Rate – The incidence rate is 478.4 with a 95% confidence interval from 469.3 to 487.7
    - Includes all races (including Hispanic), both sexes, all cancer sites, all ages
    - Average Annual County – the count is 2,131
13. South Carolina Hospital Association Hospital Toolkit for Community Health Needs Assessments, 2012
14. Bureau of Community Health and Chronic Disease Prevention, SCDHEC Division of Biostatistics, 2010
15. Greenville County Health Assessment, 2003
16. CDC, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, 2010
17. NHANES, 2009-2010
18. CDC, Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses – United States, 2000-2004.
19. Bureau of Community Health and Chronic Disease, SCDHEC, "Asthma in Greenville County, 2010"

APPENDIX C. Qualifications of Consultant

Russell H. Stall

Executive Director, Greenville Forward

Russell is Executive Director of Greenville Forward, the organization he created in 2006. Greenville Forward is responsible for making sure that the bold and aggressive dreams of Vision 2025 are accomplished. Russell is an active public speaker and motivator, telling the story of Greenville's transformation from the "Textile Capital of the World" into a diversified, economically-thriving city by way of collaborative relationship-building, community engagement, and creative partnerships. In the last few years, Russell has told this story to over 325 groups and 17,000 people.

Prior to launching Greenville Forward, Russell owned ResearchWorks, a strategic marketing research firm that focused on community development and customer satisfaction research. He conducted patient satisfaction measurement for over 50 hospitals and strategic marketing research for over 100 clients. Much of his research focused on providing community and health assessments for communities throughout the Southeast.

APPENDIX D. Local Public Health System Performance Assessment Description

The LPHSA is one out of three assessments developed by the National Public Health Performance Standards Program (NPHPSP), involving all of the organizations and entities that contribute to public health in the community:

- Public Health Foundation (PHF)
- Centers for Disease Control and Prevention, Office of Chief of Public Health Practice (CDC/OCPHP)
- American Public Health Association (APHA)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Network of Public Health Institutes (NNPHI)
-

NPHPSP assessments are intended to help users answer questions such as "What are the activities and capacities of our public health system?" and "How well are we providing the Essential Public Health Services in our jurisdiction?" The dialogue that occurs in answering these questions can help to identify strengths and weaknesses and determine opportunities for improvement.

The NPHPSP is a partnership effort to improve the practice of public health and the performance of public health systems. The NPHPSP assessment instruments guide state and local jurisdictions in evaluating their current performance against a set of optimal standards. Through these assessments, responding sites consider the activities of all public health system partners, thus addressing the activities of all public, private and voluntary entities that contribute to public health within the community.

The Local Public Health System Performance Assessment

The audience for this instrument is the local public health system. This may include organizations and entities such as the local health department, other governmental agencies, healthcare providers, human service organizations, schools and universities, faith institutions, youth development organizations, economic and philanthropic organizations, environmental agencies and many others. Any organization or entity that contributes to the health or well-being of a community is considered part of the public health system. Ideally, a group that is broadly representative of these public health system partners will participate in the assessment process. By sharing their diverse perspectives, all participants will gain a better understanding of each organization's contributions, the interconnectedness of activities, and how the public health system can be strengthened.

Through the assessment process, participants from throughout the local public health system will have an opportunity to discuss and determine how they are performing in comparison to each of the 30 model standards. Once the assessment is completed, sites submit their data to the NPHPSP and receive a report summarizing their results within 24 hours. All of this information – the responses to the assessment questions,

the NPHPSP report, and the comments shared during the dialogue – can be used to develop improvement strategies for the local public health system.

Essential Public Health Services

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

APPENDIX E. Focus Group Representation

Executive Director, Taylors Free Medical Clinic

Volunteer Medical Director, Greenville Free Medical Clinic

Certified Diabetes Educator, Bon Secours St. Francis Health System

Campaign Counsel, Faces and Voices of Recovery

Executive Director, Faces and Voices of Recovery

Director of Business Development, Carolina Centers for Behavioral Health

Two community residents and chronic disease sufferers (name withdrawn)

Director of Client Services, AID Upstate

Executive Director, Greenville County Medical Society

New Horizon Family Health Services (FQHC)

Executive Director, Greenville Free Medical Clinic

Community Health Outreach Nurse Triune Mercy Center, Bon Secours St. Francis Health System

Community Health Outreach Social Worker San Sebastian, Bon Secours St. Francis Health System

Director of Development, Cancer Society of Greenville

Professional Services Coordinator, Greenville County EMS

Public Health & General Preventive Medicine, South Carolina Department of Health and Environmental Control (SCDHEC)

Community Systems Director, South Carolina Department of Health and Environmental Control (SCDHEC)

APPENDIX F. Qualifications for those with Public Health Knowledge

Natalie Dougherty, MPH
Community Health Outreach Coordinator
Bon Secours St. Francis Health System

Natalie is currently the Community Health Outreach Coordinator for Bon Secours St. Francis Health System. In her seven year tenure as a BSSFHS employee, Natalie has worked with underserved communities to coordinate services and prevention strategies that meet individual and population-based needs. Activities have included community advocacy (Covered the Uninsured Week), annual cancer prevention screening and educational events, and nutrition education with underserved adults and children. For 6 years, Natalie has coordinated the successful program, A Healthy You,® focusing on health literacy for at-risk children and their families. In 2008, Natalie helped develop one of the first community gardens in Greenville County, initiated to bring better nutrition to the community surrounding BSSF-Downtown. Natalie is also responsible for managing community benefit reporting for 4+ BSSFHS facilities and locations and over 80 employees, properly documenting and inventorying the health system's valuable community social investments.

Before coming to BSSFHS, Natalie worked with the School District of Greenville County to modify school menus to reflect healthier food standards for elementary, middle, and high school students. Natalie received a Bachelor of Science in Psychology with a minor in Health in 2002. Post-graduate work was completed in 2005 with a Master's in Public Health, concentrating in Health Promotion, Education and Behavior. She currently serves on the boards of Gardening for Good: a network and resource center for community gardens in Greenville County, and the Judson Community Center YMCA.

Lillie M. Hall, MPH, MHS, CHES
Community Systems Director
SC DHEC Upstate

Lillie Hall is currently the Community Systems Director with the SCDHEC- Upstate Public Health Region and is a Certified Health Education Specialist. She is responsible for community relations and partnerships in 11 counties across the Upstate including Greenville, Spartanburg, Cherokee, Pickens, Greenwood, Laurens, Oconee, Abbeville, Anderson, McCormick and Union.

She has a Bachelor of Science in Health Science, a Master in Health Science and a Master in Public Health. Lillie has a rich work history in Maternal and Child Health, community development/mobilization and community health prevention.

Lillie chairs and serves on several community boards and coalitions including LiveWell Greenville, Greenville Safe Communities, Greenville County First Steps, and AccessHealth Greenville. Lillie is currently Treasurer and Past President for the SC Public Health Association. She has received numerous awards including the prestigious Lucinda Thomas Health Education award in 2008; this is awarded to a Health Educator who exhibited outstanding health education and promotion in their community and across the state of South Carolina. Lillie has also received several other awards including the 2010 Outstanding Health Educator from the SC Public Health Association Health Education Section, the 2007 Outstanding TRiO Achiever Award from the SC Council of Educational Opportunity Programs, the 2003 Outstanding Health Educator Award for the Low Country Public Health District, and the 2002 Outstanding Health Professional of the Year Award in Jasper County, SC.

Alicia Powers, PhD
Assistant Professor
Health Sciences Department
Furman University

Alicia Powers, assistant professor in the Health Sciences Department, joined the Furman faculty in 2007. Dr. Powers teaches the Research and Evaluation course as well as the Advanced Nutrition Course for the Health Sciences Department. In addition, she serves as the Health Sciences Majors Club advisor and involves more than 25 students each year in her research and service projects.

Dr. Powers also serves as the principal investigator for LiveWell Greenville. LiveWell Greenville is a partnership of dozens of public and private organizations that aims to make Greenville County a healthier place to live, work and play. Formed five years ago by a partnership between YMCA of Greenville, Furman University, Greenville Hospital System and Piedmont Health Foundation, the coalition has engaged more than 100 key partners in crafting plans to create policies, systems and environments in our community to make living well easier. From grassroots efforts, to specific partner projects, to county-level initiatives, LiveWell Greenville works on all levels to improve the health of Greenville residents. Powers serves as the evaluation consultant for all projects associated with LiveWell Greenville and has helped garner more than $3 million dollars in funds to support LiveWell's work in the community.

Dr. Powers graduated summa cum laude with a BS in Nutrition and Food Science from Auburn University. She then completed her MS in Nutrition and Food Science with an emphasis in Sports Nutrition at Auburn University. Her thesis research was entitled, "Investigation of Nutrition Education's Influence on Student Nutrition Knowledge and Behavior." While pursuing her MS, Dr. Powers served as a Graduate Research Assistant with the Alabama Cooperative Extension Nutrition Education Program where she assisted in the evaluation. Dr. Powers received her PhD in

Nutrition and Food Systems with a focus in Public Health Nutrition and Community Based Participatory Research at The University of Southern Mississippi. Her dissertation research was entitled, "Process Evaluation of Fit for Life Steps, a Community Based Participatory Research Project." While pursuing her PhD, Powers served as a graduate Research Assistant with the Lower Mississippi Delta Nutrition Intervention Research Initiative and served as an adjunct instructor for the Department of Nutrition and Food Systems. She also served as an adjunct instructor for the Department of Biological Sciences at Pearl River Community College, Forrest County Campus.

[1] County Health Rankings, 2012

[2] Health System Profile for Greenville County, 2010

[3] State of South Carolina, Department of Health and Environmental Control, Bureau of Community Health and Chronic Disease Prevention, County Chronic Disease Fact Sheet, April 2012

[4] Greenville County Health Assessment, 2008

[5] Greenville County Health Assessment, 2012

[6] Hoyert DL, Xu JQ. Deaths: Preliminary data for 2011. National vital statistics reports; vol 61 no 6. Hyattsville, MD: National Center for Health Statistics. 2012.

[7] www.cdc.gov

[8] Office of Chronic Disease Epidemiology and Evaluation, Bureau of Community Health and Chronic Disease Prevention, 2010

[9] www.nhlbi.gov

[10] The National Cancer Institute, State Cancer Profiles (hhtp://statecancerprofiles.cancer.gov)

Greenville Count:

- Rate – The incidence rate is 478.4 with a 95% confidence interval from 469.3 to 487.7
- Includes all races (including Hispanic), both sexes, all cancer sites, all ages
- Average Annual County – the count is 2,131

[11] South Carolina Hospital Association Hospital Toolkit for Community Health Needs Assessments, 2012

[12] Bureau of Community Health and Chronic Disease Prevention, SCDHEC Division of Biostatistics, 2010

[13] Greenville County Health Assessment, 2003

[14] CDC, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, 2010

[15] NHANES, 2009-2010

[16] CDC, Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses – United States, 2000-2004.

[17] Bureau of Community Health and Chronic Disease, SCDHEC, "Asthma in Greenville County, 2010"