VIDANT EDGECOMBE HOSPITAL'S 2016 COMMUNITY HEALTH NEEDS ASSESSMENT

Acknowledgments

This report is the culmination of significant work by the Edgecombe County Health Department, Vidant Edgecombe Hospital, and members of the Edgecombe County Rural Health Network, which is dedicated to improving the health and well-being of the residents of Edgecombe County:

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TABLE OF CONTENTS

Acknowledgments	1
Table of Contents	2
Introduction	5
Assessment Methodology	6
Chapter One: Demographic Data	7
General Population Characteristics	7
Minority Populations	7
Population Growth	8
Birth Rate	8
Age	9
Elderly Population	9
Children and Families	10
Military Veterans	10
Foreign-Born Population	10
Linguistic Isolation	11
Chapter Two: Socioeconomic Data	12
Tier Designation	12
Income	12
Employment	12
Employment by Sector	13
Unemployment	13
Poverty 8 Page	14
Poverty & Race	14
Children Receiving Free or Reduced-price School Lunch	15 16
Housing Costs Homelessness	16
Educational Achievement	17
Educational System	17
Crime and Safety	17
Juvenile Crime	17
Domestic Violence	18
Child Maltreatment	18
Chapter Three: Health Resources	19
Health Insurance	19
Medicaid Eligibility	19
Health Care Practitioners	19
Vidant Edgecombe Hospital	19
Edgecombe County Health Department	20
Health Services	21
Dialysis	21
Health Facilities	21
Mental Health Services	21
Home Health/Hospice	21
School Nurses	21

Long-Term Care Facilities	21
Hospital Utilization – Emergency Department	21
Hospital Utilization – Emergency Department – Gender and Age	21
Hospital Utilization – Emergency Department – Racial and Ethnic Profile	22
Hospital Utilization – Emergency Department – Payor Mix	22
Hospital Utilization – Inpatient Admissions	22
Hospital Utilization – Inpatient Admissions – Gender and Age	22
Hospital Utilization - Inpatient Admissions - Racial and Ethnic Profile	23
Hospital Utilization – Inpatient Admissions – Payor Mix	23
Chapter Four: Health Statistics	24
Methodology	24
Understanding Health Statistics	24
Age-adjustment	24
Aggregate Data	24
Incidence	24
Mortality	25
Morbidity	25
Prevalence	25
Trends	25
Small Numbers	25
Describing Difference and Change	26
Final Health Data Caveat	27
Health Rankings	27
America's Health Rankings	27
County Health Rankings	27
Maternal and Infant Health	27
Pregnancy	27
Pregnancy Risk Factors	29
Smoking during Pregnancy	29
Inadequate Prenatal Care	29
Pre-Term, Low Weight, and Very Low Weight Births	29
Infant Mortality	29
Life Expectancy	30
Mortality	31
Leading Causes of Death	31
Morbidity	33
Vehicular and Alcohol-Related Motor Vehicle Crashes	33
Sexually Transmitted Infections – Chlamydia	34
Sexually Transmitted Infections – Gonorrhea	34
Sexually Transmitted Infections – HIV/AIDs	35
Adult Diabetes	36
Obesity in Adults	36
Obesity in Children	37
Asthma	37
Mental Health	38
Edgecombe County Populations At-Risk for Poor Health Outcomes	39

Chapter Five: Community Watch List	40
Chapter Six: Community Feedback Community Survey Methodology	41 41
Community Small Group Discussion Methodology Community Feedback Results	41 41
Chapter Seven: Issue Prioritization	42
Prioritization Process	42
Edgecombe County Health Priorities for 2016-2019	42
Appendices	43
Appendix A – Secondary Data Source List	44
Appendix B – Secondary Data and Hospital Utilization Data Indicators	46
Appendix C – Primary Data Survey and Small Group Discussion Questions	52
Appendix D – Evaluation of 2013 Vidant Edgecombe Hospital Implementation Plan	73

Introduction

Local public health agencies in North Carolina (NC) are required to conduct a Comprehensive Community Health Assessment (CHA) at least once every four years. The CHA is required of public health departments in the consolidated agreement between the NC Division of Public Health NC DPH) and the local public health agency. Furthermore, a CHA is required for local public health department accreditation through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1). As part of the US Affordable Care Act of 2011, non-profit hospitals are also now required to conduct a community health (needs) assessment at least every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, LHDs and non-profit hospitals across the state are developing models for collaboratively conducting the community health assessment process. This document is the culmination of such a partnership between the Edgecombe County Health Department (ECHD), Vidant Edgecombe Hospital (VEDG) and the Vidant Health system.

The Edgecombe County Rural Health Network is a collaborative network composed of representatives from multiple organizations within the county. This network's mission is to improve health outcomes. The network has identified 5 key areas which comprise their vision: collaboration in the delivery of care; reduction of barriers to health care; exchange of data to facilitate improvements; increased efficiencies; and the sharing and generating of resources to effectively improve health. This community partnership has been instrumental in leading health improvement efforts in Edgecombe County.

The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, and professional and public opinion. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. The completed CHA serves as the basis for prioritizing the community's health needs, and culminates in planning to meet those needs.

The Vidant Health system contracted with Sheila S. Pfaender, Public Health Consultant, to assist in conducting the 2016 Community Health Needs Assessments for Vidant Health's primary service counties, including Edgecombe County. The assessment process incorporated the guidance provided by the *Community Assessment Guidebook: North Carolina Community Health Assessment Process*, published by the NC Office of Healthy Carolinians/Health Education and the NC State Center for Health Statistics (December 2011). The assessment also adheres to the 2012 standards for community assessment stipulated by the NC Local Health Department Accreditation (NCLHDA) Program and The Internal Revenue Service (IRS) 2014 final ruling implementing requirements for tax-exempt hospitals under Section 501(r) of the Affordable Care Act (ACA).

The CHA coordinators from the ECHD, VEDG and Vidant Health worked with the consultant to develop a multi-phase plan for conducting the assessment. The phases included: (1) a research phase to identify, collect and review demographic, socioeconomic, health and environmental data; (2) a community input phase to receive input from community members utilizing a survey and small group discussions; (3) data synthesis and analysis phase; (3) a period of data reporting and discussion among community partners; and (4) a prioritization and decision-making phase. Upon completion of this work the CHA partners and the community will have the tools they need to develop

plans and activities that will improve the health and well-being of the people living in Edgecombe County.

Assessment Methodology

In order to learn about the specific factors affecting the health and quality of life for Edgecombe County residents, the consultant accessed numerous readily available secondary data sources, representing data from the local, state and national level. All secondary data sources are listed in Appendix A of this report. The author has made every effort to obtain the most current data available at the time the report was prepared.

It is instructive in any community health assessment to relate local county level data to similar data in other jurisdictions. Edgecombe County data is compared to "like" data describing the state of NC as a whole, as well as compared to data from ten counties that comprise the Vidant Health primary service area, referred to as the "Region." Where Edgecombe County data is compared to this "Region," the Regional data includes the compilation of data from Beaufort, Bertie, Chowan, Dare, Duplin, Edgecombe, Greene, Hertford, Hyde and Pitt Counties. In other cases, Edgecombe County data is compared to US-level data, or to Healthy People 2020 goals or other standardized measures. Where appropriate, trend data has been used to show changes in indicators over time, at least since the previous assessment three years ago, but as far back as comparable data is available. A summary of the secondary data and hospital utilization data indicators is included in Appendix B of this report.

In addition to the secondary data collection, ECHD, VEDG, and Vidant Health also reached out to Edgecombe County residents to gain a better understanding of their health status including health issues/diagnoses, preventative health activities, identified health needs, and barriers to health within the county. Feedback was obtained through a survey process, as well as small group discussions.

The survey questions were adapted from the survey questionnaire provided by the *Community Assessment Guidebook: North Carolina Community Health Assessment Process*, published by the NC Office of Healthy Carolinians/Health Education and the NC State Center for Health Statistics (December 2011). Surveys were provided in English and Spanish and distributed to residents using an online survey option and a paper survey option. The survey process was conducted over a 4 week period with 471 individuals participating in the survey process. The survey questions are included in Appendix C of this report.

In addition to the survey process, five small group discussions were held in various locations within Edgecombe County. Participants responded to 7 open-ended questions and shared their feedback. The small group open-ended discussion questions are also included in Appendix C of this report.

Chapter One: Demographic Data

General Population Characteristics

The following general population characteristics of Edgecombe County and its comparator counties were based on 2014 US Census data population estimates presented in Table 1.

- As outlined in the July 1, 2014 US Census data estimates, the population of Edgecombe County is estimated to be 54,933.
- The county has a higher proportion of females than males; it has the lowest proportion of males compared to the State, the Regional Average, and all other counties in the Vidant Region.
- The overall median age in Edgecombe County is 2.6 years older than NC average and 0.9 years younger than the Region.
- Approximately 23% of the county is under the age of 18 which is similar to NC and higher than the Region.
- Nearly 17% of the County population is over the age of 65, a higher proportion compared to the Region and NC.

			Total Pop	ulation			Under 1	8 Years	# 18-64 Years	% 18-64 Years	65 Years and Older	
County	# Total	# Males	% Males	# Females	% Females	Median Age*	# Under 18 Years	% Under 18 Years			# Total	% Total
Edgecombe	54,933	25,498	46.4	29,435	53.6	40.8	12,719	23.2	32,906	59.9	9,308	16.9
Regional Total	458,613	221,596	48.3	237,017	51.7	41.7	100,240	21.9	287,278	n/a	71,095.0	15.5
State Total	9,943,964	4,844,593	50.8	5,099,371	53.5	38.2	2,287,549	23.0	6,193,053	62.3	1,463,362	14.7
State Average	99,440	48,446	n/a	50,994	n/a	n/a	22,875	23.0	61,931	n/a	14,634	n/a

Table 1. General Demographic Characteristics (2010 US Census data and 2014 Population estimates)

Note: Percentages by gender are calculated.

*Metric for Regional Total Median Age calculated as the arithmetic mean of county values

Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010; 2014 Population Estimates: April 1, 2010 to July 1, 2014 (PEPAGESEX), http://factfinder2.census.gov.

Minority Populations

Edgecombe County has a significantly larger proportion of African American residents, compared to the Region and NC as a whole. The county has a lower proportion of all other races or ethnicities, notably Hispanics.

- Whites composed 40.1% of the total population; the Regional comparable figure was 60.9% and the statewide figure was 71.5%.
- Blacks/African Americans composed 57.7% of the total population; the Regional comparable figure was 35.4% and the statewide figure was 22.1%.
- American Indians and Alaskan Natives composed 0.7% of the total population; the Regional comparable figure was 0.8% and the statewide figure was 1.6%.
- Asians, Native Hawaiians and Other Pacific Islanders composed 0.5% of the total population; the Regional comparable figure was 1.3% and the statewide figure was 2.8%.
- Hispanics/Latinos of any race composed 4.2% of the total population; the Regional comparable figure was 8% and the statewide figure was 9%.

Population Growth

Edgecombe County's population growth is expected to shrink even as the State and Region grow at a slowing rate. Between 2000 and 2030, the county population is expected to decrease by 2.8% overall, while the Region increases by 20% and NC grows by 44%. (Table 2).

Decade	Edgecombe County	Regional Average	State of NC
2000-2010	1.7	14.6	15.6
2010-2020	-2.9	2.8	10.9
2020-2030	-1.7	1.8	9.8

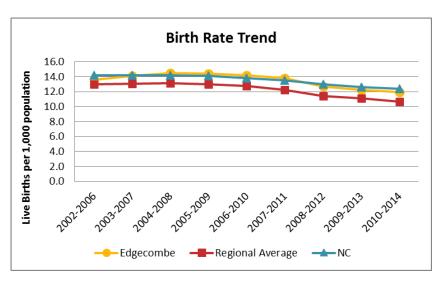
Table 2. Population Growth in Overall Population, by Decade, 2000 through 2030

Note: percentage change is calculated.

Source: Profile of General Demographic Characteristics: 2000 (DP-1), SF1.and Profile of General Population and Housing Characteristics: 2010 (DP-1). U.S. Census Bureau, American FactFinder: http://factfinder2.census.gov; Age, Race, and Sex Projections, Age Groups – Total, July 1, 2020 County Total Age Groups – Standard last updated October 7, 2015. North Carolina Office of State Budget and Management County/State Population Projections: https://www.osbm.nc.gov/demog/countytotals_standardagegroups

Birth Rate

- The Edgecombe County birth rate demonstrated an overall decline over the period presented below, with a similar trend seen in the Region and the state.
- Between 2007-2011 and 2010-2014 birth rates have decreased overall among all racial groups compared. A similar trend is seen across the Region and the state.
- The highest birth rate occurred among the Hispanic population.



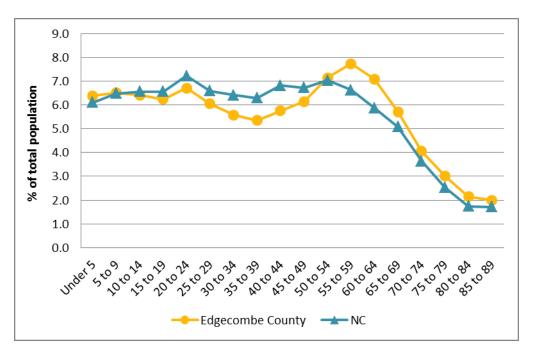
Graph 1. Birth Rate Trend, Live Births per 1,000 Total Population (Nine 5-Year Aggregates, 2002-2006 through 2010-2014)

Source: NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008, 2009, 2010, 2011, 2012, 2013; 2014; http://www.schs.state.nc.us/schs/data/databook/.

Age

The following information about the age (and gender) distribution of the Edgecombe County population was derived from the US Census Bureau 2014 Population Estimates.

According to 2014 estimates, Edgecombe County has lower proportions in most age categories of people under age 50 and higher proportions in most age categories of people over age 50, when compared to the state as a whole.



Graph 2. Population Distribution by Age and Gender, Number and Percent (US Census July 1, 2014 Estimates)

Source: US Census Bureau, American FactFinder, 2010 Census, 2010 Demographic Profile Data, Summary File DP-1, Profile of General Population and Housing Characteristics: 2010; http://factfinder2.census.gov.

Elderly Population

Because the proportion of the Edgecombe County population age 65 and older is larger than the proportion of that age group statewide, it merits closer examination. The population segment age 65 and older often requires more and different health and social services than the rest of the population, and understanding how that population will change in coming years will be an important consideration in planning to meet future health and human service needs.

The following information regarding the elderly population in Edgecombe County was extracted from the 2000 and 2010 US Census figures and current projections for the years 2020 and 2030 from the NC Office of State Budget and Management.

- The proportion of every major age group in Edgecombe County age 65 and older will increase through the year 2030.
- In 2014 there were an estimated 9,308 persons age 65 and older in Edgecombe County, representing around 17% of the total population
- By 2030, with the total population predicted to decrease, 12,646 residents over the age of 65 will comprise 23.4% of the population.

Children and Families

According to the U.S. Census Bureau figures for 2010-2014, there were 20,987 households in Edgecombe County. A household includes all the people who occupy a housing unit, which may be a single family, multiple families, one person living alone, or any other group of unrelated people who share a living space. A family household consists of a householder and one or more people living in the same household who are related by birth, marriage or adoption.

When examining the households in Edgecombe County, 26% of the households were family households with children under 18 years of age. Forty-four percent of the family households with children under 18 years were headed by a married couple as compared to 58% in the region, and 65% within the state. Forty-seven percent were headed by a female householder (no husband present) compared to 34% in the region and 27% in the state. Slightly less than 9% of these households were headed by a male householder (no wife present) compared to 8% in the region and 8% in the state. The head of household does have implications for the care of children as studies have shown that different genders approach health prevention and maintenance differently.

In addition to this data, a further examination of children and families revealed that 57% of the estimated 1,515 grandparents in Edgecombe County who live with their minor grandchildren are also financially responsible for their care. Grandparents are considered responsible for grandchildren if they are financially responsible for food, shelter, clothing, day care, etc. for any/all grandchildren. This data also has implications for care as the elderly population has its own unique health challenges. It is important to note that Edgecombe County's percentage of grandparents living with and financially responsible for their minor grandchildren is greater than the region (52%) and the state (48%).

Military Veterans

A population group that sometimes needs special health services is military veterans. An analysis of the 2010-2014 population estimates demonstrated that Edgecombe County did not have the largest population of military veterans among the regional comparisons. Veterans composed 9.2% of Edgecombe County's overall adult civilian population in the period cited, which was consistent with the regional percentage of 11.2% and less than the state at 9.6%.

Edgecombe County does have a higher proportion of veterans in the 55-64 age group than any other county within the Region. It is also important to note that Edgecombe County has fewer veterans over the age of 65 (37%) than the Region (42%) and state (41%).

Foreign-Born Population

The foreign-born population in a community is one that potentially does not speak English, and so is of concern to service providers. In NC, the greatest proportion of the increase in foreign-born persons is represented by immigrants of Hispanic origin; however, statewide there has also been an influx of foreign-born immigrants from Southeast Asia.

According to single five-year US Census Bureau estimates (2010-2014), there were 1,487 foreign-born residents residing in Edgecombe County in 2014. Approximately 35.2% entered the US between 2000 and 2009, while approximately 35.5% entered between 1990 and 1999.

Linguistic Isolation

"Linguistic isolation", reflected as an inability to communicate because of a lack of language skills, can be a barrier preventing foreign-born residents from accessing needed services. The US Census Bureau tracks linguistically isolated households according to the following definition:

A linguistically isolated household is one in which no member 14 years and over (1) speaks only English, or (2) speaks a non-English language and speaks English "very well". In other words, all members 14 years old and over have at least some difficulty with English.

Among the 835 households (4% of all households in Edgecombe County) that speak a language other than English, the most common language is Spanish (82.4%). Among the Spanish-speaking households, 35% would be considered "limited English speaking". No other non-English speakers are considered linguistically isolated within Edgecombe County.

Chapter Two: Socioeconomic Data

Tier Designation

The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns a Tier Designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2, and the 20 least distressed as Tier 3. The Tier system is incorporated into various state programs, including a system of tax credits (Article 3J Tax Credits) that encourage economic activity and business investment in less prosperous areas of NC. From 2011 – 2016, Edgecombe County has been assigned Tier 1 designation.

Income

While revenue indicators give us some idea of economic health from the community economic development standpoint, income measures tell us about the economic well-being of individuals in the community. Among the more useful income measures are personal income, family income, and household income. For comparison purposes, personal income is calculated on a per capita basis; family income and household income are viewed as a median value for a target population. The following are definitions of each of the three income categories:

- *Per capita personal income* is the income earned per person 15 years of age or older in the reference population.
- Median household income pertains to the incomes of all the people 15 years of age or older living in the same household (i.e., occupying the same housing unit) regardless of relationship.
 For example, two roommates sharing an apartment would be a household, but not a family.
- Median family income pertains to the income of all the people 15 years of age or older living in the same household who are related either through marriage or bloodline. For example, in the case of a married couple who rent out a room in their house to a non-relative, the household would include all three people, but the family would be just the couple.

In Edgecombe County, the 2014 Per capital personal income was \$17,652 which was \$7,956 below the state average. The 2014 Median household income was \$33,892 which is also below the state average by \$12,801. The 2014 Median family income was \$41,748 which is \$15,580 below the NC average. This figure has actually decreased since 2010.

Income levels in Edgecombe County and NC as a whole seem relatively stagnant over the past 5 years of Census estimates, fluctuating by only a few hundred dollars in either direction. This suggests that while the overall economy may have improved since the 2008 recession, wages have not increased.

Employment

The following definitions will be useful in understanding the data in this section.

- Labor force: includes all persons over the age of 16 who, during the week, are employed, unemployed or in the armed services.
- *Unemployed*: civilians who are not currently employed but are available for work and have actively looked for a job within the four weeks prior to the date of analysis; also, laid-off civilians waiting to be called back to their jobs, as well as those who will be starting new jobs in the next 30 days.
- *Unemployment rate*: calculated by dividing the number of unemployed persons by the number of people in the civilian labor force.

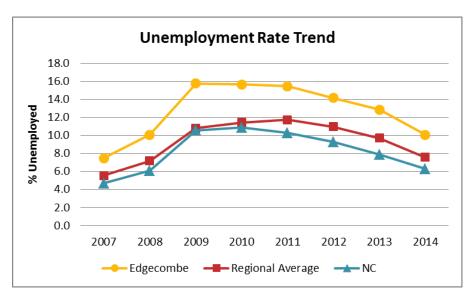
Employment by Sector

The assessment compared the various categories of industry by sector in Edgecombe County to its Regional and state comparators for 2014, showing the number employed in each sector, the percentage of all employment that the number represents, and the average annual wage for people employed in each sector.

- The industry in Edgecombe County that employed the largest percentage of the workforce (15.4%) was Retail Trade. This sector earned an average of \$452 per week.
- Manufacturing accounted for the second largest percentage of the Edgecombe County workforce, at 15.3%, followed by Public Administration, at 13.0%.
- It is important to note that persons working in the Accommodation and Food Services and the Retail Trade sectors tend to lack employment benefits such as health insurance and retirement programs; many in these sectors work for a low-wage, on a part-time basis, and sometimes work multiple jobs. These are sectors whose relative poverty leaves them vulnerable to emotional stress and poor health outcomes.
- In the Region, the sector employing the largest percentage of the workforce (16.6%) was Health Care and Social Assistance, followed by Retail Trade (12.73%), Manufacturing (11.95%) and Educational Services (11.77%).
- Statewide, the sector employing the largest percentage of the workforce was Health Care & Social Assistance (14.29%), followed by Retail Trade (11.79%) and Manufacturing (11.06%).

Unemployment

According to 2014 data, a calculated annual average of 2,336 individuals were unemployed in Edgecombe County, calculating to an unemployment rate of 10.1. While an average unemployment rate was not available for 2015, the rate declined each month since July, though it was still higher in December 2015 (8.8) compared to the Region (7.3), the State (5.3), and the Nation (4.8).



Graph 3. Annual Unemployment Rate Trend (2007-2014)

Source: NC Employment Security Commission, Labor Market Information, Workforce Information, Employed, Unemployed and Unemployment Rates, Labor Force Statistics, Single Areas for All Years; http://eslmi03.esc.state.nc.us/ThematicLAUS/clfasp/startCLFSAAY.asp.

Poverty

The poverty rate is the percent of the population (both individuals and families) whose money income (which includes job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below a federally established threshold; this is the "100%-level" figure.

- ▶ The overall poverty rate (describing the percentage of the total population below the Federally-defined 100% poverty level) in Edgecombe County was higher than the comparable state rate throughout the period reviewed.
- ▶ The poverty rate for children under 18 has increased each period and remains higher in Edgecombe County (42.3% in 2010-2014) compared to NC (25.0%) and the Region (35.7%).
- ▶ In 2014, an estimated 13,739 individuals, or one-quarter of the population, were living below the poverty level in Edgecombe County.
- ▶ The poverty rate in Edgecombe County and in NC increased in every period reviewed.

	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Edgecombe	22.3	22.6	24.0	25.2	25.3
Regional Average	20.1	21.5	22.3	23.3	23.0
State of NC	15.5	16.1	16.8	17.5	17.6

Table 3. Poverty Rate Trend (2006-2010 and 2007-2011 Five-Year Estimates)

a - Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094);

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Poverty & Race

The poverty rate among Hispanics in Edgecombe County exceeded the comparable poverty rates for other groups throughout the period reviewed. Statewide, the highest poverty rate over most of the period cited occurred among Hispanics. African American residents also demonstrate high rates of poverty compared to white residents of both Edgecombe County and NC as a whole.

b - US Census Bureau, American Fact Finder, American Community Survey, 2010 American Community Survey 5-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov.

c - US Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov.

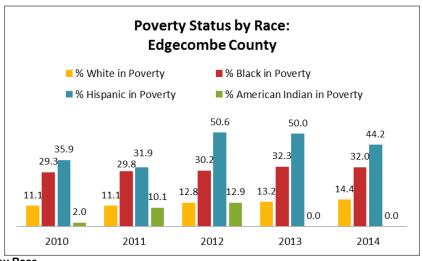


Table 4. Persons in Poverty by Race (2000; 2006-2010 and 2007-2011 Five-Year Estimates)

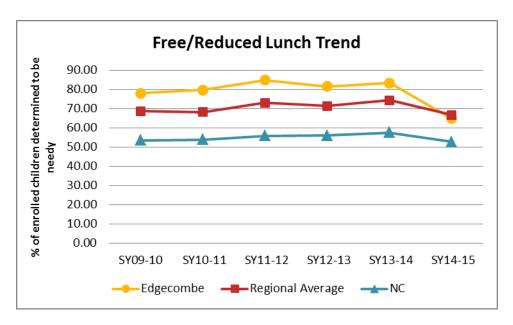
Source: US Census Bureau, American Fact Finder, ACS 5-Year Estimates, 2010 through 2014, Table S1701 Poverty Status in the Past 12 Months. http://factfinder.census.gov/

Children Receiving Free or Reduced-price School Lunch

Data corroborate the impression that children, especially the very young, bear a disproportionate burden of poverty, and that their burden is increasing. One measure of poverty among children is the number and/or percent of school-age children who are eligible for and receive free or reduced-price school lunch.

Students have to be eligible to receive meals; not everyone who is eligible will choose to enroll in the program and receive meals. To be eligible for *free* lunch under the National School Lunch Act students must live in households earning at or below 130 percent of the Federal poverty guidelines. To be eligible for *reduced-price* lunch students must live in households earning at or below 185 percent of the Federal poverty guidelines.

The percentage of students in Edgecombe County enrolled for free or reduced-price school lunch has increased over time as shown in Table _. In Edgecombe County, a higher percentage of students have been identified as "needy", compared to the Region and the State. The recent decrease could be due to policy or procedural changes rather than a change in the number in need.



Graph 4. Percent of Students Enrolled for Free or Reduced-Price School Lunch (SY2009-2010 through SY2014-15)

Source: Free and Reduced Student Data by Site, Public School Year-to-Date Data 2009-2010 [and other years as noted]. Public Schools of North Carolina, Public Schools of North Carolina, Financial and Business Services: http://www.ncpublicschools.org/fbs/resources/data/

Housing Costs

The estimated median monthly mortgage cost among Edgecombe County homeowners was \$1,009 in 2014. This cost is \$263 less than the NC median. The estimated median gross monthly rent among Edgecombe County renters has decreased slightly since 2010 and was \$649 in 2014. This figure is \$141 less than the NC median.

A closer examination of housing costs as related to percentage of monthly income reflects potential challenges individuals face with regard to balancing cost of housing with other expenditures. The percentage of Edgecombe County homeowners spending more than 30% of their monthly income on housing has decreased from 38% in 2010 to 36% in 2014 (compared to 31% in NC in 2014). The percentage of renters spending more than 30% of their income on housing has increased from 46% in 2011 to 48% in 2014 (compared to 46% in NC in 2014).

Homelessness

Every January, the NC Coalition to End Homelessness conducts a point-in-time count of homeless individuals.

- ▶ In Edgecombe County, the number of homeless people has fluctuated, from a high of 167 in 2009 to a low of 54 in 2013.
- ▶ The majority of the homeless are adults (91 in 2015) but children in families are also among the homeless (37 children in 17 households in 2015).
- ▶ Veterans and the chronically homeless are two subpopulations to note. Over the period 2009 to 2015, a high of 10 veterans were counted in 2011 and a high of 8 chronically homeless individuals were included in the 2012 count.

Educational Achievement

According to the US Census Bureau and the NC Public Schools data, a comparison of state and county data reveals that Edgecombe County has a higher population who highest attainment was a high school diploma (or equivalent) only (36.2% in 2014) as compared to the region (31.9%) and the state (26.9%). Edgecombe County has a lower population who had a bachelor's degree or higher (10.7 % in 2014) as compared to the region (16.4%) and the state (27.8%).

When comparing Edgecombe County to the NC average, the 2014-2015 4-year cohort high school graduation rate was lower in Edgecombe County Schools (81.5%) as compared to the region (83.5%) and the state (85.6%). High school graduation rates were lowest among the economically disadvantaged (Edgecombe 73.1%, region 78.6%, NC 79.6%).

Educational System

The number of students enrolled in Edgecombe County schools has decreased overall, from a high of 7,733 in the 2006-2007 school year to 6,006 in 2014-15. Statewide, the number of enrolled students has increased each year from 2009-2010 to 2014-15.

The high school drop out rate has decreased overall since 2010-11 from 4.92 to 2.88, though it remains higher than in the Region (1.93) and the state (2.28) in 2013-14.

The high school reportable crime rate has increased. In SY 2013-14 the county rate of 20.41 was nearly double the Regional average of 11.96 and 65% higher than the state rate of 12.37.

Crime and Safety

Two types of crime are generally examined to understand more about a county's crime and safety – violent and property crimes. Violent crimes include offenses of murder, rape, robbery, and aggravated assault. Property crime includes the offenses of burglary, larceny, and motor vehicle theft. For the purposes of this assessment, data was examined by individual type and combined as an "index crime rate."

The "index crime rate" is the rate of the sum of violent crime and property crime. Examining trends over time and comparing those to the state and region reveals the index crime rate in Edgecombe County was higher than the comparable NC average, as well as the Regional Average, in every year cited from 2001-2014.

In 2014 the Edgecombe County crime rate was the lowest it had been over the period shown: 3,739.4 crimes committed per 100,000 population.

The violent crime rate in Edgecombe County fluctuates widely, from a low of 495.7 in 2002 to a high of 890.4 in 2009. Recent years demonstrate a general decrease, though it remains higher (551.5) than the State (333.0) or the Region (315.5).

The Edgecombe County property crime rate has decreased from a high of 5,166.5 in 2006 to 3,188.0 in 2014, though it has been consistently higher than the Region (2,705.6 in 2014) and NC (2,954.1).

Juvenile Crime

In reviewing data from the NC Department of Public Safety with a specific focus on crimes committed by juveniles (ages 6-17), the crimes are reported as "Complaints." The term "Complaint" is defined as a formal allegation that a juvenile committed an offense, which will be reviewed by a counselor

who decides whether to approve or not approve the complaint. If approved, it will be heard in juvenile court. Complaints are divided into two categories: "Undisciplined" and "Delinquent."

The term "Undisciplined" refers to disobedience beyond disciplinary control of parent/guardian (e.g., truancy, vagrancy, running away from home for more than 24 hours). Between 2011 and 2014 the *number* and *rate* of complaints of **undisciplined** youth (ages 6-17) in

Edgecombe County increased overall, to 17 and 1.90, respectively, in 2014

Over the same period the *number* and *rate* of complaints of **delinquent** youth in the county fluctuated to 266 and 35.86, respectively, in 2014.

"Delinquency" refers to acts committed by youths that would be crimes if committed by an adult. "Rate" equals the number of events per 1,000 youth in the age group.

Additional information reflects that 29 Edgecombe County youth were sent to secure detention in 2011; 21 were sent in 2014.

Domestic Violence

Data from the NC Council for Women indicates the number of domestic violence clients seen by local agencies decreased slightly in Edgecombe County, ranging from a high of 287 in 2009-10 to a low of 110 in 2014-15. The number of services provided (advocacy, counseling, legal help, transportation, etc.) decreased from 2,206 in 2007-08 to 763 in 2014-15.

The domestic violence shelter serving Edgecombe County was full on 24 days in FY2014-2015.

Child Maltreatment

The responsibility for identifying and reporting cases of child abuse, neglect and exploitation falls to the child protective services program within a county's department of social services. Generally speaking, such a unit will have sufficient staff to handle intake of all reports. However, an agency's ability to investigate and monitor reported cases may vary from year to year, depending on the number of properly trained staff available to it; hence, follow-up on reports may vary independently of the number of reports.

Child welfare data from the NC Social Services Data Warehouse at UNC indicates the numbers of children subject to abuse, neglect, or abuse and neglect in Edgecombe County have fluctuated without pattern over the period cited. A decreasing proportion of reports are eventually substantiated. Neglect-only cases composed the most common type of child maltreatment. A high percentage of Edgecombe County reports are completed with a designation of "Services Not Recommended": 75% in 2014-15 compared to a steady NC percentage of 36%. in 2014-15, 91% of the substantiated cases of abuse, neglect, or dependency (n=10) were African-American children [NC=30%]. 64% of the victims were male [NC=48%] and 64% were under the age of 5 [NC=52%]

Chapter Three: Health Resources

Health Insurance

The percent of uninsured in Edgecombe decreased overall in all age groups over the three years assessed, though there was a slight increase in uninsured minors in 2012. Compared to NC, and the Region, Edgecombe County tends to demonstrate lower percentages of uninsured residents in all age groups. The age group 0-18 tends to have a lower percentage of uninsured than the 19-64 age group, due partly at least to NC Health Choice.

Medicaid Eligibility

According to data obtained from the NC Division of Medical Assistance, 30.2% of Edgecombe County residents were eligible for Medicaid in 2013, compared to 16.5% in NC and 19.6% in the Region. The total number of people in Edgecombe County eligible for Medicaid increased annually in most years from 2009 through 2013. The Medicaid programs with the largest proportion of eligibles in 2013 were Infants & Children (39%) and Medicaid Aid to Families with Dependent Children (AFDC) (26%). In each month of 2013, an average of 1,443 aged individuals were eligible for both Medicaid and Medicare, higher than the NC County average of 1,195 and a Regional average of 828.

Health Care Practitioners

One way to judge the supply of health professionals in a jurisdiction is to calculate the ratio of the number of health care providers to the number of persons in the population of that jurisdiction. In NC, there is data on the ratio of active health professionals per 10,000 population calculated at the county level. This data was examined for Edgecombe County, the Region, the state of NC and the US for five key categories of health care professionals: physicians, primary care physicians, registered nurses, dentists and pharmacists. The period covered is through 2012.

- The health professional ratios in Edgecombe County for MDs, Primary Care, Dentists and Pharmacists were lower than the Region and state ratios.
- The Edgecombe County ratio for RNs was higher (57.41) than the region (53.15) but lower than the state (98.56) ratios.

It is important to note these ratios do not take into consideration medical practitioners in neighboring counties accessible to Edgecombe County residents.

Vidant Edgecombe Hospital

Vidant Edgecombe Hospital (VEDG), formerly Heritage Hospital, is a full-service, 117-bed acute care facility where residents of Tarboro, Edgecombe county and surrounding communities receive a wide range of health services close to home.

VEDG exists for the community and has a proud history of active community involvement. The hospital is dedicated to professional, personal and compassionate medical treatment for our patients and their families. To meet the needs of smaller communities in Edgecombe and surrounding counties, services are also provided through Vidant Family Medicine-Pinetops.

More than 20 specialties are represented by VEDG's medical staff, assuring the people of Edgecombe county that most all of their health needs can be met locally. In addition to acute care, VEDG's services include rehabilitation, oncology and outpatient clinics.

Special programs at VEDG include

- Same Day Surgery Center
- Critical Care Unit
- Level III Intermediate Care Nursery
- Birthing Center
- Rehabilitation Services
- Outpatient Rehabilitation
- Cancer Center
- Hospitalist Physicians
- Pain Care
- Chronic Heart Failure Clinic
- 24-hour Emergency Department
- Orthopedics

Edgecombe County Health Department

The mission of the Edgecombe County Health Department (ECHD) is to serve all citizens in the prevention of disease and injury through protection, promotion, and delivery of quality, cost-effective services for community, personal, and environmental health. The health department has locations in Tarboro and Rocky Mount. ECHD offers specific programs targeting the health needs of community members including:

- Chronic Disease Self Management Program (CDSMP) This program is an extension of the former Diabetes Management program offered through ECHD. The purpose of the program is to increase awareness of the seriousness of chronic disease by promoting prevention and improving self-management skills. The CDSMP Program focuses on diabetes, prediabetes, high blood pressure, and heart disease. Education is a strong pillar in this program offering participants initial group education, nutrition, healthy eating, two diabetes self-management sessions and a blood pressure management class. Following completion of the group education program, participants are offered an incentive of twice weekly exercise sessions at the VEDG hospital gym or pool for 3 months at no cost. Additional services include one-to-one education, Eat Smart Move More Weigh Less program, and Freedom from Smoking.
- The Emergency Department HIV Testing Program This program is a collaborative project between VEDG and the ECHD in which high risk patients using the emergency department are screened for HIV and Syphilis. There were 347 HIV and Syphilis tests performed through the Emergency Department Testing Program in 2014. In this unique partnership, Vidant Edgecombe Hospital collects patient samples and information and the Edgecombe County Health Department completes the testing process and is responsible for all patient follow up as well as data collection.

Health Services

Dialysis

There are three dialysis facilities with a total of 107 hemodialysis stations in Edgecombe County, located in Tarboro. No shifts are offered after 5pm.

Health Facilities

There is one licensed ambulatory surgical center, one cardiac rehabilitation facility and one licensed nursing pool in the county, all located in Tarboro.

Mental Health Services

There are 34 mental health facilities offering a range of services, including several supervised living arrangements, psychosocial rehabilitation, substance abuse treatment and vocational programs.

Home Health/Hospice

Edgecombe County has 10 facilities providing home care services only, all located in either Tarboro or Rocky Mount. One facility, in Tarboro, offers home care, home care with hospice, and home health with hospice services. This provider was also accredited. One hospice facility is located in Tarboro and is accredited.

School Nurses

After three years of a ratio above 1,000:1, in SY2012-13 the student-to-school-nurse ratio had dropped to 825:1. The recommended ratio is 750:1 and the state average is 1,177:1.

Long-Term Care Facilities

The number of beds in NC-licensed long-term care facilities in Edgecombe County are:

- Adult Care Homes/Homes for the Aged (2 facilities): 256 beds
- Family Care Homes (7 facilities): 36 beds
- Nursing Homes/Homes for the Aged (3 facilities): 277 beds
 - One facility also had 56 adult care home beds.

All long-term care facilities in the county are located in either Tarboro or Rocky Mount. Total = 625 beds, or 1 bed for every 15 persons age 65 and older in Edgecombe County (9,308 persons \geq 65 in 2014)

Hospital Utilization – Emergency Department

Vidant Health made available extensive utilization data, some of which will be examined in conjunction with health statistics in a later section of this report. Presented here are demographic summaries of the populations that were admitted to the emergency department in recent years. This data includes all individuals who received services within the Vidant Health system, who also had a home address located within Edgecombe County. This data does not include visitors to this area.

Hospital Utilization – Emergency Department - Gender and Age

Emergency Department utilization by gender was generally consistent with the demographics of Edgecombe County. Females accounted for 57% of all ED discharges over the three year period

reviewed (54% of Edgecombe County population) and males accounted for 43% all ED discharges over the same period (46% of Edgecombe County population).

An analysis of Emergency Department utilization by age reflects that Adult (age 18-64) patients accounted for 61% of all ED visits. This figure is consistent with the proportion of persons in this age group in the overall Edgecombe County population, 60%. Pediatric (age 0-17) patients accounted for 20% of all ED visits. This figure is consistent with the proportion of persons in this age group in the overall Edgecombe County population, 23% Senior (age 65+) patients accounted for 19% of all ED visits. This figure is consistent with the proportion of persons in this age group in the overall Edgecombe County population, 17%.

Hospital Utilization – Emergency Department - Racial and Ethnic Profile

An analysis of Emergency Department utilization by race and ethnic profile shows that African-Americans accounted for 60% of all ED visits. This figure is consistent with the proportion of persons in this racial group in the overall Edgecombe County population (58%). Whites accounted for 36% of all ED discharges, which is consistent with the proportion of persons in this racial group in the overall Edgecombe County population (40%).

Hispanics accounted for 3% of all ED discharges over the same period, which is less than the overall proportion in Edgecombe County (4%). It is important to note that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals do tend to consider Hispanic ethnicity to be a separate racial category.

Hospital Utilization – Emergency Department - Payor Mix

The most common payor groups, in descending order, were:

- Medicaid (30.7%)
- Medicare (26.2%)
- Self-Pay (18.6%)
- BCBS Managed Care (13.7%)

Hospital Utilization – Inpatient Admissions

Hospital inpatient admissions were also reviewed for those individuals who experienced an inpatient admission within the Vidant Health system, who also had a home address located within Edgecombe County.

Hospital Utilization – Inpatient Admissions - Gender and Age

Hospital utilization for inpatient admissions was examined by gender and revealed admissions were generally consistent with the population of the county as a whole. Females accounted for 57% of all IP discharges over the three-year period cited. Females compose 54% of the total Edgecombe County population. Males accounted for 43% of all IP discharges over the same period. Males compose 46% of the total Edgecombe County population.

An examination of hospital inpatient admissions by age revealed that minors under the age of 18 ("pediatric" patients) accounted for 12% of all IP discharges over the three-year period cited. This utilization rate is lower than the general population of this age group within the total Edgecombe County population (23%) Persons between the ages of 18 and 64 ("adult" patients) accounted for 49% of all IP discharges over the same period. This age group composes a total of 60% of the total Edgecombe County population and the assessment revealed their utilization was also lower than the representation within the county.

Persons age 65 and older ("geriatric" patients) accounted for an average of 39% of all IP discharges over the same three-year period. This age group composes only 17% of the total Edgecombe County population. It is important to note that the percentage of geriatric inpatient discharges was more than **twice** the percentage the persons aged 65 and older represent in the Edgecombe County community.

Hospital Utilization – Inpatient Admissions - Racial and Ethnic Profile

Blacks accounted for 50% of all IP discharges over the three-year period cited which was lower than their overall representation (58%) of the total Edgecombe County population. Whites accounted for 46% of all inpatient discharges over the same period. This utilization rate is higher than their composition (40%) of the total Edgecombe County population.

Hispanics accounted for 2% of all IP discharges over the same period. Hispanics compose 4% of the total Edgecombe County population. It is important to note that in terms of the US Census, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals tend to consider Hispanic ethnicity to be a separate racial category, which is the reason it is broken out in this assessment.

Hospital Utilization – Inpatient Admissions - Payor Mix

The most common payor groups, in descending order, were:

- Medicare (46.1%)
- Medicaid (23.9%)
- BCBS Managed Care (12.1%)
- Self-Pay (5.4%)

Chapter Four: Health Statistics

Methodology

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe the health status of Edgecombe County residents. These data, which are readily available in the public domain, typically use standardized definitions, thus allowing comparisons among county, state and national figures. There is, however, some error associated with each of these data sources. Surveillance systems for communicable diseases and cancer diagnoses, for instance, rely on reports submitted by health care facilities across the state and are likely to miss a number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Understanding Health Statistics

Age-adjustment

Mortality rates, or death rates, are often used as measures of the health status of a community. Many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because the risk of death inevitably increases with age; that is, as a population ages, its collective risk of death increases. Therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of "young" people, and others have a higher proportion of "old" people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by *age-adjusting* the data. Age-adjustment is a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NC SCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing health data from one population or community to another and have been used in this report whenever available.

Aggregate Data

Another convention typically used in the presentation of health statistics is *aggregate data*, which combines annual data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. It is particularly important to aggregate data for smaller jurisdictions like Edgecombe County. The calculation is performed by dividing the number of cases or deaths due to a particular disease over a period of years by the sum of the population size for each of the years in the same period.

Incidence

Incidence is the population-based rate at which new cases of a disease occur and are diagnosed. It is calculated by dividing the number of newly diagnosed cases of a disease or condition during a given period by the population size during that period. Typically, the resultant value is multiplied by 100,000 and is expressed as cases per 100,000; sometimes the multiplier is a smaller number, such as 10.000.

Incidence rate is calculated according to the following formula:

(number of new cases/population) x 100,000 = new cases per 100,000 people

The incidence rates for certain diseases, such as cancer, are simple to obtain, since data on newly discovered cases is routinely collected by the NC Central Cancer Registry. However, diagnoses of other conditions, such as diabetes or heart disease, are not normally reported to central data-collecting agencies, so accurate incidence data on these conditions is rare.

Mortality

Mortality is calculated by dividing the number of deaths due to a specific disease in a given period by the population size in the same period. Like incidence, mortality is a rate, usually presented as number of deaths per 100,000 residents. Mortality rates are easier to obtain than incidence rates since the underlying (or primary) cause of death is routinely reported on death certificates. However, some error can be associated with cause-of-death classification, since it is sometimes difficult to choose a single underlying cause of death from potentially many co-occurring conditions.

Mortality rate by cause is calculated according to the following formula:

(number of deaths due to a cause/population) X 100,000 = deaths per 100,000 people

Morbidity

Morbidity as used in this report refers generally to the presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the population. Morbidity data usually is presented as a prevalence percentage, or a count, but not a rate.

Prevalence

Prevalence, which describes the extent of a problem, refers to the number of existing cases of a disease or health condition in a population at a defined point in time or during a period. Prevalence expresses a proportion, not a rate. Prevalence is often estimated by consulting hospital records; for instance, hospital discharge records available from NC SCHS show the number of residents within a county who use hospital in-patient services for given diseases during a specific period. Typically, these data underestimate the true prevalence of the given disease in the population, since individuals who do not seek medical care or who are diagnosed outside of the hospital in-patient setting are not captured by the measure. Note also that decreasing hospital discharge rates do not necessarily indicate decreasing prevalence; rather they may be a result of a lack of access to hospital care.

Trends

Data for multiple years is included in this report wherever possible. Since comparing data on a year-by-year basis can yield very unstable trends due to the often small number of cases, events or deaths per year (see below), the preferred method for reporting incidence and mortality data is long-term trends using the age-adjusted, multi-year aggregate format. Most trend data used in this report is of that type.

Small Numbers

Year-to-year variance in small numbers of events can make dramatic differences in rates that can be misleading. For instance, an increase from two events one year to four the next could be statistically insignificant but result in a calculated rate increase of 100%. Aggregating annual counts over a five year period before calculating a rate is one method used to ameliorate the effect of small numbers.

Sometimes even aggregating data is not sufficient, so the NC State Center for Health Statistics recommends that all rates based on fewer than 20 events—whether covering an aggregate period or not—be considered "unstable", and interpreted only with caution. In recent years, the NC SCHS has suppressed mortality rates based on fewer than 20 events in a five-year aggregate period. Other state entities that report health statistics may use their own minimum reporting thresholds. To be sure that unstable health data do not become the basis for local decision-making, this report will highlight and discuss primarily rates based on 20 or more events in a five-year aggregate period and on 10 or more events in a single year. Where exceptions occur, the narrative will highlight the potential instability of the rate being discussed.

Describing Difference and Change

In describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always possible to describe difference or change by the simple subtraction of a smaller number from a larger number, the result often is inadequate for describing and understanding the scope or significance of the difference or change. Converting the amount of difference or change to a *percent* takes into account the relative size of the numbers that are changing in a way that simple subtraction does not, and makes it easier to grasp the meaning of the change.

For example, there may be a rate for a type of event (e.g., death) that is one number one year and another number five years later. Suppose the earlier figure is 12.0 and the latter figure is 18.0. The simple mathematical difference between these rates is 6.0. Suppose also there is another set of rates that are 212.0 in one year and 218.0 five years later. The simple mathematical difference between these rates also is 6.0. Although the same, these simple numerical differences are not of the same significance in both instances. In the first example, converting the 6 point difference to a percent yields a relative change factor of 50%; that is, the smaller number increased by half, a large fraction. In the second example, converting the 6 point difference to a percent yields a relative change factor of 2.8%; that is, the smaller number in the comparison increased by a relatively small fraction. In these examples the application of percent makes it very clear that the difference in the first example is of far greater degree than the difference in the second example. This document uses percentage almost exclusively to describe and highlight degrees of difference and change, both positive (e.g., increase, larger than, etc.) and negative (e.g., decrease, smaller than, etc.)

Final Health Data Caveat

Some data that is used in this report may have inherent limitations, due to sample size, or its age, for example, but is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

Health Rankings

America's Health Rankings

Each year for more than 20 years, America's Health Rankings™, a project of United Health Foundation, has tracked the health of the nation and provided a comprehensive perspective on how the nation—and each state—measures up. America's Health Rankings is the longest running state-by-state analysis of health in the US.

America's Health Rankings are based on several kinds of measures, including *determinants* (socioeconomic and behavioral factors and standards of care that underlie health and well-being) and *outcomes* (measures of morbidity, mortality, and other health conditions). Together the determinants and outcomes help calculate an overall rank.

According to the 2015 America's Health Rankings, North Carolina ranked 31st overall out of 50 states where 1st is considered best.

County Health Rankings

Building on the work of *America's Health Rankings*, the Robert Wood Johnson Foundation, collaborating with the University of Wisconsin Population Health Institute, undertook a project to develop health rankings for the counties in all 50 states. In this project, each state's counties are ranked according to health outcomes and the multiple health factors that determine a county's health. Each county receives a summary rank for its health outcomes and health factors and also for the four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment.

According to the 2015 County Health Rankings for NC, Edgecombe County was ranked:

- 87th overall out of 100 (where 1 is best) for health outcomes
- 87th in length of life
- 72th for quality of life
- 97th overall out of 100 for health factors
- 94th for health behaviors
- 46th for clinical care
- 99th for social and economic factors
- 91st for physical environment

It should be noted that the County Health Rankings serve a limited purpose, since the data on which they are based in some cases is very old and different parameters are measured in different time periods.

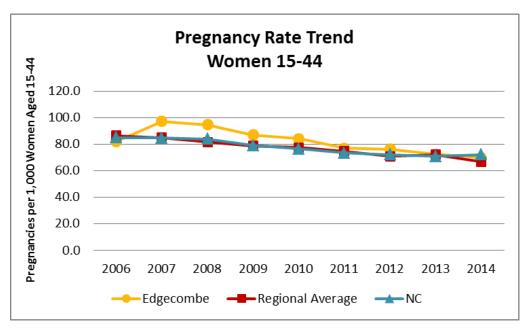
Maternal and Infant Health

Pregnancy

The following definitions and statistical conventions will be helpful in understanding the data on pregnancy:

- Reproductive age = 15-44
- Total pregnancies = live births + induced abortions + fetal death at 20+ weeks gestation
- Pregnancy rate = number of pregnancies per 1,000 women of reproductive age
- Fertility rate = number of live births per 1,000 women of reproductive age
- Abortion rate = number of induced abortions per 1,000 women of reproductive age
- Birth rate = number of live births per 1,000 population (Note that in the birth rate calculation the denominator includes the entire population, both men and women, not just women of reproductive age.) Since the birth rate is a measure of population growth, it was presented among the demographic data in Chapter One of this report.

The NC State Center for Health Statistics data indicates the total pregnancy rates for Edgecombe County, the region and the state have decreased overall since 2007. The 2014 pregnancy rate was 69.9 in Edgecombe County, compared to 66.8 in the Region and 72.1 in NC.



Graph 5. 2006-2014 Pregnancy Rate Trend for Females 15-44. Source: North Carolina State Center for Health Statistics (NC SCHS), 2008 [and other years as noted] County Health Data Books: http://www.schs.state.nc.us/data/databook/

Overall teen pregnancy rates in Edgecombe County have fallen significantly since 2008, though they remain higher than the Region or the state. The 2014 teen pregnancy rate was 50.6 in Edgecombe County, compared to 39.0 for the Region and 32.3 for the state.

- The *number* of teen (women aged 15-19) pregnancies in Edgecombe County has decreased overall from 207 in 2004 to 82 in 2014. The county demonstrates a higher number than the Regional average (which has demonstrated a steady decline from 106 in 2004 to 51 in 2014) but lower than the NC county average (103 in 2014).
- Between 2004 and 2014 there were 47 pregnancies among Edgecombe County adolescent girls (age 14 and younger). Numbers fluctuated from a low of 1 in 2010 to a high of 9 in 2004. In 2014, there were 4 pregnancies among this youngest age group and 13 Region-wide

Among Edgecombe County women age 15-44 the highest pregnancy rates appear to occur among Hispanics; rates among most racial groups have declined but the rate among African American women has changed little over the most recent three years.

Among Edgecombe County teens, the rates over time appear quite variable and are unstable for most groups, so have not been graphed. The rate is highest among African American teens and the Edgecombe county rates tend to be higher than both the Region and the State.

Pregnancy Risk Factors

Smoking During Pregnancy

The percentage of Edgecombe County women who smoked during pregnancy decreased between 2011 and 2014. When compared to Region and state data, the highest percentage of mothers who smoked while pregnant were in Edgecombe County in 2014.

Inadequate Prenatal Care

The percentage of women receiving early prenatal care was lower in Edgecombe County, compared to the Region and the State for most of the period. The percentage of women receiving prenatal care in the first trimester has declined each year in Edgecombe County and NC and has increased slightly in the Region.

Among racial groups, a slightly higher proportion of white women got prenatal care in the first trimester (64.7%) compared to African American women 50.9%) and Hispanic women (51.5%) in 2014. The percentage of African American women receiving first trimester care has decreased each year since 2011.

Pre-Term, Low Weight and Very Low Weight Births

In Edgecombe County from 2010-2014, there percentage of Pre-Term Births (babies born at less than 37 weeks) was 15.7%, compared to the Region at 13.4% and the state at 11.8%. Low Weight Births (babies weighing less than or equal to 2500 grams or 5.5 pounds at birth) occurred in 12.3% of live births in Edgecombe County, compared to the Region (9.9%) and the state (9.0%). The rate of low weight births has declined slightly in Edgecombe County since 2004-2008. The highest rate of low weight births, although unstable, is among African American mothers (14.6%).

Very Low Weight Births (babies weighing less than or equal to 1500 grams or 3.3 pounds at birth) occurred in 2.3% of live births in Edgecombe County, compared to the Region (2.3%) and the state (1.7%). The rate has declined overall since 2002-2006 but continues to remain higher than the state. The highest rate of very low weight births, although unstable, is among African American mothers (2.6%).

Infant Mortality

The total infant mortality rate in Edgecombe County has decreased overall from a high of 13.9 in 2004-2008 to 8.2 in 2010-2014. It should be noted that all rates are technically unstable and should be interpreted cautiously.

The Edgecombe County infant mortality rate has been consistently higher than the state (7.1 in 2010-2014) and the Regional (9.8 in 2010-2014) averages. According to the CDC, the 2013 infant mortality rate in NC was the 10th highest in the nation.

- ▶ The only stable minority infant mortality rates are among African Americans, who demonstrate a higher rate (9.7 in 2010-2014) compared to the overall infant mortality rate (8.2).
- ▶ The infant mortality rate among African Americans in the county is traditionally lower compared to the Region (13.3 in 2010-2014) and the state (12.9) and the Edgecombe County rate has declined since at least 2006-2010.

When looking at the number of infant deaths, the majority of all infant deaths in Edgecombe County occurred among African Americans: 78% (21 of 27) in 2010-2014 compared to 43% in NC.

Life Expectancy

Life expectancy is the average number of additional years that someone at a given age would be expected to live if he/she were to experience throughout life the age-specific death rates observed in a specified reference period. Life expectancies in terms of years of life remaining can be calculated for any age. Because life expectancy is an average, however, a particular person may well die many years before or many years after their "expected" survival, due to life experiences, environment, and personal genetic characteristics.

Life expectancy from birth is a frequently utilized and analyzed component of demographic data. It represents the average life span of a newborn and is considered an indicator of the overall health of a population or community.

Life expectancy rose rapidly in the twentieth century due to improvements in public health, nutrition and medicine, and continued progress in these areas can be expected to have further positive impact on life expectancy in the future. Decreases in life expectancy are also possible, influenced mostly by epidemic disease (e.g. plagues of history and AIDS in the modern era), and natural and man-made disasters. One of the most significant influences on life expectancy in populations is infant mortality, since life expectancy at birth is highly sensitive to the rate of death in the first few years of life.

The overall life expectancy in Edgecombe County is 75.2. When compared to the Regional Mean (77.7) and the state (78.3), Edgecombe County had the shortest life expectancies in all categories (Male, Female, White, Black/African American).

		Se	ex	Race		
County	Overall Male		Female	White	African- American	
Edgecombe	75.2	72.0	78.1	75.7	75.2	
Regional Arithmetic Mean	77.7	75.0	80.3	78.4	76.5	
State Total	78.3	75.8	80.7	78.9	75.9	

Table 5. 2012-2014 State-Level Life Expectancies by Age, Sex, Race and Race by Sex. Source: North Carolina Center for Health Statistics, Life Expectancy - State & County Estimates: http://www.schs.state.nc.us/data/lifexpectancy/

Mortality

Leading Causes of Death

This section describes mortality for the 15 leading causes of death, as well as mortality due to five major site-specific cancers. The list of topics and the accompanying data was retrieved from the NC

SCHS County Health Databook. Unless otherwise noted, the numerical data are age-adjusted and represent five-year aggregate periods.

Table 6 compares the number of deaths and mortality rates for the 15 leading causes of death in Edgecombe County to the state. The causes of death are listed in descending order of rank in Edgecombe County. Differences between Edgecombe County and NC mortality rates are discussed below.

Age-Adjusted Rates (2010-2014)	Edgecombe County No. of Deaths	Edgecombe County Mortality Rate	Edgecombe Rate Difference from NC
1. Diseases of Heart	658	195.3	+17.7%
2. Cancer	667	191.2	+11.3%
3. Cerebrovascular Disease	300	90.4	+110.2%
4. Chronic Lower Respiratory Diseases	117	35.1	-23.7%
5. All Other Unintentional Injuries	96	32.7	+10.5%
6. Diabetes Mellitus	93	27.2	+23.1%
7. Septicemia	66	19.9	+53.1%
8. Pneumonia and Influenza	66	19.7	+11.9%
9. Nephritis, Nephrotic Syndrome, and Nephrosis	65	19.4	+14.1%
10. Alzheimer's disease	62	18.7	-36.0%
11. Chronic Liver Disease and Cirrhosis	57	17.3	+78.4%
12. Unintentional Motor Vehicle Injuries	41	14.4	+6.7%
13. Homicide	29	11.7	+105.3%
14. Suicide	25	8.8	-29.0%
15. Acquired Immune Deficiency Syndrome	24	8.3	+219.2%

Table 6. 2010-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County (CD21B). Source: North Carolina State Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

Mortality rates for 12 of the 15 leading causes of death were higher in Edgecombe County compared to North Carolina rates.

Respondents to the Edgecombe County Community Health Survey reported having received the following LCD-related diagnoses at the percentage noted in parentheses:

Angina/heart disease (7.7%) Cancer (9.2%) Diabetes (18.3%)

Further examination of the leading causes of death by age reveal the top 3 causes of death in Edgecombe County

Age Group	Rank	Cause of Death in Edgecombe County (2010-2014)
00-19	1 2 3	Conditions originating in the perinatal period Motor vehicle injuries All other unintentional injuries
20-39	1 2 3	Homicide Diseases of the heart All other unintentional injuries
40-64	1 2 3	Cancer (all sites) Diseases of the heart Cerebrovascular disease
65-84	1 2 3	Cancer (all sites) Diseases of the heart Cerebrovascular disease
85+	1 2 3	Diseases of the heart Cerebrovascular disease Cancer (all sites)

Table 7. 2010-2014 Ten Leading Causes of Death by County of Residence and Age Group: Ranking, Number of Deaths, and Unadjusted Death Rates per 100,000 Population. Source: North Carolina Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

It is notable that homicide and heart disease are ranked among the leading causes of death in the 20-39 age group. It is also notable that cerebrovascular disease appears as a leading cause of death among the 40-64 and 65-84 age groups.

In North Carolina, the top three leading causes of death for the age groups are:

- Age 0-19: Conditions originating in the perinatal period; Congenital anomalies; Motor vehicle injuries
- o Age 20-39: Other unintentional injuries; Motor vehicle injuries; Suicide
- o Age 40-64: Cancer (all sites); Diseases of the heart; Other unintentional injuries
- Age 65-84: Cancer (all sites); Diseases of the heart; Chronic lower respiratory diseases
- o Age 85+: Diseases of the heart; Cancer (all sites); Alzheimer's disease.

Edgecombe County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rate in 2002-2006	Rate in 2010-2014	% Change 2002-2006 to 2010-2014
1. Diseases of Heart	275.6	195.3	-29.1%
2. Cancer	232.4	191.2	-17.7%
3. Cerebrovascular Disease	106.4	90.4	-15.0%
4. Chronic Lower Respiratory Diseases	44.8	35.1	-21.7%
5. All Other Unintentional Injuries	21.8	32.7	+50.0%
6. Diabetes Mellitus	31.2	27.2	-12.8%
7. Septicemia	16.9	19.9	+17.8%
8. Pneumonia and Influenza	18.8	19.7	+4.8%
9. Nephritis, Nephrotic Syndrome, and Nephrosis	26.3	19.4	-26.2%
10. Alzheimer's disease	24.5	18.7	-23.7%
11. Chronic Liver Disease and Cirrhosis	12.4	17.3	+39.5%
12. Unintentional Motor Vehicle Injuries	24.1	14.4	-40.2%
13. Homicide	13.7	11.7	-14.6%
14. Suicide	11.1	8.8	-20.7%
15. Acquired Immune Deficiency Syndrome	11.7	8.3	-29.1%

Table 8. 2002-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County (CD21B). Source: North Carolina State Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

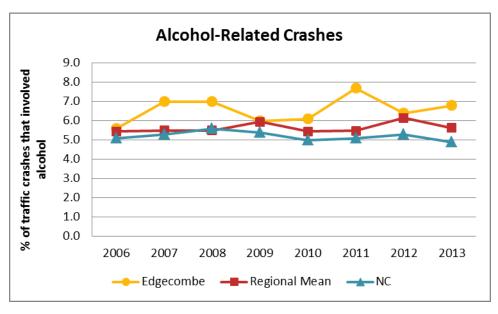
For every leading cause for which there are stable rates available for comparison in 2010-2014, the mortality rate among males is higher than the female mortality rate, except for kidney diseases.

Because diabetes ranks as the 4th Leading Cause of Death among African Americans in Edgecombe County but ranks 10th among whites, it may be illustrative to examine hospital discharges for diabetes (ICD-9 Code 250xx). These data, from VEDG only, are presented in the section of this presentation that considers diabetes as a major factor of morbidity.

Morbidity

Vehicular and Alcohol-Related Motor Vehicle Crashes

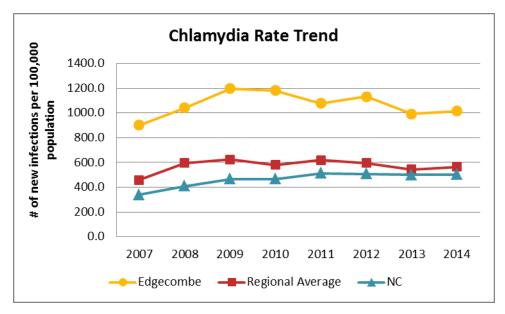
According to the NC Highway Safety Research Center, over the period from 2006 through 2013 an annual average of 6.6% of all traffic crashes in Edgecombe County were alcohol-related. Statewide, the comparable figure was 5.2% while it was 6% across the Region.



Graph 6. Alcohol Related Traffic Crashes 2006-2013. Source: North Carolina Alcohol Facts. Highway Safety Research Center at the University of North Carolina at Chapel Hill: http://www.hsrc.unc.edu/ncaf/crashes.cfm

Sexually Transmitted Infections – Chlamydia

The chlamydia infection rate in Edgecombe County is variable, though it has been approximately double the state rate for the entire period shown. In 2014, there were 557 new cases of chlamydia in Edgecombe County, calculating to a rate of 1,014 compared to 501.9 statewide. Of the 15-24 year olds who were tested for chlamydia in 2011, 11.6% tested positive, compared to 10.9% in NC.

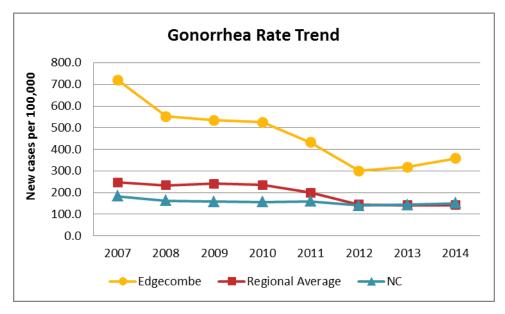


Graph 7. North Carolina Newly Diagnosed Chlamydia Rates by County of Diagnosis and Year of Diagnosis, 2010-2014 Source: 2014 North Carolina HIV/STD Surveillance Report.

Sexually Transmitted Infections - Gonorrhea

The gonorrhea infection rate in Edgecombe County, which had fallen steadily, has increased recently and was higher than both the state and the Region throughout the period cited. In 2014, there were 197 new cases of gonorrhea in Edgecombe County, calculating to a rate of 358.6, more than double the state rate of 150.4.

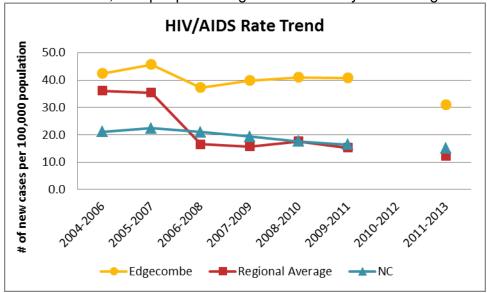
The gonorrhea rate was highest among African Americans in 2006-2010 (the last year for which stratified data is available): 930.8 compared to 596.4 overall.



Graph 8. N.C. Newly Diagnosed Gonorrhea Rates by County of Diagnosis and Year of Diagnosis 2010-2014. Source: 2014 HIV/STD Surveillance Report. Communicable Disease

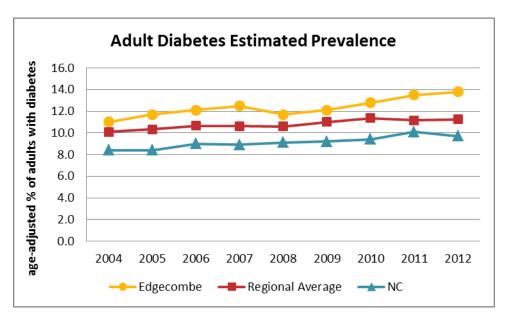
Sexually Transmitted Infections - HIV/AIDs

Although the numbers are too low to yield stable rates, the rate of newly diagnosed HIV infections in Edgecombe County (an average of 28.9 between 2012-2014) was double the comparable state rate (13.4) and was higher in Edgecombe County than any other county in the state. When numbers are aggregated over three-year periods to stabilize them, the Edgecombe County rates are still consistently and significantly higher compared to NC and the Region, despite a recent decrease. At the end of 2014, 328 people in Edgecombe County were living with HIV.



Adult Diabetes

The average prevalence of diabetes among Edgecombe County adults has increased each year since 2008 and was higher than the state and the Region for the entire period examined. Over the 9-year period presented, the Edgecombe County average was 12.4%, compared to 10.8% Region-wide and 9.1% across the state. It is also interesting to note that approximately 18% of respondents to the Edgecombe County Community Health Survey reported having received a diagnosis of diabetes.



Graph 10. County-Level Data, Diagnosed Diabetes Prevalences, North Carolina, 2004 through 2012. Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System: http://www.cdc.gov/diabetes/data/index.html

Because the prevalence of diabetes in Edgecombe County appears to be increasing, it may be illustrative to examine hospital discharges among Edgecombe County residents for diabetes (ICD-9 Code 250xx). The data which was examined was from VEDG only.

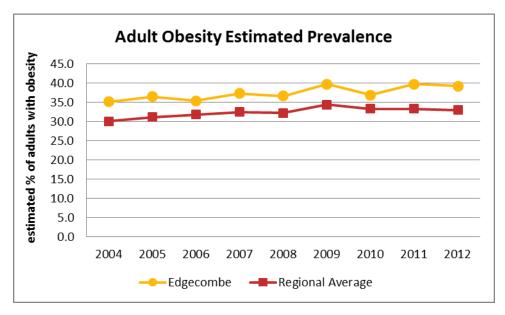
The data analysis revealed the number and percentage of ED discharges under this code for blacks was **two to three times** the comparable figures for whites; the number and percentage of IP discharges among blacks was **twice** the comparable percentage among whites. The percentages of ED discharges among Edgecombe County residents under this code for both females and males were static, but the percentage for females was slightly higher each year. On the other hand, the percentage of IP discharges among females was significantly lower than the comparable percentage among males in every year.

Obesity in Adults

The average prevalence of obesity in Edgecombe County was 37.4% in the period from 2004 through 2012, compared to 32.4 in the Region (State data is not available).

The Edgecombe County percentage was higher than the Region for the entire period presented and increased slightly overall. It is also interesting to note that approximately 52% of respondents

to the Edgecombe County Community Health Survey reported having received a diagnosis of overweight or obesity.



Graph 11. Obesity Prevalence 2004-2012. Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System: http://www.cdc.gov/diabetes/data/index.html

Obesity in Children (Ages 2-4)

There is limited data on the prevalence of childhood obesity in Edgecombe County. Data is collected for three age groups (2-4, 5-11, 12-18), but the only one yielding stable rates in the county was the 2-4 year old group. The data is also not particularly current. The data available covers only children seen in health department WIC and child health clinics and certain other facilities and programs.

According to this NC-NPASS data, in 2010 an annual average of 12.9% of the participating children in Edgecombe County age 2-4 were deemed "overweight", and an additional 14.1% were deemed "obese" (total = 27%). Statewide, 16.1% were overweight and 15.6% were obese, for a total of 31.7%. Across the Region, an average of 16% were overweight and another 16.8% were considered obese, for a total of 32.8%

Asthma

The Edgecombe County rate of hospital discharges with a primary diagnosis of asthma was **more than double** the state rate (233.0 vs. 90.9 in 2014), and has decreased slightly over time (from 251.1 in 2010). Among children aged 0-14, the hospital discharge rate has decreased from being more than 167% higher than the state in 2010 (443.8 vs. 166.0) to being 43% higher than the state in 2014 (207.5 vs. 144.6).

Because, according to NC SCHS, the hospital discharge rate for asthma in Edgecombe County has long been higher than the comparable state rate, it may be illustrative to examine hospital discharges among Edgecombe County residents for asthma (ICD-9 Code 493xx). The data examined were from VEDG only.

The number and percentage of ED discharges under this code for blacks were approximately **three times** the comparable figures for whites; the number and percentage of IP discharges among blacks was lower than the comparable figures among whites in two of the three years cited.

Because, according to NC SCHS, the hospital discharge rate for asthma among children in Edgecombe County has long been higher than the comparable state rate, it may be illustrative to examine hospital discharges among Edgecombe County residents for asthma (ICD-9 Code 493xx) by age. The data examined were from VEDG only.

The percentage of ED discharges for children age 14 and younger averaged 40% of all ED discharges under this code; the comparable percentage for *all* remaining age groups averaged 60%. The number and percentage of IP discharges among children age 14 and younger were significantly lower than the comparable figures for all remaining age groups.

Mental Health

Between 2006 and 2014, the number of Edgecombe County residents served by the Area Mental Health Program *increased* overall by 81%, much of that increase occurring between 2012 and 2014, when utilization jumped from 1,866 to 2,617 to 3,877. Over the same 9-year period the number of Edgecombe County residents served by State Psychiatric Hospitals *decreased* by 91%. In 2014, 27 persons were served. During the same 9-year period, a total of 328 Edgecombe County residents were served by NC State Alcohol and Drug Abuse Treatment Centers (ADATCs), with the number varying from year to year.

The LME/MCO serving Edgecombe County is Eastpointe, located in Beulaville (in Duplin County). Eastpointe also serves the following counties: Bladen, Columbus, Duplin, Greene, Lenoir, Nash, Robeson, Sampson, Scotland, Wayne, and Wilson.

Eastpointe's call center provides access information, assessment, crisis care and referrals to providers 24 hours a day, 365 days a year. They "manage a network of licensed practitioners and comprehensive, independent, and specialty provider agencies who offer a variety of services designed to meet consumer needs." Source:

http://www.eastpointe.net/aboutus/Eastpointe%20Brochure%20Eng%2002222016.pdf

It is interesting to note that approximately 32% of Edgecombe County Community Survey respondents reported having received a diagnosis of depression or anxiety.

ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses composed approximately 1% of all ED discharges over the three-year period cited; IP discharges for mental health diagnoses composed approximately 0.5% of all IP discharges. These diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

Edgecombe County Populations At-Risk for Poor Health Outcomes

Primary and Secondary data gathered identifies the following groups as at-risk or populations with health disparities:

- The uninsured and under-insured
- Persons living in poverty
- Minorities
- Males, who generally have poorer health outcomes than females
- Persons with poor access to transportation, because travel may be necessary to reach certain healthcare providers
- The elderly, because healthcare services may not be sufficient to accommodate their needs as their population grows
- Pregnant women and the children they carry, since rates of prenatal care appear to be decreasing; frequency of smoking during pregnancy is significantly higher in county than statewide.

Chapter Five: Community Watch List

After Secondary data was compiled, a watch list of noteworthy Health Problems was developed. The following items were identified as health problems in Edgecombe County:

- Cancer especially prostate cancer and breast cancer, and particularly among African Americans; cancer screening activities may be inadequate
- Stroke the county mortality rate has long been higher than NC rate and has been increasing lately
- Septicemia the county mortality rate is higher than the NC rate and has been increasing
- Liver disease county mortality rate is higher than NC rate and has been climbing for the past five years
- Diabetes prevalence is increasing, and African Americans suffer disproportionate mortality
- Non-motor vehicle unintentional injuries (including poisonings, which in turn include drug overdoses) – mortality rate is higher than NC rate and climbing
- Chlamydia and gonorrhea infections incidence rates have long been higher than comparable NC rates
- Asthma prevalence in county higher than in state and region

Chapter Six: Community Feedback

Community Survey Methodology

Edgecombe County Health Department (ECHD), VEDG and the Vidant Health system partnered to create a community survey designed to receive feedback from community members regarding health. The survey questions were adapted from the survey questionnaire provided by the *Community Assessment Guidebook: North Carolina Community Health Assessment Process*, published by the NC Office of Healthy Carolinians/Health Education and the NC State Center for Health Statistics (December 2011). The survey was implemented online and in paper copies and in English and Spanish. A total of 471 community members responded to the survey. The survey questions were designed to obtain feedback regarding health issues within the community, as well as to better understanding health behaviors and issues experienced by survey participants and their family members. The survey responses shave been incorporated throughout this document.

Community Small Group Discussions Methodology

In addition to the survey questionnaire, The Edgecombe County Department of Public Health partnered with VEDG Hospital and the community to assemble and complete Community Small Group Discussions. Community Health Assessment coordinators served as Group Moderators and completed 4 small group discussions throughout Edgecombe County.

Community Feedback Results

Key Feedback Received from all Community Feedback (survey and small group discussions):

- Participants valued a strong sense of community as a valued benefit of living in Edgecombe County.
- The economy and lack of employment were consistently identified as primary concerns among participants.
- Participants identified the need for more community health education related to eating healthy and substance abuse.
- Participants were asked to respond to a confidential survey question about their current medical diagnoses; responses revealed the 3 most common diagnoses among both genders, whites and African Americans are: high blood pressure, high cholesterol, and overweight/obesity.
- The uninsured, underinsured, and individuals who cannot afford services were consistently identified as groups not receiving necessary healthcare.
- Substance Abuse and Mental Health related concerns were frequently identified as health problems within Edgecombe County.

Chapter Seven: Issue Prioritization

In June of 2016, members of the Edgecombe County Rural Health Network met to discuss the Community Health Needs Assessment. Assessment results were shared and a formal process was utilized to determine Edgecombe County's community health priorities.

Assessment data (primary and secondary) were shared with key stakeholders. Stakeholders reviewed the information, asked questions, and shared additional data from their respective organizations. Following a comprehensive review of all data provided, each participant was asked to identify key trends for further evaluation. A list was developed which included 12 potential priorities for further discussion and consideration.

The following criteria were used to evaluate the potential health priorities:

- 1. The Magnitude of the Problem How many persons does the problem affect?
- 2. **Seriousness of the Consequences** What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community such as social or economic burdens?
- 3. **Feasibility of Correcting the Problem** Is the problem amenable to interventions? Is the problem preventable? Is the community concerned about the problem? Is the intervention feasible scientifically as well as acceptable to the community?

Prioritization Process

Following additional discussion, participants were then guided through a nominal group technique (NGT) where decision-making could be finalized. The nominal group technique was utilized to assure everyone's feedback and opinions were considered (as opposed to traditional voting, where the majority rules). During this process, some priorities were combined as appropriate to finalize the top health priorities for Edgecombe County. As a result of this process, ECHD and VEDG will work to develop action plans addressing the top community health issues.

Edgecombe County Health Priorities for 2016-2019

- Chronic Disease Prevention and Management
- STDs/ HIV
- Mental Health & Substance Abuse
- Access to Care

Appendices

Appendix A: Secondary Data Sources

Sheila S. Pfaender, Public Health Consultant, accessed data from the following sources to obtain and analyze secondary data:

- 2014 North Carolina HIV/STD Surveillance Report
- 2015 County Health Rankings & Roadmaps.County Health Rankings and Roadmaps website.
- America's Health Rankings: http://www.americashealthrankings.org/
- Authorized Medicaid and Health Choice Enrollment Reports
- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System & National Diabetes Surveillance System
- Child Welfare, Reports of Abuse and Neglect section
- Dialysis Facility Compare, http://www.Medicare.gov/Dialysis/Include/DataSection/Questions
- Duncan, D.F., Kum, H.C., Flair, K.A., and Stewart, C.J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Special data request, March 2011. Also available online through the University of North Carolina at Chapel Hill Jordan Institute for Families website at http://ssw.unc.edu/ma/. Footnotes: Last updated September 2014.
- KIDS COUNT Data Center, a Project of the Annie E. Casey Foundation website: http://datacenter.kidscount.org/
- Highway Safety Research Center at the University of North Carolina at Chapel Hill
- National Center for Health Statistics
- North Carolina Administrative Office of the Courts (AOC)
- North Carolina Coalition to End Homelessness
- North Carolina Department of Administration, Council for Women
- North Carolina Department of Commerce
- North Carolina Department of Health and Human Services
- North Carolina Department of Justice, State Bureau of Investigation
- North Carolina Department of Public Instruction, Data and Statistics
- North Carolina Department of Public Safety, Juvenile Justice
- North Carolina Department of Revenue
- North Carolina Division of Motor Vehicles (DMV)
- North Carolina Electronic Disease Surveillance System (NC EDSS)
- North Carolina Employment Security Commission
- North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS)
- North Carolina Office of State Budget and Management
- North Carolina State Center for Health Statistics (NC SCHS)
- North Carolina Vital Statistics
- Public Schools of North Carolina
- Sheps Center for Health Services Research, North Carolina Health Professions Data System: http://www.shepscenter.unc.edu/hp/publications.htm
- State Laboratory of Public Health (SLPH). The SLPH provides testing for the Infertility Prevention Project (IPP), which includes testing for chlamydia.
- U.S. Census Bureau, American FactFinder
- Vidant Health Hospital Utilization Data

Appendix B: Secondary Data and Hospital Utilization Data Indicators

2016 CHNA Process Secondary Data Indicators

TOPIC NOTES

Demographic Data

Population by Sex, Age Counts and percentages
Population by Race, Ethnicity Counts and percentages

Population Growth Trend Percent growth by decade; projected to 2030

Birth Rate Trend Birth rate over several years

Point-in-time profile of proportion of population by

Population by Age Group age group

Elderly Population Growth Trend Population age 65 and older, by 10-year age groups

Grandparents responsible for grandchildren; single-

Family Composition parent families
Military Veterans By age group

Household Language Reveals proportion not facile in English

Foreign Born Population Date of entry of foreign-born population, by decade Voting Trend Registered voters and voter turnout per election Urban and Rural Population Number and proportion in both groups over time

School Enrollment Trend Number enrolled plotted over time

Proportion HS and College graduates; SAT scores; End

Educational Attainment of grade test results

Educational Investment Federal, state and local investment, by school district

High School Drop Out Trend By school district
High School Graduation Rate By school district

High School Graduation Rate by Race Stratification offered where valid

Socioeconomic Data

Income

Per capita, median family and median household

income

100% level, overall and stratified by age group (i.e.,

Poverty adult and child) and race

Median monthly cost for mortgage and for rent,

Housing Cost multiple time periods

Percent spending more than 30% of household income

Housing Cost on housing

Homeless Population Trend Point-in-time counts, by age group and military status

Percent students eligible OR receiving F&R, by several

Free and Reduced Lunch Trend school years

Point-in-time proportional employment by sector;

Sector Employment average weekly wage by sector

Annual unemployment rate, plotted for at least 10

years

Unemployment Rate Trend County Tier Designation From NC Department of Commerce County Revenue Indicators Receipts, gross and sales tax-related Rate, over time for several years Crime Trend (Homicide and Index) Crime Trend (Violent) Rate, over time for several years Crime Trend (Property) Rate, over time for several years

Rates of undisciplined and delinquent youth Juvenile Crime

Counts and rates High School Reportable Crimes

Number of complaints; types of perpetrators, by

percent Sexual Assault

Number of complaints **Domestic Violence**

Child Abuse Number of reports and substantiated cases Adult Abuse Number of reports and substantiated cases

Health Data

Prenatal Care Trend

Ranking of NC among 50 states America's Health Rankings

Ranking of target county among 100 NC counties County Health Rankings

Counts and rates reported over time Pregnancy Trend (Ages 15-44) For most recently reported period only Pregnancy Rate by Race (Ages 15-44) Abortion Trend (Ages 15-44) Counts and rates reported over time Pregnancy Trend (Ages 15-19) Counts and rates reported over time For most recently reported period only Pregnancy by Race (Ages 15-19) Counts and rates reported over time Abortion Trend (Ages 15-19)

Proportion of births to mothers who smoked when

pregnant; plotted over time Prenatal Smoking Trend

> Proportion of births to mothers who got prenatal care in first three months of pregnancy; plotted over time

Prenatal Care Trend by Race Where stratification is valid

Proportion of births at less than 5.5 pounds Low Birth Weight Trend Very Low Birth Weight Trend Proportion of births at less than 3.3 pounds

Death rate among infants under the age of one year Infant Mortality Trend

Infant Mortality by Race Where stratification is valid

Years of expected life for individual born in a defined

period Life Expectancy

Tracks mortality rates for 15 Leading Causes of Death Cause of Death

Mortality rate for top three causes of death, by major

age groups Death by Age Group

Heart Disease Mortality Trend

Heart Disease Mortality by Race Where stratification is valid

Total Cancer Mortality Trend

Where stratification is valid Total Cancer Mortality by Race

New cases per defined time periods Total Cancer Incidence Trend

For four major site-specific cancers: lung, breast,

prostate and colorectal Cancer Mortality by Site

New cases per defined time periods for four major site-specific cancers sited above Cancer Incidence by Site Lung Cancer Mortality Trend Where stratification is valid Lung Cancer Mortality by Race Lung Cancer Incidence Trend New cases per defined time periods **Breast Cancer Mortality Trend** Where stratification is valid Breast Cancer Mortality by Race Breast Cancer Incidence Trend New cases per defined time periods Prostate Cancer Mortality Trend Where stratification is valid Prostate Cancer Mortality by Race New cases per defined time periods Prostate Cancer Incidence Trend Colorectal Cancer Mortality Trend Where stratification is valid Colorectal Cancer Mortality by Race New cases per defined time periods Colorectal Cancer Incidence Trend **CLRD Mortality Trend** Where stratification is valid CLRD Mortality by Race Stroke Mortality Trend Where stratification is valid Stoke Mortality by Race Other Injury Mortality Trend Where stratification is valid Other Injury Mortality by Race Alzheimer's Mortality Trend Where stratification is valid Alzheimer's Mortality by Race **Diabetes Mortality Trend** Where stratification is valid Diabetes Mortality by Race Pneumonia and Influenza Mortality Trend Pneumonia and Influenza Mortality by Where stratification is valid Race Unintentional Motor Vehicle Injury (UMVI) Mortality Trend Unintentional Motor Vehicle Injury Where stratification is valid (UMVI) Mortality by Race Suicide Mortality Trend Where stratification is valid Suicide Mortality by Race Kidney Disease Mortality Trend Where stratification is valid Kidney Disease Mortality by Race Septicemia Mortality Trend Where stratification is valid Septicemia Mortality by Race Liver Disease Mortality Trend Where stratification is valid Liver Disease Mortality by Race Homicide Mortality Trend Where stratification is valid Homicide Mortality by Race **AIDS Mortality Trend** Where stratification is valid AIDS Mortality by Race Adult Diabetes Prevalence Trend Child Obesity Prevalence (2-4 years)

Number of unintentional fatal falls, by age group

Injury Mortality - Unintentional Falls

Motor Vehicle (MV) Crashes, Alcohol, Trend

Motor Vehicle (MV) Crashes, Alcohol, Detail

Injury Mortality - Poisoning Chlamydia Infection Rate Trend Gonorrhea Infection Rate Trend

HIV Incidence Trend

Communicable Disease

Inpatient Hospitalization Rate Trend Dental Service Utilization by Medicaid Recipients

Area Mental Health Program Utilization Trend

Alcohol and Drug Treatment Center Utilization Trend

Psychiatric Hospital Utilization Trend

Number of percent of crashed related to alcohol, plotted over time

Number and percent of crashes by type (e.g., fatal, non-fatal, property only) related to alcohol Number of cases and rates

New cases identified annually, plotted over time Counts by causative organism or disease; must be obtained from local health department For state-defined list of health conditions

Stratified by age group (i.e., adults and children)

Number using the service, plotted over several years

Number using the service, plotted over several years Number using the service, plotted over several years

Health Resource Data

Health Professional Ratios

Health Professionals by Type Health Insurance Coverage Estimates Trend

Medicaid Eligibles Trend

Long-Term Care Facilities

Home Health Providers

School Nurses

Hospitals

Other Health Care Facilities

Number of providers per 100,000 population for MDs, Primary Care MDs, RNs, Dentists, and Pharmacists Number of active providers in major categories of health care specialties

Percent uninsured, by age group

By Department of Social Services Program Areas

Counts of beds, by type of facility (e.g., nursing homes,

homes for the aged, family care homes, etc.)

Counts of providers, by category (e.g., home health,

hospice, etc.)

Nurse to student ratio

List; counts of beds and loose description (list) of

major services

Census of dialysis centers, ambulatory surgery centers,

urgent care centers, cardiac rehab centers, etc.

Hospital Utilization Data Fields

Hospital Code (to identify specific Vidant Hospital – ie. VMC, VEDG, etc) Encounter # (to serve as unique identifier) Admit FY Discharge FY LOS Gender Race/Ethnic Group Age Age Group (Pediatric, Adult, Geriatric) County City Numerical Zip Code **Payor Category** DRG Code / DRG Description ICD9 Diagnosis Code / ICD9 Diagnosis Description ICD9 Procedure Code / ICD9 Procedure Description

Appendix C: Primary Data Survey and Small Group Discussion Questions

Welcome to My Survey

Thank you for participating in our survey. Your feedback is important.

<u> 2016</u>	Eagecombe	e County Co	<u>ommunity i</u>	Health Surv	<u>/ey (Englisn)</u>

*	Do you live in Edgecon	nbe County?			
	Yes - What town do you	u live in? (please choose	"Next")		
	No - We appreciate yo	ur time but need to ask tha	at you do not complete the su	urvey (please choose "Ne	xt")
	2016	Edgecombe Cou	nty Community Hea	alth Survey (Engl	ish)
*	If you answered "Yes,"	what town do you liv	ve		
	2016	Edgecombe Cou	nty Community Hea	alth Survey (Engl	ish)
	Part 1: Quality of L				
	Please tell us whethe with each of the next		gree", "disagree", "n	eutral", "agree" or	"strongly agree"
	Q1. How do you feel a		•	_	ounty"?
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
			\bigcirc		

* Q2: How do you feel ab Consider the quality and	-	,	•	
play in this county.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
\bigcirc	\bigcirc	\bigcirc	\circ	\circ
* Q3. How do you feel ab Consider the county's el for		•		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	\circ	\circ	\circ	\circ
* Q4. How do you feel ab County"? Consider the i and Strongly Disagree		• •		
Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
Q5. How do you feel ab Consider how safe you for centers in the county. Strongly Disagree		•	•	
* Q6. How do you feel ab in Edgecombe County"? faith Strongly Disagree		• •		
		\bigcirc		
2016 [Edaecombe Cour	nty Community He	alth Survev (Eng	lish)
Part 2: Community				

Q7: The next set of questions will ask about community problems, issues, and services that are important to you. Remember your choices will not be linked to you in any way.

Please look at this list of community issues.	In your opinion, which one issue most affects the
auality of life in Edgecombe County? (Please	chanse anly one)
Pollution (air, water, land)	Lack of community support
Dropping out of school	Elder abuse
Low income/poverty	Child Abuse
Homelessness	O Domestic Violence
Lack of/inadequate health insurance	Violent crime (murder, assault)
Hopelessnes	Theft
Discrimination/racisim	Rape/sexual assualt
Other (please specify)	
Q8. a) In your opinion, which one of the following	·
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only o	services needs the most improvement in
Q8. a) In your opinion, which one of the following	services needs the most improvement in
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only o	services needs the most improvement in one.)
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control	services needs the most improvement in one.) Healthy family activities
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options	services needs the most improvement in one.) Healthy family activities Education / Schools
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people More affordable health services	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options Availability of employment Higher paying employment
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people More affordable health services More affordable/better housing Number of health care providers (please provide what kind on the care)	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options Availability of employment Higher paying employment
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people More affordable health services More affordable/better housing Number of health care providers (please provide what kind on the control of the cont	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options Availability of employment Higher paying employment Bin Road maintenance
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people More affordable health services More affordable/better housing Number of health care providers (please provide what kind to the control of the cont	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options Availability of employment Higher paying employment Road maintenance Road safety None
Q8. a) In your opinion, which one of the following neighborhood or community? (Please choose only of Animal control Child care options Elder care options Services for disabled people More affordable health services More affordable/better housing Number of health care providers (please provide what kind on the control of the cont	services needs the most improvement in one.) Healthy family activities Education / Schools Positive teen activities Transportation options Availability of employment Higher paying employment Road maintenance Road safety None

Q8. b) If your answer to Q8. a) is "number of health	care providers," what kind?
Addictionology (alcohol and drug abuse)	Endocrinology (glands)
Rheumatologist (arthritis)	Cardiac, Cardiovascular (heart and blood vessels)
Urology (bladder, prostate, urinary)	Hypertension (high blood pressure)
Hematology (blood vessels)	Maxillofacial (jaws, mouth and face)
Orthopedic (bones, joints, muscles and spine)	Nephrology (kidneys)
Oncology (cancer and malignant diseases)	Pulmonology (lungs / respiration)
Thoracic (chest)	Psychiatry (mental health)
Obstetrics (childbirth / pregnancy)	Neurology (nervous system)
Pediatric (children)	Neonatology (newborn / infants)
Proctology (colon and rectal)	Rinology (nose)
Gastroenterologist (digestive system)	Bariatric (obesity)
Otology (ear)	Dermatology (skin)
Otolaryngology (ear, nose, throat)	Laryngology (throat)
Geriatrics (elders)	Radiology (x-ray / imaging)
Gynecology (female reproductive)	

2016 Edgecombe County Community Health Survey (English)

Part 3: Health Information

abo			pehavior do people in your own	com	nmunity need more
\bigcirc	Eating well/nutrition	\bigcirc	Using child safety seats	\bigcirc	Substance abuse prevention (ex: drugs
\bigcirc	Exercising/fitness	\bigcirc	Using seat belts	\bigcirc	Suicide prevention
\bigcirc	Managing weight	\bigcirc	Driving safely	\bigcirc	Stress management
\bigcirc	Going to a dentist for check-	\bigcirc	Quitting smoking/tobacco use		Anger management
\bigcirc	Going to the doctor for yearly check-	\bigcirc	Child care/parenting	\bigcirc	Domestic violence prevention
		\bigcirc	Elder care	\bigcirc	None
\bigcirc	Getting prenatal care during pregnanc	y	Caring for family members with specia	I	
\bigcirc	Getting flu shots and other vaccines				
\bigcirc	Preparing for an emergency disaster	\bigcirc	Preventing pregnancy and sexually		
\bigcirc	Other (please specify)				
* Q10). Where do <u>you</u> get most of yo	ur h	ealth-related (Pleas	e ch	oose only one.)
\bigcirc	Friends and family	\bigcirc	Internet	\bigcirc	Help lines
0	Friends and family Doctor/nurse	\bigcirc	Internet My child's school	\bigcirc	Help lines Books/magazines
0				\bigcirc	
0	Doctor/nurse	0 0 0	My child's school	0	
0 0 0 0	Doctor/nurse Pharmacist		My child's school Hospital		
	Doctor/nurse Pharmacist Church		My child's school Hospital		
	Doctor/nurse Pharmacist Church		My child's school Hospital		
	Doctor/nurse Pharmacist Church		My child's school Hospital		
O O O O O O O O O O O O O O O O O O O	Doctor/nurse Pharmacist Church Other (please specify)	() () () () () () ()	My child's school Hospital	Out?	
Q11	Doctor/nurse Pharmacist Church Other (please specify)	e(s) v	My child's school Hospital Health department	Out?	
Q11	Doctor/nurse Pharmacist Church Other (please specify)	e(s) v	My child's school Hospital Health department	out?	
Q11	Doctor/nurse Pharmacist Church Other (please specify)	e(s) v	My child's school Hospital Health department	out?	
Q11	Doctor/nurse Pharmacist Church Other (please specify)	(e(s) v	My child's school Hospital Health department	Out?	
Q11	Doctor/nurse Pharmacist Church Other (please specify)	() () () () () () () () () () () () () (My child's school Hospital Health department	Out?	

* Q12. Which of the following (Check all that apply.)	health topics do you think your c	hild/children need(s) more	information
Dental hygiene	Reckless driving/speeding	Alcohol	
Nutrition	Eating Disorders	Mental health is:	sues
Tobacco	Asthma management	Suicide preventi	on
STDs	Diabetes management		
Drug Abuse	Sexual intercourse		
Other (please specify)			
0016 Ed.	samba Caunty Community	Hoolth Cumron (English	
Part 4: Personal Health	ecombe County Community	Health Survey (English	1)
Fait 4. Feisonai neaith			
* Q13. Would you say that, in	general, your health is		
* Q13. Would you say that, in Excellent	general, your health is Good	Poor	
		Poor Don't know/Not	sure
Excellent Very good	Good Fair	Don't know/Not	
Excellent Very good * Q14. Have you ever been tol	Good Fair d by a doctor, nurse, or other hea	Don't know/Not	
Excellent Very good	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol	Good Fair d by a doctor, nurse, or other hea	Don't know/Not	
ExcellentVery good* Q14. Have you ever been tol following health conditions?	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
ExcellentVery good* Q14. Have you ever been tol following health conditions?	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol following health conditions? Asthma Depression or anxiety	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol following health conditions? Asthma Depression or anxiety High blood pressure	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol following health conditions? Asthma Depression or anxiety High blood pressure High cholesterol	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol following health conditions? Asthma Depression or anxiety High blood pressure High cholesterol Diabetes (not during	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of
Excellent Very good * Q14. Have you ever been tol following health conditions? Asthma Depression or anxiety High blood pressure High cholesterol Diabetes (not during Osteoporosis	Good Fair d by a doctor, nurse, or other hea (DK= Don't know/ Not	Don't know/Not	ave any of

Mammogram (if woman) Bone density test Vision screening Prostate cancer screening (if man) Physical exam Cardiovascular screening Colon/rectal exam Pap smear (if woman) Dental cleaning/X-rays Blood sugar check Flu shot None of the above Cholesterol screening Blood pressure check Hearing screening Skin cancer screening				
Colon/rectal exam Pap smear (if woman) Dental cleaning/X-rays Blood sugar check Flu shot None of the above Cholesterol screening Blood pressure check Hearing screening Skin cancer screening				
Blood sugar check Flu shot None of the above Blood pressure check Hearing screening Skin cancer screening				
Cholesterol screening Blood pressure check Hearing screening Skin cancer screening				
Hearing screening Skin cancer screening				
* Q16. In the past 30 days, have there been any days when feeling sad or worried kept you from go about your normal business?	ing			
Yes No Don't know/Not sure)			
Q17. During a normal week, other than in your regular job, do you engage in any physical activity exercise that lasts at least a half an hour? Yes No (skip to question #20) Don't know/Not sure				
2016 Edgecombe County Community Health Survey (English)				
2010 Eagoomiso Sounty Community Ficultif Carvoy (English)				
Q18. Since you said yes, how many times do you exercise or engage in physical activity during a n	ormal			
week? (Write number)				
week? (Write number) Q19. Where do you go to exercise or engage in physical activity? Check all that apply.				
week? (Write number) Q19. Where do you go to exercise or engage in physical activity? Check all that apply. YMCA/Wellness Center Public Recreation Center Home				
week? (Write number) Q19. Where do you go to exercise or engage in physical activity? Check all that apply. YMCA/Wellness Center Public Recreation Center Home Park Private gym				
week? (Write number) Q19. Where do you go to exercise or engage in physical activity? Check all that apply. YMCA/Wellness Center Public Recreation Center Home				

	e the reasons you do not exercise fo	r at least a half hour during a
normal week? You can give as mar	ny of these reasons as you need to.	
My job is physical or hard labor	I don't like to e	exercise
Exercise is not important to me	It costs too mu	uch to exercise
I don't have access to a facility that ha	as the things I need, like There is no sa	fe place to exercise
I don't have enough time to exercise	l'm too tired to	
I would need child care and I don't hat I don't know how to find exercise partr	I don't know	
Other (please specify)		
Q21. How many times each week event. etc.)?	do you eat a meal outside the home	e (restaurants, fast food, sporting
	1-2 times per week	2-3 times per month
2-3 times each day		
once each day	3-5 times per week	rarely/never
* Q22. In the previous 12 months, w before you got money to buy Yes	vere you ever worried about whethe	er your family's food would run
^k Q23. Have you been exposed to se	econdhand smoke in the past year?	
Yes	No (Skip to question #25)	Don't know/Not sure (Skip to question

* Q24. If yes, where do you thinl	k you are exposed to secondhand sn	noke most often? (Check only one
nlace)		
Home	Hospitals	School
Workplace	Restaurants	I am not exposed to second hand
Other (please specify)		
(F 1 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		
* Q25. Do you currently smoke?	(Include regular smoking in social s	ettings.)
Yes	No (If no, s	skip to question #27)
2016 Edgec	ombe County Community Hea	Ith Survey (English)
* Q26. If yes, where would you g	o for help if you wanted to	
Quit Line NC	Pharmacy	I don't know
Doctor	Private counselor/therapist	Not applicable; I don't want to quit
Church	Health Department	
Other (please specify)		
* Q27. Have you had a flu vaccin	e in the past year?	
Yes	○ No	Don't know/not sure
2016 Edgec	ombe County Community Hea	Ith Survey (English)
Part 5: Access to Care/Fa	mily Health	

Q28. Where do you go mo	ost often when you are sick	k? (Choose only one please.)
Doctor's office	Hospital	Urgent Care Center
Health department	Medical Clinic	
Other (please specify)		
Q29. Do you currently have Please choose all that apple		ms of health insurance or health care
Health insurance my e	mployer	Health insurance through Health
Health insurance my s	pouse's employer	Insurance Marketplace
Health insurance my so	chool	☐ Medicar
Health insurance my periodes	arent or my parent's	Veteran's Administration
Health insurance I bou	ght	No health insurance plan of any
Other (please specify)		
		getting the health care you needed for you
or for a family member fro	m any type of health care	provider, dentist, pharmacy, or other
Yes	No (Skip to que	estion #33) Don't know/Not sure
2016 Ed	gocombo County Com	amunity Hoolth Survey (English)
2016 Ed	gecombe County Con	nmunity Health Survey (English)

getting health care from? You can choose as	many of these as you need to.
Dentis	Health
General	Hospita
Eye care/ optometrist/	Urgent Care
Pharmacy/	Medical
Pediatricia	Specialist (What
OB/GY	
Other (please specify)	
Q31. b) If your answered "Specialist" in Q31	. a) please provide what type of specialist(s)
Addictionology (alcohol and drug abuse)	Endocrinology (glands)
Rheumatologist (arthritis)	Cardiac, Cardiovascular (heart and blood vessels)
Urology (bladder, prostate, urinary)	Hypertension (high blood pressure)
Hematology (blood vessels)	Maxillofacial (jaws, mouth and face)
Orthopedic (bones, joints, muscles and spine)	Nephrology (kidneys)
Oncology (cancer and malignant diseases)	Pulmonology (lungs / respiration)
Thoracic (chest)	Psychiatry (mental health)
Obstetrics (childbirth / pregnancy)	Neurology (nervous system)
Pediatric (children)	Neonatology (newborn / infants)
Proctology (colon and rectal)	Rinology (nose)
Gastroenterologist (digestive system)	Bariatric (obesity)
Otology (ear)	Dermatology (skin)
Otolaryngology (ear, nose, throat)	Laryngology (throat)
Geriatrics (elders)	Radiology (x-ray / imaging)
Gynecology (female reproductive	

* Q32. Which of these problems processes as many of the care? You can choose as many of the care?		member from getting the necessary
No health	D	entist would not take my/our insurance or
Insurance didn't cover what I/v	we N	o way to get
My/our share of the cost (deductib was too high.	ctible/co-pay) M	edical office not open when
	D	idn't know where to
Hospital would not take my/ou	r C	ouldn't get an
Pharmacy would not take my/o insurance or Medicaid.	\Box T	ne wait was too
Other (please specify)		
Private counselor or Support group (e.g., AA. Al- Other (please specify)	O School O Don't	O Doctor Minister/religious
Part 6: Emergency Prepared		y Health Survey (English)
* Q34. Does your household have w	orking smoke and carbon	monoxide detectors? (Mark only one.)
Yes, smoke detectors	○ No	On't know/ Not
○ Yes,	Yes, carbon monoxic detectors only	le
* Q35. Does your family have a basi (These kits include water, non-peri	• , ,, ,	prescriptions, first aid supplies, flashlight and
batteries, non-electric can opener.	blanket, etc.)	
○ Yes	No (Skip to question	On't know/Not sure (Skip to question 37)

7. What would be your mair	n way of getting information from auth	norities in a large-scale disaster
Televisio	Text message (emergency alert	Neighbors
Internet	Radio	On't know/Not sure
Social networking site	Print media (ex: (newspaper)	
Other (please specify)		
	unced a mandatory evacuation from y	our neighborhood or community
		our neighborhood or community Don't know/Not sure (go to ques
rge-scale disaster or emerge Yes (Skip to question #40)	ency, would you evacuate?	Don't know/Not sure (go to ques
rge-scale disaster or emerge Yes (Skip to question #40)	ency, would you evacuate? No (go to question #39)	Don't know/Not sure (go to ques
rge-scale disaster or emerge Yes (Skip to question #40) 2016 Edgec	ency, would you evacuate? No (go to question #39)	Don't know/Not sure (go to quest
rge-scale disaster or emerge Yes (Skip to question #40) 2016 Edgec	ency, would you evacuate? No (go to question #39) ombe County Community Healt! reason you might not evacuate if aske	Don't know/Not sure (go to quest
Yes (Skip to question #40) 2016 Edgec What would be the main	ency, would you evacuate? No (go to question #39) ombe County Community Healt! reason you might not evacuate if aske Concern about traffic jams and inability to get out Health problems (could not	Don't know/Not sure (go to quest
Yes (Skip to question #40) 2016 Edgec 9. What would be the main Lack of Concern about leaving	Pency, would you evacuate? No (go to question #39) No (go to question #39) Ombe County Community Healt! reason you might not evacuate if aske Concern about traffic jams and inability to get out	Don't know/Not sure (go to quest

Part 7: Demographic Questions

Q40. How old are you? (Mark age category.)					
15 - 19	40 - 44		65 - 69		
20 - 24	45 - 49		70 - 74		
25 - 29	50 - 54		75 - 79		
30 - 34	55 - 59		80 - 84		
35 - 39	60 - 64		85 or older		
Q41. Are you Male or Female?					
Male		Female			
Q42 .a) Are you Hispanic, Latino, or Spanish origin?					
Yes		No (If no, skip to	o #43)		
2016 Edgecom	nhe County Com	munity Health	Survey (English)		
2010 Lugecom	ibe county con	illiullity Health	Survey (English)		
Q42. b) If yes, are you?					
Mexican, Mexican American, or	Puerto Rican		Cuban		
Other Hispanic or Latino (please specify)					

race.)		
White		
Black or African		
American Indian or Alaska N	Varive (List tribe(s) including	
Asian		
Other Asian including Japane	ese, Chinese, Korean, Vietnameso	e, and
Pacific Islander including Na	ntive Hawaiian, Samoan, Guamar	nian/
Other race not listed above (please	e write in race)	
Q44. a) Do you speak a language	e other than English at home?	
Yes	O No (If n	o, skip to #45)
2042 = 1		W 0 (5 11 1)
2016 Edgeco	mbe County Community Ho	ealth Survey (English)
2016 Edgeco	mbe County Community Ho	ealth Survey (English)
		ealth Survey (English)
Q44. b) If yes, what language do		ealth Survey (English)
		ealth Survey (English)
		ealth Survey (English)
	you speak at home?	ealth Survey (English)
Q44. b) If yes, what language do	you speak at home?	ealth Survey (English) Widowed
Q44. b) If yes, what language do Q45. What is your marital status	you speak at home?	
Q44. b) If yes, what language do Q45. What is your marital status Never Married/Single	you speak at home? O you speak at home? O you speak at home?	Widowed
Q44. b) If yes, what language do Q45. What is your marital status Never Married/Single Married	you speak at home? O you speak at home? O you speak at home?	Widowed

Q46. What is the highest level of se	chool, college or vo	ocational training	that you have finished? (Mai	rk only
one.)				
Less than 9th grade		Some college (no degree)	
9 - 12th grade, no diploma		Bachelor's degr	ree	
High school graduate (or GED/ equiva	lent)	Graduate or pro	ofessional degree	
Associate's Degree or Vocation	al			
Other (please specify)				
Q47. What was your total househo	ld income last yea	r, before taxes? P	lease select which category y	ou fall
into.				
Less than	\$25,000 to		\$75,000 to	
\$10,000 to	\$35,000 to		\$100,000 or	
\$15,000 to	\$50,000 to			
Q48. How many people does this in	ncome support?			
(Note: If you are paying child suppo	ort but your child is	not living with yo	ou, this still counts as someo	ne
living on your income.)				
Q49. What is your employment sta	itus? (please checl	c all that apply)		
Employed full-time	Unemployed for	more than 1 year	Self-employed	
Employed part-time	Disabled		Unemployed for 1 year or les	ss
Retired	Student			
Armed forces	Homemaker			
Q50. Do you have access to the Int	ernet?			
Yes	O No		Don't know/Not sure	

Primary Data - Small Group Discussion Questions

- 1. Introduce yourself and tell us what you think is the best thing about living in this community.
- 2. What do people in this community do to stay healthy?

Prompt: What do you do to stay healthy?

- 3. In your opinion, what are the serious health-related problems in your community?
- 4. What keeps people in your community from being healthy?

Prompt: What challenges do you face that keep you from being healthy?

5. What could be done to solve these problems?

Prompt: What could be done to make your community healthier?

6. Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

<u>Prompt</u>: Is there any group not receiving enough health care? (If, so why?)

7. What are the strengths related to health in your community?

Prompt: Specific strengths to healthcare?

Prompt: Specific strengths to a healthy lifestyle?

Appendix D: Evaluation of 2013 Vidant Edgecombe Implementation Plan

2013 Implementation Plan Evaluation

Priority: Chronic Disease Prevention and Management Goal: To improve outcomes and quality of life for adults with chronic illness (i.e. diabetes, heart disease, cancer, asthma)

Strategies:

- Collaborate with local agencies and local industry to conduct community-based health screenings for heart disease, stroke, diabetes and cancer. – Vidant Edgecombe continues to collaborate with multiple community agencies, including Edgecombe County Health Department, Vidant Multi-Specialty Clinic, and area churches to provide community-based health screenings. Vidant Edgecombe Hospital offers free community health screenings where BMI, blood pressure, blood sugar, cholesterol, and triglyceride checks are performed. Following the screenings, participants receive health coaching and follow up if their values are abnormal.
- Promote at least three nationally recognized health events such as breast cancer awareness, women's heart health, stroke awareness and diabetes. Vidant Edgecombe has held and continues to offer annual events for breast cancer awareness, women's heart health and stroke awareness.
- In conjunction with other community partners, sponsor Breast Cancer Awareness and Prevention activities in October. Conduct breast cancer screenings at an annual health fair hosted at Vidant Edgecombe Hospital. Participate in Vidant Health's annual Pink Power initiative.
 - Continue the Breast Lay Health Advisor program to provide community education and outreach throughout the year. – This program continues to serve the surrounding community.
 - Expand the Lay Health Advisor program to provide lay navigation to all cancer patients. This program was not implemented as originally planned. The program was revised and implemented as a Peer Connect program. The Peer Connect program utilizes cancer survivors who function as lay health advisors. These individuals have been trained to provide motivational interviewing. The advisors work 1:1 with cancer patients to provide a variety of services and support.
 - Apply for grant funding to address breast cancer. Vidant Edgecombe has applied and received several breast cancer grants specifically related to screening, treatment and survivorship.
- Sponsor Women's Heart Truth event in February. Event will feature a luncheon with an informational and inspirational speaker, health screenings and women's heart health education. – Vidant Edgecombe has sponsored this event on an annual basis with significant participation by community members.
- Continue existing and establish new support groups for individuals with chronic illness.
 - Continue to support Bosom Buddies cancer support group for women. Vidant Edgecombe is pleased to offer this support group for women with cancer diagnoses. The monthly support group did experience some challenges over the past three years with low participation rates. Vidant Edgecombe restructured the program and is experiencing positive feedback and increased participation rates

- following the program restructure process.
- Continue to offer Look Good Feel Better to female cancer survivors. This program continues to be offered on a monthly basis.
- Continue the Lotus Survivor support group to provide Edgecombe County breast cancer patients and/or survivors with opportunities to strengthen recovery. This program continues with the monthly support group meetings and an annual walk to support programs for cancer survivors in the local community.
- Implement at least one other chronic disease support group. Vidant Edgecombe has established a successful stroke support group which meets monthly.
- Provide support and/or funding to the following programs through the Community Benefits Grants & Health Initiatives program:
 - The Sweet Relief Program with Crossworks, Inc. for diabetes self-management Vidant Edgecombe awarded a total of \$10,000 in Community Benefits grant funding over a 2 year period to support this program. In 2016, Crosswalks, Inc. dissolved and therefore, this program is no longer offered in the community.
 - The East Carolina University Brody School of Medicine's program to improve respiratory health among high risk children with asthma in Edgecombe County – Vidant Edgecombe provided \$9,965 in grant funds for this program in the 2013 grant funding cycle.
 - Chronic Disease Self-Management program with the Edgecombe County Health Department through the Vidant Health Community Benefits Grants Initiative.
 - i. Continue to provide the Chronic Disease Self-Management program with in-kind use of the gym and pool Vidant Edgecombe provides access to the hospital's gym and pool at no cost to the health department or program participants for the fitness component of this program.
 - ii. Provide support for diabetes nurse at Edgecombe County Health department Vidant Edgecombe Hospital continues to support this position in our local health department through our Community Benefit Grants program.
 - Diabetes Testing Supplies program with Tar River Mission Clinic Vidant Edgecombe provided a total of \$30,000 in grant funds over a three year period to support this program
 - Other qualified program applicants focusing on chronic disease prevention Vidant Edgecombe has awarded OIC with \$6,000 in grant funds for their 2016-2017 chronic disease management Healthy Foods for Diabetics program

Priority: Access to Care

Goal: To improve access to health care especially for the uninsured / underinsured patient population.

Strategies:

- Continue commitment to providing quality health care to everyone who seeks our services. Vidant Edgecombe continues to collaborate with local clinics including FQHCs to provide care and follow-up care for patients.
- Continue to provide financial counselors who can assist with determining if patients qualify for Medicaid and in applying for other government-assisted programs. – Vidant Edgecombe continues to provide financial counselors.
- Continue to offer charity care to our patients who are unable to pay due to financial hardships. Vidant Edgecombe continues to offer charity care. Awarded a total of \$39,069,958 in charity care. (Fiscal years ending 2014 \$12,494,353, 2015 \$13,195,681, 2016 \$13,379,924)
- Continue to work with Vidant Physician Recruitment office to help recruit additional primary care physicians to the community. Vidant Edgecombe Hospital continues to support recruitment efforts. The hospital has also assisted one of the FQHCs in securing a physician by serving as a liaison between Carolina Family Health Centers, Inc. and Vidant Medical Group.
- Assist Vidant Medical Group and local primary care practices as they work towards implementing the patient-centered medical home model of care which will provide greater access to needed services, better quality of care, greater focus on prevention, as well as early identification and management of health problems. – Vidant Edgecombe continues to make progress with this strategy with more progress expected in the coming years.
- Continue to work with the Edgecombe County Stakeholders to identify and address gaps and barriers of access to care for the uninsured and underinsured residents of Edgecombe County. Collaborate with the health committee of the Twin Counties Visioning effort to address health care concerns in the community. The Edgecombe County Stakeholders are now the Edgecombe County Rural Health Network consisting of 10 organizations (Vidant Edgecombe Hospital, three FQHCs, health department, two mental health organizations, Medicaid case management agency, faith-based organization, and a regional university medical school), with a goal to improve health outcomes for all Edgecombe County Residents. Vidant Edgecombe Hospital serves as the lead agency and has received almost \$200,000 in grant funding with \$900,000 grant application pending on behalf of the Network.
- Develop and implement a committee of Federally Qualified Health Care Centers to focus on access to care for uninsured and underinsured residents. - The Edgecombe County Rural Health Network hosts a Clinical Workgroup consisting of CEOs of the FQHCs, hospital, health department, and mental health LME.
 - Focus on educating the community about availability of services for the uninsured and underinsured. - More progress expected at the Rural Health Network transitions from planning to development and implementation.
- Establish memoranda of agreement for services for the hospital and each FQHC in the county. – This work is partially complete. More progress expected. An MOA has been signed with the Edgecombe County Rural Health Network which includes all

- three FQHCs and the hospital (among other members).
- Collaborate with the Edgecombe County Health Department to provide education and outreach on services available to the community. - The hospital collaborated with the health department on multiple events. Examples include, Latino Health Fair, Blue Ribbon Kidz Day, Stroke Screening, HIV/STD Taskforce, Teen pregnancy prevention.
- Accept and review applications through the Community Benefits Grants &
 Health Initiative program from qualified applicants that are addressing access to
 care. Provide support and/or funding to appropriate organizations. Awarded
 CareNet Counseling East \$6,500 in grant funds for access to mental health care.
- Completed. Awarded Mental Health America of the Tar River Region \$4,000 in grant funds for getting WRAP to the Masses program.

Priority: Physical Activity and Nutrition

Goal: To educate adults and children on the benefits of physical activity and nutrition and provide resources, therefore improving general wellness.

Strategies:

- Participate in at least two community events/health fairs and offer at least one of the following screenings depending upon the event – blood pressure, blood sugar and body mass index. Provide educational information about nutrition and physical activity. - Participated in multiple events annually i.e. health department, churches, businesses, other non-profits.
- Sponsor at least one community event that targets children's health and specifically promotes health eating and physical activity for children. Held an annual event, Blue Ribbon Kidz Day, which focused on child health, parenting, and community resources.
- Sponsor at least one community event that targets the Hispanic/Latino community and offer at least one of the following screenings depending upon the event – blood pressure, blood sugar and body mass index. Provide educational information about nutrition and physical activity – Vidant Edgecombe conducted two Latino community health fairs
- Promote healthy eating and educate visitors on making healthy choices by
 providing calorie and other nutritional information at the point of service in the
 hospital cafeteria. This includes snack and vending machines. We will continue
 to offer discounted rates on the healthy foods served in our hospital cafeteria. All food products, including cafeteria, catered meals and vending machines, have
 nutrition information posted for consumers.
- Provide support and/or funding for the following programs through the Community Benefits Grants & Health Initiative Program:
 - Triple Play Physical Activity Program with the Boys & Girls Club of Nash/Edgecombe Counties through the Vidant Health Community Benefits Grants & Health Initiatives program, - Awarded a total of \$25,000 in grant funds.
 - Fitness is Child's play physical education program at G. W. Bulluck Elementary School, Awarded \$5,000 in grant funds.

- The Expanded Food and Nutrition Program through the NC Cooperative Extension Edgecombe County office, Awarded a total of \$15,000 in grant funds.
- Town of Tarboro FIT Club exercise and nutrition program, Awarded \$1,650 in grant funds.
- Change Initiative with Conetoe Chapel Missionary Baptist Church Awarded a total of \$65,000 in grant funds.
 - Provide in-kind support to help expand community garden program to other churches in Edgecombe and Nash counties – Vidant Edgecombe Hospital's Manager of Grants & Special Projects provided assistance with program development and management.
 - Assist with grant writing efforts for sustainable outreach, Assisted with documentation of program needs and assets to prepare for state, federal, and other private foundation grant applications.
- Other qualified program applicants focusing on physical activity and nutrition.
 - Awarded \$5,000 in grant funds to Living Waters Ministries of Pinetops for faithful steps program.
 - Awarded \$19,000 in grant funds to Rocky Mount Family YMCA for Silver Sneakers Program.
 - Awarded \$9,000 in grant funds to St. Luke Total Community Outreach Ministry for Community Health & Wellness Initiative.
 - Awarded \$6,000 in grant funds to NECPS for Healthy Huskies.
 - Awarded \$5,000 in grant funds to beGlobal for Healthy Living Tour program.
 - Awarded \$5,000 in grant funds to Down East Partnership for Children for Healthy Families program.
 - Awarded \$4,500 in grant funds to Community Enrichment Organization for FUN program.

Priority Health Need Not Addressed by Implementation Plan:

One community health need identified by the community health needs assessment is not specifically addressed in the hospital's implementation plan. However, Vidant Edgecombe will work collaboratively with the Edgecombe County Health Department to address the following priority:

HIV/AIDS, STDs, Teen Pregnancy

- The Edgecombe County Health Department will take the lead on HIV/AIDS, STDs, and teen pregnancy. The Edgecombe County Health Department has a grant-funded project to provide HIV testing to community residents. Vidant Edgecombe Hospital will collaborate with the Edgecombe County Health Department on this grant by collecting blood samples for HIV testing of patients in the emergency department. This service will be offered to patients meeting the established high risk behavior criteria and patients will have the option to opt out. This program is still ongoing
- The Edgecombe County Health Department has ongoing programs addressing HIV/AIDS, STDs and teen pregnancy. Vidant Edgecombe Hospital will provide support as needed. -

Vidant Edgecombe staff participates on the HIV/STD Taskforce and Project Reach (teen pregnancy prevention).