Cullman Regional Medical Center, Inc.

2016

Community Health Needs Assessment

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Executive Summary

Introduction and Process

Cullman Regional Medical Center, Inc. (CRMC) contracted with Alexander Consulting Group, Inc. to (ACG) assist in conducting a Community Health Needs Assessment (CHNA) as required by Internal Revenue Code, section 501(r).

CRMC is a 145-bed acute care hospital located in Cullman, Alabama. CRMC is the only hospital in Cullman County, a county consisting of more than 734 square miles located in north central Alabama. CRMC is designated a Level III Trauma Center and provides a wide range of services, including five centers of excellence:

❑ Cardiovascular Center,

❑ Women's and Children's Services,

❑ Orthopedic Center,

❑ Emergency Services, and

❑ Stroke Center.

CRMC provides high quality, cost effective care and is committed to continuing to provide educational and disease prevention programs to improve the health of its community.

CRMC defined its community geographically as Cullman County based on its patient origin. Further, CRMC is able to have the greatest influence on the health of Cullman County residents.

Both information and data from primary and secondary sources were collected to assist in identifying health needs within Cullman County.

During the CHNA process, CRMC solicited and took into account input received from persons who represent the broad interests of Cullman County, including those with special knowledge of and expertise in public health through multiple methods. Interviews and focus groups were conducted with a broad range of community representatives who represent the broad interests of Cullman County. Many of the interview and focus group participants have special knowledge of and expertise in public health, and represented the interests of the medically underserved, low income, and minority populations of Cullman County. In total, 39 community representatives participated in either interviews or focus groups, including a representative from the Cullman County Health Department. The purpose of the interviews and focus groups was to gain direct input from these individuals regarding identifying and prioritizing health needs, including the health issues associated with the medically underserved, low income, and minority populations, as well as identifying resources potentially available to address those health needs.

In addition to conducting interviews and focus groups, community input was garnered from participants in a Community Advisory Committee (CAC), as well as CRMC's CHNA Advisory Committee. The CAC was comprised of a broad range of community representatives, including from the Cullman County Health Department. The CHNA Advisory Committee was responsible for overseeing the CHNA process, including identifying and prioritizing the significant health needs of the community.

Secondary data was collected from a variety of respected organizations on a broad array of health indicators and other information, and analyzed and summarized. The types of data collected included demographic, socioeconomic, mortality and morbidity, health status indicators, health behaviors, maternal and child health, insurance status, and general community/environmental information.

Summary Findings

Community health needs were based on information gathered through primary and secondary data collection and analysis, and discussions with the CHNA Advisory Committee and Community Advisory Committee, and were grouped into six major categories. These areas were prioritized by the CHNA Advisory Committee by utilizing criteria related to the estimated feasibility and effectiveness of possible interventions; whether addressing the need builds on existing organizational competencies; the number or proportion of people effected by the health need; the ability to meet the need with resources available; the importance the community places on addressing the health need; and the opportunity to intervene at the prevention level. This process resulted in the prioritized health needs list shown below:

1. Heart disease
2. Obesity
3. Access to care/continuity of care
4. Cancer
5. Smoking (as primary cause of lung disease and lung Cancer)
6. Substance abuse/mental health

These priorities will be further discussed in CRMC's Implementation Strategy.

Background

Requirements

The CHNA process is designed to meet the requirements of Internal Revenue Service (IRS) rules, including the assessment and prioritization of health needs within the community through a process that includes collecting and analyzing primary and secondary data.

To assist in conducting the CHNA, CRMC contracted with ACG, an Atlanta-based independent consulting firm providing services exclusively to the health care industry. Founded in 1998, ACG provides a broad range of health planning services to health care organization, including community health needs assessments, strategic and financial planning, service line planning, and regulatory planning. ACG uses only highly experienced, senior-level consultants. The CHNA facilitated and prepared for CRMC was directed by the firm's president, Keith Alexander. Mr. Alexander has more than 30 years of health care planning experience and holds an MBA with a concentration in health care management from Boston University.

As required by the 2010 Patient Protection and Affordable Care Act (PPACA) and the IRS rules published on December 31, 2014, the CHNA process included, and the CHNA report includes, the following:

❑ A definition of the community served by the hospital facility and a description of how the community was determined

❑ A description of the process and methods used to conduct the CHNA

❑ An assessment of the health needs of the community served that incorporated:

- The solicitation and inclusion of input from persons who represent the broad interests of the community, including those with special knowledge of and expertise in public health, regarding identifying and prioritizing significant health needs and identifying resources potentially available that included:

  – At least one state, local, tribal, or regional governmental public health department, or State Office of Rural Health with knowledge, information, or expertise relevant to the health needs of the community

  – Members or individuals or organizations representing the interests of medically underserved, low income, and minority populations in the community

  – Written comments received on the hospital facility's most recently conducted CHNA and most recently adopted implementation strategy

- Identification of significant health needs of the community, including:

  – Prioritization of those health needs

  – Identification of resources potentially available to address those health needs

❑ Documentation of the CHNA in a written report that is adopted for the hospital facility by the authorized body of the hospital, and includes:

- A definition of the community served by the hospital facility and a description of how the community was determined

- A description of the process and methods used to conduct the CHNA, including:

  - The data and other information used in the assessment

  - The methods of collecting and analyzing the data and information, or citing of the source material

  - The organization with which it contracted for assistance in conducting the CHNA

- A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves

- A prioritized description of the significant health needs of the community identified through the CHNA, along with a description of the process and criteria used in identifying certain health needs as significant and prioritizing those significant health needs

- A description of the resources potentially available to address the significant health needs identified through the CHNA

- An evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA

CHNA Approval

The CHNA was approved and adopted by the Cullman Regional Medical Center, Inc. Board of Directors on June 28, 2016.

Public Posting/Availability

The CRMC 2016 Community Health Needs Assessment is publicly posted and available on its website.

Assessment Methodology

Report Methodology

The assessment was conducted using a wide range of primary and secondary data sources, and resulted in a profile of the community, information regarding access to care, health outcomes, behaviors and risk factors, and a summary of focus group and interview findings.

Secondary Data Methodology

Secondary data was collected using a variety of publicly available data from numerous respected organizations and agencies, and regarding a broad range of issues. The types of data included information related to demographics, socioeconomics, insurance status, chronic disease, mortality/morbidity, health status, health behaviors, behavioral risk factors, and maternal and child health indicators for residents of Cullman County. The sources of the secondary data are cited together with the data. In many cases, secondary data for Cullman County residents were compared with state and national indicators when applicable and available.

Primary Data Methodology

To gather input from an extensive range of people who represent the broad interests of Cullman County, focus groups with 22 participants and one-on-one interviews with 17 participants were conducted in March 2016. Questions involved an array of health topics including what the most significant health needs are in Cullman County and why; what groups of residents are medically underserved and what are their most significant health needs; and health needs and other issues associated with the low income and minority populations in the county. The opinions of focus group and interview participants were summarized and ranked according to the number of responses provided.

Focus group and interview participants included community stakeholders from health care and social services providers, schools and colleges, religious organizations, economic organizations, community officials, law enforcement, emergency medical services, and minority representatives. The vast majority of focus group and interview participants were from organizations serving and/or representing the interests of the medically underserved, low income, and minority populations in Cullman County.

In addition, community input was garnered from participants in the CAC, as well as CRMC's CHNA Advisory Committee, which was responsible for overseeing the CHNA process, including identifying and prioritizing health needs.

Information Gaps

Every attempt was made to collect relevant and recent primary and secondary data reflecting the health status and social determinants of health in Cullman County. In some cases, the ability of CRMC to assess all community health needs may have been limited by a lack of existing or recent small-area estimate information relevant to Cullman County. In particular, due to the very small population of minority groups in Cullman County, secondary data was very limited and/or had a high margin of error in some cases. As a result, primary data was relied upon more heavily in assessing the health needs of minority groups in Cullman County.

Comments Received on Most Recently Conducted CHNA/Implementation Strategy

CRMC has received no written comments on the hospital facility's most recently conducted CHNA or most recently adopted implementation strategy.

Prioritization Methodology

Community health needs were identified through the analyses described above. CRMC's CHNA Advisory Committee, described below, considered and discussed Cullman County's health needs, and developed and used weighted criteria to evaluate and prioritize the health needs. The evaluation criteria included the estimated feasibility and effectiveness of possible interventions; whether addressing the need builds on existing organizational competencies; the number or proportion of people effected by the health need; the ability to meet the need with resources available; the importance the community places on addressing the health need; and the opportunity to intervene at the prevention level.

Subsequent to developing the evaluation criteria, the CHNA Advisory Committee deliberated and applied the evaluation criteria to each health need through group consensus to determine its priority. The result was the identification and ranking of six significant health needs.

CHNA Advisory Committee

CRMC's CHNA Advisory Committee provided input into the CHNA process from the beginning through the end of the process, from February through June 2016. The CHNA Advisory Committee was responsible for overseeing the CHNA process.

Members of the CHNA Advisory Committee were chosen to bring a broad range of perspectives to the CHNA process. The following individuals participated in the CHNA Advisory Committee:

❑ James Clements, Chief Executive Officer

❑ Cheryl Bailey, Chief Nursing Officer

❑ Dr. Bill Smith, Chief Medical Officer

❑ Nesha Donaldson, Chief Financial Officer

❑ Charna Brown, Chief Quality Control Officer

❑ Lori McGrath, Division Director of Case Management & Social Work Services

❑ Lindsey Dossey, Marketing Director

❑ Meredith Easterwood, Community Relations

❑ Beth Anderson, Board Member

❑ Geana McKee, Administrative Support

Representatives of the CHNA Advisory Committee participated in four meetings over the course of four months and reviewed and discussed the implications of the primary and secondary data analyses, and identified and prioritized the significant health needs of the community.

Community Advisory Committee

In addition to the 39 focus group and interview participants, the CAC was formed to provide further input and feedback related to the CHNA process at CRMC. Participants from the CAC were not affiliated with CRMC and included representatives from a broad range of perspectives. The CAC was given the task of: reviewing a summary of the primary and secondary data; reviewing, recommending changes to, and prioritizing a preliminary list of significant health needs identified by the CHNA Advisory Committee; and identifying resources potentially available to address the significant health needs. Recommendations from the CAC were then presented to and utilized by the CHNA Advisory Committee to develop their final prioritization of the most significant health needs in Cullman County.

The CAC included representatives from the Cullman County Health Department and the local clinic for the low income and uninsured residents, community mental health center, and commission on aging.

Response to 2013 Community Health Needs

The 2013 CRMC CHNA identified the hospital's image, access to care, chronic illnesses, health behaviors, and poverty as the highest priority needs. Based on the 2013 assessment activities, CRMC enacted specific programs designed to impact the needs identified. Below are some of the activities CRMC has enacted as a result of the 2013 CHNA and Implementation Strategy:

| 2013 CHNA Need Category(ies)	2013 Initiatives
Access to Care, Hospital Image	CRMC conducted a Trunk or Treat Program, hosting more than 5,000 citizens at the hospital, providing opportunities for fun, activities, and free community health screenings.
Access to Care	CRMC provided support for the Good Samaritan Health Clinic (Good Samaritan), including paying the salary of a Nurse Practitioner and the provision of a substantial amount of free services that Good Samaritan does not offer. Free services provided by CRMC include diagnostic testing (laboratory, imaging, etc.) and therapeutic treatment procedures (surgeries, etc.). Good Samaritan is a free clinic that provides health care services to low-income, uninsured residents of Cullman County.
Health Behaviors, Chronic Illness	CRMC has provided numerous community education seminars, targeting low-income groups, including the following topics: • Immunizations • Heart Disease • Allergies • Stroke prevention • Communicating with your healthcare provider • Sleep Apnea • Foot health • Women's health • Healing old wounds • Exercise for seniors • Medication safety screening • Understanding your heart • Osteoporosis • Cancer treatment • Vision • Healthy aging tips for women • Survival guide for caretakers • Arthritis • Medicare • Hereditary female cancers • Diabetes

2013 CHNA Need Category(ies)	2013 Initiatives
Chronic Illness	CRMC has provided free preventive health screenings at various community events, as well as heart and stroke prevention clinic screenings.
Access to Care, Chronic Illness	CRMC established a Community Paramedic Program (CPP) through Cullman Emergency Medical Services. The CPP utilizes paramedics to function outside their customary emergency response and transport roles in ways that enhance access to primary care for the medically underserved populations.
Chronic Illness	CRMC established a multidisciplinary team to work with heart failure patients to reduce their readmission to the hospital. This team evaluates reasons for readmission, and determines community resources to help alleviate the problems. This includes working with local pharmacies to ensure the patients have medications, as well as with the CPP and local nursing homes.
Health Behaviors	CRMC has worked to impact/change negative health behaviors through its: • Employee Wellness Program, which provides tobacco cessation support, free fitness facilities and weight management programs; • Community Wellness Programs, including fitness options (Silver Sneakers, water aerobics, etc.); and • Trauma Prevention Program, an education program (staffed by CRMC employee volunteers) to teach the responsibilities of driving safely and the consequences that can occur when poor judgment is used while driving. This program is operated in conjunction with the Circuit Court.
Access to Care	CRMC has worked to improve access to mental health services by working closely with the Probate Court to improve processes, and has partnered with Mental Healthcare of Cullman, Cullman County's independent local agency offering treatment for mental illness and addiction.
Access to Care	CRMC has contracted with a local taxi service to provide transportation to individuals without access, at CRMC's expense.
Poverty	CRMC has worked to decrease poverty caused by unemployment, homelessness, illness, and general poverty through developing a partnership with The Link of Cullman County (The Link), including supporting local events and provided CRMC management staff to serve as The Link board members. The Link is a faith-based non-profit organization that works to break the cycle of poverty through encouragement, education, and employability training, and works to accomplish this mission through a variety of programs and services.
Access to Care	CRMC has developed a Nurse Navigation Program, designed to steer patients to community resources for financial help, and encourage/assist patients with enrollment in the Health Insurance Marketplace.

Community Overview

CRMC defined its community geographically as Cullman County based on its patient origin. Further, CRMC is able to have the greatest influence on the health of the residents of Cullman County.

There are many cities and towns in Cullman County including the cities of Cullman, Hanceville and Good Hope; the towns of Baileyton, Colony, Dodge City, Fairview, Garden City, Holly Pond, South Vinemont, and West Point; and several unincorporated areas. The large majority of CRMC's patients reside in Cullman County, and CRMC is able to have the greatest influence on the health of the residents of this county. As demonstrated below, approximately 77 percent of CRMC's inpatients are residents of Cullman County.

CRMC Inpatient Origin
Fiscal Years 2013 through 2016
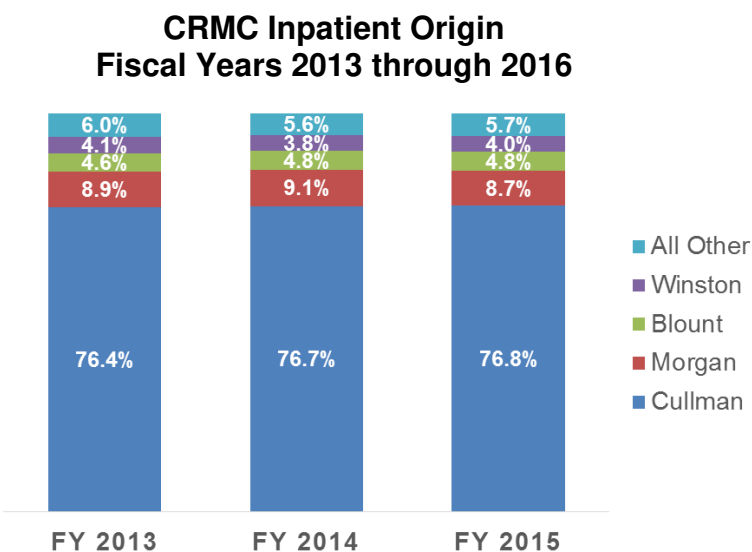
Source: CRMC records.

A map of Cullman County follows.

Cullman County, Alabama
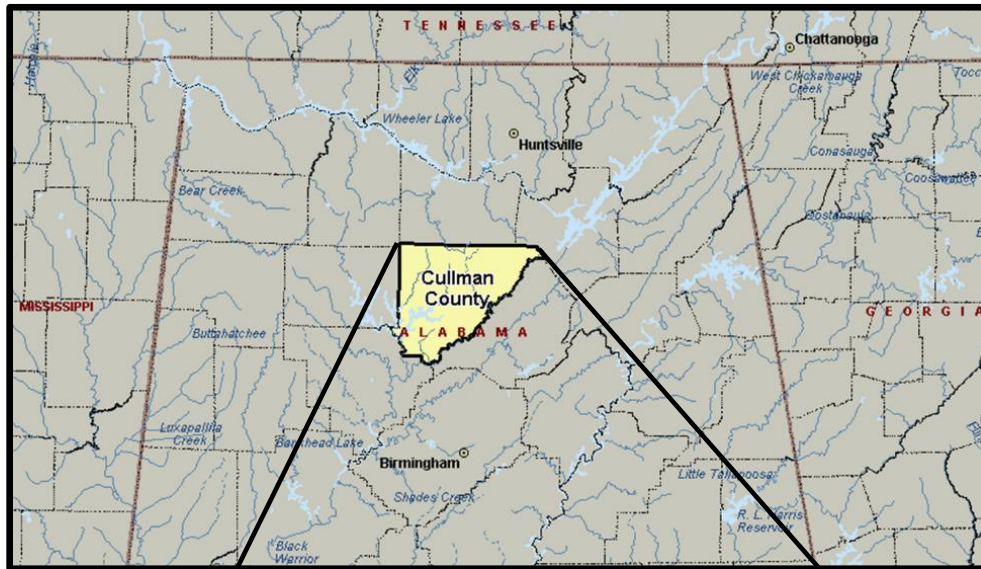
Source: Microsoft MapPoint.

Community Profile

Cullman County, with a 2010 population of 80,406, is located in the north central portion of Alabama, roughly halfway between the cities of Birmingham and Huntsville. Cullman County covers 743 square miles and is located on the Cumberland Plateau. Cullman County is defined as a Micropolitan Statistical Area, and is included in the Birmingham-Hoover-Talladega, Alabama Combined Statistical Area.

With a 2010 population of 14,775, the City of Cullman is by far the most populous city in Cullman County. In contrast, the 2010 population of the City of Hanceville was 2,982 and of the City of Good Hope was 2,264. The remainder of the Cullman County population is dispersed throughout other portions of the county.

Demographic Profile

Cullman County is projected to grow by 1.4 percent, or just under 1,200, between 2016 and 2021. In particular, the population ages 65 and older is expected to increase substantially as shown in the table below.

Cullman County Population Trends
By Age Group and Total

Age Groups	Census 2010	Estimated 2016	Projected 2021	Projected Change 2016-2021	Projected % Change 2016-2021
17 and Under	18,641	17,989	17,904	-85	-0.5%
18 to 44	26,848	26,389	26,585	+196	+0.7%
45 to 64	22,107	21,805	21,040	-765	-3.5%
65 and Over	12,810	15,263	17,095	+1,832	+12.0%
All Ages	80,406	81,446	82,624	+1,178	+1.4%
				Alabama	+1.5%
				U.S.	+3.0%

Source: Nielsen Claritas, 2016.

The proportion of the Cullman County population that are seniors is very large as shown in the age distribution table below.

Percent of Population by Age Group
2016 Estimate
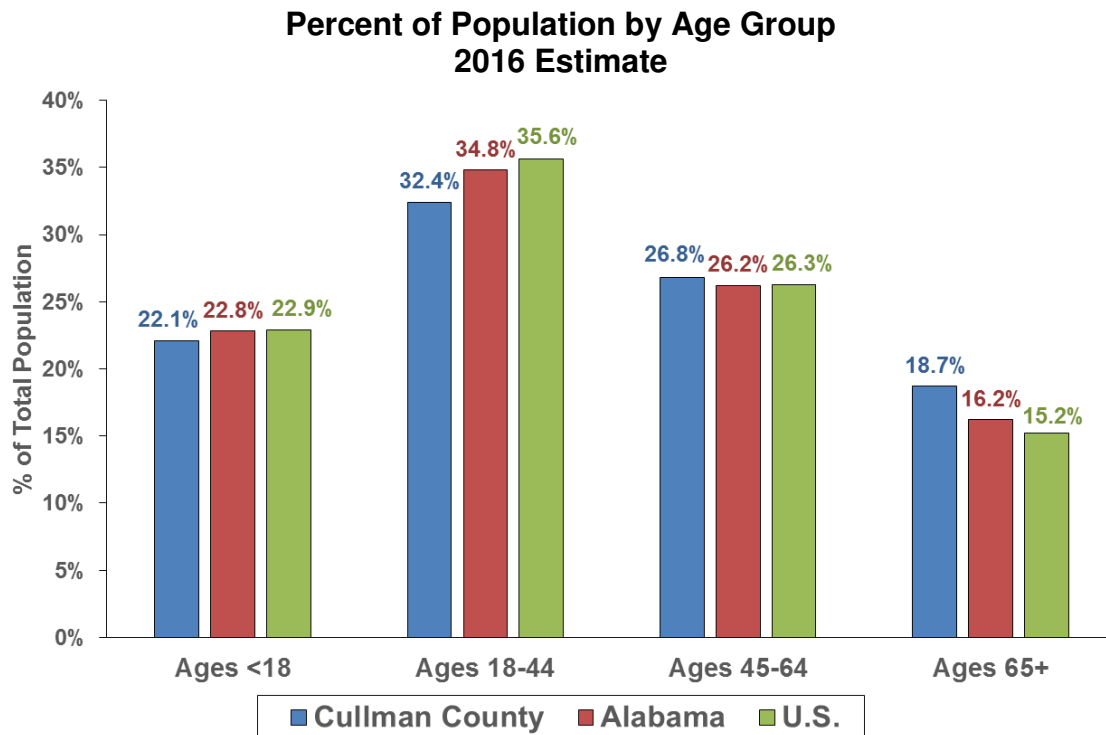
Source: Nielsen Claritas, 2016.

When compared with Alabama and the U.S., the proportion of the 65 and older age cohort is significantly greater in Cullman County.

Race and Ethnicity Profile

As shown in the following table, the vast majority of the Cullman County population by race is White, at 96.2 percent of the population, followed very distantly by African American (1.4 percent), two or more races (1.2 percent), Native American (0.6 percent), Asian (0.5 percent), and some other race (0.1 percent).

Percent of Population by Race & Ethnicity
2014 Estimate

% of Total Population

Race/Ethnicity	Cullman County	Alabama	U.S.
White	96.2%	69.7%	77.4%
African American	1.4%	26.7%	13.2%
Amer. Ind./ AK Native	0.6%	0.7%	1.3%
Asian	0.5%	1.3%	5.4%
Native HI/ Other Pacific	0.1%	0.1%	0.2%
Two or More Races	1.2%	1.5%	2.5%
Hispanic (Ethnicity)	4.4%	4.1%	17.4%

Legend: ■ Cullman County ■ Alabama ■ U.S.
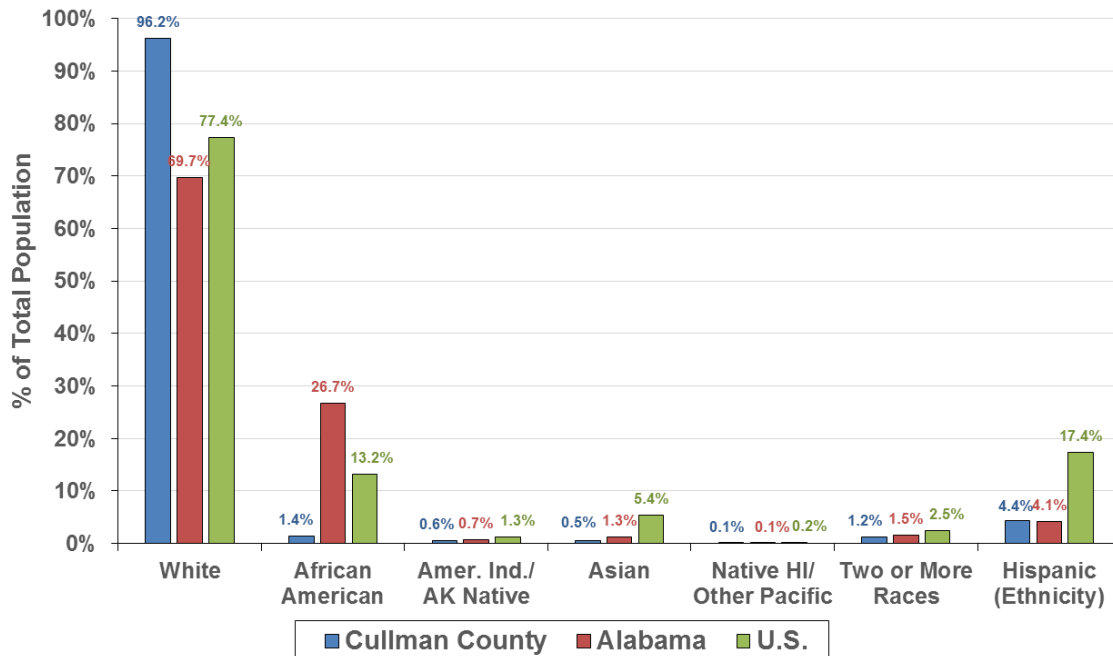
Source: Population Estimates, U.S. Census Bureau, 2016.

When looking at ethnicity, only 4.4 percent of the population is Hispanic, compared with 95.6 percent which is non-Hispanic.

Socioeconomic Profile

The socioeconomic status of Cullman County residents is below, and expected to remain below, Alabama, and significantly below the U.S.

Median & Mean Household Income
2015 and 2020 Estimates

	Cullman County	Alabama	U.S.
2015	$38,398	$43,997	$53,706
2020	$40,191	$46,616	$57,294

Legend: ■ Cullman County ■ Alabama ■ U.S.
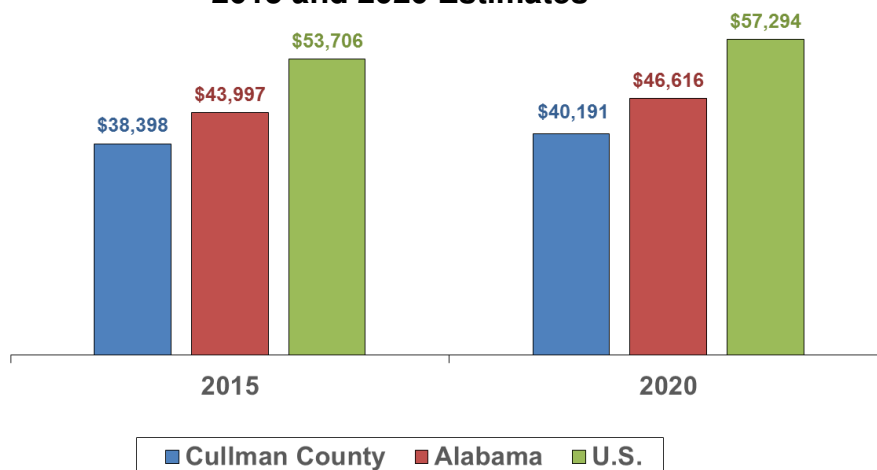
Source: Nielsen Claritas, 2016.

The overall level of poverty in Cullman County is slightly below the statewide level, while greater than the national level. As sh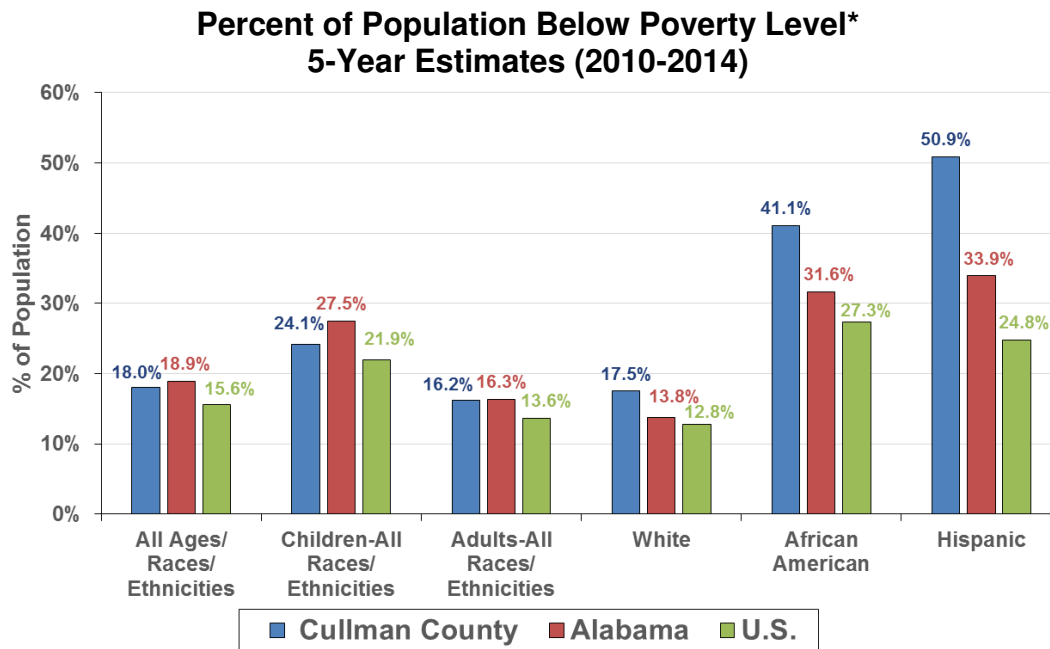own in the chart below, a larger proportion of children live in poverty than adults. Also, a much larger percentage of African Americans and substantially greater percentage of Hispanics live below the poverty level compared with Whites and non-Hispanics in Cullman County.

Percent of Population Below Poverty Level*
5-Year Estimates (2010-2014)

|	Cullman County	Alabama	U.S.
All Ages/Races/Ethnicities	18.0%	18.9%	15.6%
Children-All Races/Ethnicities	24.1%	27.5%	21.9%
Adults-All Races/Ethnicities	16.2%	16.3%	13.6%
White	17.5%	13.8%	12.8%
African American	41.1%	31.6%	27.3%
Hispanic	50.9%	33.9%	24.8%

* Below 100 percent of the Federal Poverty Level.
Source: 2010-2014 American Community Survey 5-Year Estimates; US Census Bureau, 2016.

Other Economic and Social Factors

The unemployment rate and percentage of households receiving food stamps, households with no vehicle, and population not speaking English at home in Cullman County were all below the Alabama rates as indicated below.

Selected Economic/Social Indicators
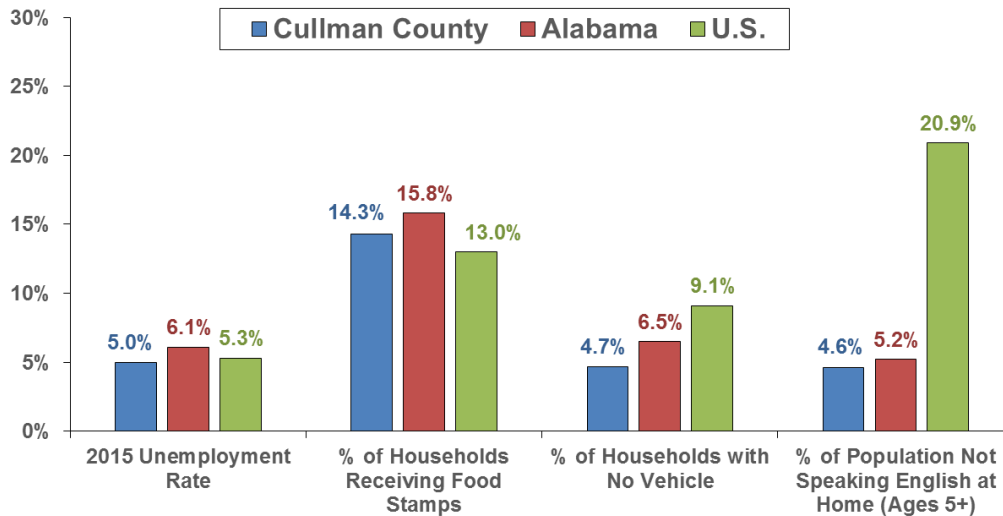
Source: Bureau of Labor Statistics, March 3, 2016; 2010-2014 American Community Survey 5-Year Estimates; US Census Bureau, 2016.

The proportion of adults who reported having a disability in surveys conducted by the U.S. Census Bureau is slightly higher in Cullman County when compared with both the statewide and national rates, particularly for the population ages 18 and older.

Population With a Disability
Percent of Civilian Non-Institutionalized Population
5-Year Estimates (2010-2014)
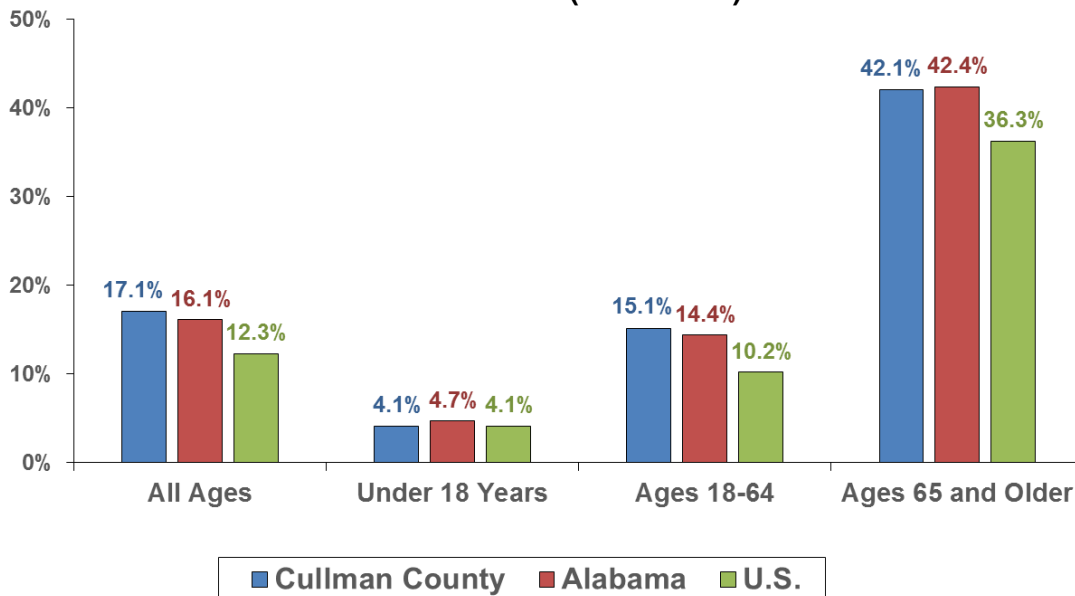
Source: 2010-2014 American Community Survey 5-Year Estimates; US Census Bureau, 2016.

The percentage of Cullman County children who receive free or reduced-price lunch is significantly less than the statewide rate, but still roughly half. Regarding educational achievement, the percentage of Cullman County residents 25 years of age and over that are not high school graduates is slightly below the Alabama rate, and those that have a bachelor's degree or higher is significantly below the Alabama and U.S. rates.

Selected Education-Related Indicators
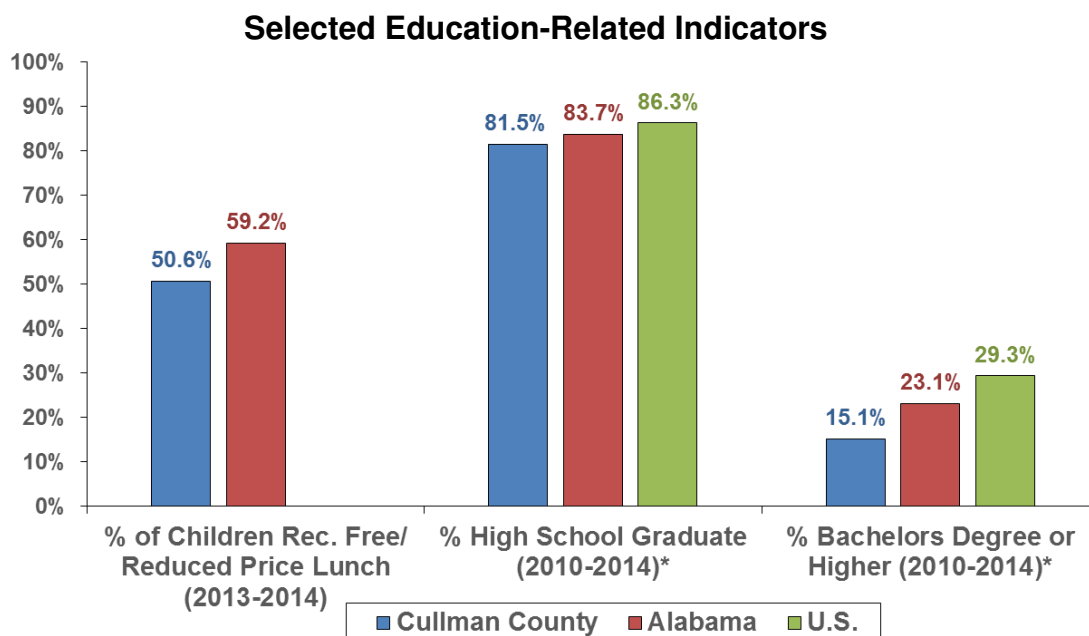
*For ages 25 and older
Source: State of Alabama Department of Education (2013-2014), March 2016; 20010-2014 American Community Survey 5-Year Estimates; US Census Bureau, 2016.

Access to Care

Access to care was one of the most mentioned health issue identified by focus group and interview participants. Below is an overview of key economic and physical factors effecting access to health care in Cullman County.

Economic Access to Care

Cullman County's relatively low income levels, including comparatively high poverty and disability rates, and lack of health insurance have created significant economic barriers to care. The uninsured and underinsured were identified by focus group and interview participants as those experiencing the greatest difficulty in accessing care.

Cullman County experiences a relatively high rate of uninsured residents compared with the statewide rate, for both children and adults under the age of 65. As shown below, more than 23 percent of adults under the age of 65 have no health insurance.

Percent Uninsured
5-Year Estimates (2010-2014)
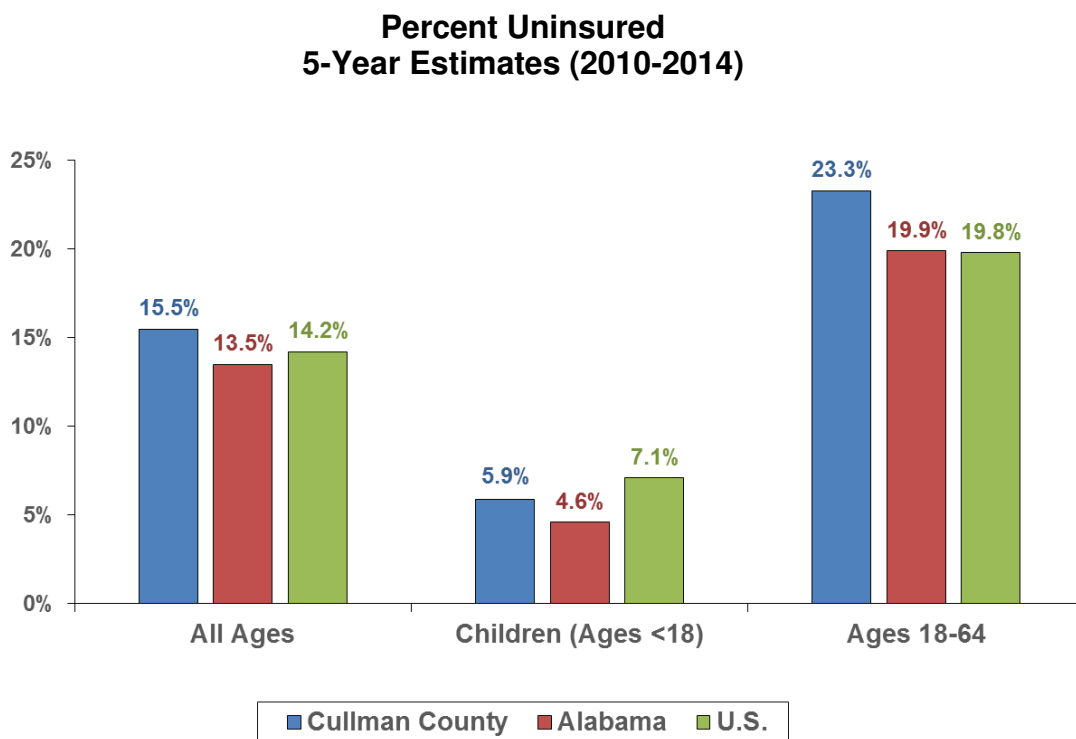
Source: 2010-2014 American Community Survey 5-Year Estimates; US Census Bureau, 2016.

At the same time, the proportion of the Cullman County and Alabama population covered by Medicaid is significant and has continued to increase as demonstrated below.

**Percentage of Population Covered by Medicaid
Eligibles as Percent Population**
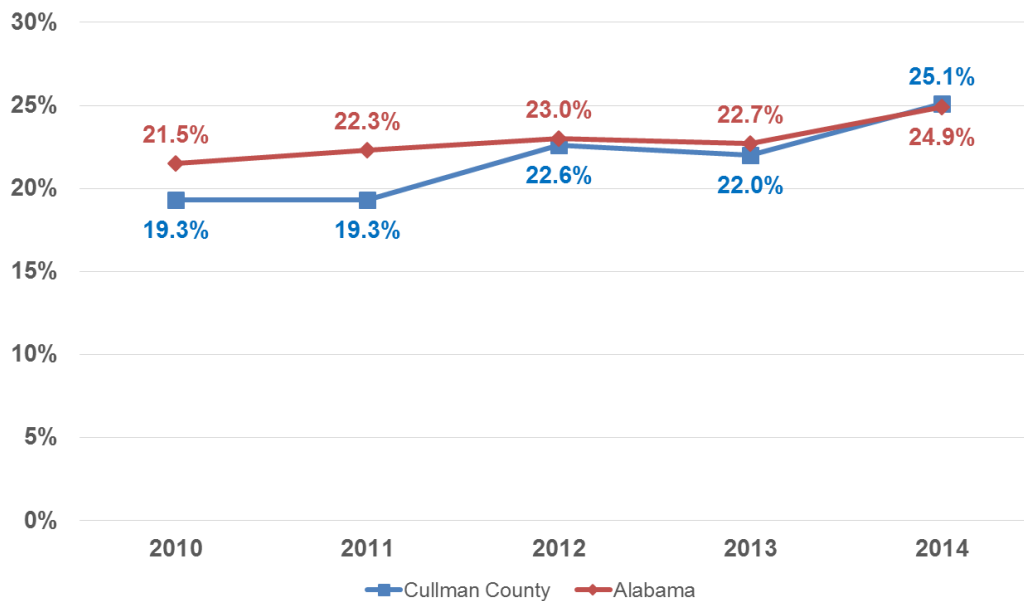
Source: Alabama Medicaid Agency Annual Reports, 2010, 2011, 2012, 2013, 2014.

In addition to the uninsured, the increasing number of individuals enrolled in health insurance plans with high deductibles and copays was mentioned by focus group and interview participants as a barrier to care. Also, focus group and interview participants indicated that the uninsured and underinsured with high deductibles and copays were the most likely to be medically underserved, experience the most difficulty accessing health care, and more likely to use the emergency department for their care.

Other access-related issues mentioned by focus group and interview participants included that there was a lack of awareness regarding other resources available for the low income population, such as Good Samaritan Health Clinic and the Federally Qualified Health Center located in Cullman (Quality of Life Health Services), and that it can be difficult for this group to pay for medications prescribed by physicians.

When looking at utilization rates for health care services, both Cullman County's hospital inpatient admission and ER visit rates per thousand population are below the Alabama and U.S. rates among Medicare beneficiaries as demonstrated below.

Hospital Inpatient Admission & ER Visit Rates
(per 1,000 Medicare Beneficiaries*)
2013
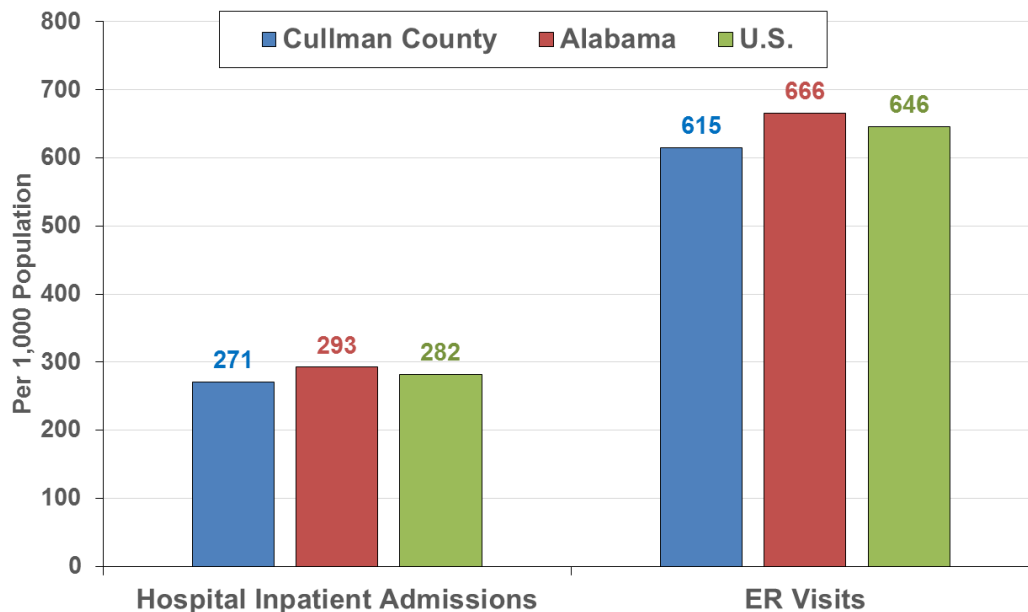
* Includes fee-for-service Medicare beneficiaries only.
Source: CDC, National Center for Health Statistics, Health Indicators Warehouse (www.healthindicators.gov), 2016.

ER visit rates below the state and national averages are typically an indicator that the Medicare beneficiary population has relatively good access to primary care and is not forced to use the ER for primary care.

Physical Access to Care

The physical inability to access care is an impediment to receiving health care, particularly for vulnerable populations. Focus group and interview participants indicated that, following being uninsured or underinsured, transportation issues are the next most significant barrier to access to care in Cullman County, particularly for residents living in outlying areas of the county.

Cullman County has limited public transportation options, consisting primarily of the Cullman Area Rural Transportation System (CARTS). Outside of the Cullman city limits, CARTS buses typically charge a fee ranging from $3 roundtrip for scheduled shopping routes, to $6 each way, with the disabled and population over the age of 60 receiving a 50 percent discount. The regularly scheduled shopping routes are from different locations in the county on Tuesdays through Fridays. All CARTS rides are required to be scheduled at least one business day in advance. For people in outlying areas of the county to use a CARTS bus for a doctor's appointment may require an individual to leave their residence early in the morning, returning late in the afternoon. As a result of these and other limitations, there are many circumstances for which transportation through CARTS for medical services is not a practical option. As a result, some Cullman County residents may have difficulty obtaining transportation to health care.

The shortage of health care providers exacerbates the ability of Cullman County residents to access health care. For example, according to www.countyhealthrankings.org, the population to primary care physician ratio in Cullman County (1,760:1) is significantly greater than the statewide ratio (1,570:1) and national ratio (1,320:1), indicating a shortage of primary care physicians in the county.

Health Outcomes, Behaviors and Risk Factors

Mortality, Morbidity, and Screening

Overall age-adjusted mortality rates in Cullman County have been consistently above statewide and national rates over the most recent five-year period available.

Age-Adjusted Mortality Rates – All Causes
Per 100,000 Population
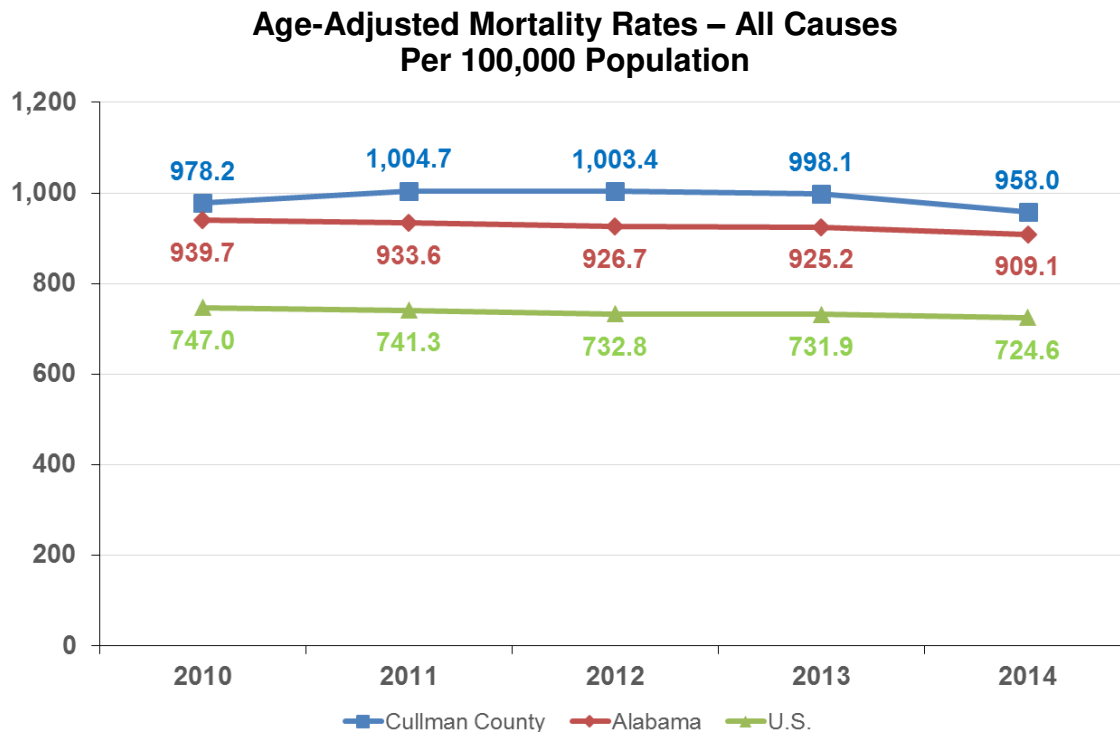
Source: CDC, National Center for Health Statistics, CDC Wonder, Underlying Cause of Death age-adjusted to the 2000 US standard population, accessed March 5, 2016.

As shown below, mortality rates in Cullman County are significantly higher than Alabama and U.S. rates for several of the leading causes of death, including heart disease, chronic lung disease, accidents, Alzheimer's disease, and diabetes. Cullman County mortality rates for cancer and stroke are consistent with the statewide rate, but significantly higher than national rates.

Age-Adjusted Mortality Rates by Cause
2010 – 2014
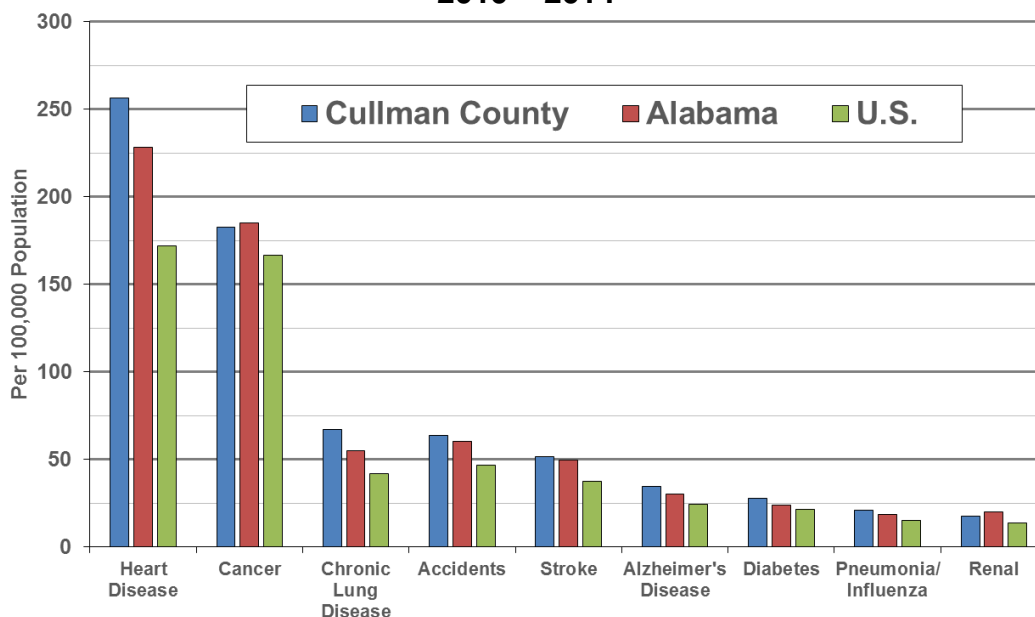
Source: CDC, National Center for Health Statistics, CDC Wonder, Underlying Cause of Death 2010-2014 age-adjusted to the 2000 US standard population, accessed March 5, 2016.

When evaluating the mortality rate for the leading cancer sites, the Cullman County mortality rate for lung/bronchus/trachea/pleura cancer is slightly higher than the Alabama rate, but significantly higher than the U.S. rate. At the same time, rates of prostate, breast, and colorectal cancer mortality in Cullman County have been consistent with, or slightly below the statewide rates.

Age-Adjusted Mortality Rates by Selected Cancer Sites
2010 – 2014
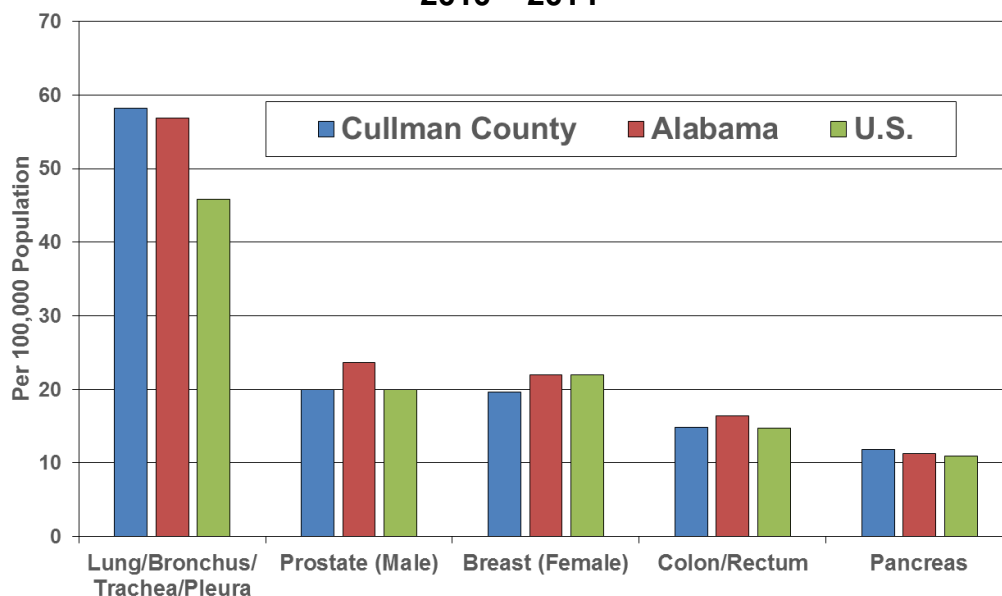
Source: CDC, National Center for Health Statistics, CDC Wonder, Underlying Cause of Death 2010-2014 age-adjusted to the 2000 US standard population, accessed March 5, 2016.
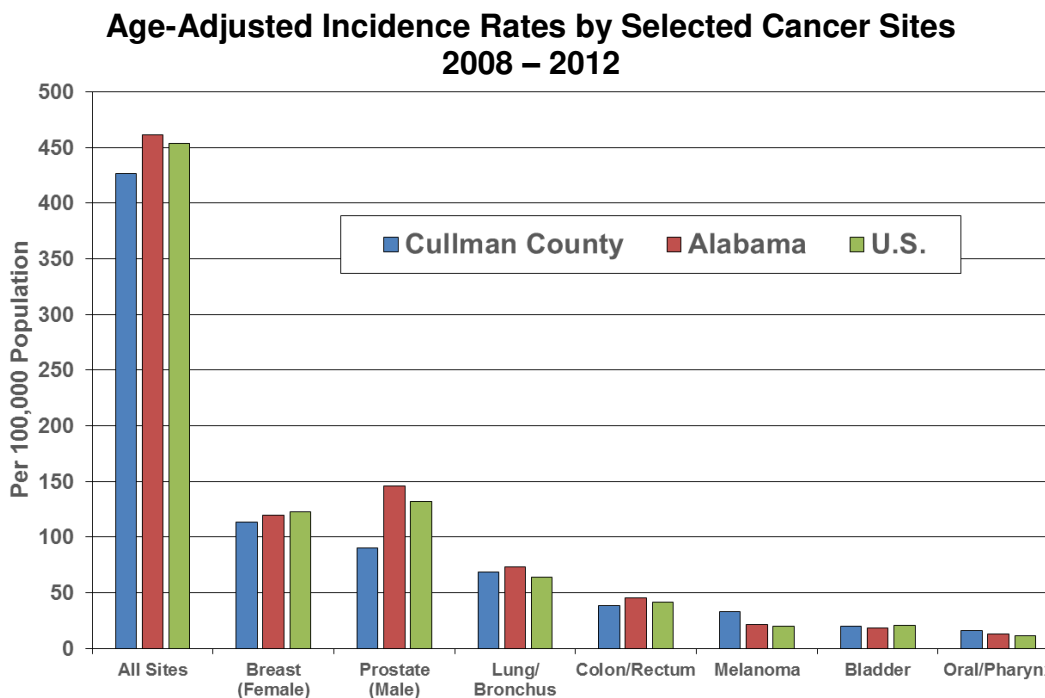
In evaluating the incidence of cancer, the age-adjusted cancer incidence rates in Cullman County are somewhat lower than rates for Alabama or the U.S. Incidence rates for Cullman County are slightly above the statewide and national incidence rates for melanoma and oral/pharynx cancers.

**Age-Adjusted Incidence Rates by Selected Cancer Sites
2008 – 2012**

Source: CDC statecancerprofiles.cancer.gov, 2008-2012 age-adjusted to the 2000 US standard population, accessed March 5, 2016.

The proportion of Cullman County Medicare beneficiaries that have been diagnosed with heart failure is 21%, significantly higher than the statewide and national rates. At the same time, the proportion with high cholesterol, depression, and COPD are all somewhat higher than the Alabama and U.S. rates as shown in the following table.

Percentage of Medicare Beneficiaries
with Selected Conditions*
2013

% of Medicare Recipients

Condition	Cullman County	Alabama	U.S.
High Cholesterol	47%	46%	45%
Ischemic Heart Disease	29%	29%	28%
Diabetes	29%	29%	27%
Heart Failure	21%	15%	14%
Depression	17%	14%	16%
Chronic Kidney Disease	15%	15%	16%
COPD	14%	13%	11%
Alzheimer's Disease	10%	10%	10%

■ **Cullman County** ■ **Alabama** ■ **U.S.**
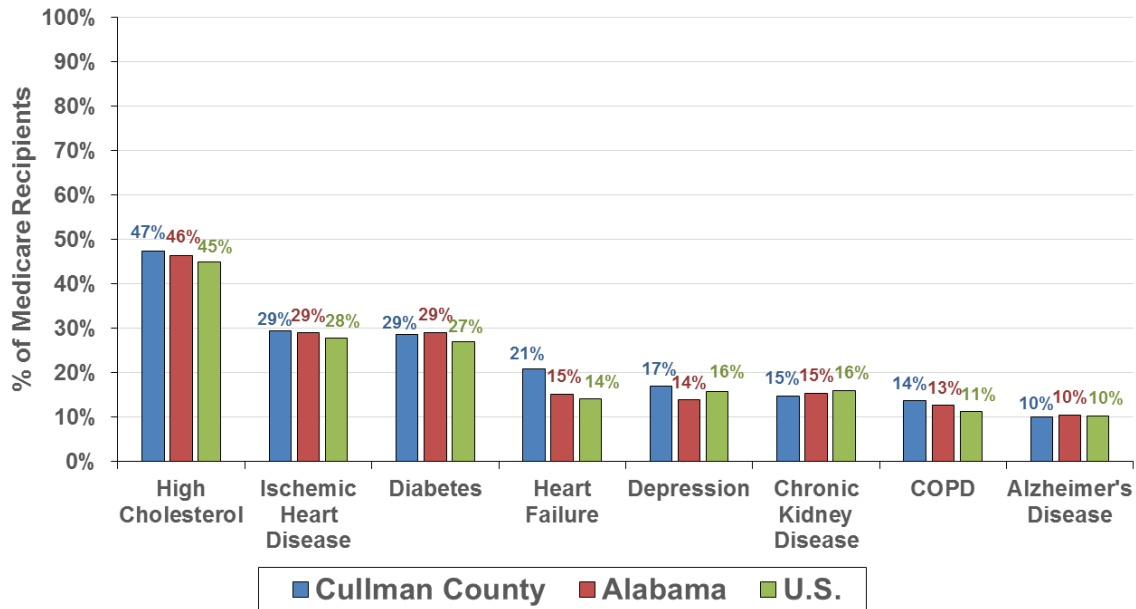
* Percentage of fee-for-service Medicare beneficiaries only.
Source: CDC, National Center for Health Statistics, Health Indicators Warehouse (www.healthindicators.gov), 2016.

Regarding screening indicators, Cullman County Medicare beneficiaries experienced slightly higher mammography screening rates, and slightly lower cervical and colorectal cancer screening rates than Alabama overall. Cullman County Medicare beneficiaries have higher pneumococcal and flu vaccination rates than Alabama overall as shown below.

Percentage of Medicare Beneficiaries
Receiving Screening and Vaccination Services*
2006 – 2012
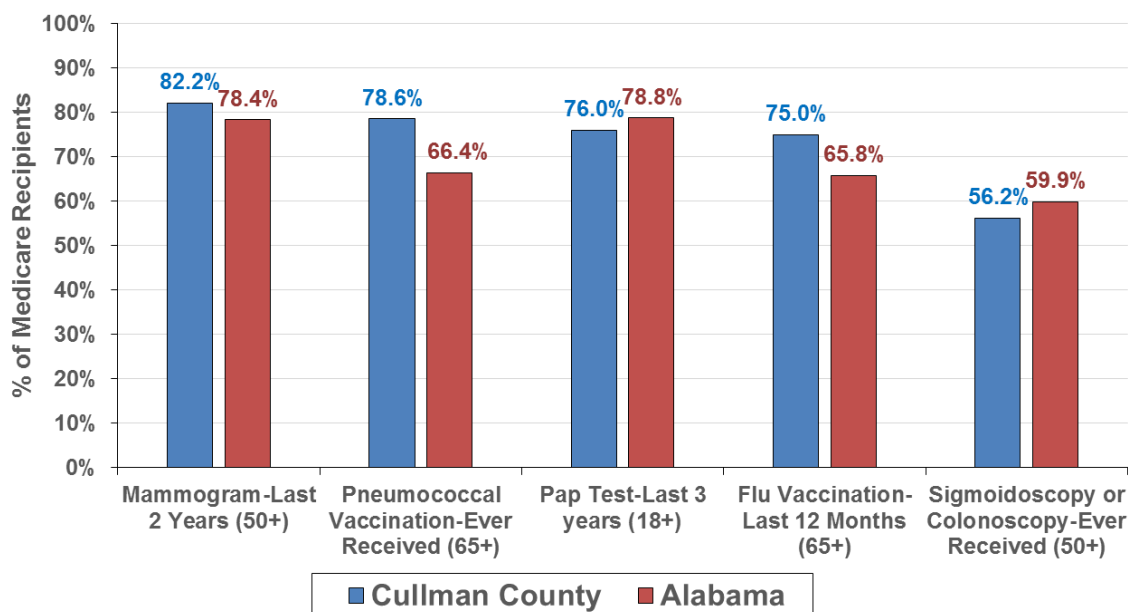
*Age-adjusted to the 2000 US standard population.
Source: CDC, National Center for Health Statistics, Health Indicators Warehouse (www.healthindicators.gov), 2016.

Currently, CRMC provides a significant amount of education and screening for heart disease and cancer in the region, and is committed to continuing, enhancing, and expanding education and screening services to address these important health needs.

Behavioral Risk Factors

As shown below, the proportion of Cullman County adults that are obese is slightly higher than Alabama overall, and that smoke is consistent with the statewide percentage. However, when compared with national figures, rates of both obesity and smoking are significantly higher in both Cullman County and Alabama. Both the level of obesity and the proportion of individuals that smoke are both significant factor influencing the health status of Cullman County residents.

Behavioral Risk Factors — Adult Smoking, Obesity, Excessive Drinking and Alcohol Impaired Driving Deaths
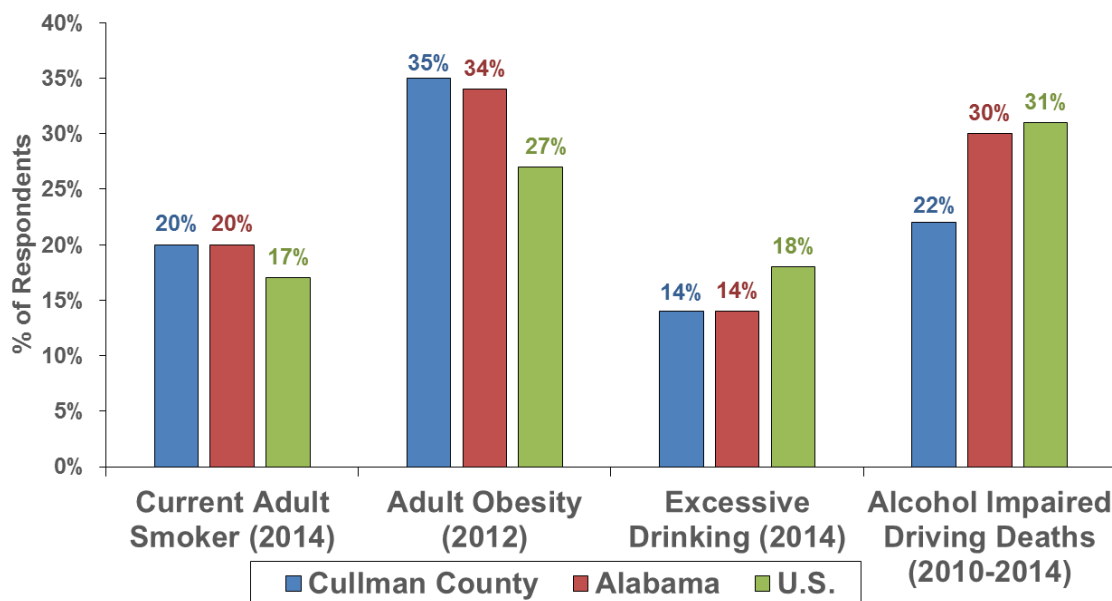
Source: www.countyhealthrankings.org, 2016.

Obesity is one of the most significant risk factors for several diseases affecting Cullman County residents, including heart disease, diabetes, and hypertension. The fact that more than one-third of the adult population is obese has been a significant factor in causing the elevated heart disease mortality rates in Cullman County. One of the causes of obesity is inactivity, and the relatively high proportion of the Cullman County adult population that do not exercise is consistent with the level of obesity.

Another contributing factor to the elevated rate of heart and lung disease including lung cancer, is the relatively high smoking rate in Cullman County. Approximately 20 percent of Cullman County adults smoke, consistent with the statewide rate, but greater than the U.S. rate of 17 percent. With one-fifth of adults who smoke in Cullman County, and the negative impact smoking has on other significant diseases in the region, there is significant room for improvement.

Maternal and Child Health

The rate of infant mortality in Cullman County, including both neonatal and post neonatal mortality, is below the Alabama rate, and only slightly higher than the U.S. rate as shown below.

Infant, Neonatal & Post Neonatal Mortality Rates
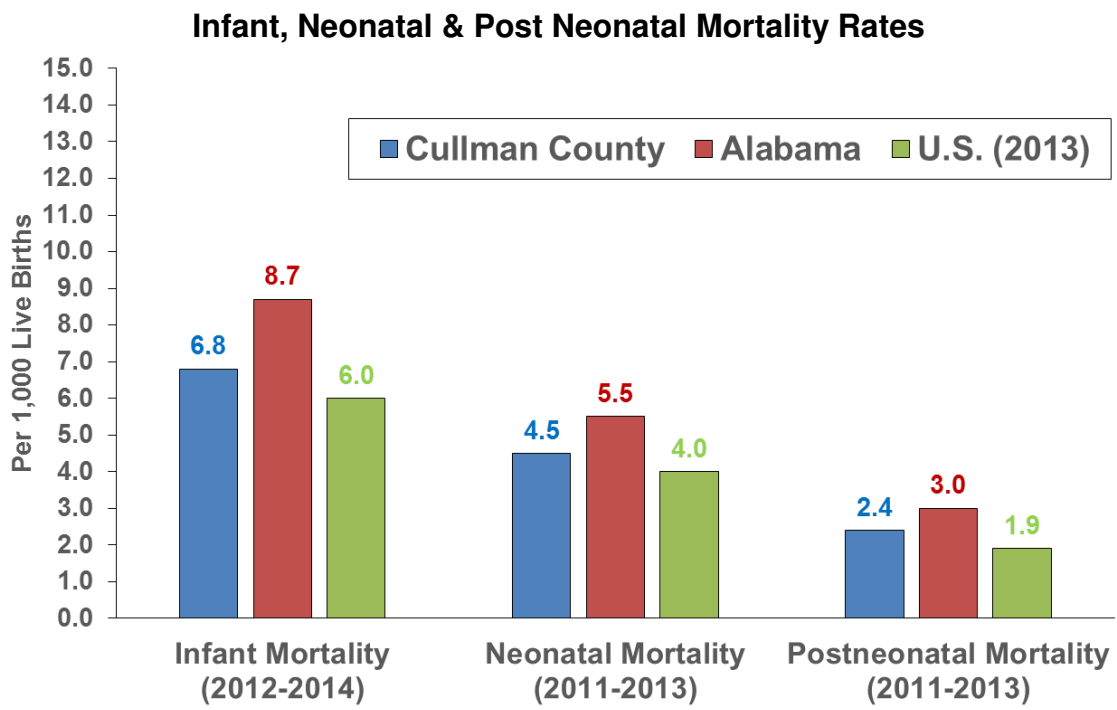
Source: Alabama Center for Health Statistics, Statistical Analysis Division, Selected Maternal and Child Health Statistics-2011 through 2014, 2016; CDC National Vital Statistics Reports, Volume 64, Number 9, August 6, 2015.

While the proportion of mothers receiving less than adequate prenatal care, low weight births, and births to unmarried women are all lower in Cullman County compared to statewide percentages, the percentage of mothers who smoked during their pregnancy was substantially greater than statewide. This adds further emphasis to the need to reduce smoking rates in Cullman County, including among pregnant mothers.

Selected Maternal & Child Health Indicators
2011 – 2013
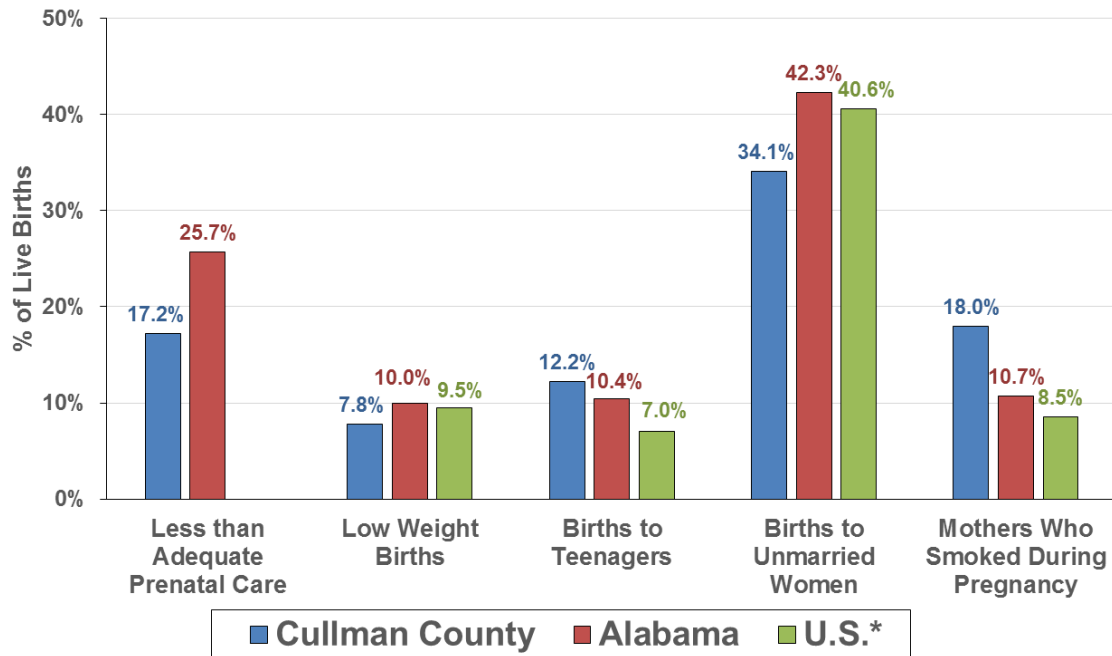
* U.S. data is for 2013.
Sources: Alabama Center for Health Statistics, Statistical Analysis Division, Selected Maternal and Child Health Statistics-2011 through 2013, and County Health Profiles-2011, 2012, 2013, 2016; and CDC, NCHS National Vital Statistics report, Vol. 64, No. 9, August 6, 2015.

County Health Rankings

County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, examines a variety of health status indicators and ranks each county within each state in terms of "health factors" and "health outcomes" as shown below.

County Health Rankings model © 2014 UWPHI
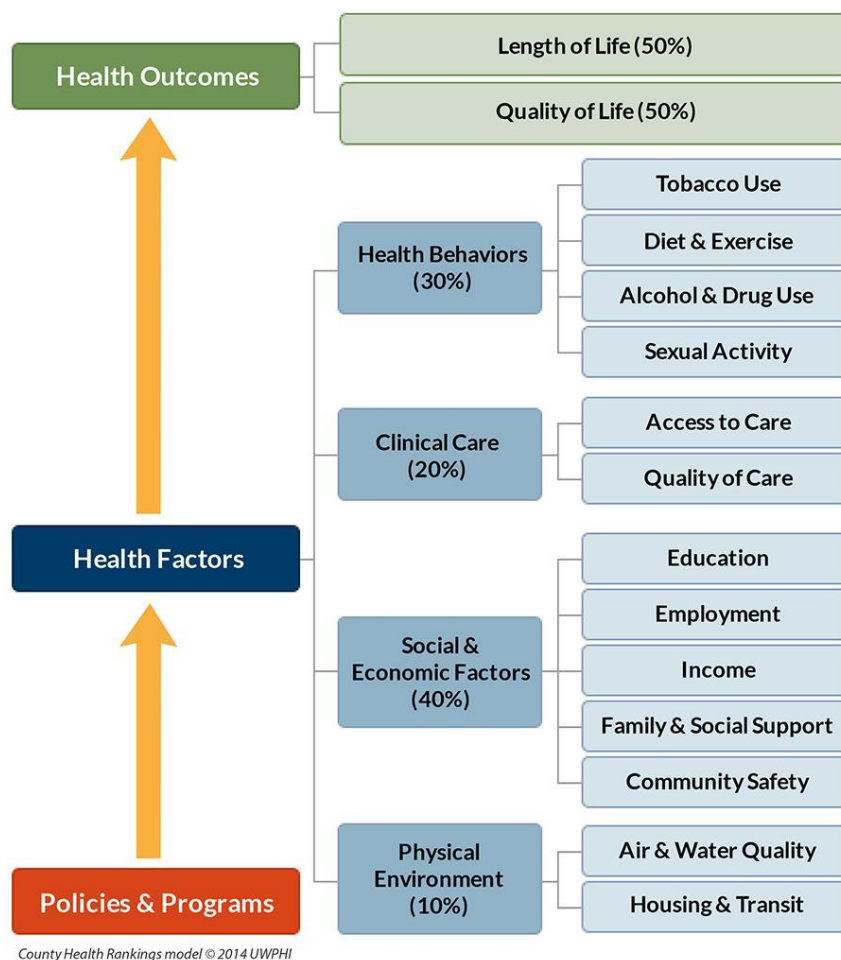
The health outcomes measure is a composite based on length of life and quality of life statistics; and the health factors measure is a composite of several variables known to affect health outcomes: health behaviors, clinical care, social and economic factors, and physical environment.

❑ Health Behaviors consists of several indicators, including measures of tobacco use, diet and exercise, alcohol and drug use, and sexual activity.

❑ Clinical Care is a composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, dentists, and mental health providers; and Quality of Care, which includes measures of preventable hospital stays, diabetic monitoring, and mammography screening.

❑ Social and Economic Factors measures indicators related to education, employment, income, family and social support, and community safety.

❑ Physical Environment is a composite that examines air and water quality, and housing and transit indicators.

County Health Rankings is updated annually. Currently, County Health Rankings 2016 relies on data from 2007 to 2014, with most data originating in 2010 to 2014.

Following is a summary of the indicators used to develop the 2016 rankings for Cullman County, compared with overall Alabama and U.S. statistics.

County Health Rankings (2016)			
Indicators	**Cullman County**	**Alabama**	**U.S.**
Mortality			
Premature Death (Deaths before age 75 per 100,000 pop.)[1]	9,500	9,500	6,600
Morbidity			
Poor or fair health	20%	21%	18%
Poor physical health days (per month)	4.5	4.6	3.8
Poor mental health days (per month)	4.7	4.6	3.7
Low birthweight (<2,500 grams)	9%	10%	8%
Health Behaviors			
Adult smoking	20%	20%	17%
Adult obesity	35%	34%	27%
Food environment index[2]	7.7	6.6	7.2
Physical inactivity[3]	28%	29%	23%
Access to exercise opportunities[4]	38%	63%	84%
Excessive drinking[5]	14%	14%	17%
Alcohol impaired driving deaths	22%	30%	31%
Sexually transmitted infections (chlamydia infections per 100,000 pop.)	295	611	447
Teen birth rate (per 100,000 female pop.)	55	44	35
Clinical Care			
Uninsured	19%	16%	17%
Primary care physicians (pop. to physician ratio)	1,760:1	1,570:1	1,320:1
Dentists (pop. to dentist ratio)	2,260:1	2,200:1	1,540:1
Mental health providers (pop. to provider ratio)	970:1	1,200:1	490:1
Preventable hospital stays (hospitalization rate per 1,000 Medicare enrollees)[6]	57	65	54
Diabetic monitoring[7]	90%	85%	85%
Mammography screening[8]	63%	63%	63%

County Health Rankings (2016)			
Indicators	**Cullman County**	**Alabama**	**U.S.**
Social & Economic Factors			
High school graduation [9]	86%	81%	82%
Some college [10]	57%	58%	64%
Unemployment	6.1%	6.8%	6.2%
Children in poverty	24%	27%	22%
Income inequality [11]	4.7	5.2	4.7
Children in single-parent households	29%	38%	34%
Social associations [12]	12.6	12.5	9
Violent crime rate (per 100,000)	201	418	392
Injury deaths (per 100,000)	73	74	60
Physical Environment			
Daily fine particulate matter [13]	12.5	12.8	11.4
Drinking water violations [14]	No	n/a	n/a
Severe housing problems [15]	14%	15%	19%
Driving alone to work	84%	85%	76%
Long commute – driving home [16]	34%	33%	31%

[1]Age-adjusted to the 2000 U.S. population.

[2]Ranges from 0 (worst) to 10 (best) and equally weights two indicators: Limited Access to Healthy Foods, and Food Insecurity.

[3]Adults that report not participating in physical activity or exercise during the past 30 days other than their regular job.

[4]Percentage of individuals who live reasonably close to a location for physical activity, defined as parks and recreation facilities.

[5]Based on BRFSS criteria for binge or heavy drinkers.

[6]Preventable hospital stays for ambulatory care sensitive conditions as defined by the Dartmouth Atlas.

[7]Percentage of diabetic fee-for-service Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels.

[8]Percent of female Medicare enrollees ages 67 to 69 receiving at least one screening over a two year period.

[9] Percent of high school freshmen that graduate from high school in four years.

[10]Percentage of the population age 25-44 with some post-secondary education.

[11]Ratio of household income at the 80th percentile to that at the 20th percentile.

[12]Number of associations per 10,000 population.

[13]Average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5).

[14]Whether or not at least one community water system in the county received a violation during federal fiscal years 2013-2014.

[15]Percentage of households with at least 1 or more of the following housing problems: housing unit lacks complete kitchen facilities; housing unit lacks complete plumbing facilities; household is severely overcrowded; and household is severely cost burdened.

[16]Percentage of commuters, among those who commute to work by car, truck, or van alone, who drive longer than 30 minutes to work each day.

Focus Group and Interview Findings

Overview

To gather primary input from people who represent the broad interests of Cullman County, focus groups and one-on-one interviews were conducted representing 39 individuals on March 15, 16, and 17, 2016, including 22 Focus Group participants and 17 Interview participants. The organizations which provided input into the CHNA process through participation in focus groups and interviews are included in Appendix A.

Topics of the Focus Groups and Interviews included:

❑ What do you believe are the most significant health needs/issues in Cullman County?
- Why are they significant?

What do you believe are the most significant health needs of each of the following groups?

❑ Medically underserved population?
❑ Low income population?
❑ Minority population?

A summary of the opinions of focus group and interview participants follows, in descending order of frequency in which they were mentioned.

Significant Health Needs

The most frequently mentioned significant health needs are as follows:

❑ Obesity
- Causes include:
  - Overall lifestyle, including lack of exercise, high amount of screen time, and food choices
    - Tends to move from one generation to the next
  - Lack of education
- Cost prohibitive for some people to join a fitness center
- Cullman County Health Coalition is working to address the obesity issue

❑ Poor Nutrition/Diet
- Causes include:
  - Lack of access to healthy foods
    - Fast food is more affordable and faster
    - Tends to move from one generation to the next
    - Particularly difficult for people living in rural areas

- ❑ Substance Abuse
  - Most commonly abused substances include:
    - Prescription medications/pain medications
      - ◆ Affects all socioeconomic levels
      - ◆ People become inadvertently addicted
    - Methamphetamine
    - Heroin
    - Marijuana/synthetic marijuana
    - Alcohol
  - Causes include:
    - Some individuals have a propensity for addiction/highly addictive
    - Lack of treatment resources/facilities
    - Overprescription by physicians
    - Enabled by family/friends
    - Easy availability
    - Lack of education
  - Other characteristics include:
    - Many are uninsured and difficult to place for treatment
    - Some can be violent

- ❑ Smoking/Tobacco Use
  - Caused by:
    - Lack of education
    - Habit passed from generation to generation

- ❑ Access to Care
  - Many are uninsured
    - Many use ER as primary care
    - Some find it difficult to access a doctor
    - Some don't qualify for care from Good Samaritan Health Clinic
  - Some lack transportation
    - CARTS buses are an option, but have limitations
      - ◆ Limited service and limited times available
      - ◆ Requires scheduling in advance
    - More of an issue in outlying areas of county
  - Medicare patients
    - Some find it difficult to access a doctor, such as specialists located in other cities
  - Medicaid patients
    - Some find it difficult to access a doctor since few accept Medicaid
  - Lack of education

❑ Mental Health
   • Need for more mental health workers/resources
   • No group homes are available for mental health patients in Cullman County
   • Mental Healthcare of Cullman is overwhelmed
     – Needs more resources/capacity
   • Other issues mentioned include:
     – Many people repeatedly end up in ER
     – Lack of providers accepting Medicaid
     – Lack of follow-up after treatment
     – Lack of transportation for treatment

❑ Generally Unhealthy Lifestyle
   • Causes include:
     – Lack of exercise and need for more exercise/wellness programs
     – People not taking control of their health/lack of personal responsibility
       ◆ Focused on other priorities/busy
       ◆ Short-term mentality

❑ Heart Disease

❑ Cancer
   • Causes for some cancers include:
     – Late detection/lack of screening
     – Unhealthy lifestyle
     – Drugs and tobacco

❑ Diabetes

❑ Lack of Education

❑ Health Care for Geriatric population
   • Growing need

❑ Alzheimer's Disease
   • Lack of support for patients/families
   • Some younger people are being diagnosed

Medically Underserved Population

The most frequently mentioned characteristics of the medically underserved population are as follows:

❑ Uninsured/Underinsured
  - Working poor/people who earn too much for Medicaid, but don't qualify for Medicare
    – Potential Medicaid expansion group
  - People are not aware of the options available to them/don't know how to apply
  - People with high deductibles/copays
  - Options can be bureaucratic/difficult to get assistance

❑ Low income population
  - Lack transportation
  - Lack of dental care (Medicaid patients)

❑ Young adults

❑ Mental Health patients

❑ Some respondents noted that most people in the community have access if they seek it, such as from Good Samaritan Health Clinic

❑ Other characteristics of this population include:
  - Tend to seek care at ER and, as a result, have limited continuity of care
  - Less likely to receive health screenings

Low Income Population

The most frequently mentioned characteristics of the low income population are as follows:

❑ More likely to have chronic illnesses
  • Diabetes
    – Many are undiagnosed prior to receiving care/treatment
  • Hypertension
  • COPD/Lung Disease

❑ Suffer from poor nutrition/diet
  • Cullman County Food Bank helps with this

❑ Lack of education

❑ Less likely to access medical care
  • Many put off going to the doctor
    – Good Samaritan is an option for some
    – Some are too proud to ask for help
  • Difficult to access prescription drugs
  • Many seek care in ER

Minority Population

The African American, Hispanic, and Asian population were the only minority groups mentioned by more than one respondent. Several indicated the minority population is very small in Cullman County. Also, several respondents mentioned that the health and economic issues associated with minority groups are generally consistent with the non-minority population in Cullman County.

The most frequently mentioned minority groups, and their identified characteristics and health needs/issues are as follows:

❑ Hispanic
  • Considered to be the largest minority in Cullman County, but small in number
  • Many indicated that health issues are the same/similar to general population
  • Language barrier exists
  • Other characteristics include:
    − Tend to only seek services in emergencies/use ER
    − Higher prevalence of diabetes
    − Higher prevalence of hypertension
    − Unwilling to access government health services

❑ African American
  • Considered to be a very small population
  • Many indicated that health issues are the same/similar to general population
  • Other characteristics include:
    − Higher prevalence of hypertension
    − Higher prevalence of kidney disease
    − Sickle cell disease can be a factor for some

❑ Asians
  • There are very few in Cullman County

Priority Health Needs

Evaluation Process and Criteria Utilized

Community health needs were identified through primary and secondary data collection and analyses, and were grouped into six major categories. These areas were prioritized by the CHNA Advisory Committee by utilizing criteria related to the estimated feasibility and effectiveness of possible interventions; whether addressing the need builds on existing organizational competencies; the number or proportion of people effected by the health need; the ability to meet the need with resources available; the importance the community places on addressing the health need; and the opportunity to intervene at the prevention level. The result was the identification and ranking of six significant health needs.

Prioritized Health Needs

Through the process described above and in the Assessment Methodology section, the CHNA Advisory Committee developed the following prioritized list of the most significant health needs:

1. Heart disease
2. Obesity
3. Access to care/continuity of care
4. Cancer
5. Smoking (as primary cause of lung disease and lung Cancer)
6. Substance abuse/mental health

These priorities will be further discussed in CRMC's Implementation Strategy.

Resources Potentially Available to Address Significant Health Needs

In addition to the facilities and services provided by CRMC and other providers as discussed above and in the Access to Care section of this report, Cullman County has many health resources available for vulnerable populations and the community overall. These resources were considered by CRMC in prioritizing the health needs of the community.

Appendix B to this report includes a list of existing health care facilities and other resources identified during the CHNA process that are available to address the community health needs identified. This list is not comprehensive, but includes those health resources known or identified in the course of conducting the CHNA.

Appendices

Appendix A – Organizations Providing Focus Group and Interview Input

Below are the organizations which provided input into the CHNA process through participation in focus groups and interviews. Organizations represented by more than one individual during the focus group and interview process are indicated in parentheses.

❑ Cullman Regional Medical Center
   • Social Services/Home Health and Hospice
   • Chaplain
   • Emergency Department
   • Emergency Medical Services
❑ Cullman County Health Department
❑ Cullman County Department of Human Resources
❑ Good Samaritan Health Clinic (2)
❑ Clergy
   • Garden City First Baptist Church
   • St. John's Evangelical Protestant Church
❑ Merchants Bank
❑ The Sanctuary at The Woodlands
❑ Wallace State Community College (2)
❑ Cullman City Primary School and Head Start (2)
❑ Cullman County Career Center
❑ Cullman City Schools Lead Nurse
❑ Mental Healthcare of Cullman
❑ Local Dentist
❑ Local Pharmacist
❑ Quality of Life Health Services (Federally Qualified Health Center)
❑ Cullman Economic Development Agency (2)
❑ Cullman County Cooperative Extension Agency (2)
❑ USA Healthcare
❑ 32nd Judicial Circuit Judge
❑ The Link of Cullman County
❑ Cullman County Chamber of Commerce
❑ Cullman City Mayor
❑ Former Congressman
❑ Cullman County Sheriff
❑ Cullman City Police Chief
❑ Cullman City Fire and Rescue
❑ AirEvac
❑ Cullman County E9-1-1

❑ West Point Elementary School

Appendix B – Community Resources

Cullman County has many health facilities and resources within the community that are available to respond to the health needs of the community. These resources were considered by CRMC in prioritizing the health needs of the community.

The following is a partial list of existing health care facilities and resources identified during the CHNA process that are available to address the community health needs identified. This list is not comprehensive, but includes those health resources known or identified in the course of conducting the CHNA.

Organization	Location/City	Telephone Number
Hospital		
• Cullman Regional Medical Center	Cullman	256-737-2831
Federally Qualified Health Center		
• Quality of Life Health Services, Inc.	Cullman	256-775-0230
Free Clinic		
• Good Samaritan Health Clinic	Cullman	256-775-1389
Rural Health Clinics		
• Cullman Internal Medicine, P.C.	Cullman	256-734-9370
• Horizon Medical Clinic, LLC	Baileyton	256-796-3083
• Midway Medical Clinic, LLC	Holly Pond	256-796-3084
• Southview Medical Clinic, LLC	Hanceville	256-352-4767
Public Health Department		
• Cullman County Health Department	Cullman	256-734-1030
Home Health Agencies		
• CRMC Home Care Services	Cullman	256-737-2831
• Alacare Home Health	Cullman	256-739-9016
• Cullman County Home Care	Cullman	256-734-0258
• Gentiva Health Services	Cullman	256-739-2992

Organization	Location/City	Telephone Number
Hospice Agencies		
• Hospice of Cullman County/CRMC	Cullman	256-739-5185
• Alacare Hospice	Cullman	256-739-5557
• Comfort Care Hospice of Cullman	Cullman	256-739-2588
• Gentiva Hospice	Cullman	256-737-7234
• Hospice of North Alabama	Cullman	256-734-9330
• SouthernCare New Beacon Cullman	Hanceville	256-887-0190
Nursing Homes		
• Cullman Health & Rehab Center	Cullman	256-734-8745
• Folsom Center for Rehabilitation and Healthcare	Cullman	256-739-1239
• Hanceville Nursing & Rehab Center, Inc.	Hanceville	256-352-6481
• Woodland Village Rehabilitation and Healthcare Center	Cullman	256-739-1430
Assisted Living Facilities		
• Brookdale Hanceville	Hanceville	256-352-3141
• Country Living, Inc.	Falkville	256-734-8618
• Morningside of Cullman	Cullman	256-737-1088
• Westminster Assisted Living of Cullman	Cullman	256-255-0361
• Woodland Haus	Cullman	256-739-2988
Mental Health/Substance Abuse Resources		
• Mental Healthcare of Cullman (mental health and substance abuse services for individuals ages 4 and up)	Cullman	256-734-4688
• The Sanctuary at the Woodlands (inpatient mental health services for adult (ages 19 to 64) and geriatric (ages 65 and older)	Cullman	256-255-0820
• Bridge Recovery Center for Teens (outpatient substance abuse treatment and drug testing for teens ages 12 to 18)	Cullman	256-775-8301
• Cullman County Treatment Center (methadone maintenance)	Cullman	256-739-5595
• The Foundry Farm Recovery Center (residential treatment of substance abuse for men)	Cullman	256-796-1440
• Lighthouse, Inc. (residential rehabilitation center for treatment of substance abuse for men)	Cullman	256-739-2777
• Alcoholics Anonymous (alcohol prevention, treatment, counseling)	Cullman	256-736-6000

Organization	Location/City	Telephone Number
Counseling Resources		
• New Beginnings Clinic	Cullman	256-739-1455
• Alliance Counseling & Psychotherapy	Cullman	256-736-3408
• Brooks' Place/Children's Advocacy Center of Cullman, Inc.	Cullman	256-739-2243
• Childhaven, Inc.	Cullman	256-734-6720
• Cullman Family Counseling	Cullman	256-734-2006
• East Cullman Baptist Association	Cullman	256-737-9918
• New Horizon Family Center	Cullman	256-739-9786
• Restoration Counseling Services	Cullman	256-385-2539
• Turnaround Counseling Services	Cullman	256-739-9569
• Victim Services of Cullman, Inc.	Cullman	256-734-6100
• Youth Advocate Programs, Inc.	Cullman	256-734-2644
Transportation		
• Cullman Area Rural Transportation System (CARTS)	Cullman	256-734-1246
Dialysis		
• Dialysis Clinic, Inc.	Cullman	256-734-3055
Senior Citizens		
• Cullman County Commission on Aging	Cullman	256-734-1241
• Community Action Partnership of North Alabama	Cullman	256-260-3142
Developmentally Delayed/Disabilities		
• The ARC of Cullman County	Cullman	256-737-1915
• Cullman County Center for the Developmentally Delayed	Cullman	256-734-3253
• Cullman County Child Development Center	Cullman	256-739-0486
• T.O.D.D.'s Club	Cullman	256-737-1915

Organization	Location/City	Telephone Number
Other Community Organizations		
• The Link of Cullman County	Cullman	256-775-0028
• United Way of Cullman	Cullman	256-739-2948
• American Red Cross-Cullman County	Cullman	256-734-0921
• Cullman Area Chamber of Commerce	Cullman	256-734-0454
• Cullman County Center for the Developmentally Disabled	Cullman	256-737-1915
• Alabama Cooperative Extension Agency-Cullman County Office	Cullman	256-789-0106
• Alabama Department of Human Resources-Cullman County	Cullman	256-737-5300
• Cullman County Parks and Recreation	Cullman	256-734-3369
• Cullman City Parks and Recreation	Cullman	256-734-9157
• Cullman County Health Coalition	Cullman	N/A