



COMMUNITY HEALTH NEEDS ASSESSMENT

2019

UAB MEDICINE

• Mission • Vision • Values • Culture •

Mission:

To improve the health and well-being of society, particularly the citizens of Alabama, by providing innovative health services of exceptional value that are patient- and family-centered, a superior environment for the education of health professionals, and support for research that advances medical science.

Vision:

UAB Health System will enhance its role as a preeminent and well-integrated clinical enterprise, recognized as a leader in the advancement of medical science and the delivery of health-related services that are patient- and family-centered. With the School of Medicine, the Health System will create highly innovative, well-coordinated interdisciplinary services and partnering relationships that serve as a model for health education and service delivery.

Values:

- **Always Care** - listen with empathy, be compassionate and support those in need.
- **Own It** - Be accountable, take action and make it happen.
- **Work Together** - think win-win, build consensus and play your role on the team.
- **Do Right** - Follow through, work with principles and do no harm.

Culture:

Our employees embrace these values and together they represent the goal of providing excellence in all we do.



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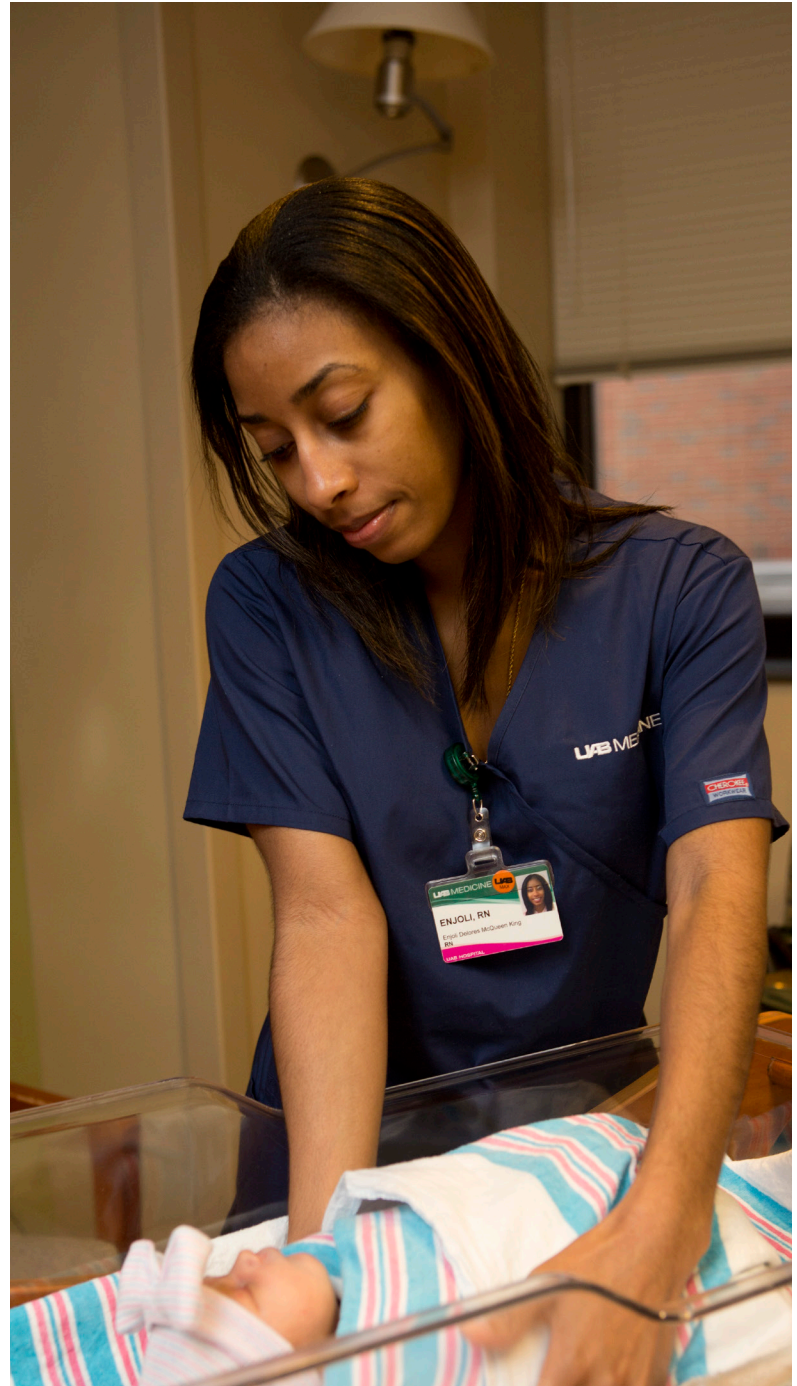
• Executive Summary •

On March 23, 2010, the Patient Protection and Affordable Care Act (ACA) was signed into law and created new requirements for not-for-profit hospitals including a requirement for a Community Health Needs Assessment (CHNA) to be completed every three years. This report was prepared by the Alabama Quality Assurance Foundation (AQAF) in conjunction with The University of Alabama at Birmingham Health System to meet the CHNA requirement for The University of Alabama at Birmingham (UAB) Hospital for fiscal year 2018-2019. AQAF is the Quality Improvement Organization (QIO) for the state of Alabama and has more than three decades of experience in identifying and addressing community health needs.

To prepare this CHNA report, data were gathered from a variety of sources in an effort to construct a comprehensive, current and accurate snapshot of the health issues in Jefferson County, Alabama. Data were obtained from multiple public data bases and opinions were solicited from public health experts and community leaders within the community served by UAB Hospital. This information was summarized for final consideration by a CHNA team consisting of hospital and system personnel. This team prioritized the community health needs as follows:

1. Diabetes Education
2. Hypertension / Stroke Prevention
3. Good Nutrition / Obesity Prevention

An implementation strategy that will address each of these issues is currently in development. The strategy will seek to leverage existing partnerships, identify novel opportunities for synergy and maximize legacy programs while deploying specific interventions within the community. The outcomes and results of these interventions will be followed and re-examined in preparation for the next CHNA scheduled for completion no later than Summer 2022.



• Methodology •

The community needs assessment process was initiated by assembling an internal team responsible for shepherding the entire project. The internal team was comprised of representatives from hospital management, outreach services, strategic planning, and AQA. This team met initially to review the requirements of the CHNA as established by the ACA and further defined by IRS Notice 2011-52, and to establish the roles and responsibilities for the team members. These decisions were memorialized in a project plan and incorporated into a project dashboard. With the infrastructure created and the purpose and scope of the project identified, the team set about its primary task of gathering data.

The first step in the data gathering process was to obtain several de-identified data sets from the hospital. The initial task was to obtain zip code specific discharges for up to three years. These data sets were then analyzed to compile zip code maps defining the hospital's service area. Additional data sets were requested from the hospital including admission data stratified by age, race, ethnicity, payor mix, and discharge diagnoses. With the service area of the hospital determined, a best fit county was selected for data collection from secondary (public) sources and for the purposes of comparison. Secondary sources utilized for this report include:

- **Behavioral Risk Factor Surveillance Survey 2017**
- **Alabama Department of Labor**
- **Alabama Department of Public Health, Center for Health Statistics**
- **Alabama Department of Public Health, Cancer Registry**
- **Georgia Department of Public Health**
- **U.S. Census Bureau**
- **U.S. Bureau of Labor Statistics**
- **County Health Rankings and Roadmaps**
- **World Population Review**
- **United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released 2018**

The second step was to gather information from various representatives of the community. The CHNA team met to establish a list of key informants who included individuals with public health expertise, state and local officials, and community leaders. Topic areas and interview questions from the previous CHNA were reviewed to determine the appropriateness of utilizing them for this CHNA. The topic areas were then used to develop survey and interview tools that were utilized in discussions and interviews with their identified key informants. The results of these surveys and interviews were then compiled.

Distillation of these data into a prioritized list was the final step of the Community Health Needs Assessment. The CHNA Oversight Committee met to complete this final task. AQA staff presented the data collected. The Oversight Committee members then established the top 3 health care needs for their community. The information that was presented to the CHNA Oversight Committee and the final prioritized list of health care needs are summarized in this report and will also be displayed on UAB Hospital's website.

• Geographic Area Defined •

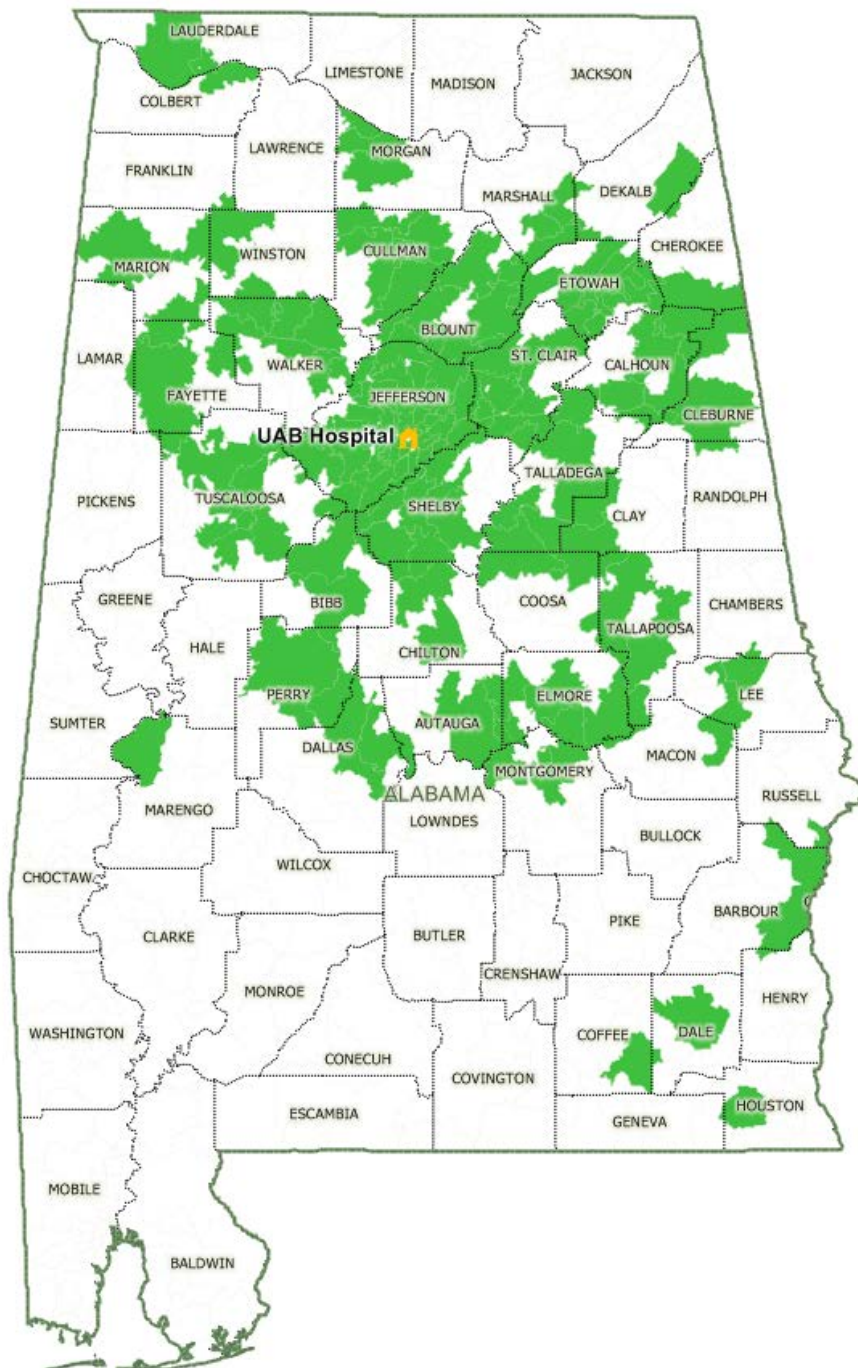
The UAB Hospital's Community is defined using the 146 zip codes derived from 75% of UAB's inpatient discharges from fiscal year 2018. The zip codes encompass 31 counties, all in the state of Alabama. Fifty percent of these zip codes are concentrated in five counties: Jefferson (30.8%), Shelby (5.4%), Etowah (4.7%), St. Clair (4.7%) and Calhoun (4.1%). For the purposes of this study, the University of Alabama at Birmingham Hospital community is defined as Jefferson County, Alabama. The zip codes are listed in descending order from high concentration of discharges to lower concentration of discharges. The zip codes are as follows:

35215	35126	35077	35045	35555	36801
35211	35173	35903	36092	36703	36078
35206	35210	35223	35125	36054	35473
35212	35243	35901	35640	35475	36264
35205	35124	35040	35116	35550	35044
35214	35111	35504	35051	36206	36111
35020	35180	35501	36330	35950	36756
35208	35094	35080	35031	35661	35073
35204	35222	36201	35401	35085	35072
35217	35010	36203	35503	35967	36022
35209	35007	36116	35603	35578	35633
35226	35160	36265	35601	35594	35549
35207	35005	35115	35043	35118	36106
35242	35405	35146	36066	36853	36360
35216	35224	36207	35565	35406	35453
35244	35213	35062	36108	35179	36027
35023	35068	35904	36301	35151	36732
35022	35150	35954	36830	35184	35951
35203	35127	36067	35906	36093	35570
35064	35121	36109	35953	35907	35054
35071	35117	35128	35058	35952	35042
35228	35055	35057	35630	35133	
35235	36701	35117	36272	35006	
35218	35221	35079	35404	35172	
35234	35120	35004	35096	35957	

• Service Area •

Jefferson County, Alabama has a total area of 1,122.3 square miles of which, 1,111 square miles are land and 11.2 square miles are water (**Graph 16**). Jefferson County is the most populous county in the state. Birmingham is the county seat and also the state's largest city. There are 34 municipalities located within the county. The county is governed by five commissioners elected from specific county districts. The county is 89% urban and 11% rural areas. The neighboring counties are Bibb, Blount, St. Clair, Shelby, Tuscaloosa and Walker. Due to its location in the north central part of the state and the foothills of the Appalachian Mountain, the county is characterized by rolling hills and valleys.

Illustration 1. UAB Hospital Birmingham Service Area



• Demographics •

Population

Located in central Alabama, Jefferson County is a mix of urban, suburban, and rural environments. There are 67 communities within the county, 34 of which are incorporated municipalities. According to the U.S. Census Bureau, the most recent population estimate for Jefferson County is 659,197 (**Table 1**). The dominant language is English, with 5.9% speaking another language in the home.

Race/Ethnicity

The population of Jefferson County is 53.2% white, 43.4% black, and 3.1% other (**Graph 20**). The U.S. Census Bureau considers Hispanic/Latino heritage as an ethnicity and not a race. Of Jefferson County residents responding to the most recent census, 3.9% consider themselves to be of Hispanic/Latino origin. Persons of Hispanics/Latino origin may be of any race, and are included in the applicable race categories above. The Hispanic/Latino population of Jefferson County is 4.3%.



Education

Of Jefferson County's 659,197 residents, 22.9% are under 18 years old (**Graph 18**) and are served by 12 school systems. There are 11 city systems and one run by the Jefferson County Board of Education. This county system is Alabama's second largest school district with 57 schools, 4,500 teachers, and over 36,000 students. The system offers a multitude of academic, career technical and extracurricular opportunities for students. The Birmingham City School System serves students in the city of Birmingham with 43 schools, (18 elementary, 8 middle, 10 K-8 schools, and 7 high schools). Of the county's residents, 89.4% graduated from high school (**Graph 22**).

Jefferson County offers many post-secondary education opportunities. The University of Alabama at Birmingham Southern College, and Samford University provide the area with major colleges of medicine, dentistry, optometry, pharmacy, law, engineering, and nursing. Of the county's residents, 31.9% hold a Bachelor's degree or higher (**Graph 23**). Birmingham has been the home of The University of Alabama at Birmingham School of Medicine since 1947. Birmingham is also home to three of the state's five law schools.

• Employment •

Jefferson County is an economic catalyst for the state. Not only does it have many companies and organizations with a large employment base, but it is a hub for medical care. UAB has an extensive healthcare complex and is the second largest employer in the state. The per capita income of a Jefferson County resident in 2017 was \$29,456 and median family income was \$49,321 (**Graph 24**). The percentage of residents living below the poverty level is 16.7% (**Graph 25**). As of February 2019, the unemployment rate for Jefferson County was 3.7% which is the same as the state of Alabama.

UAB is the largest healthcare provider in the state, while Blue Cross Blue Shield of Alabama is the major health insurance carrier in the state with corporate headquarters in Birmingham. Honda Manufacturing of Alabama (4,500 employees) and Mercedes-Benz U.S. International, Inc. (3,600 employees) are the major manufacturing employers. Both are located in adjacent counties within driving distance of Birmingham.



In April 2019, the Birmingham Business Alliance lists the largest employers in Jefferson County as follows:

TOP TEN EMPLOYERS:

- **University of Alabama at Birmingham (23,000)**
- **Regions Financial Cooperation (9,000)**
- **St. Vincent's Health System (5,100)**
- **Children's of Alabama (5,000)**
- **AT&T (4,517)**
- **Brookwood Baptist Health (4,459)**
- **Jefferson County Board of Education (4,400)**
- **City of Birmingham (4,200)**
- **Blue Cross-Blue Shield of Alabama (3,100)**
- **Alabama Power Company (3,092)**

U.S. Bureau of Labor Statistics reported that employment increased in five of Alabama's six largest counties from June 2017 – June 2018. Jefferson County had a 1.4% increase in employment during that time period.

• Roads & Transportation •

The roadway system in Jefferson County provides residents and companies transportation access to all major cities in the southeast and throughout the United States. The five major interstates located throughout the county are I-20, I-22, I-59, I-65, and I-459. U.S. Highways 31 and 280 carry travelers through downtown Birmingham and over Red Mountain into surrounding counties.

Public transportation is limited in Jefferson County. The Birmingham-Jefferson County Transit Authority (BJCTA) operates public transportation for the county. Bus service runs regularly, along fixed routes, from the transportation center to multiple points in Birmingham, Bessemer, Center Point, Woodlawn, Homewood, Ensley, Mountain Brook, Hoover, Tarrant and Vestavia Hills. The downtown natural gas trolley service is available for three routes through the City Center. Greyhound provides intercity bus transportation to cities across the United States. Current service area is 200 square miles with a demand population of 400,000.



The Birmingham Shuttlesworth International Airport is home to four major airlines and offers 130 daily flights to 48 airports in 45 cities throughout the U.S. They have more than 2.6 million passengers who travel through the airport each year.



The Birmingham region has rail transportation for both passenger and freight. There are daily Amtrak stops connecting to most major cities in the U.S. with daily passenger services to Atlanta, New Orleans and New York. Metropolitan Birmingham has three rail hubs: Norfolk Southern, CSX, and BNSF.

The state of Alabama contains an extensive waterway system. Port Birmingham is located in the western part of Jefferson

County on the Warrior River. River service connects to the deep water Port of Mobile. It offers fleeting and shifting services as well as access to inland and international ports.

• Weather & Air Quality •

Jefferson County has a humid subtropical climate, characterized by hot summers, mild winters, and abundant rainfall. The spring and fall months are pleasant but variable as cold fronts frequently bring strong to severe thunderstorms and tornadoes to the region. The fall season features less rainfall and fewer storms, as well as lower humidity than the spring, but it is also a secondary severe weather season. Birmingham is located in the heart of a tornado alley due to the frequency of tornadoes in Central Alabama. In 2016, there were 65 tornadoes in Alabama resulting in 18 injuries and 4 fatalities. During 2017 - 2018, there were 103 tornadoes resulting in 29 injuries, but no fatalities. 2019 has proven to be a more destructive year than the past 3 years with 12 tornadoes touching down on March 3rd with a devastating EF - 4 tornado killing 2 in Lee County. In the late summer and fall months, the area experiences the results of occasional tropical storms and hurricanes due to its proximity to the central gulf coast.

From the 1970s to the early 2000s, Jefferson County was classified at times as a non-attainment area for ground-level ozone and particle pollution by the Environmental Protection Agency (EPA). This occurs when pollution levels exceed federal limits. Through the cooperation of the community and other entities, Jefferson County has been designated as an attainment area for the eight-hour ozone standard since 2006.



• Health Care •

Jefferson County residents are well served by an abundance of inpatient hospitals in the area.

- Brookwood Baptist Health
- Children's of Alabama
- Grandview Medical Center
- Encompass Health Lakeshore Rehabilitation Hospital
- Hillcrest Behavioral Health Services
- Princeton Baptist Medical Center
- St. Vincent's Health System
 - St. Vincent's Birmingham
 - St. Vincent's East
- The University of Alabama at Birmingham Hospital (UAB)
 - UAB Callahan Eye Hospital & Clinics
 - Spain Rehabilitation Center
 - UAB Hospital - Highlands
- Medical West (Affiliate)
- Veterans Affairs Medical Center



• Medically Underserved •

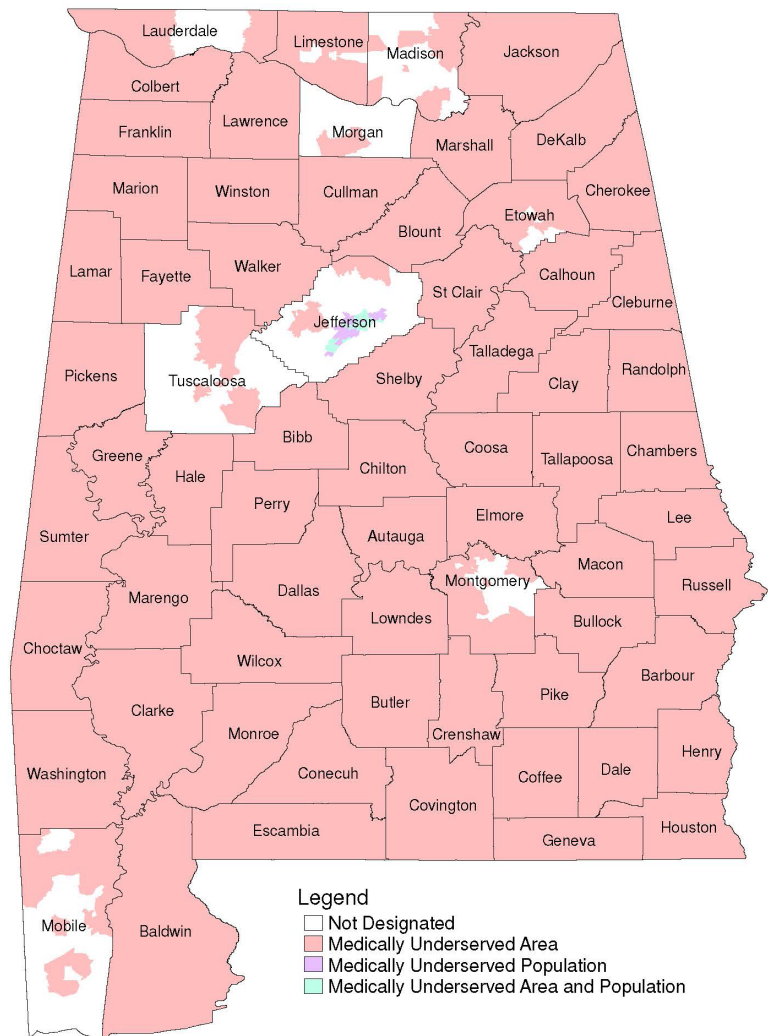
Jefferson County residents are well served by an abundance of hospitals in the area. A small area of West Central Jefferson County is currently designated as a Medically Underserved Area Population (MUAP) according to criteria developed by the Department of Health and Human Services (**Illustration 2.**). This designation is based on an index of four variables:

- 1. The Ratio of Primary Care Physicians per 1,000 Population**
- 2. The Infant Mortality Rate**
- 3. Population Living Below the Poverty Level**
- 4. Population Over the Age of 65**

Jefferson County is considered a Health Professional Shortage Area (HPSA) for low-income residents in areas of primary care, dental care, and mental health care. Low income residents of Jefferson County are able to utilize the county’s charity healthcare system, Cooper Green Mercy Hospital. Due to financial concerns, the inpatient services were discontinued in late 2012, but the facility continues to provide chronic and urgent care to those in need of free or subsidized healthcare. Although many in the community have the needed healthcare services, UAB Hospital’s faculty and staff are committed to providing world-class care for persons throughout Jefferson County, Alabama, and the world.

Illustration 2. Medically Underserved Populations (MUAs)

Medically Underserved Areas/Populations (MUA/Ps)



• UAB Health System •

The University of Alabama at Birmingham (UAB) Health System is an academic medical center located in Birmingham, Alabama. It is one of the top five largest academic medical centers in the country with over 11,000 employees and 900 physicians. The health system is comprised of UAB Hospital, the Kirklin Clinic of UAB Hospital, the Kirklin Clinic at Acton Road, UAB Callahan Eye Hospital & Clinics, UAB Hospital - Highlands, Medical West (Affiliate), Baptist Health Montgomery (Affiliate), Spain Rehabilitation Center, Hazelrig-Salter Radiation Center, and UAB Women's & Infants Center. UAB encompasses more than 90 city blocks. UAB Hospital is the centerpiece of the UAB Health System. It is located in the medical district of the city on the University of Alabama at Birmingham campus at 1802 6th Avenue South Birmingham, Alabama 35233. It is a level 1 trauma center. As one of U.S. News & World Report's best hospitals, UAB is a national leader in patient care, research, and training, providing the most up-to-date treatments and innovations in health care. The hospital is recognized as a Center for Nursing Excellence and is the only adult-care hospital in the state of Alabama that has earned Magnet Status, a designation awarded by the American Nurses Association. UAB Hospital is a major center for clinical research and the home of some of the top medical programs in America. The hospital's faculty and staff are committed to providing world-class care for patients throughout Alabama and the world. UAB has partnered with its community and state, spurring phenomenal progress over a half century. Its growth as a world renowned research university and medical center has driven the social, cultural, and economics of Birmingham. UAB Hospital is committed to providing a continuum of health services of the highest quality. The resources of the hospital and expertise of the staff set a national standard for health care delivery. A vision for a healthier and more prosperous city, county, and state remain foremost for UAB.



• Inpatient Services •

As the centerpiece of the UAB Health Systems, UAB Hospital provides a complete range of primary and specialty services, as well as the most up to date treatments and innovations in health care.

- **1,157 Inpatient Beds (UAB/UAB Highlands)**
- **51,063 Discharges Yearly**
- **INTENSIVE CARE UNITS (ICU)**
 - 36 Beds - Neurological (NICU)
 - 28 Beds - Trauma Burn (TBICU)
 - 25 Beds - Medical (MICU)
 - 21 Beds - Cardiac (CCU)
 - 20 Beds - Cardiovascular (CICU)
 - 20 Beds - Heart Transplant (HTICU)
 - 20 Beds - Surgical (SICU)
 - 19 Beds - Cardiopulmonary (CPCC)
 - 17 Beds - Bone Marrow Transplant (BMT)
 - 11 Beds - Highlands ICU
- **SURGERY - 36,339 Surgeries/Year (Excludes Endoscopy)**
 - Comprehensive Transplant Institute 400+ Transplants Yearly
 - Heart
 - Kidney
 - Liver
 - Lung
 - Pancreas
- **CENTER FOR PSYCHIATRIC MEDICINE**
- **CHAPLAINCY/PASTORAL CARE**
- **CLINICAL LAB & PATHOLOGY**
- **EMERGENCY ROOM (ER)**
 - 109,825 Visits/Year
 - 65 Individual Patient Rooms (38,000 sq. ft)
 - Critical Care Transport (Worldwide)
 - Level 1 Trauma Center
 - Two 40 Slice CT Scanners
- **HEALTH FACILITY TRANSPORTATION**
- **PATIENT RESOURCES**
 - Blood Donation Center
 - CarePages - Free, Private Patient/Family Web-Sites
 - Dietary Services - Hotel Style Room Service
 - Deaf - Talk Video System
 - Escort Services
 - Guest Services
 - Language Interpreters
 - Patient Advocate
 - Patient Resource Library - The Kirklin Clinic
 - TIGR System - Educational Video on Demand
- **RADIOLOGY**
 - Computed Tomography
 - 8,500 Scans Monthly
 - Heart & Vascular Center
 - Magnetic Resonance Imaging (MRI)
 - Nuclear Medicine
 - Ultrasound
 - Sonograms
 - 35,000 yearly
 - Sieman Sequoia
 - Phillips IU 22
 - 13 Cinical Trials



• Outpatient Services •

UAB Hospital provides outpatient services as a multidisciplinary medical home serving 1,600 patients daily with 600 physicians and 35 specialties including:

- **The Kirklin Clinic at UAB Hospital**
 - Cardiology
 - Dermatology
 - Ear, Nose & Throat
 - Gastroenterology
 - Hematology
 - Internal Medicine
 - Nephrology
 - Neurology
 - Pulmonology
 - Psychiatry
 - Rheumatology
 - Surgery
 - Traveler's Health
 - Urology
- **The Kirklin Clinic at Acton Road**
 - Comprehensive Cancer Center
 - Heart & Vascular Clinic
- **1917 HIV Clinic**
- **Hematology/Oncology West Clinic**
- **Russell Clinic**
- **Sparks Clinic (Civitan)**
 - Educational Research
 - Developmental Disabilities Services
- **Student Health Services**
 - Counseling
 - Prevention
 - Treatment
- **UAB Medicine Clinics**
 - Gardendale
 - Hoover
 - Huntsville
 - Inverness
 - Leeds
 - Montgomery
 - Selma
 - Whitaker Clinic

Over 1.3 Million Patient Visits per Year to UAB Outpatient Facilities.



• UAB Hazelrig - Salter Oncology Center •

This 50,000 square-foot radiation oncology center is one of the most technologically advanced radiation centers in the country, serving 5,000 patients per year. Located at 1719 6th Avenue South Birmingham, AL 35294



EXTERNAL RADIATION THERAPIES:

- 3 Dimensional Radiation Therapy (3D-CRT)
- EBRT- Superficial
- Image Guided Radiotherapy (IGRT-Rapid Arc)
- Intensive Modulated Radiation Therapy (IMRT)
- Stereotactic Body Radiation
- Total Body Irradiation (TBI)
- Total Skin Irradiation (TSI)

INTERNAL RADIATION THERAPY:

- Brachytherapy
 - High Dose Rate (HDR)
 - Low Dose Rate (LDR)
 - Pterygium
- Radioisotope Therapy
- New Research Medicine
 - Synthetic Chlorotoxin
- Radioimmunotherapy
- Therapeutic Isotopes

• UAB Highlands •

A general acute care facility located at 1201 11th Avenue South, Birmingham, AL 35205. The hospital covers a full range of general, medical and surgical specialties.

INPATIENT SERVICES:

- 119 Inpatient Beds
- 17 Operating Rooms
- Acute Care for Elderly Unit
- Emergency Room



OUTPATIENT SERVICES:

- The Workplace: Work Related Injury Treatment & Rehabilitation
 - Drug Screens
 - Impairment Ratings
 - Occupational Therapy (OT)
 - Physical Therapy (PT)
 - Physicals
 - Psychiatric Evaluations
 - Walk-In Injuries
- Pain Center (Procedure Rooms)
- Sleep Center

CLINICS:

- Alabama Eye & Cataract Center
- Gastroenterology
- Infectious Disease
- Orthopaedic Specialties
- Neurology & Neurosurgery
- Pain Treatment Clinic
- Rheumatology Clinic
- Sleep-Wake Disorders Center
- The Travelers' Health Clinic - Suite 502
- Vein Clinic

• UAB Spain Rehabilitation •

Spain Rehabilitation Center is one of the Southeast's foremost providers of comprehensive rehabilitation care located at 1717 Sixth Avenue South, Birmingham, Alabama 35233 Immediate access provided via a crosswalk to UAB Hospital.

INPATIENT SERVICES:

- 49 Private Inpatient Rooms
- Aquatic Therapy Pool
- Therapy Gyms
 - 2 Fully-Equipped
 - 1 Specialized Brain Injury

OUTPATIENT SERVICES:

- Audiology
- Balance & Vestibular Training
- Constraint Induced Aphasia Therapy
- Cardiopulmonary Rehabilitation Program
- Driver Rehabilitation Services
- Electromyography Clinic
- Locomotor Training
- Model Peer-Focused Support Program
- Neuropsychology/Clinical Psychology
- Occupational Therapy (OT)
- Orthotics & Prosthetics
- Physical Therapy (PT)
- Physician Clinic Outpatient:
 - Amputee Clinic
 - Brain Injury Clinic
 - Orthopaedic Clinic
 - Women's Reproductive Health Clinic for Women with Disabilities
 - Wound Care Clinic
- Speech Therapy (ST)
- Spasticity Clinic
- Spinal Cord Clinic
- Taub Therapy
 - Stroke
 - Traumatic Brain Injury
- Urology & Sexual Health Clinic
- Wheelchair Seating & Positioning Clinic



• UAB Women & Infants Center •

State of the art facility dedicated to caring for healthy and high-risk pregnant women, healthy and high-risk newborns and a variety of gynecological problems, including gynecological cancers.

INPATIENT FACILITIES

- 4,085 Deliveries/Year
- Maternal Fetal Physician On-Call 24 Hours/Day
- Private Rooms Including:
 - Labor
 - Antepartum
 - Postpartum
 - Gynecology
- Breast Feeding Lactation Support
- Single Room Neonatal ICU Care
 - 55 Bassinets - Regional Neonatal ICU (RNICU)
 - 52 Bassinets - Continuing Care Nursery (CCN)

OUTPATIENT FACILITIES

- Maternal Fetal Medicine Clinic (High Risk OB):
 - Prenatal Genetics Clinic
 - Fetal Diagnosis & Care
 - First Trimester Screening
 - Multiples Clinic
- Gynecologic Oncology
- Obstetrics & Gynecology
- Urogynecology & Pelvic Reconstruction Surgery
- Reproductive Endocrinology & Infertility
- Tot Shots



• Patient Data •

Inpatient Discharge Disposition	Total	% of Total
Home / Self Care	31,851	62.4
Home Health Service	10,029	19.6
Skilled Nursing Facility	2,823	5.5
Rehabilitation Facility	1,920	3.8
Expired	1,591	3.1
Hospice Home	723	1.4
Intermediate Care Facility	485	0.9
Against Medical Advice	393	0.8
Psych Hospital / Psych Unit	355	0.7
Short Term Hospital	312	0.6
Cancer Center / Children's Hospital	246	0.5
Long Term Care Hospital	142	0.3
Hospice Medical Facility	44	0.1
Other	151	0.4
Total	51,065	100%



Patient data from FY 2018 for UAB Hospital and includes primary/admitting diagnosis, payor source, inpatient demographics, and discharge disposition.

Top 15 IP & OP Principal Diagnoses	Total	% of Total
Complications of Surgery & Medical Care, Not Elsewhere Classified	4,938	5.7
Encounters for Other Specific Health Care	3,219	3.7
Other Forms of Heart Disease	3,204	3.7
Maternal Care Related to the Fetus & Amniotic Cavity & Possible Delivery Problems	3,183	3.7
Other Bacterial Diseases	3,054	3.6
Other Obstetric Conditions, Not Elsewhere Classified	2,763	2.8
Persons Encountering Health Services In Circumstances Related to Reproduction	2,392	2.7
Hypertensive Diseases	2,300	2.4
Ischemic Heart Diseases	2,087	2.3
Cerebrovascular Diseases	1,936	2.2
Other Maternal Disorders Predominantly Related to Pregnancy	1,879	2.0
Disorders of Gallbladder, Biliary Tract & Pancreas	1,694	1.9
Diseases of Esophagus, Stomach & Duodenum	1,607	1.8
Benign Neoplasms, Except Benign Neuroendocrine Tumors	1,528	1.5
Other Diseases of Intestines	1,262	1.5
Other	48,879	56.9
Total	85,925	100.0%

• Inpatient Data •

Inpatient Payor	Total	% Total
Medicare	20,203	39.6
Commercial	13,574	26.6
Medicaid	10,573	20.7
SelfPay/Indigent	4,218	8.3
Other	2,497	4.9
Total	51,065	100

Inpatient Race Distribution	% Total
White	57.2
Black	37.3
Hispanic	2.6
Unknown	1.5
Asian	1.3
Other	0.1

Inpatient Age Distribution	% Total
>18	6.7
18 - 24	6.9
25 - 34	13.5
35 - 44	11.7
45 - 54	14.1
55 - 64	19.4
65 - 69	8.6
70+	19.0



• Community Resources •

- Alabama Legal Help
- Alabama Cancer Society
- Alabama Diabetic Association
- Alabama Heart Association
- Alethia House
- Bessemer Rescue Mission
- Brother Bryan Mission
- Cahaba Valley Health Care
- Catholic Center of Concern
- Churches
- Clastran Specialized Public Transportation
- Community Kitchens of Birmingham
- Children’s Aid Society
- Firehouse Shelter
- First Light Women & Children’s Shelter
- Food Banks (25+)
- Greater Birmingham Ministries
- Habitat for Humanity
- Hope House
- Jefferson County Chamber of Commerce
- Jefferson County Court & Family Services
- Jefferson County Department of Rehabilitation Services
- Jefferson County Department of Veteran’s Affairs
 - Birmingham Center
 - Clay Center
 - St. Benedict’s Center
- Jefferson County Sheriffs Department
- Jefferson County Senior Citizens Center
- Jessie’s Place
- Jimmy Hale Mission
- Magic City Harvest
- Parks & Recreation:
 - Public Parks (95+)
 - Walking Trails (12+)
 - Bike Trails (10+)
- Salvation Army
- The Foundry Rescue Mission & Recovery Center
- The Lighthouse Recovery Mission
- The Nest Homeless Ministry

Jefferson County Department of Health

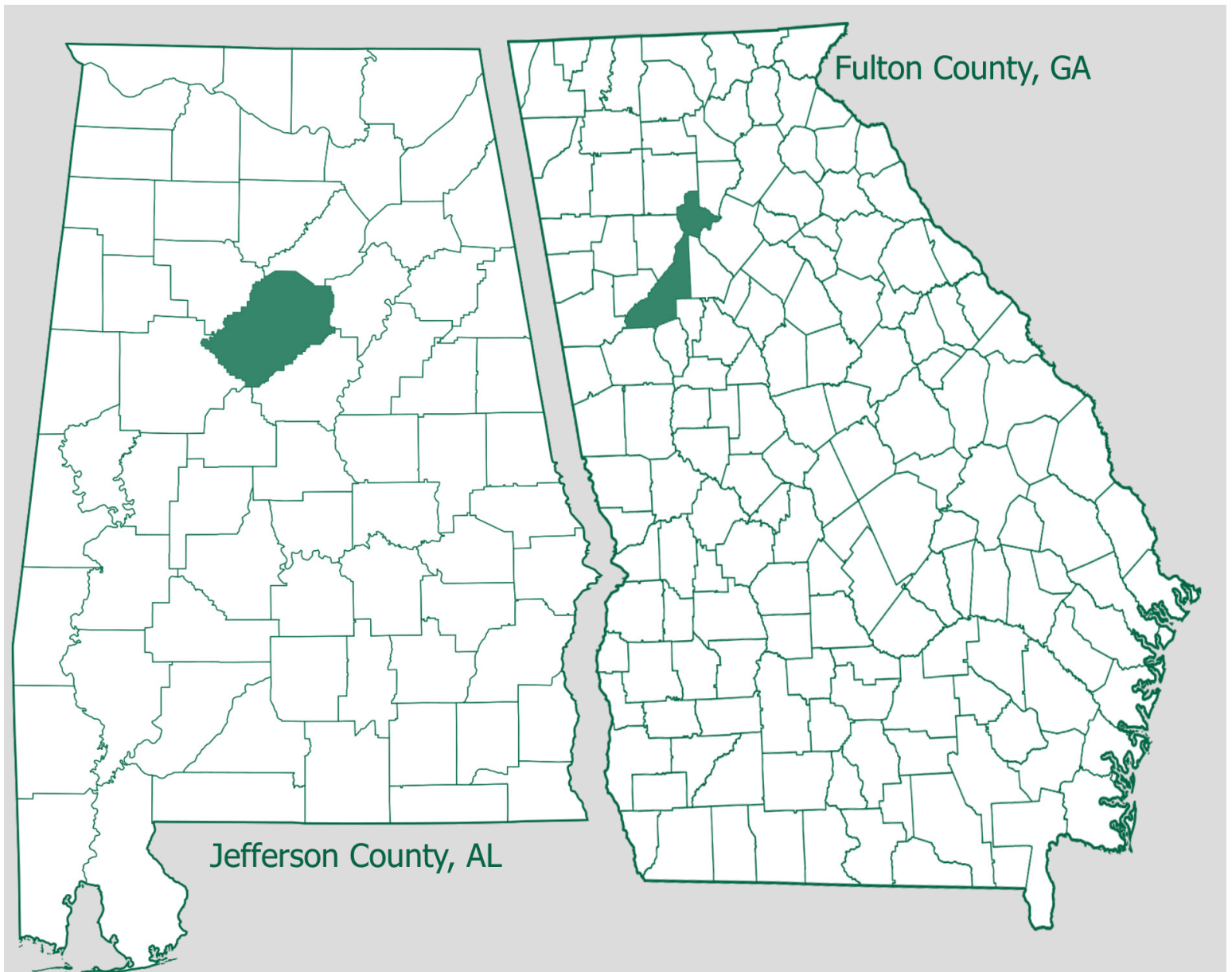
Health Centers:	Specialty Clinics:	Community Health:
Bessemer Central Eastern Morris West End Western	International Travel Sexually Transmitted Diseases Tuberculosis	Community Health Nurses Nutrition Education Tobacco Prevention & Control Programs

• Comparison Community •

Fulton County, Georgia

In an effort to measure how UAB Hospital's community of Jefferson County compared to a peer county, the 2019 County Health Rankings & Roadmaps report was utilized. This uses population size, poverty level, age distribution, population density and other demographic data to establish comparison communities across the United States. Of the 43 counties considered to be peer counties to Jefferson County; Fulton County, Georgia was selected for this CHNA based on its' similar location in the southeastern section of the United States.

Illustration 3. Jefferson County, AL & Comparison Fulton County, GA



• Population Data •

Table 1. U.S. Census 2018 Population Estimates

JEFFERSON COUNTY, ALABAMA	POPULATION	FULTON COUNTY, GEORGIA
659,197	POPULATION	1,041,423
593	DENSITY (PER SQUARE MILE)	1,748
16.7%	POVERTY LEVEL (% BELOW)	14.8%
Under 18 - 22.9% 19 to 64 - 61.7% 65 & Older - 15.4%	AGE DISTRIBUTION (GRAPH 18 & 19)	Under 18 - 22.3% 19 to 64 - 66.3% 65 & Older - 11.4%
White - 53.2% Black - 43.4% Other - 3.4%	RACE (GRAPH 20)	White - 45.8% Black - 44.6% Other - 9.6%
3.9%	HISPANIC OR LATINO ORIGIN (GRAPH 21)	7.3%
89.4%	HIGH SCHOOL GRADUATES (GRAPH 22)	91.7%
31.9%	BACHELOR'S DEGREE OR HIGHER (GRAPH 23)	50.2%
\$49,321	MEDIAN HOUSEHOLD INCOME (GRAPH 24)	\$61,336

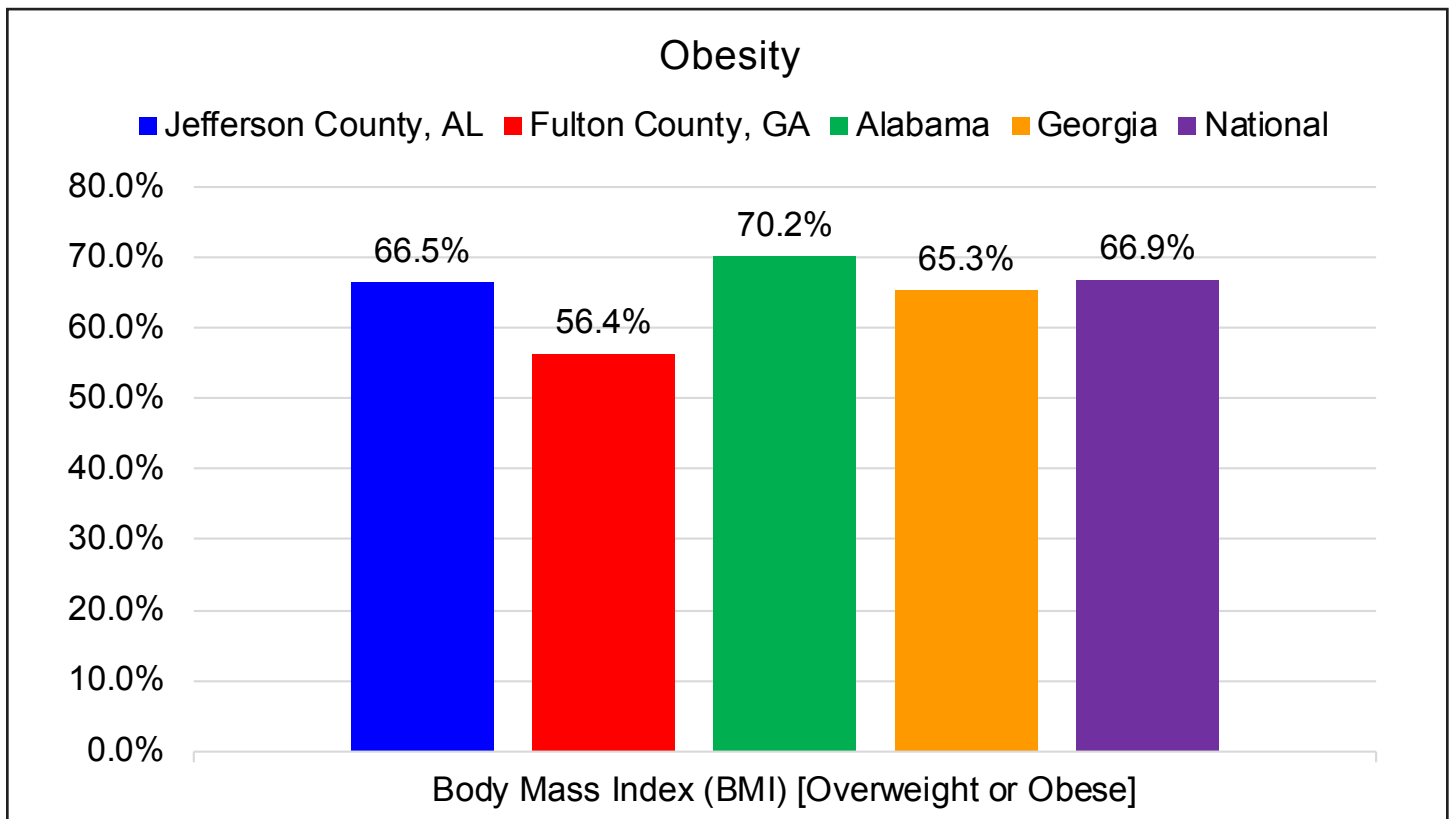
• 2017 BRFSS Data •

Data from primary and secondary sources were analyzed. Secondary source data were aggregated at the smallest unit available - the county. Secondary data reports and other resources were carefully reviewed for this CHNA in order to provide points of comparison for the information and opinions gathered through the primary information collection process. Information from primary sources was obtained via electronic surveys, phone and in-person interviews.

Behavioral Risk Factors

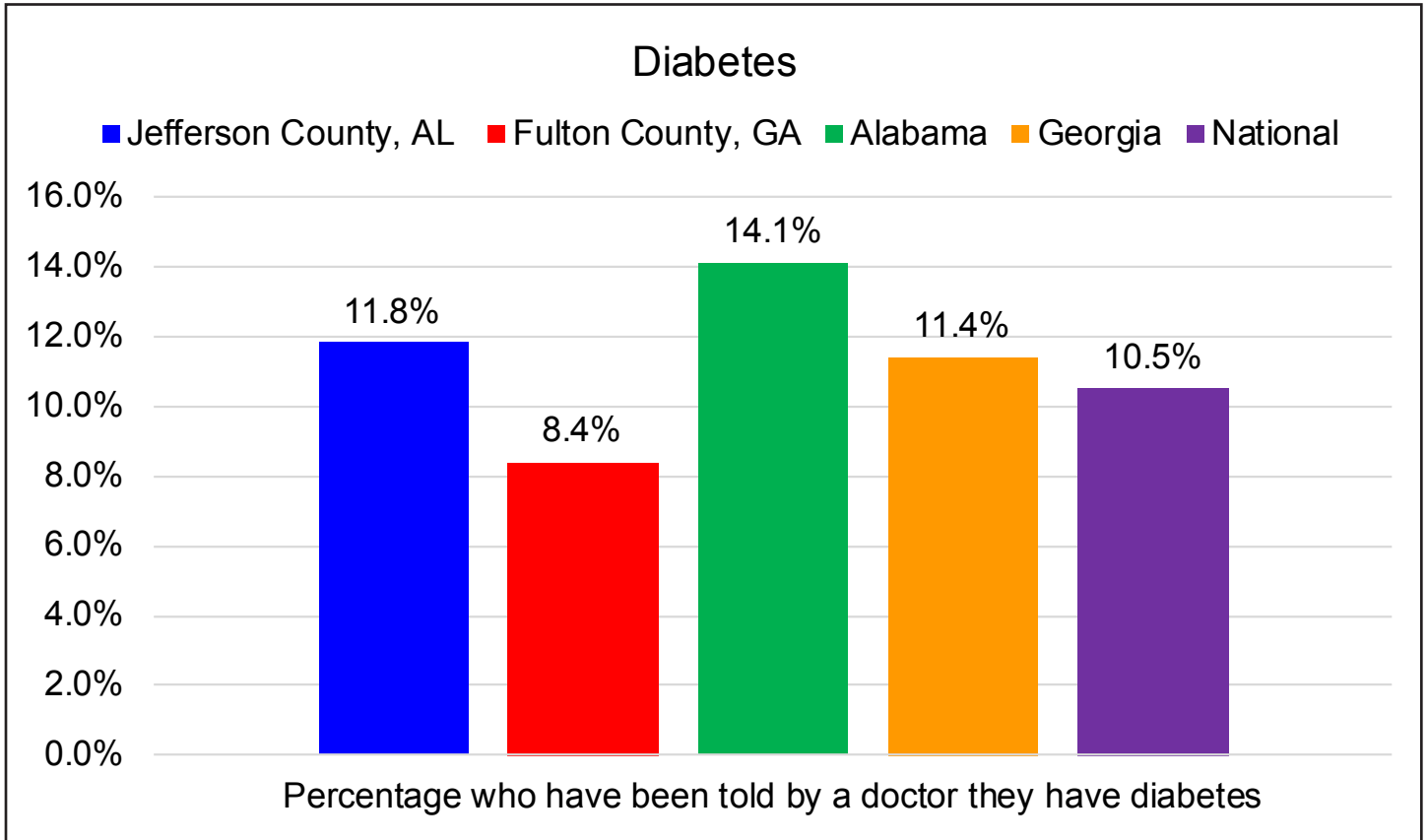
The Behavioral Risk Factor surveillance system (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. It is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. For many states, the BRFSS is the only available source of timely, accurate data on health-related behaviors.

Graph 1. Obesity

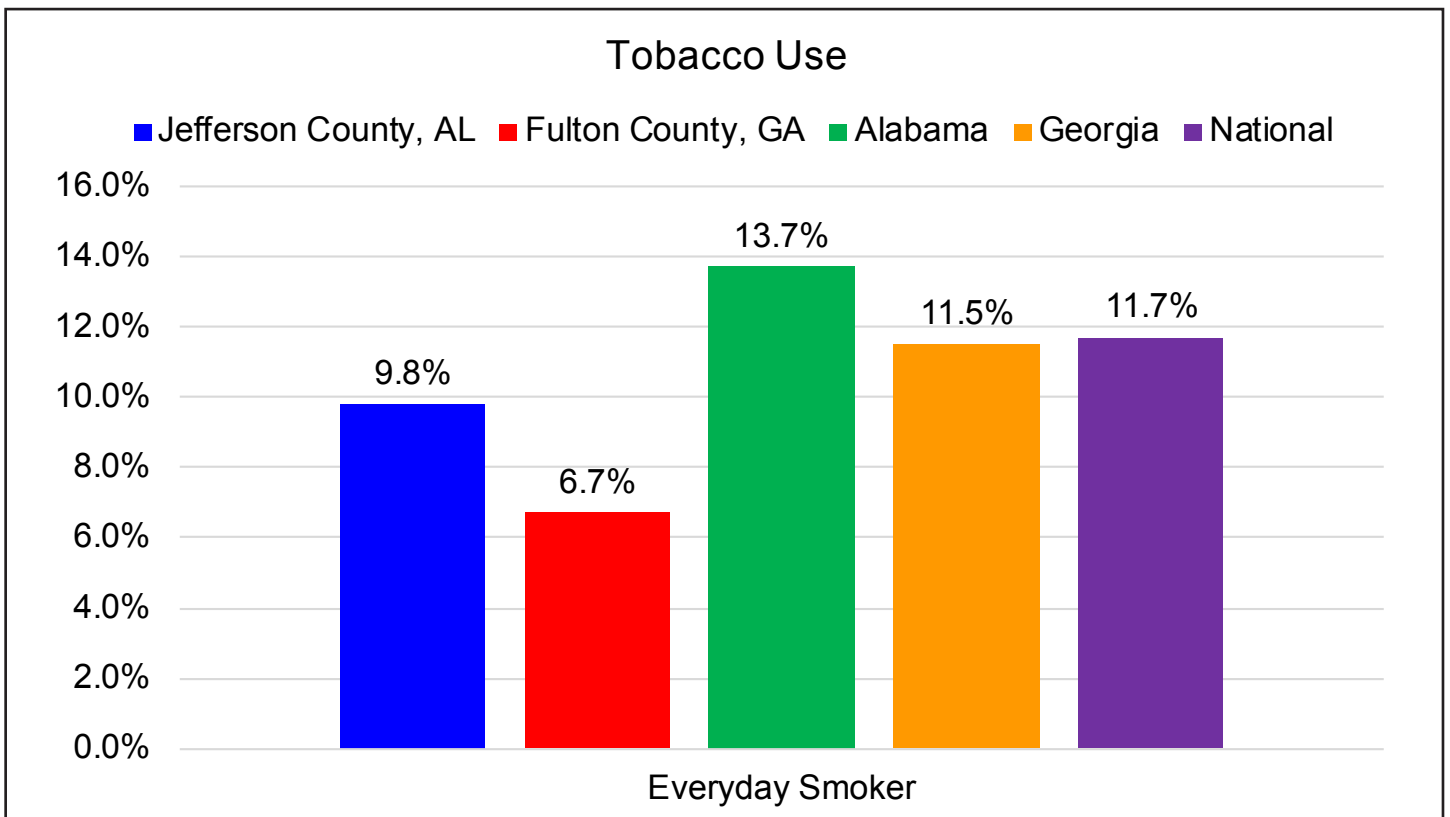


• 2017 BRFSS •

Graph 2. Diabetes

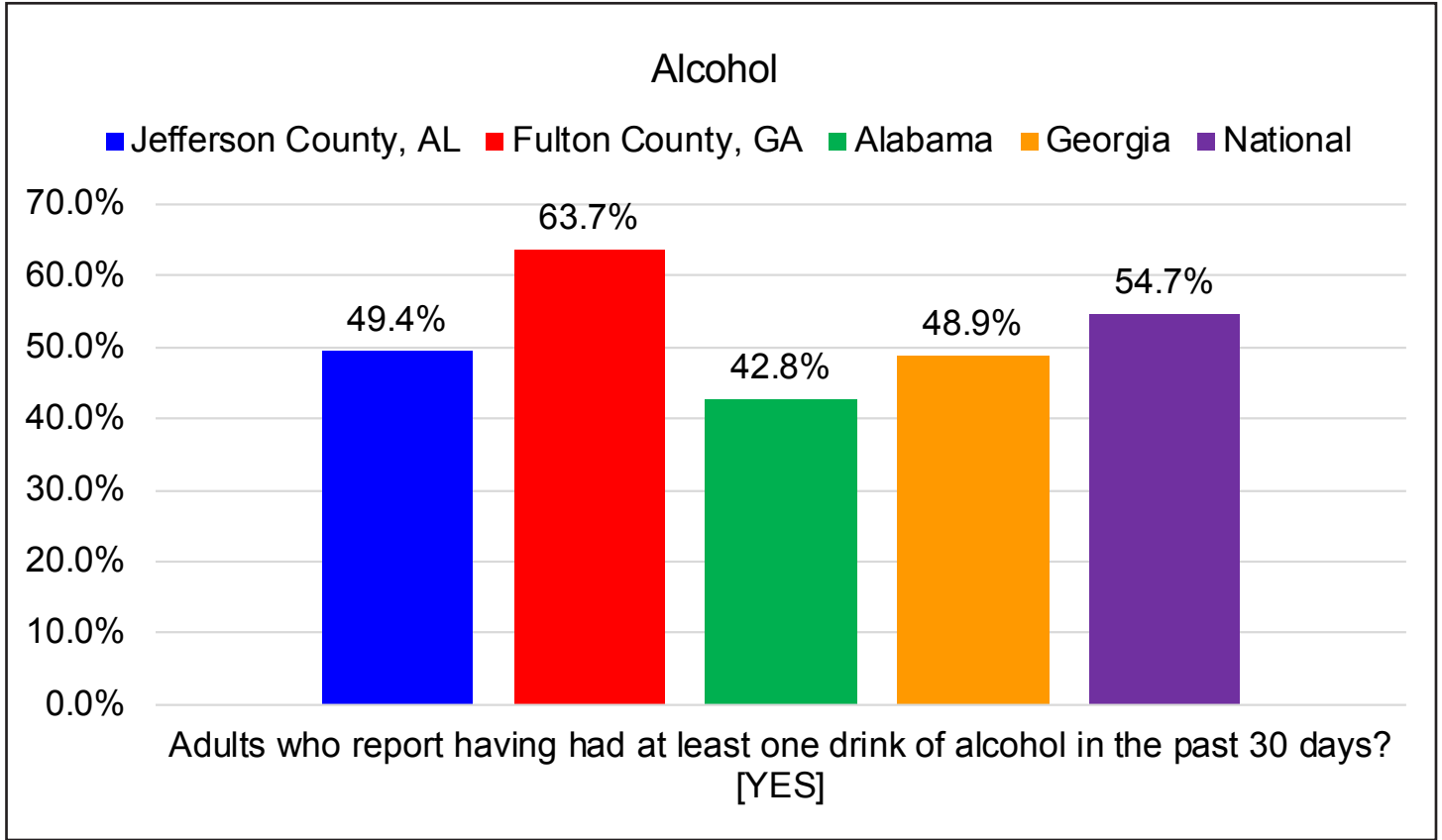


Graph 3. Tobacco Use

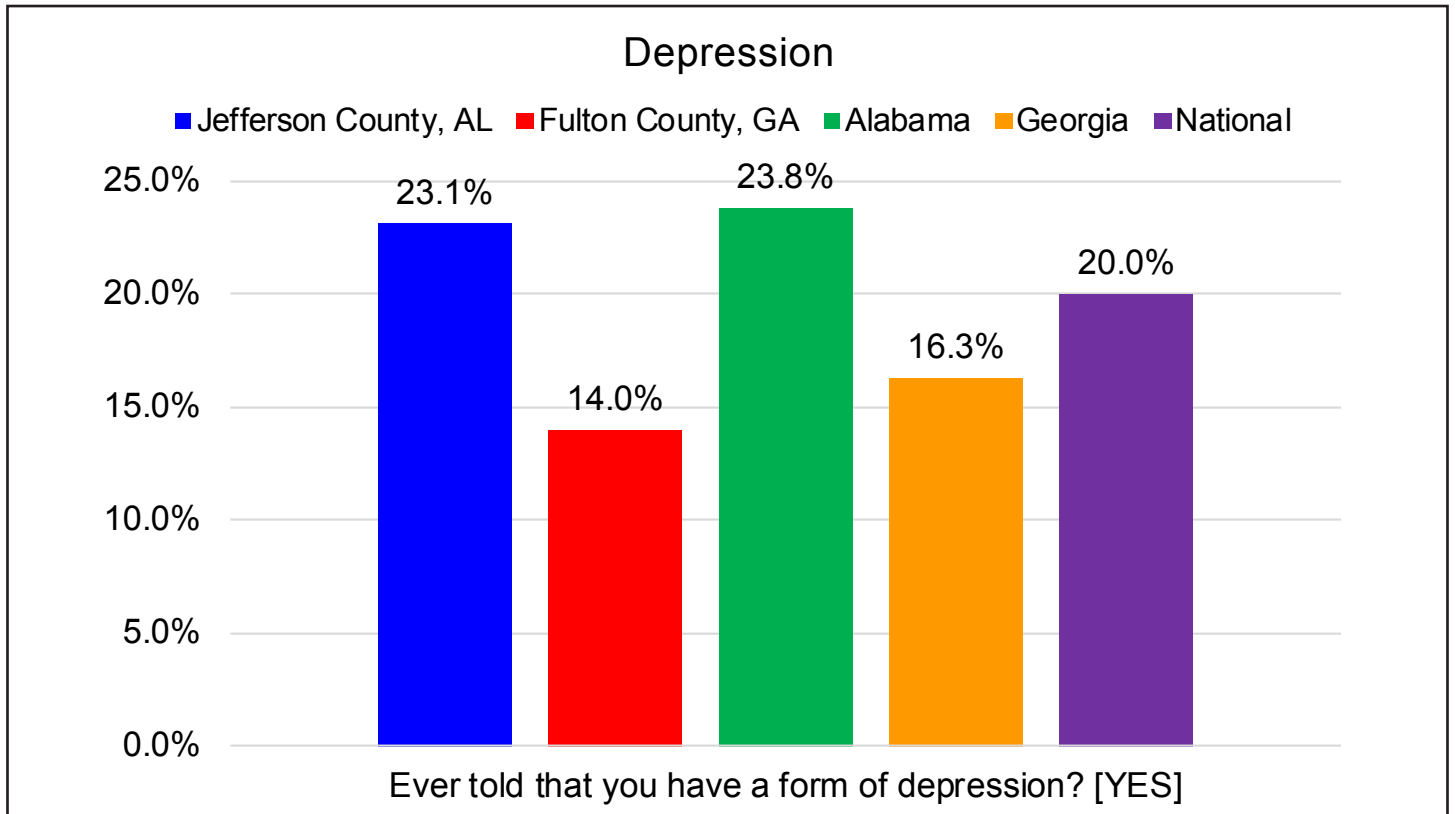


• 2017 BRFSS •

Graph 4. Alcohol Use

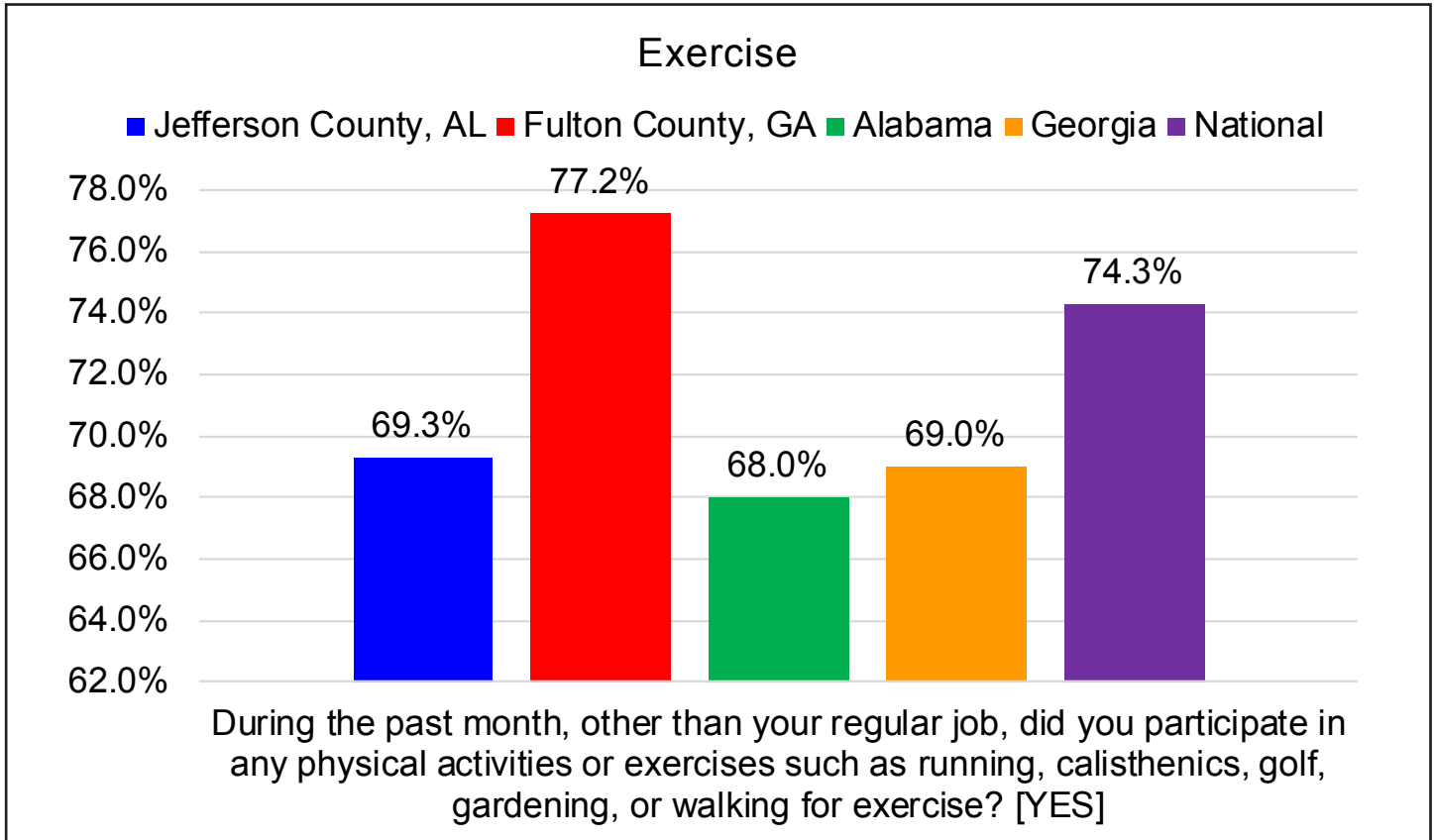


Graph 5. Depression

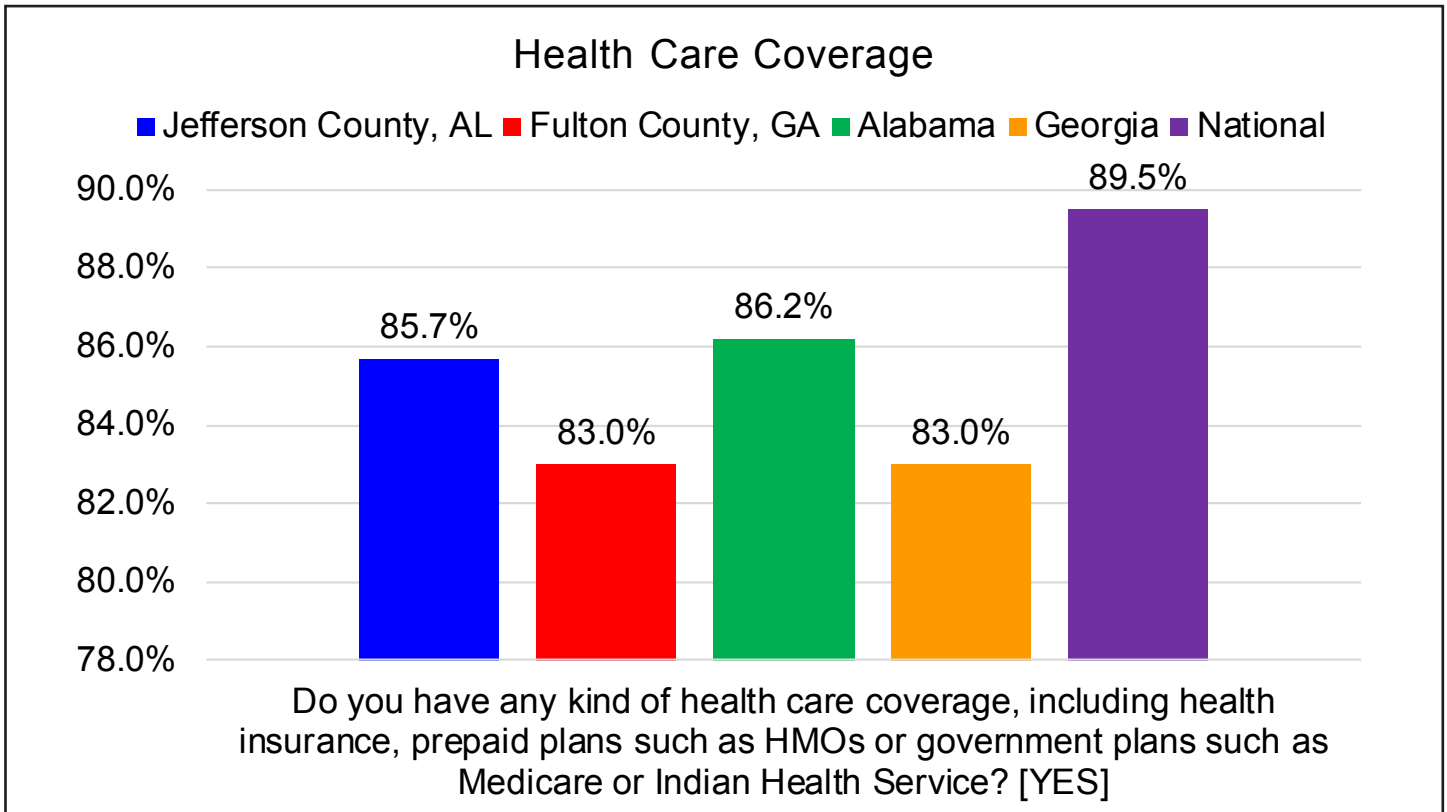


• 2017 BRFSS •

Graph 6. Exercise

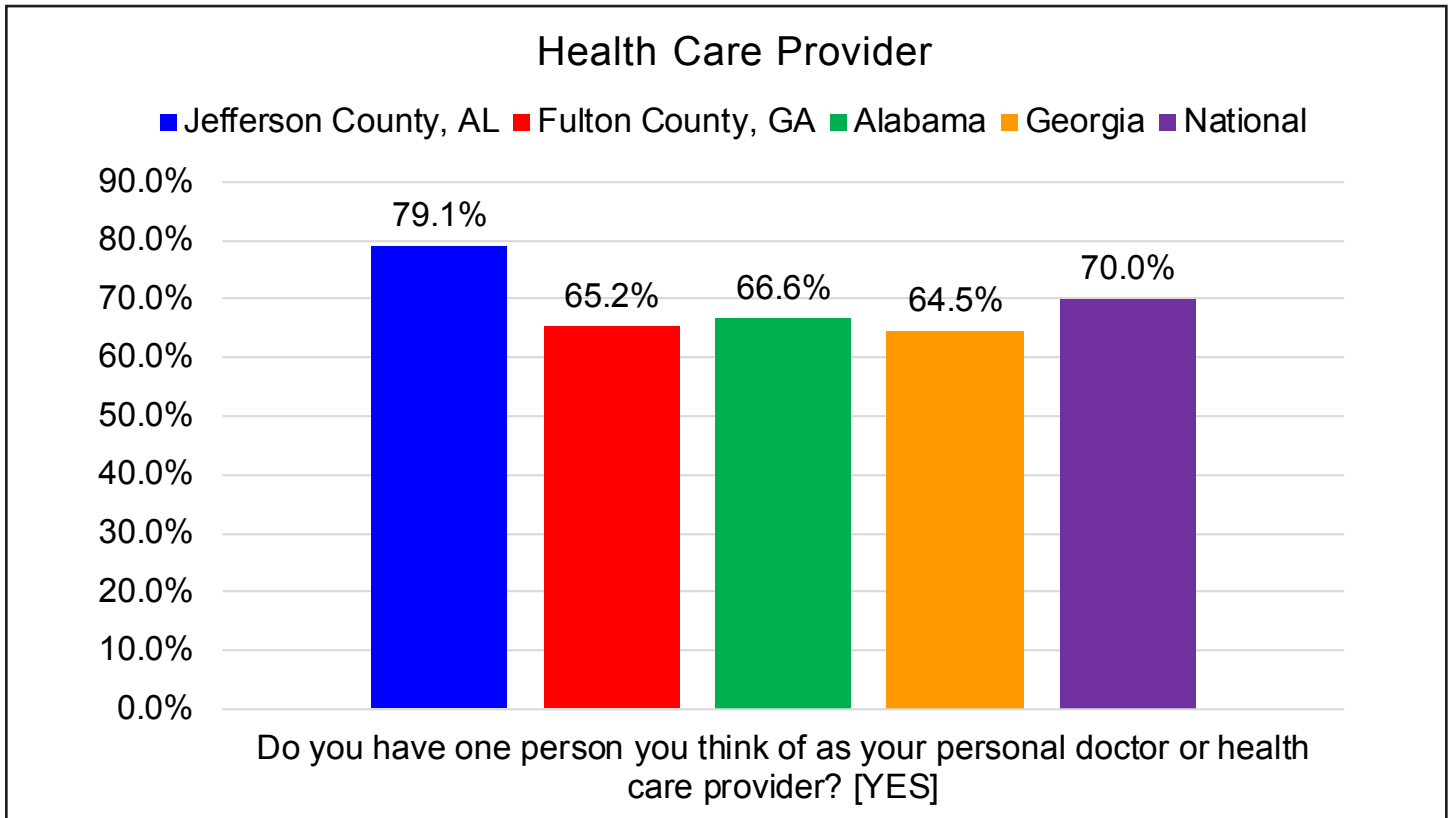


Graph 7. Health Care Coverage



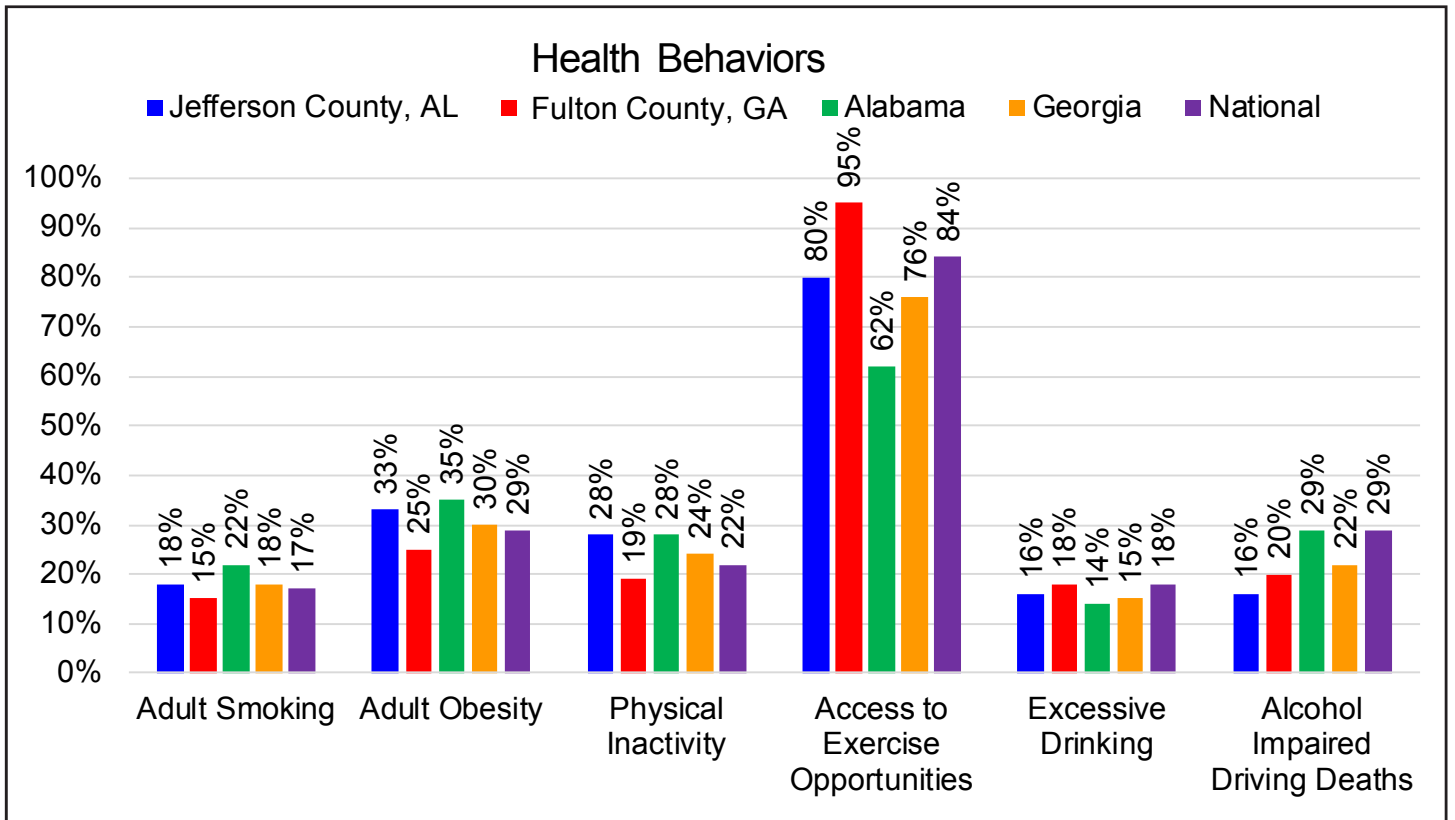
• 2017 BRFSS DATA •

Graph 8. Health Care Provider

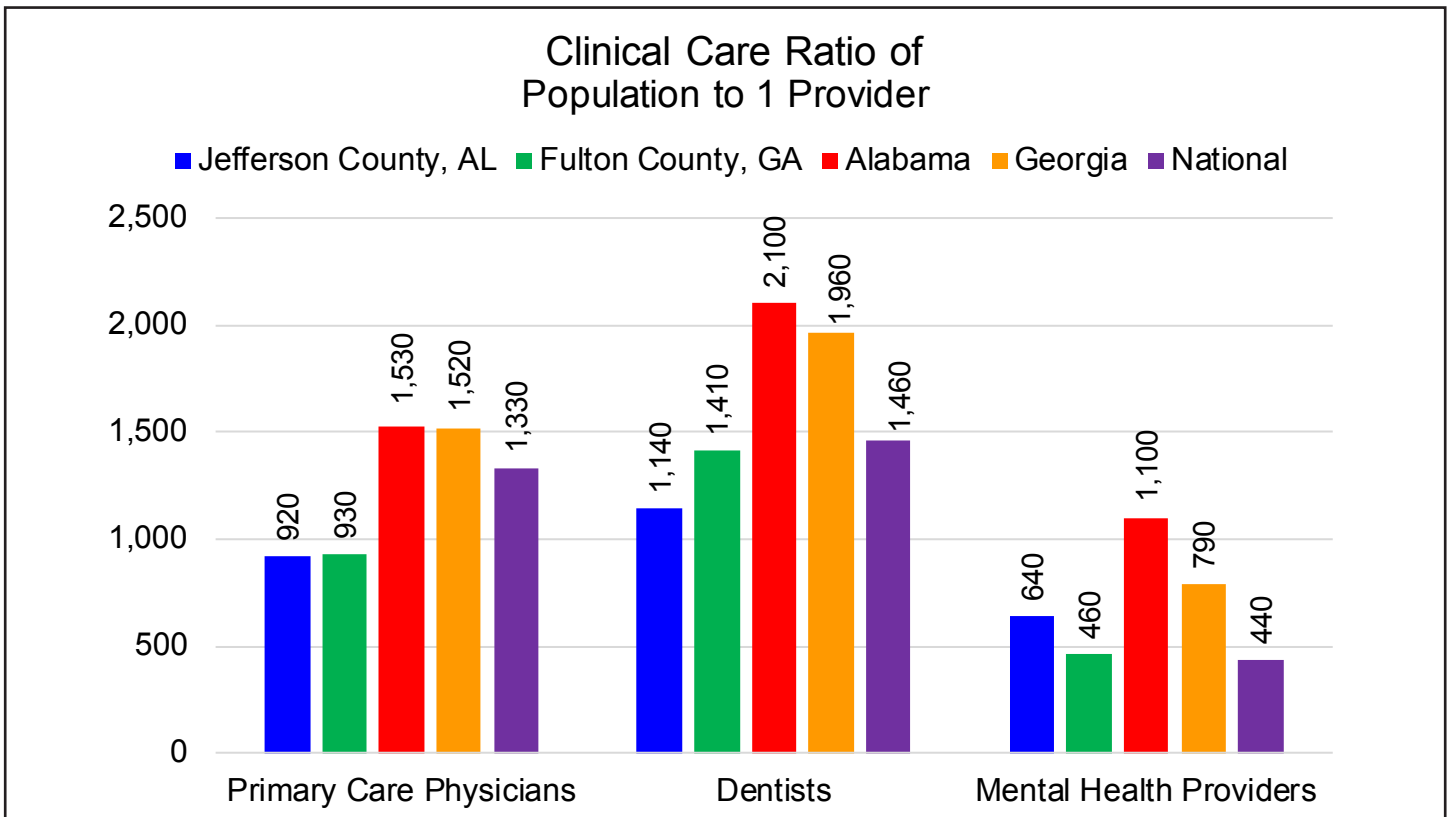


• 2019 County Health Rankings •

Graph 9. Health Behaviors

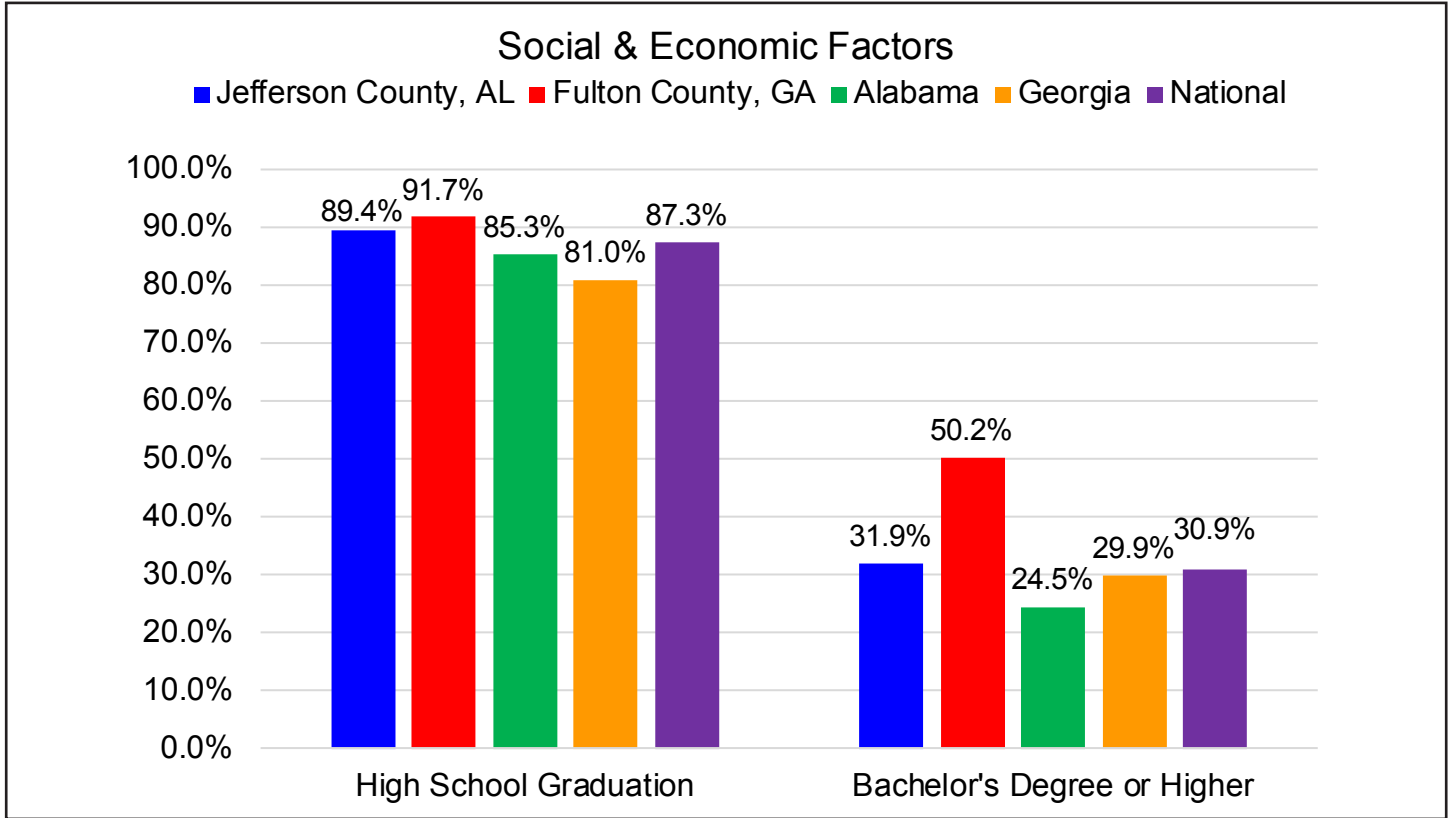


Graph 10. Clinical Care

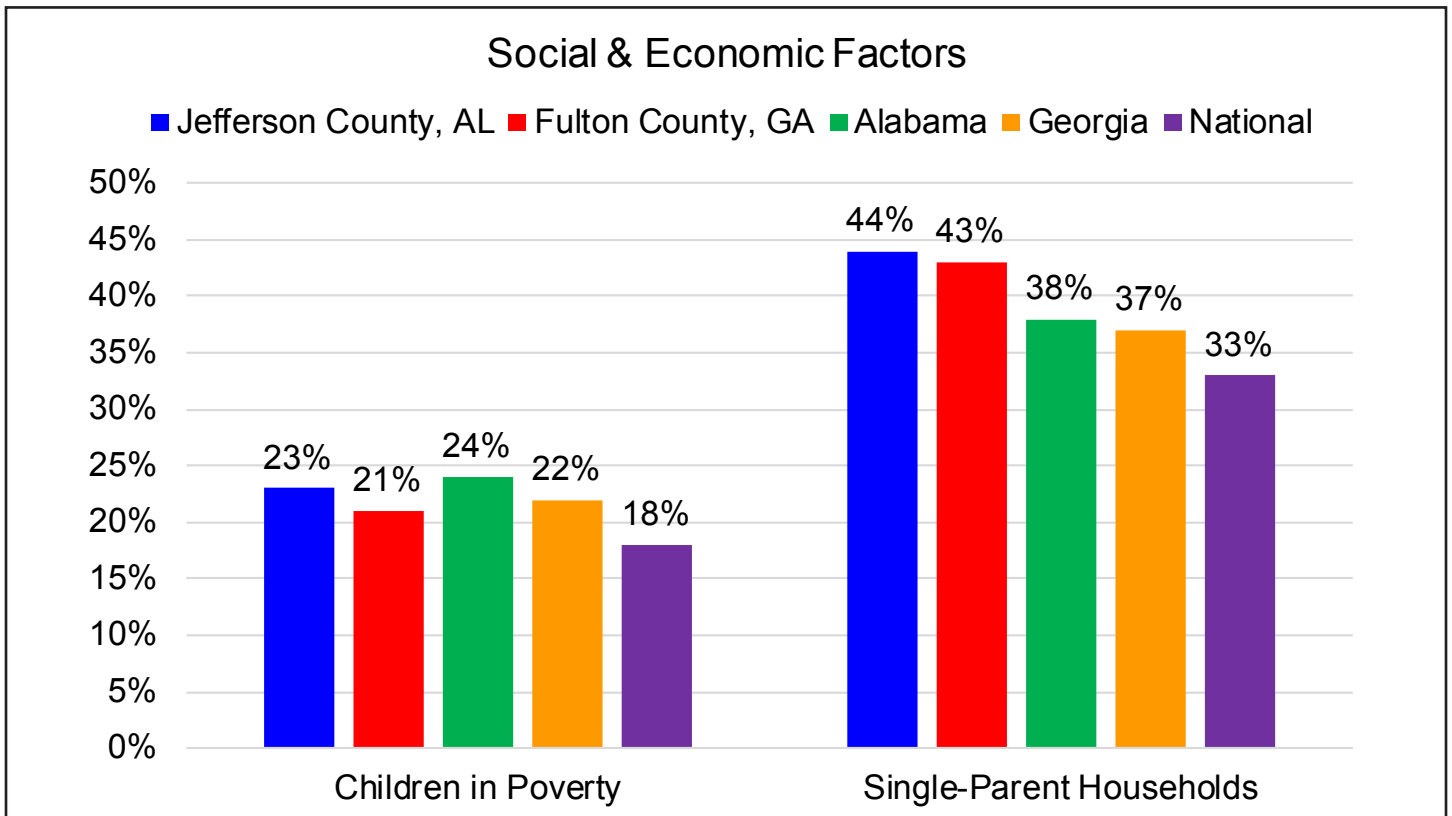


• 2019 County Health Rankings •

Graph 11. Social & Economic Factors



Graph 12. Social & Economic Factors



• 2019 County Health Rankings •

Secondary data available on Jefferson County and all counties in the nation are available at countyhealthrankings.org. This annually updated site establishes a benchmark using Health Outcomes and Health Factors. The County Health Rankings are a key component of the Mobilizing Action Toward Community Health (MATCH) project. MATCH is the collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The rankings identify the multiple Health Factors that determine a county's health status. Each county receives a summary rank for its Health Outcomes and Health Factors - the four different types of Health Factors include: health behaviors, clinical care, social and economic factors, and the physical environment.

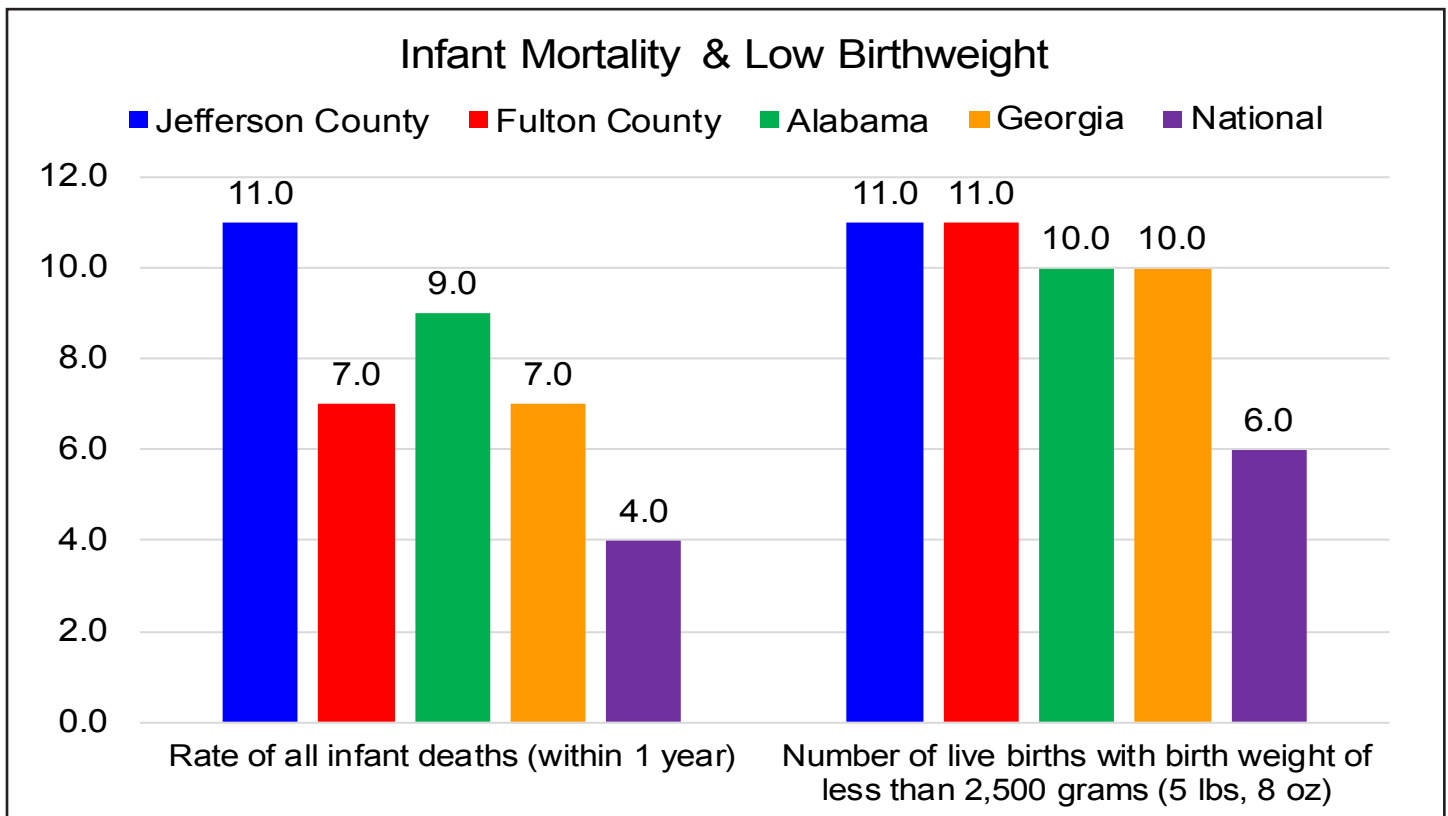
Table 2. 2019 County Health Rankings

County Health Rankings Health Outcomes and Factors					
	Jefferson County	Fulton County	Alabama	Georgia	National Average
Mortality					
Premature Death (Lives Lost / 100,000)	11,000	6,800	9,900	7,700	8,500
Health Behaviors					
Adult Smoking	18%	15%	22%	18%	18%
Adult Obesity	33%	25%	35%	30%	32%
Physical Inactivity	28%	19%	28%	24%	26%
Excessive Drinking	16%	18%	14%	15%	17%
Alcohol-Impaired Driving Deaths	16%	20%	29%	22%	29%
Sexually Transmitted Infection (Chlamydia / 100,000)	700.1	820.5	543.6	614.6	383.5
Low Birthweight	11%	11%	10%	10%	8%
Teen Birth Rate (15 - 19 Yr Olds / 100,000)	32	24	33	33	32
Clinical Care					
Uninsured	10%	13%	11%	15%	11%
Primary Care Physicians	920:1	930:1	1,530:1	1,520:1	1,830:1
Preventable Hospital Stays (Per 100,000 Medicare Enrollees)	4,236	4,423	5,496	4,851	4,828
Mammography Screening	47%	38%	42%	40%	40%
Social & Economic Factors					
High School Graduation	89%	87%	89%	81%	88%
Unemployment	4.2%	4.8%	4.4%	4.7%	4.6%
Children in Poverty	23%	21%	24%	22%	22%
Children in Single - Parent Households	44%	43%	38%	37%	32%
Violent Crime Rate / 100,000	873	763	480	388	252
Physical Environment					
Air Pollution - Particulate Matter / Cubic Meter	13.4	12.0	11.0	10.9	9.0
Food Environment Level [0 (worst) - 10 (best) - Food Desert]	6.2	6.8	5.8	6.0	7.5
% Adequate Access to Exercise Opportunities	80%	95%	62%	76%	63%

• Health Indicators Data •

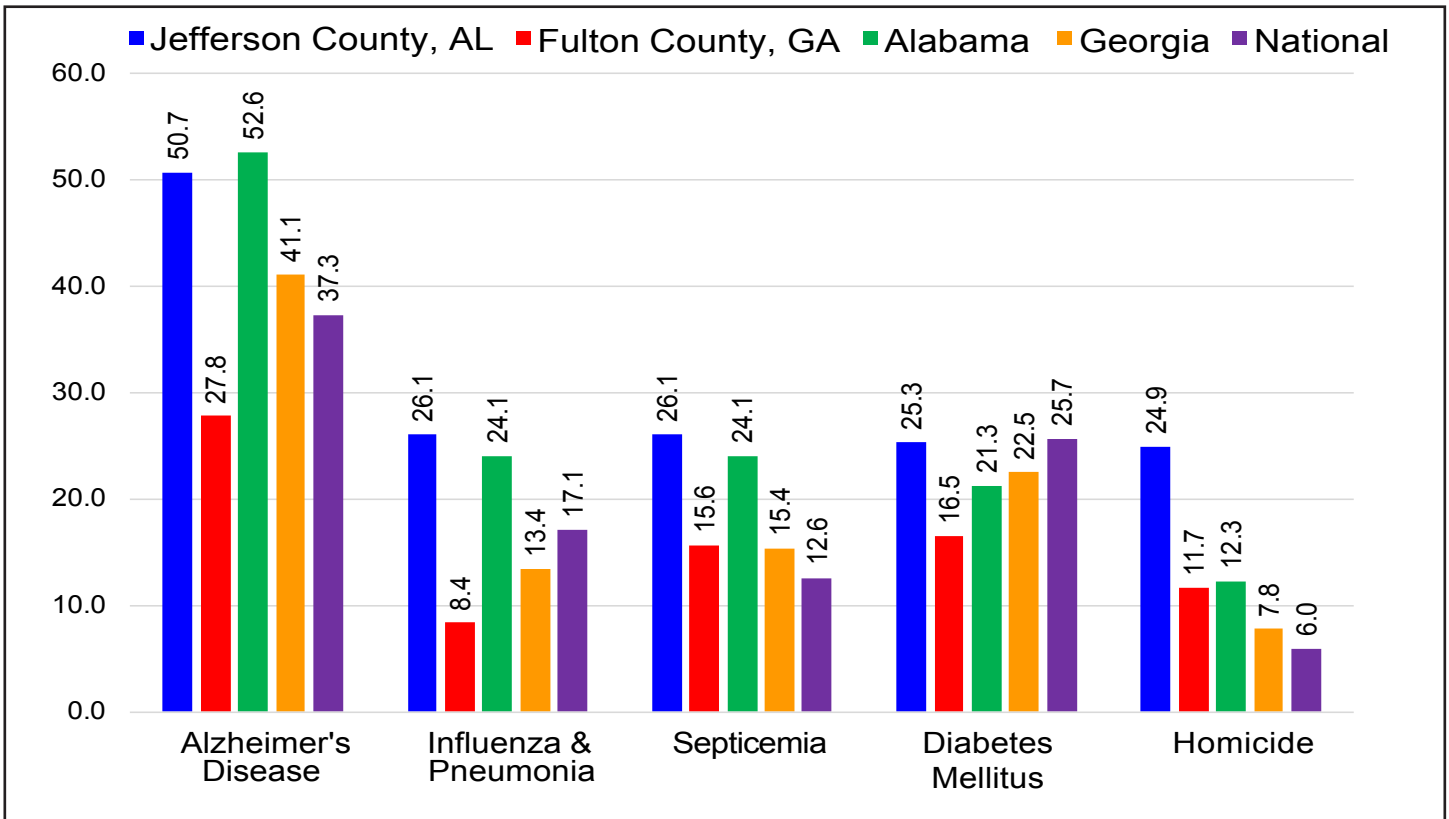
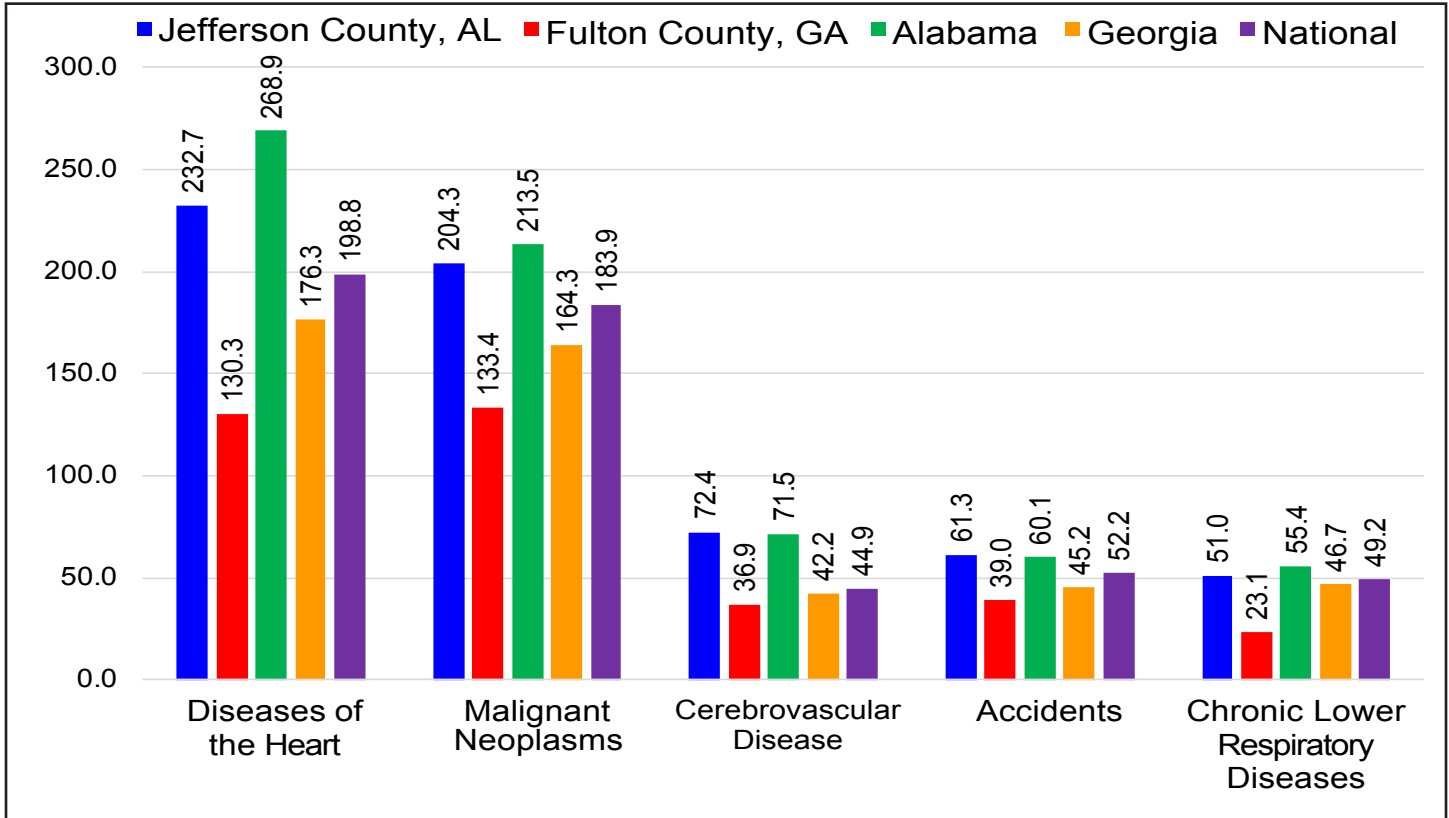
Community Health Status Indicators (CHSI) provide data on over 200 key health indicators for each of the 3,141 U.S. counties. The data are provided to assist community leaders and public health professionals as they identify, compare, and address the most pressing issues for their community.

Graph 13. Infant Mortality and Low Birth Weight 2018 (healthdata.gov)



• Health Indicators Data •

Graph 14. Deaths per 100,000 Population CHSI



*Diseases of the Heart: Ischemic Heart Disease, Acute Myocardial Infarction, Artherosclerotic CVD, Hypertensive Heart Disease

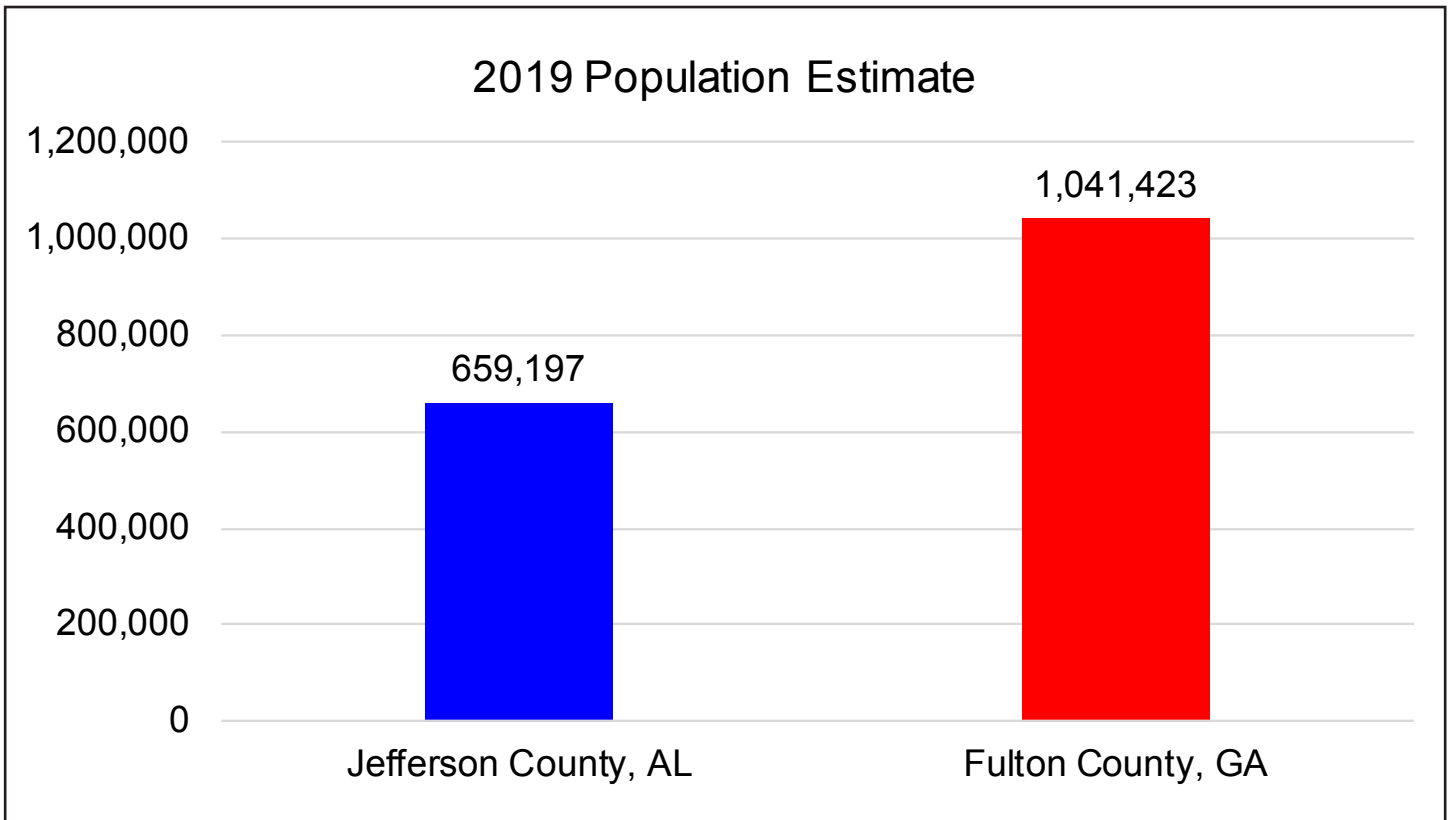
*Malignant Neoplasms: Cancer of the trachea, Bronchus & Lung; Cancer of the Colon, Rectum & Anus; Cancer of the Lymphoid, Hematopoietic & Related Tissue

*Cardiovascular Diseases: Stroke

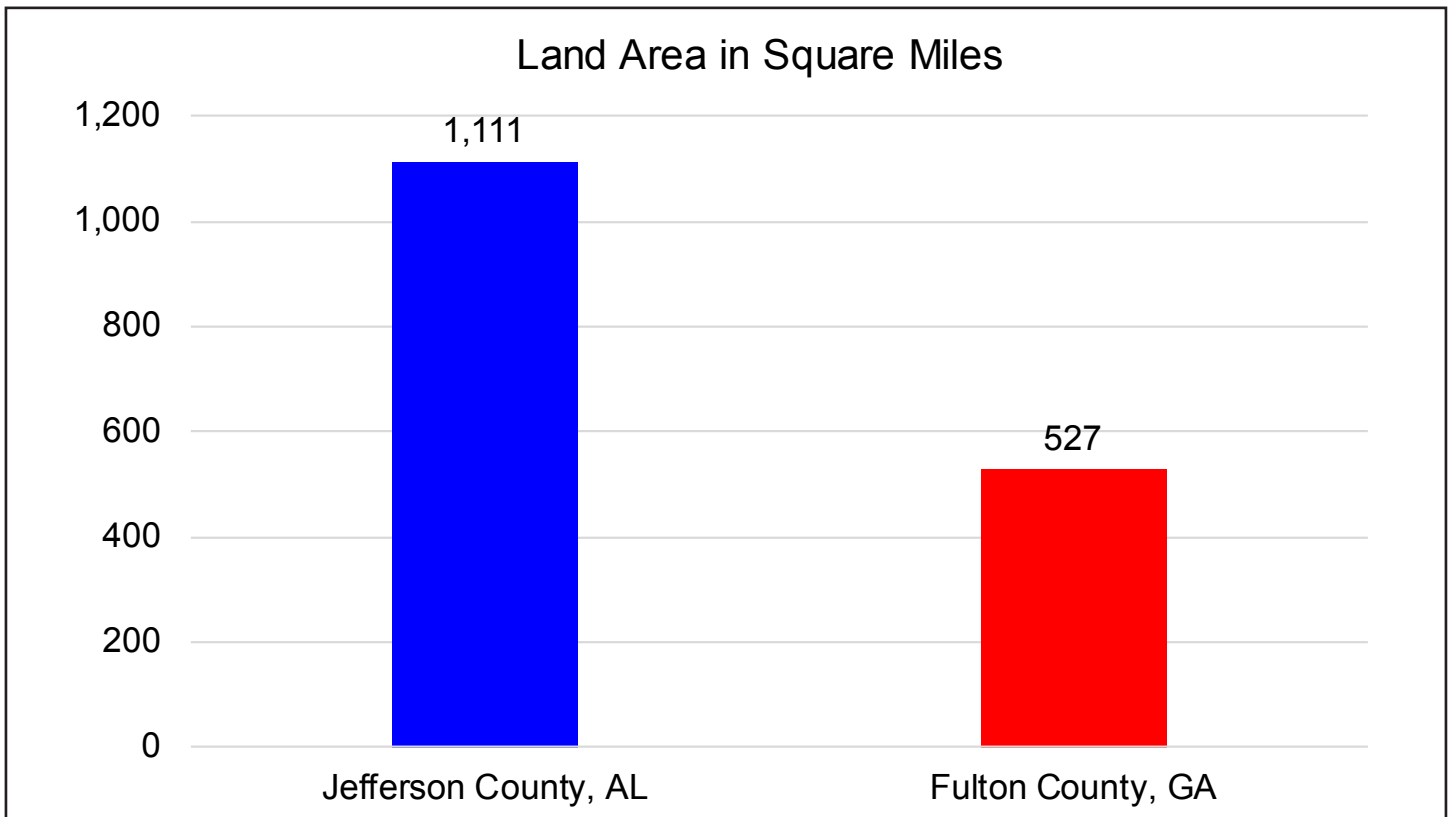
*Accidents: Poisoning & Exposure to Noxious Substances, Nontransport Accidents, Motorvehicle Accidents

• Census Data •

Graph 15. U.S. Census – 2019 Population Estimate

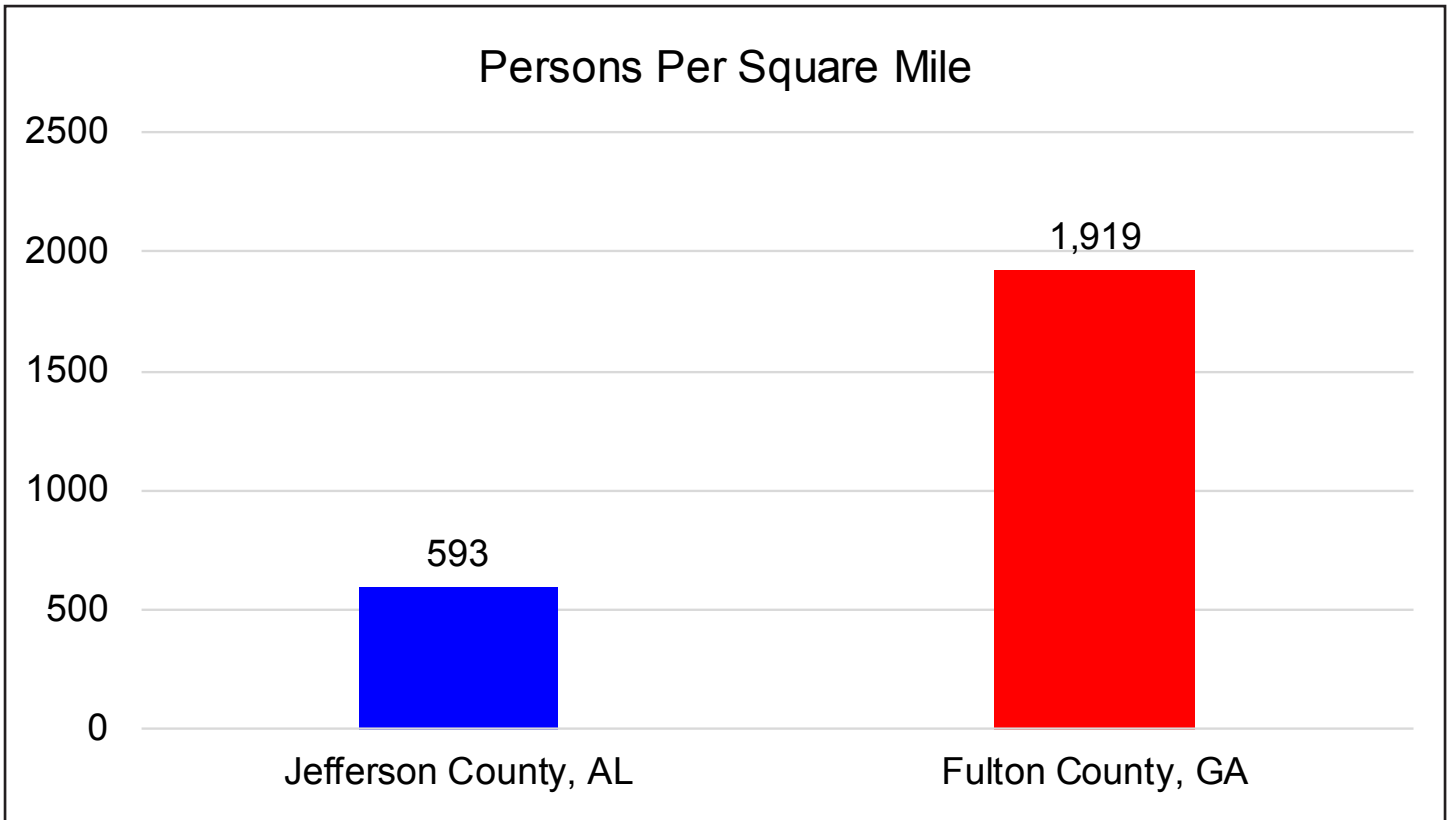


Graph 16. U.S. Census – Land Area

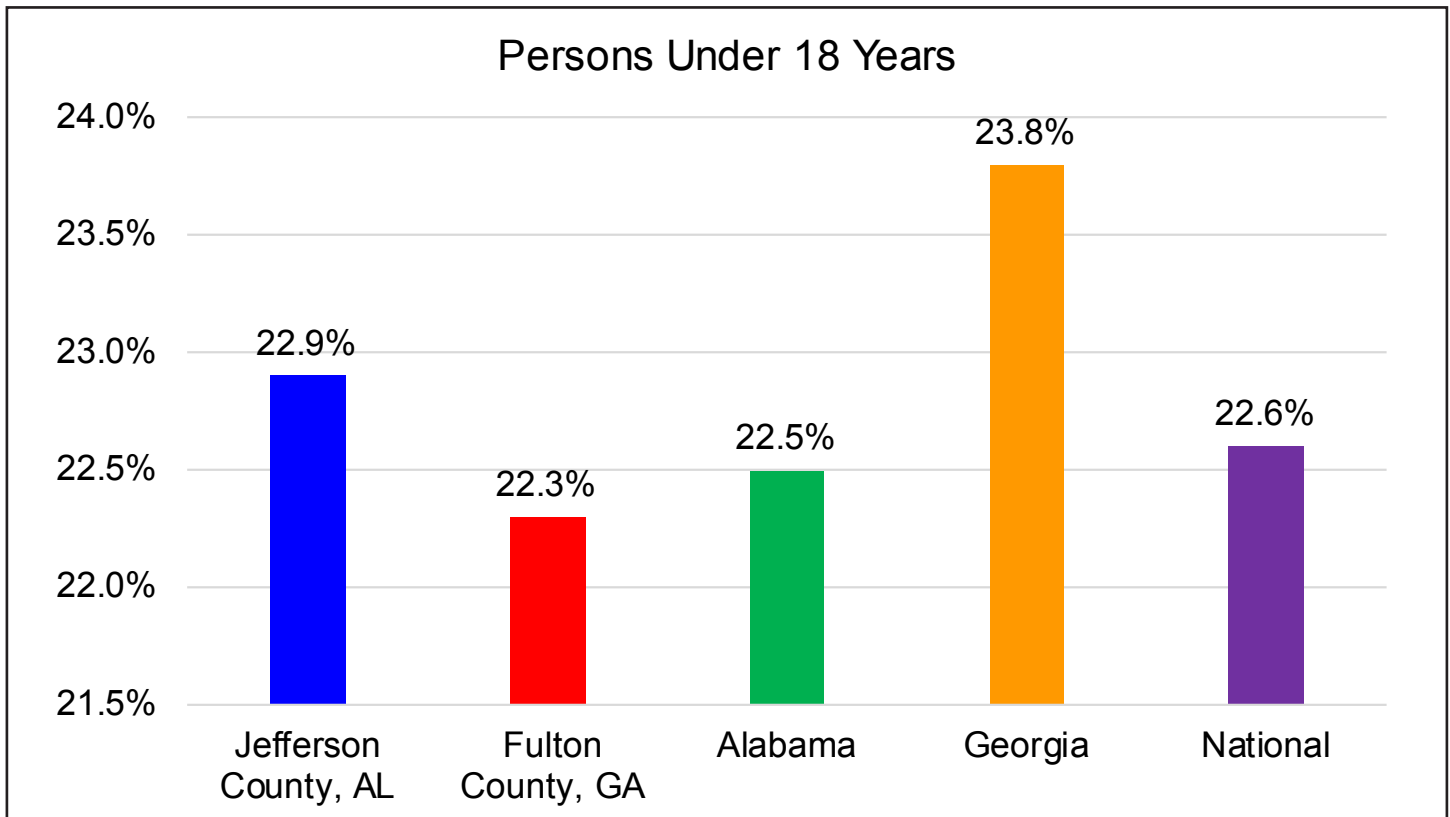


• Census Data •

Graph 17. U.S. Census – Persons per Square Mile

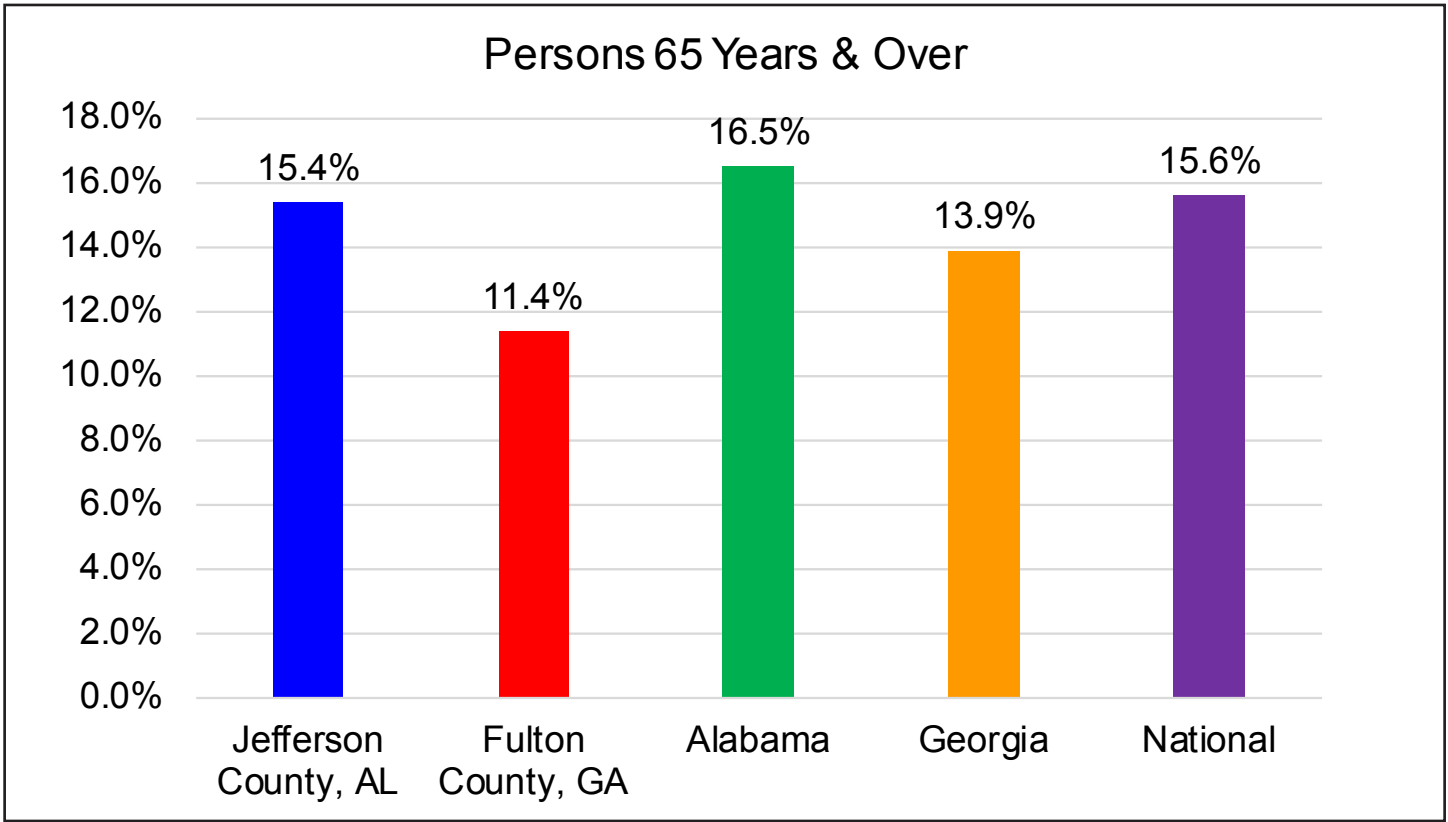


Graph 18. U.S. Census – Persons Under 18 Years

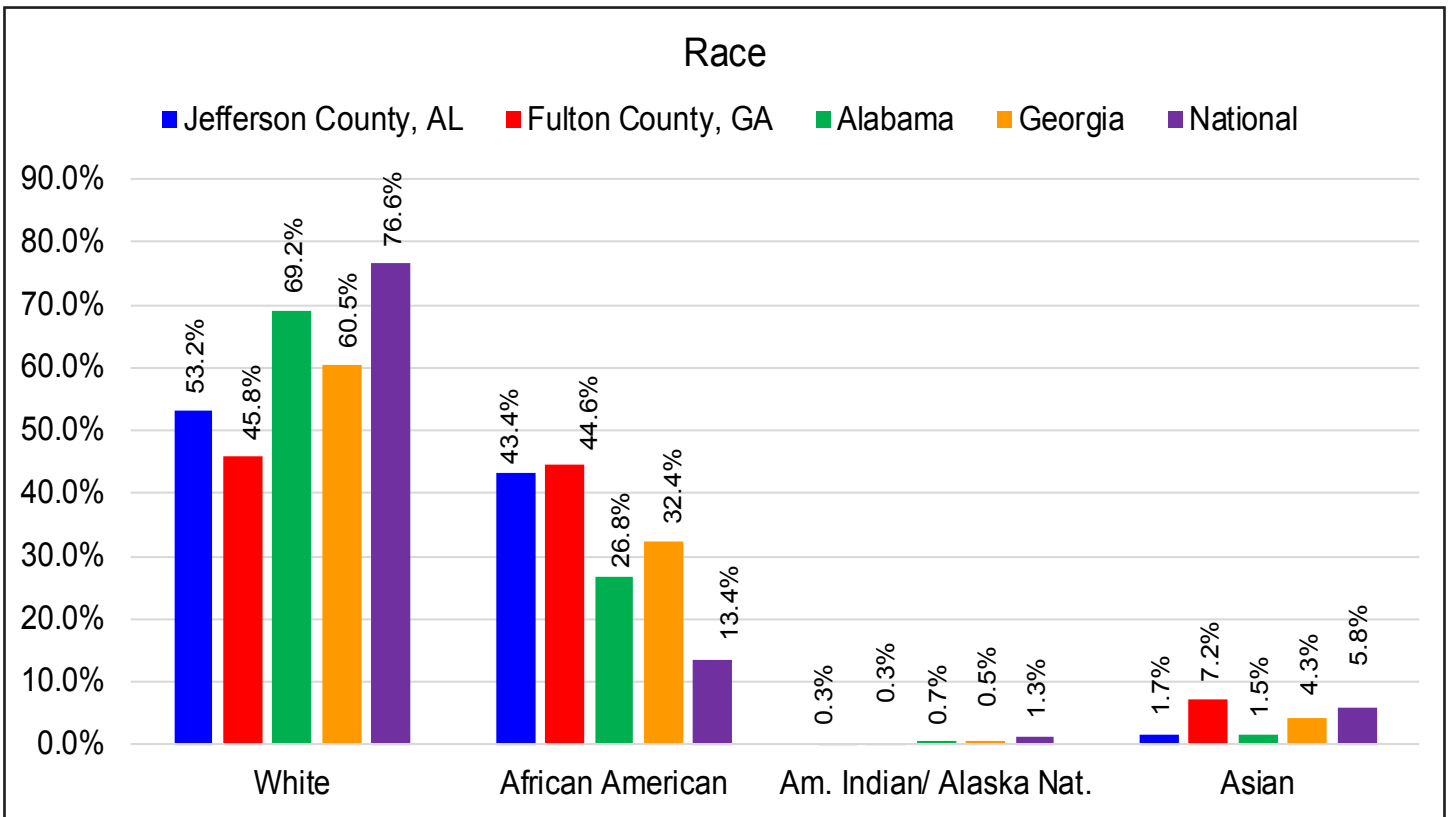


• Census Data •

Graph 19. U.S. Census – Persons 65 Years & Over

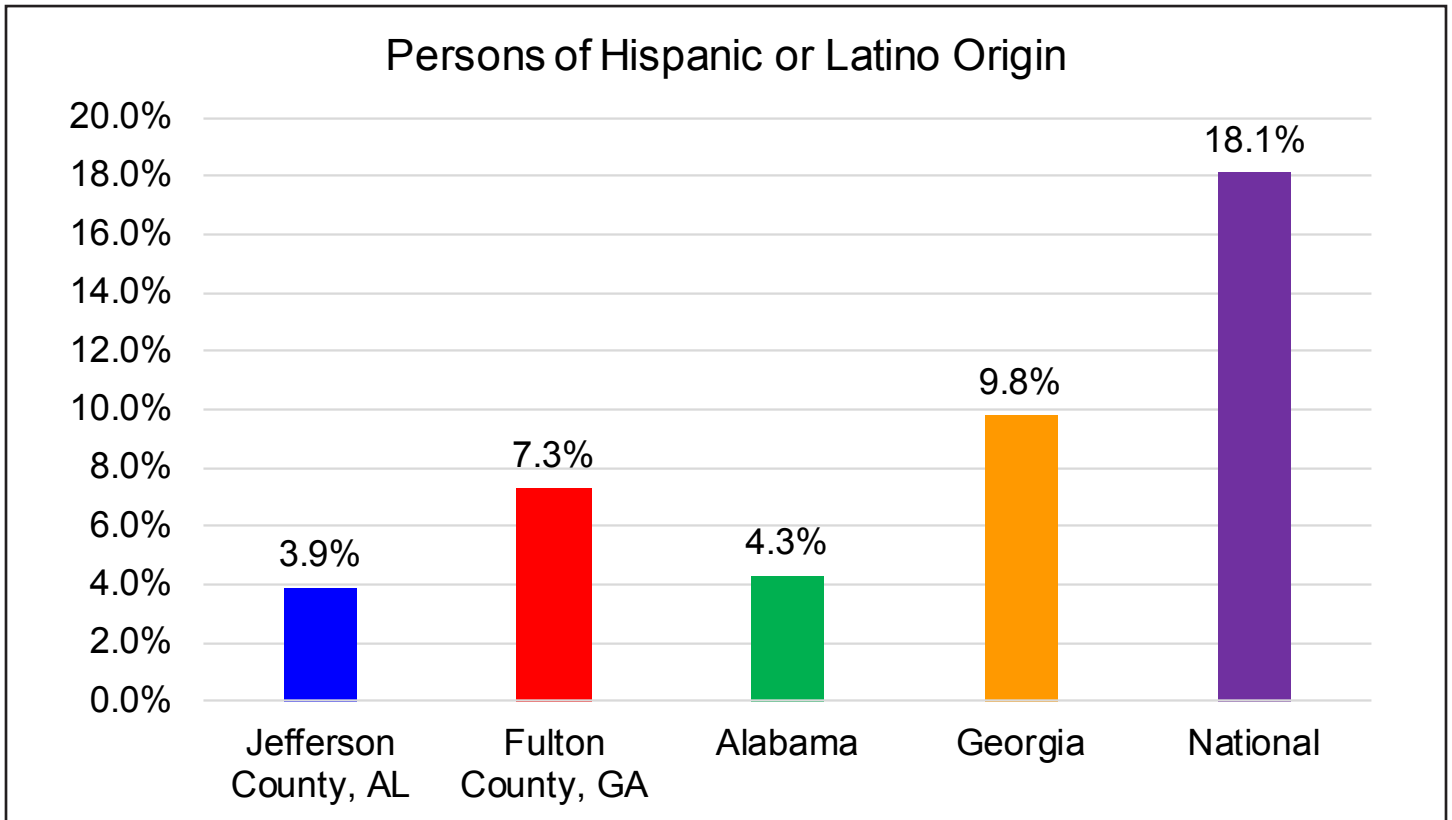


Graph 20. U.S. Census – Race

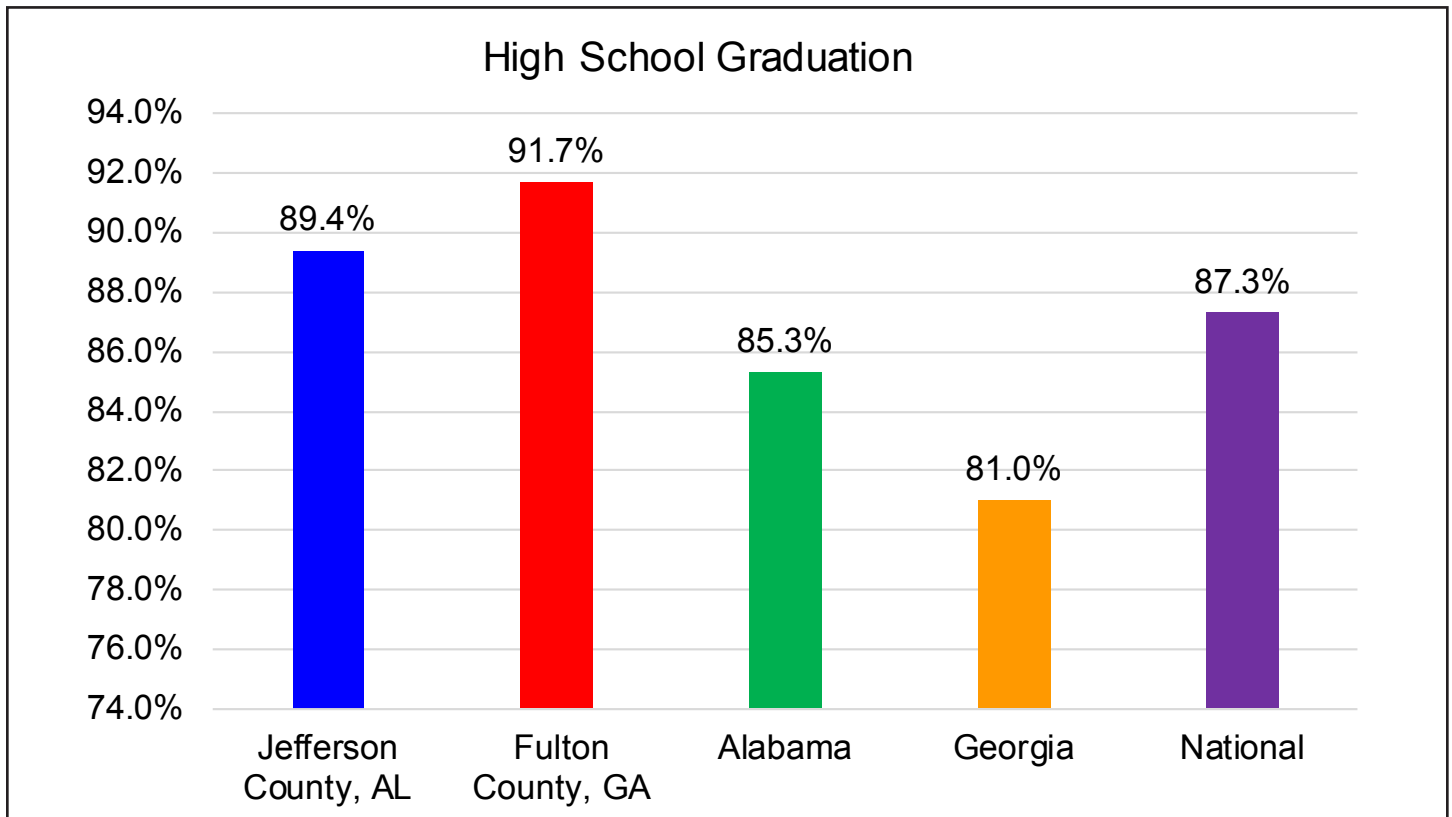


• Census Data •

Graph 21. U.S. Census – Persons of Hispanic or Latino Origin

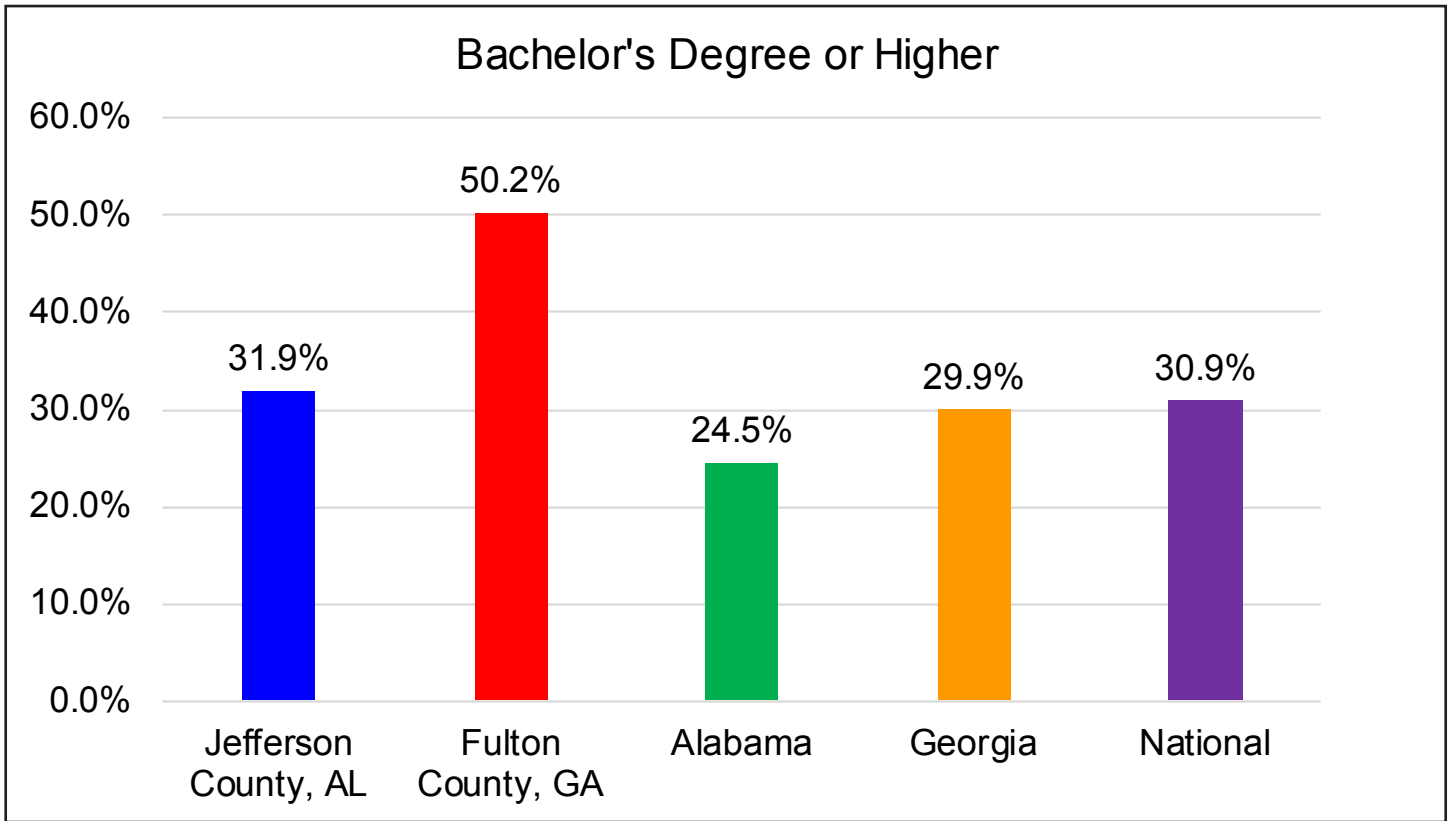


Graph 22. U.S. Census – High School Graduate or Higher

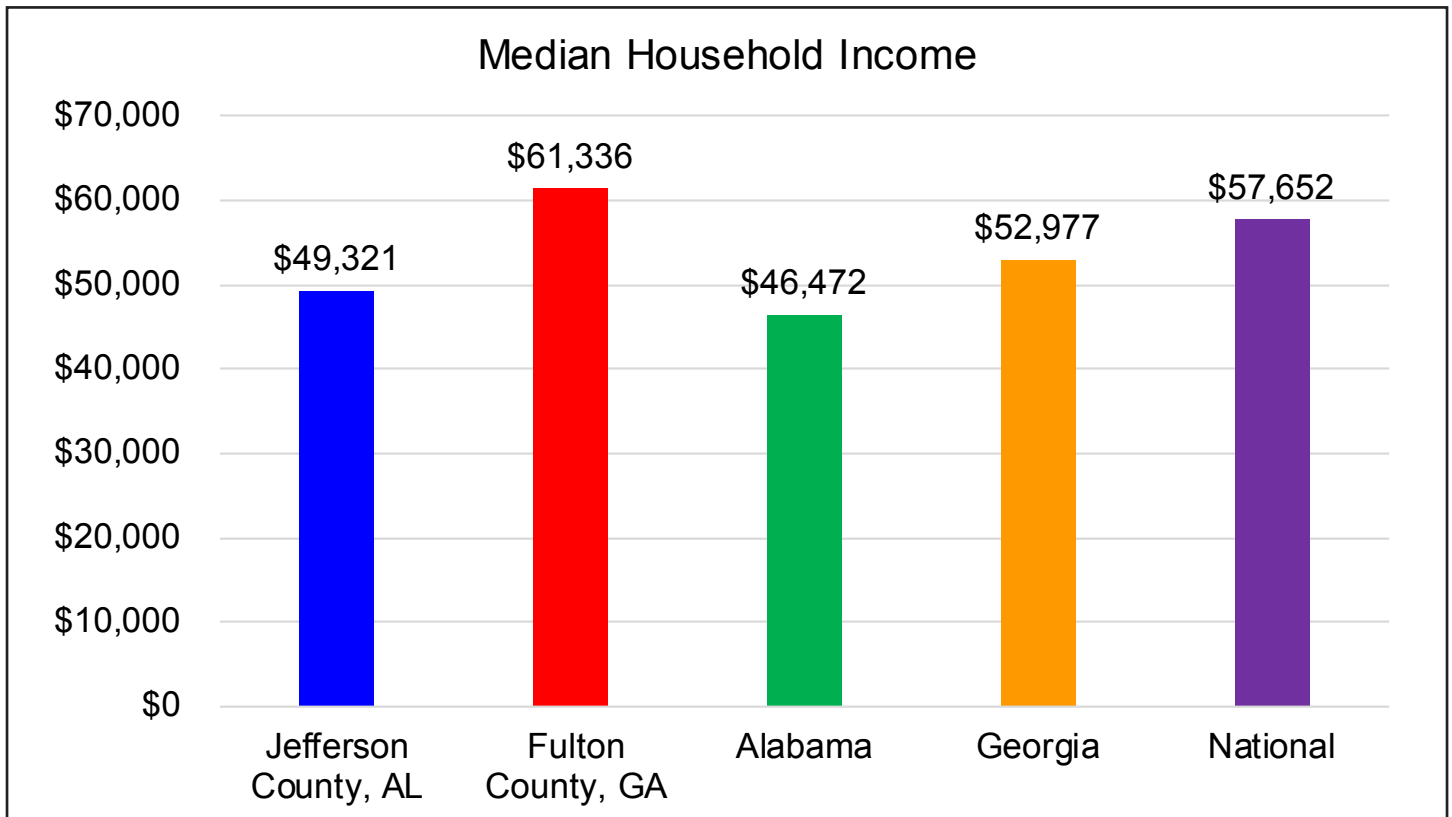


• Census Data •

Graph 23. U.S. Census – Bachelor's Degree or Higher

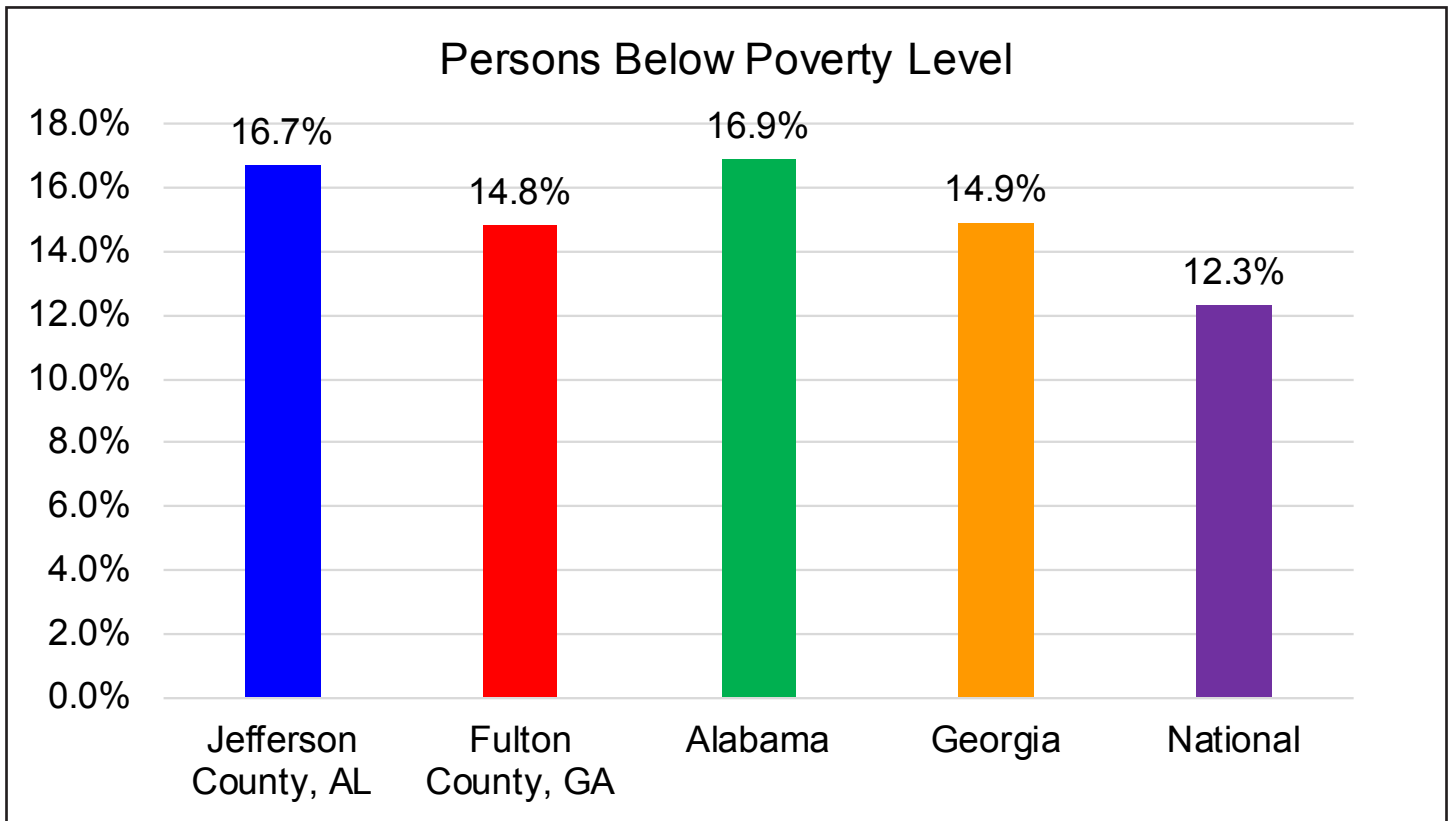


Graph 24. U.S. Census – Median Household Income



• Census Data •

Graph 25. U.S. Census – Persons Below Poverty Level



• Survey/Interviews •

In order to formulate a comprehensive list of the greatest health needs within the UAB Hospital Birmingham community, survey and interview questions were developed as previously described. Using the guidance provided in IRS notice 2011-52 on Community Health Needs Assessments for tax-exempt hospitals, the CHNA team identified key informants. The list of key informants included health experts at the state and community levels and local civic leaders. These key informants were queried using a variety of techniques including electronic survey, and telephone and in-person interviews. Below is a list of the survey questions and the weighted responses:

WHICH ARE MOST PRESSING HEALTH CONCERNS IN YOUR COMMUNITY? (INTERVIEWS/SURVEY)

- Access To Health Services
- Obesity
- Substance Abuse
- Social Determinants
- Cancer
- Heart Disease & Stroke
- Depression
- Stress

WHICH ARE THE PROBLEMS/CONCERNS IN YOUR COMMUNITY? (SURVEY)

- Access to Healthcare
- Drug Use
- Obesity
- Homelessness
- Poor Diet
- Tobacco Use
- Lack of Exercise
- Alcohol Abuse
- Literacy
- Increase in Elderly Population

MOST COMMON CAUSE OF DEATH IN YOUR COMMUNITY? (SURVEY)

- Heart Disease & Stroke
- Cancer
- Diabetes

MAIN REASON PEOPLE DON'T SEEK HEALTHCARE IN YOUR COMMUNITY? (INTERVIEWS/SURVEY)

- Lack of Insurance
- Cost
- Fear
- Lack of Access to Primary Care Physicians

WHAT IS THE HOSPITAL'S ROLE IN ADDRESSING NEEDS? (INTERVIEWS/SURVEY)

- Education
- Stronger Relationships with Community Resources
- Take Care of Acute Illness then Send to Primary Care Physician to Stay Healthy
- Seek Whole Health
- Offer Screenings
- Improve Access to Care

• Summary of Findings •

The CHNA Coalition Committee, consisting of representatives from hospital senior management and multiple community leaders, completed a private ballot to determine the top five issues of the community. The ballot prompted each committee member to rank order a list of community concerns. The results demonstrated the committee members' healthcare priorities, as well as the voting frequency of each item on the ballot. A Borda-Type methodology was used to tabulate the results. The top three issues considered to be of greatest need in the community are as follows:

1. Diabetes Education
2. Hypertension / Stroke Prevention
3. Good Nutrition / Obesity Prevention

Identifying the needs of the community provides UAB Hospital the opportunity and the knowledge to better align existing programs and to design future efforts to best meet the needs of their community. UAB Hospital is part of a health system committed to providing a continuum of health services of the highest quality.



UAB HOSPITAL

2019 Community Health Needs Assessment – Implementation Strategy -

Hospital and Clinics Summary

UAB Hospital was established in 1945 as the teaching hospital for the University Of Alabama School Of Medicine. UAB Hospital is now a major tertiary care center providing quality care not only to the residents of Alabama, but to patients from around the world. The hospital is a not-for-profit organization that serves as the primary clinical support unit of the UAB Health System. It is located in the Medical District of Birmingham on the University of Alabama at Birmingham campus. Situated among major research centers and clinics, UAB Hospital, a 1,157 bed facility, provides patients with a complete range of primary and specialty care services, as well as the most up-to-date treatments and innovations in health care. UAB Hospital is a major center for clinical research and the home of some of the top medical programs in America. UAB Hospital's faculty and staff are committed to providing world-class care for patients throughout Alabama and the world. UAB Hospital offers a Level IV Regional Neonatal Intensive Care Unit, a Level I Trauma Emergency Center; a National Cancer Institute designated Comprehensive Cancer Center, a Comprehensive Stroke Center, a state of the art Heart and Vascular Center, and the 47- private bed Spain Rehabilitation Hospital which houses several nationally recognized programs.

Target Areas and Population

The UAB Hospital community is defined using the 146 zip codes derived from 75% of UAB's inpatient discharges from fiscal year 2018. The zip codes encompass 29 counties, all in the state of Alabama. For the purposes of this study, UAB Hospital's community is defined as Jefferson County, Alabama.

Population

Located in central Alabama, Jefferson County is a mix of urban, suburban, and rural environments. There are 67 communities within the county, 34 of which are incorporated municipalities. According to the U.S. Census Bureau, the most recent population estimate for Jefferson County is 659,197. The dominant language is English, with 5.9% speaking another language in the home.

Race/Ethnicity

The population of Jefferson County is 53.2% white, 43.4% black, and 3.1% other. The U.S. Census Bureau considers Hispanic/Latino heritage as an ethnicity and not a race. Of Jefferson County residents responding to the most recent census, 3.9% consider themselves to be of Hispanic/Latino origin. Persons of Hispanic/Latino origin may be of any race, and are included in the applicable race categories above. The Hispanic/Latino population of Jefferson County is 4.3%.

Education

Of Jefferson County's 659,197 residents, 22.9% are under 18 years old and are served by 12 school systems. There are 11 city systems and one run by the Jefferson County Board of Education. This county system is Alabama's second largest school district with 57 schools, 4,500 teachers, and over 36,000 students. The system offers a multitude of academic, career technical and extracurricular opportunities for students. The Birmingham City School System serves students in the city of Birmingham with 43 schools, (18 elementary, 8 middle, 10 K-8 schools, and 7 high schools). Of the county's residents, 89.4% graduated from high school. Jefferson County offers many post-secondary education opportunities. Birmingham Southern, The University of Alabama at Birmingham, and Samford University provide the area with major colleges of medicine, dentistry, optometry, pharmacy, law, engineering, and nursing. Of the county's residents, 31.9% hold a Bachelor's degree or higher. Birmingham has been the home of The University of Alabama at Birmingham School of Medicine since 1947. Birmingham is also home to three of the state's five law schools.

Employment

Jefferson County is an economic catalyst for the state. Not only does it have many companies and organizations with a large employment base, but it is a hub for medical care. UAB has an extensive healthcare complex and is the second largest employer in the state. The per capita income of a Jefferson County resident in 2017 was \$29,456 and median family income was \$49,321. The percentage of residents living below the poverty level is 16.7%. As of February 2019, the unemployment rate for Jefferson County was 3.7% which is the same as the rate for the state of Alabama. UAB is the largest healthcare provider in the state, while Blue Cross Blue Shield of Alabama is the major health insurance carrier in the state with corporate headquarters in Birmingham. Major financial institutions include Regions, BBVA/Compass, and Wells Fargo. Honda Manufacturing of Alabama (4,500 employees) and Mercedes-Benz U.S. International, Inc. (3,600 employees) are the major manufacturing employers. Both are located in adjacent counties within driving distance of Birmingham.

How the Implementation Strategy Was Developed

The UAB Hospital Implementation Plan was developed based on the findings of our CHNA conducted by Alabama Quality Assurance Foundation.

The CHNA reviewed our target areas and population, key demographic data, health trends in the key markets, comparisons to a similar market, internal stakeholder surveys, and key informant interviews.

After all the data was compiled and reviewed, the UAB CHNA Oversight Committee reviewed the top ranking health priorities and approved the Top Three Health Needs. This Oversight Committee membership included primary care physicians, UAB Health System strategic planning, UAB Health system marketing, UAB Hospital Wellness, and the Director of the UAB Health System Population Health Task Force.

Updates on the 2016 CHNA Action Plan

In 2016 the top three Health Needs identified were as follows:

1. Access
2. Diabetes Education
3. Hypertension/ Stroke Prevention & Education

2016 Health Need Number One: Access

We are working on many initiatives that will address access to care for our population. The main initiatives and brief summaries are listed below:

- A. Urgent care** – UAB has opened an urgent care center close to campus that is available for anyone needing these services
 - UPDATES:** UAB's urgent care center received a total of 65,632 visits from CY 2016 – 2018 and continues to operate daily.
- B. Population Health Task Force** – This committee has now formed an office of Population Health that is focusing on the high risk patients (readmission, disease state, etc.) and working with community partners on improving care and efficiency.
 - Develop Chronic Care Medical Home: Primary Care focused care, virtual in nature. Objective is to tie Primary Care providers with sub-specialties who identify and treat chronic illnesses in at-risk populations.
 - Partnership with VIVA and UAB Wellness to develop population and wellness programs for UAB employees and dependents dealing with diabetes, obesity, and hypertension.
 - Acquire and implement Cerner Health-E Intent registries, longitudinal medical records, and import data from disparate medical records.
 - UPDATES:** Health-e Intent implemented and tracking 216,360 patients through registries to close gaps in care.
- C. Telemedicine** – While implementing many telemedicine initiatives across the system, UAB is working to unify these efforts at an institution and state level.
 - UPDATES:** UAB eMedicine has successfully created the infrastructure to support the technological, regulatory and financial foundation of a state-wide telehealth network. More than 100 providers have received telemedicine privileges at UAB, encompassing more than 20 specialties.
- D. Healthy Happy Kids** - Childhood obesity is a growing epidemic in the U.S., and it's even more severe in Alabama. One third of Alabama children are either overweight or obese, placing them on the top of obesity charts nationally. Among racial and ethnic minority populations such as African American and Hispanic, obesity rates are even higher. The UAB Minority Health and

Health Disparities Research Center (MHRC) designed the Healthy Happy Kids (HHK) program to teach children how good nutrition and an active lifestyle will help them lead healthier lives. For six weeks, children in Birmingham City School System's after-school programs learn about healthy eating and staying active. Dressed in Healthy Happy Kids aprons and chef hats, the children learn how to make simple and healthy snacks. The children also learn the importance of exercise by playing volleyball, jumping ropes and throwing frisbees. The HHK program culminates with an Iron Chef-inspired competition, hosted by a celebrity judge. Local chefs join the children to meet the challenge of creating a healthy, kid-approved dish.

- i. **UPDATES:** For six weeks, children in after-school and summer programs in under-resourced communities across the state learn about healthy eating and staying active. The hands-on curriculum, taught by UAB nutritionists, physical activity experts, and student and community volunteers, provides children with healthy lifestyle skills to help them prevent obesity-related chronic diseases as adults. Since the program launched in 2008, 1,565 children from 28 sites in Central and South Alabama have learned how to live a healthy lifestyle. Healthy Happy Kids was selected as one of UAB's 50 Acts of Service to commemorate the university's 50th anniversary.

E. **HealthSmart** - – Continuing downtown wellness facility that works to prevent high rates of chronic disease through free health profiles, nutrition and fitness classes, and health education talks.

- i. **UPDATES:** In 2011, the MHRC opened UAB HealthSmart, a wellness hub, with easy access to primary and secondary preventive medicine program and services at no charge. In the five years HealthSmart was located in downtown Birmingham, 24,917 services were delivered to 2,848 individuals during 10,900 total visits. There was a 47% improvement in client biometrics, attributed to due to healthy eating and increased physical activity, with personalized counseling by registered dietitians and exercise experts. In 2017, the focus of HealthSmart changed from a facility-based wellness model to a more mobile one, with increased outreach across UAB and the community. That same year, HealthSmart was selected to provide comprehensive wellness screenings for UAB employees. The MHRC conducted 5,147 employee screenings at 8 different campus locations, providing real time biometric screening results.

F. **Sowing the Seeds of Health**- Sowing the Seeds of Health is a community-based educational program funded by the National Cancer Institute that has continued to grow since its inception in 2007.

- i. **UPDATES:** Sowing the Seeds of Health (SSH) is a community based, culturally relevant educational program designed to promote breast and cervical cancer early detection and screening among Latina immigrants via lay health promoters or "promotores de salud". The program trains lay individuals from the Latino community with the knowledge and skills necessary to promote health, prevent disease and encourage screening. The SSH program conducts annual educational luncheons in local churches where a Spanish-speaking physician provides education on breast and cervical cancer early detection and screening. Following the educational component,

participants are given the opportunity to schedule low-cost Pap test and mammogram appointments at local clinics. These events are designed to educate Latinas on the importance of breast and cervical cancer early detection and screening and connect individuals to affordable healthcare. Through these events, SSH has reached over 4,000 Latina immigrants, linking them to screening services and enabling access to a regular source of healthcare

- G. Participation in Bundled Payments** – UAB has continued our participation and have seen a positive impact due to our participation. We have instituted a number of different patient care initiatives due to our participation in BPCI.
- i. **UPDATES:** Enrolled in BPCI- A and are awaiting first quarter results. Currently managing approximately 196 patients through this program.
- H. Cancer Care Community Network** – The UAB Health System Cancer Community Network provides a structured program to support community-based oncology services to foster collaborative physician relationships, provide continuing medical education and offer local patients the opportunity to enroll in clinical trials managed by leading scientists and physicians, and access to UAB’s best practices in cancer care at a local level. The UABHS Cancer Community Network has 12 current members who, together with UAB, serve over 70,000 cancer patients across the 5 state region of the Deep South.
- i. **UPDATES:** UABHS Cancer Community Network has 6 current members, serving over 11,000 new cancer cases per year across 3 states—AL, MS, and FL.
- I. Hiring additional primary care physicians** – UAB has increased the number of PCPs as well as APPs. We are also looking at expansion in outlying markets
- i. **UPDATES:** UAB Medicine is working closely with new Chairman of Family & Community Medicine to increase the footprint of Family Medicine providers, while maintaining a strong group of Internal Medicine and Med/Peds Physicians around the Birmingham metro.
- J. Contracting with Cooper Green** – UAB continues its affiliation with Cooper Green- Our latest Agreement includes Podiatry, Cardiology, Neurology, Rheumatology, ENT, Nephrology, Dermatology, Urology, Primary Care/Preventive/Urgent Care, Medicine, Endocrinology, and Gastroenterology and acute care services.
- i. **UPDATES:** On April 18, 2019, the Jefferson County Commission passed a resolution in agreement with the UAB Health System to begin a due diligence period to focus on creating a University Healthcare Authority to help manage Cooper Green Mercy Health Services. By passing the resolution, Jefferson County and UAB Health System can have more detailed discussions on how a transition would occur under the new Authority. Those discussions have begun. Source: www.coopergreenupdates.com

2016 Health Need Number Two: Diabetes Education

We are working on many initiatives that will address diabetes education for our population. The main initiatives and brief summaries are listed below:

- A. **Population Health Task Force** – This committee has now formed an office of Population Health that is focusing on the high risk patients (readmission, disease state, etc.) and working with community partners on improving care and efficiency.
- Develop Chronic Care Medical Home: Primary Care focused care, virtual in nature. Objective is to tie Primary Care providers with sub-specialties who identify and treat chronic illnesses in at-risk populations.
 - Partnership with VIVA and UAB Wellness to develop population and wellness programs for UAB employees and dependents dealing with diabetes, obesity, and hypertension.
 - Acquire and implement Cerner Health-E Intent registries, longitudinal medical records, and import data from disparate medical records.
- i. **UPDATES:** Health-e Intent implemented and tracking 216,360 patients through registries to close gaps in care.
- B. **Cities for Life** - UAB continues to be a majority member on the Steering committee and continues to partner with the program on a number of events.
- i. **UPDATES:** UAB was a majority member on the Cities for Life steering committee and partnered on a number of events. Over the life of this initiative, a Community Action Team was engaged and a website, was developed. www.Mydiabetesconnect.com is a website designed to link individuals affected by diabetes to Birmingham-metro area, Jefferson County and surrounding counties to resources to promote healthy living and diabetes management. This website continues to actively engage Alabama communities through support from the UAB Diabetes Research Center's Interventions and Translation Core.
- C. **Diabetes Education 101**- Quarterly lecture series conducted by UAB Wellness on diabetes awareness and education.
- i. **UPDATES:** UAB Employee Wellness created a four-month program called Diabetes Decoded that received 225 participants. This program offered lunch-and-learns, yoga classes, and online videos on diabetes education and incentivized participation with points for prizes.
- D. **HealthSmart** – Continuing downtown wellness facility that works to prevent high rates of chronic disease through free health profiles, nutrition and fitness classes, and health education talks.
- i. **UPDATES:** In 2011, the MHRC opened UAB HealthSmart, a wellness hub, with easy access to primary and secondary preventive medicine program and services at no charge. In the five years HealthSmart was located in downtown Birmingham, 24,917 services were delivered to 2,848 individuals during 10,900 total visits. There was a 47% improvement in client biometrics, attributed to due to healthy eating and increased physical activity, with personalized counseling by registered dietitians and exercise

experts. In 2017, the focus of HealthSmart changed from a facility-based wellness model to a more mobile one, with increased outreach across UAB and the community. That same year, HealthSmart was selected to provide comprehensive wellness screenings for UAB employees. The MHRC conducted 5,147 employee screenings at 8 different campus locations, providing real time biometric screening results.

- E. **Sowing the Seeds of Health-** Sowing the Seeds of Health is a community-based educational program funded by the National Cancer Institute that has continued to grow since its inception in 2007.
- i. **UPDATES:** Sowing the Seeds of Health (SSH) is a community based, culturally relevant educational program designed to promote breast and cervical cancer early detection and screening among Latina immigrants via lay health promoters or “promotores de salud”. The program trains lay individuals from the Latino community with the knowledge and skills necessary to promote health, prevent disease and encourage screening. The SSH program conducts annual educational luncheons in local churches where a Spanish-speaking physician provides education on breast and cervical cancer early detection and screening. Following the educational component, participants are given the opportunity to schedule low-cost Pap test and mammogram appointments at local clinics. These events are designed to educate Latinas on the importance of breast and cervical cancer early detection and screening and connect individuals to affordable healthcare. Through these events, SSH has reached over 4,000 Latina immigrants, linking them to screening services and enabling access to a regular source of healthcare

2016 Health Need Number Three: Hypertension/ Stroke Prevention & Education

We are working on many initiatives that will address hypertension/stroke prevention & education for our population. The main initiatives and brief summaries are listed below:

- A. **Partnership with VIVA and UAB Wellness:** Develop population and wellness programs for UAB employees and dependents dealing with diabetes, obesity, and hypertension.
 - i. **UPDATES:** VIVA invited UAB Employee Wellness to host a series of lunch-and-learns related to overall wellness. UAB Employee Wellness also facilitated onsite Wellscreens for employees where they could get a snap shot of their health status through a 15 minute health screen. In 2018, 176 VIVA employees were screened and follow up lectures were offered to help employees understand their results.

- B. **Stroke Awareness Month:** Every May, UAB promotes Stroke Awareness Month through a series of educational lectures and “Lunch and Learn” seminars designed to promote awareness of the warning signs, risk factors, and latest treatments for stroke.
 - i. **UPDATES:** Continue to promote stroke awareness month and added an annual comprehensive stroke symposium for internal and external health providers.

The 2019 Action Plan

The top three Health Needs that were identified in 2019 are as follows:

1. Diabetes Education
2. Hypertension/Stroke Prevention
3. Good Nutrition/Obesity Prevention

1. Diabetes Education

UAB Hospital is working on many initiatives that will address diabetes education for our population. The main initiatives and brief summaries are listed below:

- A. PATH (Providing Access to Healthcare) Clinic** - The University of Alabama at Birmingham (UAB) School of Nursing Providing Access to Healthcare (PATH) Clinic, which has been providing high-quality care in an interprofessional clinical setting since 2012. The PATH clinic, in partnership with UAB Medicine, serves patients recently discharged from UAB Hospital and employs a variety of health care professionals, including nurse practitioners, physicians, dietitians, optometrists and social workers to provide the complete spectrum of care for patients living with diabetes.
- B. Digital medicine venture**- UAB Medicine is launching a new venture to help patients and visitors manage and improve their health and wellness using technology. The concept is similar to Apple's in-store Genius Bar, where people can get assistance with devices and apps and learn about various technologies on the market. The venture will be the first of its kind in Alabama, and initially it will focus on patients with diabetes, hypertension, or obesity.
- C. Healthy Alabama 2030: Live HealthSmart**- This is the winning project selected for the inaugural UAB Grand Challenge. Led by Principal Investigator Dr. Mona Fouad, director of the UAB Minority Health & Health Disparities Research Center, the project plans to make Alabama a model of healthy living. The project marshals the capacity of UAB faculty, staff, and students in collaboration with over 90 government, healthcare business, education, and community partners from across the state to move our state out of the bottom 10 in national healthy rankings by 2030. By expanding proven innovations and changing policies, neighborhoods, schools and workplaces, Healthy Alabama 2030 aims to dramatically improve the health of all Alabamians. Dr. Fouad and her team will employ a comprehensive, multi-sectoral approach—comprising academic partners, businesses, healthcare and insurance providers, local and state governments, faith-based organizations and community stakeholders—in a concerted effort to lift Alabama into the 30s in key health metrics over the next 10 years.
- D. EMMI**- To support communication between doctors and patients, UAB Medicine has deployed interactive post-discharge phone calls and corresponding multimedia programs known as EMMI that encourage patients' additional learning about their health condition to improve care transitions and reduce readmission rates. EMMI is a web-based program that takes complex medical information and explains it in a way that is easy to understand. Using animation and a soothing female voice, EMMI helps you prepare for an upcoming procedure, learn more about certain treatments, or manage a chronic condition.

- E. **Telemedicine-** Diabetes education via telemedicine has been successfully piloted at local county health departments. In addition, the program developed a strategy to deliver diabetes education to patients at home and to provide remote patient monitoring for specific high risk diabetes populations.
- F. **My Health Rewards** - All benefit eligible employees (full time and part time regular) can enroll into the sweepstakes program model that allows employees to qualify for gift cards for certain self-report criteria related to healthy behaviors such as physical activity, water intake, and wellness education competency. As of 2/4/2019, this program has been adjusted to a claims based model and is available for all UAB, UAB Hospital, UAB LLC, UA Health Services Foundation and UAB Health System benefit-eligible employees enrolled in a 2019 medical plan.
- G. **UAB Diabetes Bridge Clinic-** The Diabetes Bridge Clinic is part of the UAB Medicine Integrated Diabetes Management Program and helps patients achieve the best possible control of their condition after discharge from UAB Hospital.

2. Hypertension/Stroke Prevention

UAB Hospital is working on many initiatives that will address hypertension/stroke prevention for our population. The main initiatives and brief summaries are listed below:

- A. **HRTSA Clinic-** The Heart FailuRe Transitional Care Services for Adults (HRTSA) Clinic is a nurse-managed interprofessional collaborative clinic for underserved patients with a diagnosis of heart failure. The HRTSA Clinic provides services across the care continuum by seeing patients in the hospital, clinic, and home.
- B. **EMMI-** To support communication between doctors and patients, UAB Medicine has deployed interactive post-discharge phone calls and corresponding multimedia programs known as EMMI that encourage patients' additional learning about their health condition to improve care transitions and reduce readmission rates. EMMI is a web-based program that takes complex medical information and explains it in a way that is easy to understand. Using animation and a soothing female voice, EMMI helps you prepare for an upcoming procedure, learn more about certain treatments, or manage a chronic condition.
- C. **Telemedicine-** The UAB eMedicine Stroke program continues to increase access to stroke care throughout Alabama delivered by UAB vascular neurologists. Since May 2018, when the first stroke site went live, several hospitals have been added to this stroke network with planned implementation at additional hospitals throughout the state.
- D. **State-Wide Stroke Network-** developing network to triage quickly, appropriate stroke intervention and will help to reduce stroke mortality in the state of Alabama. Part of this effort will include stroke education to rural and community Emergency Department teams.
- E. **Digital medicine venture-** UAB Medicine is launching a new venture to help patients and visitors manage and improve their health and wellness using technology. The concept is similar to Apple's in-store Genius Bar, where people can get assistance with devices and apps and learn about various technologies on the market. The venture will be the first of its kind in Alabama, and initially it will focus on patients with diabetes, hypertension, or obesity. Retail specialists will provide assistance and advice on devices and apps to help patients monitor their health from home.

- F. **Healthy Alabama 2030: Live HealthSmart-** This is the winning project selected for the inaugural UAB Grand Challenge. Led by Principal Investigator Dr. Mona Fouad, director of the UAB Minority Health & Health Disparities Research Center, the project plans to make Alabama a model of healthy living. The project marshals the capacity of UAB faculty, staff, and students in collaboration with over 90 government, healthcare business, education, and community partners from across the state to move our state out of the bottom 10 in national healthy rankings by 2030. By expanding proven innovations and changing policies, neighborhoods, schools and workplaces, Healthy Alabama 2030 aims to dramatically improve the health of all Alabamians. Dr. Fouad and her team will employ a comprehensive, multi-sectoral approach—comprising academic partners, businesses, healthcare and insurance providers, local and state governments, faith-based organizations and community stakeholders—in a concerted effort to lift Alabama into the 30s in key health metrics over the next 10 years.
- G. **Designated Women’s Heart Disease Clinic-** This clinic focuses on treating women with different heart issues such as CHF, Coronary Artery Disease, Hypertension, Adult Congenital Heart Disease and Pregnancy and Cardio-Oncology focusing on cardiac care for women undergoing cancer treatment with Chemotherapy and/or Radiation Therapy. We promote the uniqueness of women’s symptoms with cardiac disease to create awareness for specialized care.
- H. **WomenHeart Program-** UAB sponsors two of our female cardiac patients serving as patient education and community awareness advocates for women and heart disease. Educate public on women’s cardiac symptoms, heart disease and prevention.
- I. **Smoking Cessation Task Force-** evaluating patient (and public) need for smoking cessation education and counseling. Currently have inpatient counseling team, education on smoking cessation through patient portal, and link to resources on UAB webpage for smoking cessation.
- J. **Annual Healthcare Provider Stroke Educational Seminar-** Annual CME seminar presenting up to date clinical data as well as case study information for UAB and outside health care providers.

3. Good nutrition/ Obesity Prevention

UAB Hospital is working on many initiatives that will address good nutrition/obesity prevention for our population. The main initiatives and brief summaries are listed below:

- A. **Digital medicine venture-** UAB Medicine is launching a new venture to help patients and visitors manage and improve their health and wellness using technology. The concept is similar to Apple’s in-store Genius Bar, where people can get assistance with devices and apps and learn about various technologies on the market. The venture will be the first of its kind in Alabama, and initially it will focus on patients with diabetes, hypertension, or obesity. Retail specialists will provide assistance and advice on devices and apps to help patients monitor their health from home.

- B. **Farm stand-** Boozer Farms continues to evolve and expand throughout Alabama as Taylor and her family seek new ways to serve the community. In addition to attending local farmer's markets, supplying local restaurants with fresh produce, and running their CSA (community supported agriculture) program, Boozer Farms has now set down roots in UAB's community. Traveling from Clanton to Birmingham four days a week, they sell their produce in several locations around UAB.
- C. **EMMI-** To support communication between doctors and patients, UAB Medicine has deployed interactive post-discharge phone calls and corresponding multimedia programs known as EMMI that encourage patients' additional learning about their health condition to improve care transitions and reduce readmission rates. EMMI is a web-based program that takes complex medical information and explains it in a way that is easy to understand. Using animation and a soothing female voice, EMMI helps you prepare for an upcoming procedure, learn more about certain treatments, or manage a chronic condition.
- K. **Healthy Alabama 2030: Live HealthSmart-** This is the winning project selected for the inaugural UAB Grand Challenge. Led by Principal Investigator Dr. Mona Fouad, director of the UAB Minority Health & Health Disparities Research Center, the project plans to make Alabama a model of healthy living. The project marshals the capacity of UAB faculty, staff, and students in collaboration with over 90 government, healthcare business, education, and community partners from across the state to move our state out of the bottom 10 in national healthy rankings by 2030. By expanding proven innovations and changing policies, neighborhoods, schools and workplaces, Healthy Alabama 2030 aims to dramatically improve the health of all Alabamians. Dr. Fouad and her team will employ a comprehensive, multi-sectoral approach—comprising academic partners, businesses, healthcare and insurance providers, local and state governments, faith-based organizations and community stakeholders—in a concerted effort to lift Alabama into the 30s in key health metrics over the next 10 years.
- D. **WellScreens-** UAB Employee Wellness provides a free 15-minute health screen for all UAB, UAB Hospital, LLC, UA Health Services Foundation and UAB Health System who are eligible for a medical plan. A WellScreen measures blood pressure, total cholesterol, LDL cholesterol, HDL cholesterol, blood sugar, BMI, triglycerides and cholesterol ratio/cardiac risk.
- E. **Telemedicine-** UAB will continue to develop strategies to deliver nutrition and obesity education to patients at home.
- F. **My Health Rewards** - All benefit eligible employees (full time and part time regular) can enroll into the sweepstakes program model that allows employees to qualify for gift cards for certain self-report criteria related to healthy behaviors such as physical activity, water intake, and wellness education competency. As of 2/4/2019, this program has been adjusted to a claims based model and is available for all UAB, UAB Hospital, UAB LLC, UA Health Services Foundation and UAB Health System benefit-eligible employees enrolled in a 2019 medical plan.
- G. **Obesity Health Disparities Research Center-** The UAB OHDR, an MHRC initiative funded through the NIMHD's Centers of Excellence program, supports transdisciplinary, multi-level, and multi-domain research to understand the complex contributors to obesity and obesity related health disparities. By connecting research and communities, we create better health for all.

- We will continue to foster collaborative and multidisciplinary obesity related health disparities research, using the state of Alabama as a model.
- Through our Building Healthy Communities initiative, we will continue to work with our neighbors to build healthier communities, partnering with residents and stakeholders to address the self-identified issues impacting their health. The partnership of mutual trust fosters collaboration and creates a community-driven action plan that promotes changes that improve the health of the community.
- We will continue Healthy Happy Kids (HHK), our successful childhood obesity prevention program, implementing from 2-4 six-week sessions a year in areas across the state. We will pilot a newly developed train-the-trainer model for HHK implementation. We will develop a Healthy Happy Families curriculum for parents and caregivers that will complement HHK and pilot the program in at least 2 sites.
- We will expand our exercise prescription program, Parks Rx, adapting it for use beyond Jefferson County. This will be one of the tools in the easily accessible online toolkit for Healthy Alabama 2030: Live HealthSmart.

Next Steps

Our next steps will be to monitor the progress of each of these initiatives in order to gauge their effectiveness towards improving the health status of our community population and report the progress to the UAB CHNA Oversight Committee.

Needs Not Being Addressed

While the UAB CHNA Oversight Committee has focused on the top three health needs for the purpose of the CHNA, this does not mean that we are not addressing other needs mentioned in interviews, surveys, and data collection. At this time, all major health needs are being addressed in some way- but priority is given to the top three health needs identified.

Approval

This plan was presented to and approved by the UAB Health System Board on August 15th, 2019. This plan has also been approved by the UAB CHNA Oversight Committee



Community Health Needs Assessment
2019

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