Brookwood Baptist Health

Walker Baptist Medical Center
Community Health Needs Assessment

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Walker Baptist Medical Center at a Glance

In 2015, Baptist Health System and Brookwood Medical Center came together to form a new community of care: Brookwood Baptist Health. United in service and devotion to the people of central Alabama, Brookwood Baptist Health was founded on our mutual dedication to high-quality, compassionate care for the communities we have served since 1922.

With five hospitals, dozens of specialty centers, and the largest primary care network in the state, Brookwood Baptist Health has convenient locations all across Central Alabama, including Walker Baptist Medical Center and Princeton Baptist Medical Center in Birmingham, Shelby Baptist Medical Center in Alabaster, Walker Baptist Medical Center in Jasper, and Citizens Baptist Medical Center in Talladega.

Across the entire statewide system, Brookwood Baptist Health has more than 1,700 patient beds, includes more than 70 primary and specialty care clinics, approximately 1,500 affiliated physicians, and more than 8,500 employees overall, with convenient locations across central Alabama.

Walker Baptist Medical Center is an acute care facility located at 3400 Highway 78, Jasper, AL 35501 and equipped with 267 beds and over 600 healthcare professionals. WBMC offers a full range of services to meet the diverse needs of patients including fast, life-saving response times for patients with chest pain or stroke symptoms; cardiology; orthopedics, including rehabilitation; psychiatric care; urology; and detox therapy.

Methodology

Community Health Needs Assessment Background

On June 6, 2019, Brookwood Baptist Health contracted with Carnahan Group to conduct a Community Health Needs Assessment (CHNA) for Walker Baptist Medical Center (WBMC) as required by the Patient Protection and Affordable Care Act (PPACA). Please refer to Appendix A: Carnahan Group Qualifications for more information about Carnahan Group.

The PPACA, enacted on March 23, 2010, requires not-for-profit hospital organizations to conduct a CHNA once every three taxable years that meets the requirements the Internal Revenue Code 501(r) set forth by the PPACA. The PPACA defines a hospital organization as an organization that operates a facility required by a state to be licensed, registered, or similarly recognized as a hospital; or, a hospital organization is any other organization that the Treasury's Office of the Assistant Secretary ("Secretary") determines has the provision of hospital care as its principal function or purpose constituting the basis for its exemption under section 501(c)(3).

A CHNA is a report based on epidemiological, qualitative, and comparative methods that assess the health issues in a hospital organization's community and that community's access to services related to those issues. Based on the findings of the CHNA, an implementation strategy for WBMC that addresses the community health needs will be developed and adopted no later than five and a half months following the end of Fiscal Year 2019.

Secondary Data Collection and Analysis Methodology

A variety of data sources were utilized to gather demographic and health indicators for the community served by WBMC. Commonly used data sources include Esri, the U.S. Census Bureau, and the Centers for Disease Control and Prevention (CDC). Walker and Winston counties define the community served by WBMC. Demographic and health indicators are presented for these two counties.

For select indicators, county level data are compared to state and national benchmarks. Additionally, Healthy People 2020 (HP 2020) Goals are presented where applicable. The HP 2020 Goals, launched in December 2010, are science-based, ten-year national objectives for improving the health of all Americans.

Requirements

As required by the Treasury Department ("Treasury") and the Internal Revenue Service (IRS), this CHNA includes the following:

- A description of the community served;
- A description of the process and methods used to conduct the CHNA, including:
    - A description of the sources and dates of the data and the other information used in the assessment; and,
    - The analytical methods applied to identify community health needs.
- The identification of all organizations with which WBMC collaborated, if applicable, including their qualifications;
- A description of how WBMC took into account input from persons who represented the broad interests of the community served by WBMC, including those with special knowledge of or expertise in public health, written comments regarding the hospital's previous CHNA, and any individual providing input who was a leader or representative of the community served by WBMC; and,
- A prioritized description of all of the community health needs identified through the CHNA and a description of the process and criteria used in prioritizing those needs.

CHNA Strategy

This CHNA was conducted following the requirements outlined by the Treasury and the IRS, which included obtaining necessary information from the following sources:

- Input from persons who represented the broad interests of the community served by WBMC, which included those with special knowledge of or expertise in public health;
- Identifying federal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by WBMC, leaders, representatives, or members of medically underserved, low-income, and minority populations with chronic disease needs in the community served by WBMC; and,
- Consultation or input from other persons located in and/or serving WBMC's community, such as:
    - Healthcare community advocates;
    - Nonprofit organizations;
    - Local government officials;
    - Community-based organizations, including organizations focused on one or more health issues;
    - Healthcare providers, including community health centers and other providers focusing on medically underserved populations, low-income persons, minority groups, or those with chronic disease needs.
- The sources used for WBMC's CHNA are provided in the References and Appendix B: Community Leader Interviewees. Information was gathered by conducting interviews with individuals representing community health and public service organizations, public health agencies, medical professionals, hospital administration and other hospital staff members.

Impact Evaluation - Actions Taken Since 2016 CHNA

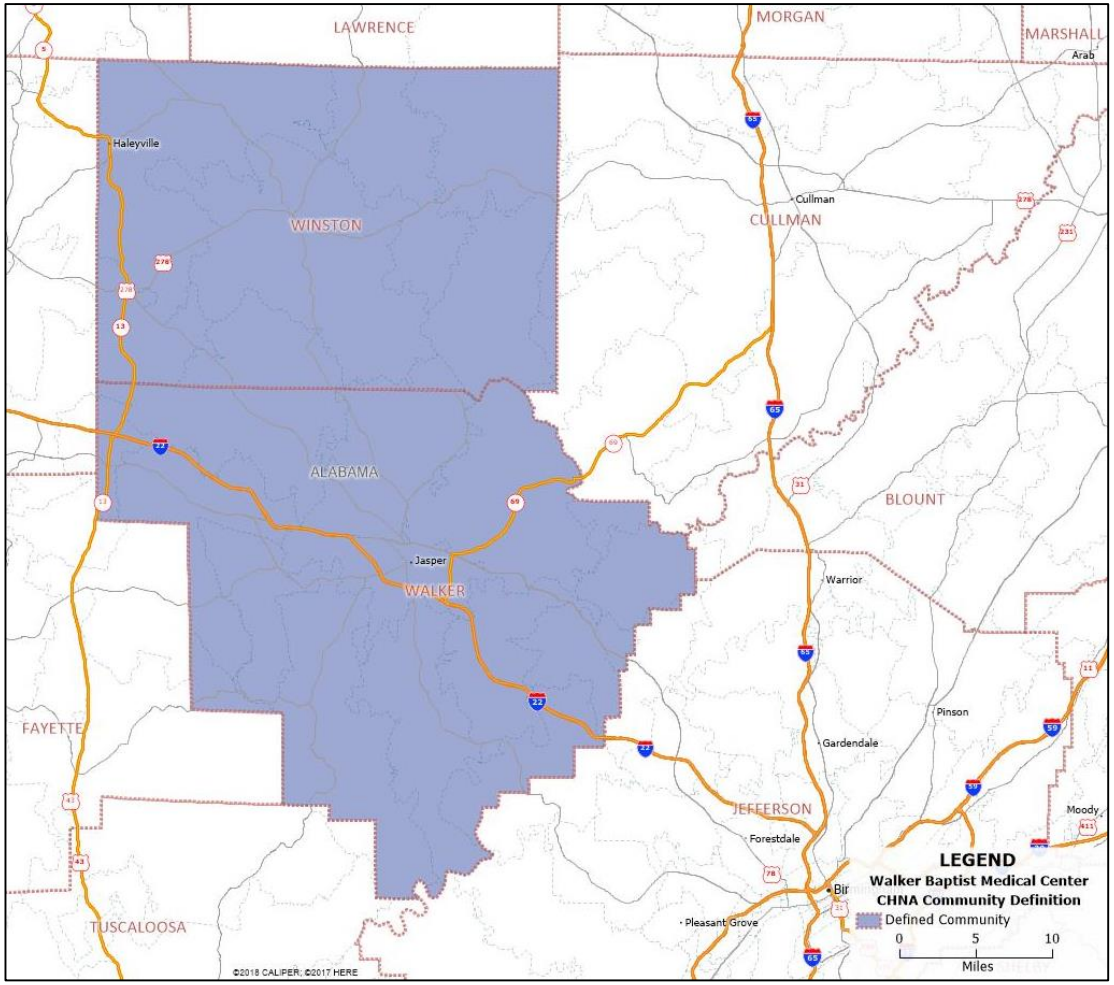
WBMC's previous Implementation Strategy outlined a plan for addressing the following priorities identified in the 2016 CHNA: *Cardiovascular Disease, Cancer, Diabetes, Obesity, Mental Health,* and *Substance Abuse*. The table below describes the strategies and action items completed by WBMC.

2016 CHNA Health Priorities	2016 Implementation Strategies	Actions Completed
Cardiovascular Disease	Education Reduction of cardiovascular disease rates	2019 American Heart Association Hospital Fundraiser 2019 Recipient Get with the Guidelines - Gold Award for Heart Failure Men's Health and Screening Event Fall 2018 Better with Age Women's Educational Event Fall 2018 and Spring 2019
Cancer	Improve early detection	Offering of Low Dose Lung CT scans Continued community education and awareness initiatives
Diabetes	Education Reduce diabetes prevalence	Bimonthly Diabetes Education Classes offered to community Men's Health and Screening Event Fall 2018 Better with Age Women's Educational Event Fall 2018 and Spring 2019
Obesity	Physical activity and nutrition education	Participated as an Anchor Member in the Health Action Partnership: continued to focus on promoting healthy eating Hosted educational health talks, mental health, cardio, and wellness checks
Mental Health	Improve awareness of local resources	PTSD Awareness: Dr. Syed Aftab completed a Fox 6 Ask the Doc Segment Leadership Walker County: provided mental health education to local leaders December 2018
Substance Abuse	Link to treatment opportunities Education	State of Addiction: Opioid Epidemic community seminar September 2019 Continued promotion and marketing of the hospital's detox program Leadership Walker County: provided addiction education to local leaders in December 2018 Continued promotion and awareness of living heathier lifestyles and health screenings

WBMC received no written feedback on the 2016 CHNA and Implementation Strategy.

Community Overview

For the purposes of the CHNA report, WBMC chose Walker and Winston counties as the defined community. Because this community is based purely on geography, it includes medically underserved, low income, and minority populations.



Source: Maptitude 2018

Community Overview (continued)

Health Professional Shortage Areas

Health Professional Shortage Areas (HPSAs) are designations that indicate health care provider shortages in primary care, dental health, or mental health.

Shortages may be geographic-, population-, or facility-based:

- **Geographic Area** - A shortage of providers for the entire population within a defined geographic area.
- **Population Groups** - A shortage of providers for a specific population group(s) within a defined geographic area (e.g., low income, migrant farmworkers, and other groups)

The following geographies are characterized as Health Professional Shortage Areas (HPSA) within the service area:

County	Primary Care Designation	Dental Health Designation	Mental Health Designation	Rural Status
Walker	Low Income Population HPSA	Low Income Population HPSA	High Needs Geographic HPSA (Catchment Area M-4)	Partially Rural
Winston	High Needs Geographic HPSA	Low Income Population HPSA	High Needs Geographic HPSA (Catchment Area M-4)	Rural

Source: HRSA

Community Overview (continued)

Medically Underserved Areas

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) identify geographic areas and populations with a lack of access to primary care services. MUAs have a shortage of primary care health services for residents within a geographic area while MUPs are specific sub-groups of people living in a defined geographic area with a shortage of primary care health services.

Designations are based on the Index of Medical Underservice (IMU). The IMU is calculated based on four criteria:

- the population to provider ratio;
- the percent of the population below the federal poverty level;
- the percent of the population over age 65; and
- the infant mortality rate.

IMU can range from 0 to 100, where zero represents the completely underserved. Areas or populations with IMUs of 62.0 or less qualify for designation as an MUA/P.

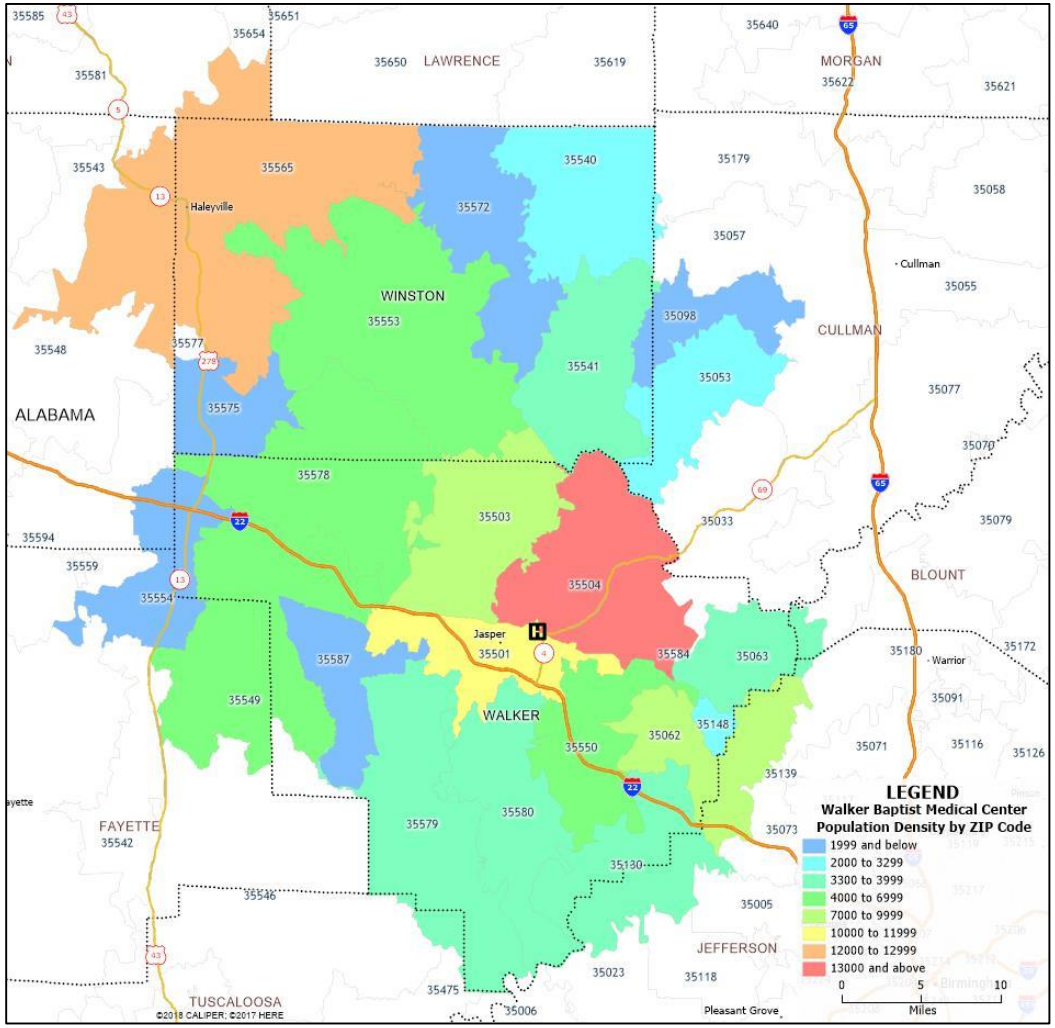
The following table describes the MUA within the community:

County	IMU Score	Medically Underserved Area Designation
Walker	61.6	MUP Low Income
Winston	58.1	MUA

Source: HRSA, Maptitude 2018

Health Profile

Demographics - Population Density by ZIP Code in WBMC's Community, 2019



Source: Esri 2018; Maptitude 2018

Population Change by ZIP Code

The overall projected population decline for the community is -1.7% over the next five years. Slight decline is expected for most ZIP Codes, with ZIP Code 35550 in Cordova and ZIP Code 35503 in Jasper anticipating the greatest decline (-3.5% and -3.2%, respectively). Marginal growth is expected for ZIP Codes 35130 in Quinton (0.3%) and 35579 in Oakman (0.2%).

Total Service Area Population Change by ZIP Code, 2019-2024

ZIP Code	Community	Current Population	Projected 5-year Population	Percent Change
35063	Empire	3,619	3,558	-1.7%
35130	Quinton	3,350	3,360	0.3%
35148	Sumiton	3,024	3,014	-0.3%
35501	Jasper	10,336	10,137	-1.9%
35503	Jasper	8,903	8,622	-3.2%
35504	Jasper	13,593	13,340	-1.9%
35540	Addison	2,674	2,662	-0.4%
35541	Arley	3,887	3,883	-0.1%
35549	Carbon Hill	4,412	4,357	-1.2%
35550	Cordova	5,270	5,085	-3.5%
35553	Double Springs	4,582	4,544	-0.8%
35554	Eldridge	1,044	1,017	-2.6%
35565	Haleyville	12,449	12,174	-2.2%
35572	Houston	999	999	0.0%
35575	Lynn	1,116	1,087	-2.6%
35578	Nauvoo	5,176	5,080	-1.9%
35579	Oakman	3,443	3,450	0.2%
35580	Parrish	3,803	3,745	-1.5%
35587	Townley	909	902	-0.8%
Total		**92,589**	**91,016**	**-1.7%**

Source: Esri 2018

Population Change by Age and Gender

The population of residents aged 70 and older is expected to increase significantly over the next five years. Moderate population growth is expected for children aged 15–19 (5.2%) individuals aged 40–44 (2.3%), and individuals aged 65-69 (3.2%). Substantial population decline is expected amongst the following age groups: 0-9, 20-34, and 45-59.

Total Service Area Population Change by Age and Gender, 2019-2024

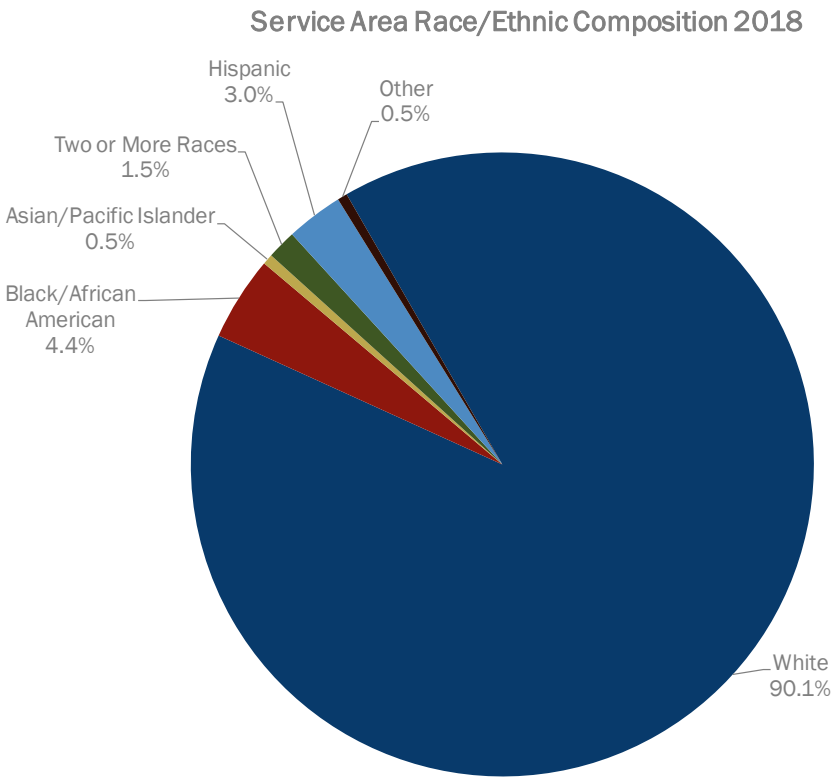
	2019			2024			Percent Change		
Age Group	Male	Female	Total	Male	Female	Total	Male	Female	Total
Age 00 through 04	2,388	2,367	4,755	2,241	2,220	4,461	-6.2%	-6.2%	-6.2%
Age 05 through 09	2,591	2,551	5,142	2,447	2,414	4,861	-5.6%	-5.4%	-5.5%
Age 10 through 14	2,711	2,637	5,348	2,729	2,648	5,377	0.7%	0.4%	0.5%
Age 15 through 19	2,498	2,354	4,852	2,634	2,472	5,106	5.4%	5.0%	5.2%
Age 20 through 24	2,348	2,249	4,597	2,028	1,997	4,025	-13.6%	-11.2%	-12.4%
Age 25 through 29	2,933	2,756	5,689	2,143	2,090	4,233	-26.9%	-24.2%	-25.6%
Age 30 through 34	2,897	2,804	5,701	2,705	2,543	5,248	-6.6%	-9.3%	-7.9%
Age 35 through 39	2,836	2,768	5,604	2,873	2,761	5,634	1.3%	-0.3%	0.5%
Age 40 through 44	2,735	2,815	5,550	2,864	2,813	5,677	4.7%	-0.1%	2.3%
Age 45 through 49	3,087	2,973	6,060	2,770	2,851	5,621	-10.3%	-4.1%	-7.2%
Age 50 through 54	3,172	3,111	6,283	3,142	2,981	6,123	-0.9%	-4.2%	-2.5%
Age 55 through 59	3,487	3,571	7,058	3,226	3,166	6,392	-7.5%	-11.3%	-9.4%
Age 60 through 64	3,373	3,567	6,940	3,455	3,582	7,037	2.4%	0.4%	1.4%
Age 65 through 69	3,139	3,297	6,436	3,246	3,397	6,643	3.4%	3.0%	3.2%
Age 70 through 74	2,367	2,791	5,158	2,732	2,961	5,693	15.4%	6.1%	10.4%
Age 75 through 79	1,543	1,915	3,458	1,924	2,338	4,262	24.7%	22.1%	23.3%
Age 80 through 84	885	1,245	2,130	1,082	1,529	2,611	22.3%	22.8%	22.6%
Age 85 and over	600	1,228	1,828	709	1,303	2,012	18.2%	6.1%	10.1%
Total	**45,590**	**46,999**	**92,589**	**44,950**	**46,066**	**91,016**	**-1.4%**	**-2.0%**	**-1.7%**

Source: Esri 2018

Current Population by Race/Ethnicity

The most common race/ethnicity in WBMC's community is white (90.1%) followed by Black/African American (4.4%), Hispanic (3.0%), individuals of two or more races (1.5%), Asian/Pacific Islander (0.5%), and other races (0.5%).

Total Service Area Population by Race/Ethnicity, 2019



Source: Esri 2018; Maptitude 2018

Population Change by Race/Ethnicity

Substantial population growth is expected for Asian/Pacific Islanders (31.2%), individuals of two or more races (16.1%), Hispanics (18.1%), and other races (7.0%). The Black/African American population is expected to increase (1.1%) while the white population is expected to decrease (-3.0%) over the next five years.

Total Service Area Population Change by Race/Ethnicity, 2019-2024

Race/Ethnicity	2019	2024	Percent Change
White	83,433	80,905	-3.0%
Black/African American	4,045	4,090	1.1%
Asian/Pacific Islander	503	660	31.2%
Two or More Races	1,403	1,629	16.1%
Hispanic	2,735	3,229	18.1%
Other	470	503	7.0%

Source: Esri 2018

Socioeconomic Characteristics

According to HP2020, socioeconomic status (SES) is most often based on a person's income, education level, occupation, social status in the community, and geographic location. Studies have found that SES, more than race or ethnicity, predicts the likelihood of an individual's or group's access to education, health insurance, health care services, and safe and healthy living or working conditions.

According to the U.S. Bureau of Labor Statistics, the 2018 annual unemployment average of 4.2% for both Walker and Winston counties was higher than Alabama's rate and the national average (both 3.9%). The U.S. Census American Community Survey (ACS) publishes median household income and poverty estimates. According to 2013–2017 estimates, the median household incomes in Walker County ($38,872) and Winston County ($35,362) were lower than Alabama's ($46,472) during the same time frame.

Poverty thresholds are determined by family size, number of children and age of the head of the household. A family's income before taxes is compared to the annual poverty thresholds. If the income is below the threshold, the family and each individual in it are considered to be in poverty. As of January 11, 2019, the 2019 federal poverty threshold for a family of four was $25,750. The ACS estimates indicate that the percentages of individuals below poverty level in Winston County (18.7%) and Walker County (21.5%) are higher than the statewide and national percentages. Children in Walker and Winston Counties were also more likely to live below the poverty level (31.4% and 29.2%, respectively) compared to all children in Alabama (26.0%) and the United States (20.3%).

Socioeconomic Characteristics

	Walker	Winston	Alabama	United States
Unemployment Rate[1]	4.2%	4.2%	**3.9%**	**3.9%**
Median Household Income[2]	$ 38,872	$ 35,362	**$ 46,472**	**$ 57,652**
Individuals Below Poverty Level[2]	21.5%	18.7%	**16.9%**	**12.3%**
Children Below Poverty Level[2]	31.4%	29.2%	**26.0%**	**20.3%**

[1] Source: Bureau of Labor Statistics, 2018 Annual Average

[2] Source: U.S. Census - ACS, 2013-2017 estimates

Educational Attainment

The U.S. Census ACS publishes estimates of the highest level of education completed for residents aged 25 years and older. The ACS 2013-2017 estimates indicate that a significantly fewer percentage of individuals in Walker or Winston counties earned a Bachelor's, graduate, or professional degree when compared to the state and the nation. During the same time frame, Walker and Winston counties had greater percentages of individuals who had not graduated high school and individuals who had not completed 9th grade when compared to the Alabama and U.S. averages.

Highest Level of Education Completed by Persons 25 Years and Older, 2013-2017

	Walker	Winston	Alabama	United States
Less than 9th grade	7.5%	8.0%	**4.7%**	**5.4%**
9th to 12th grade, no diploma	12.4%	14.7%	**10.0%**	**7.2%**
High school degree or equivalent	37.3%	36.2%	**30.9%**	**27.3%**
Some college, no degree	22.8%	19.9%	**21.7%**	**20.8%**
Associate's degree	8.8%	8.2%	**8.2%**	**8.3%**
Bachelor's degree	6.7%	7.8%	**15.4%**	**19.1%**
Graduate or professional degree	4.4%	5.1%	**9.1%**	**11.8%**

Source: U.S. Census, ACS 2013-2017 estimates

Crime Rates

According to the Alabama Law Enforcement Agency, the rates of homicide, rape, robbery, and assault in Walker County were lower than the state and national benchmarks in 2017. During the same time frame, Winston County's rates of robbery and assault were significantly lower than the state and national benchmarks, while the rate of rape incidents was higher than the state and national rates.

Violent Crime Rates, 2017

	Walker	Winston	Alabama	United States*
Homicide	3.1	N/A	**8.1**	**5.4**
Rape	37.5	59.0	**39.5**	**42.4**
Robbery	61.0	4.2	**79.8**	**101.2**
Assault	245.6	130.6	**364.3**	**252.4**

Source = Alabama Law Enforcement Agency, Crime in Alabama 2017

* Source = Federal Bureau of Investigation, Crime in the United States 2017

Rates are per 100,000 population

Housing

The U.S. Census Bureau ACS 2013-2017 estimates indicated that residents of Walker (75.6%) and Winston (77.3%) counties had higher rates of home ownership than the Alabama and U.S. averages (68.6% and 64.0%, respectively). County Health Rankings also publishes an estimate of the percent of residents faced with a severe housing cost burden by county. Fewer individuals within Walker and Winston counties faced a severe housing cost burden from 2013 to 2017 when compared to the state (12.9%) and the nation (15.0%).

From 2013-2017, the segregation indices for both Black/White and non-White/White populations were lower within Walker and Winston counties (when rates were available) than in Alabama and the United States.

Home Ownership and Residential Segregation, 2013-2017

	Walker	Winston	Alabama	United States
Homeownership	75.6%	77.3%	**68.6%**	**64.0%**
Severe housing cost burden	11.1%	10.0%	**12.9%**	**15.0%**
Residential segregation - Black/White	40.2	*	**57.0**	**62.0**
Residential segregation - non-White/White	30.1	26.4	**51.2**	**47.0**

Source: U.S. Census - ACS, 2013-2017 estimates, County Health Rankings

Residential segregation shown as a segregation index

* data unavailable

Health Outcomes & Risk Factors

The Centers for Disease Control and Prevention (CDC) publish mortality and life expectancy data by county. From 2013-2017 the age-adjusted mortality rates from all causes in Walker and Winston counties were higher than the mortality rate in Alabama during the same time frame (919.3 deaths per 100,000 population).

According to the CDC National Center for Health Statistics, from 2015-2017 the life expectancies in Walker and Winston counties were lower than the life expectancy within the state of Alabama (75.4 years). The life expectancy for black individuals (68.1 years) was lower than that of white individuals (70.0 years) in Walker County, which is similar to the trend observed at the national level. In the United States, the life expectancy at birth for the white population was 78.8 years in 2017 while the life expectancy for the black population was 75.3 years.

Mortality Indicators

	Walker	Winston	Alabama
Age-adjusted mortality from all causes[1]	1,266.8	946.5	**919.3**
Life expectancy[2]	70.2	74.9	**75.4**
White life expectancy[2]	70.0	*	*
Black life expectancy[2]	68.1	*	*
Hispanic life expectancy[2]	*	*	*

[1] Source: CDC Wonder, Multiple Cause of Death 2013-2017

[2] Source: National Center for Health Statistics Mortality File 2015-2017

Mortality rates are per 100,000 population and life expectancy is shown in years of age

* Insufficient data

Leading Causes of Death

According to the Centers for Disease Control and Prevention, heart disease and cancer were the first and second leading causes of death, respectively, in Walker and Winston counties, Alabama, and the United States. Unintentional injuries, chronic lower respiratory disease (CLRD), and stroke are among the top five leading causes of death for Walker and Winston counties. Walker County's death rates exceeded both state and national benchmarks for all but two causes of death (hypertension and assault). The death rates in Winston County were lower than the state benchmark for cancer, Alzheimer's disease, Septicemia, and chronic liver disease and cirrhosis, although the county exceeded the national benchmark for these causes.

Leading Causes of Death

	Walker	Winston	Alabama	United States
Heart disease	379.7	231.2	**225.5**	**167.1**
Cancer	217.3	161.2	**175.8**	**158.1**
Chronic lower respiratory disease	86.1	104.5	**55.8**	**41.1**
Stroke	51.0	56.3	**50.1**	**37.1**
(Unintentional injury) Accident	84.1	59.6	**51.3**	**44.0**
Alzheimer's disease	41.5	30.4	**39.0**	**28.0**
Diabetes	22.2	34.1	**21.7**	**21.2**
Influenza and pneumonia	22.9	22.7	**19.0**	**14.8**
Kidney disease	25.7	*	**17.9**	**13.2**
Septicemia	25.3	14.0	**17.8**	**10.7**
Suicide	22.3	19.0	**15.2**	**13.3**
Chronic liver disease and cirrhosis	16.5	11.8	**12.1**	**10.6**
Hypertension[1]	5.5	14.4	**9.7**	**8.6**
Assault (homicide)	9.1	*	**10.4**	**5.7**
Pneumonitis	6.0	*	**5.7**	**5.2**
Other Neoplasms (benign)	5.9	*	**4.2**	**4.3**
Parkinson's disease	11.1	*	**8.7**	**7.8**

Source: CDC Wonder, Multiple Cause of Death 2013-2017

Age-Adjusted Death Rates are per 100,000 population

[1] Hypertension includes essential primary hypertension and hypertensive renal disease with renal failure

^ Not included in Leading Causes of Death for this County

Heart Disease Mortality

According to the Centers for Disease Control and Prevention, Walker's age-adjusted mortality rates for heart disease per 100,000 adults aged 45 to 64 for all races/ethnicities (433.2) was more than double the state rate (198.6) and 3.5 times greater than the national rate (122.6). Winston County's mortality rate for all race/ethnicities was lower than that of Walker County but higher than the state and national benchmarks.

Within the state of Alabama and the United States, heart disease mortality in adults aged 45 to 64 and older was higher for males than for females from 2014-2016. The male death rate in Walker County was 560.6 per 100,000 adults, significantly higher than the AL ad U.S. rates of 268.2 and 175.1, respectively.

In Winston County, Alabama and the U.S., adults aged 45 to 64 with Black (Non-Hispanic) race/ethnicity were more likely than those with White (Non-Hispanic) race/ethnicity to die of heart disease. This trend was reversed in Walker County, where individuals with White (Non-Hispanic) race/ethnicity had a higher death rate (446.6) than those with Black (Non-Hispanic) race/ethnicity (224.1) from 2014-2016.

Age-Adjusted All Heart Disease Death Rates per 100,000 Adults Age 45 to 64 by Race and Gender, 2014-2016

	Walker	Winston	Alabama	United States
All Heart Disease, All Races/Ethnicities	433.2	201.0	198.6	**122.6**
All Heart Disease, Black (Non-Hispanic)	224.1	368.5	246.5	**213.2**
All Heart Disease, White (Non-Hispanic)	446.6	207.5	190.1	**121.4**
All Heart Disease, Hispanic	*	*	77.8	**73.5**
All Heart Disease, Male	560.6	245.5	268.2	**175.1**
All Heart Disease, Female	281.3	166.9	134.3	**72.8**

Source: Centers for Disease Control and Prevention

* Insufficient Data

Heart Attack Mortality

According to the Centers for Disease Control and Prevention, Walker County's age-adjusted mortality rate for heart attacks per 100,000 adults aged 45 to 64 (30.5) was higher than the Alabama and U.S. rates from 2014-2016. Winston County's heart attack mortality rate was lower at 36.5, exceeding only the national benchmark (27.9 per 100,000 adults aged 45 to 64).

Within Walker County, the heart attack mortality rates for Black (Non-Hispanic) and White (Non-Hispanic) adults aged 45 to 64 were nearly identical from 2014-2016.

The heart attack mortality rates for males aged 45 to 64 in Walker County was slightly lower than the rates for Winston County and the state of Alabama, but greater than the national mortality rate for 2014-2016. Across the county, state, and national levels, the heart attack death rates for females were drastically lower than the death rates for males.

Age-Adjusted Heart Attack Mortality Rates per 100,000 Adults Ages 45 to 64 by Race and Gender, 2014-2016

	Walker	Winston	Alabama	United States
Heart Attack, All Races/Ethnicities	46.3	36.5	44.3	**27.9**
Heart Attack, Black (Non-Hispanic)	42.3	*	41.6	**34.8**
Heart Attack, White (Non-Hispanic)	42.7	37.5	47.1	**30.0**
Heart Attack, Hispanic	*	*	*	**16.9**
Heart Attack, Male	61.7	64.7	63.3	**41.3**
Heart Attack, Female	30.3	11.6	26.8	**15.2**

Source: Centers for Disease Control and Prevention

* Insufficient Data

Hypertension Mortality

According to the Centers for Disease Control and Prevention, the age-adjusted hypertension mortality rate per 100,000 adults aged 45 to 64 was slightly higher in Winston County than in the state and the nation from 2014 to 2016. Walker County's mortality rate was lower than the state and national benchmarks during this time frame.

The hypertension mortality rate for males aged 45 to 64 was nearly double the female mortality rate in Walker and Winston counties, Alabama, and the United States.

In Walker County, Black (Non-Hispanic) adults aged 45 to 64 had much higher hypertension mortality rates than White (Non-Hispanic) adults. The same trend was observed at the state and national levels.

Age-Adjusted Hypertension Death Rates per 100,000 Adults Ages 45 to 64 by Race and Gender, 2014-2016

	Walker	Winston	Alabama	United States
Hypertension, All Races/Ethnicities	57.1	91.3	89.7	**89.7**
Hypertension, Black (Non-Hispanic)	121.1	*	148.4	**189.1**
Hypertension, White (Non-Hispanic)	51.5	93.8	72.7	**80.4**
Hypertension, Hispanic	*	*	30.1	**66.6**
Hypertension, Male	79.2	118.8	116.9	**121.8**
Hypertension, Female	48.6	48.1	64.6	**59.4**

Source: Centers for Disease Control and Prevention

* Insufficient Data

Stroke Mortality

According to the Centers for Disease Control and Prevention, both Walker and Winston counties had higher age-adjusted stroke mortality rates per 100,000 adults aged 45 to 64 than the state of Alabama and the nation from 2014-2016.

In Walker County, adults aged 45 to 64 with Black (Non-Hispanic) race/ethnicity had a higher stroke mortality rate (56.0) than those with White (Non-Hispanic) race/ethnicity (29.6). Males aged 45 to 64 had higher stroke mortality rates than females aged 45 to 64 in Walker and Winston counties, Alabama, and the United States. Male and female stroke rates within both Walker and Winston Counties exceeded state and national rates for the same time period.

Age-Adjusted Stroke Death Rates per 100,000 Adults Ages 45 to 64 by Race and Gender, 2014-2016

	Walker	Winston	Alabama	United States
All Stroke, All Races/Ethnicities	37.1	35.1	33.7	**19.1**
All Stroke, Black (Non-Hispanic)	56.0	*	54.9	**41.4**
All Stroke, White (Non-Hispanic)	29.6	34.8	27.4	**16.0**
All Stroke, Hispanic	*	*	*	**16.6**
All Stroke, Male	44.8	40.5	39.5	**22.4**
All Stroke, Female	30.1	29.9	28.4	**16.0**

Source: Centers for Disease Control and Prevention

* Insufficient Data

Cancer Screenings

The Centers for Medicare and Medicaid publish information on screenings completed by beneficiaries in the Mapping Medicare Disparities Tool. In 2017, the percentage of Walker County Medicare beneficiaries who received mammograms (34%) was higher than the Alabama rate (31%) and Winston County's rate (28%). At 22%, fewer beneficiaries in Winston County received prostate cancer screenings than those in Walker County and Alabama (both 24%). The rate of colorectal cancer screening amongst Medicare beneficiaries in Winston County was the same as the state rate (6%) while the rate in Walker County was slightly higher (7%). Fewer beneficiaries in Walker and Winston counties received pap smear screenings than the Alabama rate (7%).

Percentage of Medicare Beneficiaries Receiving Select Cancer Screenings, 2017

	Walker	Winston	Alabama
Mammogram	34%	28%	**31%**
Prostate Cancer Screening	24%	22%	**24%**
Colorectal Cancer Screening	7%	6%	**6%**
Cervical Cancer Screening (Pap Smear)	4%	5%	**7%**

Source: Centers for Medicare and Medicaid, Mapping Medicare Disparities Tool, 2017

Cancer Incidence

The National Cancer Institute reports cancer incidence rates on a state and county level. Tables detailing select cancer incidence rates per 100,000 population from 2012-2016 can be found below.

- Walker County's combined incidence rate for all cancer sites (515.8 per 100,000 population) was higher than the state and national benchmarks. At 428.2, Winston County had a lower combined incidence rate than both benchmarks.
- The incidence rates for lung, prostate, pancreatic, brain, and cervical cancers in Walker County were higher than the state and national benchmarks. In Winston County, the incidence rates for lung and brain cancers exceeded both the state and national incidence levels.
- Winston County's incidence rates for prostate and pancreatic cancers were lower than the state and national benchmarks.
- In both counties, the incidence of breast cancer was lower than the rate in Alabama and the United States. Both counties had colorectal cancer incidence rates that were lower than the state benchmark but exceeded the national rate.

Select Cancer Incidence Rates, 2012 – 2016

	Walker	Winston	Alabama	United States
All Cancer Sites[1]	515.8	428.2	**451.9**	**448.0**
Lung and bronchus[1]	95.5	71.5	**66.4**	**59.2**
Prostate[2]	135.9	84.7	**119.5**	**104.1**
Breast[3]	108.6	99.7	**122.1**	**125.2**
Colon and rectum[1]	43.8	42.0	**44.0**	**38.7**
Pancreas[1]	16.2	11.2	**12.8**	**12.8**
Ovarian[3]	9.7	*	**11.7**	**11.1**
Brain[1]	8.1	12.9	**6.5**	**6.5**
Stomach[1]	6.1	*	**6.6**	**6.6**
Cervical[3]	13.2	*	**9.3**	**7.6**

Source: National Cancer Institute - State Cancer Profiles

[1]Rates are per 100,000 males

[2]Rates are per 100,000 females

[3]Rates are per 100,000 population

* Indicates rate is unstable

Cancer Mortality

The National Cancer Institute reports cancer mortality rates on a state and county level. Tables detailing select cancer mortality rates per 100,000 population from 2012-2016 can be found below.

- Walker County's combined mortality rate for all cancer sites (223.1 per 100,000 population) was higher than the state and national benchmarks. Winston County's combined mortality rate (174.6) was lower than both benchmarks.
- The mortality rates for lung, prostate, colorectal, pancreatic, and brain cancers in Walker County were higher than the state and national benchmarks. In Winston County, the mortality rates for lung and pancreatic cancers were greater than both benchmarks.
- Walker County's mortality rates for breast and ovarian cancers were lower than the state and national benchmarks.
- In Winston County, the mortality rate for colorectal cancer (14.7 per 100,000 population) was higher than the national benchmark but lower than the state mortality rate.

Select Cancer Mortality Rates, 2012 – 2016

	Walker	Winston	Alabama	United States
All Cancer Sites[1]	223.1	174.6	**179.0**	**161.0**
Lung and bronchus[1]	77.7	58.7	**51.9**	**41.9**
Prostate[2]	25.3	*	**21.7**	**19.2**
Breast[3]	20.2	*	**21.8**	**20.6**
Colon and rectum[1]	20.2	14.7	**16.1**	**14.2**
Pancreas[1]	14.4	15.1	**11.5**	**11.0**
Ovarian[3]	6.2	*	**7.4**	**7.0**
Brain[1]	6.2	*	**5.2**	**4.4**
Stomach[1]	*	*	**3.4**	**3.1**
Cervical[3]	*	*	**3.5**	**2.3**

Source: National Cancer Institute - State Cancer Profiles

[1]Rates are per 100,000 population

[2]Rates are per 100,000 males

[3]Rates are per 100,000 females

* Indicates rate is unstable

Diabetes Incidence

According to the CDC's Division of Diabetes Translation, in 2016 the percentage of adults aged 20 and older who had been diagnosed with diabetes was 12.2% in Walker County and 17.0% in Winston County. The incidence rate in Winston County was nearly double the national benchmark (8.5%). Walker County's incidence rate was slightly lower than the Alabama rate of 13.2%.

Age-Adjusted Diabetes in Adults Ages 20 and Older, 2016

	Walker	Winston	Alabama*	United States
Adults with diagnosed diabetes	12.2%	17.0%	**13.2%**	**8.5%**

Source: Centers for Disease Control and Prevention, Division of Diabetes Translation

*State and national data reflect adults aged 18+

Weight Status

The Behavioral Risk Factor Surveillance System (BRFSS) collects data and reports on health-related risk behaviors, chronic health conditions, and use of preventative services. The 2017 adult obesity rates in both Walker and Winston counties were lower than the Alabama rate (36.3%) but higher than the national benchmark (30.1%).

Adult Obesity Rate, 2017

	Walker	Winston	Alabama	United States
Adult obesity rate	35.3%	35.3%	**36.3%**	**30.1%**

Source: Behavioral Risk Factor Surveillance System and Alabama Department of Public Health, 2017

Nutrition and Food Insecurity

The U.S. Department of Agriculture publishes the Food Environment Atlas which includes information on food insecurity, food deserts, and access to healthy foods. Winston County's food environment index rating of 7.9 was higher than the Alabama and United States ratings (5.8 and 7.7, respectively) based on 2015-2016 data points, while Walker County (7.4) exceeded the Alabama rating but was lower than the national benchmark. The percentages of county residents experiencing limited access to healthy foods in Walker County (5.2%) and Winston County (2.7%) were far lower than the state and national benchmarks. According to Map the Meal Gap, published by Feeding America in 2017, the percentages of individuals experiencing food insecurity within Walker County (14.6%) and Winston County (13.1%) were lower than the state rate (16.3%) but greater than the U.S. average (12.5%). The average meal costs in Walker and Winston counties were lower than the state ($2.98) and national ($3.02) averages.

Access to Healthy Foods, 2015-2016

	Walker	Winston	Alabama	United States
Food environment index [1]	7.4	7.9	**5.8**	**7.7**
Limited Access to Healthy Foods [1]	5.2%	2.7%	**7.9%**	**6.0%**
Food insecurity [2]	14.6%	13.1%	**16.3%**	**12.5%**
Average meal cost [2]	$ 2.81	$ 2.96	**$ 2.98**	**$ 3.02**

[1] USDA Food Environment Atlas, 2015-2016

[2] Map the Meal Gap, 2017

Physical Activity

The Centers for Disease Control and Prevention and County Health Rankings collect data on physical inactivity and access to physical fitness venues.

In 2015, Walker and Winston counties had higher rates of physical inactivity (33.3% and 33.6%, respectively) than the state of Alabama (28.2%) and the United States (22.0%).

Walker County residents had far lower access to recreation and fitness facilities (46.0%) compared to the state of Alabama (61.6%) and the nation (84.0%). At 76.2%, a greater portion of Winston County residents had access to recreation and physical fitness facilities than the Alabama rate, although the county did not exceed the national benchmark.

Physical Inactivity Indicators

	Walker	Winston	Alabama	United States
Physical inactivity [1]	33.3%	33.6%	**28.2%**	**22.0%**
Access to exercise opportunities [2]	46.0%	76.2%	**61.6%**	**84.0%**

[1] CDC Diabetes Interactive Atlas, 2015

[2] County Health Rankings 2019

Sexually Transmitted Infections

The Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention reports on rates of sexually transmitted infections (STIs) by county. Walker County had significantly lower rates of chlamydia and primary and secondary syphilis than the state and nation, although the rate of gonorrhea infections was higher than the national benchmark. Within Winston County, the rates of reported chlamydia and gonorrhea were much lower than the state and national benchmarks.

In 2016, the HIV prevalence rates in Walker and Winston counties were lower than the state and national prevalence rates.

Rate of Reported Cases of Sexually Transmitted Infections, 2017

	Walker	Winston	Alabama	United States
Chlamydia	360.6	248.7	614.1	**524.6**
Gonorrhea	179.5	37.9	245.1	**170.6**
Primary and Secondary Syphilis	1.6	*	8.7	**9.4**

Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2017

Rates are per 100,000 population

* Data suppressed or unavailable

HIV Prevalence and Diagnosis Rate, 2016–2017

	Walker	Winston	Alabama	United States
HIV prevalence, 2016	143.6	53.7	309.9	**365.5**
Newly Diagnosed HIV Case Rate, 2017	*	*	15.9	**14.0**

Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2017

Rates are per 100,000 population

* Data suppressed or unavailable

Maternal and Child Health

The Alabama Department of Public Health and the National Center for Health Statistics publish data on maternal and child health indicators. The birth rate in Winston County (10.2) was lower than the state and national rates (12.2 each) in 2016, while the rate in Walker County was equal to the state and national benchmark rates. Within Walker and Winston counties the teen birth rates, measured per 1,000 females aged 15-19, were significantly higher than the Alabama (30.1) and United States (22.3) rates in 2015.

The infant mortality rates per 1,000 live births in Walker and Winston counties were higher than the Alabama (7.4) and United States rates (5.8) in 2017. Winston County's rate of low-birthweight births (10.2%) was higher than the state and national rates in 2016, while Walker County's rate of 10.2% only exceeded the national benchmark. The proportion of mothers with inadequate prenatal care in Winston County (13.0%) was lower than the Alabama benchmark (18.2%) during 2016, while the percentage in Walker County (20.3%) was higher than the state rate.

Births and Infant Morbidity and Mortality, 2015–2017

	Walker	Winston	Alabama	United States
Birth rate (per 1,000 population), 2016[1]	12.2	10.2	**12.2**	**12.2**
Teen birth rate (per 1,000 women aged 15–19 years), 2015[2]	43.2	36.2	**30.1**	**22.3**
Infant mortality rate (per 1,000 live births), 2017[3]	9.3	7.9	**7.4**	**5.8**
Low birthweight, 2016[1]	10.2%	12.3%	**10.3%**	**8.2%**
Inadequate prenatal care, 2016[1]	20.3%	13.0%	**18.2%**	**N/A**

[1]Source: Alabama Department of Public Health, Alabama Vital Statistics 2016

[2]Source: National Center for Health Statistics

[3]Source: Alabama Department of Public Health, Center for Health Statistics

Inadequate prenatal care refers to the percentage of births for which the adequacy of prenatal care utilization index was known, comparable national data unavailable

Access to Care

According to the ACS 2013–2017 estimates, 11.6% of Walker County residents and 11.7% of Winston County residents had no health insurance coverage, compared to 10.7% of Alabama residents and 10.5% of Americans. The number of children without health insurance in Walker County (3.4%) was slightly lower than the state benchmark (3.5%), the Winston County rate (3.8%), and the national benchmark (5.7%).

A greater number of individuals received public health insurance in Walker County (41.3%) and Winston County (45.1%) than in Alabama (36.1%) and the United States (33.8%). Conversely, a lesser number of individuals had private health insurance coverage in Walker County (63.7%) and Winston County (60.7%) than in Alabama (66.9%) and the United States (67.2%).

Health Insurance Coverage, 2013-2017

	Walker	Winston	Alabama	United States
Private insurance coverage	63.7%	60.7%	**66.9%**	**67.2%**
Public insurance coverage	41.3%	45.1%	**36.1%**	**33.8%**
No health insurance coverage	11.6%	11.7%	**10.7%**	**10.5%**
No health insurance coverage (children)	3.4%	3.8%	**3.5%**	**5.7%**

Source: US Census, ACS 2013-2017

Substance Abuse

The CDC's National Center for Injury Prevention and Control provides estimates of the number of opioid prescriptions dispensed per person, per year. Within Walker County the prescribing rate (216.1) was nearly double the state rate, and over three times greater than the national average. Winston County's prescribing rate in 2017 was also higher than both the AL and United States averages.

Opioid Prescriptions Dispensed per 100 Persons per Year

	Walker	Winston	Alabama	United States
Opioid Prescribing Rate 2017	216.1	155.1	**107.2**	**58.7**

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control

Mental Health

County Health Rankings provides an estimate of access to mental health providers in the form of a ratio of the county population to mental health providers. The ratio represents the number of individuals served by one mental health provider in a county, if the population were equally distributed across providers. The ratio for Walker County was 2,140:1 while the ratio in Winston County was 23,720:1 in 2018. Both counties had worse ratios than the state of Alabama and the United States during the same time frame.

Mental Health Provider Ratio, 2018

	Walker	Winston	Alabama	United States
Mental health provider ratio	2,140:1	23,720:1	**1,100:1**	**440:1**

Source: County Health Rankings 2019, CMS, National Provider Identification 2018

Health Behaviors

The Behavioral Risk Factor Surveillance System collects data on adult smoking and alcohol consumption. In 2016, Walker County's adult smoking rate (19.8%) was lower than Winston County's rate (22.8%) and the Alabama rate (21.5%) but higher than the national benchmark (17.0%). Walker County had a slightly lower rate of excessive drinking (13.8%) than Alabama (14.2%), Winston County (14.7%), and the United States (18.0%).

Behavioral Risk Factors - 2016

	Walker	Winston	Alabama	United States
Adult smokers	19.8%	22.8%	**21.5%**	**17.0%**
Excessive drinking	13.8%	14.7%	**14.2%**	**18.0%**

Source: Behavioral Risk Factor Surveillance System, 2016

Health Outcomes

The National Center for Health Statistics provides estimates of premature death. The Walker County (15,488) and Winston County (10,380) premature death indicators, measured as years of potential life lost per 100,000 population, were higher than the indicators for Alabama (9,917 years) and the United States (6,900 years) from 2015 to 2017.

The Behavioral Risk Factor Surveillance System collects data on self-reported physical and mental health. In 2016, a greater number of individuals in Walker County and Winston County reported poor or fair health (21.6% and 21.8%, respectively) when compared to Alabama (21.4%) and the United States (16.0%).

Residents in Walker and Winston counties reported a greater number of poor physical health days than the Alabama and U.S. averages. Similarly, the average number of reported poor mental health days in both counties exceeded the state and national benchmarks.

Health Outcomes

	Walker	Winston	Alabama	United States
Premature death indicator [1]	15,488	10,380	**9,917**	**6,900**
Poor or fair health [2]	21.6%	21.8%	**21.4%**	**16.0%**
Poor physical health days [2]	4.7	4.9	**4.4**	**3.7**
Poor mental health days [2]	4.9	4.9	**4.6**	**3.8**

Source: [1] National Center for Health Statistics, 2015-2017, shown in years of potential life lost before age 75 per 100,000 population

[2] Behavioral Risk Factor Surveillance System, 2016

Community Input

The interview and survey data is qualitative in nature and should be interpreted as reflecting the values and perceptions of those interviewed. This portion of the CHNA process is designed to gather input from persons who represent the broad interest of the community serviced by WBMC, as well as individuals providing input who have special knowledge or expertise in public health. It is intended to provide depth and richness to the quantitative data collected.

Community Leader Interviews

Interview Methodology

Seven interviews were conducted from September 11 through September 19, 2019. Interviews required approximately 30 minutes to complete. Interviewers followed the same process for each interview, which included documenting the interviewee's expertise and experience related to the community. Additionally, the following community-focused questions were used as the basis for discussion:

- Interviewee's name
- Interviewee's title
- Interviewee's organization
- Overview information about the interviewee's organization
- What are the top strengths of the community?
- What are the top health concerns of the community?
- What do you think is the single most important thing that could be done to improve the health in your community?
- What are the barriers to obtaining health services in your community?
- What health resources are available in your community?
- What health resources does your community currently need more of?
- What sub-populations are medically underserved in your community?
- Is there anything else we should know about your community that we have not already discussed?

Community Leader Interview Summary

There was a variety of subjects discussed in the community leader interviews. The most common topics included the impact of having anchor institutions, substance abuse, chronic diseases, and negative influences on weight status.

Concerns

Substance abuse was the most notable concern voiced by community leaders. Many interviewees specifically mentioned opioid addiction as a serious problem in the area. One leader drew a connection between IV drug use and an increased risk of HIV transmission while another leader was concerned about the area's prevalence of sexually transmitted infections. Chronic disease like diabetes, heart disease, and lung disease were among the most reported health issues. Some leaders also discussed a lack of nutritional resources, behavioral risk factors, and physical inactivity as concerns.

Barriers

Health literacy and a lack of health education were frequently mentioned as barriers to obtaining the right care at the right time. Interviewees also mentioned how low-income individuals faced the greatest difficulty in accessing healthcare services, although all community members faced rising healthcare costs. Additionally, transportation was indicated as a barrier by multiple community leaders. One leader noted how opioid addiction has become a barrier to obtaining health services because providers are unable to address chronic diseases or other health needs without first addressing the individual's substance abuse.

Community Leader Interview Summary (continued)

Strengths and Assets

All community leaders interviewed mentioned multiple healthcare facilities as assets for the communities in Walker and Winston counties. One leader reported the importance of facilities that accommodate the uninsured with a sliding fee scale while others spoke specifically about the hospital's Financial Assistance Policy (FAP), stroke care, and high patient satisfaction ratings.

Resources

Leaders were also asked to share resources that they felt were missing from the community. Transportation to medical appointments and public transportation were frequently mentioned needs. Interviewees would also like to see additional mental health resources, including school-based services and an increased number of inpatient psychiatric beds. Some leaders felt that increased access to addiction treatment and recovery programs could help combat the pervasive substance abuse problems that Walker and Winston counties face.

A few community leaders described their desire to see WBMC continue to focus on chronic disease management and tracking population health outcomes. Finally, interviewees described valuable existing resources including Capstone Rural Health Center, United Way, and the Walker Area Community Foundation.

Community Leader Interview Summary

Interview Themes

Topic	Top Themes Discussed
Strengths & Assets	Healthcare facilities including FQHCs and free clinics Community-based organizations and non-profits
Concerns	Substance abuse (including tobacco) Diabetes Pulmonary disease Weight status
Barriers	Health literacy Financial barriers Transportation
Medically Underserved Populations	Minority populations Low-income populations Children Older Adults

Online Health Survey

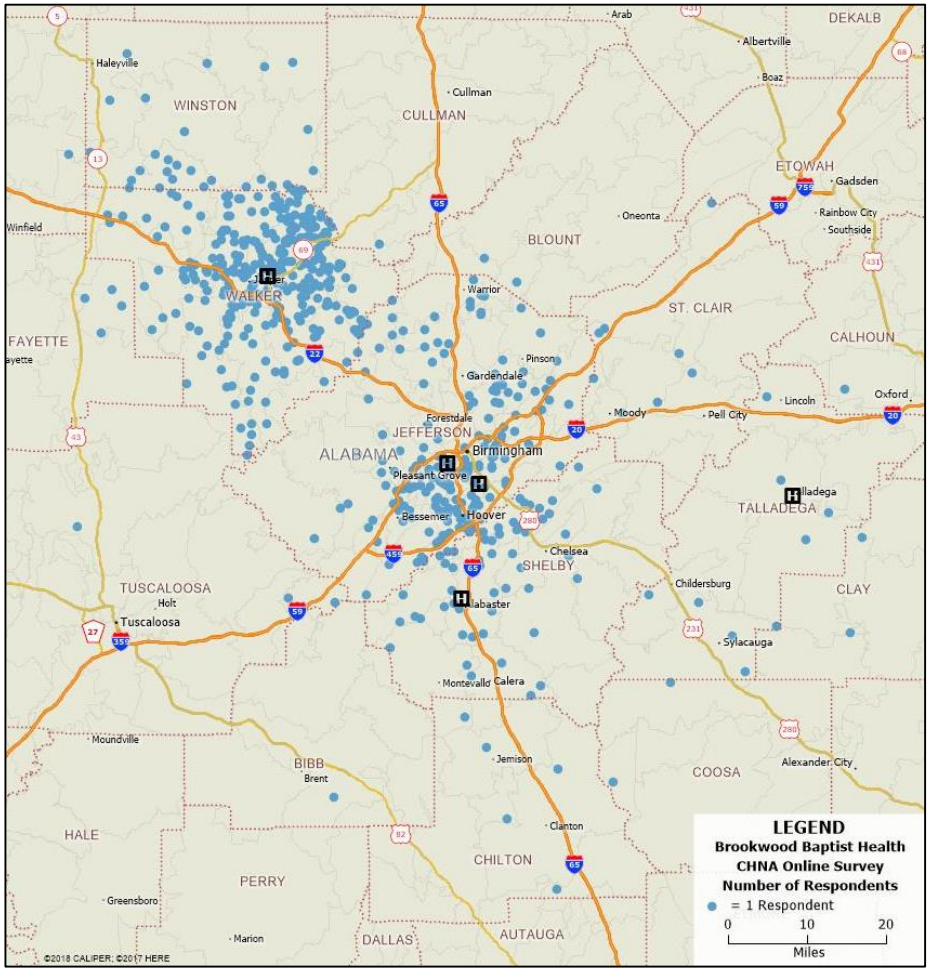
A total of 374 online health surveys were completed by community members within Walker and Winston Counties and those who did not provide a home ZIP Code. The full health survey questionnaire is available in Appendix C.

Online Community Health Survey Methodology

The link to the online survey was shared via multiple social media channels by Brookwood Baptist Health's Marketing Department. Email invitations to complete the survey or to share the survey via e-newsletters were sent to BBH's email subscriber list, community leaders, and health and public health stakeholders throughout the region. The survey instrument asked respondents to rate their own health and the overall health of community members, in addition to questions related to accessing preventative and sick care. Respondents were also asked to prioritize three health problems and three social problems in the community from lists of options. Lastly, optional demographic questions were also included at the end of the survey.

Online Health Survey Summary

Community Health Survey Distribution – All BBH Facility Respondents Mapped by ZIP Code



Source: Carnahan Group; Maptitude 2018

NOTE: n=30 respondents did not provide a ZIP Code and were also included within the analysis for each BBH facility.

Health Survey Summary (continued)

Community Health Survey Respondent Demographics

4.3% of n=371 survey respondents indicated that they did not own a smartphone. The majority of respondents indicated that they have private health insurance (91.7%), while 10.2% had Medicare coverage, and 0.5% had Medicaid coverage.

Age	Percentage of Respondents
18-44 years	37.9%
45-64 years	51.6%
65+ years	10.5%

n=351 respondents

Gender	Percentage of Respondents
Female	87.6%
Male	12.4%

n=348 respondents

Race/Ethnicity	Percentage of Respondents
White	97.4%
Black/African American	1.2%
Hispanic	0.3%
Asian/Pacific Islander	0.3%
American Indian & Alaska Native	0.6%
Other	0.6%

n=347 respondents

Household Income	Percentage of Respondents
$200,000 and above	4.6%
$150,000 to $199,999	10.4%
$100,000 to $149,999	22.0%
$75,000 to $99,999	19.2%
$50,000 to $74,999	21.6%
$35,000 to $49,999	9.1%
$25,000 to $34,999	4.6%
$15,000 to $24,999	3.4%
Under $15,000	0.9%
I don't know	4.3%

n=328 respondents

Online Health Survey Summary (continued)

Community Health Survey Results

When asked to select three serious health problems, n=374 respondents selected the following options*:

Rank	Serious Health Problem	Percentage of Respondents
1	Obesity	68.7%
2	Substance abuse/addiction	64.7%
3	Mental health issues (ex. depression)	54.8%
4	Cancer	50.5%
5	Diabetes	44.1%
6	Heart disease and stroke	43.9%
7	High blood pressure	37.2%
8	Child abuse or neglect	29.4%
9	Tooth problems (dental health)	26.5%
10	Breathing problems (ex. asthma, COPD)	19.8%
11	Suicide	16.8%
12	Alzheimer's Disease	16.6%
13	Infectious diseases	13.1%
14	Violence	11.5%
15	Sexually transmitted diseases	9.6%
16	Prenatal and infant health	7.8%
17	Injuries	4.8%

**Note that some respondents indicated fewer or greater than three selections.*

Online Health Survey Summary (continued)

Community Health Survey Results

When asked to select three serious social problems, n=374 respondents selected the following options*:

Rank	Serious Social Problems	Percentage of Respondents
1	Poverty (low income)	77.0%
2	Not enough interesting activities for youth	41.2%
3	Not enough jobs in area	36.6%
4	No health insurance	34.2%
5	Not enough education	30.5%
6	Crime	28.1%
7	Public transportation	24.9%
8	Not enough healthy food	19.8%
9	Not enough free or affordable health screenings (	19.3%
10	Homelessness	18.4%
11	Other	16.8%
12	Not enough childcare options	13.9%
13	Overcrowded housing	3.2%

**Note that some respondents indicated fewer or greater than three selections.*

Health Survey Summary (continued)

Community Health Survey Results

- When asked “Have you had any of the following health services in the past year?”, the majority of respondents (n=363) indicated that they had received blood work (83.7%), a blood pressure check (80.4%), and dental care (73.0%).
- The majority of respondents indicated that they would rate their health as “good” in general (55.6%), while 33.3% of respondents selected “very good.” However, only 26.7% of respondents indicated that they would rate the overall health of community members as “good” in general (n=372 and n=374, respectively).
- 29.8% of respondents have missed 1-5 days of work or other activities (ex. church, school) over the past 3 months because they were sick or not feeling well (n=373).
- 83.6% of respondents have had a physical exam (checkup, well visit) with a doctor in the past year and an additional 8.9%of respondents had a physical exam within the past 2 years (n=372).
- When asked “When you are sick or need health care, are you able to visit the doctor?”, the majority of respondents indicated that they were always able to visit the doctor (77.3%) while 20.1% indicated that they were sometimes able to visit the doctor (n=374).
- When asked “Is there anything that makes it hard for you to see a doctor when you are sick?”, n=245 respondents were more likely to indicate the following barriers:
    - I don’t think I need to see a doctor (32.7%)
    - It is too expensive (26.1%)
    - I cannot get time off work (19.6%)

Community Health Priorities

The overarching goal in conducting this Community Health Needs Assessment is to identify significant health needs of the community, prioritize those health needs, and identify potential measures and resources available to address the health needs. For the purpose of identifying health needs for WBMC, a health priority is defined as a medical condition or factor that is central to the state of health of the residents in the community. An exhaustive list of health needs was compiled based on the health profile and interviews. A modified version of Fowler and Dannenberg's Revised Decision Matrix was developed to capture priorities from the primary and secondary data. This matrix tool is used in health program planning intervention strategies, and uses a ranking system of "high," "medium," and "low" to distinguish the strongest priorities.

As the CHNA is meant to identify the community's most significant health needs, only the health needs falling under the "high" and "medium" categories are highlighted. The three health priorities identified through this process are:

1. Substance abuse
2. Weight status
3. Diabetes

Substance Abuse

Priority Definition

One of the HP2020 goals is to “reduce substance abuse to protect the health, safety, and quality of life for all, especially children.” Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes.

Key topics within this priority include:

- Opioid misuse
- Illicit drug use
- Incarceration
- Co-occurring mental health and substance use disorders
- Tobacco use including e-cigarettes
- Alcohol consumption
- Access to treatment services
- Prevention for children and youth

Qualitative Findings

COMMUNITY LEADER CONCERNS:

- Leaders were concerned with the rate of opioid addiction within the community
- The transmission of HIV by IV drug users
- Access to recovery programs
- Co-occurring chronic disease

Quantitative Findings

Across Alabama, the age-adjusted drug overdose death rate was 18.0 per 100,000 in 2017

64.7% Of health survey respondents (n=374) indicated substance abuse is a serious health problem in the community

According to SAMHSA, an estimated 164.8 million people aged 12 or older in the United States (60.2 percent) were past month substance users (i.e., tobacco, alcohol, or illicit drugs) in 2018. Nearly 1 in 5 people aged 12 or older (19.4 percent) used an illicit drug in the past year.

The AL Dept. of Mental Health reported 5,128 deaths from overdoses in Alabama from 2006-2014 and a total of 741 overdose deaths in 2016.

Opioid abuse claims more lives within the United States than motor vehicle crashes (SAMHSA). In 2017, the Opioid prescribing rate was 216.1 prescriptions per 100 population in Walker County, and 155.1 in Winston County. These prescribing rates exceeded both the state and national averages (CDC).

Within Alabama, 14.2% of adults self-reported excessive drinking in 2016. Winston County had a higher rate of excessive drinking (14.7%) during the same time frame.

Weight Status

Priority Definition

The HP2020 goals include to “promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights” and to “improve health, fitness, and quality of life through daily physical activity.” Key topics within this priority include:

- Nutrition
- Access to healthy food
- Access to physical activity opportunities
- Knowledge, understanding, and skills
- Environmental risk factors
- Food insecurity

Qualitative Findings

COMMUNITY LEADER CONCERNS:

- Cultural norms surrounding food were cited as a barrier
- Leaders described the need for outreach and education to be conducted throughout the community
- Noted the need for social support and motivation to promote successful behavior change
- Community leaders would like to see the faith-based community get involved in health education
- Low-cost physical fitness and recreation opportunities

Quantitative Findings

Of n=374 health survey respondents, 68.7% identified obesity as a serious health problem.

35.3% of individuals within the community were obese in 2017 ADPH)

According to The Walker County Health Action Partnership, more than 8,600 children in Walker County depend on free or reduced school lunch programs. In Walker County, 54% of restaurants are fast food establishments.

The USDA’s Food Environment Index scores for Walker and Winston counties were better than the state benchmark. Within Walker County, 46.0% of the population had access to exercise opportunities while 76.2% of Winston County residents had access (CHR). According to the CDC, 33.3% of adults in Walker County and 33.6% of adults in Winston County reported no leisure time physical activity in 2015.

“Among adults and older adults, physical activity can lower the risk of coronary heart disease, stroke, high blood pressure, type 2 diabetes, breast and colon cancer, falls, and depression. Among children and adolescents, physical activity can improve bone health, reduce symptoms of depression, improve cognitive skills, and improve the ability to concentrate and pay attention.” (HP2020)

Diabetes

Priority Definition

One of the HP2020 goals is to "reduce the disease burden of diabetes mellitus (DM) and improve the quality of life for all persons who have, or are at risk for, DM."

Key topics within this priority include:

- Prevention
- Health education to improve self-management
- Nutrition
- Quality clinical care including case management and care coordination
- Support services for individuals with DM

Qualitative Findings

COMMUNITY LEADER CONCERNS:

- High diabetes prevalence
- Health literacy and understanding of chronic disease
- Behavioral risk factors
- Need for nutrition education
- Knowledge of existing community resources

Quantitative Findings

The diabetes prevalence rate in Walker County was 12.2% while Winston County's rate was 17.0% in 2016

44.1% Of health survey respondents (n=374) considered diabetes a serious health problem

HP2020 describes the four "transition points" in diabetes care and their accompanying opportunities for intervention:

1. Primary prevention: Movement from no diabetes to diabetes
2. Testing and early diagnosis: Movement from unrecognized to recognized diabetes
3. Access to care for people with diabetes: Movement to having timely access to appropriate care
4. Quality of care: Movement to adequate care

"African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans, Native Hawaiians, and other Pacific Islanders are at particularly high risk for the development of type 2 diabetes." (HP2020)

Of those surveyed (n=363), nearly half indicated that they had received a blood sugar check in the past year.

Resources

Hospital-based, community-based, and government-sponsored resources related to each of the health priorities are featured throughout the following pages.

General Resources

Capstone Rural Health Center is a medical home that provides access to primary care, preventative and wellness services, family planning, STD testing and treatment, chronic disease and diabetes management, nutrition education and counselling, cancer screenings, dental, vision, and case management services. Capstone's Outreach team conducts activities in community, hosts and participates in health fairs, and partners with other agencies to provide food assistance, utility assistance, and housing assistance. The center also provides transportation services to medical appointments for patients.

Walker County Health Action Partnership is a local coalition dedicated to improving healthy food access, increasing active living, and improving environments.

The Walker County Health Department located in Jasper provides immunizations, family planning, women's health services, an STD clinic, WIC programming, assistance with Medicaid enrollment, and clinical laboratory testing.

Whatley Health Services provides sliding-fee scale care at the Oakman Student Health & Wellness Center and Whatley Health Services at Sipsey locations.

Local emergency responders and **physician extenders** were also mentioned as valuable resources by community leaders.

Resources – Substance Abuse

Walker Baptist Medical Center continues to partner with **Bradford Health Services** to provide access to medical detox services. Substance abuse services are available to adolescents and adults through the Winston County outpatient office in Haleyville, AL. Clinical services for substance use disorders include: emergency/crisis intervention services, screening, assessment, individual and group therapy, case management, co-occurring services, referrals for detoxification, residential treatment services, follow-up, and aftercare services.

Capstone Rural Health Center received a grant from the Health Resources & Services Administration to address the opioid epidemic in Walker County. Capstone has also partnered with Southern Research's Prosperity Fund to create innovative solutions to transportation barriers facing local residents and to seek grant funding to build a residential substance abuse treatment facility.

Resources – Weight Status

Walker County Health Action Partnership (HAP) is working to increase physical activity levels by fostering environments that promote walking and reduce time spent riding in cars and buses. The partnership seeks to increase greenways, blue-ways, and open spaces with rails-to-trails projects and access to Black Water Creek. The HAP is also working to connect local farmers with merchants and customers to provide healthier food options and reduce the rate of obesity in adults and children.

Capstone Rural Health Center provides nutrition education and counselling in addition to case management services.

Whatley Health Services offers the “CYL2” Diabetes Prevention Program in Walker County. This program teaches participants how to eat healthier and become more active to reduce the risk of developing type 2 diabetes and other preventable conditions like heart disease and high blood pressure.

The Walker County Public School System has adopted a Wellness Policy on Nutrition and Physical Activity that aims to promote physical activity and healthy eating, provide nutritious foods at schools, and offer nutrition and physical activity education.

Resources – Diabetes

Walker Baptist Medical Center offers diabetes education courses to the public through the accredited Diabetes Self-Management Education Program.

Capstone Rural Health Center provides nutrition education and counselling and diabetes management.

Whatley Health Services provides specialized care for patients with diabetes including nutrition counseling. The Sipsey clinic location accepts Medicaid as well as offering qualifying patients a sliding fee scale discount. Additionally, the organization offers the “CYL2” Diabetes Prevention Program in Walker County. This program teaches participants how to eat healthier and become more active to reduce the risk of developing type 2 diabetes and other preventable conditions like heart disease and high blood pressure.

Some of the area’s local pharmacies provide free or reduced-cost diabetic supplies to community members in need.

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Appendix A

Carnahan Group Qualifications

Carnahan Group is an independent healthcare technology and consulting firm that focuses on providing innovative and cost-effective compliance solutions to healthcare systems and organizations throughout the nation. Since 2002, Carnahan Group has been trusted by healthcare organizations throughout the nation as an industry leader in providing Fair Market Valuations, Medical Staff Demand Analyses, Community Health Needs Assessments, and Strategic Planning. Our executive team has risen through the ranks of some of the world's largest healthcare systems and has firsthand knowledge of working within a hospital system undergoing federal scrutiny and under OIG Corporate Integrity Agreements. We have not spent our lives as consultants and are therefore acutely aware of the sensitivity surrounding the timeliness, the objectivity, and the correctness of strategic reports. Carnahan Group is dedicated to providing unsurpassed customer service and quality to our clients.

Appendix B

Community Leader Interview Organizations

Organization	Title	Organization Type or Population Represented
Walker Area Community Foundation	Executive Director	Non-profit
Capstone Rural Health Center	Director	Clinical provider, underserved, low-income, minority, and/or chronic disease populations
Alabama Department of Public Health	District Outreach Worker - West Central District	Public health expert
Regional Paramedical Services	North District Director of Operations	Emergency response
Alabama State Senate, District 5	State Senator	Local government
City of Jasper	Mayor	Local government
Bevill State Community College	Dean for Health Sciences	Academic institution

Appendix C

Community Health Survey

1. **Are you 18 years of age or older?** ☐ **Yes** ☐ **No**
2. **Which type of health insurance do you have?**
   - ☐ Medicare
   - ☐ Medicaid
   - ☐ Private insurance (ex. through your job)
   - ☐ I do not have health insurance
   - ☐ I don't know
3. **Do you have a smart phone?**
   - ☐ Yes ☐ No
4. **How would you rate your health in general (most days)?**
   - ☐ Very good ☐ Good ☐ Fair ☐ Poor ☐ I don't know
5. **Thinking about your community, how would you rate the overall health of community members?**
   - ☐ Very good ☐ Good ☐ Fair ☐ Poor ☐ I don't know
6. **Over the last 3 months (90 days), how many days have you missed work or other activities (ex. church, school) because you were sick or not feeling well?**
   - ☐ None
   - ☐ 1-5 days
   - ☐ 6-10 days
   - ☐ 11-15 days
   - ☐ 16-20 days
   - ☐ More than 30 days
7. **When you are sick or need health care, are you able to visit the doctor?**
   - ☐ Always ☐ Sometimes ☐ Rarely ☐ Never
8. **Is there anything that makes it hard for you to see a doctor when you are sick?** ***(Choose all that apply)***
   - ☐ It is too expensive
   - ☐ I don't think I need to see a doctor
   - ☐ I don't have health insurance
   - ☐ I am not ready to talk about my health problem(s)
   - ☐ I do not have transportation
   - ☐ The doctor is too far away
   - ☐ My culture or religious beliefs
   - ☐ I can't find a doctor who accepts my insurance
   - ☐ I can't get time off from work
   - ☐ Other _____
9. **When was your last physical exam (checkup, well visit) with a doctor?**
   - ☐ In the past year
   - ☐ Less than 2 years ago
   - ☐ Between 2-5 years ago
   - ☐ More than 5 years ago
   - ☐ I have never had a checkup or physical exam visit with my doctor

Community Health Survey (continued)

10. Have you had any of the following health services in the past year?
(Choose all that apply)

- ☐ Heart screening
- ☐ Dental appointment
- ☐ Blood work
- ☐ Skin cancer screening
- ☐ Blood sugar check
- ☐ Blood pressure check
- ☐ Mammogram (breast cancer screening – for females)
- ☐ Pap smear (cervical cancer screening – for females)
- ☐ Colon/rectal exam
- ☐ Prostate exam (for males)

11. Which of the following do you consider serious health problems in your community?
(Choose three)

- ☐ Alzheimer's Disease
- ☐ Cancer
- ☐ Tooth problems (dental health)
- ☐ Obesity
- ☐ Heart disease and stroke
- ☐ Suicide
- ☐ Diabetes
- ☐ Injuries
- ☐ Infectious diseases (ex. flu virus, hepatitis, tuberculosis)
- ☐ Mental health issues (ex. depression)
- ☐ Motor vehicle injuries
- ☐ High blood pressure
- ☐ Prenatal and infant health (ex. babies born underweight)
- ☐ Breathing problems (ex. asthma, COPD)
- ☐ Sexually transmitted diseases
- ☐ Violence
- ☐ Child abuse or neglect
- ☐ Substance abuse/addiction
- ☐ Other _____

12. Which of the following do you consider serious social problems in your community?
(Choose three)

- ☐ Poverty (low income)
- ☐ Not enough jobs in the area
- ☐ Overcrowded housing
- ☐ Homelessness
- ☐ Not enough education (ex. high school dropouts)
- ☐ Racism and discrimination
- ☐ No health insurance
- ☐ Not enough interesting activities for youth
- ☐ Crime
- ☐ Not enough healthy food
- ☐ Not enough childcare options
- ☐ Public transportation
- ☐ Not enough free or affordable health screenings (ex. tests for cancer or infectious diseases)
- ☐ Other _____

13. Which of the following do you consider important parts of healthy, thriving community?
(Choose all that apply)

- ☐ Safe worksites
- ☐ Affordable housing
- ☐ Good schools
- ☐ Access to healthy foods
- ☐ Diversity
- ☐ Parks and recreation
- ☐ Sanitation and public works
- ☐ Good jobs
- ☐ Low crime and violence
- ☐ Good healthcare
- ☐ Childcare
- ☐ Faith-based organizations (ex. churches)
- ☐ Services for the elderly
- ☐ Support organizations (ex. nonprofits)
- ☐ Other _____

Community Health Survey (continued)

1. **Your Home ZIP Code** _____
2. **Age:**
   - ☐ Under 18 ☐ 18-44 ☐ 45-64 ☐ 65+
3. **Gender:**
   - ☐ Male ☐ Female
4. **Race/Ethnicity (*Choose all that apply*)**
   - ☐ White
   - ☐ Black/African American
   - ☐ Hispanic
   - ☐ Asian/Pacific Islander
   - ☐ American Indian & Alaska Native
   - ☐ Other
5. **Household income last year:**
   - ☐ Under $15,000
   - ☐ $15,000 to $24,999
   - ☐ $25,000 to $34,999
   - ☐ $35,000 to $49,999
   - ☐ $50,000 to $74,999
   - ☐ $75,000 to $99,999
   - ☐ $100,000 to $149,999
   - ☐ $150,000 to $199,999
   - ☐ $200,000 and above
   - ☐ I don't know
6. **Which of the following best describes your employment status?**
   - ☐ Employed full-time
   - ☐ Employed part-time
   - ☐ Full-time student
   - ☐ Retired
   - ☐ Unemployed
   - ☐ Homemaker
   - ☐ Other _____
7. **Where do you go for information about health and wellness? *Check all that apply***
   - ☐ Doctors, nurses, and pharmacists in my community
   - ☐ Family and friends
   - ☐ Newspapers or magazines
   - ☐ Television or radio
   - ☐ Books
   - ☐ Social media (Facebook, Twitter, Instagram)
   - ☐ Internet (websites)
   - ☐ Hospital
   - ☐ Church
   - ☐ School or college
   - ☐ Health fairs
   - ☐ The health department
   - ☐ Your place of work
   - ☐ Other _____

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