FY22

PIEDMONT COLUMBUS REGIONAL – MIDTOWN AND NORTHSIDE

COMMUNITY HEALTH NEEDS ASSESSMENT

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Introduction

As a not-for-profit healthcare system, the mission of Piedmont Columbus is healthcare marked by compassion and sustainable excellence in a progressive environment, guided by physicians, delivered by exceptional professionals, and inspired by the communities we serve.

In our commitment as a not-for-profit health system, Piedmont Healthcare studied the region's community health needs for its Community Health Needs Assessment (CHNA), a triennial process required by the Internal Revenue Service due to our tax-exempt status. A CHNA is a measurement of the relative health or well-being of a given community. It's both the activity and the end-product of identifying and prioritizing unmet community health needs, which is done by gathering and analyzing data, soliciting the feedback of the community and key stakeholders, and evaluating our previous work and future opportunities.

Through this assessment, we hope to better understand local health challenges, identify health trends in our community, determine gaps in the current health delivery system and craft a plan to address those gaps and the identified health needs. This is the fourth Piedmont CHNA, with the others having been conducted in 2013, 2016 and 2019. The 2022 Piedmont CHNA will serve as a foundation for developing our community benefit strategies and further strengthening our community-focused work.

About the hospitals

Piedmont Columbus Regional dates to 1836 when the local hospital was a small building on the Chattahoochee River. It is now the region's healthcare leader, offering compassionate care and an unwavering commitment to patients. Piedmont Columbus Regional consists of two hospitals, a cancer center, and over 35 physician practice locations. Piedmont Columbus Regional joined the Piedmont family in March 2018.

Midtown Campus is a 583-bed, acute care hospital and features a regional Level II trauma center, one of only six perinatal centers in the state with a Level III Neonatal Intensive Care Unit and is the only Piedmont facility with a Children's Hospital. It has been home to the Family Medicine Program since 1972. The nationally recognized program, which was the first of its kind in Georgia and one of the first in the Southeast, has graduated over 500 family physicians.

Northside Campus is a 100-bed, acute care hospital specializing in an extensive range of surgical and emergency services, physical rehabilitation, and a state-of-the-art sleep lab. Piedmont Columbus Regional has garnered national acclaim in clinical quality, patient satisfaction, stroke care, oncology, and pediatrics. Piedmont Columbus Regional is also the lead agency for Safe Kids Columbus.

Note that all statistics and information in this report is for both hospitals combined.

Community benefit

Piedmont Columbus is a not-for-profit hospital, meaning it is exempt from paying certain taxes. In exchange for those exemptions, federal and some state laws require that communities receive from their hospitals certain benefits, appropriately called community benefit. These programs are generally meant as programs intended to increase access to care and boost the health of the community, with a focus on low-income populations and others who face unique challenges to being healthy. Since our last CHNA, in FY20 and FY21 combined, Piedmont Columbus provided $103.8 million in community benefit. Specifically, Piedmont Columbus provided:

	FY20	FY21
Care for low-income and other vulnerable patients	$24,393,860	$20,151,268
Community health services	$338,017	$326,816
Health professions education	$7,720,822	$6,984,847
Bad debt	$22,617,982	$21,365,684

Key programs include: the hospital's mobile unit, which provides place-based services to low-income and other vulnerable populations. The mobile unit consists of a registered nurse, a licensed medical social worker, a family practice resident, and a PharmD resident under the medical direction of a staff physician. The hospital also conduct extensive community health education, including efforts focused on prevention and treatment of diabetes and stroke.

Financial assistance

Piedmont Healthcare provides financial assistance to qualifying low-income patients at or below 300 percent the Federal Poverty Level. Patients qualify for financial assistance in one of two ways: either through presumptive eligibility, in which the patient's file is automatically scanned for certain indicators that mean he or she would qualify for financial assistance, or via manual application by the patient or his or her representative. Below is a list of the top ten ZIP codes by volume of patients receiving financial assistance at the hospital during the last two fiscal years.

ZIP code	No. of patients - FY20	No. of visits - FY20	No. of patients - FY21	No. of visits - FY21
31907	3,768	7,207	3,902	7,949
31903	2,649	5,505	3,327	7,278
31906	2,164	4,379	2,623	5,682
31904	1,959	3,913	2,337	4,821
31901	1,102	2,351	1,169	2,675
31909	1,024	1,744	1,176	2,094
36867	977	1,320	181	234
36869	906	1,199	168	238
36870	391	495	75	115
31805	136	261	274	481

Please note we provided financial assistance to patients outside of these ten ZIP codes as well.

Examining ZIP code data can help us to better target specific communities that may have unique challenges due to social determinants of health, such as having a low income, poor housing conditions, or limited access to healthy foods.

Medicaid

Piedmont provides services to patients who receive benefits through the state/federal public insurance program Medicaid, which covers the cost of care for low-income patients who: are pregnant, are a child or teenager, are 65 and older, are legally blind, have a disability, or need nursing home care. Below is a list of the top ten ZIP codes by volume of patients receiving care at the hospital as a Medicaid beneficiary during the last two fiscal years.

ZIP code	No. of patients - FY20	No. of visits - FY20	No. of patients - FY21	No. of visits - FY20
31907	20,359	50,316	19,816	50,399
31904	11,644	28,512	11,451	28,027
31909	10,538	23,465	10,615	24,442
31903	9,731	25,775	9,180	25,007
31906	8,982	23,256	8,767	22,910
36867	5,992	13,468	5,712	12,968
36869	5,754	12,831	5,648	12,629
31901	3,074	8,627	2,569	7,566
36877	1,921	5,062	1,837	5,015
31820	923	1,318	1,138	1,712

Please note we provided care to Medicaid beneficiaries outside of these ten ZIP codes as well.

Examining ZIP code data can help us to better target specific communities that may have unique challenges due to social determinants of health, such as having a low income, poor housing conditions, or limited access to healthy foods.

FY22 Priorities

A key component of the CHNA is to identify the top health priorities we'll address over fiscal years 2023, 2024, and 2025. These priorities will guide our community benefit work. They are, in no order of importance:

Ensure affordable access to health, mental, and dental care for all community members, and especially those that are low income and/or uninsured

Decrease preventable instances of diabetes and decrease the number of patients with uncontrolled diabetes

Reduce preventable instances of and death from cancer

Decrease the impact of and deaths from stroke

Reduce rates of obesity and increase access to healthy foods and recreational activities

With each priority, we will work to achieve greater health equity by reducing the impact of poverty and other socioeconomic indicators for that priority. This means we will prioritize programming and investment in areas that directly address issues related to income and poverty and others who face particular challenges in accessing care due to disability, race, English proficiency, educational attainment and other areas of socioeconomic status. Additionally, whenever possible, health education will be available in the languages found within the community, with special attention spent on outreach to those populations.

When possible, we will work to address other issues that arose during the CHNA, such as violence and Alzheimer's Disease, even though those are not listed in the above priority list. Throughout the CHNA process, violence was a prevalent issue, and we'll partner with community organizations to the best of our ability to address the issue. Additionally, when possible, we will weigh in on issues of growth and traffic, though those are outside the realm of us being able to directly impact those issues.

Progress since last CHNA

In the hospital's FY19 CHNA, six health priorities were identified to address over the following three years. These priorities were:

- Increase access points for appropriate and affordable health care for all community members, and especially those who are uninsured and those with low incomes
- Decrease deaths from cancer and increase access to cancer programming for those living with the disease
- Decrease preventable instances of diabetes and decrease the number of patients with uncontrolled diabetes
- Reduce rates of obesity and increase access to healthy foods and recreational activities
- Decrease the impact of and deaths from stroke
- Reduce opioid and related substance abuse and overdose deaths

To address these priorities, we:

We prioritized increasing access to care by utilizing key community stakeholders to provide meaningful input to critical areas of consideration. We created a steering committee to increase access to care by assisting with clinical policies and guidelines for the operations of the mobile unit. The committee focused on critical components to increase access to care for high-risk populations identified in the CHNA and discussed how to utilize hospital services for the community during the pandemic.

During clinical visits, the mobile unit team consists of a registered nurse, a licensed medical social worker, a family practice resident and a PharmD resident under the medical direction of a staff physician. The clinical team assesses each patient, provides acute medical treatment and calls in prescriptions to local pharmacies as necessary. Referrals to the Piedmont Columbus emergency department if medically necessary. The mobile unit served 1,512 indigent patients from July 01, 2019, to March 01, 2020, when activities ceased due to COVID. From Valley Rescue and Safe House clinics, the hospital treated 254 patient through medical encounters. Of those, seven were referred to the emergency department and 71 were referred to community partners for follow-up.

We deployed a mobile unit clinic team comprised of a family practice resident, a pharmacy resident, and a registered nurse to conduct weekly clinics to reduce emergency admissions. COVID-19 significantly impacted the mobile unit activities and was suspended for 12 months until March 2021. The mobile unit served 287 indigent patients between March 1, 2020, and July 1, 2021. There were 50 patient encounters from Valley Rescue and Safe House clinics. Additionally, 19 patients were referred to community partners for a follow-up. Before the mobile unit resumed in March, there were 24 mobile unit patients seen in the emergency department. After March, we saw 13

Progress since last CHNA, cont'd

mobile unit patients in the emergency department. The mobile unit social worker assisted 21 patients with additional personal needs.

After COVID-19 cases significantly decreased, we resumed a modified schedule with the mobile unit. We continued weekly clinics at Safe House and Valley Rescue to target indigent populations and provided education to assist with vaccine hesitancy and offer vaccines.

We prioritized decreasing deaths from cancer and increasing access to cancer programming by increasing local awareness of and local opportunities for lung cancer screening. We continued distributing a brochure titled "Lung Cancer Screening, Shared Decision-Making Guide." The instructional guide explains the details of our Low-Dose CT Scan Lung Cancer Screening. There has been a total of 651 patients in the Lung Cancer Screening program.

We also worked to address cultural barriers to cancer prevention and education for the Latino community. We conducted two screening events for colorectal and prostate cancer by outreaching to Latino and African American churches in local counties. The effectiveness of outreach quality depended on the number of Latino participants at the annual free prostate cancer screenings. In 2021, the prostate cancer screening event had 4.16 percent Hispanic/Latino participants, a decline from the previous year, when we had a higher rate of Hispanic/Latino population participation.

We worked with the community to overcome barriers to screenings and increase cancer screenings for colorectal, prostate, and skin cancer. We partnered with the West Central Georgia Cancer Coalition for a community-wide drive-through Colorectal Cancer Screening. Piedmont Columbus Regional used Community Educational Events to distribute Stool Screening FIT Kits. In FY21, 159 FIT kits were distributed, 67 kits returned, and six came back positive. The patients who received positive kits received follow-up care. We provided surveys to measure outreach quality for the event, and we received mostly positive feedback. We prioritized decreasing the impact of and deaths from stroke by increasing EMS as the preferred mode of transportation by 10 percent over the next three years. We increased EMS as the preferred mode of arrival for stroke patients by 13 percent in FY21 by increasing the community's knowledge of the stroke survival campaign of F.A.S.T. During FY20, EMS as the method of arrival was 62 percent for all stroke encounters and, in FY21, it was 75 percent, which is evidence of the success of the campaign.

We prioritized reducing rates of obesity and increasing access to healthy foods and recreational activities by supporting healthy food access for low-income children. Our community outreach department partnered with Amerigroup to host two Mobile Market Day

Progress since last CHNA, cont'd

events despite challenging COVID-19 protocols. We targeted families from the surrounding area in at-risk populations identified in the CHNA and provided fresh fruit, vegetables, and educational materials.

We prioritized decreasing preventable instances of diabetes and number of patients with uncontrolled diabetes by increasing the number of Outpatient Diabetes Self-Management Education attendees. Due to COVID-19, we suspended the Outpatient Diabetes Self-Management Education program following the February 8, 2020, class. Later in the year, we moved the course to the virtual platform Zoom. In-person courses resumed in November 2021.

We also worked to address uncontrolled diabetes by continuing the accredited Diabetes Prevention Program, focusing on at-risk populations as identified in our CNHA. A total of three participants in Cohort III of the Diabetes Prevention Program completed the program in September 2021, meeting all completion criteria. This program was offered virtually and in person to accommodate CDC guidelines.

Finally, we incorporated and initiated a glycemic management/diabetes management rotation with medical and pharmacy residents, which remained active throughout 2020 and 2021, despite the COVID-19 pandemic.

Due to the pandemic and the suspension of most community outreach activities in FY20 and FY21, Piedmont Columbus Regional assisted with the following:

- Performed COVID-19 screenings at PCR Midtown and J.B.A.C.C. from March 2020 to March 2021.
- Coordinated three COVID-19 vaccination clinics with follow-up clinics to administer second doses of the Moderna vaccine. Piedmont Columbus Regional also served as vaccinators in the clinics.

Additionally, in FY20, the hospital provided $57,500 in grants to local nonprofit organizations with programming that aligned with our FY19 CHNA. Through of these programs, in October 2019, Piedmont Columbus Regional partnered with the Boys and Girls Clubs of Chattahoochee Valley to host a flu clinic. A total of 76 flu shots were administered to children with an additional 45 parents/guardians who received flu education from the hospital’s chief of pediatrics.

In both years the hospital maintained its accredited Diabetes Prevention Program, which focuses on at-risk populations as identified in its CHNA. Activities included: ongoing diabetes education that includes information on diabetes management, physical activity, medication usage, complication prevention and how to cope with this chronic disease; nutrition education that focuses on food

Progress since last CHNA, cont'd

choices and improving blood sugar control; and education to reduce the negative impact of diabetes, reduce heart disease risk factors and improve weight management.

The hospital also regularly offered stroke awareness educational materials and blood pressure screenings at health fairs and community events to achieve and maintain stroke certification through community awareness. Additionally, the hospital has had extensive outreach to the community to provide cancer education and screenings, including prostate and lung cancer screenings.

As part of a Piedmont Healthcare systemwide effort, Piedmont Columbus was an active participant in anti-opioid work, which included: active participation on the systemwide task force, tracking opioid prescriptions within the hospital and by providers, utilizing Epic EMR tools to monitor opioid use, offering patients and the community ways to safely dispose of unused medication, and providing ongoing education on opioid prescribing. The advent of COVID-19 precluded local take-back day activities, in which we'd traditionally partner with local law enforcement to host an event in which community members were encouraged to bring in any unused prescriptions for safe disposal.

Piedmont Columbus's Community Outreach department partnered with the Muscogee County School District, Amerigroup, Feed the Valley, and University of Georgia Cooperative Extension to host various farmers markets throughout the year for at-risk populations identified in the CHNA. Fresh fruit and vegetables, interactive food demonstrations and nutritional education were provided at the events. University of Georgia Cooperative Extension also provided free cooking classes in select low-income housing areas where the attendees were given tips on how to shop for healthy food items on a budget and how to prepare healthy meals with ingredients they may already have in the home.

Piedmont Columbus also facilitated education sessions hosted by our dietitians for the annual Muscogee County School District Professional Development Training for the teachers and administrators.

FY22

Community Health Needs Assessment

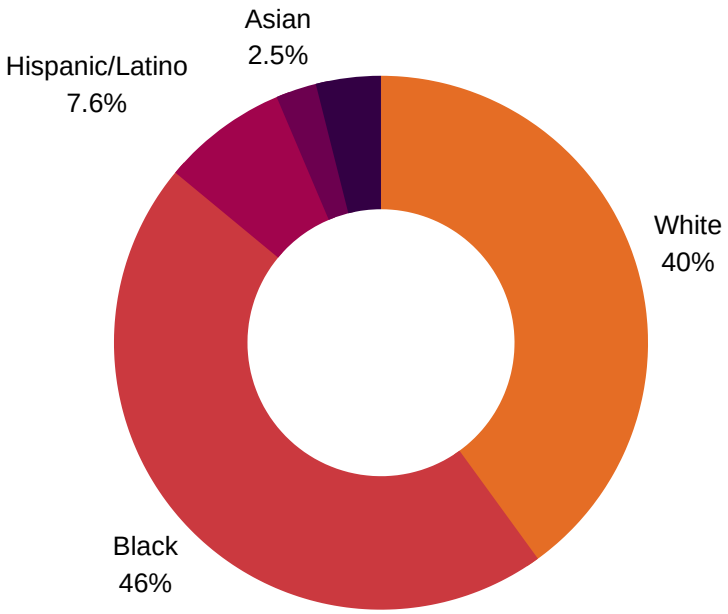
About the community

While Piedmont Columbus serves patients from all over northeast Georgia, for purposes of this CHNA, we consider our community to be Muscogee County. We do this in recognition of the direct impact of our tax-exempt status on county residents.

In Muscogee County, an average 195,739 people lived in the 216.44 square mile area each year between 2015 and 2019. The population density for this area, estimated at 904 persons per square mile, is much greater than the state average population density of 181 people per square mile and the national average population density of 92 persons per square mile. The ZIP code with the highest concentration of people was 31906, where 30 percent of the county's population called home. Muscogee is mostly urban, as 97 percent of community members live within an urban setting. The ZIP code with the highest concentration of the rural population was 31801 and, like in most of Georgia, rural populations in Muscogee are overwhelmingly white. Muscogee County is growing, having seen a 9 percent increase in total population between 2010 and 2020.

About 14 percent of the population were veterans in 2020, and more than half were between the ages of 35 and 54. Eighteen percent of the population - about 34,150 people - lived with a disability. Most of that population were 65 or older.

About 25 percent of the population were 17 or younger, 13 percent were over the age of 65, and the remaining population were between the ages of 18-64. Between 2015 to 2019, about 40 percent of all Muscogee County residents were white, 46 percent were black or African American, 7.6 percent were Hispanic/Latino, 2.5 percent were Asian, and the remaining were comprised of other races. About 5 percent of the population were born outside of the US and 2.2 percent of the total population did not have citizenship status in 2020.



The chart to the left represents a breakdown of races within the community. The community is still predominately white, though that is shifting. Minority populations have steadily grown in recent years, with Hispanic or Latino populations leading growth at 36 percent from 2010 to 2020, as compared to 7.11 percent for all other races. This is on-trend with Hispanic/Latino population growth throughout the state.

Root causes of poor health

In conducting the FY22 CHNA, we recognized two main issues that emerged that are root causes of poor health.

Poverty and health

Poverty is the most significant indicator of health as those living at or near poverty are more likely to die from cancer, heart disease and diabetes than those with higher incomes. This is due to several factors that go beyond income, such as education, housing and simple geography, things commonly dubbed “social determinants of health.” This means that factors outside your immediate physical self can play a huge role in your health, even including how long you live. Life expectancy can vary as much as 30 years between the richest and poorest Georgia counties. Muscogee County has a poverty rate much higher than state and national averages, with about 21 percent of the population living at or below poverty. Minorities far more likely to live in poverty. For example, 27 percent of black populations lived in poverty, on average between 2015 and 2020, versus only 13 percent of whites.

Insurance status and health outcomes

In 2020, 12 percent of the population had no form of insurance. Insurance status and health are inextricably linked. Being uninsured is generally a marker of low-income, as the overwhelming majority of those that are uninsured are also within certain ranges of the Federal Poverty Level. This means these populations are also likely to face the myriad of other social determinants of health (SDH), like housing and food insecurity.

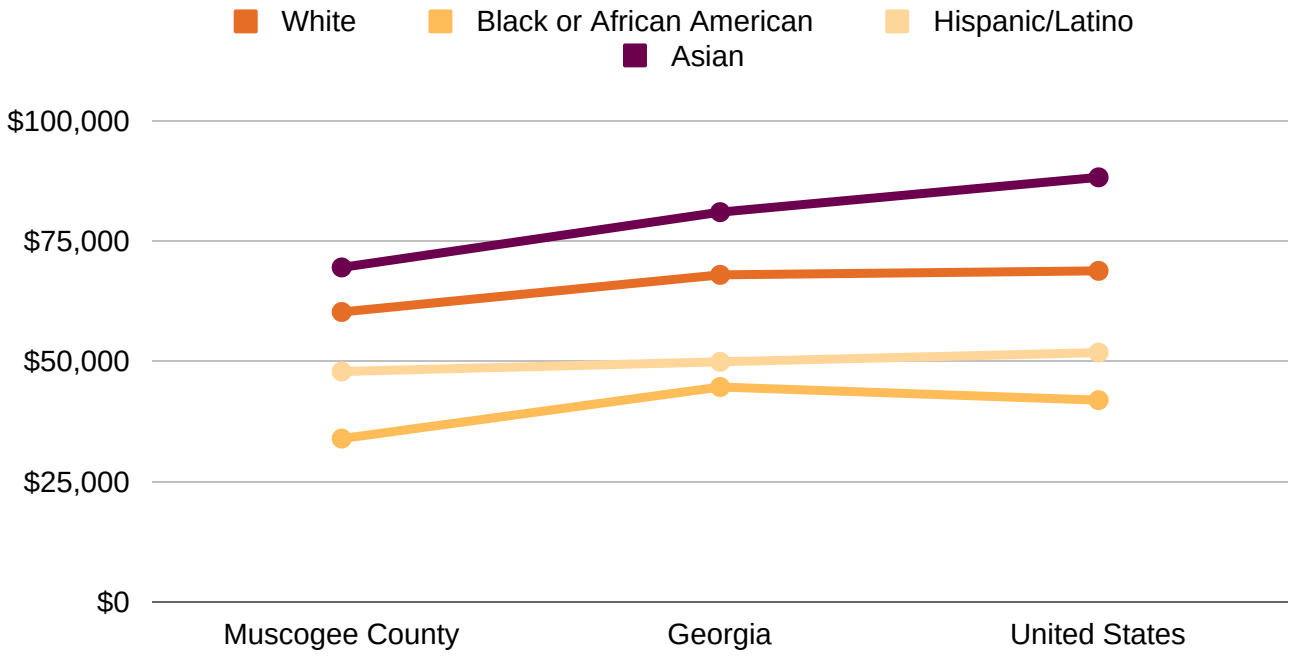
No insurance can mean no access to primary and specialty care, due to cost and/or provider availability. Conditions that could have been treated affordably in a community setting are often not and, because of this, those without insurance statistically suffer worse health outcomes than their insured counterparts. Diseases like cancer are often diagnosed later, and manageable conditions such as hypertension can elevate to dangerous levels.

Across the state, adults aged 18 to 64 are most likely to be uninsured, and that's true in Muscogee County. In 2020, 18 percent of nonelderly adults were uninsured, as compared to 5.11 percent of those under age 18 and 1 percent for those 65 and older.

As with other indicators, race matters. Approximately 18 percent of Hispanic/Latino populations were uninsured, 12 percent of Asians were uninsured, 13 percent of blacks or African Americans were uninsured, and 9.14 percent of whites were uninsured.

Community and income

Between 2015 and 2019, the median household income was $46,408, which is lower than state and national levels, which are $58,700 and $62,843, respectively. When broken down by the four dominant races in the community, income disparities are evident.



Of employers in the community, the largest sector by employment size is retail trade, which employed 13,570 community members at an average annual wage of $27,310 in 2019 according to the US Department of Commerce. Administrative and support and waste management and remediation services was the second largest sector, with 12,488 people employed at an average annual wage of $20,111. Transportation and warehousing was the third largest sector, with 10,566 people employed at an average annual wage of $28,159.

Unemployment and labor force participation

According to the 2015-2019 American Community Survey, 122,444 people in the community were part of the labor force, and only 3,500 -- about 4.5 percent -- were unemployed as of January 2022. This figure has steadily decreased since last year, when in January 2021, 5.9 percent of the labor force was unemployed. When looking back further, the rate is nearly three times less than the unemployment rate in 2012.

This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Community safety and violence

For a county its size, Muscogee County has significant violence issues. Community level risk factors for violence include increased levels of unemployment, poverty and transiency; decreased levels of economic opportunity and community participation; poor housing conditions; gang activity, emotional distress and a lack of access to services.

Below is a chart breaking down offenses in 2017, as reported to the Georgia Bureau of Investigation. This is the last year for which this information is publicly available.

Murder	Rape	Robbery	Assault	Burglary	Larceny	Vehicle Theft
35	74	395	806	2,138	6,052	705

Incarceration rate

The Opportunity Atlas estimates the percentage of individuals born in each census tract who were incarcerated at the time of the 2020 Census. According to the Atlas data, 2.9 percent of the county population were incarcerated, slightly higher than the state average of 2.1 percent.

Juvenile arrests

Within the county, in 2018, there were 54 juvenile arrests. Juvenile arrests can illustrate one aspect of the complex societies in which youth live. Juvenile arrests are the result of many factors such as policing strategies, local laws, community and family support, and individual behaviors. Youth who are arrested face disproportionately higher morbidity and mortality. Those who are arrested and incarcerated experience lower self-reported health, higher rates of infectious disease and stress-related illnesses, and higher body mass indices.

Firearm fatalities

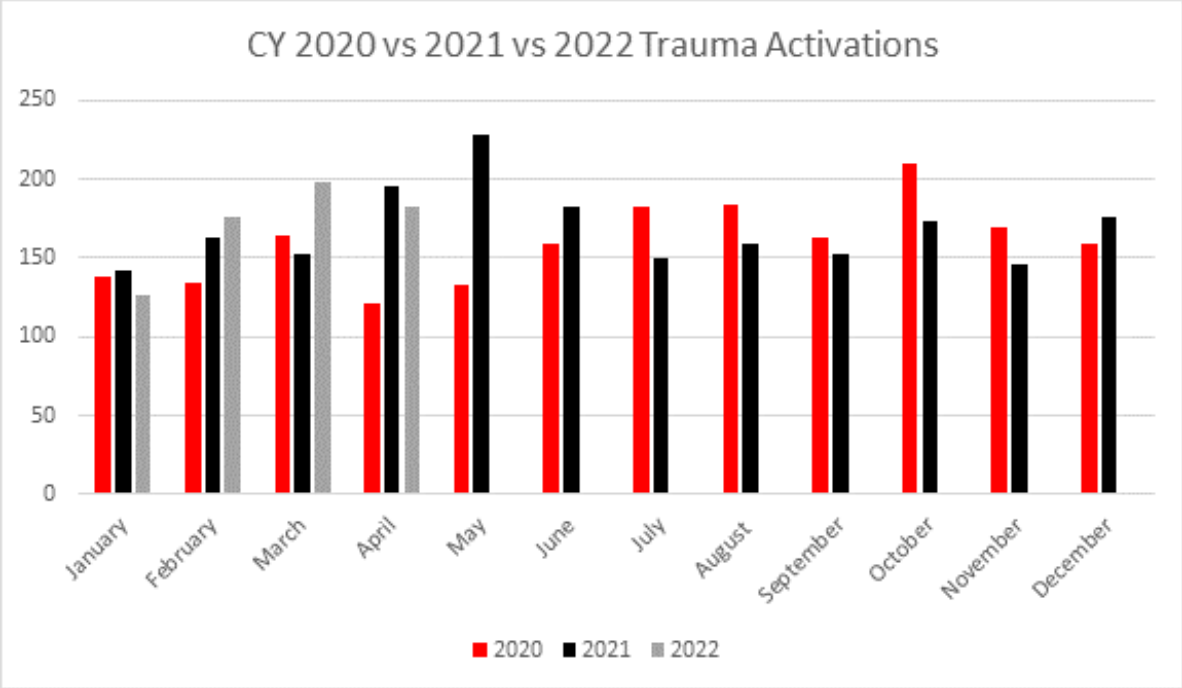
Firearm fatalities are a critical public health issue as they are largely preventable. Most firearm fatalities are the result of suicides and homicides. Between 2016 and 2020, there were 257 firearm fatalities in Muscogee County, resulting in a rate of 25.6 per every 100,000 people, much higher than the state and national rates of 16.0 and 12.2, respectively.

Violent crime

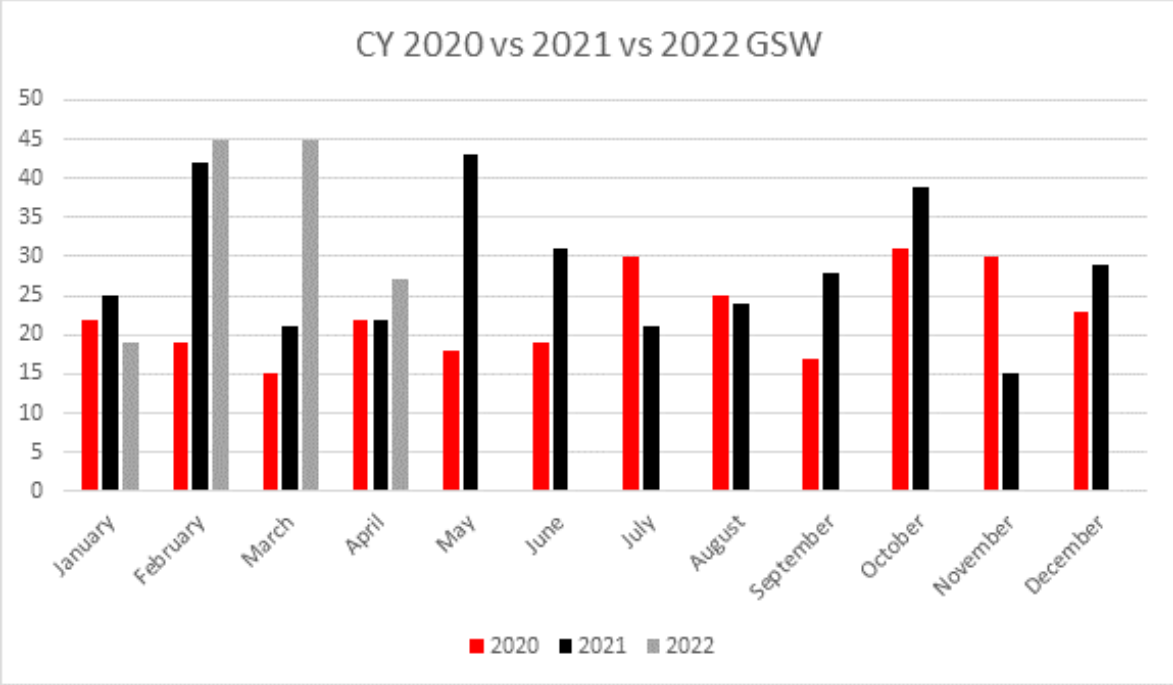
Violent crime is a critical public health issue as it is often largely preventable. Between 2015 and 2019, there were a total 3,672 violent crimes reported in Muscogee County, a figure that includes homicide, rape, robbery, domestic violence, and aggravated assault. This equates to a violent crime annual rate of 606.9 per every 100,000 people, a figure significantly higher than the state and national rates of 373.1 and 416, respectively.

Community safety and violence, cont'd.

The chart below illustrates trauma activations at the hospital for calendar years 2020, 2021, and 2022. As illustrated, both February and March saw significant increases over the last two years.



The chart below illustrates gunshot wounds as presented at the hospital for calendar years 2020, 2021, and 2022. As illustrated, February, March and April saw significant increases over the last two years.



Vulnerability and Deprivation indexes

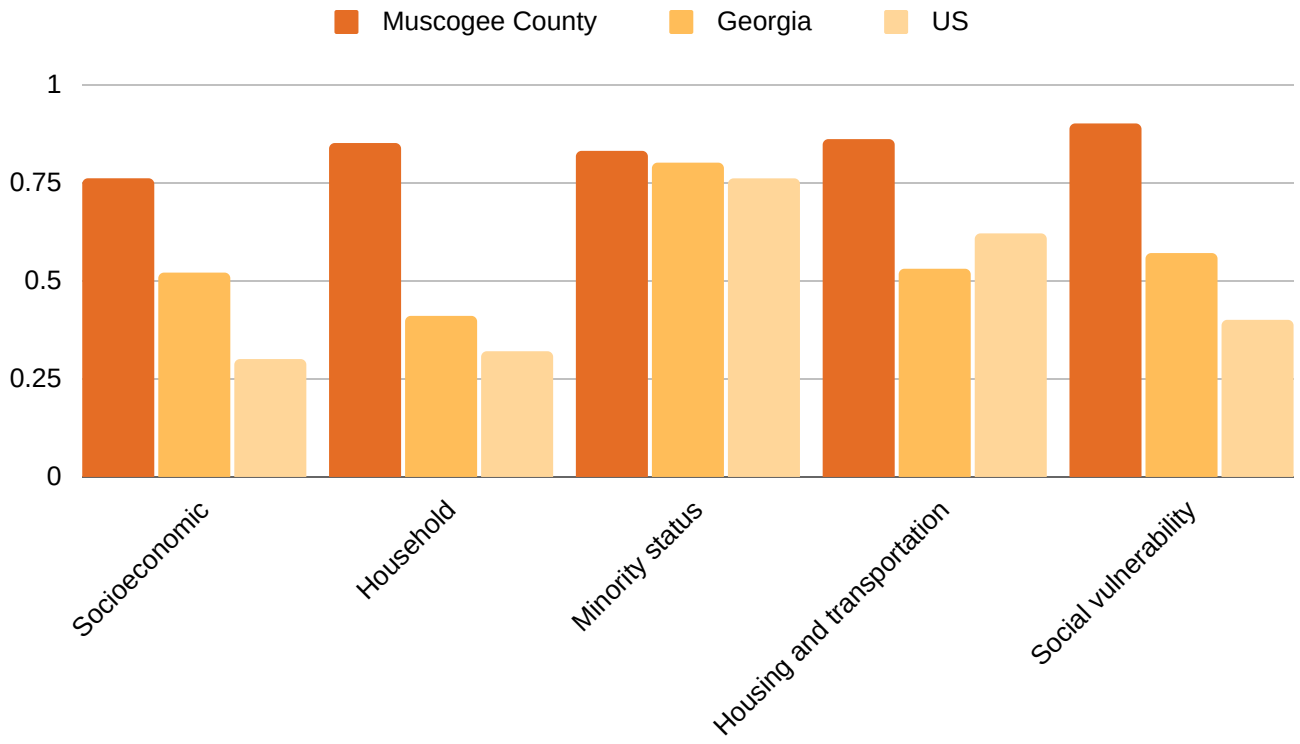
Area Deprivation Index

The Area Deprivation Index (ADI) ranks neighborhoods and communities relative to all neighborhoods across the nation and the state. ADI is calculated based on 17 measures related to four primary domains: education, income and employment, housing, and household characteristics. The overall scores are measured on a scale of 1 to 100 where 1 indicates the lowest level of deprivation (least disadvantaged) and 100 is the highest level of deprivation (most disadvantaged). Muscogee County ranks in the 62nd percentile for Georgia and 68th in the national percentile, both of which are on the high side of the midrange.

Social Vulnerability Index

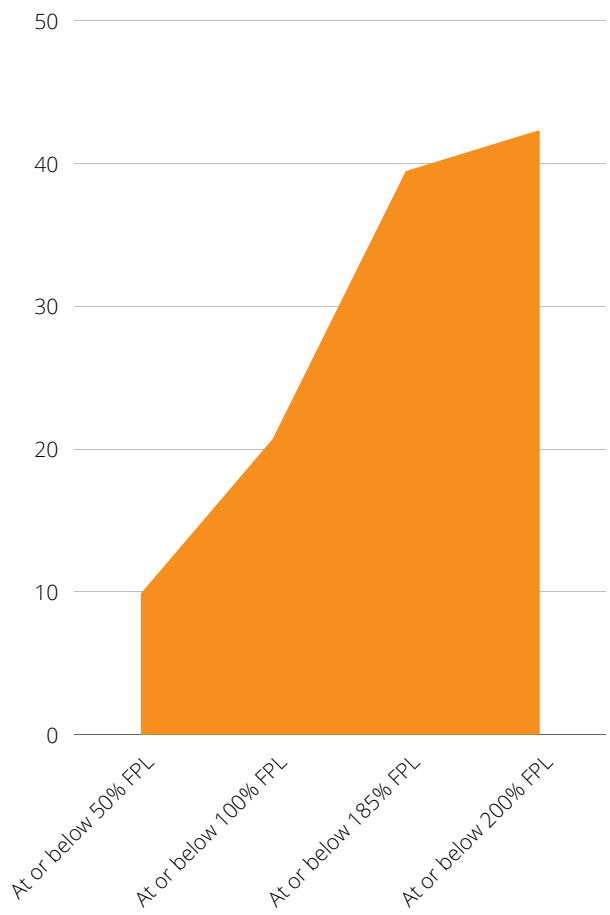
The Social Vulnerability Index is the degree to which a community exhibits certain social conditions, including high poverty, low percentage of vehicle access, or crowded households, that may affect that community's ability to prevent human suffering and financial loss in the event of disaster. These factors describe a community's social vulnerability.

The social vulnerability index is a measure of the degree of social vulnerability in counties and neighborhoods, where a **higher score indicates higher vulnerability**. Muscogee County has a social vulnerability index score of 0.90, which is much higher than the state score of 0.57. Broken down by themes:



Income and poverty

A person's income status is directly related to their health status, and predictably the more money you have, the healthier you tend to be.



The chart to the left demonstrates how many community members live in poverty or near-poverty. In 2020, approximately 21 percent of the county lived at or below the Federal Poverty Level (FPL).

In 2022, the FPL placed a family of four as having a total household income of $27,750. Even when living at twice the FPL, families are likely unable to afford many of life's basics.

By far, the poorest ZIP code within Muscogee County is 31903, where 42 percent of the population lived in poverty in 2020.

In Muscogee County, like most of the state, minorities are more likely to live in poverty. For example, in 2020, 27 percent of blacks or African Americans and 19 percent of Hispanic/Latino populations in Muscogee County were living at or below poverty, as compared to 13 percent of whites.

SNAP Benefits

The Georgia Supplemental Nutrition Assistance Program (SNAP) is a federally funded program that provides monthly benefits to low-income households to help pay for the cost of food. A household may be one person living alone, a family, or several unrelated individuals cohabitating who routinely purchase and prepare meals together. SNAP enrollment and poverty rates are co-related.

In Muscogee County, nearly 18 percent of households received SNAP benefits in December 2020, representing about 13,067 households. Black populations are far more likely to receive SNAP benefits than any other demographic --- 40 percent all SNAP recipients are black or Hispanic/Latino, as compared to 18 percent of white recipients. The ZIP code with the highest amount of SNAP recipients was 301903, where 39 percent of the population received SNAP benefits.

Housing

On average, between 2015 and 2019, the median rent cost for a home in Muscogee was $906, with some areas higher than others. For example, the median rent in 31905 was $1,512. According to 2020 USDA data, the average adult male spends between $193 and $358 on groceries per month, and the average adult female spends between $174 and $315. In Muscogee County, in 2020, basic utilities average $101 per month, and internet averaged $59. As the family size grows, costs increase, and households are increasingly burdened. None of the above reflects the impact of COVID-19 on housing stock, income, and increased cost of living, meaning the situation is likely worse than before.

Cost-burdened households

Of the 75,984 total occupied households in Muscogee County between 2015 and 2019, 26,767 community members -- about 37 percent -- lived in cost burdened households, in which housing costs were 30 percent or more of total household income. Approximately 18 percent of households had costs that exceeded 50 percent of the household income, which places the household in significant financial strain.

Substandard housing

This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) 1 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent. Of all households in the county, 27,532 (about 37.84 percent) have one or more substandard conditions. This is worse than the state average of 30.1 percent.

Area Median Income and affordable housing

This indicator reports the number and percentage of housing units at various income levels relative to Area Median Income (AMI). The AMI is the midpoint of a region's income distribution, meaning that half of households in a region earn more than the median and half earn less than the median. A household's income is calculated by its gross income, which is the total income received before taxes and other payroll deductions.

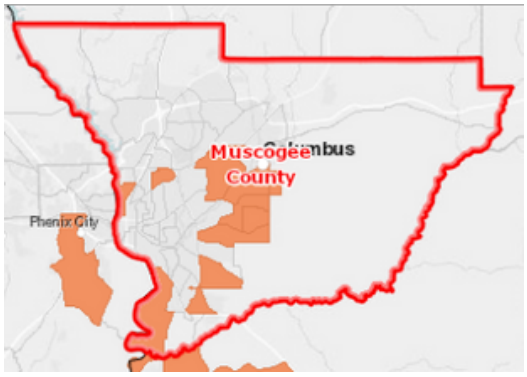
Affordability is defined by assuming that housing costs should not exceed 30 percent of total household income. Income levels are expressed as a percentage of the county's AMI. About 65 percent of housing units are affordable at 100 percent AMI, which means that housing is not affordable for the remaining 35 percent of the population. This is slightly worse than the state rate of 67.13 percent of housing units affordable at 100 percent AMI.

Food deserts and food insecurity

Food insecurity happens when a person or family does not have the resources to afford to eat regularly. This can happen due to affordability issues, particularly for households facing unemployment, and especially so if they were already low-income. As with many health indicators, minorities are much more likely than their white counterparts to experience food insecurity.

Neighborhood conditions can affect physical access to food. For example, people living in some urban areas, rural areas, and low-income neighborhoods may have limited access to full-service supermarkets or grocery stores. Predominantly black and Hispanic neighborhoods tend to have fewer full-service supermarkets than predominantly white and non-Hispanic neighborhoods. Communities that lack affordable and nutritious food are commonly known as “food deserts.”

In Muscogee County, in 2019, 11 of the county's 53 census tracts were food deserts, as shown in the map to the right. About 46,281 people lived within these census tracts. These tracts almost directly correspond with census tracts demonstrating retailers who are authorized to take SNAP benefits. In Muscogee County, like with most of the state, those retailers tend to be convenience and discount stores that carry limited, if any, healthy foods. Increasingly, discount stores like Dollar General do have some sort of produce section, but that is inconsistent among communities.



Grocery stores

Healthy dietary behaviors are supported by access to healthy foods, and grocery stores are a major provider of these foods. There were 36 grocery stores in the county, a rate of 18.96 per every 100,000 people, which is on par with state and national rates of 17.46 and 20.66, respectively. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Delicatessen-type establishments are also included, and convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded.

Low food access

Low food access is defined as living more than 0.5 mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity. According to the 2019 Food Access Research Atlas database, about 30 percent of the total population in the county have low food access, meaning about 57,404 county residents may struggle to access healthy foods. This is between the state and national rates of 30.89 percent and 22.22 percent, respectively. ZIP code 31905 has the worst rate of low food access at 99.4 percent.

Access to care

At the crux of healthcare is access, which is determined by a few factors: availability of providers, insurance status, and ability to pay.

Insurance

Insurance status is directly related to a person's ability to access care, and this is particularly true for non-emergent care and specialty care. Health insurance makes a difference in whether and when people get necessary medical care, where they get their care, and ultimately, how healthy they are. Uninsured people are far more likely than those with insurance to postpone health care or forgo it altogether. The consequences can be severe, particularly when preventable conditions or chronic diseases go undetected.

Compared to those who have health coverage, people without health insurance are more likely to skip preventive services and report that they do not have a regular source of health care. Adults who are uninsured are over three times more likely than insured adults to say they have not had a visit about their own health to a doctor or other health professional’s office or clinic in the past 12 months. They are also less likely to receive recommended screening tests such as blood pressure checks, cholesterol checks, blood sugar screening, pap smear or mammogram (among women), and colon cancer screening. Part of the reason for poor access among the uninsured is that half do not have a regular place to go when they are sick or need medical advice, while most insured people do have a regular source of care.

In Muscogee County, in 2019, about 12 percent of the population were uninsured, a figure lower than the state rate of 16 percent and higher than the national figure of 11 percent. As with other indicators, these rates are much worse for minorities, particularly Hispanic/Latino populations, which had an uninsurance rate of 33.1 percent. Rates, overall, have steadily declined. In 2011, approximately 18 percent of all adults were uninsured.

Insurance coverage

The below table demonstrates the type of insurance for those who had coverage in 2020, by percentage of the population. Note this doesn't equal 100 percent, as some community members have two types of coverage.

Employer or Union	Self-purchased	TRICARE	Medicare	Medicaid	VA
50.67%	12.76%	19.72%	19.42%	25.13%	5.74%

Access to dental and primary care

Dental care and dental outcomes

Dental care is crucial to health, as dental conditions that go unchecked can lead to decay, infection and tooth loss. Within the county, in 2018, 58.3 percent of adults went to the dentist in the past 12 months. That year, 18.1 percent of the county reported having lost most or all natural teeth because of tooth decay or gum disease. This is an impactful measure in multiple ways:

- Research shows that losing your teeth will shorten your lifespan. Missing nine teeth for nine years or more reduces lifespan compared to a contemporary who maintains their teeth.
- The lower your income and education level, the more likely you are to lose your teeth, which results in even fewer economic opportunities, creating a poverty cycle. For example, it is difficult to gain employment if you have visible missing teeth.
- The individual will inevitably struggle with eating certain foods, limiting their options, which can be detrimental for lower-income populations already facing food insecurity.

It's important to note that there are few options for low-income patients needing dental care. While most dental services for children enrolled in the low-income public health insurance program PeachCare are covered, for adults covered by Medicaid, only emergency dental care is provided. There are limited options for low-income dental care services within the county, and there are few -- if any, at a given time -- options for low-cost dental services that go beyond cleaning, basic fillings, and extractions. For example, if you have lost even one tooth, you have few, if any, options for implants that aren't at full retail cost. In Georgia, the cost to replace a single tooth can range from $3,000 to $4,500, out of pocket.

Primary care and routine check-ups

In 2019, about 79 percent of adults aged 18 or older saw a doctor for a routine check-up the previous year, a measure that is likely over-reported and is lower than both state and national averages. For Medicare recipients, this number drops to 74 percent of adult beneficiaries, which is below both state and national averages. Routine check-ups are a critical component to maintaining good health and identifying conditions that can be treated affordably in a community-based setting. Absent that, even simple-to-treat conditions can escalate to deeper issues, eventually requiring more intensive care, later stage diagnoses, or reduced life expectancy.

As with most other indicators, race and income play heavily into this. White populations are far more likely to receive preventive care than their white counterparts (76.5 percent among black populations compared to 86.49 percent among white populations statewide), and those with insurance are also much more likely to go to the doctor for a routine check-up than those without insurance.

Causes of death

Below are the eight leading causes of age-adjusted death, in total between 2016 and 2020. The dials indicate how severe the rate is, as compared to the rest of the state.

Ischemic heart and vascular disease - 1

COVID-19 - 2

Cerebrovascular disease - 3

All COPD except asthma - 4

Trachea, bronchus and lung cancer - 5

Alzheimer's Disease - 6

Diabetes - 7

Essential hypertension and hypertensive renal and heart disease - 8

When broken down by race, the leading causes of death shift. Below is a list of the top three causes of death, by race.

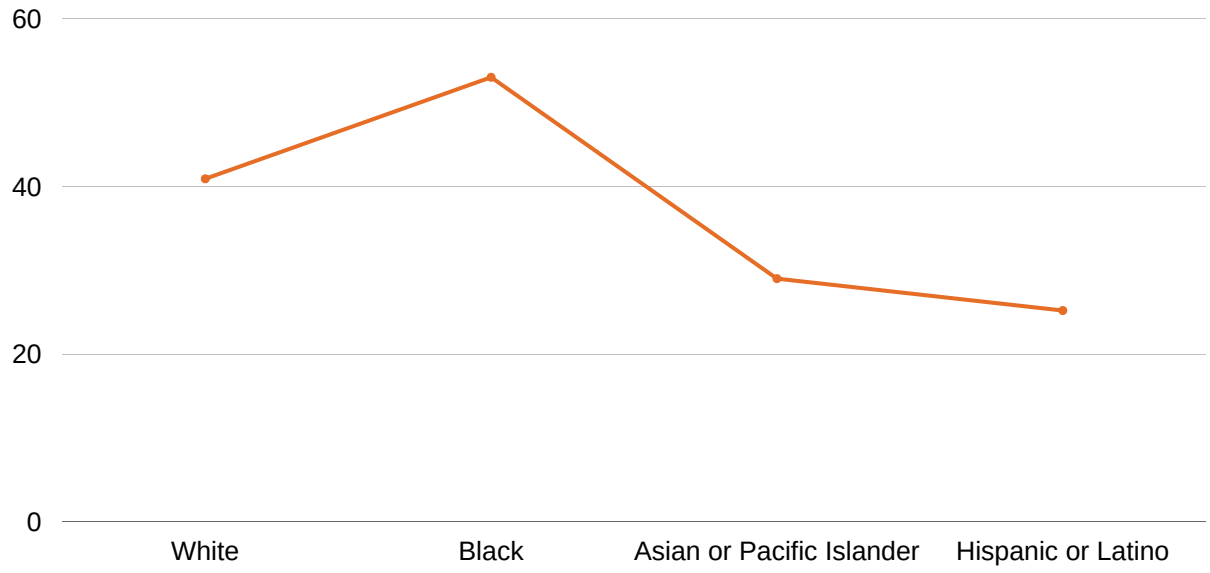
- White: Ischemic heart disease and vascular disease; all COPD except asthma; Alzheimer's disease
- Black or African American: Ischemic heart disease and vascular disease; cerebrovascular disease; diabetes
- Asian: Ischemic heart disease and vascular disease; cerebrovascular disease; trachea, bronchus, and lung cancer
- Hispanic/Latino: Ischemic heart disease and vascular disease; diabetes; essential hypertension and hypertensive renal and heart disease

All other races had numbers too small to report.

Heart disease and stroke

Heart disease is a leading cause of death for both women and men in Muscogee County. In 2020, the age-adjusted death rate was 262.9 deaths for every 100,000 people, which is far worse than both state and national rates, which were 72.4 and 91.5 heart-related deaths per 100,000 people, respectively. Even so, this rate has steadily declined over the last few years.

Between 2016 and 2020, there were 507 deaths due to stroke, representing an age-adjusted death rate of 50 deaths per every 100,000 people. Men are more likely to die from stroke than women, as are black populations. Below is a chart demonstrating the death rate broken down by race, per every 100,000 people, between 2016 and 2020.



There are several potential reasons for this, including a higher poverty rate among black populations, which impacts all areas of life, including access to primary health care and healthy foods. Hypertension and other related chronic conditions also tend to be higher among black populations, as do obesity and diabetes, all of which tend to occur at a younger age than they do for their white counterparts. Finally, neighborhoods matter. In Muscogee County, black populations tend to live in communities with lower walkability rates and more limited access to healthy foods.

Hospitalizations

The hospitalization rate for heart disease and stroke among Medicare recipients have steadily decreased over the last five years. The cardiovascular disease hospitalization rate in 2018 was 8.9 hospitalizations per every 1,000 Medicare beneficiaries, which is better than state and national rates of 12.2 and 11.8, respectively. The hospitalization rate for stroke, though, is above state and national rates, with 9.7 hospitalizations per every 1,000 Medicare beneficiaries, as compared to the state rate of 9.3 and the national rate of 8.4.

Cancer

Although heart disease leads in county deaths, cancer remains a critical issue within the community. The cancer incidence rate for Muscogee County each year, on average between 2014 and 2018, was 490.4 per every 100,000 people, which equates to a diagnosis rate of an average 1,001 new cases each year. Below is a chart showing cancer diagnoses, by site, between 2014 and 2018, the last year for which this data is available.

Cancer Site	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Population)
1 - Breast	148	133
2 - Lung and bronchus	132	64.8
3 - Prostate	125	130.5
4 - Colon and rectum	97	48.2
5 - Melanoma of the skin	40	20.4

When comparing to state and national average, though, Muscogee County does fare better in terms of overall diagnosis. This means one of two things: there are either fewer incidence rates of cancer within the community or there are fewer screenings for all members of the community, therefore resulting in fewer diagnoses.

When broken down by cancer site, though, the breast cancer incidence rate of 133 is higher than state and national rates, which are 128.4 and 126.8 diagnoses per every 100,000 people, on average each year. Other diagnosed cancer sites are below state and national averages.

Poverty is directly related to increased incidence rates of cancer, as those with lower levels of education and lower levels of income experience higher rates of cancer diagnoses. They are also more likely to die from certain cancers – particularly lung cancer and colorectal cancer. For survivors, income and socioeconomic status are significant predictors of quality of life after cancer. Increased income allows patients to maintain a level of comfort that people with low SES might not be able to afford, meaning that even if a low-income patient survives cancer, their quality of life after will be worse than someone more well off.

Hospitalizations and ER visits

Emergency department visits

In FY21, Piedmont Columbus treated patients through approximately 103,347 emergency room visits, an increase from the year before, when the hospitals treated patients through about 82,400 visits. This is likely in part due to the impact of COVID-19 and a wariness among patients to visit a hospital.

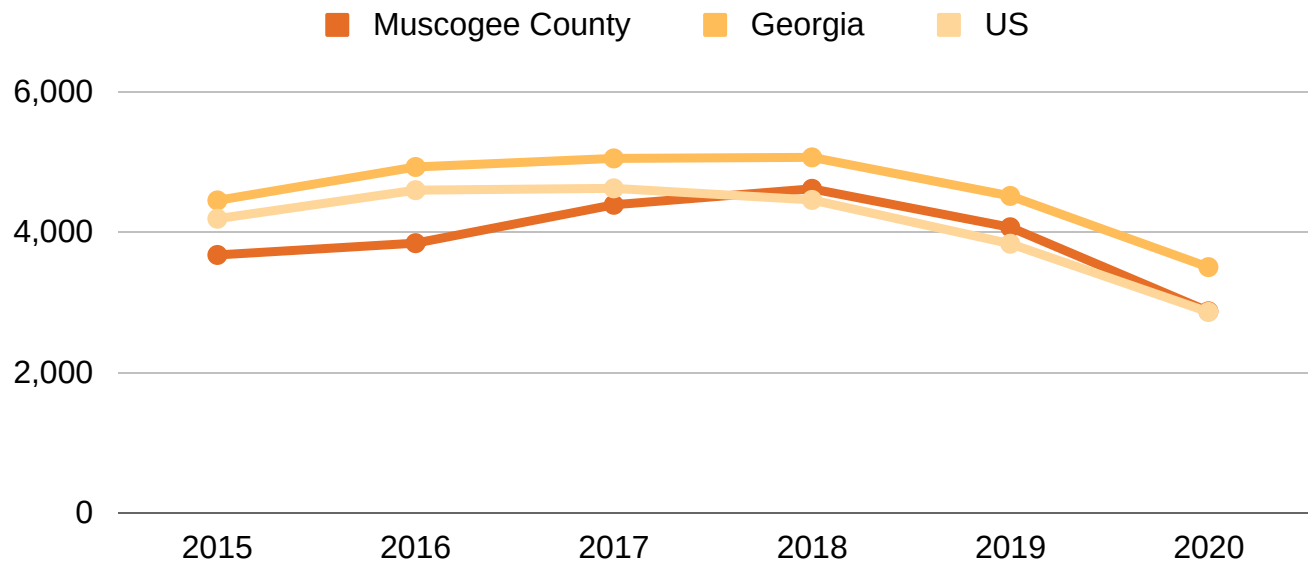
Inpatient stays

In 2020, there were 34,252 Medicare beneficiaries in the county. Approximately 2,711 total beneficiaries, or 14.3 percent, had a hospital inpatient stay, resulting in a rate of stay of 218 visits per every 1,000 beneficiaries. The rate of inpatient stays in the county was lower than the state rate of 230.0 during the same time.

Preventable hospitalizations among Medicare beneficiaries

Preventable hospitalizations include hospital admissions for one or more of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, bacterial pneumonia, or urinary tract infections. Rates are presented per 100,000 beneficiaries. In 2020, there were 34,252 Medicare beneficiaries in the county, and the preventable hospitalization rate was 2,874, which is better than the state rate of 3,503 during the same time. As with other health indicators, African Americans were twice as likely to experience preventable hospitalizations than other races in 2020.

The below chart demonstrates the five-year trend for preventable hospitalizations over the last five years.



Chronic conditions

A chronic condition is a health condition or disease that is persistent or otherwise long-lasting in its effects or a disease that comes with time. As with most health indicators, low-income households are most at risk for developing chronic diseases and for premature deaths. Such households are more vulnerable for several reasons, including their inability to cover medical expenses and diminished access to health care facilities.

Diabetes

In 2019, 17,911 of adults aged 20 and older had diabetes, equaling 12.1 percent of the county's population, which is higher than the state rate of 9.8 percent. Diabetes is a prevalent problem in the US, often indicating an unhealthy lifestyle, and puts individuals at risk for further health issues. This rate has remained somewhat steady over the years. For example, ten years earlier, in 2009, the diabetes diagnosis rate was 11.2 percent.

Kidney disease

Chronic kidney disease, also called chronic kidney failure, involves a gradual loss of kidney function. Your kidneys filter wastes and excess fluids from your blood, which are then removed in your urine. Advanced chronic kidney disease can cause dangerous levels of fluid, electrolytes and wastes to build up in your body. In 2019, 3.6 percent of the county's population had a diagnosis of kidney disease, a rate worse than the state and national percentages of 3.22 percent and 3.1 percent, respectively.

High cholesterol

In 2019, 31 percent of adults 18 and older of the total population reported having high cholesterol, which is on par with state and national rates. Too much cholesterol puts you at risk for heart disease and stroke, two of the main causes of death within the county.

High blood pressure

In 2019, 39.1 percent of adults 18 and older had a diagnosis of high blood pressure. This is higher than the state and national rates of 35.5 percent and 32.6 percent, respectively. High blood pressure can damage your arteries by making them less elastic, which decreases the flow of blood and oxygen to your heart and leads to heart disease.

Multiple chronic conditions among Medicare populations

This indicator reports the number and percentage of the Medicare fee-for-service population with multiple (more than one) chronic conditions. Data are based upon Medicare administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Within the county, there were 14,014 beneficiaries with multiple chronic conditions based on administrative claims data in the latest report year, representing 75.3 percent of the total Medicare fee-for-service beneficiaries, which is higher than state and national rates. Twenty-three percent of these beneficiaries have six or more chronic conditions.

Infectious diseases

Infectious diseases are an issue in Muscogee County, as with most communities. Most infectious diseases have only minor complications. But some infections — such as pneumonia, AIDS, and meningitis — can become life-threatening. A few types of infections have been linked to a long-term increased risk of cancer. For example, human papillomavirus is linked to cervical cancer.

HIV/AIDS

HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). While there is no cure for HIV/AIDS, if treated, most can live a relatively healthy life. In Muscogee County, in 2018, there were 676.5 confirmed cases of HIV/AIDS for every 100,000 people. This is higher than the state rate of 624.90 confirmed cases per every 100,000 people.

Chlamydia

Chlamydia is a common STD that can cause infection among both men and women. It can cause permanent damage to a woman's reproductive system. This can make it difficult or impossible to get pregnant later. Chlamydia can also cause a potentially fatal ectopic pregnancy (pregnancy that occurs outside the womb). In Muscogee County, in 2018, there were 1,722 confirmed cases of chlamydia, resulting in a rate of about 887.36 infections per every 100,000 people. This is much higher than the state rate of 632.2 confirmed cases per every 100,000 people.

Gonorrhea

Gonorrhea is an STD that can cause infection in the genitals, rectum, and throat. It is very common, especially among young people ages 15-24 years. Untreated gonorrhea can cause serious and permanent health problems in both women and men. In women, gonorrhea can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). In Muscogee County, in 2018, there were 291.7 confirmed cases of gonorrhea for every 100,000 people. This is much higher than the state rate of 200.10 confirmed cases per every 100,000 people.

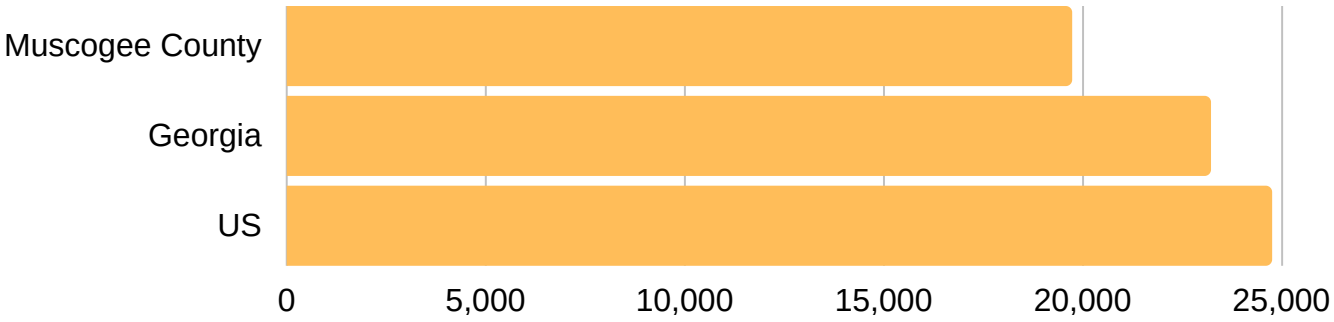
Influenza and pneumonia

Within the county, between 2016 and 2018, there were a total 183 deaths due to influenza and pneumonia, representing an age-adjusted death rate of 18 per every 100,000 people, which is higher than the state and national rates of 13.6 and 13.6, respectively. In Muscogee County, men are nearly twice as likely to die from influenza or pneumonia than women, and black men are especially susceptible.

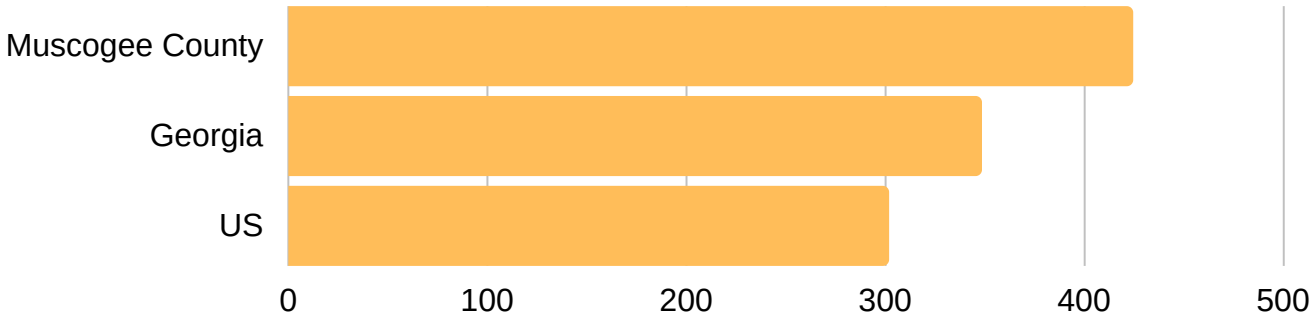
COVID-19

Without a doubt, COVID-19 is easily one of the most impactful health events to happen within both the community and the world.

In Muscogee County, there have been 38,253 total confirmed cases of COVID-19. The rate of confirmed cases is 19,701.79 per 100,000 population, which is less than the state average of 23,188.84. Data are current as of May 12, 2022.



In the county, there have been 823 total deaths among patients with confirmed cases of COVID-19. The mortality rate in the report area is 423.88 per 100,000 population, which is greater than the state average of 347.92. Data are current as of May 12, 2022.



Approximately 54 percent of the county was fully vaccinated as of May 12, 2022. An estimated 15 percent of the county's adults are hesitant about receiving the vaccine, and the county had a COVID-19 vaccine coverage index (CVAC) of 0.70. This score represents how challenging vaccine rollout may be in some communities compared to others, with values ranging from 0 (least challenging) to 1 (most challenging). CVAC ranks states and counties on barriers to coverage through 28 indicators across five themes:

- Historic undervaccination
- Sociodemographic barriers
- Resource-constrained health system
- Health care accessibility barriers
- Irregular care-seeking behaviors.

The CVAC can help contextualize progress to widespread COVID-19 vaccine coverage, identifying underlying community-level factors that could be driving low vaccine rates.

Youth and children

There were approximately 48,489 children and youth under the age of 18 in Muscogee County in 2020, representing 25 percent of the county's population. The ZIP code with the highest number of children was 31903, according to the Census Bureau. Approximately 3.4 percent of students were homeless in 2020 -- about 1,086 kids.

Of all children, 53 percent lived at or below 200 percent of the Federal Poverty Level (FPL), which was $55,500 gross household income for a family of four in 2022. The highest percentage of poor children was in the 31903 ZIP code, where 87 percent of children lived in poverty in 2020. Overall, in Muscogee, black children were three times more likely to live in poverty than white children.

Additionally, 78 percent of county children qualified for free or reduced-price lunch in the 2019-2020 school year, a figure far above state and national rates of 60 percent and 50 percent, respectively. Free or reduced-price lunches are served to qualifying students in families with income under 185 percent (reduced price) or under 130 percent (free lunch) of the US FPL as part of the federal National School Lunch Program (NSLP).

Access - Head Start and preschool enrollment

Head Start is a program designed to help children from birth to age five who come from families at or below poverty level. This helps these children become ready for kindergarten while also providing the needed requirements to thrive, including health care and food support. In 2019, Muscogee County had 12 Head Start programs, with a rate of 8.49 programs per 10,000 children under 5 years old in 2020. This rate is between state and national rates of 6.83 and 10.53, respectively. Approximately 44 percent of all children aged 3 to 4 were enrolled in preschool in 2020, a rate lower than state and national figures of 50.26 percent and 48.32 percent, respectively.

Single-parent households

In 2019, 30 percent of children lived in households where only one parent is present, and the overwhelming majority of those were led by a single woman. Statistically, compared to married parents, single parents tend to be poorer (because there is not a second earner in the family) and less well-educated (in part because early childbearing interrupts or discourages education, and single parent households tend to be led by younger parents).

English and math 4th grade proficiency

Of 9,883 students tested, 71.6 percent of 4th graders tested below the "proficient" level in the English Language Arts portion of state standardized tests in the 2018-2019 school year, which is worse than the state rate of 60.8 percent and the national rate of 53.8 percent. Reading proficiency is key; up until 4th grade, students are learning to read. After that, they are reading to learn. For the math portion of the test, 69.6 percent of 4th graders tested below the "proficient" level, according to the latest data. Students in the county tested worse than the statewide rate of 46.1 percent.

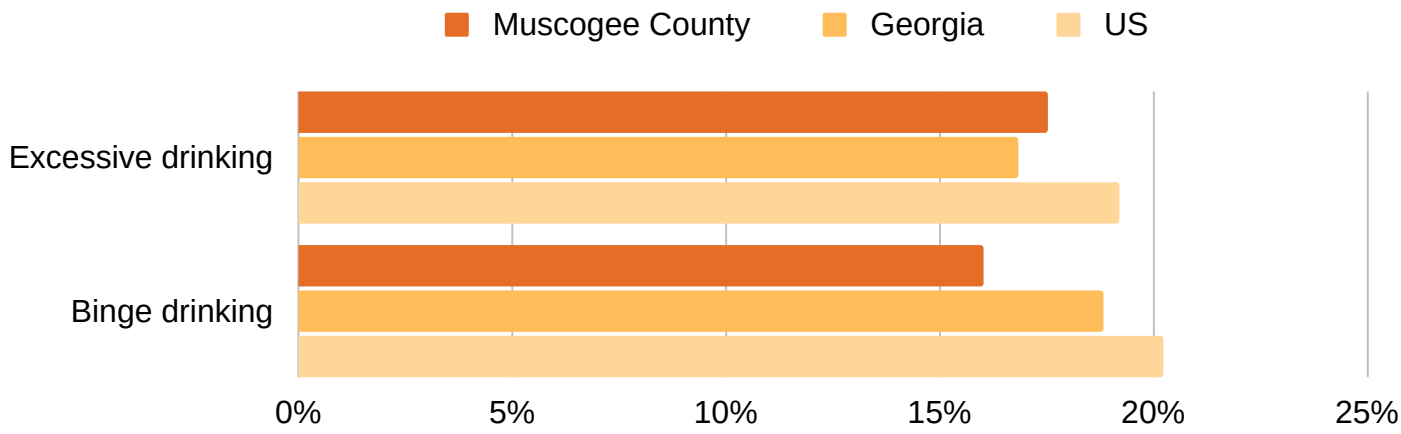
Risky behaviors

Behaviors are directly related to health outcomes, leading to increased risks of cardiovascular disease, cancer, liver diseases, hepatitis, and sexually transmitted diseases.

Alcohol use

Excessive alcohol use can lead to a myriad of health issues, including liver disease, depression, injuries, violence, and cancer. In Muscogee County, in 2018, 17.5 percent of adults self-reported excessive drinking in the last 30 days, which was less than the state rate of 16.81 percent. Data for this indicator were based on survey responses to the 2018 Behavioral Risk Factor Surveillance System (BRFSS) annual survey, the last year for which data is available. Based on preliminary national data, these rates likely increased during 2020, in which alcohol use increased during COVID-19 quarantine periods.

The below chart shows self-reported excessive and binge drinking rates in 2018. Binge drinking is defined as adults aged 18 and older who report having five or more drinks (men) or four or more drinks (women) on an occasion in the past 30 days. Excessive drinking is when binge drinking episodes occurred multiple times within the last 30 days.



Tobacco use

Within the county in 2019, 20.6 percent adults reported being a current smoker, which is higher than both state and national rates. Smoking is directly related to a myriad of health issues, including cancer.

Insufficient sleep

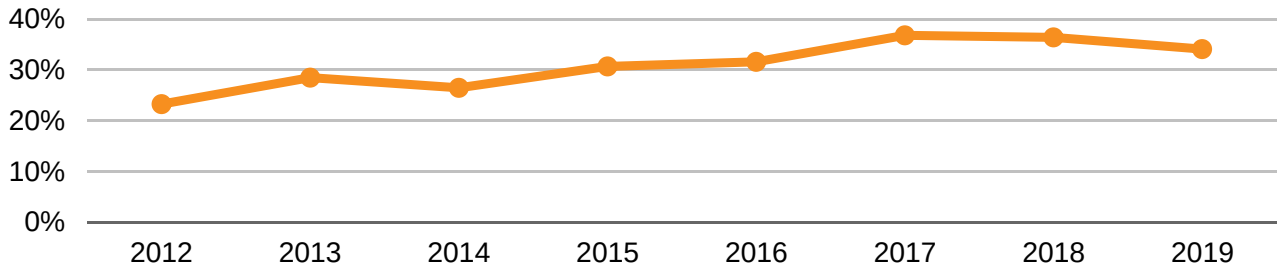
Approximately 44 percent of county residents reported regularly sleeping less than seven hours most nights, on average, in 2019. Sleep is an essential function that allows your body and mind to recharge, leaving you refreshed and alert when you wake up. Healthy sleep also helps the body remain healthy, fight diseases, and maintain good mental health. Without enough sleep, the brain cannot function properly.

Health factors

Certain health factors have a strong impact on overall health, including obesity and physical inactivity.

Obesity

In 2019, 34.1 percent of county residents aged 20 and older were obese, meaning they had a body mass index of 30 percent or more. Obesity rates have steadily risen in Muscogee County, where ten years ago, 24.5 percent of the population were considered obese. Obesity is directly linked to several health issues, including diabetes and heart disease.



In Muscogee County, as throughout the state and nation, the poorer you are, the more likely you are to be obese. Additionally, Hispanic/Latino and black populations are much more likely to be obese than their white counterparts.

Physical inactivity

Within the county in 2019, 27.6 percent of adults aged 20 and older self-report no active leisure time, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Even so, Muscogee does have ample opportunity for its community members to be outside or to exercise. For example, 45 percent of county residents live within a half-mile of a park, a figure much higher than state and national rates of 17.42 percent and 38.01 percent, respectively. Additionally, there were 23 recreation and fitness places within the county in 2019, resulting in a rate of 12.11 facilities per every 100,000 people, which is better than state and national rates.

Soda expenditures

This indicator reports soft drink consumption by census tract by estimating expenditures for carbonated beverages, as a percentage of total food-at-home expenditures. Soda is directly related to obesity and poor dental health. In Muscogee County, households spent an average 4.64 percent of their food budget on sodas in 2019, which is worse than average state and national expenditures, which were 4.18 percent and 4.02 percent, respectively. Some ZIP codes spent more on soda, such as 31901, which had a rate much higher than other ZIP codes at 5.03 percent.

Mental health

Mental health is a critical driver of overall health, as being in a good mental state can keep you healthy and help prevent serious health conditions. A study found that positive psychological well-being can reduce the risks of heart attacks and strokes. On the other hand, poor mental health can lead to poor physical health or harmful behaviors.

Deaths of Despair

Deaths of despair -- suicide, drug and alcohol poisoning, and alcoholic liver disease—are at their highest rate in recorded history, according to the Centers for Disease Control and Prevention (CDC). In Muscogee County, the average rate of death due despair was 37.4 people every 100,000 people in 2020, a number that has steadily risen since 2010, when it was 29.5 people per every 100,000 people. This is most common among white adults with four-year degrees.

Specifically, suicide rates in the county continue to climb, and are among leading causes of death for middle-age white men.

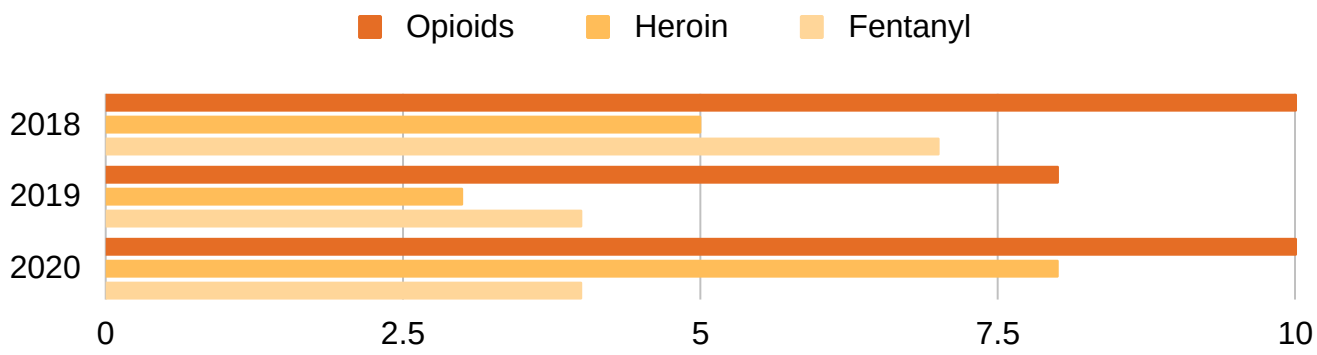
Poor mental health days

In 2018, the last year for which data is available, county members reported an average 4.8 poor mental health days over the last 30 days, which is worse than the state average of 4.2 poor mental health days. This is a statistic that likely sharply increased in 2020 and 2021, when the severe mental impact of COVID-19 was felt throughout the community. Additionally, in 2018, 17 percent of adults reported being in frequent mental distress, which is 14 or more poor mental health days within a 30-day period. This statistic also likely increased during 2020 and 2021.

Opioid and substance use

Providers in Muscogee County prescribed 102.428 prescriptions per every 100 people in 2020, the last year for which data is available. This is higher than most Georgia counties, though it does represent a decline from 2019, when the rate was 107.5 prescriptions.

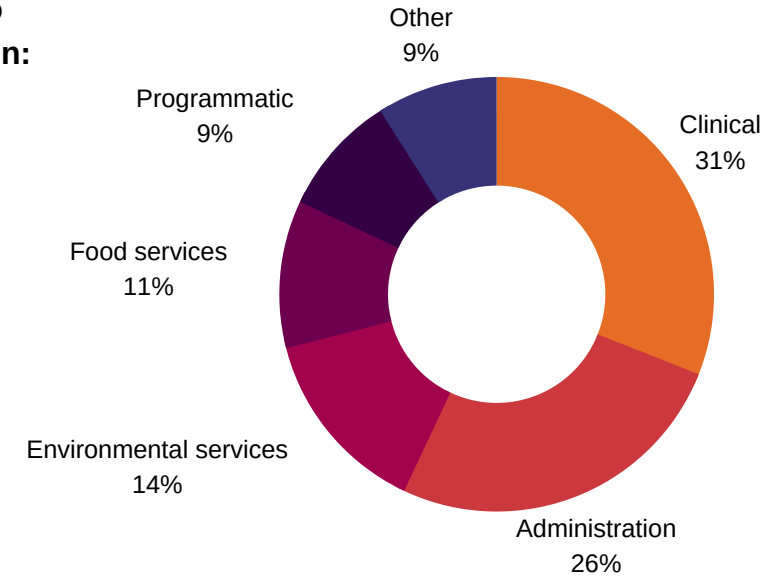
Deaths from opioids, heroin, and fentanyl are shown below.



Employee survey

In March 2022, we launched an online employee survey to solicit community input on key health issues. A total 1,053 system employees responded, including 94 Piedmont Columbus employees. Below are the results of that survey. You can find all survey questions in the appendix.

The employees who responded worked in:



They worked at:

- Piedmont Athens: 13.12%
- Piedmont Atlanta: 9%
- Piedmont Cartersville: 2.98%
- Piedmont Columbus: 8.93%
- Piedmont Eastside: 4.31%
- Piedmont Fayette: 7.69%
- Piedmont Healthcare: 4.29%
- Piedmont Henry: 5%
- Piedmont Macon: 4.4%
- Piedmont Mountainside: 5.83%
- Piedmont Newnan: 7.38%
- Piedmont Newton: 3.33%
- Piedmont Physicians: 4.4%
- Piedmont Rockdale: 4.64%
- Piedmont Walton: 3.45%
- Multiple locations: 5.98%
- Other: 5.36%

Q: What do you think are the five most important factors for a healthy community? The top five answers were:

1. Access to health care
2. Access to healthy foods
3. Economic opportunity for everyone
4. Healthy behaviors and lifestyle
5. Good place to raise children

Q: What do you think are the five most important health problems in your community? The top five answers were:

1. Aging problems
2. Poverty
3. Mental health problems
4. COVID-19
5. Heart disease and stroke

Employee survey, cont'd

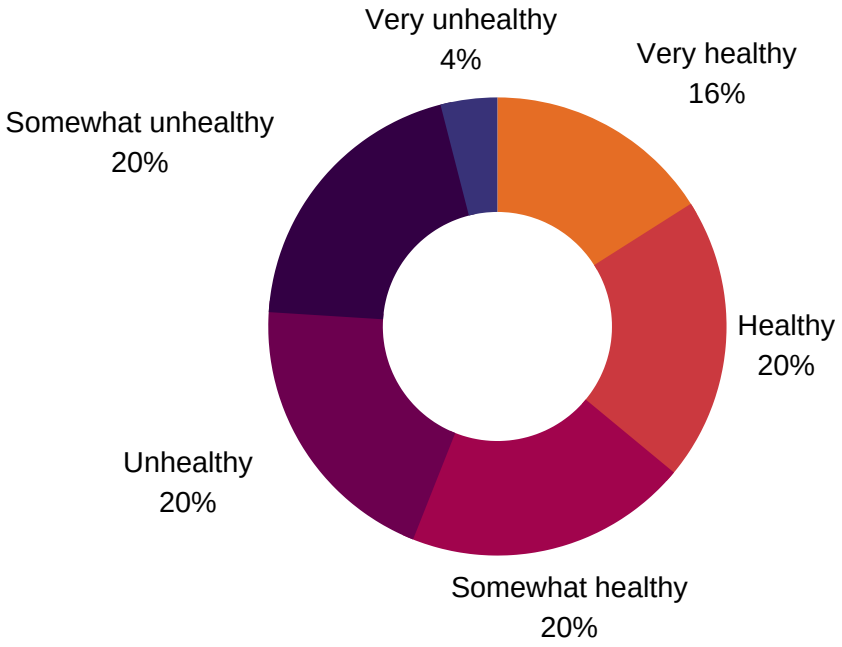
Q: What do you think are the five riskiest behaviors in your community? The top five answers were:

1. Not getting vaccinations to prevent disease, including COVID-19
2. Poor diet
3. Alcohol abuse
4. Tobacco use
5. Lack of exercise

Q: What issues do you think may prevent community members from accessing care? The top five answers were:

1. Unable to pay co-pays and deductibles
2. No insurance
3. Lack of access to transportation
4. Fear (e.g., not ready to face or discuss health problem)
5. Don't understand the need to see a doctor

Q: How would you rate the overall health of your community?



Employee survey, cont'd

Q: What do you think are the top five most important actions in improving the health of community members living within Piedmont communities? The top five answers were:

1. Access to low-cost mental health services
2. Financial assistance to those who qualify
3. Access to dental care services
4. Community-based programs for health
5. Expanded access to specialty physicians

Q: What is your vision for a healthy community? Some answers were:

A healthy community includes access to affordable healthcare, healthy food, safe housing, quality education, and stable jobs.

A place where people are healthy enough to move about and enjoy life.

One that is educated, with access to health services both financially and geographically.

Families and individuals who care for each other.

A community who has access to services, I have been an ER nurse for nearly a decade and the mental health population continues to grow. There are not many resources for these patients; Advantage is great but it would be wonderful to have a local Piedmont facility to help with these patients.

Affordable housing that is safe.

More community care clinics where underserved communities can have access to "affordable" healthcare.

Using healthcare for prevention instead of trying to treat most problems after onset.

Free little food pantries on different blocks in towns, with healthy food choices.

A healthy community to me would be a place where social and financial factors do not stop a person for asking for help when in need. If everyone was able to get healthcare assistance, the community would be a healthy place as a whole.

Employee survey, cont'd

Q: What is the single most pressing issue that you believe our patients face? Most answers centered around cost, with some health factors. Among the answers:

Barriers to accessing health care including lack of health insurance and poor socioeconomic status.

Medical bills.

Affordable, really affordable, health care for everyone.

Financial insecurity (including but not limited to people living at or below poverty lines).

Mental health.

Drug use, obesity, and heart failure are things that could probably be helped if they had the access to the right facilities.

Uninsured and underinsured people are so underserved. There are so many people who don't access care until they are falling apart and end up hospitalized simply because they couldn't afford to see a doctor and pay out of pocket rates.

Low healthcare literacy.

Q: What are one or two things we can do better to serve our patients/our community? Some answers were:

Include better discharge instructions on how to stay well at home. Also have a health hotline to triage calls before heading to emergency room.

Participate in community clinics that offer reduced cost preventative services (wellness, vaccines, chronic illness management) in challenged communities.

Get more involved in schools, as healthy behaviors start early.

Make non-emergent care more viable for uninsured and underinsured populations.

Help lower income patients with housing and food issues, and provide discharge instructions that are viable for these patients.

Push the Governor to accept federal funding to fully expand Medicaid under the ACA.

Community stakeholders

As a part of our process, we interviewed 37 statewide key stakeholders and policymakers that represent public health, low-income populations, minorities, chronic conditions, older adults, and lawmakers. These interviews were conducted for people representing the entire region, including Muscogee County. Answers carried certain themes. Below is a summary of comments.

Access to Care
Almost all of the stakeholders interviewed identified having more access to care as a continuing and growing need in all areas including primary and specialty healthcare, mental health, and dental services. It was stated that current services are not able to keep up with the need. There is an ongoing concern over chronic health concerns such as diabetes, hypertension, obesity, and respiratory disease. These conditions were often paired with a concern around the high number of residents living in food deserts, without access to grocery stores, further perpetuating these health concerns.

There is an ongoing concern over emergency rooms being used for all health issues, generally with patients waiting to receive care when they are in a crisis situation, rather than accessing preventive care. Some interviewees reported a concern over how cumbersome it is to navigate the health system when specialist care or follow up appointments are needed, as well as transportation being a large barrier in getting to the appropriate appointments, which often leads to patients opting not to seek care until there is a true emergency.

Multiple interviewees referenced an increasing need for affordable and culturally sensitive mental health resources for all ages. Mental health needs are reported to be rising since the COVID-19 pandemic, but currently local resources are unable to keep up with the demand for services.

In addition to the need for services, several interviewees stated they are seeing a distrust of the healthcare system by those receiving services, therefore agencies are having to work diligently to “build trust that outlasts your patient’s mistrust” in order to improve the health outcomes that are causing the problem at hand.

Interviewees expressed a need for specialists in the Columbus area in order to meet the needs including Neurology, Psychology, OBGYN, Oncology, and Pediatric specialists. In addition, there is a concern over the difficulty in recruiting and retaining specialists to the area. Currently, patients are frequently traveling outside of Columbus to receive treatment, particularly for pediatric care and cancer care.

Crime and Violence
All stakeholders expressed a concern over the uptick in crime rates in the area. Currently, the Columbus area has a higher murder per capita rate than other comparable cities, stakeholders stated. Local agencies are seeing a correlation between the growing mental health concerns and the crime taking place. Victims are all ages, including the youngest children. Some stakeholders suggested implementing a stronger police presence to combat this issue.

Community stakeholders, cont'd.

Social Determinants of Health

Poverty rates in Columbus are higher than other comparable cities, something most stakeholders noted.

The limited amount of affordable housing was discussed by most interviewees, further citing that those who can afford their rent are often unable to cover the cost of their utilities. There is evidence to support that lacking seasonally appropriate heating and cooling leads to poor health outcomes. In addition, there are high rates of homelessness in Columbus, however, there are a number of active initiatives in place to combat this. In addition, interviewers stated an issue with landlords holding property simply for income but not upholding suitable living conditions to maintain these properties.

Many stakeholders with housing are housed in food deserts, lacking access to grocery stores to fulfill these nutritional deficits. Children with nutritional deficits are unable to develop appropriately and have poor health outcomes and performance in school. Furthermore, those living in proximity to a grocery store often still are unable to afford their nutritional needs.

Jobs in the area are available but few offer a livable wage for employees, forcing many people to allocate a high percentage of their income going towards cost of living to cover basic needs. Many stakeholders recognized these concerns as a multi-generational issue but noted that the community is lacking methods to offer those experiencing poverty a way to work out of it. Overall funding was cited as a large issue to addressing these concerns.

Community survey

In March 2022, we launched an online survey asking community members to weigh in on the health issues within the community. Fifty-three Muscogee residents responded. Overall, responses fell in line with stakeholder interviews, with limited economic opportunity, poverty and income, and violence as top-cited concerns. Most respondents felt the community was either "somewhat healthy" or "healthy." Many rated issues of health education, health literacy, and risky behaviors as barriers to good health, with problems in accessing affordable housing and healthy foods listed as key barriers.

Q: What issues do you think may prevent community members from accessing care? The top five answers were:

1. Unable to pay co-pays and deductibles
2. No insurance
3. Lack of access to transportation
4. Fear (e.g., not ready to face or discuss health problem)
5. Don't understand the need to see a doctor

Q: What do you think are the five most important health problems in your community? The top five answers were:

1. Mental health problems
2. Violence
3. Dental health problems
4. Poverty
5. Heart disease and stroke

Methodology

The Piedmont Columbus CHNA was led by the Piedmont Healthcare community benefits team and consulting organization Public Goods Group, with significant input and direction from Piedmont Columbus's leadership and Community Outreach Manager, as well as Piedmont Healthcare's Department of External Affairs.

The CHNA started with an analysis of available public health data. We looked at our Piedmont service region, which spans the northeast section of the state. We paid particular attention to the home counties of our hospitals, which is reflected in this CHNA. We focused on the home counties in the individual CHNAs due to the local impact of our tax-exempt status.

Once our community was established, we interviewed key stakeholders who have a particular expertise or knowledge of our communities. Specifically, we interviewed representatives of local and regional public health entities, minority populations, faith-based communities, local business owners, the philanthropic community, mental health agencies, elected officials and individuals representing our most vulnerable patients.

An internal survey was also conducted throughout the healthcare system for both clinical and non-clinical employees. Information was gathered on knowledge and understanding of community benefit and current programs, as well as suggestions for how we can better serve our patients and communities. Approximately 1,053 employees spanning the system responded. Additionally, we conducted a community-based survey that was widely advertised to the community.

Once both qualitative and quantitative data were gathered, we authored the preliminary report. Several key community health needs emerged during the assessment process. The chosen priorities were recommended by the community benefit department with sign-off from hospital and board leadership. The following criteria were used to establish the priorities:

- The number of persons affected;
- The seriousness of the issue;
- Whether the health need specifically affected persons living in poverty or reflected health disparities; and,
- Availability of community and/or hospital resources to address the need.

While the priorities reflect clinical access and certain conditions, all priorities are viewed through the lens of health disparities, with particular attention paid to improving outcomes for those most vulnerable due to income and race. The priorities we chose reflected a collective agreement on what hospital leadership, staff and the community felt was most important and within our ability to positively impact the issue. Once priorities were chosen, we then authored the CHNA and presented our findings and recommendations to the hospital's board of directors for their input and approval.

Approval

Hospital leadership then reviewed the CHNA and provided input. We incorporated their input into the final CHNA report, which is this report. We then presented our findings and recommended priorities to the hospital board of directors.

Once we established our priorities, we presented the CHNA to the board of directors for approval on June 02, 2022.

Appendices

Appendix one: Stakeholders interviewed

In February and March 2022, we interviewed 35 stakeholders to gain their insight to the community and health challenges the community faces. Specifically, we talked to:

- Dr. Beverly Townsend (District Health Director, District 4 Public Health, PCR Board)
- John Dale Hester (Board Chair, Piedmont Columbus)
- Rebecca Rumer (SVP, Columbus Bank & Trust, PCR Board Member)
- Dr. William Roundtree (Family Medicine Doctor, PCR Board Member)
- Warren Steele, II (PCR Board Member), Dr. Shane Darrah (Cardiologist, PCR Board Member)
- Dr. Susan McWhirter (Pediatrician, PCR Board Member)
- Travis Wade (SVP, Synovus Securities, PCR Board Member)
- Rhea Bentley (Coordinator, UGA Extension)
- Ben Moser (President/CEO, United Way of the Chattahoochee Valley)
- Melissa Thomas (PCR Foundation Board), Skip Henderson (Columbus Mayor)
- Pat Frey (VP, Home for Good)
- Wanda Amos (PCR Foundation Board)
- Matthew Barkley (PCR Foundation Board)
- Norm Bennett (PCR Foundation Board)
- David Johnson (PCR Foundation Board)
- Belva Dorsey (CEO, Enrichment Services Program)
- Dr. Rebecca Reamy (Piedmont Physician and Director of Pediatric ER)
- Rem Houser (PCR Foundation Board)
- Justin Etheridge (PCR Foundation Board)
- Neil Richardson (Executive Director, Safehouse Ministries)
- Billy Holbrook (Chief Development Officer, MercyMed of Columbus)
- Guy Sims (PCR Foundation Board)
- Alex Stepanouk (PCR Foundation Board)
- Dr. Kendall Handy (Piedmont Physician, Chief of OBGYN, PCR Foundation Board)
- Philip Badcock (PCR Foundation Board)
- Sara Lang (CEO, Valley Healthcare)
- Vann Ellison (CEO and President, Valley Rescue Mission)
- Hamilton Hilsman (PCR Foundation Board)
- Mallory Harris (PCR Foundation Board)
- Mandy Flynn (Aflac Community Partner)
- Rob Ward (PCR Foundation Board)
- Phil Shuler (Mayor’s Commission)
- Dr. Gregory Foster (Piedmont Physician, Head of Family Medicine Residency Program)
- Jack Lockwood (DPH West Georgia)
- Asante Hilts (DPH West Georgia)

Appendix two: Sources for data

We utilized numerous data sources throughout the CHNA process. Due to the high volume in this report, we did not individually cite each statistic. That said, we provide a list of all data sources below. Please contact the Piedmont Healthcare community benefit department at communityprograms@piedmont.org for questions on specific data points.

Category	Data Source
Demographics	US Census Bureau, Decennial Census, 2020.
Demographics	US Census Bureau, American Community Survey, 2015-19.
Demographics	University of Wisconsin Net Migration Patterns for US Counties, 2010-20.
Income and Economics	US Census Bureau, American Community Survey, 2015-19.
Income and Economics	US Census Bureau, Business Dynamics Statistics, 2018-19.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2019.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2019.
Income and Economics	US Department of Labor, Bureau of Labor Statistics, Jan. 2022.
Income and Economics	IRS - Statistics of Income, 2018.
Income and Economics	US Census Bureau, American Community Survey, 2015-19.

Appendix two: Sources for data, cont'd

Category	Data Source
Income and Economics	US Census Bureau, American Community Survey, University of Missouri, Center for Applied Research and Engagement Systems, 2007-11.
Income and Economics	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2017.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2016.
Income and Economics	National Center for Education Statistics, NCES - Common Core of Data, 2020-21.
Income and Economics	US Census Bureau, Small Area Income and Poverty Estimates, 2020.
Education	US Department of Health & Human Services, HRSA - Administration for Children and Families, 2019.
Education	US Census Bureau, American Community Survey, 2015-19.
Education	National Center for Education Statistics, NCES - Common Core of Data, 2020-21.
Education	US Department of Education, EDFacts, 2018-19.
Education	US Census Bureau, American Community Survey, 2014-18.
Education	U.S. Department of Education, US Department of Education - Civil Rights Data Collection, 2017-18.
Housing and Families	US Census Bureau, American Community Survey, 2015-19.

Appendix two: Sources for data, cont'd

Category	Data Source
Housing and Families	US Department of Housing and Urban Development, 2019.
Housing and Families	US Department of Housing and Urban Development, US Census Bureau, American Community Survey, 2019.
Housing and Families	Eviction Lab, 2016.
Housing and Families	US Census Bureau, American Community Survey, 2011-15.
Housing and Families	Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act, 2014.
Housing and Families	US Census Bureau, Decennial Census, US Census Bureau, American Community Survey, 2015-19.
Housing and Families	US Department of Housing and Urban Development, 2014.
Housing and Families	US Census Bureau, Census Population Estimates, 2019.
Housing and Families	US Department of Housing and Urban Development, 2020-Q4.
Other Social & Economic Factors	University of Wisconsin-Madison School of Medicine and Public Health, Neighborhood Atlas, 2021.
Other Social & Economic Factors	Feeding America, 2017.
Other Social & Economic Factors	US Department of Education, EDFacts, 2019-20.

Appendix two: Sources for data, cont'd

Category	Data Source
Other Social & Economic Factors	US Census Bureau, American Community Survey, 2015-19.
Other Social & Economic Factors	Opportunity Insights, 2018.
Other Social & Economic Factors	US Census Bureau, American Community Survey, 2015-2019.
Other Social & Economic Factors	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2020.
Other Social & Economic Factors	US Census Bureau, Small Area Health Insurance Estimates, 2019.
Other Social & Economic Factors	Opportunity Nation, 2018.
Other Social & Economic Factors	US Census Bureau, Decennial Census, University of Missouri, Center for Applied Research and Engagement Systems, 2020.
Other Social & Economic Factors	US Census Bureau, Small Area Income and Poverty Estimates, 2019.
Other Social & Economic Factors	Pennsylvania State University, College of Agricultural Sciences, Northeast Regional Center for Rural Development, 2014.
Other Social & Economic Factors	Centers for Disease Control and Prevention and the National Center for Health Statistics, CDC - GRASP, 2018.
Other Social & Economic Factors	Debt in America, The Urban Institute, 2021.

Appendix two: Sources for data, cont'd

Category	Data Source
Other Social & Economic Factors	Centers for Disease Control and Prevention, National Vital Statistics System, 2013-19.
Other Social & Economic Factors	Federal Bureau of Investigation, FBI Uniform Crime Reports, 2014; 2016.
Other Social & Economic Factors	Federal Bureau of Investigation, FBI Uniform Crime Reports, 2014; 2016.
Other Social & Economic Factors	Townhall.com Election Results, 2016.
Physical Environment	US Environmental Protection Agency, 2018-19.
Physical Environment	Centers for Disease Control and Prevention, CDC - National Environmental Public Health Tracking Network, 2015.
Physical Environment	Centers for Disease Control and Prevention, CDC - National Environmental Public Health Tracking Network, 2016.
Physical Environment	EPA - National Air Toxics Assessment, 2014.
Physical Environment	US Environmental Protection Agency, 2019.
Physical Environment	US Census Bureau, County Business Patterns, 2019.
Physical Environment	National Broadband Map, Dec. 2020.
Physical Environment	US Census Bureau, American Community Survey, 2015-19.

Appendix two: Sources for data, cont'd

Category	Data Source
Physical Environment	US Department of Health & Human Services, US Food and Drug Administration Compliance Check Inspections of Tobacco Product Retailers, 2018-20.
Physical Environment	Climate Impact Lab, 2018.
Physical Environment	Multi-Resolution Land Characteristics Consortium, National Land Cover Database, 2016.
Physical Environment	Federal Emergency Management Agency, National Flood Hazard Layer, 2019.
Physical Environment	Center for Disease Control and Prevention, CDC National Environmental Public Health Tracking, 2017-19.
Physical Environment	Federal Emergency Management Agency, National Risk Index, 2020.
Physical Environment	US Census Bureau, Decennial Census, ESRI Map Gallery, 2013.
Physical Environment	US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2019.
Physical Environment	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2017.
Physical Environment	Centers for Disease Control and Prevention, CDC - Division of Nutrition, Physical Activity, and Obesity, 2011.
Physical Environment	US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator, 2021.

Appendix two: Sources for data, cont'd

Category	Data Source
Physical Environment	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2012.
Physical Environment	US Fish and Wildlife Service, Environmental Conservation Online System, 2019.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Clinical Care and Prevention	Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, CDC - Atlas of Heart Disease and Stroke, 2016-18.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2020.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2020.
Clinical Care and Prevention	Centers for Disease Control and Prevention, National Vital Statistics System, Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, CDC - FluVaxView, 2019-20.
Clinical Care and Prevention	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2019.

Appendix two: Sources for data, cont'd

Category	Data Source
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2015-18.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2018-19.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2015-16.
Health Behaviors	University of Wisconsin Population Health Institute, County Health Rankings, 2018.
Health Behaviors	Child and Adolescent Health Measurement Initiative, National Survey of Children's Health, 2018.
Health Behaviors	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019.
Health Behaviors	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018.
Health Behaviors	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Health Behaviors	US Census Bureau, American Community Survey, 2015-19.
Health Outcomes	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2018.
Health Outcomes	State Cancer Profiles, 2014-18.

Appendix two: Sources for data, cont'd

Category	Data Source
Health Outcomes	State Cancer Profiles, 2014-18.
Health Outcomes	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2019.
Health Outcomes	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019.
Health Outcomes	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2018.
Health Outcomes	Centers for Medicare and Medicaid Services, 2018.
Health Outcomes	Centers for Disease Control and Prevention, National Vital Statistics System, 2016-20.
Health Outcomes	University of Wisconsin Population Health Institute, County Health Rankings, 2013-19.
Health Outcomes	Institute for Health Metrics and Evaluation, 2017.
Health Outcomes	Centers for Disease Control and Prevention and the National Center for Health Statistics, U.S. Small-Area Life Expectancy Estimates Project, 2010-15.
Health Outcomes	US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2015-19.
Health Outcomes	University of Wisconsin Population Health Institute, County Health Rankings, 2017-19.

Appendix two: Sources for data, cont'd

Category	Data Source
Health Outcomes	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Health Outcomes	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2019.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), May 2021.
Healthcare Workforce	US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Feb. 2022.
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File, 2015.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), 2021.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), 2020.
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File, 2017.
Healthcare Workforce	US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File, Sept. 2020.
Healthcare Workforce	US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File, 2019.

Appendix two: Sources for data, cont'd

Category	Data Source
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Health Professional Shortage Areas Database, May 2021.
COVID-19	Johns Hopkins University, 2022.
COVID-19	Google Mobility Reports, Feb. 01, 2022.
COVID-19	Centers for Disease Control and Prevention and the National Center for Health Statistics, CDC - GRASP, 2022.

Appendix three: Employee survey

From March 01 to March 31, 2022, the hospital placed online an employee survey meant to capture employees' thoughts on challenges within our communities and suggestions on how the hospital can improve its community's health. Below is the survey these employees received.

In our commitment as a not-for-profit health system, Piedmont is currently studying the region’s community health needs for its Community Health Needs Assessment. As a member of our community, we invite you to take this 15-minute survey so that your feedback can be heard and included in identifying health priorities which we’ll address over the next three years.

Thank you for your time and input.

1. What type of role do you have?
- Administrative
- Clinical
- Environmental Services
- Food Services
- Programmatic
- Other: Please describe

2. Are you an employee or are you a contract employee?

Appendix three: Employee survey, cont'd.

3. What is your home zip code?

4. How do you define the community you serve in your role?

- From wherever our patients come
- All of Georgia
- The hospital's county
- Other: Please describe

5. In the following list, what do you think are the five most important factors for a healthy community? We consider this to be those factors which most improve the quality of life in a community.

- Access to health care (e.g., family doctor)
- Access to healthy food
- Arts and cultural events
- Civic participation
- Clean environment
- Ethnic and cultural diversity
- Financial assistance for health care at the hospital
- Healthy behaviors and lifestyles
- High retirement rates
- Emergency preparedness
- Good place to raise children
- Low adult death and disease rate
- Low crime/safe neighborhoods
- Low infant deaths
- Low level of child abuse
- Parks and recreation
- Low- and no-cost options for health care within the community
- Quality of care
- Quality of housing or housing availability
- Religious or spiritual values
- Social cohesion
- Strong family life
- Strong school district
- Transportation and walkability
- Other: Please describe

Appendix three: Employee survey, cont'd.

6. In the following list, what do you think are the five most important health problems in our community? Please check five.

- Aging problems (e.g., arthritis, hearing/vision loss, etc.)
- Cancers
- Child abuse / neglect
- COVID-19
- Dental problems
- Diabetes
- Domestic violence
- Firearm-related injuries
- Heart disease and stroke
- High blood pressure
- HIV/AIDS
- Homicide
- Infant death
- Infectious diseases
- Mental health problems
- Motor vehicle crash injuries
- Poverty
- Rape/sexual assault
- Respiratory/lung disease
- Sexually transmitted diseases (STDs)
- Social isolation
- Suicide
- Teenage pregnancy
- Terrorist activities
- Health illiteracy
- Built environment
- Housing insecurity
- Neighborhood environmental risk (e.g., pollution, high lead exposure)
- Other: Please describe

7. How would you rate the overall health of our community?

- Very unhealthy (most have three or more chronic conditions such as heart disease or diabetes)
- Unhealthy (most have one or two chronic conditions such as heart disease or diabetes)
- Somewhat unhealthy
- Somewhat healthy
- Healthy
- Very healthy (most have no chronic conditions such as heart disease or diabetes)

Appendix three: Employee survey, cont'd.

8. What issues do you think may prevent community members from accessing care?

- No insurance
- Unable to pay co-pays and deductibles
- Language barriers
- Lack of access to transportation
- Unable to use technology to find doctors, schedule appointments, manage online care
- Fear (e.g., not ready to face or discuss health problem)
- Don’t understand the need to see a doctor
- Don’t know how to find doctors
- Cultural/religious beliefs
- Lack of availability of doctors

9. Of the following, what do you think are the top five things most important in improving the health of community members living in our communities?

- Access to local inpatient mental health services
- Access to local outpatient mental health services
- Access to low-cost mental health services
- Access to health care services
- Access to dental care services
- Additional access points to affordable care within the community
- Cancer awareness and prevention
- Community-based health education
- Community-based programs for health
- Curbing tobacco use, such as banning indoor smoking
- Expanded access to specialty physicians
- Financial assistance for those who qualify
- Free or affordable health screenings
- Increased social services
- More options for paying for care
- Opioid awareness and prevention campaigns
- Partnerships with local charitable clinics
- Programs that address issues of housing
- Programs that address food insecurity
- Safe places to walk and play
- Substance abuse rehabilitation services
- Other: Please describe

Appendix three: Employee survey, cont'd.

10. What is your vision for a healthy community?

11. What is the single most pressing issue you feel our patients face?

12. What are one or two things we can do better to serve our patients/our community?

13. Do you have questions about this survey or community health in general?

Appendix four: Employee survey, cont'd.

Data on the poverty threshold is created by the US Census Bureau, which uses pre-tax income as a yardstick to measure poverty. The statistical report on the poverty threshold is then used by the HHS to determine the federal poverty level (FPL). Below are the rates for 2022.

Family size	100%	150%	200%	300%	400%
1	$13,590	$20,385	$27,180	$40,770	$54,360
2	$18,310	$27,465	$36,620	$54,930	$73,240
3	$23,030	$34,545	$46,060	$69,090	$92,120
4	$27,750	$41,625	$55,500	$83,250	$111,000
5	$32,470	$48,705	$64,940	$97,410	$129,880
6	$37,190	$55,785	$74,380	$111,570	$148,760
7	$41,910	$62,865	$83,820	$125,730	$167,640
8	$46,630	$69,945	$93,260	$139,890	$186,520