EMORY
HEALTHCARE



2019 Community Health Needs Assessment & Implementation Plan

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Improving the Health of Individuals and Communities

Emory Healthcare is pleased to present this Community Health Needs Assessment, a demonstration of our commitment to our mission – "Improving the health of individuals and communities at home and throughout the world." Atlanta continues to thrive as a dynamic, world-class city with a highly diverse and rapidly growing population. That dynamic population brings increasingly complex health challenges to which no one medical professional can possibly have all the answers. Instead, modern health and healing require interdisciplinary, inter-professional teams working side by side across education, research, and clinical care to most effectively prevent and treat disease.

Working side by side harnesses the extraordinary talents of our medical professionals, educators, and investigators to improve quality of life for all the people we serve. Through the collective efforts and dedication of our entire Woodruff Health Sciences Center and Emory Healthcare, we provide value to our patients and our community and help ensure continued health and well-being for the city, the state, the region, and beyond.

This report assesses the needs of the community served by Emory Healthcare and the unique communities served by each of our hospitals using quantitative data and input from individuals representing the broad interest of the community. Using the Community Health Needs Assessment, each of our hospitals identified specific priority health needs for each of their communities. Each hospital developed actions to address the health needs of those within our communities. Through these actions, it is our goal to improve the health and well-being of our community members, while continually delivering optimal care to our patients.

We are honored that you have entrusted us with your health and the health of your family.

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Emory Healthcare; Executive Vice President for
Health Affairs, Emory University; Executive Director,
Woodruff Health Sciences Center

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Orthopaedics & Spine Hospital, and Emory
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Overview of Emory Healthcare

Emory Healthcare (EHC) is an integrated academic health care system committed to providing the best care for our patients, educating health professionals and leaders for the future, pursuing discovery research in all of its forms, including basic, clinical, and population-based research, and serving our community. As the clinical enterprise of the Robert W. Woodruff Health Sciences Center (WHSC) of Emory University, EHC is dedicated to a unifying mission and strategic direction.

Mission: Improving the health of individuals and communities at home and throughout the world

Values:

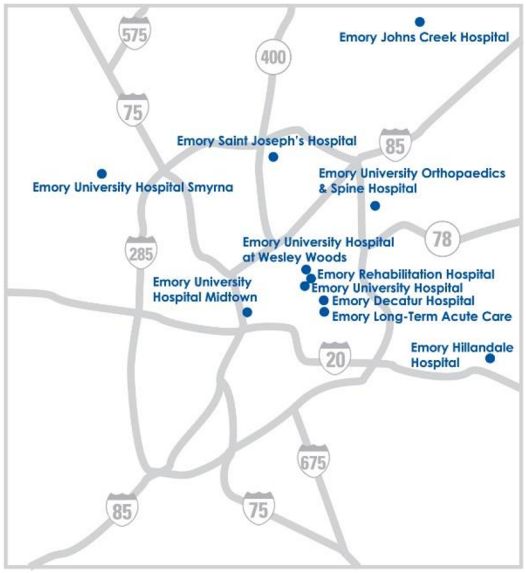
- We exemplify excellence, innovation, and collaboration
- We treat everyone with respect, caring, and compassion
- We embrace diversity, equity, and inclusion
- We steward our resources responsibly to optimize value
- We serve with integrity

Vision: Be the leading academic health sciences center in transforming health and healing, through education, discovery, prevention, and care

In addition to EHC, the WHSC includes Emory University School of Medicine, Nell Hodgson Woodruff School of Nursing, the Rollins School of Public Health, the Yerkes National Primate Research Center, the Winship Cancer Institute of Emory University, and the Emory Global Health Institute.

Through community partnerships, patient-focused care, and innovative research, EHC works to improve health care in Georgia and across the globe. As the most comprehensive health system in Georgia, EHC offers patients and families the choice of more than 2,800 doctors and 250 locations, including 11 hospital campuses as well as primary care, urgent care, and MinuteClinics. Our hospital locations include:

- Emory University Hospital
- Emory University Hospital Midtown
- Emory University Orthopaedics & Spine Hospital
- Emory Rehabilitation Hospital
- Emory Saint Joseph's Hospital
- Emory Johns Creek Hospital
- Emory Decatur Hospital
- Emory Hillandale Hospital
- Emory Long-Term Acute Care
- Emory University Hospital Smyrna
- Emory University Hospital at Wesley Woods



Community Health Needs Assessment Process

Emory Healthcare's (EHC) community health needs assessment (CHNA) was conducted by the EHC Strategic Planning Office. In the CHNA, quantitative and qualitative data is provided for the EHC community and the individual communities of each of our hospitals. The EHC Community Engagement Team provided guidance and input during the development of the community health needs assessments. Additional valuable input and guidance was provided by the leadership of EHC, the leadership of each hospital, and the leadership of the Boards.

The CHNA for EHC was completed in the summer of 2019. The CHNA process was designed to assess the needs of the community served by EHC and each hospital using quantitative data and input from stakeholders representing the broad interest of the community. The community health needs assessment took into account information from a variety of quantitative data sources, including:

- Centers for Disease Control and Prevention (CDC)
- Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS)
- Department of Health and Human Services' *Healthy People 2020*
- Georgia Department of Public Health's Online Analytical Statistical Information System (OASIS)
- IBM Watson Health
- Kaiser Family Foundation
- National Cancer Institute Surveillance, Epidemiology, and End Result Program (SEER)
- National Institute for Mental Health
- National Institute on Drug Abuse
- Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute's *County Health Rankings & Roadmaps*
- United States Census Bureau
- United States Bureau of Labor Statistics
- United Health Foundation's *America's Health Rankings*

Appendix A contains additional information on the data sources and highlights information gaps that impacted EHC's ability to assess the health needs of our community.

EHC gathered input from stakeholders representing the broad interest of the community through interviews conducted by EHC, the Georgia Health Policy Center, and the Atlanta Regional Collaborative for Health Improvement. Interviews with approximately fifty organizations were conducted with representatives from organizations with special knowledge of:

- The specific health needs of EHC patients, families, and employees
- Public health in the community served by EHC
- The specific health needs of the community served by EHC
- The health needs of underserved, low-income, and minority populations in the community served by EHC
- The health needs of populations with chronic diseases in the community served by EHC

The interviews conducted by the Georgia Health Policy Center and the Atlanta Regional Collaborative for Health Improvement were completed on behalf on multiple health systems across the Atlanta area. The

feedback from the interviews will inform actions to be taken by health systems across the Atlanta area to improve the collective health of our communities. *Appendix B* contains a list of organizations that provided input during the community health needs assessment process.

In 2013 and 2016, EHC also conducted CHNAs to understand the needs of our communities. Each hospital developed an implementation plan to address the community needs over the next three years. As part of the 2019 CHNA process, an assessment of the 2016 implementation plan was conducted to gauge the progress of EHC and each hospital in impacting the identified community needs over the past three years. A summary of the review is included in *Appendix C*.

Using the quantitative data, input from community stakeholders, and the implementation plan assessment, the health needs of the overall communities served by EHC were identified by the EHC Community Engagement Team. The priority health needs were utilized by each hospital to develop the priority needs for their community. Implementation plans were developed to outline how each hospital plans to address the identified health needs of the community it serves. The implementation plans were developed by leadership at each hospital with input from the Community Engagement Team. The community health needs assessments and implementation plans for each hospital were approved and adopted by the associated Boards and governing bodies.

Emory Healthcare Community: Demographics & Health Care Access

Our Communities

As an integrated academic health care system, Emory Healthcare (EHC) is committed to providing the best care for our patients, educating health professionals and leaders for the future, pursuing discovery research in all of its forms, and serving our community. Across 11 hospitals and over 250 locations, EHC provides care for patients across Atlanta, Georgia, the United States, and the world. For the purpose of our CHNA, EHC defines our community as our Primary Service Area (PSA). The PSA is a contiguous six-county area in Atlanta from which approximately 70% of our inpatient admissions originate. Individual PSA communities are defined for each EHC hospital in the hospital CHNA section beginning on page 18.

EHC Primary Service Area



Population

According to the U.S. Census Bureau, the population of the 10-county Atlanta region increased by over 660,000 residents between 2010 and 2018, an increase of 12%. The Atlanta region ranks 4th across metropolitan areas nationwide in raw population growth between 2010 and 2018. The EHC PSA has also experienced significant population growth. Between 2010 and 2019, the EHC PSA population increased by approximately 515,000 residents, an increase of 14%. Over the next five years, the EHC PSA is expected to continue growing. Between 2019 and 2024, the population of the EHC PSA is anticipated to increase by 271,000, an increase of 7%.

Population Growth



Source: IBM Watson Health

Age Distribution

The population of the EHC PSA is younger than the population of Georgia as a whole. In 2019, 14% of Georgia's population was over the age of 65 and 12% of the EHC PSA population was over the age of 65. Between 2019 and 2024, the most significant population increase in the EHC PSA is expected among persons in the 55-64 and the 65+ age categories.

EHC PSA: 2019 Population Age Distribution by Age Group



Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

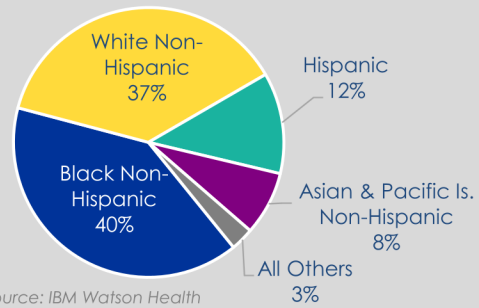
Gender Distribution

The gender of the EHC PSA population is evenly distributed between males and females. In 2019, approximately 52% of the population was female and 48% of the population was male. Within the EHC PSA, 895,000 females fall in the age range classified as childbearing age, ages 15-44. Females of childbearing age represent 43% of the female population and 22% of the overall EHC PSA population.

Race Distribution

EHC serves a racially and ethnically diverse community. In 2019, Black non-Hispanic residents account for approximately 40% of the EHC PSA population while White Non-Hispanic accounts for 37%. The Hispanic population accounts for 12% of the EHC community.

EHC PSA: 2019 Population by Race/Ethnicity



Source: IBM Watson Health

Education Level Distribution

The population of adults ages 25+ in the EHC PSA has attained higher levels of education than the population of adults ages 25+ in the state of Georgia. In the state of Georgia, 14% of the adult population does not hold a high school degree. In the EHC PSA, 11% of the adult population does not hold a high school degree.

EHC PSA: 2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	41%
Some College/Assoc. Degree	27%
High School Degree	22%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

Household Income Distribution

The EHC PSA is more affluent than the state of Georgia as a whole. Statewide, 21% of households reported an annual household income of less than $25,000. In the EHC PSA, 17% of households reported an annual income of less than $25,000. In 2019, the median household income in the EHC PSA was $73,292, 17% higher than the median income for Georgia of $62,288.

EHC PSA: 2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	33%

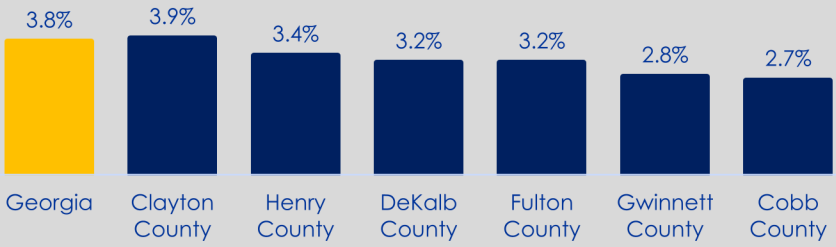
Source: IBM Watson Health

Labor Force Characteristics

According to the Bureau of Labor Statistics, Georgia's seasonally adjusted unemployment rate in April 2019 fell to 3.8%, a decrease of 1.6% from April 2016. In the EHC PSA, the unemployment rates for Henry, DeKalb, Fulton, Gwinnett, and Cobb counties fell below the Georgia average, while the unemployment rate for Clayton County slightly exceeded the Georgia average.

EHC PSA: Unemployment Rate by County

April 2019



Source: U.S. Bureau of Labor Statistics

Insurance Coverage

Insurance coverage in the EHC PSA is more prevalent than in the state of Georgia as a whole. In 2019, 14% of the EHC PSA population was uninsured while 17% of the total population in the state of Georgia was uninsured. Similar to national trends, the population of Medicare covered residents is expected to increase in the EHC PSA over the next ten years.

EHC PSA: 2019 Insurance Coverage Type



Managed Care	64%
Medicare	9%
Medicaid	11%
Medicare Dual Eligible	2%
Uninsured	14%

Source: IBM Watson Health

Access to Care

Access to quality health care services is an important component of the health of an individual and the overall community. According to *Healthy People 2020,* key components of access are services available to individuals, the ability of health care providers to provide access to medical care quickly, and the availability of medical providers to provide care to individuals and communities. A measure of access is the ratios of specific types of health care providers to the population. The following compare provider to population ratios for primary care physicians, dentists, and mental health providers:

- Primary Care Physicians: Primary care physicians are physicians who specialize in general practice medicine, family medicine, internal medicine, pediatrics, or obstetrics/gynecology. The ratio of primary care physicians per population provides a measure of the availability of health care resources in an area.
- Dental Providers: The ratio of population per one dental provider provides a measure of the availability of dental care resources in an area.
- Mental Health Providers: Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and advanced practice nurses specializing in mental health care. The ratio of population per one mental health provider provides a measure of the availability of mental health care resources in an area.

EHC PSA: 2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Clayton County	3,540	3,850	1,690
Cobb County	1,400	1,500	650
DeKalb County	930	1,750	370
Fulton County	930	1,410	460
Gwinnett County	1,630	1,670	1,030
Henry County	2,110	2,860	740

Source: County Health Rankings, 2019

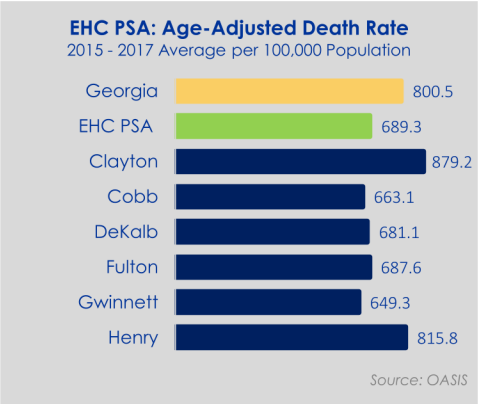
America's Health Rankings provides a basis for comparing the health of Georgia to the health of the states in United States. *America's Health Rankings* ranks the states from 1 to 50 on a variety of health measures. The higher the ranking, the worse the health of a state on a specific metric. In *America's Health Rankings 2018*, Georgia ranked 42nd out of 50 states on the number of primary care physicians (PCPs), 46th on the number of dental health providers, and 46th on the number of mental health providers per 100,000 population.

Emory Healthcare Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. The Georgia Department of Public Health's health data repository, the Online Analytical Statistical Information System (OASIS), provides data and insight into the various mortality statistics in the EHC PSA. The most recent year of available data is 2017. Morbidity measures provide a basis for understanding people's quality of life or how healthy people feel while they are alive. Quality of life includes a person's overall health, physical health, and mental health. *County Health Rankings & Roadmaps* provides information on morbidity measures at a county level.

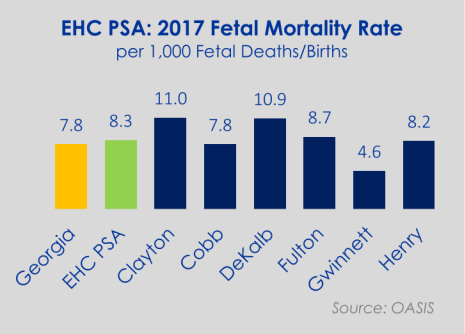
Age-Adjusted Death Rate

Mortality refers to the level of death in a population. Age-adjusted reflects a weighted average of the age-specific mortality rates. By controlling for differences in age structure, observed differences in rates across areas are not due solely to differences in the proportion of people in different age groups in different areas. The age-adjusted death rate expresses deaths as a rate per 100,000 population. Between 2015 and 2017, the average age-adjusted death rate for the EHC PSA was 689.3 deaths per 100,000 population, significantly less than the rate of 800.5 per 100,000 population for Georgia during the same time period. Henry and Clayton counties reported death rates above the Georgia average.



Fetal Mortality Rate

The fetal mortality rate represents the number of fetal deaths (at or greater than 20 weeks gestation) per 1,000 fetal deaths (at or greater than 20 weeks gestation) plus live births. In 2017, the EHC PSA fetal mortality rate of 8.3 was higher than the statewide average of 7.8. Clayton, DeKalb, Fulton, and Henry counties reported higher fetal mortality rate than the Georgia average.



Self-Reported Poor or Fair Health Status

County Health Rankings & Roadmaps uses the BRFSS survey question, "In general, would you say that your health is excellent, very good, good, fair, or poor?" to gauge the overall self-reported health in a county. *County Health Rankings & Roadmaps* reports the age-adjusted percentage of adults self-reporting their health status as "fair" or "poor." In *County Health Rankings & Roadmaps 2019*, the percentage of self-reported "fair" or "poor" health status in the EHC PSA counties fell below the average for Georgia.

EHC PSA: Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Clayton County	21%
Cobb County	15%
DeKalb County	15%
Fulton County	14%
Gwinnett County	16%
Henry County	17%

Source: County Health Rankings, 2019

Age-Adjusted Death Rate by Cause

The World Health Organization defines the underlying cause of death as the disease or injury that initiated the sequence of events leading directly to death or as the circumstances of the accident or violence that produced a fatal injury. The World Health Organization has defined a list of sixteen cause of death categories. *Appendix D* contains a list of the cause of death categories and associated conditions.

In the EHC PSA, major cardiovascular diseases and cancer had the highest reported age-adjusted death rates per 100,000 population in 2017. Major cardiovascular diseases and cancer also had the highest reported death rates per 100,000 population in Georgia. In the EHC PSA, the age-adjusted death rates for the majority of causes of death are lower than the age-adjusted death rates in Georgia.

2017 Age-Adjusted Death Rate per 100,000 Population		
Cause of Death	**EHC PSA**	**Georgia**
Major Cardiovascular Diseases	200.2	236.2
Cancers	141.1	154.9
Nervous System Diseases	71.7	76.1
Respiratory Diseases	61.1	81.7
External Causes	56.3	67.7
Nutritional and Metabolic Diseases	33.7	35.1
Digestive System Diseases	22.5	27.1
Infectious and Parasitic Diseases	22.3	23.2
Mental and Behavioral Disorders	21.7	30.8
Reproductive and Urinary System Diseases	20.7	24.1
Fetal and Infant Conditions	5.5	5.1
Bone and Muscle Diseases	3.3	3.3
Birth Defects	3.0	3.2
Blood Diseases (Anemias)	1.3	1.6
SIDS	1.1	1.2
Pregnancy and Childbirthing Complications	0.9	0.8

Source: OASIS

Emory Healthcare Community: General Health Measures

Understanding the health of EHC PSA population is a key component of our community health and engagement efforts. The following section provides detailed information for a number of the leading causes of deaths in the EHC PSA and other conditions that negatively impact the health of a population including obesity, smoking and tobacco use, cardiovascular/heart disease, cancer, respiratory diseases, diabetes, mental health, substance abuse, maternal/child health, and sexually transmitted diseases. *Appendix A* contains additional information about the data sources referenced below. *America's Health Rankings* is noted in sections to provide a basis for comparing the health of Georgia to the health of the states in United States. *America's Health Rankings* ranks the states from 1 to 50 on a variety of health measures. The lower the ranking, the better the health of a state on a specific metric. The higher the ranking, the worse the health of a state on a specific metric.

Obesity

Obesity negatively impacts one's health and contributes to a variety of conditions including heart disease, stroke, Type 2 diabetes, hypertension, certain types of cancer, respiratory problems, liver disease, kidney disease, and other health conditions. Obesity is a leading factor in preventable diseases in the United States. Since 1990, obesity has increased steadily in the United States and in Georgia. In *America's Health Rankings 2018*, Georgia ranked 26th out of 50 states for the percentage of obese adults in the population. In 2019, the percentage of obese adults in each EHC PSA county ranged from 25% to 35%.

EHC PSA: 2019 Adult Obesity Prevalence	
Georgia	30%
Clayton County	35%
Cobb County	26%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%
Henry County	34%

Source: County Health Rankings, 2019

Smoking & Tobacco Use

Tobacco use is the leading cause of preventable disease, disability, and death in the United States. Tobacco use causes a number of diseases including respiratory disease, heart disease, stroke, and cancer. According to *America's Health Rankings 2018*, Georgia ranked 30th out of 50 states for the percentage of the adult population who smokes regularly. In the EHC PSA, adult smoking prevalence in each county ranges from 14% to 17%.

EHC PSA: 2019 Adult Smoking Prevalence	
Georgia	18%
Clayton County	20%
Cobb County	14%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%
Henry County	17%

Source: County Health Rankings, 2019

Cardiovascular/Heart Disease

Cardiovascular disease or heart disease describes the diseases affecting the heart. Cardiovascular disease is the main contributor to heart attacks, chest pain, and stroke. According to the CDC, heart disease was the leading cause of death in the United States in 2016 accounting for over 635,000 deaths. Stroke was the 5th leading cause of death accounting for over 142,000 deaths in 2016. According to *America's Health Rankings 2018*, Georgia ranked 38th out of 50 states for cardiovascular deaths. High blood pressure (hypertension), high cholesterol, and smoking are the main risk factors for heart disease and stroke.

According to the CDC, nearly 50% of Americans have at least one of the three main risk factors for heart disease and stroke. Additional risk factors for heart disease and stroke include diabetes, obesity, lack of physical activity, poor diet, and excessive alcohol use. In the EHC PSA, approximately 3% of adults reported having a stroke, 4% of adults reported having heart disease, and nearly one-third of adults reported having high blood pressure.

EHC PSA: 2019 Adult Cardiovascular Health Prevalence Rates

	EHC PSA	Georgia
High Blood Pressure	31%	32%
Heart Disease	4%	5%
Stroke	3%	3%

Source: County Health Rankings, 2019

Cancer

Cancer is the term used to describe diseases that involve abnormal cells dividing without control and invading other tissues in the body. Over 100 different types of cancer exist. The National Cancer Institute (NCI) estimates 38% of men and women in the United States will be diagnosed with cancer at some point during their lifetime. According to the CDC, cancer was the 2nd leading cause of death in the United States in 2016, accounting for approximately 598,000 deaths. According to *America's Health Rankings 2018*, Georgia ranked 31st out of 50 states for cancer deaths.

NCI SEER data provides a basis of understanding how the incidence rates and mortality rates of specific cancers in Georgia compare to national averages. The main risk factors for a number of cancers are lack of physical activity, poor nutrition, obesity, use of tobacco products, and ultraviolet light exposure. Reducing these risk factors may prevent a number of types of cancer. In Georgia, the top four cancers by incidence rate between 2012 and 2016 were breast cancer, prostate cancer, lung & bronchus cancer, and colon & rectum cancer. Both the incidence and mortality rates for Georgia in these cancers exceed the rates for the United States.

	Age-Adjusted Incidence Rates by Cancer Site (2012-2016)		Age-Adjusted Mortality Rates by Cancer Site (2012-2016)	
	Georgia Rate	USA Rate	Georgia Rate	USA Rate
All Cancer Sites	466.4	448.0	165.6	161.0
Bladder	18.3	20.1	4.6	4.4
Brain & ONS	6.2	6.5	4.2	4.4
Breast (Female)	125.8	125.2	21.9	20.6
Breast (Female in situ)	29.3	30.1	n/a	n/a
Cervix (Female)	7.8	7.6	2.5	2.3
Childhood (Ages <15, All Sites)	17.4	17.3	2.2	2.1
Childhood (Ages <20, All Sites)	18.5	18.9	2.4	2.3
Colon & Rectum	41.8	38.7	15.1	14.2
Esophagus	4.4	4.5	3.6	4.0
Kidney & Renal Pelvis	16.7	16.6	3.7	3.8
Leukemia	14.5	14.1	6.1	6.5
Liver & Bile Duct	8.1	8.3	6.3	6.5
Lung & Bronchus	64.1	59.2	44.6	41.9
Melanoma of the Skin	26.6	21.8	2.4	2.5
Non-Hodgkin Lymphoma	18.3	19.2	5.3	5.6
Oral Cavity & Pharynx	12.6	11.7	2.7	2.5
Ovary (Female)	11.0	11.1	7.0	7.0
Pancreas	13.2	12.8	10.7	11.0
Prostate (Male)	122.3	104.1	22.2	19.2
Stomach	6.5	6.6	3.3	3.1
Thyroid	12.1	14.5	0.4	0.5
Uterus (Female)	23.0	26.6	4.8	4.7

Rates are per 100,000 population per year. Source: NCI State Cancer Profiles: Georgia

Cancer screenings are an effective way to identify certain types of cancer early on in the disease progression including colorectal cancer, cervical cancer, and breast cancer. NCI SEER data provides a basis for understanding cancer risk factors for Georgians and the utilization of preventative cancer screenings by Georgians.

Cancer Screening Behaviors	Georgia Rate	USA Rate
Ever Had Colorectal Endoscopy (Sigmoidoscopy or Colonoscopy), Ages 50+, 2016	65.3	70.3
FOBT in last year and/or flex sig in last 5 years and FOBT in last 3 years and/or colonoscopy in last 10 years, Ages 50-75, 2016	63.3	67.7
Had a Mammogram in Past 2 Years, Ages 50-74, 2016	79.3	77.6
Had a Mammogram in Past 2 Years, Ages 40+, 2016	73.9	72.5
Had a Pap Smear in Past 3 Years and No Hysterectomy, Ages 18+, 2016	72.4	71.9
Pap Test in Past 3 Years, No Hysterectomy, Ages 21-65, 2016	80.1	80.0

Source: NCI State Cancer Profiles: Georgia
Note: Fecal Occult Blood Test (FOBT) is a lab test used to check stool samples for hidden (occult) blood, which may indicate cancer or polyps in the colon/rectum

Respiratory Disease

Respiratory diseases encompass a variety of conditions including asthma, chronic obstructive pulmonary disease (COPD), lung cancer, pneumonia, and tuberculosis. Asthma and COPD in particular are significant health problems. According to the CDC, chronic lower respiratory disease was the 4th leading cause of death in the United States in 2016 accounting for approximately 154,000 deaths. Influenza/pneumonia was the 8th leading cause of death in the United States in 2016, accounting for approximately 51,000 deaths.

EHC PSA: 2019 Adult Respiratory Disease Prevalence Rates

	EHC PSA	Georgia
Asthma	13%	13%
Chronic Bronchitis	4%	4%
Emphysema	1%	2%

Source: County Health Rankings, 2019

In 2019, over 13% of the adult EHC PSA population reported asthma as a chronic affliction. Chronic bronchitis is a type of COPD that causes inflammation, or irritation, in the bronchioles of the lungs. In 2019, approximately 4% of the adult EHC PSA population reported chronic bronchitis as a chronic affliction. Emphysema is a type of COPD that causes a permanent enlargement of the airways in your lungs. Emphysema, which is often associated with cigarette smoking, gradually damages the air sacs in the lungs, causing shortness of breath. In 2019, approximately 1% of the adult EHC PSA population reported emphysema as a chronic affliction.

Diabetes

Diabetes is an illness in which blood glucose levels exceed normal levels. Diabetes can contribute to serious health issues including heart disease, high blood pressure, stroke, and other conditions. According to the CDC, diabetes was the 7th leading cause of death in the United States in 2016 accounting for approximately 80,000 deaths. According to *America's Health Rankings 2018*, Georgia ranked 38th out of 50 states for diabetes prevalence. *Healthy People 2020* explains the three main types of diabetes that exist:

- Type 2 diabetes results from a combination of resistance to the action of insulin and insufficient insulin production
- Type 1 diabetes results when the body loses its ability to produce insulin

- Gestational diabetes is a common complication of pregnancy. Gestational diabetes can lead to perinatal complications in mother and child and substantially increases the likelihood of cesarean section. Gestational diabetes is also a risk factor for subsequent development of type 2 diabetes after pregnancy.

In 2019, over approximately 10% of adults in the EHC PSA reported being afflicted with diabetes.

EHC PSA: 2019 Adult Diabetes Prevalence

EHC PSA	10%
Georgia	10%

Source: IBM Watson Health

Mental Health

Mental health is a state of successful performance of mental function and is essential to personal well-being. Mental health and physical health are closely related. Mental health is an important factor in one's ability to maintain good physical health. Conversely, physical health problems can impact one's mental health. Mental health encompasses a variety of disorders including anxiety disorders, attention-deficit/hyperactivity disorders, autism, eating disorders, mood disorders, personality disorders, and schizophrenia. According to the National Institute for Mental Health (NIMH), nearly 1 out of every 25 adult Americans have a serious mental illness. According to the CDC, suicide was the 10th leading cause of death in the United States in 2016, accounting for approximately 45,000 deaths. In *America's Health Rankings 2018*, Georgia was ranked 26th out of 50 states for adults reporting frequent mental distress. Depression and anxiety are two of the disorders within mental health. In 2019, approximately 6% of adults in the EHC PSA reported depression and/or anxiety as a chronic affliction.

EHC PSA: 2019 Adult Depression/Anxiety Prevalence

EHC PSA	6%
Georgia	6%

Source: IBM Watson Health

Maternal & Child Health

According to the CDC, pregnancy and childbirth have a significant impact on the physical, mental, emotional, and socioeconomic health of women and their families. Pregnancy-related health outcomes are influenced by a woman's health and other factors like race, ethnicity, age, and income. Maternal and child health status is measured with a number of indicators including low birth weight, infant mortality, and teen birth rate. According to America's Health Rankings 2018, Georgia ranked 47th in the country for low birth rate and 45th for infant mortality. In 2019, the percentage of live births with low birth weight in each EHC PSA county ranged from 9% to 12%.

EHC PSA: 2019 Percentage of Low Birth Weight Births

Georgia	10%
Clayton County	12%
Cobb County	9%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%
Henry County	10%

Source: County Health Rankings, 2019

Substance Abuse

In 2016, the CDC estimated 48.5 million people in the U.S. reported using illicit drugs or misusing prescription drugs in the past year, including marijuana, cocaine, heroin, hallucinogens, inhalants, and methamphetamines, and the misuse of prescription drugs. Over 63,000 drug overdose deaths were reported across the U.S. and two-thirds of the deaths involved a prescription or illicit opioid. According to the NIH National Institute on Drug Abuse, Georgia reported 1,014 overdose deaths involving opioids, a rate of 9.7 deaths per 100,000 population in 2017. The national rate of overdose deaths involving opioids in 2017 was 14.6 deaths per 100,000 population. In Georgia, approximately 70.9 opioid prescriptions were written per 100 population compared to a national rate of 58.7 per 100 population.

Sexually Transmitted Diseases (STDs)

In the United States, millions of sexually transmitted diseases (STDs) infections occur annually. STDs include chlamydia, gonorrhea, hepatitis, herpes, human papillomavirus (HPV), syphilis, HIV/AIDS, and other infections. While some STDs can be cured, other STDs can cause serious health complications.

On an annual basis, the CDC summarizes national surveillance statistics for three STDs that are considered notifiable and for which there are federally funded notification programs, including chlamydia, gonorrhea, and syphilis. Other common STDs, including HPV and herpes, are not nationally notifiable diseases. In 2017, Georgia reported the 6th highest rate in the U.S. of chlamydia infections with 631.4 cases per 100,000 population. Georgia reported the 9th highest rate of gonorrhea with 219.8 case per 100,000 population. For syphilis, Georgia reported 14.4 cases of primary and secondary syphilis per 100,000 population and 17.7 case of congenital syphilis per 100,000 live births, the 4th and 10th highest rates in the U.S. respectively.

Acquired immunodeficiency syndrome (AIDS) is a chronic, life-threatening condition caused by the human immunodeficiency virus (HIV). In 2017, the Kaiser Family Foundation and CDC reported an HIV diagnosis rate of 30.0 per 100,000 population in Georgia, the 2nd highest rate in the nation. Georgia also reported the 2nd highest rate of AIDS diagnosis in the nation with a rate of 15.5 per 100,000 population.

Community Stakeholder Interview Summary

EHC gathered input from stakeholders representing the broad interest of the community through interviews conducted by EHC and in partnership with the Georgia Health Policy Centers and the Atlanta Regional Collaborative for Health Improvement. Interviews with approximately fifty organizations were conducted with representatives from organizations with special knowledge of:

- The specific health needs of EHC patients, families, and employees
- Public health in the community served by EHC
- The specific health needs of the community served by EHC
- The health needs of underserved, low-income, and minority populations in the community served by EHC
- The health needs of populations with chronic diseases in the community served by EHC

The interviews conducted by the Georgia Health Policy Centers and the Atlanta Regional Collaborative for Health Improvement were completed on behalf on multiple health systems across the Atlanta area. The feedback from the interviews will inform actions to be taken by multiple health systems across the Atlanta area to improve the collective health of our communities. *Appendix B* contains a list of organizations that provided input during the community health needs assessment process. Due to their profession, tenure, and/or community involvement, community stakeholders offer diverse perspectives and information to the community health needs assessment. *Appendix B* contains the list of questions asked during the interviews. EHC continues to collect input from community stakeholders on an ongoing basis.

Major Health Challenges

The following were noted by the community stakeholders as major health challenges impacting residents of the EHC PSA:

- Common health issues:
  - Diabetes(type I and II)
  - Obesity (adult and child)
  - Asthma
  - Respiratory issues among homeless populations (COPD and asthma)
  - Infectious disease (HIV, syphilis, gonorrhea, chlamydia, and Hepatitis C)
  - Infant mortality
  - Cardiovascular diseases
  - Hypertension
  - Stroke
  - Cancer (Lung, colon, gastric, breast)
  - Kidney disease
- Behavioral health challenges, including substance abuse:
  - High prevalence of untreated/undiagnosed mental issues (depression, anxiety, serious mental illness)
  - Self-harm/suicide
  - Substance abuse and overdose (opioid/heroin, alcohol, marijuana, cocaine, and methamphetamines)
- Overutilization of the emergency room (medical and behavioral health needs)
- Undocumented women showing up in labor having received no prenatal care
- Poor dental health among uninsured

- Disparities for Black and Latino residents
- High rates of teen pregnancy
- Smoking

Context and Drivers of Health

The following were noted by the community stakeholders as context and drivers of the health of residents of the EHC PSA. *Appendix B* contains additional detail for each context and driver.

- Geographic location
- Access to care – need for affordable healthcare
- Awareness of what services are available and where they are located
- Behavioral health services – barriers related to social/cultural stigma
- Dental care and other services for uninsured
- Substance abuse services
- Poor socioeconomic status
- Education
- Racial and ethnic challenges
- Housing issues
- Poor nutrition
- Residents do not always make healthy choices related to parenting, physical activity, nutrition, etc.

Vulnerable Populations

When asked which populations experience these health needs most, stakeholders offered the following populations as being most at-risk:

- African American and Hispanic residents
- Uninsured and underinsured
- Previously incarcerated
- Undocumented residents
- Immigrants (Hispanic and African)
- Homeless residents
- People diagnosed with behavioral health challenges or chronic disease
- Single parents
- People experiencing low socioeconomic status (poverty and education)
- Children
- Seniors on a fixed income
- Residents without access to transportation

Changes in Health Status

When asked what has improved, declined, or remained unchanged in the past three years. Stakeholders said the following:

- Improved

  - The economy is improving, which translates into better access to care for some people
  - Health has improved for those with access to increased employment opportunities
  - Increase in preventive care that is available at Southside Medical Center and Center Pan-Asian Community Services
  - New health care facilities have opened and others have expanded
  - Increase in the number of Federally Qualified Health Centers (FQHCs)
  - Some schools are addressing mental health needs
  - More people are insured
  - New workout facilities in some areas
- Stayed the Same
  - Lack of services and high costs have remained unchanged for many residents
  - Not enough clinics and FQHCs to meet the demand for affordable care in some communities
  - No improvements over time in resources or outcomes for underinsured and uninsured
  - Limited access to care for uninsured residents remains unchanged in many communities
  - No improvements in chronic diseases (hypertension, cardiovascular disease, stroke, diabetes, and STDs)
  - Disparities in the health outcomes and access to care remain
  - Social determinants of health are not being addressed in all parts of all counties
- Declined
  - Not enough local data available to assist with decision-making (e.g., the health disparities that exist between populations within counties muted in county level-data)
  - For residents remaining in poverty, health has declined
  - Premiums and medications are unaffordable
  - Residents are uninsured and not seeking care
  - Racial and ethnic disparities have become worse in some communities
  - Access to behavioral health services has declined

EMORY
HEALTHCARE

Hospital Community Health Needs Assessments & Implementation Plans



Emory University Hospital

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory University Hospital

Emory University Hospital's (EUH) tradition of healing dates back almost a century. In March 1904, EUH's predecessor, Wesley Memorial Hospital, was chartered with 50 beds. Over the past century, EUH has grown into a leading adult, tertiary/quaternary care facility with 751 licensed beds, including 82 beds at EUH at Wesley Woods. EUH is long known for services in transplantation, cardiology, cardiac surgery, oncology, neurology/neurosurgery, and orthopaedics. EUH at Wesley Woods specializes in adult inpatient psychiatric care in addition to training programs. EUH includes 120 ICU beds and a Serious Communicable Diseases Unit where ongoing research, training, and preparedness for challenging infectious diseases continues since the first Ebola patients in the U.S. were treated there in 2014. As a not-for-profit academic medical center, EUH is committed to providing the best care for our patients, educating health professionals and leaders for the future, pursuing discovery research, and serving our community.

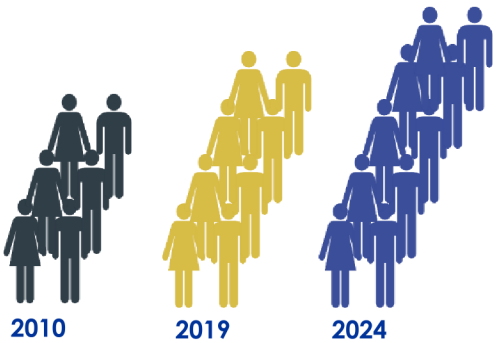
EUH's community health needs assessment demonstrates the needs of our community. As a tertiary care facility, EUH serves patients from throughout the state of Georgia and the Southeast. For the purpose of EUH's community health needs assessment, EUH's community is defined as the contiguous area from which over 60% of EUH's inpatient admissions originate. EUH's community or primary service area (PSA) includes DeKalb, Fulton, Gwinnett, Cobb, Henry, and Clayton counties.

EUH Primary Service Area



EUH Community: Demographics Snapshot

Population Growth

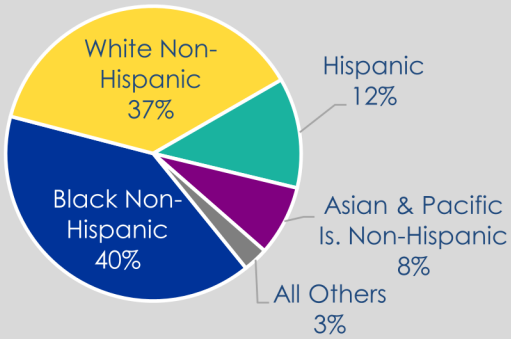


2010	2019	2024
3.6 Million	4.2 Million	4.4 Million

52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.2%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	41%
Some College/Assoc. Degree	27%
High School Degree	22%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	64%
Medicare	9%
Medicaid	11%
Medicare Dual Eligible	2%
Uninsured	14%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	33%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Clayton County	3,540	3,850	1,690
Cobb County	1,400	1,500	650
DeKalb County	930	1,750	370
Fulton County	930	1,410	460
Gwinnett County	1,630	1,670	1,030
Henry County	2,110	2,860	740

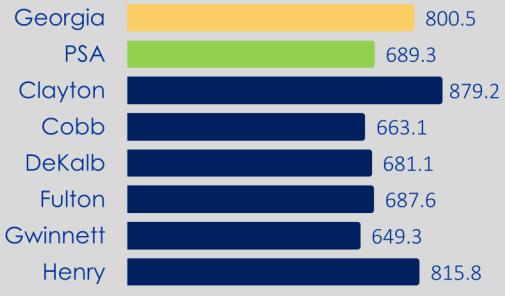
Source: County Health Rankings

EUH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

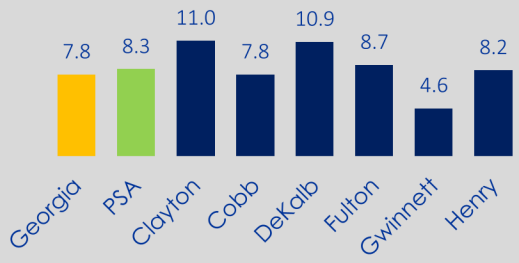
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Clayton County	21%
Cobb County	15%
DeKalb County	15%
Fulton County	14%
Gwinnett County	16%
Henry County	17%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	*Rate*	*Cause of Death*	*Rate*
Major Cardiovascular Diseases	200.2	Mental and Behavioral Disorders	21.7
Cancers	141.1	Reproductive and Urinary System Diseases	20.7
Nervous System Diseases	71.7	Fetal and Infant Conditions	5.5
Respiratory Diseases	61.1	Bone and Muscle Diseases	3.3
External Causes	56.3	Birth Defects	3.0
Nutritional and Metabolic Diseases	33.7	Blood Diseases	1.3
Digestive System Diseases	22.5	SIDS	1.1
Infectious and Parasitic Diseases	22.3	Pregnancy and Childbirthing Complications	0.9

Source: OASIS

EUH Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for EUH. The following section provides detailed information for a number of the leading causes of death in the EUH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Clayton County	35%
Cobb County	26%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%
Henry County	34%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Clayton County	20%
Cobb County	14%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%
Henry County	17%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	31%	32%
Heart Disease	4%	5%
Stroke	3%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	13%	13%
Chronic Bronchitis	4%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA	10%
Georgia	10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA	6%
Georgia	6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Clayton County	12%
Cobb County	9%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%
Henry County	10%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.
(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:
- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EUH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 EUH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EUH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

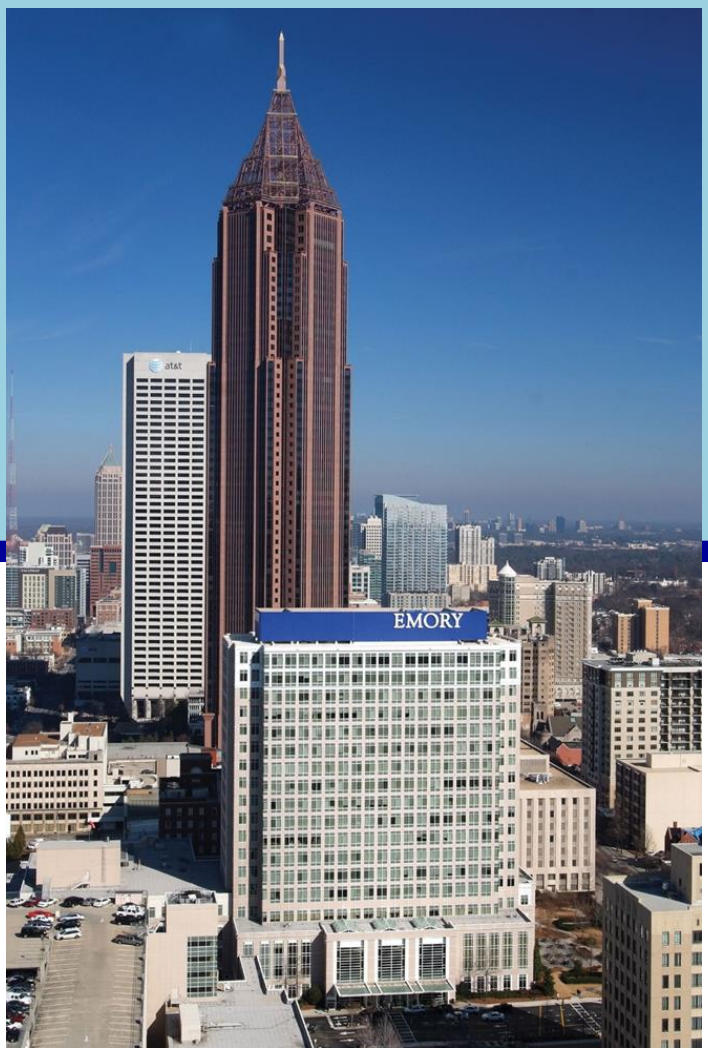
EUH and EUOSH partnered to develop the implementation plan below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EUH, EUOSH, and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs & Actions			
Priority Health Needs	Access to Care	Health Education & Literacy	Preventative Care & Chronic Disease Management
• Strengthen partnerships with large employers in Metro Atlanta and surrounding counties to improve access to the community and promote health and wellness • Collaborate with Emory University schools on initiatives and research to improve the health of the community • Increase access to care for vulnerable patient populations by providing a Faith Community Nurse Navigator for patients at risk of readmission to the hospital and promote awareness of healthy behaviors and available resources • Expand internal outreach efforts at EUH/EUOSH around preventative care and disease management activities such as smoking cessation, biometric screening, counseling/coaching through FSAP and spiritual health, yoga classes, and back injury prevention			

Priority Health Needs & Actions
● Expand collaboration with post-acute and community based levels of care to expand access to supportive healthcare for patients with neurologic, orthopaedic, and diabetes diagnoses ● Continue to partner with local and national agencies to share practice knowledge, human factor insights, protocols, and expertise regarding serious communicable and emerging diseases management ● Continue to provide international surgical, anesthesia, and nursing care through Emory Perioperative Health Working Group ● Continue and expand stroke screenings at local health fairs and in communities with at-risk populations in Metro Atlanta ● Provide a Distress Therapy Group to enhance behavioral skills and mindfulness to address distress tolerance, emotional regulation, and interpersonal effectiveness for internal and external community ● Continue education and skills training about healthy food choices and preparation through teaching kitchen and community fairs

Emory University Hospital Midtown

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory University Hospital Midtown

The history of Emory University Hospital Midtown (EUHM) dates back to 1908, when two physicians opened the 26-bed Davis-Fischer Sanatorium. From a 26-bed sanatorium to a tertiary care facility with more than 529-beds, EUHM has a rich heritage. For more than 100 years, our hospital has established a solid foundation for outstanding quality health care and medical integrity for Atlantans and the Southeast. EUHM physicians work collaboratively to provide comprehensive care and quality outcomes for our patients and their families. EUHM is well known for services in cardiology, cardiac surgery, gastroenterology, neurosurgery, cancer, orthopaedics, emergency medicine, and women's services.

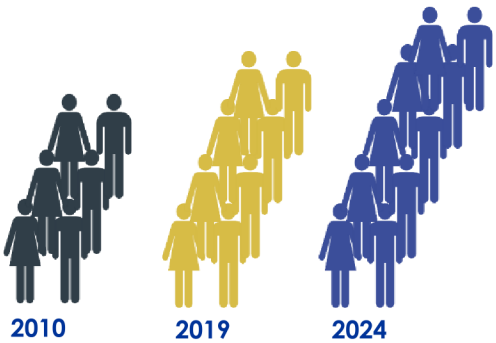
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EUHM Primary Service Area



EUHM Community: Demographics Snapshot

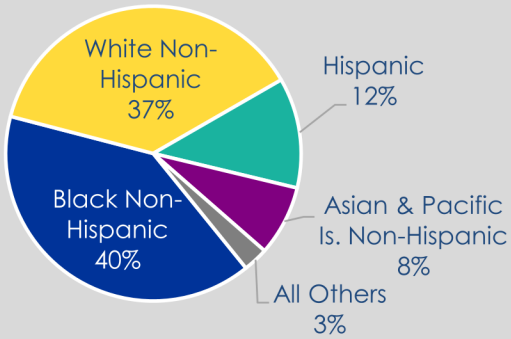
Population Growth



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48% Male

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Source: IBM Watson Health

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April 2019

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Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

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Source: IBM Watson Health

2019 Population by Education Level Attained

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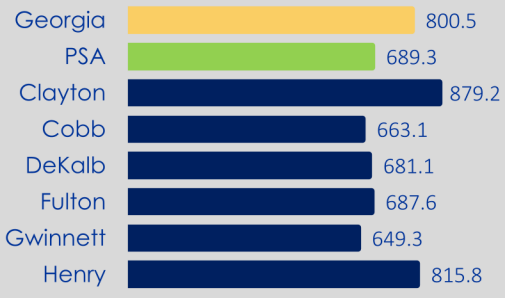
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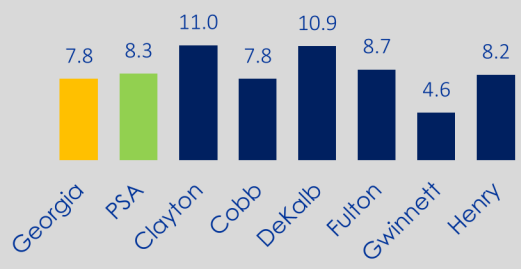
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Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

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Diabetes

2019 Adult Diabetes Prevalence

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Mental Health

2019 Adult Depression /Anxiety Prevalence

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Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
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Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

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- **9th** highest of Gonorrhea rate
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- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EUHM community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page *15*.

2019 EUHM Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EUHM identified three priority health needs of our community:

- Access to Care & Community Collaboration
- Health Education & Community Awareness
- Preventative Care & Chronic Disease Management

EUHM developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EUHM and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care & Community Collaboration	• Enhance resources to enable safe and appropriate transitions of care for our patients • Collaborate with post-acute and community-based levels of care and expand access to supportive health care • Continue EUHM's focus on improving maternal and infant health by maintaining designation as a Baby-Friendly hospital and expanding education around cord blood collection and banking
Health Education & Community Awareness	• Strengthen partnerships with area high schools to promote health and wellness and increase education around at-risk behaviors • Strengthen presence in the broader community by promoting and teaching healthy behaviors in addition to connecting individuals with available resources

Priority Health Needs	Actions
	● Expand community education and outreach efforts around cancer, cardiovascular disease and stroke prevention, diabetes management, and awareness of clinical trials
Preventative Care & Chronic Disease Management	● Expand and strengthen community outreach efforts around disease management for stroke, obesity, weight management, and cardiovascular disease ● Expand population health management capabilities to provide value-based care in partnership with patients, families, and communities ● Strengthen communication with patients on discharge instructions and medication management to minimize readmission ● Offer support groups for patients and families for a variety of health conditions

Emory Johns Creek Hospital

2019 Community Health Needs Assessment & Implementation Plan

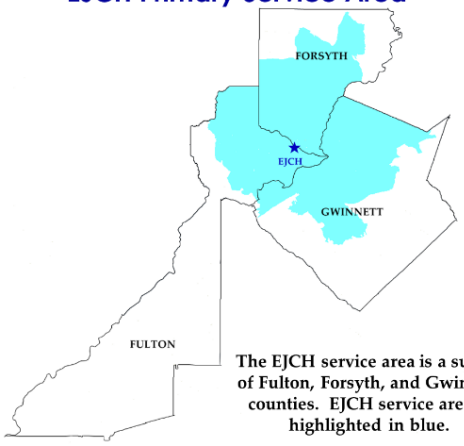


Overview of Emory Johns Creek Hospital

Emory Johns Creek Hospital (EJCH) has proudly served the health care needs of our neighbors since 2007. EJCH is a 110-bed acute care facility servings Johns Creek and surrounding communities. EJCH supports award-winning centers and programs that advance the science of medicine while providing outstanding patient care. Some of these centers include the Emory Bariatrics Center at Johns Creek, Breast Imaging Center, Hyperbarics and Wound Care Services and the Birth Center. As a not-for-profit hospital, EJCH is committed to providing the best care for our patients and serving our community.

EJCH's community health needs assessment demonstrates the needs of our community. For the purpose of EJCH's community health needs assessment, EJCH's community is defined as the contiguous area from which over 80% of EJCH's inpatient admissions originate. EJCH's community or primary service area (PSA) includes fifteen ZIP codes in north Fulton, Forsyth, and Gwinnett counties.

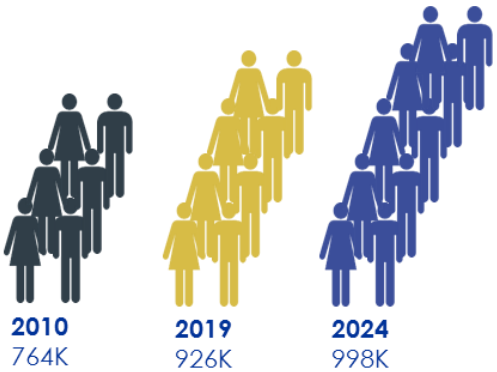
EJCH Primary Service Area



The EJCH service area is a subset of Fulton, Forsyth, and Gwinnett counties. EJCH service area is highlighted in blue.

EJCH Community: Demographics Snapshot

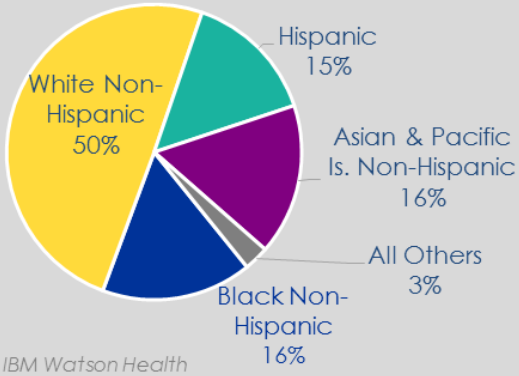
Population Growth



51% Female
49% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 2.9%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	26%
18 – 34	21%
34 – 55	30%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	48%
Some College/Assoc. Degree	26%
High School Degree	18%
Some High School	4%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	76%
Medicare	8%
Medicaid	7%
Medicare Dual Eligible	1%
Uninsured	8%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	5%
$15,000 - $25,000	5%
$25,000 - $50,000	16%
$50,000 - $75,000	15%
$75,000 - $100,000	13%
Greater than $100,000	45%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Gwinnett County	1,630	1,670	1,030
Fulton County	930	1,410	460
Forsyth County	2,800	2,430	1,920

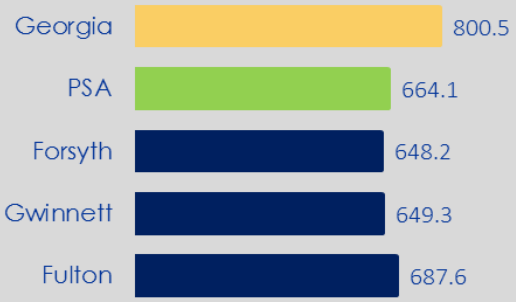
Source: County Health Rankings

EJCH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

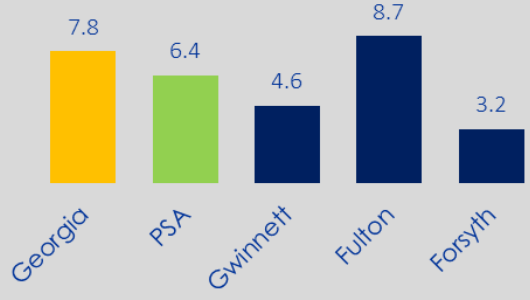
Age-Adjusted Death Rate

2015 - 2017 Average per 100,000 Population



2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Gwinnett County	16%
Fulton County	14%
Forsyth County	12%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	Rate	Cause of Death	Rate
Major Cardiovascular Diseases	186.3	Mental and Behavioral Disorders	23.1
Cancers	137.7	Reproductive and Urinary System Diseases	18.9
Nervous System Diseases	76.2	Fetal and Infant Conditions	4.4
Respiratory Diseases	56.4	Bone and Muscle Diseases	3.0
External Causes	54.8	Birth Defects	2.6
Nutritional and Metabolic Diseases	31.3	Blood Diseases	1.3
Digestive System Diseases	22.1	SIDS	0.7
Infectious and Parasitic Diseases	20.6	Pregnancy and Childbirthing Complications	0.7

Source: OASIS

EJCH Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for EJCH. The following section provides detailed information for a number of the leading causes of death in the EJCH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Gwinnett County	30%
Fulton County	25%
Forsyth County	30%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Gwinnett County	14%
Fulton County	15%
Forsyth County	14%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	22%	32%
Heart Disease	3%	5%
Stroke	2%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	9%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA	7%
Georgia	10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA	4%
Georgia	6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Gwinnett County	8%
Fulton County	11%
Forsyth County	7%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:

- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EJCH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 EJCH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EJCH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

EJCH developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EJCH and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	• Increase awareness to the community regarding programs and services offered at EJCH • Continue creating a culturally-friendly environment to reach the ethnically diverse population of our community • Continue and expand our volunteer opportunities for adults and teens
Health Education & Literacy	• Expand and increase partnerships with businesses, nonprofit organizations, and community leaders to communicate existing resources and programs at EJCH in order to promote a healthy community • Utilize social media, in-house newsletter, and increased media presence to promote available programs and resources • Provide education opportunities to staff and the community related to health and wellness initiatives at EJCH

Priority Health Needs	Actions
Preventative Care & Chronic Disease Management	● Strengthen outreach and community education efforts to promote preventative care activities and disease management related to cardiovascular disease, stroke prevention, diabetes, and healthy aging ● Strengthen coordination of care across the EHC system and within the community for cancer prevention, support, and survivorship ● Collaborate with schools, nonprofit organizations, and other health care providers to increase awareness and prevention of suicide, opioid addiction, and mental illness

Emory Saint Joseph's Hospital

2019 Community Health Needs Assessment & Implementation Plan

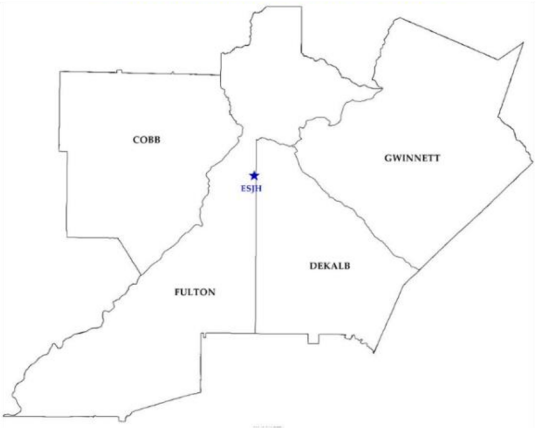


Overview of Emory Saint Joseph's Hospital

Founded by the Sisters of Mercy in 1880, Emory Saint Joseph's Hospital (ESJH) is Atlanta's longest-serving hospital. What started in a small house on Baker Street is now a 32-acre campus in North Atlanta. Our mission is the same today as it was over 130 years ago — to provide compassionate care, especially to those in need. Today, the 410-bed, acute-care facility is recognized as one of the top specialty-referral hospitals in the Southeast. ESJH is one of the region's premier providers of cardiac, cancer, neurologic, vascular, gastrointestinal, respiratory, and orthopedics care. Throughout its history, ESJH has been dedicated to furthering the healing ministry of the Sisters of Mercy by providing compassionate, clinically excellent health care in the spirit of the loving service to those in need, with special attention to the poor and vulnerable.

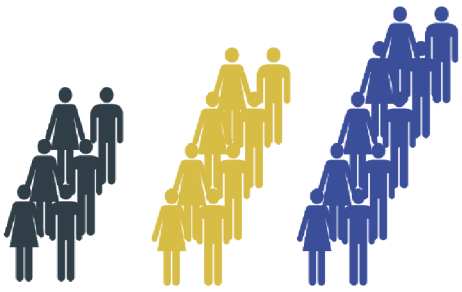
ESJH's community health needs assessment demonstrates the needs of our community. For the purpose of ESJH's community health needs assessment, ESJH's community is defined as the contiguous area from which over 75% of ESJH's inpatient admissions originate. ESJH's community or primary service area (PSA) includes Cobb, DeKalb, Fulton, and Gwinnett counties.

ESJH Primary Service Area



ESJH Community: Demographics Snapshot

Population Growth

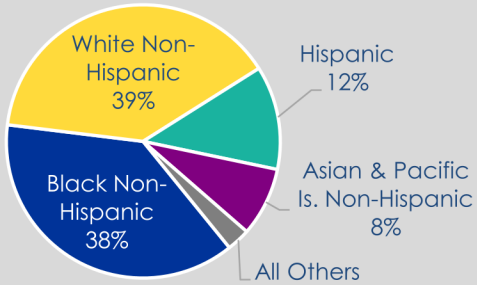


2010	2019	2024
3.2 Million	3.7 Million	3.9 Million

52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.0%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
35 – 54	28%
55 – 64	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	43%
Some College/Assoc. Degree	26%
High School Degree	21%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	74%
Medicare	10%
Medicaid	12%
Medicare Dual Eligible	2%
Uninsured	2%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	33%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Cobb County	1,400	1,500	650
DeKalb County	930	1,750	370
Fulton County	930	1,410	460
Gwinnett County	1,630	1,670	1,030
Henry County	2,110	2,860	740

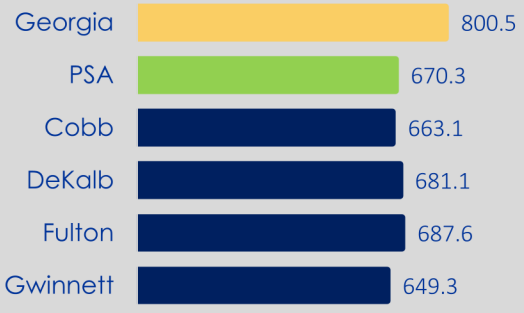
Source: County Health Rankings

ESJH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

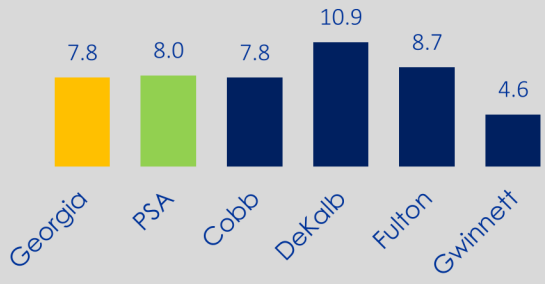
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Cobb County	15%
DeKalb County	15%
Fulton County	14%
Gwinnett County	16%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	*Rate*	*Cause of Death*	*Rate*
Major Cardiovascular Diseases	191.4	Mental and Behavioral Disorders	21.8
Cancers	138.7	Reproductive and Urinary System Diseases	20.0
Nervous System Diseases	71.1	Fetal and Infant Conditions	5.3
Respiratory Diseases	55.4	Bone and Muscle Diseases	3.2
External Causes	54.9	Birth Defects	3.0
Nutritional and Metabolic Diseases	33.0	Blood Diseases	1.4
Digestive System Diseases	22.2	SIDS	1.0
Infectious and Parasitic Diseases	20.3	Pregnancy and Childbirthing Complications	0.7

Source: OASIS

ESJH Community: General Health Measures

Understanding the health of population is a key component of our community health and engagement efforts for ESJH. The following section provides detailed information for a number of the leading causes of death in the ESJH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison for the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Cobb County	26%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Cobb County	14%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	29%	32%
Heart Disease	4%	5%
Stroke	3%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	12%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA	9%
Georgia	10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA	6%
Georgia	6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Cobb County	9%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:

- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the ESJH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 ESJH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, ESJH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

ESJH developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, ESJH and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	• Increase access to care for vulnerable patient populations by providing a Faith Community Nurse Navigator for patients at risk of readmission to the hospital • Continue collaboration with Mercy Care Services to provide support and funding for low income, homeless, and/or minority populations (Run for Mercy 5K, Mercy Care Toiletry Collections for the homeless, Annual Coat Drive for needy populations, Christmas Family Sponsorships for those in need) • Continue and expand our volunteer opportunities for adults and teens • Continue Father Patrick Sculley's Sunday Mass to the community—all donations go to Mercy Care and projects to support Mercy Care Street Medicine Program • Continue support for Deacon Aspirant Program which works with the Catholic Archdiocese to train deacons for hospital visitation and spiritual health support to the community

Priority Health Needs	Actions
Health Education & Literacy	● Continue Walk-With-A-Doc events to provide free health education to local communities ● Continue (and expand) community health fairs to provide health education and screenings for disease management (Sandy Springs Community Fair, local church and community center health fairs, etc.) ● Continue to provide support groups and education for various health issues (Prostate Cancer Support Group, Acoustic Neuroma Support Group, Brain Tumor Support Group, etc.) ● Utilize social media to provide health information and educational opportunities for the community and at-risk populations ● Expand mentorship and work study programs for high school students interested in (or seeking) professions in health care (North Springs Charter High School, Cristo Rey Atlanta Jesuit High School, ESJH Volunteer program, North Gwinnett High School, etc.) ● Continue collaboration with local faith communities to connect patients and families to spiritual health resources ● Expand education for health care workers on diverse faith-based health care and end-of-life preferences and beliefs to ensure the dignity of those with different faith traditions is honored and respected throughout the continuum of care
Preventative Care & Chronic Disease Management	● Expand Faith Community Nurse Navigator program to assist with chronic disease management for at-risk patient populations once they have been discharged home to the community ● Provide free health screenings at local community centers and churches to increase awareness of risk factors, preventative care needs, and lifestyle changes that would promote health ● Continue stroke screenings at local health fairs and expand to employees of local corporations ● Continue providing nurse facilitators (through Faith Community Nursing) to teach the Diabetes Prevention Program in local communities ● Continue Mended Hearts Volunteer Program (outreach and education by former heart surgery patients to current inpatients)

Emory Decatur Hospital

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory Decatur Hospital

Founded in 1961, Emory Decatur Hospital (EDH) is an integral member of the community. As a 451-bed acute care hospital, EDH offers a variety of premier services, including joint replacement, surgical weight loss, mammography, cancer treatment, heartburn solutions, a Medical Fitness Association Certified wellness center, and more. The Maternity Center is the first in Georgia to receive the international "Baby-Friendly" hospital designation. EDH is also a certified Primary Stroke Center. In 2018, DeKalb Medical at North Decatur officially became a part of the Emory Healthcare system. The partnership between Emory and DeKalb Medical brings together the best of both worlds – the discovery and innovation of an academic medical center together with a high-quality, deeply-rooted community health system.

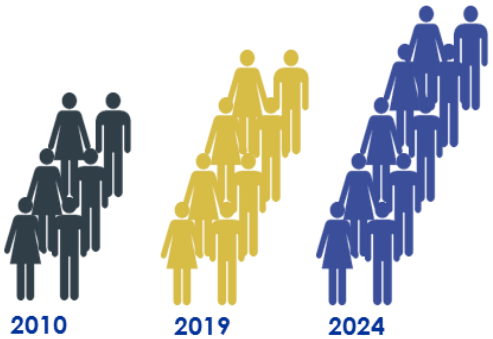
EDH's community health needs assessment demonstrates the needs of our community. For the purpose of EDH's community health needs assessment, EDH's community is defined as the contiguous area from which over 75% of EDH's inpatient admissions originate. EDH's community or primary service area (PSA) is comprised of DeKalb County.

EDH Primary Service Area



EDH Community: Demographics Snapshot

Population Growth

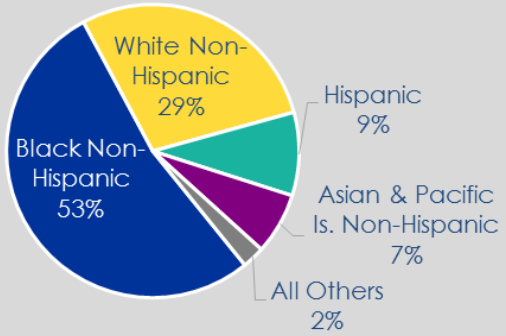


2010	2019	2024
752,873	835,890	883,861

52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate PSA 3.2%
April 2019

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
35 – 54	28%
55 – 64	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	43%
Some College/Assoc. Degree	26%
High School Degree	21%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	60%
Medicare	9%
Medicaid	13%
Medicare Dual Eligible	2%
Uninsured	16%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	33%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
DeKalb County	930	1,750	370

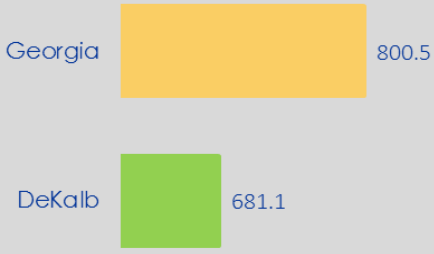
Source: County Health Rankings

EDH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

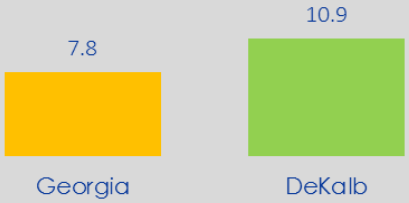
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
DeKalb County	15%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	Rate	Cause of Death	Rate
Major Cardiovascular Diseases	189.9	Mental and Behavioral Disorders	22.8
Cancers	143.5	Reproductive and Urinary System Diseases	22.5
Nervous System Diseases	62.8	Fetal and Infant Conditions	6.8
Respiratory Diseases	53.2	Bone and Muscle Diseases	2.8
External Causes	54.7	Birth Defects	3.1
Nutritional and Metabolic Diseases	37.5	Blood Diseases	1.6
Digestive System Diseases	20.0	SIDS	1.6
Infectious and Parasitic Diseases	21.7	Pregnancy and Childbirthing Complications	1.1

Source: OASIS

EDH Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for EDH. The following section provides detailed information for a number of the leading causes of death in the EDH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
DeKalb County	26%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
DeKalb County	16%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	25%	32%
Heart Disease	3%	5%
Stroke	2%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	10%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA 8%
Georgia 10%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
DeKalb County	10%

Source: County Health Rankings

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA 5%
Georgia 6%

Source: IBM Watson Health

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:

- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EDH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 EDH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EDH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

EDH developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EDH and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	Reduce Emergency Room diversion through improved processes and expanded capacity ● Recruit physician specialties where access issues exist ● Support EHC's access initiatives to ensure adequate access to primary and urgent care
Health Education & Literacy	● Implement "Know Where to Go" Campaign ● Conduct monthly health education programs through the Wellness Center ● Partner with area sororities and women's groups on breast health education programs ● Provide structured family education before OB admission, during stay and at discharge about warning signs for maternal mortality

Priority Health Needs	Actions
	● Facilitate speaker engagement throughout the community, specifically in high risk populations ● Partner with senior centers to offer doctor talks on topics such as diabetes, importance of preventive screening, and fall prevention
Preventative Care & Chronic Disease Management	● Expand Cardiac and Pulmonary Rehab program and facilitate smooth transition into program during discharge planning ● Promote Exercise is Medicine program through the Medical Fitness Center ● Promote Return to Wellness program through the Medical Fitness Center ● Connect hospitals to the Emory electronic health information exchange for provider access to information on patients previously seen elsewhere in the network

Emory Hillandale Hospital

2019 Community Health Needs Assessment & Implementation Plan

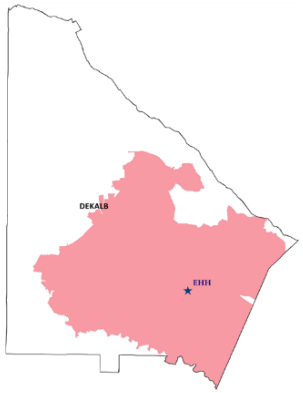


Overview of Emory Hillandale Hospital

Emory Hillandale Hospital (EHH) has proudly served the health care needs of our community since 2005. EHH is a 100-bed hospital serving Lithonia and surrounding communities. EHH offers a wide range of treatments and services, including radiology, surgery, emergency care, and infusion services. EHH also offers specialty expertise in areas ranging from orthopedics and rehabilitation to cardiology, endocrinology, hematology, diabetes, and nutrition. In 2018, DeKalb Medical at Hillandale officially became a part of the Emory Healthcare system. The partnership between Emory and DeKalb Medical brings together the best of both worlds – the discovery and innovation of an academic medical center together with a high-quality, deeply-rooted community health system.

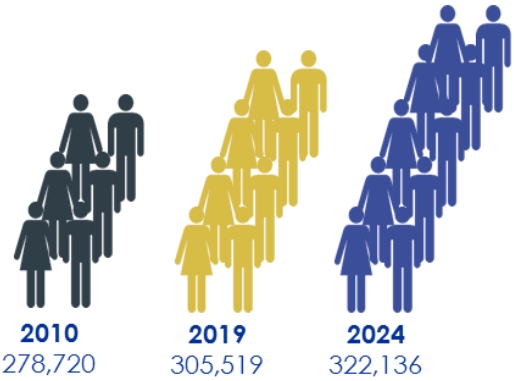
EHH's community health needs assessment demonstrates the needs of our community. For the purpose of EHH's community health needs assessment, EHH's community is defined as the contiguous area from which over 86% of EHH's inpatient admissions originate. EHH's community or primary service area (PSA) includes eight ZIP codes in DeKalb County.

EHH Primary Service Area



EHH Community: Demographics Snapshot

Population Growth

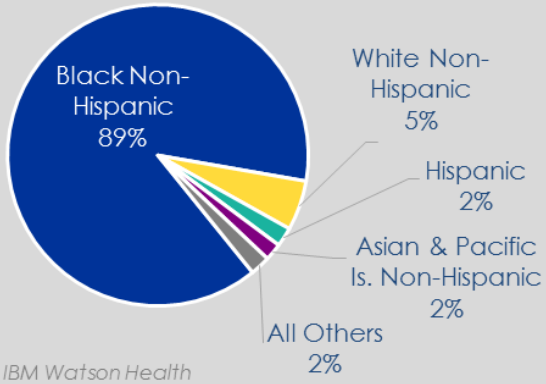


2010	2019	2024
278,720	305,519	322,136

54% Female
46% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.2%

2019 Population Age Distribution by Age Group

Less than 18	25%
18 – 34	22%
35 – 54	26%
55 – 64	13%
65+	14%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	26%
Some College/Assoc. Degree	34%
High School Degree	29%
Some High School	8%
Less than High School	3%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	51%
Medicare	9%
Medicaid	16%
Medicare Dual Eligible	2%
Uninsured	22%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	13%
$15,000 - $25,000	11%
$25,000 - $50,000	28%
$50,000 - $75,000	20%
$75,000 - $100,000	11%
Greater than $100,000	17%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
DeKalb County	930	1,750	370

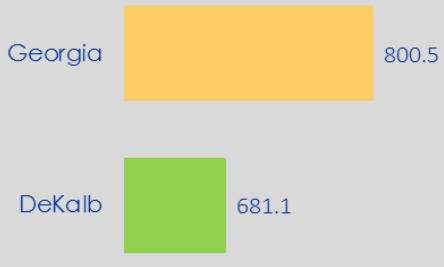
Source: County Health Rankings

EHH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

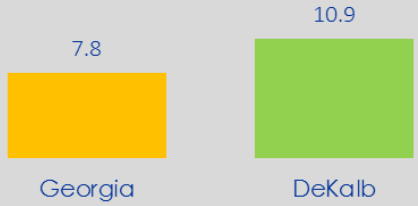
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
DeKalb County	15%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	Rate	Cause of Death	Rate
Major Cardiovascular Diseases	189.9	Mental and Behavioral Disorders	22.8
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Digestive System Diseases	20.0	SIDS	1.6
Infectious and Parasitic Diseases	21.7	Pregnancy and Childbirthing Complications	1.1

Source: OASIS

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Understanding the health of a population is a key component of our community health and engagement efforts for EHH. The following section provides detailed information for a number of the leading causes of death in the EHH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
DeKalb County	26%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
DeKalb County	16%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	28%	32%
Heart Disease	3%	5%
Stroke	3%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	11%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA 9%
Georgia 10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA 5%
Georgia 6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
DeKalb County	10%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
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Source: NIH National Institute on Drug Abuse, 2017

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- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

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2019 EHH Community Priority Health Needs & Implementation Plan

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- Preventative Care & Chronic Disease Management

EHH developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EHH and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	Reduce Emergency Room diversion through improved processes and expanded capacity • Recruit physician specialties where access issues exist • Support EHC's access initiatives to ensure adequate access to primary and urgent care
Health Education & Literacy	• Implement "Know Where to Go" Campaign • Partner with area sororities and women's groups on breast health education programs • Partner with senior centers, churches and other community organizations to offer doctor talks and health information booths

Priority Health Needs	Actions
Preventative Care & Chronic Disease Management	● Facilitate smooth transition of cardiac and pulmonary patients into cardiac and pulmonary rehab during discharge planning ● Create physician awareness of the availability of the *Exercise is Medicine* and *Return to Wellness* program through the Medical Fitness Center at Emory Decatur ● Connect hospitals to the Emory electronic health information exchange for provider access to information on patients previously seen elsewhere in the network

Emory Rehabilitation Hospital

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory Rehabilitation Hospital

Emory Rehabilitation Hospital (ERH) has proudly served the health care needs of our neighbors since 1976. As a 56-bed inpatient rehabilitation facility, ERH combines the convenience and comfort of community-based care with national clinical expertise and experience in providing comprehensive medical rehabilitation. Formerly called Emory Center for Rehabilitation Medicine, ERH was designated as a freestanding hospital in 2014 as part of a joint venture with Select Medical, which also includes 26 outpatient rehabilitation centers providing care in 13 North Georgia counties. Specializing in stroke, ERH is one of the nation's highest acuity rehabilitation hospitals. ERH is committed to providing the best care for our patients, educating health professionals and leaders for the future, pursuing discovery research, and serving our community.

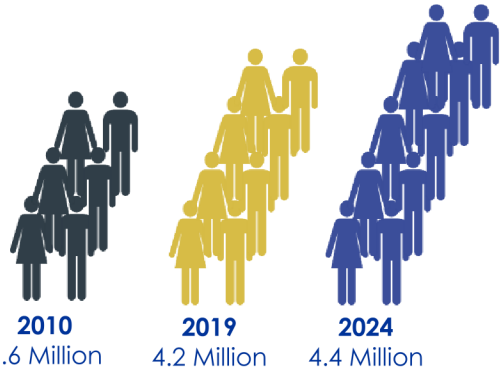
ERH's community health needs assessment demonstrates the needs of our community. As a specialized rehabilitation facility, ERH serves patients from throughout the state of Georgia and the Southeast. For the purpose of ERH's community health needs assessment, ERH's community is defined as the contiguous area from which over 70% of ERH's inpatient admissions originate. ERH's community or primary service area (PSA) includes DeKalb, Fulton, Gwinnett, Cobb, Henry, and Clayton counties.

ERH Primary Service Area



ERH Community: Demographics Snapshot

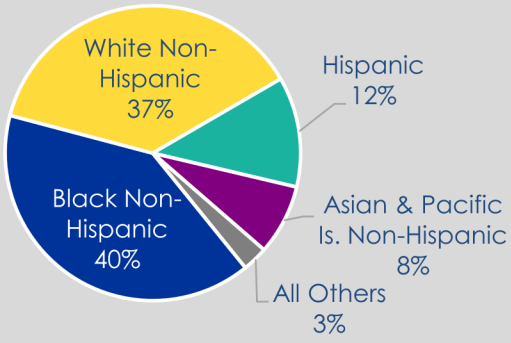
Population Growth



52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.2%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	41%
Some College/Assoc. Degree	27%
High School Degree	22%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	64%
Medicare	9%
Medicaid	11%
Medicare Dual Eligible	2%
Uninsured	14%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	33%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Clayton County	3,540	3,850	1,690
Cobb County	1,400	1,500	650
DeKalb County	930	1,750	370
Fulton County	930	1,410	460
Gwinnett County	1,630	1,670	1,030
Henry County	2,110	2,860	740

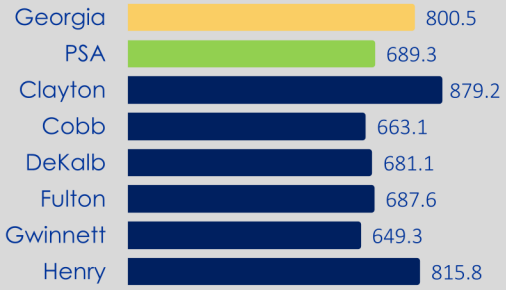
Source: County Health Rankings

ERH Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

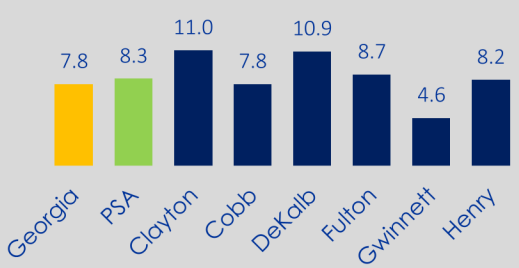
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Clayton County	21%
Cobb County	15%
DeKalb County	15%
Fulton County	14%
Gwinnett County	16%
Henry County	17%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	*Rate*	*Cause of Death*	*Rate*
Major Cardiovascular Diseases	200.2	Mental and Behavioral Disorders	21.7
Cancers	141.1	Reproductive and Urinary System Diseases	20.7
Nervous System Diseases	71.7	Fetal and Infant Conditions	5.5
Respiratory Diseases	61.1	Bone and Muscle Diseases	3.3
External Causes	56.3	Birth Defects	3.0
Nutritional and Metabolic Diseases	33.7	Blood Diseases	1.3
Digestive System Diseases	22.5	SIDS	1.1
Infectious and Parasitic Diseases	22.3	Pregnancy and Childbirthing Complications	0.9

Source: OASIS

ERH Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for ERH. The following section provides detailed information for a number of the leading causes of death in the ERH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Clayton County	35%
Cobb County	26%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%
Henry County	34%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Clayton County	20%
Cobb County	14%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%
Henry County	17%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	31%	32%
Heart Disease	4%	5%
Stroke	3%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	13%	13%
Chronic Bronchitis	4%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA	10%
Georgia	10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA	6%
Georgia	6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Clayton County	12%
Cobb County	9%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%
Henry County	10%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.
(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:
- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
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(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the ERH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 ERH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, ERH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

ERH developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, ERH and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	• Expand inpatient rehabilitation capacity to meet regional demand • Expand collaborations with community based providers • Grow outpatient rehabilitation footprint in underserved areas
Health Education & Literacy	• Renovate the Patient & Family Resource Center at ERH • Partner with local agencies and organizations to increase education • Grow and develop existing and new support groups in primary disease populations
Preventative Care & Chronic Disease Management	• Expand community outreach efforts around recovery and survivorship • Refine and expand educational information for secondary prevention

Emory University Orthopaedics & Spine Hospital

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory University Orthopaedics & Spine Hospital

Emory University Hospital (EUH) has proudly served the health care needs of our neighbors since 1904. Emory University Orthopaedics & Spine Hospital (EUOSH), an extension of EUH's acute care services, is a 120-bed facility that provides medical and surgical care for orthopaedic and spine patients as well as general acute care for patients with nonsurgical needs. As a not-for-profit academic medical center, EUOSH is committed to providing the best care for our patients, educating health professionals and leaders for the future, pursuing discovery research, and serving our community.

EUOSH's community health needs assessment demonstrates the needs of our community. As a specialty care facility, EUOSH serves patients from throughout the state of Georgia and the Southeast. For the purpose of EUOSH's community health needs assessment, EUOSH's community is defined as the contiguous area from which approximately 60% of EUOSH's inpatient admissions originate. EUOSH's community or primary service area (PSA) includes DeKalb, Fulton, Gwinnett, Cobb, Henry, and Clayton counties.

EUOSH Primary Service Area



EUOSH Community: Demographics Snapshot

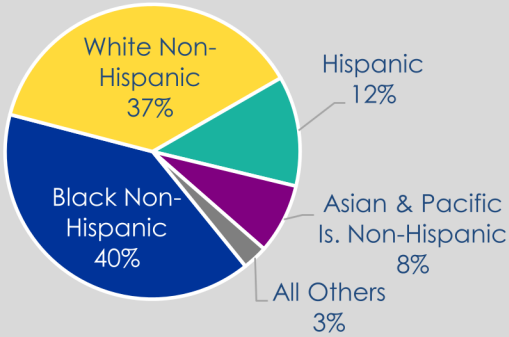
Population Growth



52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.2%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	41%
Some College/Assoc. Degree	27%
High School Degree	22%
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Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	64%
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Uninsured	14%

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2019 Household Income

Population Age 25+

Less Than $15,000	9%
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Source: IBM Watson Health

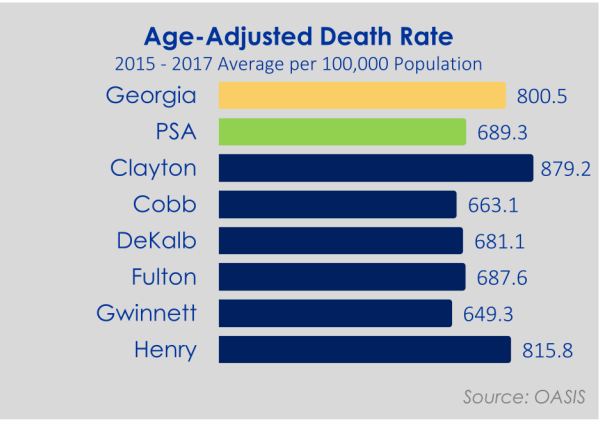
2019 Population Per Provider Ratios

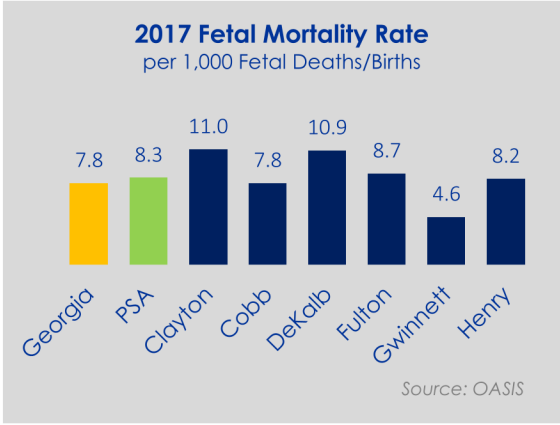
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2019 Percentage of Adults Reporting Poor or Fair Health	
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Gwinnett County	16%
Henry County	17%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	*Rate*	*Cause of Death*	*Rate*
Major Cardiovascular Diseases	200.2	Mental and Behavioral Disorders	21.7
Cancers	141.1	Reproductive and Urinary System Diseases	20.7
Nervous System Diseases	71.7	Fetal and Infant Conditions	5.5
Respiratory Diseases	61.1	Bone and Muscle Diseases	3.3
External Causes	56.3	Birth Defects	3.0
Nutritional and Metabolic Diseases	33.7	Blood Diseases	1.3
Digestive System Diseases	22.5	SIDS	1.1
Infectious and Parasitic Diseases	22.3	Pregnancy and Childbirthing Complications	0.9

Source: OASIS

EUOSH Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for EUOSH. The following section provides detailed information for a number of the leading causes of death in the EUOSH PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Clayton County	35%
Cobb County	26%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%
Henry County	34%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Clayton County	20%
Cobb County	14%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%
Henry County	17%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	31%	32%
Heart Disease	4%	5%
Stroke	3%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	13%	13%
Chronic Bronchitis	4%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA 10%
Georgia 10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA 6%
Georgia 6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Clayton County	12%
Cobb County	9%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%
Henry County	10%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.
(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:
- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EUOSH community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 EUOSH Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EUOSH identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

EUH and EUOSH partnered to develop the implementation plan below to outline how we plan to address the identified health needs of the community we serve. Through these actions, EUH, EUOSH, and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs & Actions			
Priority Health Needs	Access to Care	Health Education & Literacy	Preventative Care & Chronic Disease Management
• Strengthen partnerships with large employers in Metro Atlanta and surrounding counties to improve access to the community and promote health and wellness • Collaborate with Emory University schools on initiatives and research to improve the health of the community • Increase access to care for vulnerable patient populations by providing a Faith Community Nurse Navigator for patients at risk of readmission to the hospital and promote awareness of healthy behaviors and available resources			

Priority Health Needs & Actions
● Expand internal outreach efforts at EUH/EUOSH around preventative care and disease management activities such as smoking cessation, biometric screening, counseling/coaching through FSAP and spiritual health, yoga classes, and back injury prevention ● Expand collaboration with post-acute and community based levels of care to expand access to supportive healthcare for patients with neurologic, orthopaedic, and diabetes diagnoses ● Continue to partner with local and national agencies to share practice knowledge, human factor insights, protocols, and expertise regarding serious communicable and emerging diseases management ● Continue to provide international surgical, anesthesia, and nursing care through Emory Perioperative Health Working Group ● Continue and expand stroke screenings at local health fairs and in communities with at-risk populations in Metro Atlanta ● Provide a Distress Therapy Group to enhance behavioral skills and mindfulness to address distress tolerance, emotional regulation, and interpersonal effectiveness for internal and external community ● Continue education and skills training about healthy food choices and preparation through teaching kitchen and community fairs

Emory Long-Term Acute Care

2019 Community Health Needs Assessment & Implementation Plan



Overview of Emory Long-Term Acute Care

Emory's Long-Term Acute Care (ELTAC) facility is a 76-bed specialty-care hospital designed for patients with serious medical problems that require intense, specialized care, and rehabilitation for an extended period of time. The hospital specializes in pulmonary rehabilitation, including ventilator weaning, as well as general rehabilitation, physical therapy, and wound care. At ELTAC, we are committed to delivering superior care using the latest science and technology combined with caring and dedication. Our goal is to be a true partner to our patients and their families during their health care journey by providing high-quality care and on-going support.

ELTAC's community health needs assessment demonstrates the needs of our community. As a specialty care facility, ELTAC serves patients from throughout the state of Georgia and the Southeast. For the purpose of ELTAC's community health needs assessment, ELTAC's community is defined as the contiguous area from which over 66% of ELTAC's inpatient admissions originate. ELTAC's community or primary service area (PSA) includes DeKalb, Gwinnett, and Fulton counties.

ELTAC Primary Service Area



ELTAC Community: Demographics Snapshot

Population Growth

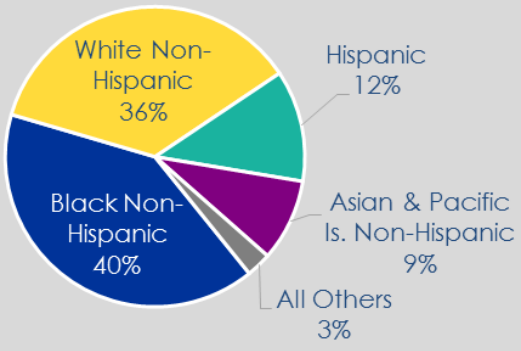


2010 2.5 Million
2019 2.9 Million
2024 3.1 Million

52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate
April 2019

PSA 3.1%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	43%
Some College/Assoc. Degree	26%
High School Degree	21%
Some High School	6%
Less than High School	4%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	64%
Medicare	9%
Medicaid	11%
Medicare Dual Eligible	2%
Uninsured	14%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	9%
$15,000 - $25,000	8%
$25,000 - $50,000	20%
$50,000 - $75,000	17%
$75,000 - $100,000	12%
Greater than $100,000	34%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
DeKalb County	930	1,750	370
Fulton County	930	1,410	460
Gwinnett County	1,630	1,670	1,030

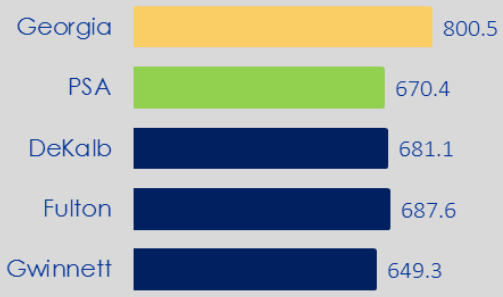
Source: County Health Rankings

ELTAC Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

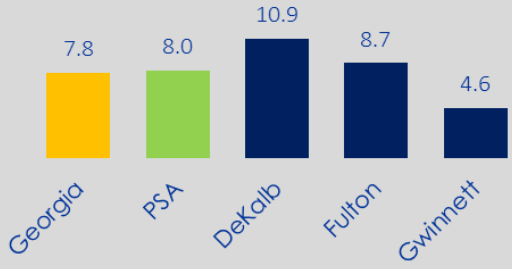
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
DeKalb County	15%
Fulton County	14%
Gwinnett County	16%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	*Rate*	*Cause of Death*	*Rate*
Major Cardiovascular Diseases	188.9	Mental and Behavioral Disorders	22.9
Cancers	139.9	Reproductive and Urinary System Diseases	20.4
Nervous System Diseases	69.6	Fetal and Infant Conditions	5.3
Respiratory Diseases	55.2	Bone and Muscle Diseases	3.0
External Causes	54.8	Birth Defects	2.8
Nutritional and Metabolic Diseases	34.3	Blood Diseases	1.5
Digestive System Diseases	22.4	SIDS	1.0
Infectious and Parasitic Diseases	21.4	Pregnancy and Childbirthing Complications	0.8

Source: OASIS

ELTAC Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for ELTAC. The following section provides detailed information for a number of the leading causes of death in the ELTAC PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
DeKalb County	26%
Fulton County	25%
Gwinnett County	30%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
DeKalb County	16%
Fulton County	15%
Gwinnett County	14%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	24%	32%
Heart Disease	3%	5%
Stroke	2%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	10%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA 5%
Georgia 10%

Source: IBM Watson Health

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA 5%
Georgia 6%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
DeKalb County	10%
Fulton County	11%
Gwinnett County	8%

Source: County Health Rankings

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:
- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the ELTAC community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 ELTAC Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, ELTAC identified three priority health needs of our community:

- Access to Care
- Health Education & Literacy
- Preventative Care & Chronic Disease Management

ELTAC developed the actions below to outline how we plan to address the identified health needs of the community we serve. Through these actions, ELTAC and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care	• Expand bed and staffing capacity
Health Education & Literacy	• Partner with senior centers, churches, and other community organizations to offer doctor talks and health information booths
Preventative Care & Chronic Disease Management	• Connect hospitals to the Emory electronic health information exchange for provider access to information on patients previously seen elsewhere in the network

Emory University Hospital Smyrna

2019 Community Health Needs Assessment & Implementation Plan

Overview of Emory University Hospital Smyrna

Emory University Hospital Smyrna (EUHS) has proudly served the health care needs of our neighbors since 1974. EUHS is an 88-bed community hospital located in Smyrna. Emory University acquired EUHS, formerly known as Emory-Adventist Hospital, in 2015. Since 1974, EUHS has offered a number of important services to the community including inpatient medical/surgical services, intensive care services, outpatient surgery, diagnostic imaging, and outpatient rehabilitative services (physical therapy/occupational therapy/speech therapy). As a not-for-profit hospital, EUHS is committed to providing the best care for our patients and serving our community.

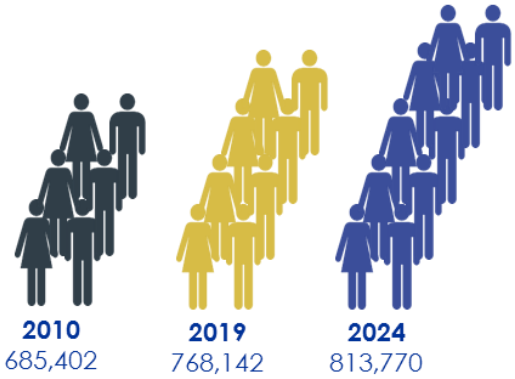
EUHS's community health needs assessment demonstrates the needs of our community. For the purpose of EUHS's community health needs assessment, EUHS's community or primary service area (PSA) is Cobb County.

EUHS Primary Service Area



EUHS Community: Demographics Snapshot

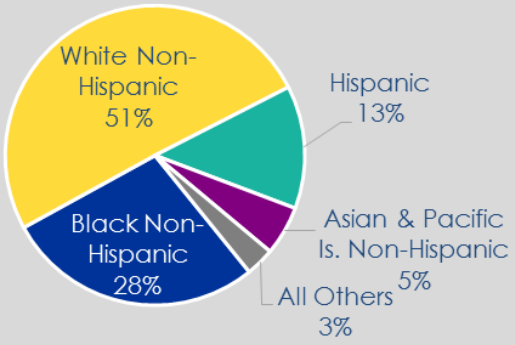
Population Growth



52% Female
48% Male

Source: IBM Watson Health

2019 Population by Race/Ethnicity



Source: IBM Watson Health

Unemployment Rate

April 2019

PSA 2.7%

Source: U.S. Bureau of Labor Statistics

2019 Population Age Distribution by Age Group

Less than 18	24%
18 – 34	24%
34 – 55	28%
55 – 65	12%
65+	12%

Source: IBM Watson Health

2019 Population by Education Level Attained

Population Age 25+

Bachelor's Degree or Greater	45%
Some College/Assoc. Degree	26%
High School Degree	19%
Some High School	5%
Less than High School	5%

Source: IBM Watson Health

2019 Insurance Coverage Type

Managed Care	70%
Medicare	11%
Medicaid	8%
Medicare Dual Eligible	1%
Uninsured	10%

Source: IBM Watson Health

2019 Household Income

Population Age 25+

Less Than $15,000	7%
$15,000 - $25,000	6%
$25,000 - $50,000	19%
$50,000 - $75,000	17%
$75,000 - $100,000	13%
Greater than $100,000	38%

Source: IBM Watson Health

2019 Population Per Provider Ratios

	Population Per Primary Care Physician	Population Per Dental Provider	Population Per Mental Health Provider
Georgia	1,520	1,960	790
Cobb County	1,400	1,500	650

Source: County Health Rankings

EUHS Community: Mortality & Morbidity Measures

Mortality measures provide a basis for understanding the causes of death in a population. Morbidity measures provide a basis for understanding how healthy people feel while they are alive. The EHC Mortality and Morbidity Measures Section on page 8 provides additional information.

Age-Adjusted Death Rate

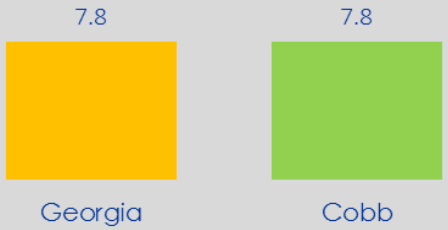
2015 - 2017 Average per 100,000 Population



Source: OASIS

2017 Fetal Mortality Rate

per 1,000 Fetal Deaths/Births



Source: OASIS

2019 Percentage of Adults Reporting Poor or Fair Health	
Georgia	19%
Cobb County	15%

Source: County Health Rankings

2017 Age-Adjusted Death Rate per 100,000 Population

Cause of Death	Rate	Cause of Death	Rate
Major Cardiovascular Diseases	200.8	Mental and Behavioral Disorders	17.9
Cancers	134.7	Reproductive and Urinary System Diseases	18.6
Nervous System Diseases	76.6	Fetal and Infant Conditions	5.5
Respiratory Diseases	56.4	Bone and Muscle Diseases	3.7
External Causes	55.5	Birth Defects	3.7
Nutritional and Metabolic Diseases	28.8	Blood Diseases	1.0
Digestive System Diseases	21.8	SIDS	0.9
Infectious and Parasitic Diseases	16.3	Pregnancy and Childbirthing Complications	Not Reported

Source: OASIS

EUHS Community: General Health Measures

Understanding the health of a population is a key component of our community health and engagement efforts for EUHS. The following section provides detailed information for a number of the leading causes of death in the EUHS PSA and other conditions that negatively impact the health of a population. *Appendix A* contains additional information about the data sources referenced below. The EHC General Health Measures Section on page 10 provides additional information about each health measure and a basis of comparison to the health of Georgian's.

Obesity

2019 Adult Obesity Prevalence	
Georgia	30%
Cobb County	26%

Source: County Health Rankings

Smoking & Tobacco Use

2019 Adult Smoking Prevalence	
Georgia	18%
Cobb County	14%

Source: County Health Rankings

Cardiovascular/Heart Disease

2019 Adult Cardiovascular Health Prevalence Rates

	PSA	Georgia
High Blood Pressure	23%	32%
Heart Disease	3%	5%
Stroke	2%	3%

Source: County Health Rankings

Respiratory Disease

2019 Adult Respiratory Disease Prevalence Rates

	PSA	Georgia
Asthma	10%	13%
Chronic Bronchitis	3%	4%
Emphysema	1%	2%

Source: County Health Rankings

Diabetes

2019 Adult Diabetes Prevalence

PSA 7%
Georgia 10%

Source: IBM Watson Health

Maternal & Child Health

2019 Percentage of Low Birth Weight Births	
Georgia	10%
Cobb County	9%

Source: County Health Rankings

Mental Health

2019 Adult Depression /Anxiety Prevalence

PSA 7%
Georgia 6%

Source: IBM Watson Health

Cancer

Georgia ranked **31st** out of the 50 states on cancer deaths in 2018.

(Higher ranking indicates worse health of a state)

See page 11 for Georgia cancer incidence and mortality rates by cancer type and Georgia screening behavior rates.

Source: America's Health Rankings

Substance Abuse

	Georgia	USA
Opioid Overdose Rate per 100,000 persons	9.7	14.6
Opioid Prescription Rate per 100 persons	70.9	58.7

Source: NIH National Institute on Drug Abuse, 2017

Sexually Transmitted Diseases

In 2017, Georgia ranked:

- **6th** highest Chlamydia Infection rate
- **9th** highest of Gonorrhea rate
- **4th** highest for primary and secondary syphilis
- **2nd** highest HIV diagnosis rate
- **2nd** highest AIDS diagnosis rate

(Lower ranking indicates worse health of a state)

Source: CDC and Kaiser Family Foundation

Community Stakeholder Interview Feedback

A key component in the community health needs assessment is feedback from community stakeholders. A summary of the feedback from community stakeholders for the EUHS community and broader EHC community is included in the EHC Community Stakeholder Interview Summary Section on page 15.

2019 EUHS Community Priority Health Needs & Implementation Plan

Based on the findings of the assessment of the health of our community, EUHS identified three priority health needs of our community:

- Access to Care & Community Collaboration
- Health Education & Community Awareness
- Preventative Care & Chronic Disease Management

EUHS partnered with EUHM to develop the implementation plan to outline how we plan to address the identified health needs of the community we serve. Through these actions, EUHS, EUHM, and EHC strive to improve the overall health of our community, while delivering the best possible care to our patients.

Priority Health Needs	Actions
Access to Care & Community Collaboration	• Enhance resources to enable safe and appropriate transitions of care for our patients • Collaborate with post-acute and community-based levels of care and expand access to supportive health care
Health Education & Community Awareness	• Strengthen partnerships with area high schools to promote health and wellness and increase education around at-risk behaviors • Strengthen presence in the broader community by promoting and teaching healthy behaviors in addition to connecting individuals with available resources

Priority Health Needs	Actions
	● Expand community education and outreach efforts around cancer, cardiovascular disease and stroke prevention, diabetes management, and awareness of clinical trials
Preventative Care & Chronic Disease Management	● Expand and strengthen community outreach efforts around disease management for stroke, obesity, weight management, and cardiovascular disease ● Expand population health management capabilities to provide value-based care in partnership with patients, families, and communities ● Strengthen communication with patients on discharge instructions and medication management to minimize readmission ● Offer support groups for patients and families for a variety of health conditions

Appendix A. Data Sources & Information Gaps

Centers for Disease Control and Prevention (CDC)

The Centers for Disease Control and Prevention (CDC) provided a number of health statistics and informational facts and figures, including the leading causes of death for 2016 and Behavioral Risk Factor Surveillance System data.

Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS)

The Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS) is a system of health-related telephone surveys that collect state data about residents of the United States regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. The BRFSS is designed to be representative of the non-institutionalized population ages 18+ in the United States residing in households with a land-line telephone. The year of the BRFSS data provided by IBM Watson Health and *County Health Rankings & Roadmaps* is referred to as 2019 data, but the years of data available for each BRFSS data topic varies and the data for specific BRFSS topics might represent a summary of data over a number of years.

Department of Health and Human Services' Healthy People 2020

Healthy People is a Department of Health and Human Services program designed to guide health promotion and disease prevention across the United States. Every decade since 1979, *Healthy People* has established 10 year goals and targets for the nation. In 2010, *Healthy People 2020* was released. *Healthy People 2020* includes over 1,200 objectives in over 40 topic areas to guide efforts to improve the health of the nation by 2020.

Georgia Department of Public Health's Online Analytical Statistical Information System (OASIS)

The Georgia Department of Public Health's health data repository, the Online Analytical Statistical Information System (OASIS), provided various mortality statistics at the county level for Georgia. While information is available based on race and ethnicity, information is not available based on income. The most recent year of available data is 2017.

IBM Watson Health

IBM Watson Health provided ZIP code, county, and state level demographics information including population statistics for 2010, 2019, and 2024; projected 5-year population growth; age distribution; race/ethnicity distribution; gender distribution; education level distribution; household income distribution; insurance coverage distribution; and prevalence rates for specific conditions. IBM Watson Health's demographics are based on Claritas data. The prevalence rates are based on the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (see CDC BRFSS section above for additional information). The type of demographics and prevalence rate data available is limited to the reports available through IBM Watson Health's product. In some instances, the level of detail desired whether by age, income level, race/ethnicity, and so forth was not available. The most recent base year available is 2019.

Kaiser Family Foundation

The Kaiser Family Foundation (KFF) is a non-profit organization focusing on national health issues and

the U.S. role in global health policy. KFF is as a non-partisan source of facts, analysis, and journalism for policymakers, the media, the health policy community, and the public. For purposes of the needs assessment, KFF provided statistics on sexually transmitted diseases.

National Cancer Institute Surveillance, Epidemiology, and End Result Program

The National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program provides information on cancer statistics in an effort to reduce the burden of cancer among the United States population. SEER collects data on cancer cases from various locations and sources throughout the country. SEER began its data collection in 1973 and continues to expand to include even more areas and demographics. SEER data provides insight into cancer statistics at the national level and in Georgia.

National Institute for Mental Health

The National Institute of Mental Health (NIMH) is the lead federal agency for research on mental disorders. NIMH is one of the Institutes and Centers that make up the National Institutes of Health (NIH), the largest biomedical research agency in the world. NIH is part of the U.S. Department of Health and Human Services (HHS). For the needs assessment, NIMH provided statistics on mental health.

National Institute on Drug Abuse

The mission of the National Institute on Drug Abuse (NIDA) is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health. NIDA is one of the Institutes and Centers that make up the National Institutes of Health (NIH), the largest biomedical research agency in the world. NIH is part of the U.S. Department of Health and Human Services (HHS). For purposes of the needs assessment, NIMH provided statistics on drug abuse.

Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute's County Health Rankings & Roadmaps

On an annual basis, the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation releases *County Health Rankings & Roadmaps*, a report that provides an overview of the health of each individual state and each county within a state. The report ranks the health of each county in a state in comparison to the health of the other counties in the state. The rankings are determined based on county-level data from a variety of national and state data sources including the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (see CDC BRFSS section above for additional information). *County Health Rankings & Roadmaps* data is not available based on race, ethnicity, or income. The most recent year of available rankings is 2019.

United States Bureau of Labor Statistics

The Bureau of Labor Statistics is the principal fact-finding agency for the federal government in the broad field of labor economics and statistics. The Bureau provided county and state level unemployment data. The data utilized in the report is based on statistics from April 2019.

United Health Foundation's America's Health Rankings

On an annual basis, the United Health Foundation releases *America's Health Rankings,* a report that provides an overview of the nation's health and the health of each individual state. *America's Health Rankings* provides a basis for comparing the health of the states in the nation by ranking states from 1 to 50. The rankings are provided for a variety of measures of health using data from a variety of sources. *America's Health Rankings* data is not available based on race, ethnicity, or income. Data is only available at the state level. The most recent year of available rankings is 2018.

Appendix B. Community Stakeholder Interviewees & Detailed Summary

Community Stakeholders Interviewed

The Georgia Health Policy Center, Atlanta Regional Collaborative for Health Improvement, and EHC gathered input from the following organizations as part of the community health needs assessment. EHC continues to collect input from community stakeholders on an ongoing basis.

A.L. Burrus Institute for Public Service & Research
Atlanta BeltLine Partnership
Atlanta Community Food Bank
Atlanta Regional Commission
Austell Community Task Force
Bethesda Community Clinic
Butts Collaborative
Butts County Hospital Authority
Center for Pan Asian Community Services
Cherokee Christian Ministerial Association
Cherokee County Chamber of Commerce
Circles of Troup County
City of East Point
City of Jackson
Clarkston Community Center
Cobb 2020
Cobb Senior Services
Cobb & Douglas Community Services Board
Cobb Douglas Public Health
Community Voices-Morehouse School of Medicine
Conifer Health Services – West Georgia
DeKalb County Board of Commissioners
Fulton County Schools – Student Health Services
G. Cecil Pruett Community Center Family YMCA
Georgia Association for Positive Behavior Support
Georgia Department of Public Health
Good Samaritan Health Center
Griffin-Spalding County Board of Education
Griffin-Spalding County Health Department
Griffin-Spalding County School System
Gwinnett, Newton, and Rockdale County Health Departments
Jackson Police Department
Jackson United Methodist Church
LaGrange Police Department
Mercy Care
MUST Ministries
Project AWARE
Rock Springs Clinic
Southside Medical Center
Spalding Collaborative
Spalding County Fire Department
Troup Cares
Troup County Schools
Troup Family Connection Authority
Twin Cedars Youth and Family Services, Inc.
United Way
United Way of Metropolitan Atlanta
United Way of West Georgia
Wholesome Wave Georgia
Woodward Academy

Community Stakeholders Interview Questions

The following questions were asked by the Georgia Health Policy Center and Atlanta Regional Collaborative for Health Improvement to gather input from community stakeholders.

- *Context*
  - In your opinion, over the past three years, has health and quality of life in the counties: (Check the selection.)
    Improved (__) Stayed the same (__) Declined (__) Don't know (__)

Please explain why you think the health and quality of life in the county has improved, stayed the same, or declined and any factors informing your answer.

- What in your opinion are the districts/county's biggest health issues or challenges that need to be addressed? Gaps? Strengths?
- In your opinion, who are the people or groups of people in your county whose health or quality of life may not be as good as others? Why? Please note any zips/areas where there are health disparities/pockets of poverty.
- What do you think are some of the root causes for these challenges? What are the barriers to improving health and quality of life?
- How important an issue to the district/county, is the reduction/elimination of health disparities? What is your perception of current disparities?
- What specific programs and local resources have been used in the past to address health improvement/disparity reduction? To what extent is health care accessible to members of your community?

- *Community Capacity*
  - Which community based organizations are best positioned to help improve the community's health?
  - Do you see any emerging community health needs, especially among underserved populations, that were not mentioned previously? How does this impact the health of residents?
- *Moving the Needle*
  - If you could only pick 3 of these health issues, which are the most important ones to address either now (short-term) or later (long- term)? What should be the focus of intervention by county/district/community?
    - Why did you pick these?
    - What interventions do you think will make a difference?
  - Do you have any other recommendations that you would make as they develop intervention strategies?
- *Wrap Up*
  - Is there anything we left out of this survey that we need to know about the most pressing health needs of the community you serve?

Health Context and Drivers Detailed Feedback

The following is a detailed summary of the feedback provided by interviewees about the major context and drivers of health in the EHC PSA.

- Geographic location:
  - There is limited access to public transportation in many counties and no public transportation in rural counties in West Georgia. The public transportation that does exist can be unreliable (e.g., often behind schedule), and disconnected from county-to-county.
  - Many under-resourced residents do not have access to private transportation, and may not be able to afford public transportation (e.g., homeless, seniors, etc.).
  - Hospitals in more rural areas (South Fulton, parts of Clayton and DeKalb Counties) offer less comprehensive care. The nearest full-service hospital can several miles away.
  - Medicaid transportation is not reliable or user-friendly in West Georgia.

- Access to care - Need for affordable healthcare, including for residents (adults and children) that are underinsured and uninsured:
  - Uninsured rates are high. When residents are uninsured, they delay seeking care until symptoms become acute because the cost is often unaffordable.
  - Limited access to affordable uninsured care- physicians have to refer patients to care outside of their communities.
  - Uninsured residents diagnosed with cancer or kidney disease do not have access to the ongoing treatment that they require, due to unaffordable cost, which often leads to frequent emergency room visits and higher medical bills over time.
  - Medicaid requires reapplication and may lapse if residents do not reapply.
  - There have been cuts to public health funding and reduced services in West Georgia.
  - South Fulton County has high barriers to accessing healthcare.
  - The health care system is difficult to navigate due to limited care coordination for the uninsured. Care coordination is limited for residents without a medical home. It can take more than a month to secure an appointment, proper medication, and care coordination for uninsured and homeless people.
  - Co-pays and deductibles can be unaffordable for residents.
  - Costs of prescription medications are high and unaffordable for some residents.
  - The health services that are available in under-resourced communities can be perceived as sparse and low-quality.
  - Residents are seeking care in the emergency department for preventable medical issues that have become emergencies.
  - There are limited specialty providers in some communities (e.g., neurologists, obstetricians, and gynecologists), and it can be difficult to recruit to more rural or under-resourced areas.
  - Uninsured specialty care is unavailable or unaffordable, and there are limited specialty providers offering care to residents with Medicaid and marketplace insurances.
  - Many providers have restricted hours of operation (e.g., limited walk-in appointments and after-hours care).
  - Residents are likely to lose their jobs if they take off from work for medical purposes.
- There is a need for uninsured dental care due to very few providers offering dental care to uninsured residents.
- Awareness of what services are available and where they are located is limited.
- There is a need for behavioral health services (adults and children) that reduce barriers related to social and cultural stigma:
  - There is a lack of local behavioral health providers (therapy, medication, and inpatient).
  - There are no long-term behavioral health services for youth in West Georgia.
  - Uninsured behavioral healthcare is not affordable, and there are few providers offering uninsured care (inpatient, outpatient, and psychiatry), and a general lack of treatment options for co-occurrence (substance use and behavioral health).
  - Residents resist seeking behavioral health care due to a fear of the stigma associated with such a diagnosis; this includes cultural stigma among African American residents.
- Substance abuse services are needed:

  - Opioid use is increasing among middle-aged and younger white men, and causing high rates of death in certain counties.
  - There are higher rates of alcohol and methamphetamine use among homeless and incarcerated or previously incarcerated populations.
  - Many residents abuse substances to cope with high stress and other undiagnosed/untreated behavioral health symptoms.
- Poor socioeconomic status:
  - Employment opportunities have decreased in several communities.
  - There are a lack of stable/good paying jobs in areas where poverty rates are highest.
  - Temporary or part-time employment offers little access to comprehensive insurance.
  - There are fewer social supports in geographic areas where high poverty is coupled with high affluence (e.g., Fulton County).
  - There is a "cliff effect" after an income threshold is met, families lose benefits (e.g., child care, food stamps, health insurance, etc.) that costs more to replace than the income they are earning.
- Education:
  - Poor educational attainment leads to poor job skills and training.
  - Low health literacy related to low educational attainment and a lack of literacy influence residents' ability to fill out forms and understand outreach education.
  - Education about STD avoidance and healthy practices is not offered to youth in a public way.
- Racial and ethnic challenges:
  - There are higher stress levels among people of color.
  - African American communities may experience a distrust for the medical community.
  - There are limited culturally and linguistically relevant health services for Black, Asian, Latino, and LGBTQ residents.
  - Undocumented residents do not always seek or have access to basic health services due to fear of deportation, no insurance, lack of transportation, lack of documentation, and a cultural preference for alternative remedies. Barriers related to language and low literacy levels make effective communication difficult.
  - Many residents resist seeking care due to a lack of culturally and linguistically relevant services.
  - Some communities are segregated, and people of color are perceived to have a lower quality of life.
- Housing issues:
  - Building and development in some communities have led to the displacement of residents.
  - Healthy housing is becoming less affordable, and residents have to make choices between healthy options (food, preventive care, medications, etc.) and the cost of their housing, because they cannot afford everything they need.
  - Homelessness is increasing, and the population of homeless people is aging. Homelessness has a negative impact on health, and older homeless people tend to have undiagnosed and unmanaged chronic health issues (COPD and diabetes).
  - There is a large homeless population in certain counties and some counties do not have homeless shelters for women.
  - There are families living in extended stay motels, and children do not have stable housing.

  - When patients are released from the emergency room, they have nowhere to place them, due to a lack of homeless shelters.
- Poor nutrition:
  - In under-resourced communities, there are a limited number of grocery stores, coupled with high rates of fast-food restaurants.
  - There is limited promotion of healthy foods in outreach efforts (e.g., cooking classes, etc.).
  - Cultural and traditional preferences can be unhealthy (e.g., fried and sugary foods), and residents are not always aware of how to prepare and enjoy healthy foods.
  - Healthy foods are often unaffordable and do not last long enough for under-resourced households, and many families have to purchase canned and frozen foods with preservatives.
  - Homeless shelters and food banks do not always offer healthy options for diabetics, etc.
  - Many residents do not have time to shop for and prepare healthy foods due to work schedules and traffic.
- Residents do not always make healthy choices related to parenting, physical activity, nutrition, etc.:
  - Traffic and time spent commuting has an impact on residents' ability to make healthy choices.
  - Educational attainment, income, and awareness influences health choices and health literacy.
  - HIV rates are high in some areas due to substance abuse, risky sexual behavior, men who have sex with other men, and prostitution.
  - The built environment is not conducive to physical activity in communities where poverty is high (poor lighting, sidewalks in disrepair, limited crosswalks, lack of safety, etc.).
  - Single parents may not be able to provide adequate supervision of youth.
  - There are a limited number of affordable programs for youth outside of school hours.

Appendix C. 2016 Implementation Plan Assessment

In 2016, EHC conducted a community health needs assessment to assess the needs of the community using quantitative data and input from individuals representing the broad interest of the community. Using the report, EHC identified three priority health needs of our community:

- Access to Care & Community Collaboration
- Community Awareness & Education
- Preventative Care & Disease Management

In 2016, EHC and its hospitals developed actions to outline how we planned to address the identified health needs of the community we serve. Through these actions, EHC strived to improve the overall health of our community, while delivering the best possible care to our patients.

As part of the 2019 CHNA process, an assessment of the 2016 implementation plan was conducted to gauge progress in impacting the identified community needs over the past three years. The following is a summary of the health priorities identified in 2016 and examples of EHC programs and partnerships in each area over the past three years.

Priority: Access to Care & Community Collaboration	
Examples of Programs & Partnerships Impacting Access to Care & Community Collaboration:	
Mercy Care Atlanta Partnership	EHC partners with Mercy Care to support Atlanta's poor, marginalized, and homeless community through monetary donations and other donations to Mercy Care Atlanta. This longstanding tradition started at ESJH in 1985, when employees began collecting toiletry items in observance of Mercy Day, as a way of extending the Mercy mission of the hospital by serving the poor and vulnerable at Mercy Care Atlanta.
Community-based Screening Programs	EHC partners with various stakeholders around Atlanta to provide community-based screenings for conditions that disproportionately affect the EHC community. Example screening events and programs include: ● Breast and prostate cancer screenings ● Skin screening ● Lung cancer screenings ● Women's health screenings
Employer Partnerships	Through partnerships with large employers in Atlanta, EHC works to improve access for the community and promote health and wellness. EHC has established on-site workplace clinics with a number of large employers in Atlanta and continues expanding partnerships with additional employers. Winship partners with large employers to offer on-site screenings for specific cancers. Winship also collaborates with local organizations and employers to offer lectures on cancer prevention, treatment, and diagnosis.
EHC Veterans Program	The EHC Veterans Program (EHVP) is dedicated to healing the invisible wounds of our veterans through innovative clinical care, research, and education. EHVP provides expert, collaborative care for post-9/11 veterans and service members, living in any area of the country. All services are provided at no cost to the veteran.
CVS Minute-Clinic Partnership	EHC partners with CVS MinuteClinic, the retail health care division of CVS Caremark, serving as medical directors for MinuteClinic locations in the Metro Atlanta area.

	MinuteClinic and EHC collaborate on patient education and disease management initiatives and inform patients of the services each offers.
Emory Healthcare Network	The Emory Healthcare Network (EHN) is a clinically integrated network of EHC facilities, Emory physicians, and private practice physicians. The EHN was formed to improve care coordination and quality outcomes as well as control costs for patients and the community.
DeKalb Medical Partnership	In 2018, EHC partnered with DeKalb Medical. The partnership between EHC and DeKalb Medical brings together the discovery and innovation of an academic medical center with a high-quality, deeply-rooted community health system. Through the partnership, EHC and DeKalb increase access to care for communities across Atlanta.
CanCare Partnership	EJCH partners with CanCare to host programs and events, including a training program for cancer survivors to help patients currently fighting the disease. CanCare is a nonprofit organization that offers free and confidential emotional support and resources to cancer patients.
Baby Friendly Designation	EUHM is a designated Baby-Friendly Hospital for exceptional breastfeeding support for both mother and infant in the maternity setting. Patients who deliver their babies at EUHM have the opportunity to publicly bank their umbilical cord blood, at no cost, in an altruistic means of helping others who are sick. Cord blood, which is normally discarded by most following delivery, can be used to save lives by effectively treating certain blood diseases and disorders.
Clarkston Community Health Center and Atlanta's Gateway Center Clinics	EHC and Emory University School of Medicine partner to provide free medical care at Clarkston Community Health Center and Atlanta's Gateway Center to vulnerable populations across metropolitan Atlanta.
MedShare	EHC partners with MedShare, an Atlanta-based non-profit, to provide a wide variety of critically-needed medical supplies and equipment to hospitals in the developing world.
Emory Proton Therapy Center	The Emory Proton Therapy Center opened in 2019, expanding access to life-saving proton therapy services to the Atlanta community and beyond. The Proton Center is the only facility of its kind in the state of Georgia.
Telehealth Expansion	EHC has continued to expand its telehealth capabilities and offerings to increase access to communities locally and regionally. EHC continues to advocate for the expansion of telehealth across Georgia.

Priority: Community Awareness & Education	
Examples of Programs & Partnerships Impacting Community Awareness & Education:	
Community Health Education Events	EHC sponsors a variety of community events aimed at wellness and increasing healthy behavior. Examples of these events include: ● Run for Mercy 5K ● 5K Scrub Run and Community Health Festival ● Diabetes Prevention Programming ● Ladies' Night Out ● "Walk with a Doc" Program ● Cancer Prevention and Education Conferences

	• Winship Win the Fight 5K Run/Walk • Community Stroke Prevention and Outreach Fairs • Mental Health Awareness Meetings
Patient Education Resources	EHC provides various platforms and events focused on empowering the community with education on healthy behaviors and ways to access care. Examples include: • Advancing Your Health Blog • Healthy Nutrition and Cooking Classes • EHC Health Source Newsletter • Social Media Engagements on Healthy Topics (Facebook Live, YouTube, etc.) • Educational seminars in local community facilities
Emory Decatur Hospital Wellness Center	The Emory Decatur Hospital Wellness Center offers a variety of lifestyle and fitness programs to the community with a focus on improving the wellness of its membership. The mission of the Wellness Center at Emory Decatur includes providing quality and affordable wellness programs in a relaxed atmosphere while positively impacting the level of wellness in the surrounding community.
Know Where to Go Campaign	The "Know Where to Go" campaign educates the EHC community on the available resources for care in their geographic area and expands awareness of receiving care in the correct setting at the right time.
Winship Summer Scholars Research Program	The Winship Summer Scholars Research Program at Winship Cancer Institute of Emory University highlights the next generation of researchers, physicians, nurses, and health care professionals. The program provides a unique immersion experience for area high school students with a cancer research team to expand awareness of cancer research and education in the community.
Emory Johns Creek Hospital Partners Program	EJCH offers the 'Emory Johns Creek Partners Program' with the goal of educating community leaders on the services offered at the facility. Over 40 community leaders have "graduated" from the program since 2016
Winship at the Y	The Winship Cancer Institute of Emory University and the YMCA of Metro Atlanta partner to offer a special exercise program called Winship at the Y for cancer survivors to help maintain and improve their overall state of wellness during and after treatment. Cancer survivors have access to special exercise assistance tailored for cancer survivors, and Winship also offers clinical trials to examine the effects of physical activity on survivors. These services are offered to all members of the community, regardless of what institution cancer treatment is received at.
Clinical Trials	As an academic medical center, clinical trials are a key part of EHC's clinical and research missions, which help lead to the approval of new lifesaving medicines, medical devices, and treatment protocols.
Serious Communicable Diseases Education Program	In August 2014, EUH became the first hospital in the United States to treat patients with Ebola virus disease (EVD). Since then, Emory has played a lead role in expanding the learning curve from experiences with Ebola virus disease. Emory physicians, nurses and other health care providers have continued to refine and share protocols in infectious disease prevention, safety patient care across Emory's health care system and with institutions and partners throughout the U.S. and globally.

Second Helpings Atlanta Partnership	EUH partners with Second Helpings Atlanta to provide food donations for local homeless shelters in the Atlanta area in an effort to fight food waste and hunger. Through these donations, Second Helpings Atlanta is able to stream valuable food into the Atlanta community to feed individuals and families who face the challenges of poverty and food insecurity.
Area High School Partnerships	EHC partners with high schools in the Atlanta area for mentorship and work study programs for high school students interested in (or seeking) professions in health care.

Priority: Preventative Care & Disease Management	
Examples of Programs & Partnerships Impacting Preventative Care & Disease Management:	
Faith Community Nursing	The Faith Community Nursing program at ESJH aims to improve access to care in the community, expand awareness of healthy behaviors, provide educational programs, and focus on preventative care and disease management.
Diabetes Prevention and Management Programs	In an effort to combat a high prevalence of diabetes in its community, EHC offers multiple diabetes programs to educate the community on diabetes prevention and management. Examples include: ● Diabetes Prevention Program: Offers learning sessions focused on preventing pre-diabetic participants and those with a family history of diabetes from developing type 2 diabetes in the future. ● Emory's Outpatient Diabetes Education and Nutrition Services Program: Offers a variety of educational resources and classes to increase the focus on diabetes prevention and disease management. ● Emory's Diabetes Management Program: Designed to improve clinical care and reduce acute and chronic complications in people affected by type 2 diabetes.
Healthy Emory	Healthy Emory focuses on bringing evidence-based programs to help EHC improve our wellbeing, through efforts to address nutrition, activity, and stress management. Programs offered through Healthy Emory to employees include general health preventative care services, physical activity programs, tobacco cessation programs, healthy eating and weight management programs, stress management and mental health programs, and programs to promote work-life balance.
Innovation Hub	The EHC Innovation Hub aims to improvement health outcomes, increase access to quality care, lower overall costs to the system and improve health care provider experiences in Georgia and across the nation. The EHC innovation Hub uses a demand-driven innovation approach to identify improvement through the eyes of the end user and to develop solutions with the greatest impact on cost, quality and health outcomes in the state of Georgia and across the U.S.
EHC- Atlanta Sports Partnerships	EHC is the official health provider various professional sports organizations in Atlanta. These partnerships allow EHC to engage in further community outreach and educate fans on the importance of maintaining a healthy lifestyle through preventative care, good nutrition, exercise, regular checkups, and screenings.

Appendix D. World Health Organization Cause of Death Classifications

The World Health Organization defines the underlying cause of death as the disease or injury that initiated the sequence of events leading directly to death or as the circumstances of the accident or violence that produced a fatal injury. The World Health Organization has defined a list of sixteen cause of death categories. Each cause of death category includes a variety of conditions. The cause of death categories and associated conditions are outlined below.

Disease Classification & Associated Conditions	Description
Infectious and Parasitic Diseases	Includes the most common of the infectious and parasitic diseases.
Blood Poisoning (Septicemia)	A systematic disease caused by pathogenic organisms or their toxins in the bloodstream.
HIV/AIDS	HIV is a retro-virus, formerly known as HTLV-III that causes the disease of the immune system known as AIDS.
Tuberculosis	A communicable disease of humans and animals caused by the microorganism, Mycobacterium tuberculosis, and manifesting itself in lesions of the lung, bone, and other body parts.
Meningitis	Inflammation of any or all of the membranes enclosing the brain and spinal cord, usually caused by a bacterial infection.
Cancers	The uncontrolled growth of abnormal cells which have mutated from normal tissues. Cancer can kill when these cells prevent normal function of affected vital organs or spread throughout the body to damage other key systems.
Oral Cancer	Involves abnormal, malignant tissue growth in the mouth.
Throat Cancer	Involves a malignant tumor of the esophagus (the muscular tube that propels food from the mouth to the stomach).
Stomach Cancer	Involves a malignant tumor of the stomach.
Colon Cancer	Colon and rectum cancers arise from the lining of the large intestine.
Liver Cancer	Involves a malignant tumor of the liver.
Pancreatic Cancer	Involves a malignant tumor of the pancreas.
Lung Cancer	Involves a malignant tumor of the lungs.
Skin Cancer	Involves malignant skin tumors involving cancerous changes in skin cells.
Breast Cancer	Involves a malignant growth that begins in the tissues of the breast.
Cervical Cancer	Involves a malignant growth of the uterine cervix, the portion of the uterus attached to the top of the vagina.
Uterine Cancer	Involves cancerous growth of the endometrium (lining of the uterus).
Ovarian Cancer	Involves a malignant neoplasm (abnormal growth) located on the ovaries.
Prostate Cancer	Involves a malignant tumor growth within the prostate gland.
Testicular Cancer	Involves an abnormal, rapid, and invasive growth of cancerous (malignant) cells in the testicles (male sex glands adjacent to the penis).
Bladder Cancer	Involves a malignant tumor growth within the bladder. Bladder cancers usually arise from the transitional cells of the bladder (the cells lining the bladder).
Kidney Cancer	Involves the growth of cancerous cells in the kidney and its subdivisions or calyces that empties urine into the ureter, which leads to the bladder.
Brain Cancer	Involves a mass created by growth of abnormal cells in the brain.
Lymph Cancer (Hodgkin's Disease)	A sometimes fatal cancer marked by enlargement of the lymph nodes, spleen, and liver.
Leukemia	Any of various neoplastic diseases of the bone marrow involving uncontrolled proliferation of the white or colorless nucleated cells present in the blood, usually accompanied by anemia and enlargement of the lymph nodes, liver, and spleen.

Disease Classification & Associated Conditions	Description
Blood Diseases (Anemias)	**A deficiency in the oxygen-carrying material of the blood, measured in unit volume concentrations of hemoglobin, red blood cell volume, and red blood cell number.**
Sickle Cell Anemia	A hereditary anemia marked by the presence of oxygen-deficient sickle cells, episodic pain, and leg ulcers.
Endocrine, Nutritional, and Metabolic Diseases	**A series of diseases or conditions related to various endocrine, nutritional and metabolic disorders.**
Diabetes	A life-long disease marked by elevated levels of sugar in the blood. It can be caused by too little insulin (a chemical produced by the pancreas to regulate blood sugar), resistance to insulin, or both.
All other Endocrine, Nutritional and Metabolic Diseases	
Mental & Behavioral Disorders	**Any of a series of mental and Behavioral disorders, which may be developmental or brought on by external factors.**
Disorders Related to Drug Use	Disorders Related to Drug Use are the misuse or overuse of any medication or drug, including alcohol and tobacco.
All Other Mental and Behavioral Disorders	
Nervous System Diseases	**Includes diseases of the central and peripheral nervous systems, including degenerative conditions of the nervous systems.**
Alzheimer's Disease	A severe neurological disorder marked by progressive dementia and cerebral cortical atrophy.
Parkinson's Disease	A progressive neurological disease, characterized by muscular tremor, slowing of movement, partial facial paralysis, peculiarity of gait and posture, and weakness.
All Other Diseases of the Nervous System	
Major Cardiovascular Diseases	**Diseases related to the major parts of the circulatory system.**
High Blood Pressure (Hypertension)	A disorder characterized by high blood pressure; generally this includes systolic blood pressure consistently higher than 140, or diastolic blood pressure consistently over 90.
Rheumatic Fever & Heart Diseases	A severe infectious disease occurring chiefly in children, marked by fever and painful inflammation of the joints and often resulting in permanent damage to the heart valves.
Hypertensive Heart Disease	A late complication of hypertension (high blood pressure) that affects the heart.
Obstructive Heart Diseases (Ischemic Heart Diseases, includes Heart Attack)	Patients with this condition have weakened heart pumps, either due to previous heart attacks or due to current blockages of the coronary arteries. There may be a build-up of cholesterol and other substances, called plaque, in the arteries that bring oxygen to heart muscle tissue.
Stroke	The sudden severe onset of the loss of muscular control with diminution or loss of sensation and consciousness, caused by rupture or blocking of a cerebral blood vessel.
Hardening of the Arteries	A disease characterized by thickening and hardening of artery walls, which may narrow the arteries and eventually restricts blood flow.
Aortic Aneurysm & Dissection	This is a condition in which there is bleeding into and along the wall of (dissection), or the abnormal widening or ballooning of (aneurysm), the aorta (the major artery from the heart).
All Other Diseases of Heart	
All Other diseases of circulatory system	
Respiratory Diseases	**Diseases related to the process or organs involved in breathing.**
Flu	An acute infectious viral disease marked by inflammation of the respiratory tract, fever, muscular pain, and irritation of the bowels.

Disease Classification & Associated Conditions	Description
Pneumonia	An acute or chronic disease caused by viruses, bacteria, or physical and chemical agents and characterized by inflammation of the lungs.
Bronchitis	Acute or chronic inflammation of the mucous membrane of the bronchial tubes.
Emphysema	A pulmonary condition characterized by dilation of the air vesicles in the lungs following atrophy of the septa, resulting in labored breathing and greater susceptibility to infection.
Asthma	A chronic respiratory disease, often arising from allergies and accompanied by labored breathing, chest constriction, and coughing.
All other Chronic lower respiratory diseases	
Digestive System Diseases	**Includes diseases associated with the organs necessary for the digestion of food.**
Alcoholic Liver Disease	Involves an acute or chronic inflammation of the liver induced by alcohol abuse
All other chronic liver disease and cirrhosis	
Reproductive and Urinary System Diseases	**Diseases relating to the organs of reproduction and urination.**
Kidney Diseases	Any disease or disorder that affects the function of the kidneys.
Kidney Infections	These are infections of the kidney and the ducts that carry urine away from the kidney (ureters).
All other Diseases of the genitourinary system	
Bone and Muscle Diseases	**Diseases of the musculoskeletal system and connective tissue.**
Pregnancy and Childbirthing Complications	**Complications to the mother associated with pregnancy, childbirth and the time period surrounding these events.**
Fetal & Infant Conditions	**Conditions to the fetus/child associated with the period of time near birth.**
Prematurity	Disorders related to short gestation and low birth weight, not elsewhere classified.
Lack of Oxygen to the Fetus	Any condition during pregnancy or childbirth where the oxygen is cut off to the fetus.
Respiratory Distress Syndrome	Respiratory distress syndrome of the newborn, also called hyaline membrane disease, is a lung disorder that primarily affects premature infants and causes increasing difficulty in breathing.
Birth-related Infections	Infections specific to the period of time near birth.
Birth Defects	**A physiological or structural abnormality that develops at or before birth and is present at birth, especially as a result of faulty development, infection, heredity, or injury.**
Neural Tube Defects	A defect occurring early in fetal development that damages the primitive tissue which will become the brain and spinal cord.
SIDS	**Sudden infant death syndrome (SIDS) is the unexpected, sudden death of any infant or child under one year old in which an autopsy does not show an explainable cause of death.**
External Causes	**All causes that affect the human body that originate from an external source.**
Motor Vehicle Crashes	Consists of all accidents in which any motorized vehicle (car, truck, motorcycle, etc.) was involved, including ones involving motor vehicles injuring pedestrians or bicyclists.
Falls	All accidental injuries caused by an individual losing their balance.
Accidental Shooting	Injury as a result of the accidental discharge of a firearm.
Drowning	Drowning from being submerged in water or other fluid.
Fire & Smoke Exposure	Accidental exposure to smoke, fire and flames.
Poisoning	The act of ingesting or coming into contact with a harmful substance that may cause, injury, illness, or death.
Suffocation	Suffocation from items in bed, inhalation of gastric contents, food, airtight space, or plastic bag.

Disease Classification & Associated Conditions	Description
All Other Unintentional Injury	Add to motor vehicle crashes, falls, accidental shooting, drowning, fire & smoke exposure, poisoning, and suffocation to obtain all unintentional injury.
Suicide	The act or intention of intentionally killing oneself.
Homicide	The killing of one person by another.
Legal Intervention	The act of an individual being harmed as a result of official legally approved intervention, such as being harmed by law enforcement during the commission of a crime, or being put to death. Does not include harm caused through an act of war.