2019

Community Health Needs Assessment

ST. MARY'S
Sacred Heart Hospital

A Member of Trinity Health

STUDY TEAM
&
ACKNOWLEDGEMENTS

Community Health Needs Assessment Study Team
College of Public Health, University of Georgia

Grace Bagwell Adams, Ph.D., MPA, Principal Investigator
Ben Gardner, MSW
Michelle Bardgett
Megan Bramlett
Rachel Colegrove
Seth Riggle
Sheila Straub
Henry Tarwater
Anyess Travers

Focus Group Team
J. W. Fanning Institute for Leadership, University of Georgia

Carolina Darbisi, Ph.D., Assistant Director
Maritza Soto Keen, Ph.D., Nonprofit Leadership Development
Lori Tiller, MA, Nonprofit and Youth Leadership Development
Emily Boness, J.D., Youth Leadership Development

St. Mary's Healthcare System Representatives
Community Benefits Team

Alex Lundy, Community Benefits Manager
Courtney Vickery, Director of Corporate Health Services
Bria Brown, Community Benefits Coordinator
Regina Hooper, Sacred Heart Director of Nursing
Beth Patrick, Good Samaritan Director of Community Outreach and
Administrative Services
Lauren Papka, Sacred Heart Director of Administrative and Support
Services
Rebecca Corley, Community Benefits Intern

TABLE OF CONTENTS

SACRED HEART HOSPITAL
COMMUNITY HEALTH NEEDS ASSESSMENT
2019

Executive Summary

Community Health Needs Assessments (CHNA) are produced to identify and prioritize health needs, and also to present relevant resources to address those needs within our community. This CHNA used a comprehensive mixed-methods approach with the latest available data on health outcomes and behaviors, demographics of the community, healthcare supply, and healthcare utilization.

Under the Affordable Care Act (ACA), nonprofit hospitals are required to conduct these assessments every three years to submit to the Internal Revenue Service (IRS). In addition to the assessment, an Implementation Strategy is required, detailing the hospital's plan to address the identified health needs.

The 2019 St. Mary's Health Care System's Community Health Needs Assessment (CHNA) was produced to satisfy the requirements of Section 501(r) of the IRS code for three St. Mary's Health Care System hospitals: St. Mary's, Good Samaritan, and Sacred Heart.

Identify Health Needs + **Prioritize Needs** + **Identify Resources**

Implementation Plan

Implementation Strategies: two to four areas of focus for each hospital in the St. Mary's Health Care System for the next three years.

This report presents data on the five county region served by Sacred Heart Hospital and accomplishes three CHNA goals: 1) Identifying Health Needs; 2) Prioritization of Needs; 3) Presentation of Community Health Resources. Data collection and analysis resulted in identification of the top ten health needs presented below, with their respective prioritization scores.

2019 CHNA Scores for the Top Ten Health Needs

1 Cardiovascular Health (216)

2 Nutrition & Physical Activity (209)

3 Behavioral Health (208)

4 Maternal & Child Health (206)

5 Healthcare Access (194)

6 Reproductive Health (193)

7 Cerebrovascular Health (173)

8 Cancer (172)

9 Respiratory Health (163)

10 Injuries & Accidents (129)

MOVING FORWARD

In January 2019, a research team from the College of Public Health at the University of Georgia partnered with St. Mary's Health Care System and the J.W. Fanning Institute for Leadership to produce the 2019 CHNA for the 17 county region served by the system's three hospitals. This study defines health broadly, and applies the social determinants of health model to assess regional health from a population perspective, looking also at the study considers the impact of where people live, work, and play on their health outcomes.

The result is a robust understanding of health and its determinants for the population as a whole, but also for vulnerable sub-populations. Special attention was given to analyzing and presenting health disparities where observable for low income families, racial and ethnic minorities, and rural residents, among others. The result is a deeper understanding of the challenges and strengths in our community, which will be used to design the Implementation Strategy for Sacred Heart Hospital Sand St. Mary's Health Care System and their approach to community benefits for the next three years.

INTRODUCTION

INTRODUCTION

ABOUT

St. Mary's Health Care System is a not-for-profit Catholic health care ministry whose mission is to be a compassionate healing presence in the communities we serve. Founded in 1906 and now a member of Trinity Health, St. Mary's focuses on neurosciences, cardiac care, orthopedics, general medicine/general surgery, women's health, and gastroenterology. Services include emergency care, intensive care, stroke care, cardiac catheterization, home health care/hospice services, inpatient and outpatient rehabilitation, assisted living, Alzheimer's/dementia care, preventive care, state-of-the-art diagnostic and therapeutic services and a growing network of physician practices.

Georgia's Large Hospital of the Year in 2006, 2010, 2015 and 2018, St. Mary's is an accredited Chest Pain Center with Primary PCI, a gold-plus hospital for stroke care, and has received the Joint Commission Gold Seal of Approval™ for advanced primary stroke care, advanced inpatient diabetes, heart failure care, knee and hip replacement, spine surgery, and COPD.

MISSION

We, St. Mary's Health Care System and Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.

VISION

As a mission-driven, innovative health organization, we will become the national leader in improving the health of our communities and each person we serve. We will be the most trusted health partner for life.

VALUES

Reverence - We honor the sacredness and dignity of every person.

Justice - We foster right relationships to promote the common good, including sustainability of the Earth.

Commitment to Those Who Are Poor - We stand with and serve those who are poor, especially those most vulnerable.

Stewardship - We honor our heritage and hold ourselves accountable for the human, financial, and natural resources entrusted to our care.

Integrity - We are faithful to who we say we are.

Health Facilities Owned & Operated by Trinity Health

Trinity Health owns and operates three separate hospitals, the largest being St. Mary's Hospital in Athens-Clarke County. Sacred Heart is the second largest campus in the system, serving the five county service area covered in this report. Below is a list of each hospital campus, its location, and the number of beds at each facility.

Facility	Location	Number of Beds
St. Mary's Hospital	Athens, GA (Clarke County)	196
Good Samaritan Hospital	Greensboro, GA (Greene County)	25
Sacred Heart Hospital	Lavonia, GA (Franklin County)	56

Services Provided by St. Mary's Healthcare System

Emergency Department
Open 24/7 and featuring cutting edge monitoring and telemedicine capabilities, the ER is staffed by physicians, certified emergency nursing and other healthcare professionals. The ER partners with EMS providers and a team of neurologists to provide access to acute care telemedicine for possible stroke patients. Sacred Heart Hospital is equipped with a helipad for expedited transportation to and from the hospital.

Inpatient and Critical Care
Acute care, pre- and post-operative, and restorative inpatient care is available for medical and surgical patients. Critical care services include dedicated medical/surgical intensive care (ICU).

Surgery
Sacred Heart Hospital provides a large surgical suite with inpatient and outpatient capabilities and dedicated pre-op and post-anesthesia care units The hospital also provides a separate endoscopy area.

Family Birth Center
This beautiful unit provides comprehensive, family-centered care in private labor, delivery, recovery and postpartum rooms. Services include perinatal education, breastfeeding education and support.

Imaging & Laboratory
From fast 64-slice CT scanning and laboratory testing for stroke patients to routine annual mammograms and blood testing, Sacred Heart Hospital provides sophisticated diagnostic services at our hospital. Imaging capabilities include CT, MRI, echocardiography, stress testing, nuclear medicine, 2D and 3D mammography, ultrasound and bone density testing. Laboratory services include bloodwork, urinalysis, blood bank and more.

Hospitalists
Once admitted to Sacred Heart, the hospitalist will be in charge of your care. Hospitalists respond to hospital patients' lab reports, test results and emergency situations providing an added level of continuous care on a daily basis.

Medical Group
St. Mary's Medical Group provides a growing continuum of medical practitioners to enhance access to care across the entire region. In addition to primary care (internal medicine and family medicine) and pediatrics, SMMG provides specialized care in cardiology, endocrinology, general surgery, industrial medicine, infectious disease, neurology, OB/GYN and rheumatology.

Graduate Medical Education
Partnering with the Augusta University/University of Georgia Medical Partnership, St. Mary's is the participating site for the Internal Medicine Residency Program, Northeast Georgia's first graduate medical education program. Up to 33 physician residents provide supervised care with increasing levels of independence as the final stage of their medical education. The program is designed to address Georgia's physician shortage and attract new doctors to our region.

Spiritual Care
Emotional and spiritual care are as important to healing as physical care. Sacred Heart provides a dedicated staff of employed and volunteer chaplains to support patients in their individual faith tradition and beliefs. Sacred Heart Spiritual Care Department offers an onsite chapel.

Respiratory Care
The Sacred Heart Respiratory Care Department is available for any breathing-related need, from ventilator management in the critical care setting to outpatient breathing tests, smoking cessation, and a support group.

Rehabilitation Services
Sacred Heart Rehab Services provide manual therapy techniques and bio-electronic equipment to evaluate and treat new rehab patients. Our program provides transition toward developing a healthy lifestyle through reducing pain and maximizing the functionality of patients with disabilities or physical injuries, including accidents, illness and stroke. We offer physical therapy, occupational therapy and speech therapy.

Wellness Center
The Sacred Heart Wellness Center provides a large, fully equipped gym, a wide range of classes and services, and friendly knowledgeable staff. It is the areas only Medical Fitness Center and is staffed by knowledgeable health and wellness professionals.

Sleep Center
The Sleep Disorders Center provides testing to help identify and treat sleep-related issues. Our center includes private individual suites with diagnostic equipment, queen size beds and private bathrooms. The service is available for patients 13 years of age and up and is staffed by registered or registry eligible polysomnographic technologists.

St. Mary's Home Health Care/Hospice Services
Homebound patients can receive nursing and rehabilitative care, aides, social work services and more in their home in a multi-county area of Northeast Georgia. Also, people diagnosed with a life-limiting illness and their family can receive care to maximize quality of life through St. Mary's home hospice services and inpatient hospice house.

Highland Hills Village
St. Mary's retirement community provides independent living, assisted living and memory care in a beautiful facility on wooded grounds convenient to Athens, Bogart and Watkinsville.

SUMMARY OF PREVIOUS CHNA:
St. Mary's Health Care System, 2016

St. Mary's Health Care System completed a Community Health Needs Assessment (CHNA) in order to meet the requirements of the Internal Revenue Service (IRS), Notice 2011-52. The document assessed population factors, health conditions, community priorities, and health behaviors in Athens-Clarke County and the surrounding counties in Northeast Georgia. Additionally, and as the IRS-requirement suggests, the assessment was used for the development of the hospitals community benefits program, including outreach services and resource development, for the following three years (2016-2019).

The St. Mary's Health Care System hospital service area was defined at the patient visit level. For the purposes of the CHNA, existing secondary and primary data were gathered from local, state, and federal data sources. Primary data were gathered through administration of a household survey in Athens-Clarke County and focus groups in surrounding counties to gain insight into the most pressing community health needs. Special focus was given to populations where health disparities were present, including those without health insurance and low-income families.

The Community Advisory Committee assessed this data in order to accomplish a prioritization of health conditions and risk factors for which the hospital could concentrate their efforts and improve community health. Following the identification and prioritization of health needs, St. Mary's staff worked with faculty from the J.W. Fanning Institute for Leadership to construct an implementation plan to systematically address the health needs in the service area. This implementation plan provided specific areas of focus with objectives and strategies to accomplish stated objectives for the three years following the 2016 CHNA. Through this process, the following needs were recognized as the most important issues to be addressed to improve the health and quality of life in our community: access to health services; nutrition, physical activity, and obesity; and cardiovascular disease.

RESPONSES TO 2016 CHNA

From United Way of Northeast Georgia:
Solicited: January 2019
Received: February 2019

"United Way of Northeast Georgia motivates and mobilizes resources to meet the highest priority needs of those living in Northeast Georgia. We understand that the health of our community and access to healthcare for all, especially the most vulnerable populations, is of great priority for our region. The St. Mary's Community Health Needs Assessment very thoroughly assesses the health needs of their 17 county service area through both quantitative and qualitative data analysis, both current and longitudinal, that engaged community members and leaders from throughout the Northeast Georgia region.

St. Mary's went above and beyond in the scope of their assessment, leading to a clear prioritization of needs to guide the hospital's work moving forward. What is helpful not only in the hospital's work, but for our community, is the data provided on the unique needs of vulnerable populations in our region. This information, and the included resource information, help to guide our work and the work of other organizations in Northeast Georgia."

From Envision Athens:
Solicited: January 2019
Received: February 2019

"Envision Athens is the 20 year strategy for community and economic development in Athens-Clarke County. As this strategy moved into implementation phase in mid-2017, it was imperative that we had real-time community based data to help inform our decision making which directly impacts the programs, policies, and procedures which affect our stakeholders and residents.

This data and approach also further connects this hospital system in relationship with other care providers and stakeholders in a way that moves the local hospital from facility to community partner and decision-maker. This report helps position the healthcare system as the informed leader that it is and that we need."
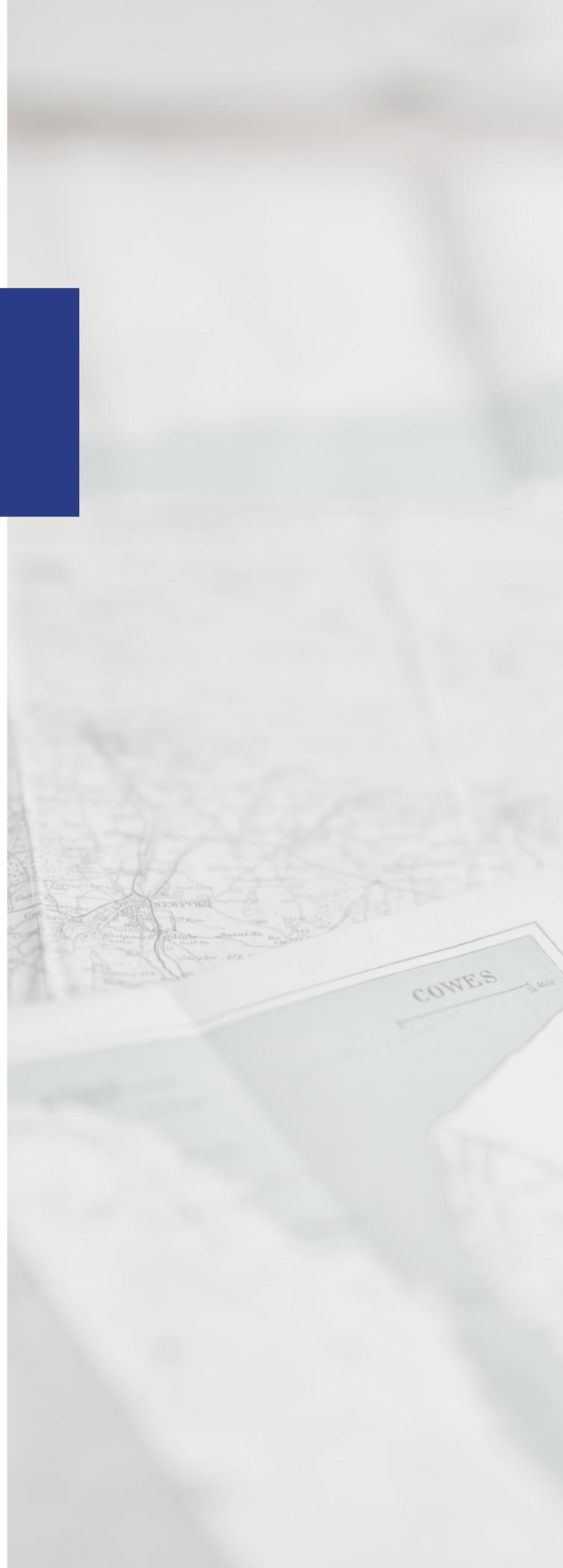
COMMUNITY SERVED

Sacred Heart Hospital Service Area

The geographic service area was defined at the county-level for the purposes of the 2019 Community Health Needs Assessment (CHNA). The service area was determined by counting patient visits by county of residence. Five counties are defined as the service area for Sacred Heart: Banks, Elbert, Franklin, Hart, and Stephens. The counties with the most patient visits are the "primary service region." The counties with the next highest patient visits are the "secondary service region." See Figure 1 for a map of the service area.

Figure 1. Service Area Map.

Sacred Heart Service Area
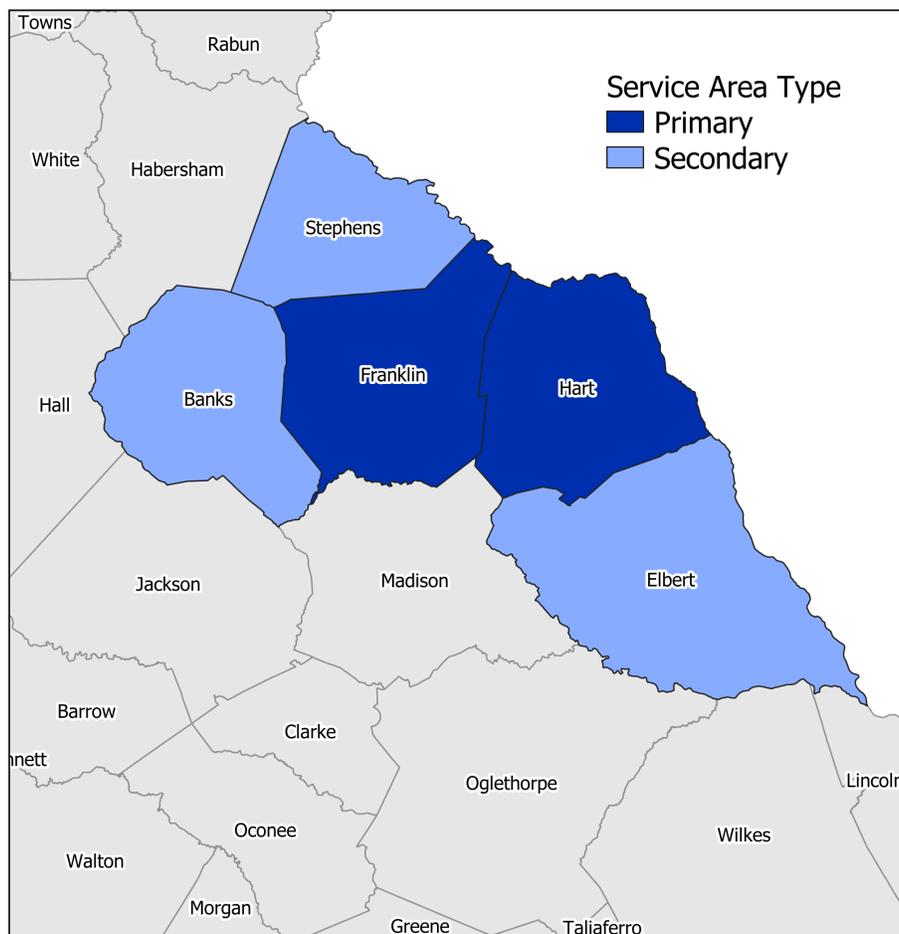
Service Area: Demographic Overview

The numbers presented below are a snapshot of the five county service area for Sacred Heart Hospital, including the total population of the counties served, the total square mileage covered, and the median household income. The following pages contain community profiles for each county served, presenting a demographic overview, strengths and challenges, and healthcare supply information.

112,247 Service Area Population Across All 5 Counties

Population estimate as of July 1, 2017 according to the U.S. Census Bureau's Quick Fact Profiles.

1,256.17 Service Area Land Mass, in Square Miles

Estimate as of July 1, 2017 according to the U.S. Census Bureau's Quick Fact Profiles.

$39,522 Median Household Income, 2013-2017 Average

Adjusted to 2017 dollars. Median household income data from U.S. Census Bureau's American Community Survey. Median income across all five counties in service area.

Banks County: Community Profile

Strengths

Access to Primary Care Providers

The ratio of population to primary care providers in Banks County has been trending down since 2011, meaning more providers for the county

(County Health Rankings, 2019)

Challenges

Teen Births

Number of births per 1,000 female population 15-19


(County Health Rankings, 2019)
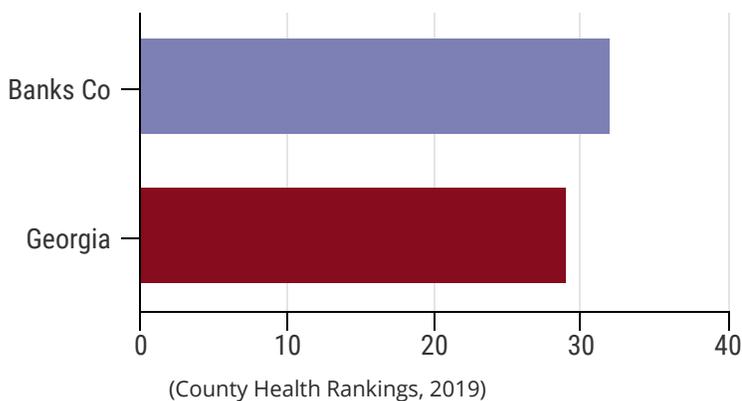
Access to Health Insurance

17.2% of population is without health insurance

compared to 15.4% statewide

(County Health Rankings, 2019)

Race & Ethnicity

6.6 %   2.5 %

2.8 %

88.1 %

- White, not Latinx
- African-American
- Latinx
- Other
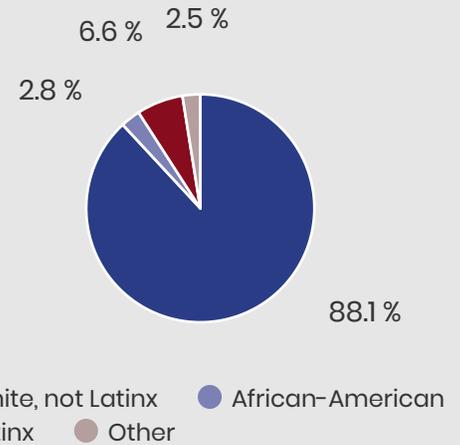
(Census, 2010)

Education

Less Than High School	High School diploma	Bachelor's Degree
23%	**77.0%**	**11.9%**

(Census, 2010)

Economy

% Living in Poverty	Median income	Unemployment Rate
13.5%	**$42,182**	**3%**

(Dept. of Labor 2018)

Other Demographics

% with broadband internet	% without health insurance	County Health Ranking
60.7%	**17.2%**	**65/159**

(County Health Rankings, 2019)

Healthcare Labor Force

Primary	Mental	Dental
1 : 6,130	**N/A**	**1 : 18,630**

(County Health Rankings, 2019)

Elbert County: Community Profile

Strengths

Access to Dentists

Since 2013, the ratio of residents to dentists has been declining, proving there are more dentists available in the county
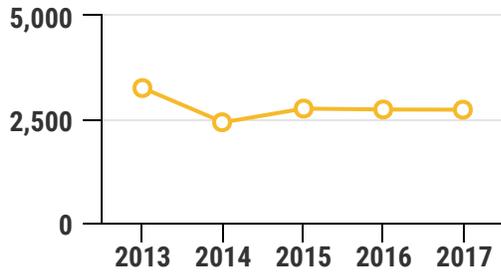
(County Health Rankings, 2019)

Challenges

Teen Birth Rate

44 (per 1,000 births), compared to the state rate of 29
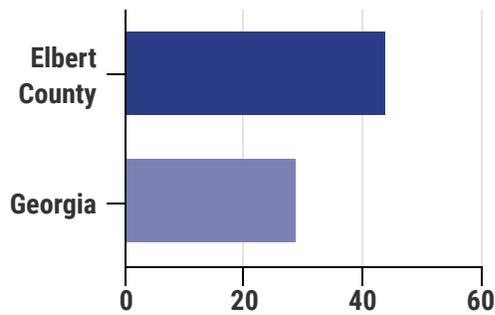
(County Health Rankings, 2019)

Alcohol-Impaired Driving Deaths

41% of driving deaths with alcohol involvement compared to 22% in the state
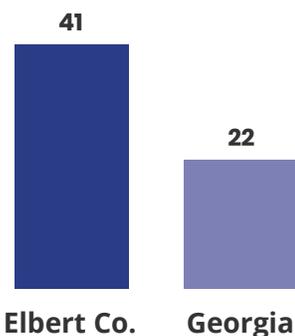
(County Health Rankings, 2019)

Race & Ethnicity

1.7 %
5.8 %
29.1 %
63.4 %

● White, not Latinx   ● African-American
● Latinx   ● Other
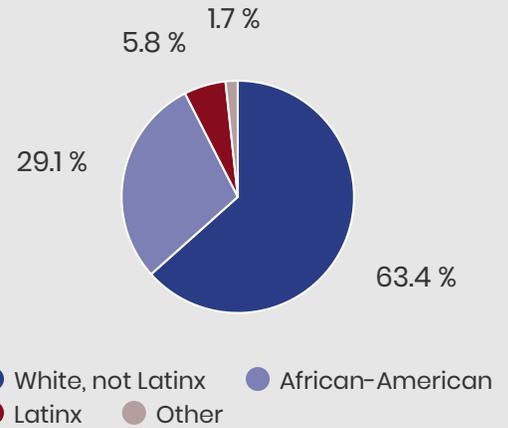
(Census, 2010)

Education

Less Than High School	High School diploma	Bachelor's Degree
21.4%	78.6%	11.1%

(Census, 2010)

Economy

% Living in Poverty	Median income	Unemployment Rate
22.9%	$35,207	4.2%

(Dept. of Labor 2019)

Other Demographics

% with broadband internet	% without health insurance	County Health Ranking
52.8%	16.9%	103 / 159

(County Health Rankings, 2019)

Healthcare Labor Force

Primary	Mental	Dental
1 : 2,130	1 : 3,180	1 : 2,730

(County Health Rankings, 2019)

Franklin County: Community Profile

Strengths
Flu Vaccinations

51% of Medicare enrollees received annual flu vaccine in Franklin Co. *compared to 43% across the state*

(County Health Rankings, 2019)

Challenges
Teen Birth Rate

44 (per 1,000 births), compared to the state rate of 29.

Franklin County

Georgia

0   10   20   30   40   50
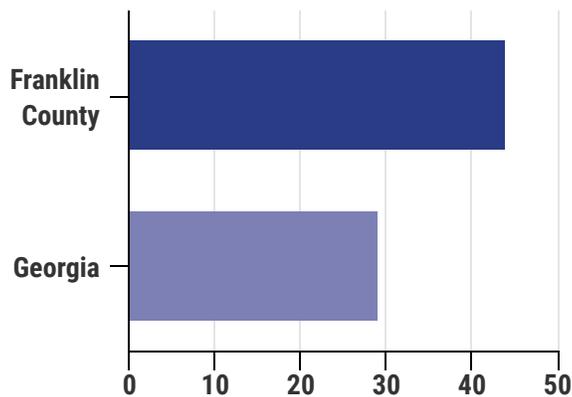
(County Health Rankings, 2019)

Opioid Use

14 age-adjusted death rate for all opioids *compared to service area average death rate of 11.7*

(OASIS Opioid, 2018)

Race & Ethnicity

4.7 %   2.2 %
9.6 %
83.5 %

- White, not Latinx
- African-American
- Latinx
- Other
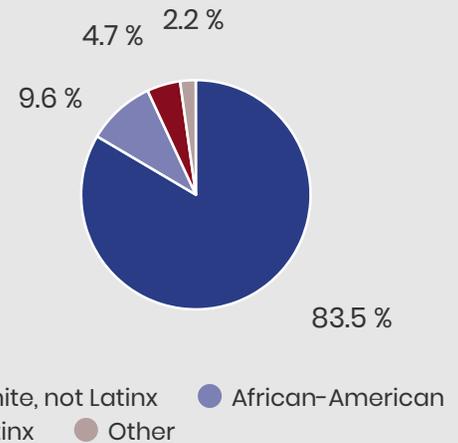
(Census, 2010)

Education

Less Than High School	High School diploma	Bachelor's Degree
22.7%	**77.3%**	**12.8%**

(Census, 2010)

Economy

% Living in Poverty	Median income	Unemployment Rate
18.7%	**$39,246**	**4%**

(Dept. of Labor, 2019)

Other Demographics

% with broadband internet	% without health insurance	County Health Ranking
59.5%	**18.8%**	**100/159**

(County Health Rankings, 2019)

Healthcare Labor Force

Primary	Mental	Dental
1 : 5,580	**1 : 1,270**	**1 : 4,560**

(County Health Rankings, 2019)

17

Hart County:
Community Profile

Strengths

Flu Vaccinations

49% of Medicare enrollees received annual flu vaccine in Hart Co.

compared to 43% across the state

(County Health Rankings, 2019)

Challenges

Child Mortality

90 deaths among children under age 18 (per 100,000 population), compared to the state rate of 60

Hart County
Georgia

0   25   50   75   100
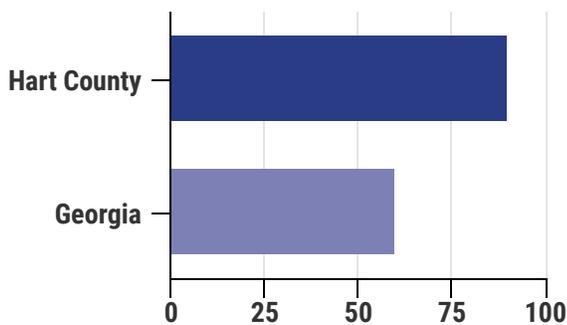
(County Health Rankings, 2019)

Obesity

32% of adults are obese compared to 30% in the state
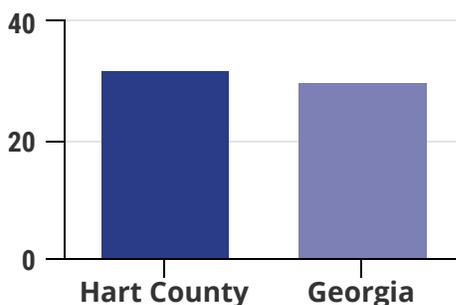
40

20

0

Hart County   Georgia

(County Health Rankings, 2019)

Race & Ethnicity

3.9 %   2.3 %

19.1 %

74.7 %

● White, not Latinx   ● African-American
● Latinx   ● Other
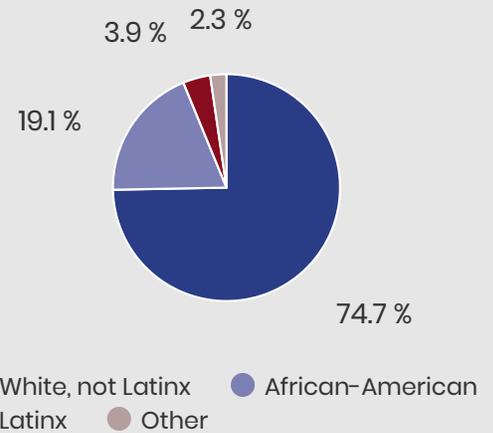
(Census, 2010)

Education

Less Than High School	High School diploma	Bachelor's Degree
18.8%	**81.2%**	**13.8%**

(Census, 2010)

Economy

% Living in Poverty	Median income	Unemployment Rate
18.9%	**$41,216**	**3.8%**

(Dept. of Labor 2018)

Other Demographics

% with broadband internet	% without health insurance	County Health Ranking
61.1%	**16.2%**	**58/159**

(County Health Rankings, 2019)

Healthcare Labor Force

Primary
1 : 2,560

Mental
1 : 6,450

Dental
1 : 3,680

(County Health Rankings, 2019)

18

Stephens County: Community Profile

Population: 25,890
Miles from Hospital: 18.5

Strengths

Access to PCPs and Dentists

	Stephens Co.	Georgia
Ratio of residents to PCPs	1,430:1	1,520:1
Ratio of residents to dentists	2,590:1	1,960:1

(County Health Rankings, 2019)

Challenges

Teen Births

40 (per 1,000 births), compared to the state rate of 29
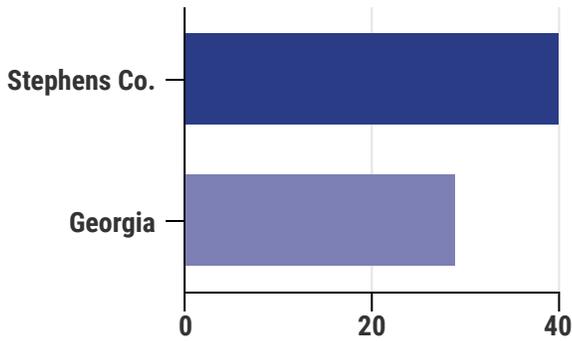
(County Health Rankings, 2019)

Sexually Transmitted Infections

Stephens County's rate of sexually transmitted infections has been trending up since 2007, with a rate of 386.9 in 2016

(County Health Rankings, 2019)

Race & Ethnicity

- 2.9 %
- 3.4 %
- 10.7 %
- 82.9 %

- White, not Latinx
- African-American
- Latinx
- Other
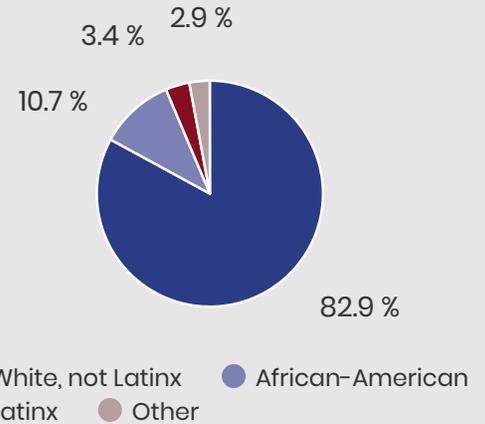
(Census, 2010)

Education

Less Than High School	High School diploma	Bachelor's Degree
18.4%	**81.6%**	**19.6%**

(Census, 2010)

Economy

% Living in Poverty	Median income	Unemployment Rate
18.7%	**$39,756**	**4.2%**

(Dept. of Labor 2018)

Other Demographics

% with broadband internet	% without health insurance	County Health Ranking
66.6%	**15.4%**	**105/159**

(County Health Rankings, 2019)

Healthcare Labor Force

Primary
1 : 1,430

Mental
1 : 1,620

Dental
1 : 2,590

(County Health Rankings, 2019)

Top 10
Health Needs

1 Cardiovascular Health

Cardiovascular health is ranked as the number one health need in our community. This includes incidence and prevalence of heart disease, which proportionally accounts for the most deaths in the service area (relative to all other causes). High blood pressure (hypertension), high cholesterol, and other cardiovascular indicators were examined across all data sources. Cardiovascular disease (CVD) and preliminary indicators of compromised cardiovascular health are also linked to many other health conditions--many of which are preventable. There is significant health disparity present in cardiovascular outcomes for individuals in medically underserved communities, low income individuals, and racial and ethnic minorities. Cardiovascular deaths are the most commonly occurring preventable deaths.

Secondary Data

Among the 5 counties in this service area, **cardiovascular diseases** accounted for 29.9% of all deaths (all ages) between 2015 and 2017.

Cardiovascular disease wasthe leading cause of death in the service area. Three of the counties in the service are are slightly higher than the state average (29.4%). Franklin has the highest proportion of CV deaths. (Source: OASIS, 2019)

Cardiovascular Deaths, % of All Causes, 2017

County	Value
Banks	~27
Elbert	~25
Franklin	~35
Hart	~29
Stephens	~27
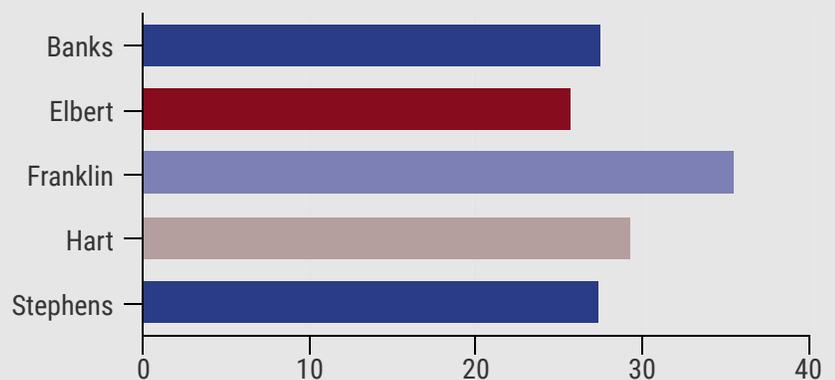
Survey Data

✳ More than **1 in 2** reported hypertension in their household.
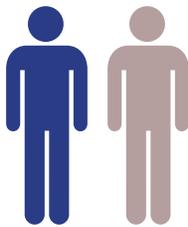
✳ **43%** of respondents reported high cholesterol in their household.

43% reported walking less than 10 minutes on at least 3 of the last 7 days.

Persistent Disparities

In Banks, Elbert, Franklin, and Hart counties, Black residents were significantly more likely to die from Cardiovascular Disease (CVD) than White residents.

Across the service area, a Black resident was more likely to visit an Emergency Department (ED) for CVD than a White resident. In Elbert, Franklin, and Stephens counties, Black residents were more than twice as likely to visit an ED for CVD than White residents, adjusted for age (2017). In Hart county, a Black resident was more than three times more likely to visit an ED for CVD than a White resident, adjusted for age (2017). When we examined these trends over time, evidence from secondary data showed persistent, statistically significant differences for the years observed (2007-2017) (Source: OASIS).

The figure below represents the orders of magnitude between the state ED visit rates for Black residents in the Service Area and the two counties with the greatest disparity: Hart, where Black individuals were 3.31 times more likely than White individuals to go to the ED for CVD; and Elbert, where the ED rate was 2.78 greater than that for White individuals.

Emergency Department Visits for Cardiovascular Disease: Racial Disparity
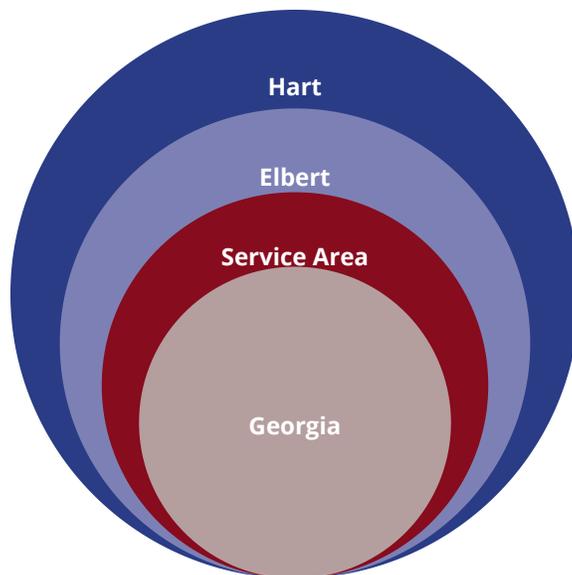
Focus Group Data
What is your biggest health challenge?

"Cardiovascular issues are one of our biggest health problems."

"We should go after the walk-friendly" community designation."

2 Nutrition, Diabetes & Obesity

Following the *HealthyPeople 2020* categorization, the number two ranked health need includes food security (access to healthy food for all families), type II diabetes, and obesity. We examined both the demand for healthy food, health behaviors for food consumption, supply of healthy food, and incidence and prevalence of diabetes and obesity. Of course, many of these health needs categories are inextricably linked; cardiovascular health and this category is perhaps one of the best examples of the intersectionality of health issues. We observed this need as being one of the most pressing across all data sources. As with cardiovascular outcomes, there was significant health disparity present in nutrition, diabetes, and obesity outcomes for individuals in medically underserved communities, low income individuals, and racial and ethnic minorities.

Secondary Data

In all counties in the service area, mortality rates (per 100,000), adjusted for age, for **diabetes** exceeded the state rate of 21.5 in 2017. (Source: OASIS, 2019)

Obesity prevalence for each county in the service area was slightly higher than the state average of 30%. (Source: RWJF County Health Rankings)

Obesity Prevalence (%), Service area vs. Georgia
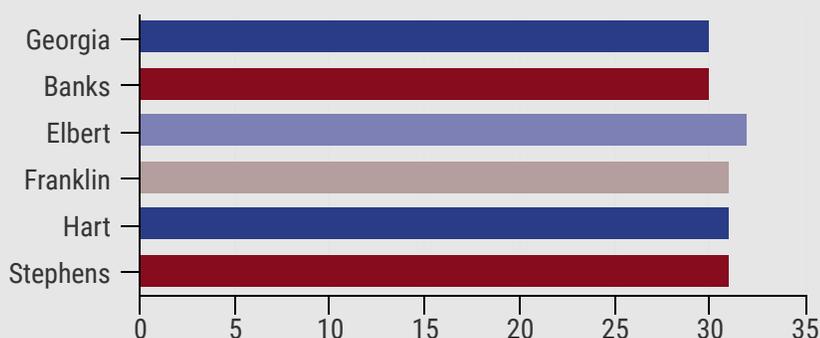
One in three individuals in the service area is obese.

Survey Data

* **1 in 5** reported diabetes in their household.

* **1 in 5** respondents reported obesity in their household.
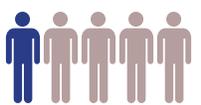
* Sacred Heart has the **highest food insecurity service area** of the three St. Mary's Health System Campuses

60% report eating one or less fruits per day

58% report eating one or less veggies per day

25% report experiencing food insecurity

Persistent Disparities

In all five counties, Black residents had a significantly higher rate of ED visits for diabetes than White residents. Additionally, in Elbert and Stephens counties, a Black resident was more than twice as likely to visit the emergency department for diabetes than a White resident, adjusted for age (2017). According to U.S. Department of Health & Human Services data (HHS), Latinx males and females are significantly more likely to be obese or overweight than non-Latinx, white males and females.

In Franklin county, a Black individual was more than five times as likely to visit an ED for diabetes than a White individual, adjusted for age (2017). When we examined these trends over time, evidence from secondary data showed persistent, statistically significant differences for the years observed (2007-2017) (Source: OASIS).

The figure below represents the orders of magnitude between the state ED visit rates for Black individuals in the Service Area and the two counties with the greatest disparity: Franklin, where Black residents were 5.76 times more likely than White residents to go to the ED for diabetes; and Stephens, where the ED visit rate was 2.95 times greater than that for White individuals.

Emergency Department Visits for Diabetes: Racial Disparity
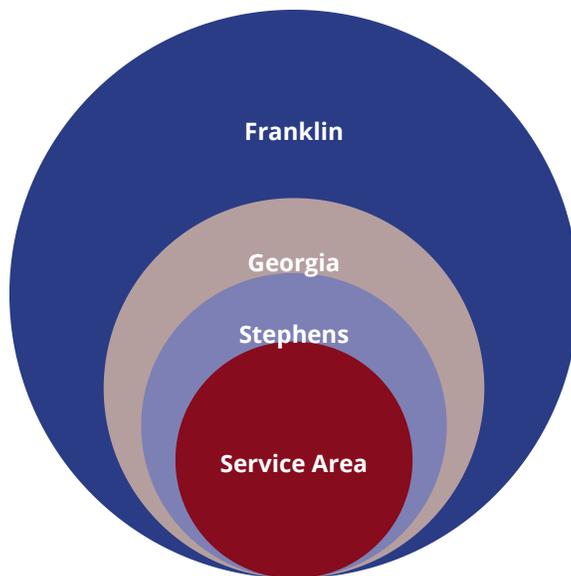
Focus Group Data

What are your most significant health issues?

"Diabetes is a major health problem here."

"We [have] businesses, but if you have more liquor stores than grocery stores, then you have an issue."

3 Behavioral Health

The number three ranked health need is behavioral health, which includes mental health and substance use disorder. This is the health need that has increased most drastically since the last CHNA. Due to the comorbidity of mental health and substance use disorder, the categorization of the two together is critically important and they must be addressed simultaneously. Across all data sources, this need was observed as being one of the most prevalent. Suicide and drug overdose are the leading causes of mortality within this health need. The demographic group most affected is working age white males. Within substance use disorder, licit and illicit opioid use and misuse has driven the increase in drug overdoses (many of which result in death). Health disparities for behavioral health are concentrated in low income, rural communities. Supply of behavioral health professionals and treatment for substance use disorder is a major concern in the service area.

Secondary Data

Age-adjusted mortality rate (per 100,000) for **opioid use** exceeded the state mortality rate in Banks, Elbert, Franklin, and Stephens counties for 2014-2017.

In Banks county, age-adjusted mortality rate (per 100,000) for **opioid use** was more than twice the state rate for 2014-2017. (Source: OASIS)

Age-Adjusted Mortality Rate (per 100,000) for Opioid Use

County	Rate
Georgia	8
Banks	17.5
Elbert	8
Franklin	14
Hart	5
Stephens	14.5
Service Area	11.5
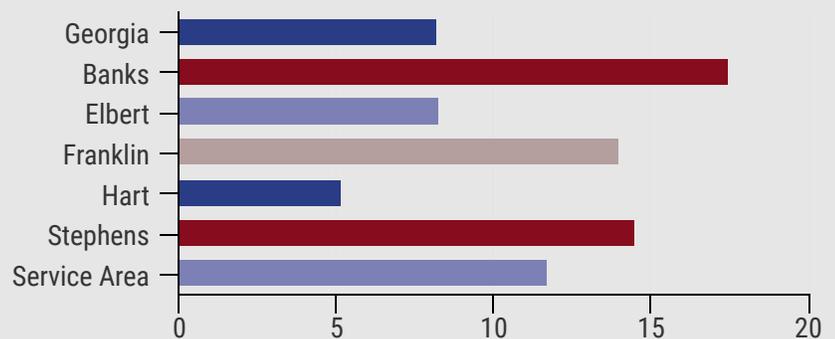
Survey Data

✳ **1 in 5** reported depression in their household.

✳ **1 in 4** reported anxiety in their household.

**3.4% report another mental health disorder (*e.g. bipolar disorder*)**

8% said they needed mental healthcare in the last 12 months but could not get it

Lack of affordability was the most common reason for not getting the mental or substance use treatment needed

Persistent Disparities

White residents in all five counties were more than twice as likely to die from issues related to opioids, adjusted for age (2017). When we examined these trends over time, evidence from secondary data showed persistent, statistically significant differences for the years observed (2007-2017). The time trend line below shows opioid overdose deaths over time for the state of Georgia. The service area data reflect the same trends shown below. (Source: Kaiser).

Opioid Overdose Deaths by Race/Ethnicity: 1999 - 2017

Legend: ○ White, Non-Hispanic □ Black, Non-Hispanic ▽ Hispanic ◇ Total ■ Georgia
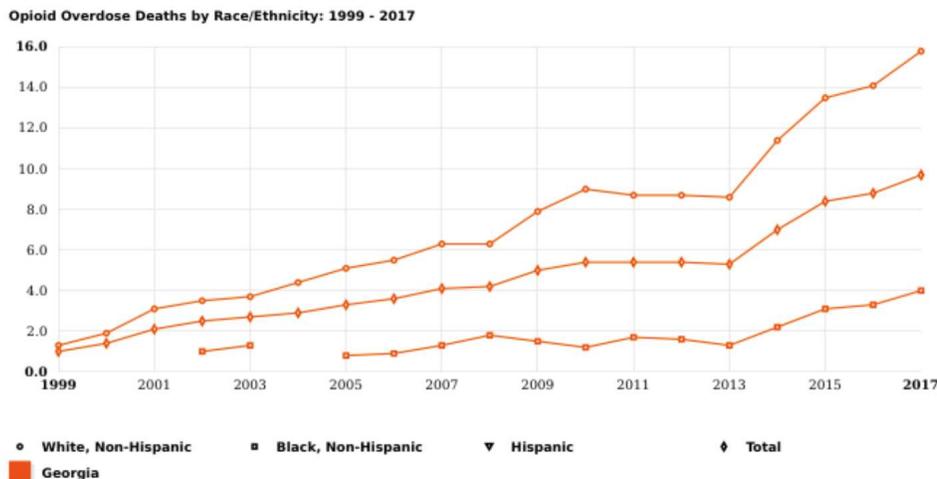
SOURCE: Kaiser Family Foundation's State Health Facts.

Opioid Epidemic: Cost Analysis

Using county-level data from the Georgia Department of Public Health from 2014 through 2018, we conducted a cost analysis of emergency services related to opioid overdose across the service area. We used the number of Naloxone doses administered by EMS professionals and the number of opioid overdose calls made to EMS that resulted in a visit to the scene.

$70,420
Spent on Naloxone in the Service Area, 2014-2018

$312,000
Spent on EMS Opioid Overdose Calls in the Service Area, 2014-2018

Focus Group Data

In the focus group, some of the most frequently cited health issues that were listed as "significant health needs" were:

- Substance use disorder, specifically **opioids, heroin, and meth.**
- Mental health, and access to **behavioral health providers.**

Even in areas where such care is available there are long waiting lists for both.

Individuals requiring a police enforced psychiatric evaluation are often taken to emergency departments when mental health care providers are unavailable.

4 Maternal & Child Health

The number four ranked health need is maternal and child health. Across all data sources, this need was observed as being a concern. Health disparities for maternal and child health are concentrated in low income, rural communities and are especially problematic for racial and ethnic minorities. A shortage of Ob-Gyn specialists, pediatricians, and other health professionals that serve pregnant and postpartum women and their children is a major barrier to health in the service area. Many women must travel significant distances for routine prenatal care, labor and delivery, and pediatric care for their children. Health behaviors during pregnancy are also a concern. Across the service area, the maternal smoking rate is more than twice the state's rate.

Secondary Data

Throughout Sacred Heart's service area, the percent (number per 100) of **births by women using tobacco** exceeded the state percentage in 2017. In Franklin and Stephens counties, percentage of births to women using tobacco was more than three times the state percentage in 2017.

The age-adjusted ED visit rate for **pregnancy and childbirth complications** are highest in Banks and Stephens counties. (Source: OASIS, 2019)

Age-Adjusted ED Visit Rates (per 100,000) for Pregnancy & Childbirth Complications
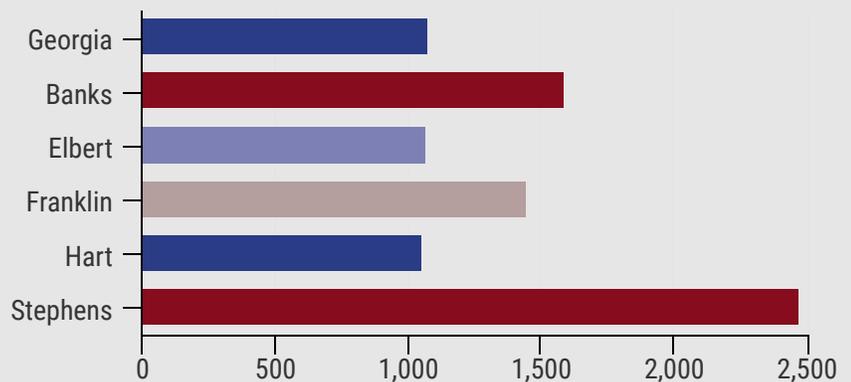
Survey Data

* **14%** reported taking a child to the ED in the last 12 months.

* **28% of households** anticipate having to assist with family caregiving in the next year

* **1 in 2 households** does not have family leave through their job

Healthcare Supply

According to the Area Health Resources File (2016), two counties in the service area do not have an **obstetrician-gynecologist** in the service area: Banks and Elbert.

The same data reports that Banks and Elbert, and Hart counties do not have any **pediatricians.**

Maternal and child health outcomes are worst in Stephens relative to the other counties, adjusting for age and population size.

Persistent Disparities

Evidence from the Pregnancy Risk and Monitoring System data (PRAMS) indicate Latinx women are significantly more likely to delay prenatal care than non Latinx (58% vs 78% accessing care in first trimester, respectively).

In Elbert, Franklin, and Hart counties, a Black resident was more likely to have less than five prenatal care visits than a White resident, adjusted for age and population (2015-2017). In Franklin County a Black woman was more than twice as likely to have less than five prenatal care visits than a White woman, adjusted for age (2015-2017). (Source: OASIS)

The figure below represents the orders of magnitude for the likelihood of an African American resident receiving less than five prenatal care visits as compared to white residents in the service area counties with the greatest disparity: Franklin, where Black women were 2.47 times more likely than White women to have less than five prenatal care visits; and Elbert, at 1.54 times greater than that for White women.

Probability of African American Women Having <5 Prenatal Care Visits

Franklin

Elbert

Hart
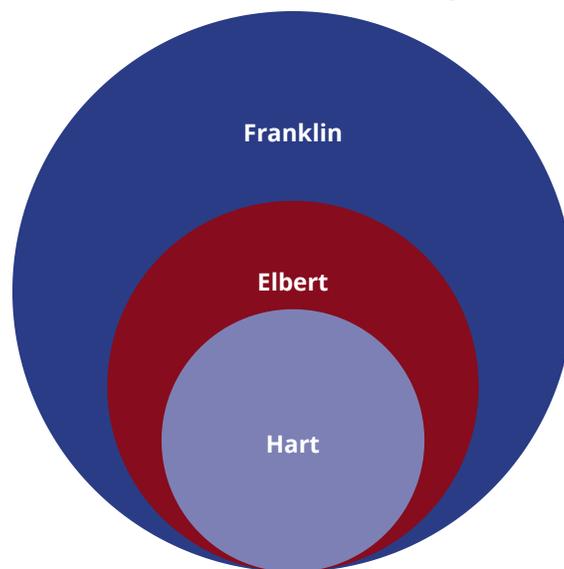
Focus Group Data

→ To **deliver babies**, parents tend to go to Athens, Gainesville, Macon, Augusta, and Baldwin. In some areas, routine care is not available which means people have to travel long distances and miss work.

→ Residents utilize the local health department for **care of babies and preventive care.** For hospital and specialty healthcare, many residents travel outside of their county and tend to go to other health facilities in other cities and counties such as Athens, Atlanta, Gainesville, Lake Oconee, Augusta, Macon, Washington, Thompson, Putnam, Stephens, and Covington.

5 Healthcare Access

The number five ranked health need is healthcare access. Healthcare access is substantively different in that it is the only need that does not cover a specific set of conditions or health outcomes. Rather, access is a complex, multidimensional area of need that is ubiquitous in all communities and is deeply connected to all the other health needs presented in this study. As with each of the other top five health needs, healthcare access stood out as a concern across all data sources. Similar to other needs, health disparities are concentrated in low income, rural communities and are especially problematic for racial and ethnic minorities. Shortage in health professionals of all types is a primary factor in this category. Transportation, drive time, being underinsured, and being uninsured were other predominate themes. Addressing healthcare access presents an opportunity to simultaneously intervene on all health needs because when access improves, so does community and public health.

Secondary Data

In all counties in the service area, there were fewer **dental providers** per 100,000 than the state average in 2016. (Source: Area Health Resource File, 2016)

The federal government defines the service area to be in a **Health Provider Shortage Area** for primary care, mental care, and dental care. (Source: HPSA Locator, 2019)

Dental Providers per 100,000 Residents

County	Value
Georgia	~47
Elbert	~36
Franklin	~18
Hart	~16
Stephens	~35
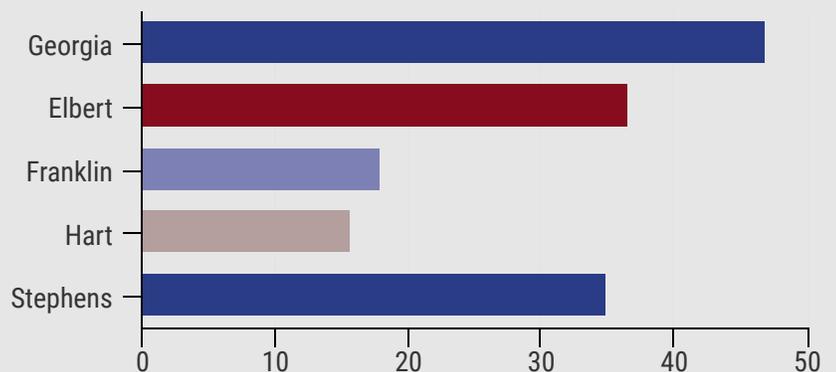
Survey Data

✳ **6% delayed care** because they had trouble finding a doctor

✳ **2 in 3** needed dental care but could not get it
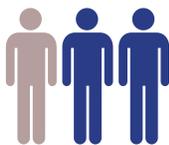
✳ **13% of households** reported having trouble finding a doctor that accepted their insurance in the last 12 months

68% of respondents traveled <30 minutes to the doctor

21% of respondents traveled 30-60 minutes to the doctor

96% rely on a personal car as their primary source of transport

Persistent Disparities

In all counties in the service area, being in a low income family significantly decreased a person's access to healthcare. Survey data showed that one in seven households indicated they did not take their medication as prescribed due to cost of the medication. We also found that 26% of people who indicated that they went to the ED in the last year went because it is the place they receive "most of their care." Being uninsured and low income was significantly (p<.01) associated with using the ED as their primary place for receiving care.

Across health department interviews and focus groups, the dominating narrative around barriers to health and health care was concerning access; with a particular focus on rural counties. Dr. Maritza Keen noted that the majority of comments made during the focus group pertaining to barriers to care focused on lack of transportation, including public transit, lack of a personal vehicle, or lack of access to vans or other forms of transportation such as Uber or taxis. Other barriers included cost of healthcare services and lack of insurance. Respondents also indicated there was a lack of awareness/education concerning what health services were available in their communities, and the need for patient advocates or educators to help patients understand medical issues and treatment. The lack of availability of providers rounded off the top barriers to access.

Barriers to Health	Number of Comments	% of Total
Transportation	45	52%
Cost/Lack of Insurance	36	41%
Education/Awareness	12	14%
Availability of Providers	11	13%

Focus Group Data

→ Other factors mentioned concerning barriers to health: **language and culture** (Latinx community).

→ When asked what is needed for a healthier community, the most common responses centered on the need for **more local health care providers,** including: urgent care, rural clinics, specialty care, dental care, and hospitals.

6 Reproductive Health

Reproductive health is ranked as the number six health need in our community. This includes sexually transmitted infections (STIs), family planning, and teen pregnancy. Prevalence of STIs were examined across all data sources. There were significant health disparities present in reproductive health outcomes for individuals in medically underserved communities, low income individuals, and racial and ethnic minorities.

Secondary Data

Banks and Elbert counties have no active OB/GYN practitioners, while Franklin, Hart, and Stephens counties are below the state rate of **OB/GYN practitioners**. (Source: Area Health Resource File, 2016)

Franklin, Hart, and Stephens counties **teen (<20 years) pregnancy rates** between 2015 and 2017 are greater than the state rate. (Source: OASIS, 2019)

Teen Pregnancies per 100,000 (2015-2017)

County	Value
Georgia	~16
Banks	~13.5
Elbert	~18.5
Franklin	~19
Hart	~23
Stephens	~21
Service Area	~19.5
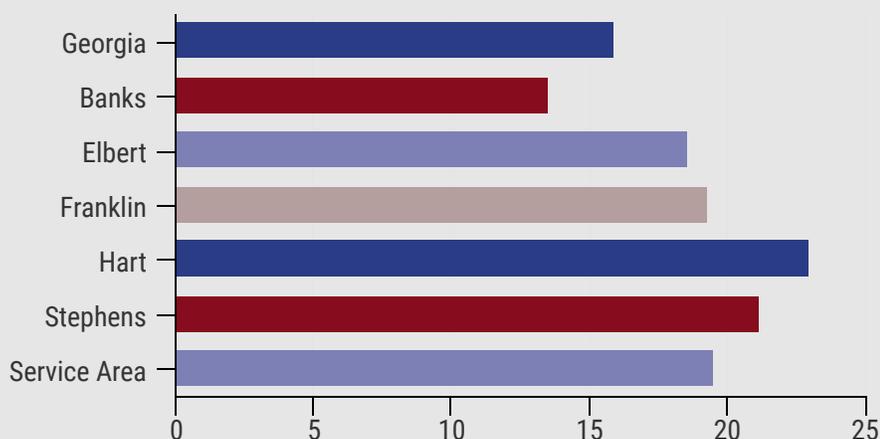
Reproductive Health Education

According to Georgia's 2013 Youth Risk Behavior Survey of high school students, the percentage of students who report ever being taught about AIDS or HIV infection in school by race and ethnicity differed significantly.

Race/Ethnicity	% Taught About HIV/AIDS
African American	85%
Latinx	81%
White	91%

Persistent Disparities

A Black resident in the five county service area was nearly five (4.87) times more likely to have an STI than a White resident after adjusting for age and county population (2015 to 2017). This disparity was particularly pronounced in every county except for Banks, and is shown in the graph below (Source: OASIS, 2019).

Racial disparities were also present in sex education. Nearly 91 percent of White students reported having been taught about AIDS or HIV, compared with 80.6 percent of Latinx students and 85.4 percent of Black students (Source: OASIS, 2019).

MAGNITUDE: Racial Disparity in STI Diagnosis, 2015-2017
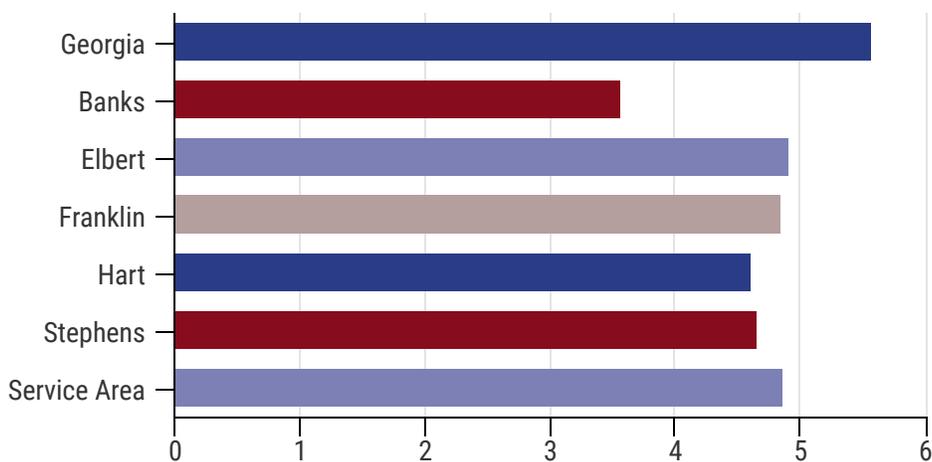
Health Department Interviews

What is going well in terms of meeting county health needs?

"We offer Family Planning Services & , Immunizations,." Hart Co. Health Department

We do a great job of meeting the health needs of women by providing many annual screenings for women in the community." Banks Co. Health Department

What are the greatest health needs you see in the county?

Family planning and Immunizations." Hart Co. Health Department

"Access to Care." Banks Co. Health Department

7 Cerebrovascular Health

The number seven ranked category is cerebrovascular health. This includes both ischemic and hemorrhagic stroke. Due to the time sensitive nature of getting a patient experiencing a stroke to the hospital, healthcare access was shown to be a concern across all data sources. According to the Georgia Department of Public Health, Georgia is part of the United States' "Stroke Belt" where stroke morbidity and mortality rates are well above those of other states. Eighty percent of strokes are preventable, which is an important reason for communities to intervene on preventive health in this area. In 2013, hospital charges related to stroke totaled over $1 billion in Georgia (Source: Georgia Department of Public Health, 2017). Similar to other needs, health disparities are concentrated in low income, rural communities and are especially problematic for racial and ethnic minorities. Access to ambulance transportation is limited or nonexistent in some rural counties and this is a major barrier to improving stroke-related outcomes.

Secondary Data

Every county in the service area had higher **stroke** death rates than the state rate from 2015 to 2017. (Source: OASIS, 2019)

Age-adjusted ED visit rates for **stroke** were higher than the state rate for every county in the service area, with the exception of Hart. Among the five counties, strokes accounted for 5.6 percent of all deaths for all ages between 2015 and 2017.

Stroke death rates per 100,000 (2015-2017)

County	Rate
Georgia	~51
Banks	~66
Elbert	~95
Franklin	~61
Hart	~38
Stephens	~98
Service Area	~70
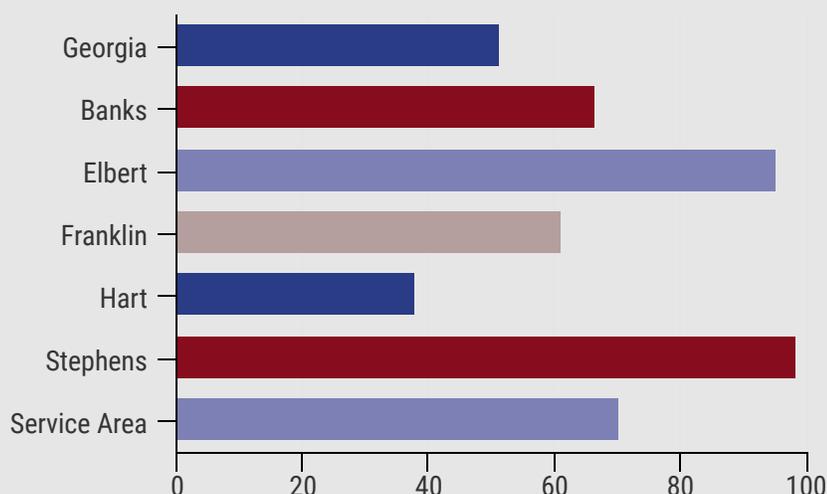
Survey Data

* **>1 in 2** households reported having high blood pressure
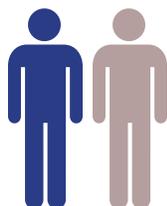
* **Evidence shows** that uncontrolled high blood pressure can lead to stroke (Source: Mayo Clinic, 2019)

38% of hemmorhagic strokes result in death in <30 days (Source: NIH, 2012)

Being more than **37 miles** from a hospital increases the mortality rate for stroke by 3%

96% of people rely on a personal car as their primary source of transport

33

Persistent Disparities

In the five county service area, the ED visit rate for stroke, adjusted for age, was greater for Black residents than White residents (2015-2017). In Elbert county, a Black resident was more than twice as likely to visit an ED due to stroke than a White resident, adjusted for age and population (2015-2017) (Source: OASIS, 2019).

The figure below represents the orders of magnitude of between ED visit rates for stroke for Black residents as compared to White residents. The two counties with the greatest disparity were Elbert, where Black individuals were 2 times more likely than White individuals to go to the ED for stroke, and Stephens, where the ED rate is 1.75 times greater than that for whites.

Emergency Department Visits for Stroke: Racial Disparity

Elbert

Stephens

Georgia
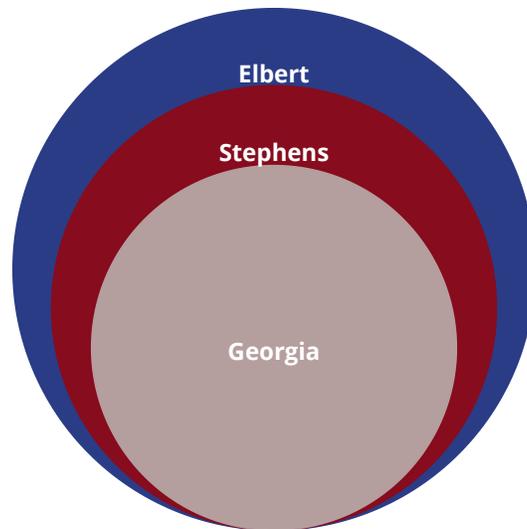
Health Department Data

→ Health department interviews showed that many patients come in with **uncontrolled high blood pressure and cholesterol,** both of which put patients at significantly greater risk of experiencing stroke.

→ **Transportation** needs were cited numerous times, including public transit, increased and improved local ambulance service, and hospital vans for patient appointments. This is a critical component of stroke prevention and treatment.

8 Cancer

The number eight ranked health need is cancer. This category covers cancer of all types; the data in this overview is not comprehensive of cancer trends and specific diseases or stages within the category. According to the Georgia Department of Public Health, cancer is the second leading cause of death in the state. Here, secondary data are presented for lung cancer, which has some of the highest rates of prevalence and is largely preventable. As in each of the other health needs, healthcare access stood out as a concern across all data sources. Based on the data presented, risky behaviors such as smoking, has been shown to directly cause cancer. Cancer health disparities were concentrated in low income, rural communities.

Secondary Data

The service area age-adjusted death rate for **lung cancer** (at 50 per 100,000) is statistically significantly higher than the state rate of 40.1.

Elbert, Franklin, and Stephens counties have the highest age-adjusted death rates for **lung cancer** in the service area between 2015 and 2017. (Source: OASIS, 2019)

Age-Adjusted Lung Cancer Death Rate (Per 100,000)
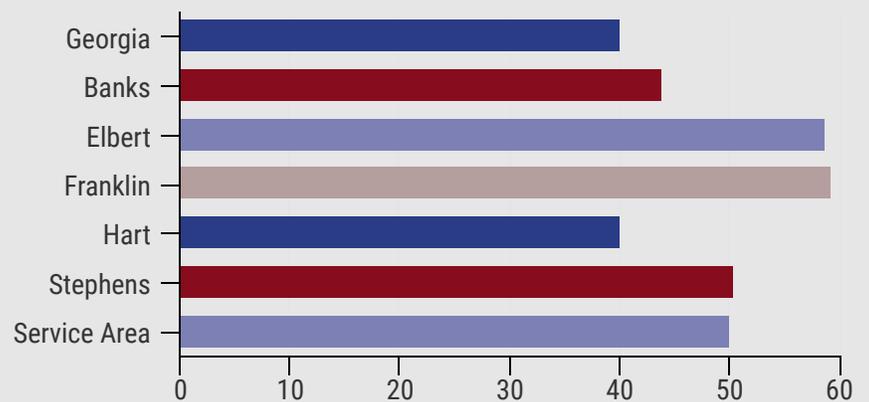
Survey Data

✳ **1 in 10** households reported having a smoker

✳ **14%** households in **poverty** reported having a smoker in their family

18% of respondents indicated that someone in their house had been diagnosed with cancer before at some point in the past

Average age of households with cancer: **65.1 years**

Persistent Disparities

In all counties in the service area, male residents were more likely to die from lung cancer than female residents, adjusted for age (2015-2017). In Banks and Stephens counties, male residents were more than twice as likely to die from lung cancer than female residents, adjusted for age (2015-2017). In Elbert county, male residents were more than three times as likely to die from lung cancer than females residents, adjusted for age (2015-2017) (Source: OASIS, 2019).

Age-Adjusted Lung Cancer Death Rate by Gender (Per 100,000), 2015-2017
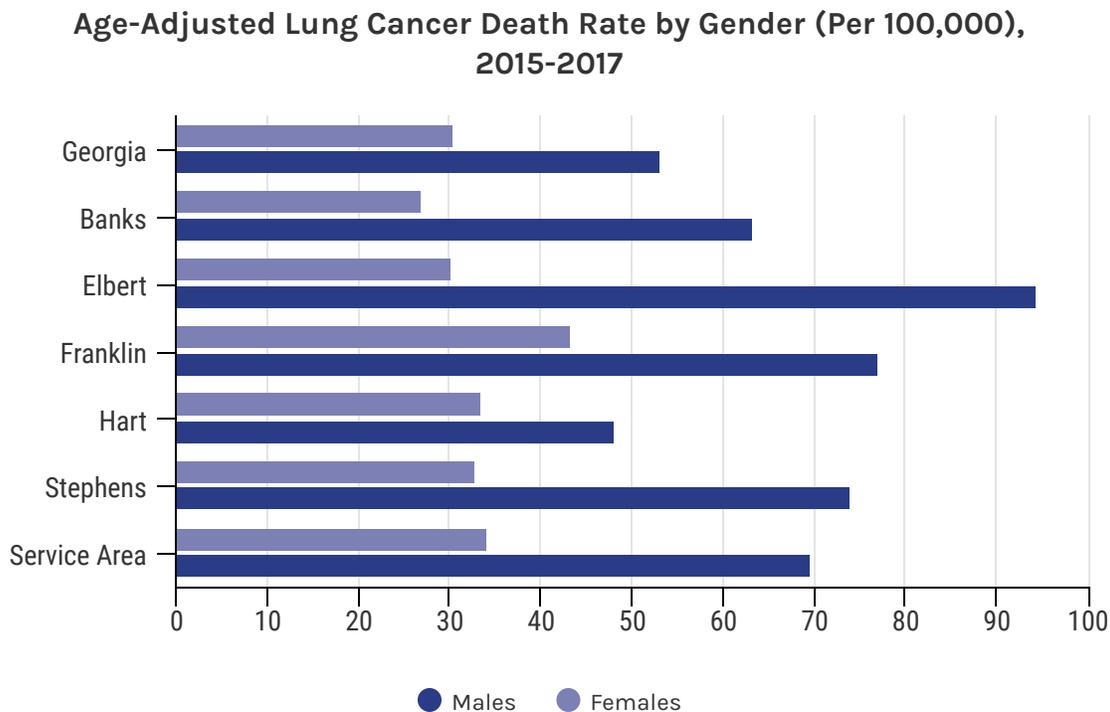
Focus Group Data

→ One main theme in the focus groups concerning cancer and cancer treatment was the **lack of specialists available**, especially in rural counties. Many participants cited the need to drive to Athens, Atlanta, or Gainesville for specialist appointments and ongoing treatment.

→ While health departments are doing their best to provide health screenings, the **limited nature of the diagnostic tests available** poses a new challenge for low income residents. Especially in regards to a timely diagnosis of serious conditions.

9 Respiratory Health

The number nine ranked health need is respiratory health. This category includes chronic conditions such as asthma and COPD, as well as acute illnesses such as influenza and pneumonia. Due to the inextricable link between respiratory health and environmental factors (*e.g. air quality*), data are presented on household measures such as mold and pests in the home. We also present information on vaccination for influenza because of the link between vaccination and flu incidence and prevalence. Risky health behaviors such as smoking also compromise respiratory health, and are correlated with prevalence of emphysema. While mortality rates due to respiratory health issues in the five county service area were comparable to the state rate, there are striking and significant differences in emergency department visits. Similar to other health needs, health disparities were concentrated in low income, rural communities and are especially problematic for racial and ethnic minorities.

Secondary Data

Age-adjusted ED visit rate for **influenza** for the five county service area was more than 1,000 (per 100,000) greater than the state rate from 2015-2017.

Age-adjusted ED visit rate for **pneumonia** was greater than the state rate in all counties except Hart from 2015 - 2017. In Stephens it was more than twice the state rate. (Source: OASIS, 2019)

Age-Adjusted Pneumonia ED Visit Rate, 2015 - 2017
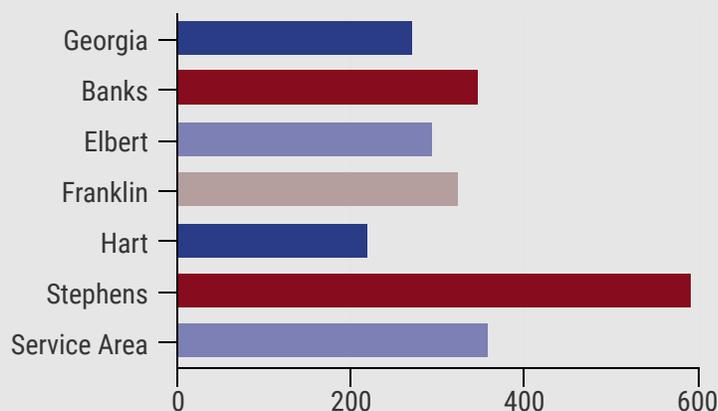
Survey Data

✳ Did not get a **flu shot** in the last 12 months

47%

✳ **14%** low income households have a smoker

14% of respondents have asthma in their household

~3% of respondents have mold in their home

~3% of respondents have pests in their home

Persistent Disparities

In the five county service area, Black residents were more likely to visit the ED for respiratory diseases, adjusted for age, than white residents in 2017. In Banks and Elbert counties, a Black individual was more than twice as likely to visit an ED for respiratory diseases than a White Individual (Source: OASIS, 2019).

The graph below represents the orders of magnitude between the state ED visit rate for asthma disparity for Black residents in each of the five counties and the service area, overall.

MAGNITUDE: Racial Disparity in Asthma Emergency Department Visits, 2015-2017
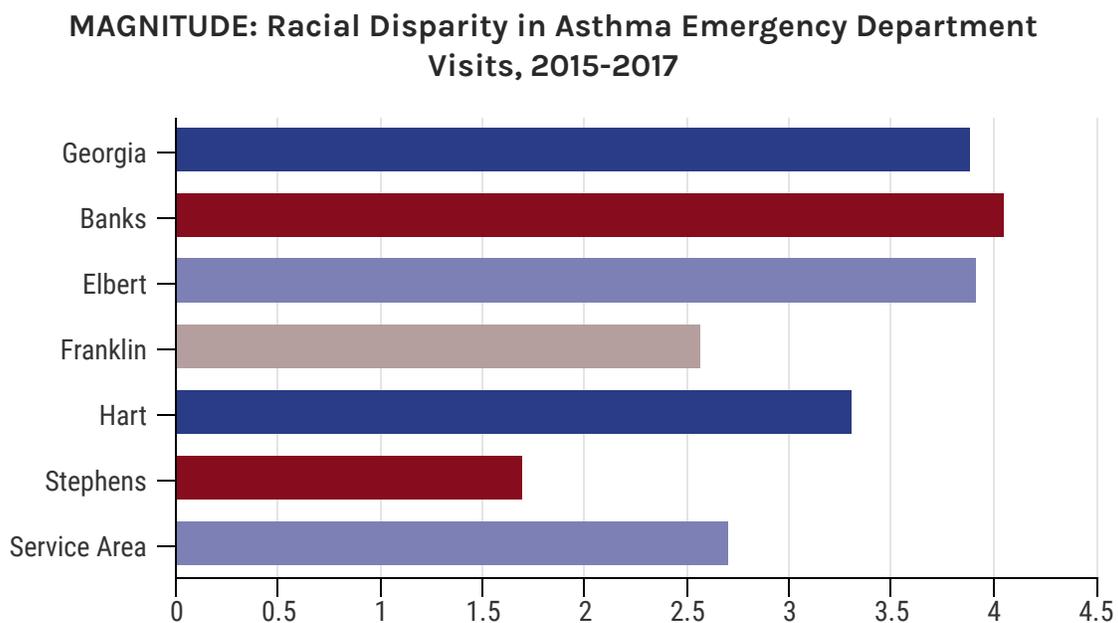
Focus Group Data

→ **Asthma, especially among children** was cited as one of the biggest health concerns in the community among focus group participants.

Regarding respiratory health among children, one person said: "smoking and vaping is a big problem here. The kids are all doing it."

10 Injuries & Accidents

The number ten ranked health need is injuries and accidents. This category includes motor vehicle crashes and falls. Similar to other needs, health disparities were concentrated in low income, rural communities. Evidence from the International Journal of Preventative Medicine and the American Journal of Epidemiology shows that lower levels of education and socioeconomic status are associated with higher rates of mortality from motor vehicle crashes (Sehat, 2012; Harper, 2015). Age disparity is also an issue: falls are disproportionately experienced by older adults and motor vehicle crashes are disproportionately experienced by young adults .

Secondary Data

In each of the five counties, death rates (per 100,000) for **motor vehicle crashes** exceeded the state rate from 2015 and 2017. Rates for Banks and Hart counties are more than double the rate of the state. (Source: OASIS, 2019)

The service area ED visit rate for **falls** was nearly 1,000 per 100,000 greater than the state's rate between 2015 and 2017. (Source: OASIS, 2019)

Age-Adjusted Motor Vehicle Crash Death Rates (Per 100,000), 2015 - 2017

County	Rate
Georgia	~14
Banks	~34
Elbert	~27
Franklin	~27
Hart	~31
Stephens	~21
Service Area	~28
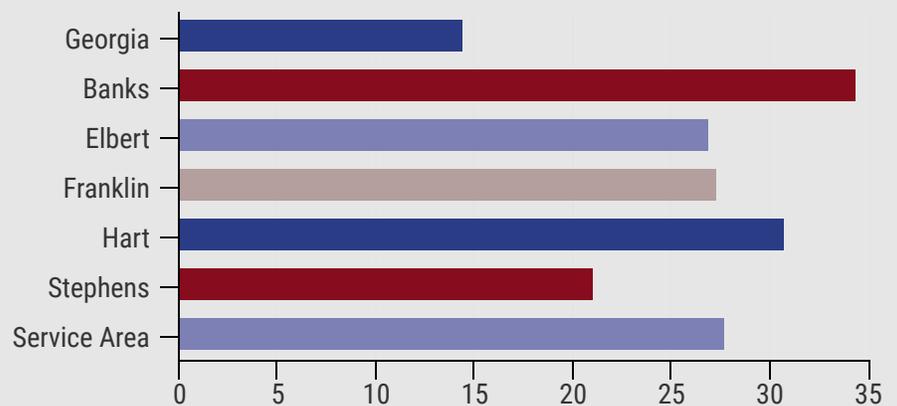
Survey Data

41% of respondents were over the age of 60. As the population ages, the fall risk increases for older adults.

Several counties in the service area have limited ambulance services, in the case of an accident or illness it could take significantly longer to get to a patient.

Persistent Disparities

In the five county service area between 2015 and 2017, men were nearly twice as likely to die from external injuries (including motor vehicle crashes, falls, accidental shootings, drownings, fire and smoke exposure, poisoning, suffocation, and all other unintentional injuries) than women. (Source: OASIS, 2019)

In all five service area counties, a Black resident was more likely to visit the Emergency Department for a motor vehicle crash than a White resident from 2015 through 2017. The rate was more than double in Elbert County. (Source: OASIS, 2019)

Motor Vehicle Crash ED Visit Rates (per 100,000) for African American and White Residents, 2015 - 2017

Legend: ● White   ● African American
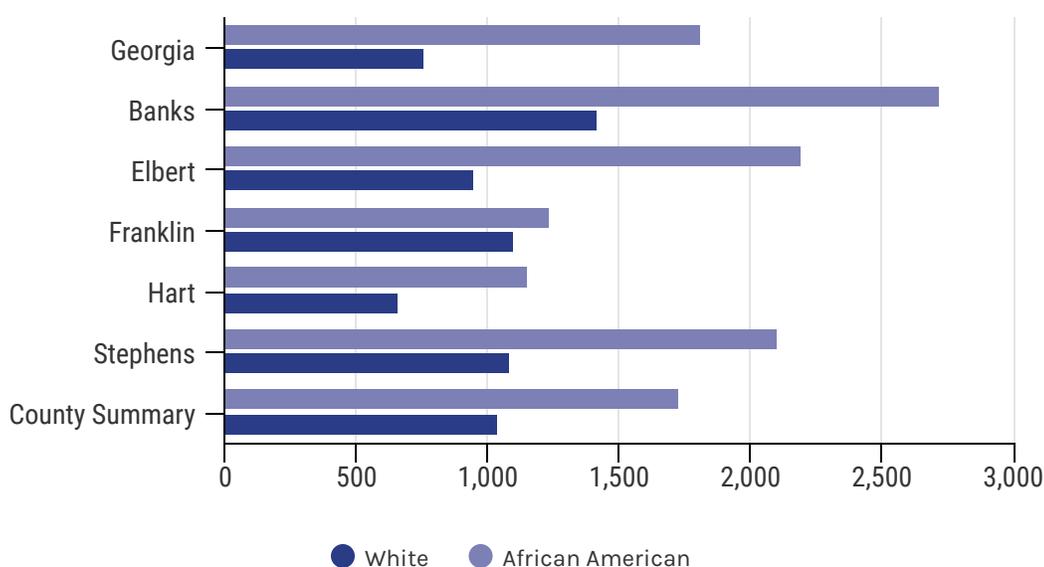
Focus Group Data

→ **Transportation and access to ambulance services** were cited as major issues in all focus groups. When accidents or injuries occur, emergency care is needed and time is of the essence in treating serious injury.

"Car crashes are the cause of a lot of people dying under 40."

PRIORITIZATION OF NEEDS
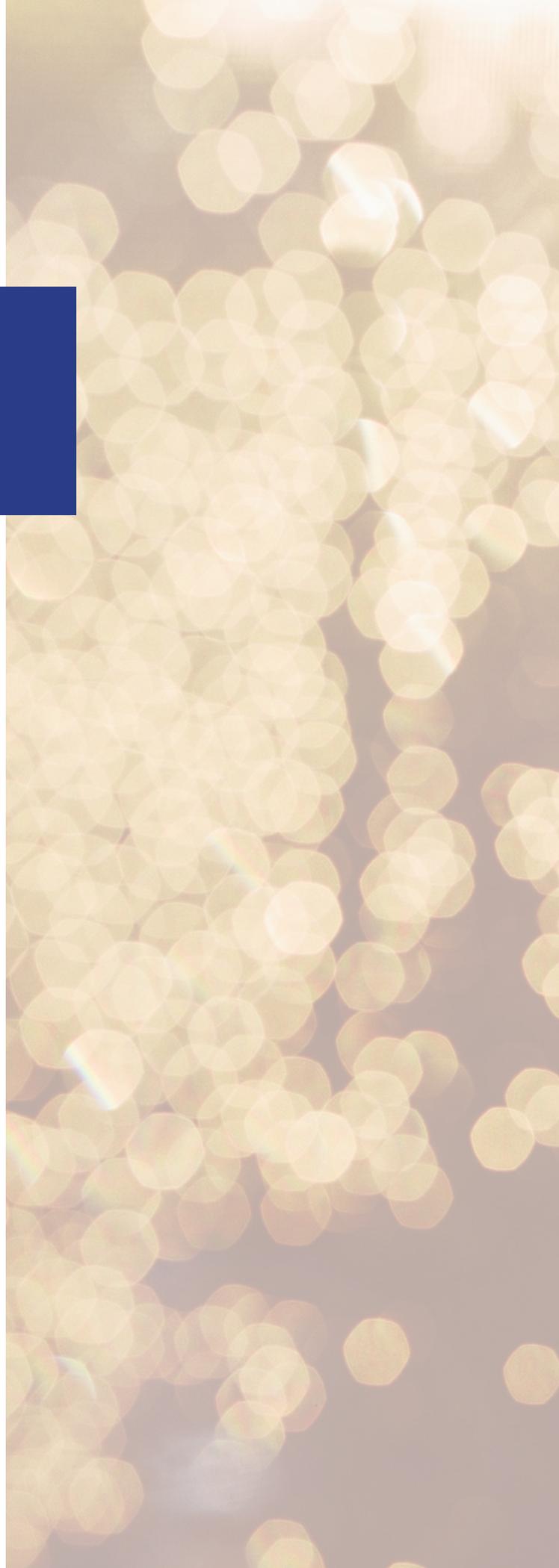
Prioritizing Needs:
Building a Rubric

Prioritizing Health Needs
In order to determine how to prioritize the health needs, we first conducted a Best Practices Analysis of existing resources. This included review of tools by The Centers for Disease Control and Prevention and World Health Organization; over 35 CHNAs from across the United States; publicly available city, county, and state health initiatives; and the Trinity Health Systems CHNA toolkit. Finding no consistent method, our research team created a unique, customized rubric tool with which each health issue could objectively and consistently be prioritized using qualitative and quantitative measures. An example is included in this CHNA at the end of this section.

Rubric Inclusion Criteria

Face Validity: Does each element make sense on its own and with the others?

Objectivity: Can each criteria be scored using evidence and/or data as opposed to opinions?

Replicability: Can multiple people, working separately and given the same data, arrive at the same (or very nearly the same) final score?

Accessibility: Is each element of the rubric straightforward enough for an unfamiliar user to operate the tool?

Once the questions were determined, a scoring system was created. Each item had the potential to score from 0 (not applicable) through 4 (dire). A score of zero was given if the question was not applicable. Example: What is the average length of hospitalization for Healthcare Access? Though a lack of access may cause health problems that require hospitalization, lack of access itself did not. Therefore, a score of 0 was given.

Prioritizing Needs:
Building a Rubric

Individual questions included on the rubric were placed into four distinct categories:

Micro: To what extent, if any, is this a health issue – right here, right now?

Equity: To what extent does this health issue disproportionately impact groups of people and are those groups already members of vulnerable populations?

Scope: To what extent is St. Mary's hospital able to work on this health issue?

Macro: To what extent is this health issue impacting the whole population – right now and over time?

In order to give measures appropriate influence, each score was multiplied by a predetermined weight of 1 through 4. Weights were determined by Best Practice Analysis results, as well as consultations with each CHNA research team member. Example: A weight of 4 was applied to the measure "What is the prevalence?" whereas a weight of 2 was given for "What is the average length of hospitalization?" This was done in order to give greater impact to the pervasiveness of a health issue than to how long a health issue caused a person to be hospitalized. The image below shows how the score was calculated for each item on the rubric.

SCORE (0 - 4)	X	WEIGHT (1 - 4)	=	TOTAL

Prioritizing Needs:
Final Scores

Once calculations for each rubric item was complete, weighted scores were totaled to give a final score to each health issue. The possible range of scores was from zero (if each measure was deemed "not applicable") to 240 (if each measure was deemed "dire"). Final scores for the top ten health needs are presented below.

2019 CHNA Scores for the Top Ten Health Needs

1 Cardiovascular Health (216)

2 Nutrition & Physical Activity (209)

3 Behavioral Health (208)

4 Maternal & Child Health (206)

5 Healthcare Access (194)

6 Reproductive Health (193)

7 Cerebrovascular Health (173)

8 Cancer (172)

9 Respiratory Health (163)

10 Injuries & Accidents (129)

A sample rubric complete with the scores for cardiovascular health is included on the following page. Completed rubrics for each of the top ten health needs can be found in the Online Appendix to this report.

Prioritizing Needs:
Sample Rubric

Organization: Sacred Heart

Health Issue: Cardiovascular

		N/A 0	Problem 1	Serious 2	Severe 3	Dire 4	Choose score:	Weight	Final score:
Micro	What is the prevalence?	-	0.1% to 9%	10% to 19%	20% - 29%	30% +	4	4	16
	What is the severity?	-	illness	severe illness	some death	premature death common	4	3	12
	What is our ability to evaluate outcomes?	-	anecdotal	anecdotal + some numbers	anecdotal + specific numbers	anecdotal + specific numbers over time	4	1	4
	What is the average required length of hospitalization?	-	none	1 to 6 days	7 days to 1 month	more than 1 month	2	2	4
	What is the average required length of treatment?	-	none	1 day to 1 month	1 month to 1 year	1 year to a lifetime	4	3	12
	Is this topic a theme in focus group or Health Department responses?	-	no	rarely	sometimes	often	3	4	12
Equity	Are specific groups more at risk?	-	no	yes one	yes some	yes several	4	2	8
	Are vulnerable populations disproportionately impacted?	-	no	yes one	yes some	yes several	4	4	16
Scope	Are there evidence-based interventions in place?	-	no	few	many	several / large scale	2	2	4
	Are there evidence-based interventions available?	-	no	few	many	several + gold standard	4	3	12
	Does this issue align with hospital mission/values?	-	no	partially	mostly	yes	4	4	16
	Is the hospital equipped to handle this issue?	-	no	partially	mostly	yes	2	3	6
	Is it appropriate for the hospital to handle this issue?	-	no	partially	mostly	yes	3	4	12
	Is there an opportunity to intervene at the prevention level?	-	no	little	some	yes	4	4	16
Macro	Has the community acknowledged this as an issue?	-	no	some acknowledgement	full acknowledgement	acknowledgement & action	4	2	8
	Is this issue trending up?	-	no	slightly	significantly	long time / large spike	4	4	16
	Is this a root cause of other health problems?	-	no	correlation	causation *some*	causation *several*	4	4	16
	Does this impact community issues?	-	no	few	some	many	3	2	6
	Are there barriers to intervention?	-	no	few	some	many	4	1	4
	What % of the population is at risk?	-	0.1% to 9%	10% to 19%	20% - 29%	30% +	4	4	16

Notes: | | | | | | | TOTAL | 216

PROCESS & METHODS
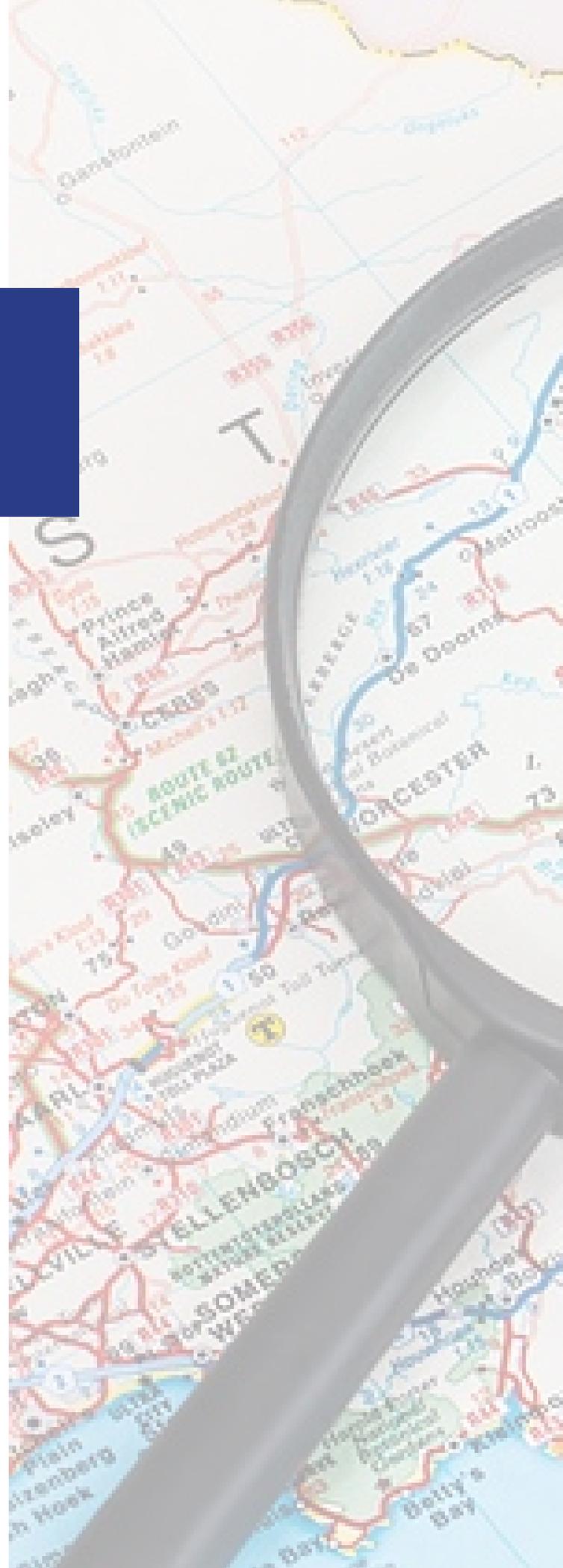
Process & Methods: Mixed-Methods Approach

Methods Used

A mixed-methods approach was used, which is a combination of qualitative and quantitative data and analyses. Using a mixed-methods approach allows for more confidence in the findings of the CHNA and ensures robustness in identification of health needs. The methods to solicit input from primary sources (survey data, focus groups, health department interviews) are detailed in Section V. Where secondary data sources were used, a quantitative approach was applied. This means that population estimates (*e.g.* the percentage of people experiencing a particular condition such as heart disease) were examined for each county in the service area and aggregated across counties. Averages were calculated for the service area counties in aggregate form where appropriate.

Secondary data were downloaded from the hosting institution's website (see the previous table). Time trends were accounted for by downloading several years for each indicator--where possible we examined at least eight years of data to examine and show longitudinal measures (typically 2010-2017). When data had limited availability (*e.g.* one cross section, or year), the latest available year was collected and reported.

Description of Study Team

The study team was composed of faculty and graduate students from the College of Public Health and the J.W. Fanning Institute for Leadership at the University of Georgia. Dr. Grace Bagwell Adams (College of Public Health) served as the Principal Investigator for the CHNA and oversaw research design, data collection, data analysis, and composition of the final report. Graduate students (see Acknowledgments for a full list of team members) from the College of Public Health, the College of Pharmacy, and the School of Public and International Affairs contributed to all aspects of project development and data analysis. Ben Gardner served as the Project Manager for the Athens-Clarke County data collection efforts.

Dr. Maritza Soto Keen, Dr. Carolina Darbisi, Lori Tiller, and Emily Bonness of the J.W. Fanning Institute for Leadership designed and facilitated the focus groups with stakeholders in service area counties. They also conducted theme analysis of focus group data and wrote the findings for that aspect of CHNA data collection. Graduate student Rachel Colegrove assisted in focus group facilitation.

There were five main data sources used for the 2019 CHNA. These data sources used can be broken into two main types:

1. Primary Data
Primary data are data that were generated by the CHNA process. These are original data sources that were collected by the study team and include three outputs for this study, each of which are detailed in Section VI of this report: 1) surveys in primary service area counties; 2) focus groups in service area counties; 3) interviews with health department key personnel in service area counties.

2. Secondary Data
Secondary data are data that were publicly available from existing sources which include local, state, and federal agencies that routinely collect and report population-level data. These sources were free and available to download for analysis and reporting purposes. In order to measure both supply and demand-side factors, secondary data were collected on the demographics, healthcare utilization, and health outcomes of service area populations in addition to supply-side measures on the number of licensed physicians, specialists and the health provider shortage areas in service-area counties. Each of these sources are detailed in table on the next page; all observation time frames were collected for the latest available date as of Spring 2019.

```
┌──────────────────┐     ┌──────────────────┐
│ Quantitative Data│     │   Quantitative   │
│   Collection     │ ──▶ │    Analysis      │ ──┐
│   (Surveys,      │     │ (time trend,     │   │
│ Secondary Data)  │     │  descriptive     │   │
│                  │     │  statistics)     │   │
└──────────────────┘     └──────────────────┘   │
                                                 ▼
                                    ┌──────────────────┐     ┌──────────────────┐
                                    │Comparing Findings│     │   Validation     │
                                    │  Across Sources  │ ──▶ │ of Health Needs  │
                                    └──────────────────┘     └──────────────────┘
                                                 ▲
┌──────────────────┐     ┌──────────────────┐   │
│ Qualitative Data │     │   Qualitative    │   │
│   Collection     │ ──▶ │    Analysis      │ ──┘
│ (Focus Groups,   │     │ (Theme analysis) │
│  Interviews)     │     │                  │
└──────────────────┘     └──────────────────┘
```
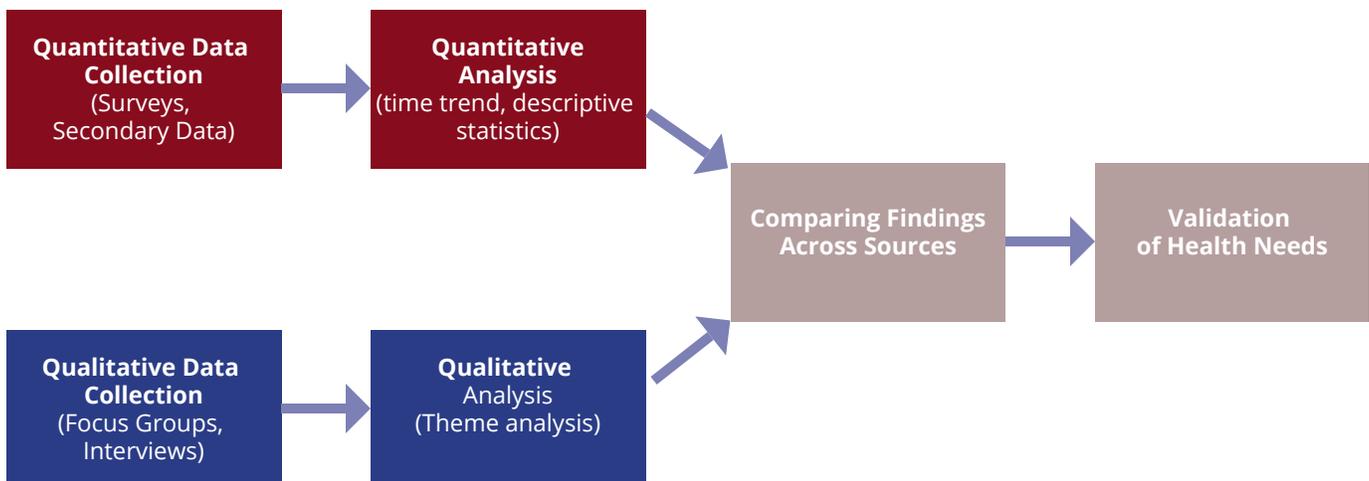
2019 CHNA Secondary Data Source List

Dataset	Indicator Focus	Observation Time frame	Source
Behavioral Risk Factor Surveillance System (BRFSS)	Health-related risk behaviors by county and service area	2011-2012, 2018	Centers for Disease Control and Prevention
Census QuickFacts	Demographic factors by county	2017	U.S. Census Bureau
Health Professional Shortage Areas	HPSA Scores (1-26) for Primary Care, Mental Health, and Dental by county	2017	Health Resources & Services Administration
Area Health Resource Files	Count and rate of health practitioners by county	2016	Health Resources & Services Administration
OASIS Emergency Department Utilization	Emergency Department visits by disease type, county, race, and payor	2010-2017	Georgia Department of Public Health
OASIS Mortality	Causes of Death by disease type, county, and race	2010-2017	Georgia Department of Public Health
OASIS Hospital Discharges	Hospital discharges by disease type, county, race, and payor	2010-2017	Georgia Department of Public Health
OASIS Opioid Mortality	Opioid deaths by drug category and county	2014-2017	Georgia Department of Public Health
County Health Rankings	Social determinants of health; health outcomes, county-level rankings	2018	Robert Wood Johnson Foundation

COMMUNITY PARTNERS

Community Partners

The hospital system engaged with several community partners in order to complete the Community Health Needs Assessment. These partners include health departments in each of the 17 counties in the service area, the J.W. Fanning Institute for Leadership, and the College of Public Health at the University of Georgia.

St. Mary's Community Benefit Manager, Alex Lundy, and Director of Corporate Health Services, Courtney Vickery, assembled and oversaw the community benefits team that coordinated with the College of Public Health and the J.W. Fanning Institute to design the CHNA approach. The data collected and analyzed provide unique representation of underrepresented groups and special populations that have historically been medically underserved.
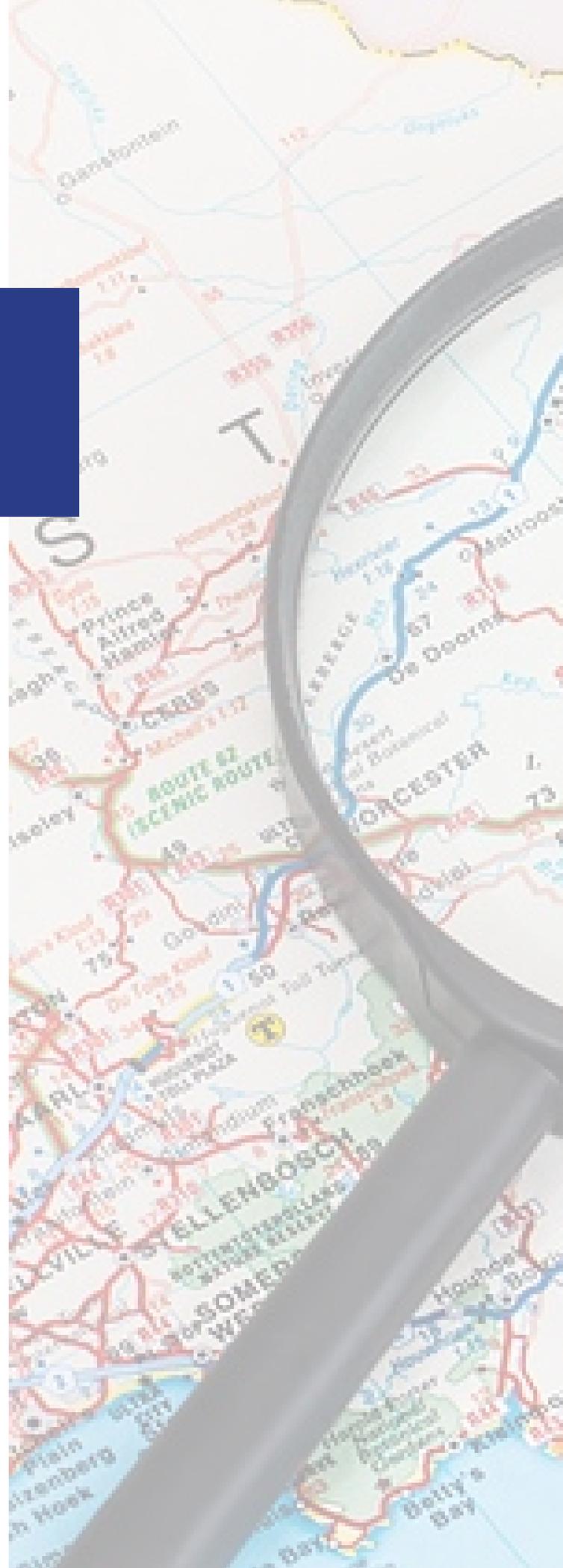
COMMUNITY INPUT

Community Input:
Health Department Interviews

**Local Organizations*: County-Level Health Department Interviews*
Community input was gathered from each health department in the hospital service area. This was done by emailing key health department staff members an open-ended interview questionnaire with the questions listed in the table below.

An internet search and phone calls were used to determine staff members names and email addresses. Emails were sent on 2/22/2019 and 2/25/2019. Follow up phone calls and emails were done on 2/26/2019 and 2/27/2019, respectively. Input was provided beginning on 2/22/2019 and continued through 4/8/2019.

	Health Department Interview Questions
1	What county does your health department serve?
2	What are the greatest health needs you see in the county?
3	What is going well in the county in terms of meeting those needs?
4	How can healthcare providers (hospitals, doctors, health departments) improve to better serve county residents?
5	Please share any additional thoughts or comments.

Upon completion of the health department interviews, a methodological approach was used called theme analysis. Responses were examined for common phrases, themes, and points of discussion and grouped into specific health needs (i*.e. "hunger," "access to health foods," and "mental health"*). Each health need was then recorded by the number of times that it was identified, and by the county of origin for the response.

Summary of Input Received
Common themes for almost all health departments responding included issues of health access--in particular, interviewees stated that the biggest barriers were access to free or low cost primary medical care, preventative services, and mental healthcare. Many counties in the service area also referenced the need for access to reproductive health services and the challenges of teen pregnancy and prevention of sexually transmitted infections. Other common themes present in all responses included high blood pressure, mental health disorders and their prevalence, substance use issues, and nutrition. Specific references to vulnerable populations and the medically underserved, especially those who experience poverty, food insecurity, and homelessness were also common concerns noted by health department officials.

Medically Underserved & Low Income: *Secondary & Survey Data*
Both secondary and survey data were collected to examine health access, utilization, and outcomes for the medically underserved and low income populations in the hospital service area. Secondary data from OASIS, HPSA, & AHRF were examined at the county level by sub-groups that included racial and ethnic minorities, low income populations, and insurance payor (self pay, Medicaid, Medicare, and privately insured), and rural residency. Secondary sources were downloaded in January 2019 and analyzed through March 2019.

A household survey was developed by utilizing questions from the Athens Wellbeing Project (AWP) survey--each of which is a validated measure. Survey items related to health and demographics were used to create a health-specific survey for all primary counties in the hospital service areas outside of Athens-Clarke. Additional measures were added based on iterative feedback from the St. Mary's Healthcare System Community Benefits Team. In particular, measures on transportation, physical activity, and financial challenges were added to the measures taken from the AWP survey to compose a comprehensive survey instrument. This survey, designed to specifically complement the existing secondary data, included questions related to healthcare access, chronic conditions, health behaviors (including risky behaviors and healthy behaviors), benefit utilization, preventive health measures (*e.g*. vaccines).

The survey was designed and administered using the *Qualtrics* platform. The survey was accessible through St. Mary's website, redirecting respondents to the *Qualtrics* site. Promotion to garner respondents was done by handing out information cards at St. Mary's, Good Samaritan, and Sacred Heart campuses, as well local businesses, health departments, libraries, and doctor's offices. The cards explained how to access the survey, and advertised the $100 weekly raffle drawing for survey respondents. Promotion was also done through AWP Facebook, Instagram, and Twitter accounts. Survey data collection began in Athens-Clarke County on October 15, 2018 and surrounding service area counties on November 15, 2018. The survey officially closed on February 1, 2019.

Community Input:
Medically Underserved

Community input from survey data was used to identify health needs by calculating descriptive statistics from responses across all variables and by sub-populations. Survey data measures were compared to secondary data sources by health area where possible. For example, self-reported prevalence of household conditions *(i.e. anxiety and depression)* were examined in conjunction with population health measures from the Department of Health's OASIS data on county-level health data (*i.e. ER visits and hospitalizations due to mental health disorders*). Triangulation of cross-sectional survey data with longitudinal secondary data increased confidence and validity of identification of health needs. A copy of the survey instrument is included in the Appendix of this CHNA document.

Demographic Measures	- Age - Race/ethnicity - Socioeconomic Status - Education - Household Composition - Insurance Status - Benefits Received
Health Measures	- Chronic conditions - Health status - Healthcare access - Experience with healthcare utilization - Risky health behaviors - Preventive health measures (e.g. vaccinations)
Social Determinant Measures	- Transportation access and utilization - Housing Status - Housing Condition - Social Capital

Community Input:
Medically Underserved

Summary of Input Received

A total of 286 completed surveys were received across the Sacred Heart service area. Survey respondent demographic trends reflected the demographics of the population across a variety of characteristics (for demographic information from American Community Survey please see the county profiles in the Community Served section of this report).

Data on specific health conditions from secondary and survey sources are presented in the following section on the Top 10 Health Needs, but a few indicators capturing vulnerability of medically underserved populations are important to highlight here. Surveys asked families, for example, if they would be worried about being able to pay if they were presented with an unexpected medical bill. The overwhelming majority of respondents indicated (>70%) that they were at least somewhat worried. Respondents were also asked if they had trouble finding a general doctor in the last 12 months.

Results showed more than one in five (>20% of low income families) had trouble finding a doctor, and of these 25% did not get the care they needed. When the low income sample was examined by race and ethnicity, white and black low income families had the same probability, but Latinx families were significantly more likely than non-Latinx families of having trouble finding a provider. More data on healthcare access are provided throughout the next section on health needs.

Community Input:
Broader Community

Community Stakeholders: *Focus Groups with Individuals Representing Broader Interests of the Communities*
Faculty from the J.W. Fanning Institute for Leadership designed and facilitated focus groups to collect data from counties in the secondary service areas. The focus group instrument was created using instruments from other health organizations across the country using a best practices analysis. Questions were selected from many of these instruments, similar or overlapping questions were thrown out or condensed, and ultimately an instrument with six questions was agreed upon.

Focus Group Instrument
What makes a community healthy?
Where does the community usually get healthcare when they need it?
Probe: What about specialty care?
What about mental and behavioral care?
What about the uninsured and underinsured in your community?
What are the most significant barriers that keep people in the community from accessing health care? (i.e. insurance, availability of providers, transportation, cost, language/cultural barriers, accessibility, awareness of services)
Focusing on specific health issues, what would you say are the biggest health problems in the community?
In terms of being a healthier community, how would you like your community to be different in 3 years?
What are the most significant barriers that keep people in the community from accessing health care? (i.e. insurance, availability of providers, transportation, cost, language/cultural barriers, accessibility, awareness of services)

After the instrument was created, counties in the secondary service areas were contacted. For Sacred Heart's campus, these counties included Banks, Elbert, and Stephens. To begin recruitment for the focus groups, the team at Fanning contacted stakeholders in each county. In some, the team at Fanning already had contacts who were able to help them locate a facility where they could hold the focus group and particular community members to invite. St. Mary's Healthcare System and Sacred Heart Hospital also publicized these focus groups on their Facebook page and website. Invitations were sent out via email and phone. In most counties, ten to fifteen community organizations were recruited to participate in the focus groups.

Focus Group Data Collection Details.

County	Date	Time	Location
Banks	February 19, 2019	12:00-1:30pm	Adult Learning Center
Elbert	February 6, 2019	12:00-1:30pm	Elbert Memorial Hospital
Stephens	February 18, 2019	3:30-5:00pm	Senior Center

At almost all of the focus groups, community stakeholders and representatives from local agencies attended. Several focus groups also had residential community members who were not in health or social services professions. At the focus group meetings, food and beverages were provided and the focus group instrument was used to lead the discussion with participants. Detailed notes were taken with each focus group, and notes were then compiled to create a master document for the St. Mary's service area.

Thematic analysis was conducted after each focus group was completed. Notes were taken during the focus group, and theme analysis extracted common topics from focus group participants. Themes and findings were shared across College of Public Health and Fanning teams to integrate into the identification and prioritization of health needs. Once theme analysis was complete, focus group data were compared to secondary quantitative measures and primary survey data.

Summary of Input Received
The data collected from focus groups provided a valuable counterpart to the primary and secondary data analysis that we conducted using quantitative data. After aggregating the notes from each focus group in the service area, we looked for themes in the notes and recurring topics that were brought up in each of the focus groups. Though these counties vary in some measures according to the secondary data, the focus group dialogues revealed that they all face many of the same health issues and concerns, and they also share the same goals and aspirations for the future of their community and its health. The focus group findings also helped connect health needs that were found in the secondary data. Health needs do not typically exist in isolation of one another, and the focus group data made a lot of these connections clear. Through the focus group findings, we also gleaned deeper understanding on some of the more complex issues around healthcare access (e.g. transportation and ambulance transports). Overall, the focus group findings gave depth and dimension to survey and secondary data.

Community Input:
Broader Community

As the secondary data suggests, some of the larger, most prevalent issues facing these communities are around nutrition and access to healthy foods. Focus group participants cited obesity and diabetes as some of the largest health issues facing their communities. Behind these issues are a more general lack of education and awareness of healthy foods, but also lack of access to those healthy foods. These claims can be corroborated by the food environment indices in these counties, along with rates of obesity and diabetes.

Another central finding from the focus groups was a general lack of access to health care services, particularly around a lack of access to transportation. Many of these counties have no public transportation system, and individuals without a car are often unable to receive the healthcare that they need as a result. This issue is compounded by insufficient numbers of clinics, primary care offices, dentist offices and urgent care clinics in these counties--almost all counties in the service area are technically Health Provider Shortage Areas (HPSAs) as defined by the U.S. federal government. This means that the supply of health care professionals are not adequately proportional to the population in these counties.

Thus, even with reliable transportation, patients have nowhere to go in these communities and they are often forced to travel outside the county to seek services. Connected to the issue of access to care, focus group attendees lamented the lack of mental health providers in their counties and the issues patients face if they need therapy or counseling. Substance abuse is a growing concern in these counties. The comorbidity of substance abuse and mental health issues are highlighted in Behavioral Health in the Top Ten Health Needs section, and is bolstered by significant quantitative and clinical empirical evidence.

Though the focus group participants discussed many specific clinical issues that their community members faced, the social determinants of health and wellbeing were discussed far more frequently and highlighted as the most pressing concerns in their communities. Issues such as income inequality and education were discussed at length as reasons that preventable diseases take lives in their communities. From the focus groups, it was clear that rural communities are particularly vulnerable and underserved. The rural nature of many of these communities also contributes to poorer health outcomes and lower county health rankings.

In closing, it is important to note that many focus group attendees were unaware that St. Mary's Health Care System served their community, and were hopeful that St. Mary's Health Care System would build facilities in their county. This particular finding is useful for St. Mary's Health Care System in thinking about how to serve the counties in their service area--especially those that are more rural in nature and experience greater health disparities as a result.

Appendix A:
Resource Guide

County	Agency	Description of Services	Address	Number
Greene	Advantage Behavioral Health Center	Adult, child, and adolescent outpatient mental health and substance abuse services	1040 Silver Rd. Greensboro, GA 30642	706-453-2301
Greene	Penfield Addiction Ministries	Drug and alcohol counseling and education, relapse prevention, spiritual guidance	1061 Mercer Cir. Union Point, GA 30642	706-453-7929
Greene	Georgia Cancer Specialists	Oncology, behavioral support, education services, support groups	1000 Cowles Clinic Way, Magnolia Building, Suite 200 Greensboro, GA 30642	706-454-0159
Greene	UGA Cooperative Extension	Nutrition classes and assistance	1180 C. Weldon Smith Dr. Suite 110 Greensboro, GA 30642	706-453-2083
Greene	Greene County Health Department	Chronic disease testing and management, STI testing, nutrition and activity education, WIC services, diabetes management, cancer screenings, immunizations	1031 Apalachee Ave. Greensboro, GA 30642	706-453-7561
Greene	Tendercare Clinic	Primary care, dental services, reduced cost pharmaceuticals, wellness screenings, women's health services	803 South Main St. Greensboro, GA 30642	706-453-1201
Hancock	Hancock County Health Department	Hypertension and diabetes management, family planning, STI testing, immunizations, WIC services, dental clinic, community health education	516 Boland St. Sparta, GA 31087	706-444-6616
Hancock	Oconee Center Behavioral Health Serivices	Mental health services, developmental disability services, addictive disease services, HIV testing	75 Boland Cir. Sparta, GA 31087	706-444-1037
Hancock	Tri-County Health System	Chronic disease care, women's health, immunizations, behavioral health screening and referrals, diabetes classes, prescription assistance, preventive care	675 E Hamilton St. Sparta, GA 31087	706-444-5241
Morgan	Morgan County Health Department	Chronic disease testing and management, STI testing, nutrition and activity education, WIC services, diabetes management, cancer screenings, immunizations	2005 S Main St Ste. 200 Madison, GA 30650	706-752-1266
Putnam	University Cancer and Blood Center	Integrative oncology care	119 Harmony Crossing Suite 1 Eatonon, GA 31024	706-353-2990
Putnam	Putnam County Health Department	Hypertension and diabetes management, family planning, STI testing, immunizations, WIC services, dental clinic, community health education	117 Putnam Dr A Eatonton, GA 31024	706-485-8591
Putnam	Putnam Christian Outreach	Food assistance	151 Industrial Blvd. Eatonton, GA 31024	706-485-4066
Putnam	Central Georgia Christian Food Bank	Food assistance	113 Scott Rd. Eatonton, GA 31024	706-484-0600
Taliaferro	Taliaferro County Health Department	Chronic disease prevention, dental services, immunizations, STI counseling and testing, tobacco use prevention,	109 Commerce St NW Crawfordville, GA 30631	706-456-2316