

2019

COMMUNITY HEALTH NEEDS ASSESSMENT 2019

*St. Anthony Regional Hospital &
Carroll County Public Health*

ST. ANTHONY
Regional Hospital & Nursing Home



Public Health
Prevent. Promote. Protect.
CARROLL COUNTY HEALTH DEPARTMENT

TABLE OF CONTENTS

Summary of Priority Needs	3
Introduction.....	4
Methods	6
Demographics.....	7
Social and Economic Factors	8
Healthcare Factors.....	9
Prevention Services	11
Vulnerable Populations	12
Mental Health	14
Cancer	16
Obesity	18
Substance Use Disorders	22
Ambulatory Care Sensitive Conditions	25
Mortality/Primary Causes of Death.....	27
Actions Taken Since Last Community Health Needs Assessment	28
Carroll County Progress on Priorities Since Previous CHNA's.....	30
Contact Information and About Community Catalyst Center for Consumer Engagement in Health Innovation.....	33
Appendices.....	34

SUMMARY OF PRIORITY NEEDS

The following priority health needs were identified in the St Anthony Regional Hospital and Nursing Home service area through this community health needs assessment process.

Mental Health

Stakeholders interviewed for this assessment identified mental health as one of the top and most urgent health issues in the community. Availability, accessibility and knowledge of services were identified as key barriers. Data analyzed supports their concerns. The average number of mentally unhealthy days reported by adults in the past 30 days has increased Carroll County; and self-reported rates of anxiety, depression, suicidal ideation and suicide attempts among youth throughout the service area are alarming.

Cancer

Cancer was identified as the second most significant community health concern of the participants in the hospital's 2019 Community Survey. Data provided by the Iowa Cancer Registry show rates of age-adjusted rate of mortality for all types of cancer higher in the majority of the population in St. Anthony's primary service area, including Carroll County, that are significantly higher than the state rate.

Obesity/Live Healthy

Obesity, and the health behaviors associated with it, continue to be among the top priorities of stakeholders engaged through interviews and the community survey by the hospital. Despite concerted and coordinate efforts to address factors influencing the condition, the rate of obesity continued to increase in St. Anthony's service area; as it did in the state of Iowa.

Substance Use

Adult and youth alcohol use in the service area continues to be a problem, sometimes with dire consequences. Three counties served by St. Anthony have higher percentages of alcohol-impaired driving fatalities than the state percentage. While the consumption by youth of any alcohol at all decreased slightly, binge drinking increased significantly. Alcohol use by adults in the service area is similar to that throughout the state, but significantly higher than national rates. Tobacco use by both youth and adults is also similar to state rates, but given the dire health consequences for both users and non-users of tobacco, it remains a priority for St. Anthony Hospital.

INTRODUCTION

Background

St Anthony Regional Hospital and Nursing Home conducted this community needs assessment in accordance with Section 501 r requirements of the Internal Revenue Code. The federal Patient Protection and Affordable Care Act passed in 2010 established new requirements that hospitals must comply with to maintain their federal tax-exempt status. Conducting health needs assessments is included among these requirements; the assessments must be done a minimum of every three years.

As with the previous assessment completed in 2016, this assessment is intended to help the hospital better understand the health needs of residents in the St Anthony Hospital service area. This assessment will be used to target interventions focused on selected community health needs.

The federal requirement also calls on hospitals to develop implementation strategies, or health improvement plans, based on the assessment to ensure that community benefit investments focus on documented needs. St Anthony Hospital intends to coordinate efforts with the Carroll County Public Health Department to ensure that community benefit resources address area needs and improve the health of residents in our service area. The representatives of St. Anthony Regional Hospital who led and coordinated this CHNA were John Munson, Chief Financial Officer; Marcia Shaefer, RN, Director of St. Anthony's Home Care/Hospice and Carroll County Public Health Director; and Karen Timm, Vice President Patient Services.




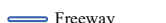
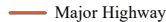
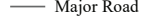
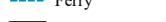

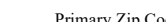
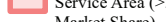

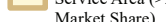
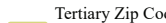
Service Area Description

It is estimated that the population of St. Anthony's six county service area was 71,498 in 2017, with Carroll County being the most populated at 20,320. The percentage of the population of adults aged 65 years and older in the service area is higher than the percentage at the state level of 16.7%.

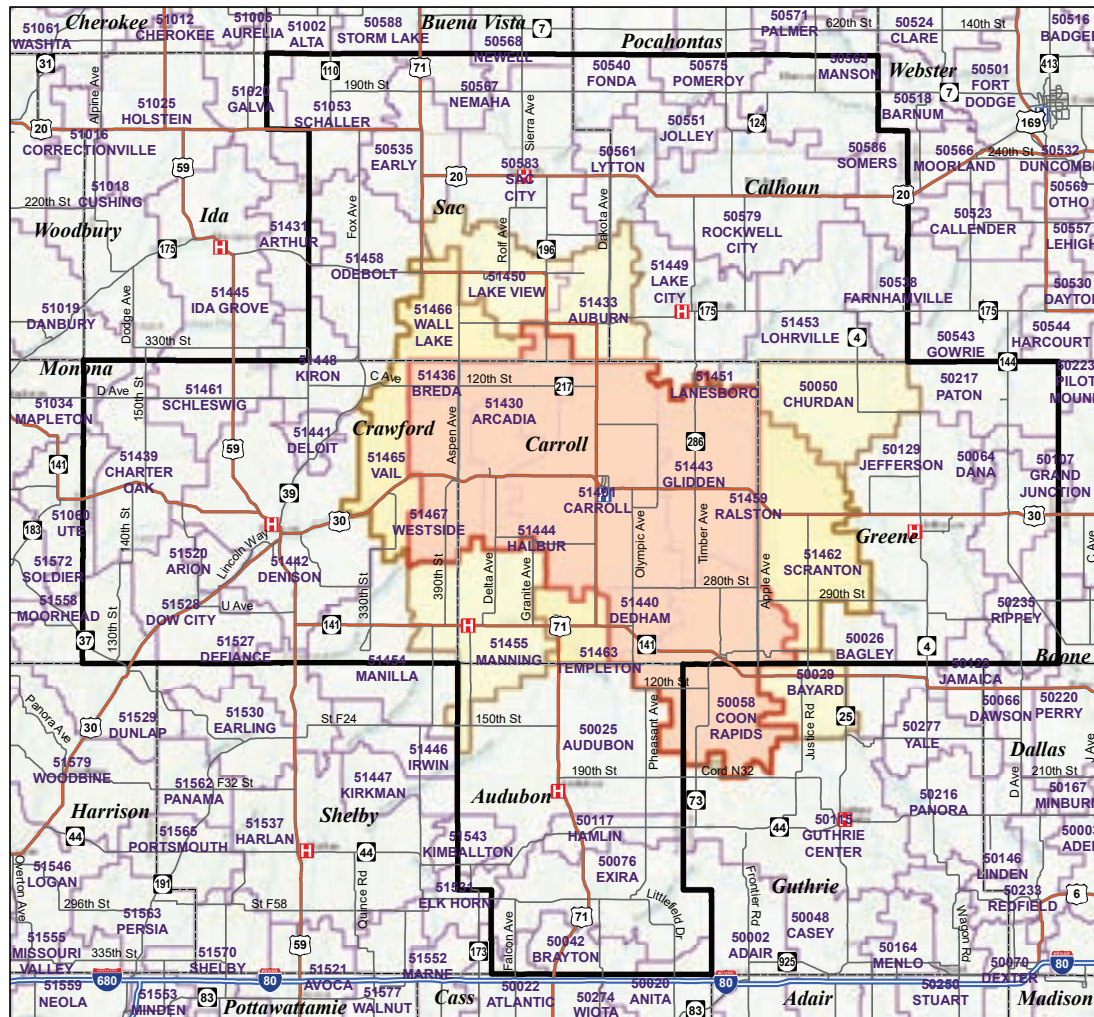
The population in the St. Anthony six-county service area is primarily White/Caucasian and comprised of residents who are proficient in the English language.

St. Anthony Regional Hospital

Service Area and Penetration Map

-  Acute Care Hospitals
-  Critical Access Hospitals
-  Other Hospitals
-  Freeway
-  Major Highway
-  Major Road
-  Ferry
-  Service Area Counties
-  County Lines
-  Primary Zip Code Service Area (>50% Market Share)
-  Secondary Zip Code Service Area (>25% Market Share)
-  Tertiary Zip Code Service Area (>10% Market Share)
-  Zip Codes

0 10 20 Mi.



METHODS

Secondary Data

Secondary data were collected from a variety of sources to present community demographics, social and economic factors, health access, birth characteristics, leading causes of death, chronic disease, and health behaviors.

Given the availability of data and the small size of many of the service area cities, analyses were conducted at the county unit level for the hospital primary service area. Sources of data include the U.S. Census Bureau, American Community Survey, Iowa Department of Public Health, Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, Health Indicators Warehouse, Iowa Cancer Registry, Iowa Kids County, Iowa Workforce Development, Iowa Youth Survey, 2019 County Health Rankings, and St. Anthony's Hospital 2018 hospital utilization data on Ambulatory Care Sensitive Conditions. Data from the most recently reported years are presented in this assessment. When possible, these data sets are presented in the context of the State of Iowa, framing the scope of an issue as it relates to the entire state.

When available, the report includes benchmark comparison data that measures the service area data findings with Healthy People 2020 objectives. Healthy People 2020 objectives are a national initiative to improve the public's health by providing measurable objectives and goals that are applicable at national, state, and local levels.

Primary Data Collection

Community Interviews

Primary data collection efforts included key stakeholder interviews and a web-based, community survey. The stakeholder interviews were conducted through telephone interviews by Dory Escobar, PhD for Community Catalyst in May of 2019. Interviews were conducted with representatives from local hospitals and other healthcare providers, non-profit health and human service organizations serving low-income and minority populations, and others to gather information directly serving residents of the six-county service area. Eight individuals were interviewed through this process.

Community Survey

The primary data collection efforts included a web-based, community survey. English and Spanish language surveys were posted on-line, during the month of February 2019. Community stakeholders participated in identifying key issues to be addressed in the survey questions, which focused on factors important for health and well-being throughout the lifespan. Participation in the survey was voluntary and responses were anonymous. Just over 260 people participated in completing the community survey, including two completed using the Spanish language survey.

DEMOGRAPHICS

It is estimated that the population of St. Anthony's six county service area was 71,498 in 2017, with Carroll County being the most populated at 20,320. The percentage of the population of adults aged 65 years and older in every one of the six counties served by St. Anthony's is higher than the percentage at the state level of 16.7%. Crawford County has the lowest percentage of older adults at 17.5%. Carroll County has the second lower percentage at 19.8%, with the other four counties having from approximately 22% to 24% of their population ages 65 years and older. The percentage of civilian, non-institutionalized population with a disability in the six-county service area is from approximately 11% to 13%, consistently with the statewide rate of 11.6%. Between a fifth and a quarter of the population in the six counties served by St. Anthony's is below the age of 18 years, with Crawford County having the highest percentage of residents below 18 at 25.1%. The percentage of residents below the age of 18 in the state of Iowa is 23.3%. The percentage of the population in St. Anthony's service area under the age of six ranges from 6.3 to 8.6% across the various counties.

The population in the St. Anthony six-county service area is primarily White/Caucasian. Crawford County has a significant Hispanic population, with more nearly 30% of the population identifying as Hispanic. Most of the service area is comprised of residents who are proficient in the English language. The exception is in Crawford County where 8% of the population is not proficient in English, the majority of whom are Spanish speaking.

SOCIAL AND ECONOMIC FACTORS

The County Health Rankings order counties according to health factors data. Social and economic indicators are examined as a contributor to the health of a county's residents. Iowa's 99 counties are ranked according to social and economic factors with 1 being the county with the best factors to 99 for the county with the poorest factors. This ranking examines: high school graduation rates, unemployment, children in poverty, social support, and others. In 2019, Carroll County ranked in the top quartile of all Iowa counties, ranking 12th out of 99, according to social and economic factors. Crawford County was the lowest ranked county in the service area, ranking 91st out of 99 Iowa Counties.

Income and Employment

The median household in Carroll County was \$54,563 in 2017. All counties in the service area had a median household income lower than the median of \$56,570 for the State of Iowa. Examining poverty levels for families with children, shows that 12.8% of families with children under the age of 18 in Carroll County experience poverty in 2017. Where there is a female head of household, the rate by which these families experience poverty is quite significant with nearly one-third (31.4%) living in poverty in Carroll County and nearly two-thirds in Calhoun (59.2%) and Crawford County (60.8%), and high percentages in the other counties in the service area, with the exception of Sac (21%). The unemployment rate for individuals age 16 and over in Carroll County was 2.3% in 2017, and low in all six counties in the service area, as well as across the State of Iowa (3.1%) in that same year.

Household Assistance

In the State of Iowa, 11.6% of residents received food assistance in 2017. In Carroll County, 8.7% of the residents receive this assistance in 2017, a rate lower than that for most of the counties in the service area, and for the State of Iowa. Slightly under 13% of Carroll County residents filing income taxes qualified for the Earned Income Tax Credit (EITC) in . The EITC is a federal tax credit for low- and moderate-income working people. The percentage of students eligible for the free or reduced-price meal program is one indicator of socioeconomic status. In Carroll County in 2017, 38% of the students qualified for this program, below the statewide percent of 41.3; and significantly lower than the 67.7% of students qualifying the program in Crawford County. The federal Women Infants and Children Program (WIC) provides supplemental nutrition support for infants and young children. In Carroll County in 2017, 27% of the children aged 0-4 who received WIC support, nearly identical to the statewide percentage of 26.9% in Iowa. The percentage of children 0-4 receiving WIC in Crawford County was significantly higher at 46.2%, and significantly lower in Sac County at 12.2%.

Education

High school graduation rates are determined by the percent of ninth grade students in public schools who graduate in four years. The graduation rate of 94.9% in Carroll County in 2017 was higher than the graduation rate of 91.1% for the State of Iowa. The national goal for high school graduation in four years established in Healthy People 2020 is 87%, and as of 2016 a rate of 84% had been achieved nationwide. In 2017, every county in St. Anthony's service area other than Greene County significantly surpassed both the current rate and the HP2020 goal.

HEALTHCARE FACTORS

Access to Care

St. Anthony prioritized access to care in its 2016 Community Health Needs Assessment, including the availability and accessibility of primary care providers and mental health providers (see below, “Mental Health”), insurance coverage for adults and children, and transportation. It was also the sixth most significant community health concern of the participants in St. Anthony’s 2019 Community Survey. The 2019 Community Health Rankings ranked Iowa’s 99 counties according to access to health care with 1 being the county with the best factors to 99 for that county with the poorest factors. Carroll County is ranked 9 of all Iowa counties for health access. Crawford and Sac are ranked among the lowest of counties in Iowa on this measure, at 91 and 89 respectively. Key stakeholders interviewed for this assessment report that the service area has good access to primary healthcare services, however there are some limitations in access to specialty care; especially for services that are not offered locally, due to the lack of sufficient transportation services for those living outside the City of Carroll.

HEALTH ACCESS RANKING, 2019

Area	County Ranking (out of 99)
Carroll County	9
Audubon County	79
Calhoun County	60
Crawford County	91
Greene County	14
Sac County	89

Source: County Health Rankings, 2019

Primary Care Providers

Healthy People 2020 (HP2020) established a national goal that 83.9% of the population have a usual primary care provider. The percent of the population nationwide that reported having a usual primary care provider in 2015 was 76.4. Of the 265 respondents to the Community Survey conducted for this Community Health Needs Assessment, 82.51% reported having a usual primary care provider; nearly that of the HP2020 goal. Nearly all respondents, 96%, reported that it is easy or moderately easy to access primary care. The most common reasons stated by those experiencing difficulty accessing care were being unable to get a timely appointment or having difficulty taking time off work to see a provider.

The ratio of population to primary care physicians (PCP) is an important measure of access to care. At a state level, the PCP ratio in Iowa was 1,390:1 in 2016. Carroll County exceeds that ratio, at 1,140:1; although this does not reflect an improvement since the last County Health Rankings report. Both Audubon and Sac Counties saw a positive trend in the ratio of PCP to population, while Crawford and Greene Counties saw negative trends.

Primary care providers also include other professionals, such as nurse practitioners, physician assistants and clinical nurse specialists. These additional providers increase access to primary care, helping to address physician shortages in many communities. Iowa had a ratio of population to primary care providers other than physicians of 1,085:1 in 2018. While Greene and Crawford counties have significantly higher ratios, at 8,981:1 and 2,437:1 respectively; Carroll (883:1), Calhoun (812:1) and Audubon Counties (558:1) all surpassed this statewide ratio.

Health Insurance Coverage

Another measure of access to care is the percentage of population with health insurance coverage. The Healthy People 2020 national goal is 100% insurance coverage for children and adults under the age of 65. The percentage of this population still uninsured in 2017 was 10.7% (National Health Survey Interview, 2017). The percent of children who are uninsured in Carroll County is 2% and for adults under the age of 65 it is 4%, the lowest among the counties in the service area, lower than the state percentage, and significantly lower than the nationwide percentage. In the service area, Crawford County has the highest percentage of the population with no insurance with 5% of children and 11% of adults under 65 having not coverage.

Transportation

In 2016, stakeholders interviewed by St. Anthony noted that the lack of public transportation in the service area made it more difficult for many people in need of medical care to have access the care they need, at the time they need it. All of the counties served by the hospital except Calhoun County are within the Region 12 Western Iowa Transit System Service Area, which lists no urban transit systems nor inter-city bus routes. Only one key stakeholder mentioned the availability of door-to-door transportation to healthcare services available to all with 24-hour notice by Western Iowa Transit. Individuals with full Medicaid benefits are eligible for non-emergency medical transportation or reimbursement for transportation services, however few interviewees mentioned this available resource.

PREVENTION SERVICES

Each of the six counties in the St Anthony Service area has a local public health department. They provide a range of public and home health services. There are also community-based primary and secondary prevention services available in the service area that include those offered by local hospitals and community health centers; as well as Elderbridge Agency on Aging, Family Resource Centers, Partnership for Health, New Hope Village, New Opportunities, and others.

Immunization

School readiness immunization rates are very high with rates for recommended immunizations among two-year old children being 79% in Carroll County. Among adolescents, ages 13-15, up-to-date immunization rates were 48% in Carroll County, with higher rates of immunization in most of the other counties in the service area. HPV immunizations protect females from cervical cancer and is recommended for both girls and boys. Carroll County HPV immunization rate among adolescents was 28.7%, a rate below that of other counties and the Healthy People 2020 goal of 80%.

VULNERABLE POPULATIONS

Maternal and Child Health

St. Anthony prioritized improved birth outcomes in its 2016 Community Health Needs Assessment. In 2017, there were 251 live births in Carroll County, and no reported births to teenage mothers. In that same period, Crawford County had 11 births to teenage mothers and Greene County had 7, an increase for both counties since the previous Needs Assessment. In 2017, the rate of pregnant women in Carroll County who received prenatal care in the first trimester of their pregnancy was 87.6%, slightly down from 90% in 2014. This rate of early entry into prenatal care still exceeds the rate of 79.1% of women entering prenatal care in the first trimester for the State of Iowa. Only Greene County (79.8%) came close to the statewide rate. There were 5 or less reports of low birth weight in Carroll County or Audubon County in 2017, an improvement for Carroll County, which was reported to have had 13 in the 2016 Community Health Needs Assessment. The percentage of birth weighing less than 5.5 pounds in 2017 ranged from 6.4% and 8% across the counties in the service area. Once again, there were no reported cases of infant mortality in the St. Anthony service area in 2017.

Regarding the availability of easily accessible, high-quality and affordable parent support services, a question was included in the hospital's Community Survey. The majority, 64%, reported that services were moderately to easily accessible, and 13% reported that they were somewhat difficult or difficult to access.

Older Adults

Iowa ranks 16th in the nation in its population of older adults, and even higher for population age 75 or older; in which it is fourth in the nation, according to Iowa's Attorney General (2019). As mentioned earlier, the percentage of older adults in the population in hospital's service area is higher than the state percentage. The rate of hospital stays for ambulatory care sensitive conditions is known to be an indirect measure of access to and quality of outpatient care services and is included as health factor for older adults in the 2019 County Health Rankings. In the state of Iowa, the rate of hospital stays for ambulatory care conditions per 100,000 Medicare enrollees was 3,776 in 2016. All six counties in St. Anthony's service area had lower rates than this in that year, with Audubon County having the lowest rate at 1,962. The rate in Carroll County was 3,464. (See more in section on ambulatory care sensitive conditions.)

Another measure addressing care for older adults included in the 2019 County Health Rankings is the percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening in 2016. At a state level, Iowa had a percentage of 49%. Only Sac (54%) and Carroll (53%) Counties met or exceeded the statewide percentage. Preventing influenza among older adults is a priority across the nation. In Iowa, 64.8% of adults age 65 and older received an influenza vaccine in 2017. The percentage of this population receiving an influenza vaccine in the hospital's service area varied, from a low of 56.8% in Crawford County to a high of 75.7% in Greene County. In Carroll County, 71.1% received a vaccine.

Falls are the leading cause of injury among older adults. Healthy People 2020 includes a goal of reducing the number of emergency department visits due to falls among older adults to 4,711.6 visits per 100,000. Iowa's rate for the 2011-2015 period was below that target at 3,570.52 for adults ages 64 - 84; as were the rates in all

the counties in St. Anthony's service area. The rate in Calhoun County, 3,095.32, was the lowest among the six counties. The rate of fall-related emergency visits by adults ages 65 – 84 in Carroll County was 3,454.70 during 2011-2015. Rates are significantly higher for adults age 85 and older. The statewide rate of emergency department visits for falls among this population was 10,771.27 in the same 2011-2015 period. In Carroll County, the rate was 10,375.00. Greene County had a significantly higher rate of fall-related emergency department visits by adults age 85 and older, at 14,256.20

Rural Health

Geographic location is one factor that can lead to health inequities and disparities in population health outcomes. A 2017 CDC study on preventable deaths among rural Americans found they are more likely to die from heart disease, cancer, unintentional injuries, chronic lower respiratory disease and stroke than urban Americans. In a data brief published by the CDC in 2010 on rural and urban hospitals roles in providing in-patient care, the authors found that over half of the patients hospitalized in hospitals classified as rural hospitals, such as St. Anthony's, were age 65 or older (<https://www.cdc.gov/media/releases/2017/p0112-rural-death-risk.html>). First-listed diagnoses that occur more frequently in rural hospital patients include dehydration, bronchitis and pneumonia when compared to urban hospital patients. Two of these conditions, dehydration and pneumonia, are among the top ambulatory care sensitive conditions treated at St. Anthony's Hospital in 2018.

MENTAL HEALTH

St. Anthony identified access to mental health services as a priority in the 2016 Community Health Needs Assessment. It was also the top significant community health concern of the participants in St. Anthony's 2019 Community Survey. Data from CMS National Provider Identification in 2018 was included in the 2019 County Health Rankings and reveals that all the counties in St. Anthony's service area have far lower ratios of population to mental health providers than the statewide ratio of 700:1 in Iowa. Carroll County had a ratio of 1,200:1, Calhoun County had a ratio of 4,870:1, and Audubon County had no providers.

MENTAL HEALTH PROVIDERS, NUMBER AND RATIO, 2018

Area	Number	Ratio of population to providers
Carroll County	17	1,200:1
Audubon County	-	-
Calhoun County	2	4,870:1
Crawford County	11	1,550:1
Greene County	6	1,500:1
Sac County	6	1,640:1
Iowa		700:1

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

Stakeholders interviewed for this assessment identified mental health as one of the top and most urgent health issues in the community. Availability, accessibility and knowledge of services were identified as key barriers. In addition to these, social norms associated with seeking care for mental health is another. Over 40% of Community Survey respondents state that they either disagree or strongly disagree with the statement that people in the area are generally supportive and sympathetic to people with mental health problems. The survey reflects concern about the social or familiar consequences of reaching out for or providing help that can negatively impact utilization of available services. Nearly one fifth of respondents to St. Anthony's Community Survey report that they do not know how to access resources to address mental health concerns for themselves, their children or other immediate family members. In addition to the psychiatric unit at St. Anthony's Regional Hospital, there are some community-based behavioral health services available in the hospital's service area; including Catholic Charities, Plains Area Mental Health Center, Seasons, New Opportunities, On the Wagon Organization, Howard Center and Jackson Recovery Center.

Indicators of mental health status among adults and youth indicate the continued need to improve access to care. In 2016, the average number of mentally unhealthy days reported by adults in the past 30 days was 3.2 in Carroll County; a slight increase since 2014. In the 2016 Iowa Youth Study, youth in all six counties reported symptoms of anxiety at rates higher than the state average of 8%, from 10% in Carroll County to 21% in Calhoun County. In Carroll County, 9% reported that they are currently taking prescribed medication to manage their

symptoms; as compared to 14% in Calhoun, indicating a gap of 7% of the youth who report feeling anxiety but are not currently being treated with prescription medication in that County.

While closely aligned with state rates, the self-reported rates of depression and suicidal ideation and attempts among youth are significant throughout St. Anthony’s service area. In Carroll County, 18% of youth respondents to the 2016 Iowa Youth Study reported feeling sad or hopeless, 13% seriously considered suicide and 5% have attempted suicide. These rates were slightly higher among youth in Calhoun and Crawford Counties.

SELF-REPORTED DEPRESSION AND SUICIDAL IDEATION/BEHAVIOR, ADOLESCENTS (ALL GRADES), 2016

Area	Felt Sad or Hopeless	Seriously Considered Suicide	Attempted Suicide
Carroll County	18%	13%	5%
Audubon County	12%	11%	3%
Calhoun County	21%	17%	6%
Crawford County	21%	17%	5%
Greene County	19%	17%	5%
Sac County	19%	12%	2%
Iowa	18%	13%	4%

Source: Iowa Youth Survey, 2016

HP2020’s target for adolescents experiencing serious depression is 7.5%. As noted above, the age-adjusted rate of suicide death rates of all service area counties except Calhoun County exceeded the state rate; with especially high rates in Sac and Audubon Counties. The 2012 National Strategy to Prevent Suicide, which was last reviewed in 2017, contains goals relevant to St. Anthony’s service area. These include the integrated and coordinated multi-sector suicide prevention activities, education about protective factors and prevention strategies, including suicide prevention as a core component of health care services, to name a few.

CANCER

Cancer was identified as a priority in St. Anthony’s 2016 Community Health Needs Assessment (CHNA) and was identified as the second most significant community health concern of the participants in St. Anthony’s 2019 Community Survey. The most recent data provided by the Iowa Cancer Registry, 2011-2014, show a statewide age-adjusted rate of mortality for all types of cancer of 167.8. Crawford County had the lowest rate cancer mortalities of all types, at 149.90; and Calhoun County had the highest rate, at 182.81. Carroll County had an age-adjusted rate of cancer mortality of all types of 178.21, greater than the state rate. Both Greene (56.93) and Calhoun (50.48) Counties had age-adjusted rates of digestive system cancer mortality greater than the state rate of 41.08; while Carroll County’s rate was lower at 30.01. All counties in the hospital’s service area had lower age-adjusted rates of respiratory cancer mortality than the state rate of 46.87. Audubon County had the lowest rate at 15.56. Carroll County’s rate of age-adjusted respiratory cancer mortality was 43.71. Every county in the area except Greene County, had greater rates of urinary cancer mortality than the state rate of 9.30. Audubon (22.34) and Calhoun (23.02) Counties had rates more than double the state rate, while the rate in Carroll County was 14.20. Carroll County’s rate of breast cancer mortality rates among females was 14.02, lower than the state rate of 19.21. Calhoun (22.36) and Crawford (26.28) Counties’ rates of female breast cancer mortality were significantly greater.

CANCER MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2014

Geographic Area	All Sites	Digestive System	Respiratory System	Urinary System	Breast (Female)
Carroll County	178.21	30.01	43.71	14.20	14.02
Audubon County	176.35	44.39	15.56	22.34	*
Calhoun County	182.81	50.48	39.07	23.02	22.36
Crawford County	149.90	33.50	41.75	12.23	26.28
Greene County	164.93	56.93	39.56	9.92	*
Sac County	180.73	36.48	43.35	13.80	17.25
Iowa	167.80	41.08	46.87	9.30	19.21

Source: Iowa Cancer Registry 2019

The rate of colorectal cancer mortality in Carroll County, 14.66, was also lower than the state rate of 15.92. Audubon and Greene Counties had significantly greater rates of colorectal cancer mortality, at 25.50 and 22.72 respectively. All counties in the service area had lower age-adjusted rates of lung cancer than the state rate of 45.52, with Audubon County’s rate being significantly lower at 15.56. The age-adjusted rate of lung cancer mortality in Carroll County was 40.34. The age-adjusted rate of prostate cancer mortality was nearly double the state rate of 19.63 in three of the six area counties. Carroll County’s rate was 38.96, Audubon’s rate was 39.40 and Sac County’s rate of 40.08.

CANCER MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2014

Area	Colorectal	Lung & Broncus	Prostate
Carroll County	14.66	40.34	38.96
Audubon County	25.50	15.56	39.40
Calhoun County	15.73	37.65	*
Crawford County	10.99	41.75	10.81
Greene County	22.72	39.56	25.12
Sac County	12.54	37.37	40.08
Iowa	15.92	45.52	19.63

Source: Iowa Cancer Registry 2019

Cancer estimates for 2019 are available through the University of Iowa’s 2019 Cancer in Iowa report. According to this report, a total of 520 new cancers are estimated in the hospital’s six county service area; with 160 of those cases estimated to occur in Carroll County. Crawford County is estimated to have 80 new cases reported in 2019. An estimated 185 cancer deaths are expected in 2019 in the entire service area, with 60 of those deaths estimated to occur in Carroll County. The same report lists percentage of all estimated new cases of cancer and cancer deaths by site for females and males, on a statewide level. For females in Iowa, most new cancer cases in 2019 are estimated to be breast (28.1%), lung (12.4%) and colorectal (8.8%). The percentage of cancer deaths by site for females in Iowa in 2018 are estimated to be breast (13.0%), lung (24.3%) and colorectal (9.0%). For males in Iowa, most new cancer cases in 2019 are estimated to be prostate (22.3%), lung (13.9%) and colorectal (9.3%). The percentage of cancer deaths by site for males in Iowa in 2019 are estimated to be prostate (10.3%), lung (26.5%) and colorectal (8.6%).

OBESITY

Obesity is defined as a Body Mass Index (BMI) of 30 and above. Healthy People 2020 (HP2020) includes reduction of obesity in the proportion of adults, children and adolescents as leading health indicators. It is a key driver of conditions such as diabetes, heart disease and cancer; which are addressed in sections below. The 2020 target for adults is 30.5% and for children and adolescents ages 2 to 19 is 14.5%. The high rate of obesity and health behaviors associated with healthy weight were identified as priorities in St. Anthony's 2016 Community Health Needs Assessment. It was also the fourth most significant community health concern of the participants in St. Anthony's 2019 Community Survey. Key stakeholders interviewed for this assessment also identified obesity and related health conditions as a priority health issue for the area.

ADULT OBESITY & PHYSICAL INACTIVITY, 2015

Area	Percent Obese	Percent Inactive
Carroll County	33	27
Audubon County	34	30
Calhoun County	35	29
Crawford County	33	27
Greene County	36	29
Sac County	35	28
Iowa	26	19

Source: CDC Diabetes Interactive Atlas, 2015. Accessed from County Health Rankings, 2019

According to the 2017 State of Obesity in Iowa report by the Robert Wood Johnson Foundation, Iowa has the fourth highest adult obesity rate in the nation, and the 30th highest obesity rate for youth ages 10 to 17. CDC data from 2015 reported in the 2019 County Health Rankings show that approximately a third of the population in the hospital's service area was obese, as compared to the state rate of 26%. In Carroll County, 33% of the population was obese, and Greene County had the highest percentage at 36%. The current data indicates a negative trend in rates of obesity throughout the service area. The 2017 State of Obesity in Iowa report includes 2016 and 2017 rates of obesity-related health issues in Iowa, as well as projected 2030 cases given the current pace.

Physical Activity

The majority of the population in all but two of the counties in the service area reported adequate access to locations for physical activity in 2010 and 2018, according to the 2019 County Health Rankings. Carroll County (75%) and Sac County (79%) had the highest percentage of residents with access to exercise opportunities and Audubon (64%) and Greene (69%) Counties had the lowest. While all six counties had a lower percentage of population than Iowa's state rate of 91% of residents with access to exercise opportunities, they showed an improvement since the 2016 Community Health Needs Assessment.

**PERCENTAGE OF RESIDENT WITH ACCESS
TO EXERCISE OPPORTUNITIES, 2010 & 2018**

Area	Percent
Carroll County	75
Audubon County	64
Calhoun County	74
Crawford County	77
Greene County	69
Sac County	79
Iowa	91

Source: ArcGIS Business Analysis 2010 & 2018.
Accessed from County Health Rankings, 2019

The percentage of the population that was physically inactive in all six counties was also significantly higher than the statewide rate of 19%; from 27% of the population in Carroll and Crawford Counties to 30% of the population in Audubon County. The CDC defines physical inactivity as “not getting any physical activity beyond basic movement from daily life activities.”

YOUTH, ALL GRADES, PHYSICAL ACTIVITY 2016

Area	0 Days	7 Days
Carroll County	6%	34%
Audubon County	0%	38%
Calhoun County	4%	23%
Crawford County	5%	28%
Greene County	3%	38%
Sac County	4%	28%
Iowa	5%	31%

Source: Iowa Youth Survey, 2016

In that same 2016 survey, 5% of participating youth statewide reported that they were not physically active for at least one hour a day even once during a seven-day period, and 34% reported being active for at least an hour seven days a week. Six percent of youth in Carroll County reported that they were not physically active at all in a seven-day period, an increase from the 3% reported in 2014. Thirty four percent of Carroll County youth reported that they were that active every day in that period, nearly the same as in 2014 (33%). By comparison, in 2016 no youth reported being physically inactive seven days a week in Audubon County and 38% reported by physically active for at least an hour every day. Students in Calhoun County reported the lowest rate of physical activity seven days a week, at 23%.

Nutrition

A healthy food environment is important to health. The lack of regular access to nutritious food is related to negative health outcomes such as weight-gain and premature mortality. Food insecurity is defined as “the disruption of food intake or eating patterns because of lack of money and other resource.” (<https://www.ers.usda.gov/media/8282/short2012.pdf>); and is identified as a key issue in the area of social determinants of health in Healthy People 2020. A 2016 study of food insecurity found that 10% of Carroll County’s population experienced food insecurity, with the other counties’ population experiencing comparable rates and which is also closely aligned with the statewide rate of 12%. The HP2020 target for household food insecurity is 6%. Access to nutritious food, however, does not ensure consumption of nutrition foods like fresh fruits and vegetables. According to the CDC, in 2017 only 9% youth in the U.S. meet the recommended consumption of fruits and just 2% meet the recommendation for vegetables. Youth in the area participating in the 2016 Iowa Youth Survey reported consuming 5 servings of fruits or vegetables at rates comparable to the state rates. Five percent of youth in Carroll County reported consuming 5 or more servings of fruits a day and 3% reported consuming 5 or more servings of vegetables. Daily consumption of fruit by youth remained unchanged in Carroll County, and their daily consumption of vegetables decreased from 6%. Youth in Calhoun, Crawford and Greene Counties reported consumption of 5 or more servings of fruits or vegetables a day at slightly higher rates than in Carroll County in 2016.

Chronic Disease Associated with Obesity

St. Anthony identified the management of chronic disease, especially diabetes and heart disease, as a priority in its 2016 Community Health Needs Assessment. One indicator of overall health status, including chronic diseases, is self-reported health status. According to the 2019 County Health Rankings, when asked to self-report on health status in 2016, just 11% of adults in Carroll County indicated they were in fair or poor health. Healthy People 2020’s established goal of self-reported good or better health is 79.8%, which is exceeded in all areas of St. Anthony’s service area.

Health behavioral risks are known to be closely associated with disease processes, especially chronic diseases like diabetes and heart disease. The County Health Rankings examination of healthy behavior data on indicators that include adult smoking, obesity, physical inactivity, excessive drinking, sexually transmitted infections, and others. In 2019, Carroll County ranked 28 out of the 99 counties in Iowa. Calhoun County was ranked lowest among the counties in St. Anthony’s service area at 84. All the counties, including Carroll, received lower ranking than in 2016.

Diabetes

Data obtained from the CDC’s 2015 Diabetes Interactive Atlas reported in the 2019 County Health Rankings indicate a diabetes prevalence rate of 8% among adults, lower than the state rate of 10%. All other counties in the service area exceeded the state rate by one to three percentage points and saw measurable increases since the 2016 Community Health Needs Assessment. Iowa’s 2018 State of Obesity report includes data from the 2017 Behavioral Risk Factor Surveillance System that reveals that 9.6% of the population in that state was obese in that year. In comparison, that same report shows that the percentage of Carroll County’s population that was obese was slightly lower at 8.9%; while all other counties in the service area had a higher percentage of obese individuals.

DIABETES, 2017

Area	Percent
Carroll County	8.9%
Audubon County	11.7%
Calhoun County	10.7%
Crawford County	11.7%
Greene County	10.4%
Sac County	10.4%
Iowa	9.6%

Source: Behavioral Risk Factor Surveillance System 2017; The State of Obesity 2018

According to Healthy People 2020, diabetes is the seventh leading cause of death across the nation, and the reduction of the disease burden of diabetes is a HP2020 goal. In 2015, 10% of Iowa's population was diagnosed with diabetes. The prevalence of diabetes in 2015 was greater in all the hospital's service area county's except for in Carroll County, which had a prevalence of 8%. The rate of emergency room visits for diabetes in Iowa was 168.29 during the 2011-2015 period. This rate was significantly lower in Sac County, at 111.56, and higher in Carroll (187.08), Crawford (181.42) and Greene Counties (341.75). The rate of hospitalizations due to diabetes during that same period in Iowa was 110.97, which was only exceeded in Greene County, with a rate of 154.97. Carroll County's rate of hospitalizations due to diabetes was 73.14.

Heart Disease

Heart disease was also the fifth most significant community health concern of the participants in St. Anthony's 2019 Community Survey. Heart disease was the fifth leading cause of death in the St. Anthony service area during the 2011-2015 period. The age-adjusted rate of hospitalizations for heart attacks in the 2011-2015 period in Carroll County was 118.16, as compared to the state rate of 145.88. Crawford County's rate of hospitalizations due to heart attacks was significantly lower at 53.63. The state rate of hospitalizations due to heart failure during that same period was 193.57. Once again, the rate in Crawford County was significantly lower at 121.77. The rate of hospitalizations due to heart failure in that period in Carroll County was 159.14. It was significantly higher in both Calhoun (197.95) and Sac (224.39) Counties.

SUBSTANCE USE DISORDERS

Substance use disorders are a significant health problem in the United States and have major impacts on individuals and families, as well as their communities (Healthy People 2020). Substance use was also the identified as the third most significant community health concerns by respondents to St. Anthony’s 2019 Community Survey. Healthy People 2020 includes a goal of reducing substance abuse for the well-being of all populations, especially children. In St. Anthony’s service area, data on two known effects related to substance use disorder, motor vehicle accidents and suicide, reveal that they are areas of concern.

Alcohol Use

Adult and youth alcohol use in the service area continues to be a problem, sometimes with dire consequences. On a state level, 28% of all driving fatalities were due to alcohol-impaired driving in 2016. Three counties served by St. Anthony have higher percentages than that. In Carroll County, 40% were reported to be due to alcohol-impaired driving and in Calhoun County 56% were, as compared to 0% reported in Crawford County. (Given the significant difference between these figures, the data was rechecked and verified that this is what had been reported.)

Youth Alcohol Use

According to the CDC, excessive alcohol use includes heavy drinking, binge drinking, and consumption of any amount of alcohol by minors or by pregnant women. St. Anthony identified the reduction of the high rate of alcohol use among area adults in youth as a priority in the 2016 Community Health Needs Assessment. Youth alcohol use during the last 30 days is a Leading Health Indicator of Healthy People 2020 (HP2020), with a target of 12.8%. According to the 2016 Iowa Youth Survey results, there was a slight reduction in the percentage of youth in Carroll County who reported having had at least one drink in the last 30 days to 11%. There was a similar reduction in youth alcohol use in all of the other counties in the St. Anthony service area, except for in Sac County, which sustained a rate of 9% of youth reporting alcohol use.

YOUTH ALCOHOL USE, 2016

Area	Alcohol Use in Last 30 Days (All Grades)	Binge Drinking (11th Grade)
Carroll County	11%	21%
Audubon County	7%	5%
Calhoun County	11%	12%
Crawford County	11%	12%
Greene County	9%	15%
Sac County	10%	20%
Iowa	9%	13%

Source: Iowa Youth Survey, 2016

Of the students who reported current alcohol consumption, most report that they obtained it at a party (4% - 6% in all counties except Audubon, in which 1% reported obtaining alcohol at a party). Between 2% and 3% of youth

currently consuming alcohol in the service area report obtaining it from a parent or guardian. In Carroll County, 5% reported that they gave someone money to buy the alcohol for them; more than youth in any other of the service area counties or across the state.

YOUTH ALCOHOL USE, 2016

Area	Alcohol Use in Last 30 Days (All Grades)	Binge Drinking (11th Grade)
Carroll County	11%	21%
Audubon County	7%	5%
Calhoun County	11%	12%
Crawford County	11%	12%
Greene County	9%	15%
Sac County	10%	20%
Iowa	9%	13%

Source: Iowa Youth Survey, 2016

The National Institute on Alcohol Abuse and Alcoholism reports that adolescents and youth ages 12 – 20 consume 90% of their alcohol by binge drinking. The percentage of youth in Carroll County reporting that they have five or more alcoholic drinks within a couple of hours (binge drinking) increase from 18% to 21%, which is significantly higher than Iowa’s statewide rate of 13%. Sac County youth also reported binge drinking at a high rate of 20%, versus Audubon County’s low rate of 5%. The 2016 Iowa Youth Study also revealed that 7% of youth in Carroll County reported driving a motor vehicle after consuming alcohol, slightly under the national rate of 8%, but higher than the Iowa rate of 5% (Youth Risk Behavior Survey, 2015).

Adult Alcohol Use

Adult binge drinking is also an HP2020 Leading Health Indicator, with a target of 24.4%. Adults in counties served by St. Anthony also reported excessive alcohol use, with Carroll County having the highest percentage at 21%; similar to Iowa’s statewide percentage of 20%, but higher than the national percentage of 16.6%.

ADULT EXCESSIVE DRINKING, 2016

Area	Percent
Carroll County	21
Audubon County	19
Calhoun County	19
Crawford County	20
Greene County	19
Sac County	19
Iowa	20

Source: Behavioral Risk Health Surveillance Survey, 2016. Accessed from County Health Rankings, 2019

According to the CDC, “excessive drinking includes binge drinking, heavy drinking, and any drinking by pregnant women or people younger than age 21. Binge drinking, the most common form of excessive drinking, is defined as consuming. For women, 4 or more drinks during a single occasion. For men, 5 or more drinks during a single occasion.”

Tobacco Use

Tobacco is the most prevalent cause of preventable deaths in the U.S. and is known to be harmful to both users and non-users; causing a variety of health problems that include cancer, heart disease, respiratory illness and lung disease, and more. According to the U.S. Surgeon General, there is no known protective factor for secondhand smoke exposure. Despite the growing body of evidence of these harms, tobacco use continues to be a widespread high-risk health behavior across the nation. In fact, it is considered an epidemic in the Healthy People 2020 framework. While tobacco use by both youth and adults in St. Anthony’s service area is not significantly different than use throughout the state of Iowa, any tobacco use is high-risk and of concern.

Youth Tobacco Use

According to the 2016 Iowa Youth Survey, 4% of students in 6th, 8th and 11th grades who responded to the survey in Carroll and Crawford Counties reported that they currently use tobacco, as compared to 3% in the state of Iowa. That percentage rises to 5% in Greene and Sac Counties. When looking just at responses of 11th grade students, 6% of respondents in the state of Iowa reported current use of tobacco; whereas only 2% of respondents in Audubon and Calhoun Counties reported current use. However, in all other counties in the hospital’s service area, 11th grade students reported higher rates of current tobacco use: 8% in Carroll and Crawford Counties, 10% in Greene County, and 16% in Sac County.

YOUTH, CURRENT TOBACCO USE, 2016

Area	All -6th, 8th and 11th grades	Students in the 11th grade
Carroll County	4%	8%
Audubon County	1%	2%
Calhoun County	1%	2%
Crawford County	4%	8%
Greene County	5%	10%
Sac County	5%	16%
Iowa	3%	6%

Source: Iowa Youth Survey, 2016

The 2016 Iowa Youth Survey also asked students about their current use of e-cigarettes, for which 5% of all respondents in the state of Iowa reported that they currently use some type of e-cigarette product. Fewer respondents in Sac (2%), Audubon (3%) and Carroll (4%) Counties reported current use of e-cigarettes. In Crawford County, 6% of respondents reported currently using e-cigarettes and an alarming 12% reported current use in Calhoun County.

Adult Tobacco Use

The 2016 Behavioral Risk Health Surveillance Survey reveals that adult cigarette smoking by respondents the hospital’s service area is not significantly different than throughout the state of Iowa (14%); from a low of 14% in Carroll and Sac Counties, to 15% in Audubon and Greene Counties, and 16% in Calhoun and Crawford Counties.

AMBULATORY CARE SENSITIVE CONDITIONS

Ambulatory care sensitive conditions (ACSCs) are diagnoses for which effective and timely care in outpatient settings can either prevent the onset of a medical condition or make it more manageable, thereby reducing the risks for hospitalization. Several ACSCs are included in the Healthy People 2020 goals.

Hospitalizations included in County Health Ranking

The 2019 County Health Rankings includes the rate of preventable hospitalizations for ambulatory care sensitive conditions per 100,000 Medicare enrollees in 2016. The statewide rate is 3,776, and all St. Anthony’s service area counties had more favorable, or lower rates than this. Asthma hospitalization rates for children ages 5-14 were unavailable for all counties in the St. Anthony Service area. The rate of asthma hospitalizations for all age groups in Carroll County was 3.01, slightly higher than the statewide rate of 2.97.

Hospitalizations at St. Anthony Hospital

Analysis of ACSC was conducted, using hospital discharge data accessed through the Iowa Hospital Association, based on CMS acute and chronic measures. This is an established set of acute and chronic ACSCs that are potentially preventable given appropriate primary and preventive care. Between 2016 and 2018, St Anthony Hospital saw a reduction in ACSC discharges. Of all discharges from St Anthony Hospital, ACSC discharges were 6.3% in 2016, 6.0% in 2017 and 5.4% in 2018. Comparable Iowa figures were 5.3% 2016, 5.4% 2017 and 5.4% 2018.

The top ambulatory sensitive care conditions (ACSCs) for which people received care at St. Anthony’s Regional Hospital in 2018 were short- and long-term complications from diabetes (149 cases and 300 cases respectively), chronic obstructive pulmonary disease (COPD) or asthma in older adults (233 cases), heart failure (154 cases), dehydration (265 cases), bacterial pneumonia (147 cases), urinary tract infection (231 cases) and uncontrolled diabetes (157 cases). While The overall percentage of ACSCs treated at the hospital are in line with the percentage at a state level, all three diabetes-related conditions comprise a higher portion of ACSC for St Anthony Hospital than was the case for all of Iowa. Several of these conditions listed are associated with overweight and obesity, which has been identified as a priority health issue for the hospital and the broader community since the previous Community Health Needs Assessment was completed in 2016.

TOP ACSC DIAGNOSES TREATED AT ST. ANTHONY HOSPITAL (2018)

Diagnosis	Carroll County # Treated at St. Anthony	Percent of ACSC	Total # Treated at St. Anthony	Percent of ACSC	Iowa Percent of ACSC
Short-Term Complications from Diabetes	100	8.8	149	9.1	7.2
Long-Term Complications from Diabetes	160	14	300	18.3	15.8
COPD or Asthma in Older Adults	185	16.2	223	14.2	22.3

Diagnosis	Carroll County # Treated at St. Anthony	Percent of ACSC	Total # Treated at St. Anthony	Percent of ACSC	Iowa Percent of ACSC
Heart Failure	119	10.4	154	9.4	7.4
Dehydration	201	17.6	265	16.2	14.4
Bacterial Pneumonia	103	9	147	9	8.8
Urinary Tract Infection	166	14.6	231	14.1	17
Uncontrolled Diabetes	105	9.2	157	9.6	7.2
Lower Extremity Amputation among Patients with Diabetes*	0	0	1	0	0.1

MORTALITY/PRIMARY CAUSES OF DEATH

Premature Death

Measuring premature mortality focuses on deaths that could have been prevented. Premature age- persons in population. The 2019 County Health Rankings reports the adjusted premature death rate in the state of Iowa for the 2015-2017 period to be 320. For that same period, Audubon County had a significant higher rate at 430. Calhoun, Greene and Sac Counties are rates between 360 and 370. Carroll and Crawford Counties both had rates of 330, close to the statewide rate.

Healthy People 2020 (HP2020) establishes the national goal of reducing heart disease-related deaths to 103.4 (age adjusted, per 100,000). The national rate was 94.3 in 2016, exceeding that goal. HP202 also has a goal of reducing the national rate of cancer mortality to 161.4 (age adjusted, per 100,000). The national rate of cancer mortality was 155.8 in 2016.

Leading Causes of Death

Data from Iowa's County Health Snapshots reveals that that the leading causes of death in St. Anthony's service area in 2011-2015 were cancer, stroke, unintentional injury, suicide and heart disease. The statewide age adjusted cancer mortality rate for this period was 165.18. The cancer mortality rate in Carroll County was higher, at 180.33, and much lower in Crawford County, at 141.54. Stroke mortality rates in Carroll (21.11) and Crawford (20.90) Counties were higher than the state rate of 18.33. The rate of stroke death was significantly higher in Sac County, at 38.39. At 4.41, only Carroll County had a lower age-adjusted mortality rate for heart disease than the state rate of 6.14.

During the 2011-2015 period, the age-adjusted rates of mortality due to unintentional injury in the all three of the service area's rural counties was higher than the state rate of 25.61. Audubon County's rate of death due to unintentional injury was 43.63, Calhoun County's rate was 35.38, and Sac County's rate was 26.71. The only non-rural county with significantly higher rate of unintentional injury deaths was Green County, at 30.80. The rate of age-adjusted unintentional injury mortality in Carroll County was 16.71. The age-adjusted rate of suicide death rates of all service area counties except Calhoun County exceeded the state rate of 13.28. Carroll County's rate of suicide mortality was 13.82. Sac County had a rate of 17.41 and Audubon County had a rate of 22.80.

ACTIONS TAKEN SINCE LAST COMMUNITY HEALTH NEEDS ASSESSMENT

The following significant needs were identified in the last assessment as those that would be addressed through an implementation strategy or community health improvement plan.

Access to Care and Health Education

In response to concern that area residents do not feel they had adequate knowledge on how to access quality health service, the following steps were taken:

- Developed updated lists of area service providers and other resources
- Organized community health fairs and events for vulnerable populations, including older adults, children and adolescents
- Promoted community service opportunities to address needs of target populations
- Provided support groups for individuals affected by priority health issues

Cancer – Treatment and Prevention

- Development of new cancer center and associated resources for the community
- Community runs for cancer to raise awareness and funds, in collaboration with partners that include Carroll Chamber and Carroll Cancer Crusaders
- Participation in Iowa Cancer Consortium event on HPV

Chronic Disease Management

- Ongoing leadership and participation in collaborative activities and events in the community that promote healthy living and chronic disease prevention and management (see details in health education and obesity)

Mental Health Services

- Community education on Adverse Childhood Experiences (ACES)
- Provider and parent education on child development and mental health
- Caregiver education on self-care
- Mentoring programs
- Community- and school-based mental health promotion programs and events for middle school and high school students
- Bereavement support groups

Nutrition and Exercise

- Community gardens and gardening classes for adults, children and adolescents
- Community events promoting physical activity and education about healthy eating and drinking water
- Healthy eating education and healthy weight management programs for general population and vulnerable populations, including older adults, women, children and people with disabilities
- Diabetes prevention and management services and programs
- Accredited diabetes education
- Participation in the Live Healthy Iowa initiative and Carroll County Wellness Coalition
- WIC clinics
- Fall prevention education and activities for older adults and providers

Substance Abuse -Tobacco and Alcohol

- Provider education
- Addiction support groups
- Community- and school-based programs to prevent substance use among adults, children and adolescents
- Responsible beverage service training
- Drivers education presentations regarding alcohol use
- Tobacco cessation “Quit Line”
- Tobacco/nicotine free work policy with area work places and with area child care providers
- Collaboration with healthcare providers to implement 2A and R-ask, advise, refer system

Transportation

- Collaborate to increase transportation to healthcare services for vulnerable populations, including older adults, people with disabilities and individuals covered by Medicaid
- Community fundraiser to fund travel vouchers for low-income individuals

Vaccinations

- Community education about HPV and promotion of vaccination
- Radio and newspaper ads, social media posts to increase HPV and meningitis immunization rates
- Community-based immunization clinics

CARROLL COUNTY PROGRESS ON PRIORITIES SINCE PREVIOUS CHNA'S

In the table below, the “2019” column text is color-coded to indicate the following:

■ improved over 2016 data
 ■ no significant change from 2016 data
 ■ condition worsened relative to 2016 data

Priorities	2013 CHNA	2016 CHNA	2019 CHNA
Health Conditions			
Mental Health (2016 & 2019 priority)	<ul style="list-style-type: none"> Adults’ fair/poor mental health days/month = 2.9 Adolescent depression = 19% Adolescent suicidal ideation = 9% 	<ul style="list-style-type: none"> Adults’ fair/poor mental health days/month = 2.9 Adolescent depression = 23% Adolescent suicidal ideation = 18% 	<ul style="list-style-type: none"> Adults’ fair/poor mental health days/month = 3.2 Adolescent depression = 18% Adolescent suicidal ideation = 13%
Cancer (2016 & 2019 priority)	<ul style="list-style-type: none"> Age-adjusted cancer incidence rate/all sites = 466.1 Age-adjusted cancer mortality rate/all sites = 175 	<ul style="list-style-type: none"> Age-adjusted cancer incidence rate/all sites = 494.73 Age-adjusted cancer mortality rate/all sites = 179.9 	<ul style="list-style-type: none"> Age-adjusted cancer incidence rate/all sites = 496.3 Age-adjusted cancer mortality rate/all sites = 178.21
Obesity (2016 & 2019 priority)	Obesity = 30.8% of adult population Adult diabetes prevalence = 8%	Obesity = 33% of adult population Adult diabetes prevalence = 8.9%	Obesity = 33% of adult population Adult diabetes prevalence = 8%
• Nutrition	<ul style="list-style-type: none"> Adolescent consumption of fruits daily = 2% Adolescent consumption of vegetables daily = 5% Residents reporting food insecurity = (reported differently) 	<ul style="list-style-type: none"> Adolescent consumption of fruits daily = 4% Adolescent consumption of vegetables daily = 3% Residents reporting food insecurity = 11% 	<ul style="list-style-type: none"> Adolescent consumption of fruits daily = 5% Adolescent consumption of vegetables daily = 3% Residents reporting food insecurity = 10%
• Exercise	<ul style="list-style-type: none"> Residents w/access to exercise opportunities= no data Physically inactive adults = 27.9% Physically inactive adolescents = 3% 	<ul style="list-style-type: none"> Residents w/access to exercise opportunities= 71% Physically inactive adults = 25% Physically inactive adolescents = 3% 	<ul style="list-style-type: none"> Residents w/access to exercise opportunities= 75% Physically inactive adults = 27% Physically inactive adolescents = 6%

Priorities	2013 CHNA	2016 CHNA	2019 CHNA
Health Conditions			
Substance Use (2016 & 2019 priority) • Alcohol and Tobacco Use	<ul style="list-style-type: none"> Youth tobacco use = 14% Adult cigarette use = 23% Current youth alcohol use = 25% Youth binge drinking = 20% Adult excessive drinking = 19% 	<ul style="list-style-type: none"> Youth tobacco use = 6% Adult cigarette use = 16% Current youth alcohol use = 12% Youth binge drinking = 18% Adult excessive drinking = 20% 	<ul style="list-style-type: none"> Youth tobacco use = 4% Adult cigarette use = 14% Current youth alcohol use = 11% Youth binge drinking = 21% Adult excessive drinking = 21%
Maternal Child Health (2016 priority)	<ul style="list-style-type: none"> Teen birth rate/1,000 live births = 16 Entry into prenatal care during 1st trimester = 86.4% Low birth weight = 4.7% 	<ul style="list-style-type: none"> Teen birth rate/1,000 live births = 39 Entry into prenatal care during 1st trimester = 90% Low birth weight = 5.1% 	<ul style="list-style-type: none"> Teen birth rate/1,000 live births = 0 reported Entry into prenatal care during 1st trimester = 87.6% Low birth weight = 0 reported
Prevention Activities			
Vaccination	<ul style="list-style-type: none"> K-12 graders immunization = 100% (includes waivers) 2-year-olds immunization = 73% Adolescent immunization = 6% Female HPV = 14% Older adult influenza vaccination = 59% Older adult pneumococcal vaccination = no data 	<ul style="list-style-type: none"> K-12 graders immunization = 100% (includes waivers) 2-year-olds immunization = 76% Adolescent immunization = 30% Female HPV = 17% Older adult influenza vaccination = 75% Older adult pneumococcal vaccination = 77% 	<ul style="list-style-type: none"> K-12 graders immunization = data no longer available 2-year-olds immunization = 79% Adolescent immunization = 48% HPV (all) = 28.7% Older adult influenza vaccination = 71.1% Older adult pneumococcal vaccination = unavailable

Priorities	2013 CHNA	2016 CHNA	2019 CHNA
Barriers & Facilitating Factors			
Access to Health Care	#13 out of 99 counties in Iowa in 2016 County Health Rankings	9 out of 99 counties in Iowa in 2016 County Health Rankings	#9 out of 99 counties in Iowa in 2019 County Health Rankings
• Cost	• 6% adults w/unmet medical need due to cost of services	• 6% adults w/unmet medical need due to cost of services	• Comparable data unavailable
• Hours of Operations	• Community survey respondents report difficulty in getting time off from work and in getting timely appointments	• Community survey respondents report difficulty in getting timely appointments	• Community survey respondents report difficulty in getting timely appointments
• Insurance Issues	• 4% children, 12% adults uninsured	• 4% children, 10% adults uninsured	• 2% children, 4% adults uninsured
• Transportation	• Reported concern, no data	• Reported concern, no data	• Reported concern, no data

TO PROVIDE COMMENTS OR FEEDBACK ON THIS ASSESSMENT:

Anyone interested in commenting on this 2019 Community Health Needs Assessment or the Community Health Improvement plan is encouraged to submit written comments to the following contacts:

John Munson, Chief Financial Officer

St Anthony Regional Hospital
311 South Clark Street
Carroll, IA 51401
email: JMunson@stanthonyhospital.org

Marcia Shaefer, RN

Carroll County Public Health Director
318 South Maple Street, Suite 3
Carroll, IA 51401
email: mschaefer@stanthonyhospital.org

About the Community Catalyst Center for Consumer Engagement in Health Innovation

St. Anthony Regional Hospital contracted with Community Catalyst Center for Consumer Engagement in Health Innovation (the Center) for assistance conducting this community health needs assessment. Community Catalyst is a national, non-profit consumer advocacy organization founded in 1998 with the belief that affordable quality health care should be accessible to everyone. The Center builds upon Community Catalyst's many years of success working in more than 45 states and across the stakeholder spectrum-with advocates, academics, state and federal policymakers and health care industry-to examine problems and identify practical solutions to improve the consumer health care experience. The Center's team has honed their expertise as leaders in state and federal health innovations and has relationships with consumer advocates and collaborations with leaders in the health and public sectors-designing and implementing improvements in care-that places them on the frontline of new approaches to health care.

The Center provides consultative services on consumer engagement and community benefit to hospitals, health systems, health plans and providers seeking to develop new models of care, including Accountable Care Organizations, health homes and demonstration programs for those eligible for both Medicare and Medicaid.

Mark Rukavina, Business Development Manager, was the Center's lead on this effort. He has extensive experience assisting non-profit hospitals with community benefit and community health improvement efforts. The Center contracted with the following entities for assistance in conducting this needs assessment. Dory Escobar, Director at the Coaction Institute, for assistance with primary data collection, analysis of secondary data and development of the Needs Assessment report. Gary Bess Associates (GBA) for analysis of discharge records. Warren Jensen at GBA analyzed the data to identify ambulatory care sensitive conditions being treated at St. Anthony Regional Hospital.

APPENDIX 1: SECONDARY DATA

Demographics

ESTIMATED POPULATION, 2017

Area	Population
Carroll County	20,320
Audubon County	5,578
Calhoun County	9,746
Crawford County	17,056
Greene County	8,981
Sac County	9,817
St. Anthony Service Area	71,498

Source: U.S. Census Bureau, Quick Facts 2017

ADULTS 65 YEARS AND OLDER, 2017

Area	% Older Adults
Carroll County	19.8%
Audubon County	24.4%
Calhoun County	22.6%
Crawford County	17.5%
Greene County	21.8%
Sac County	22.8%
Iowa	16.7%

Source: U.S. Census Bureau Population Estimates Program, Accessed from County Health Rankings, 2019

CIVILIAN, NON-INSTITUTIONALIZED PERSONS WITH DISABILITY, 2013-2017

Area	% of Population
Carroll County	10.9
Audubon County	12.7
Calhoun County	13.2
Crawford County	12.9
Greene County	13.5
Sac County	11.7
Iowa	11.6

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

POPULATION UNDER 18 YEARS, 2017

Area	% Under 18	% Under 6
Carroll County	24.6	7.7
Audubon County	20.2	6.3
Calhoun County	20.9	7.6
Crawford County	25.1	8.6
Greene County	22.3	6.4
Sac County	22.2	6.8

Source: Iowa Kids Count, 2017

ESTIMATED POPULATION, 2017

Area	White/ Caucasian	Black/African American	Hispanic
Carroll County	94.9%	1.3%	2.4%
Audubon County	96.7%	0.5%	1.4%
Calhoun County	94.6%	1.9%	2%
Crawford County	66%	3.3%	27.9%
Greene County	94.4%	0.5%	3%
Sac County	95.1%	0.4%	3%

Source: U.S. Census Bureau, Quick Facts 2017

PERCENTAGE OF POPULATION NOT PROFICIENT IN ENGLISH, 2013 - 2017

Area	Percent
Carroll County	0
Audubon County	0
Calhoun County	0
Crawford County	8
Greene County	1
Sac County	1

Source: U.S. Census Bureau American Community Survey 2013-2017, accessed from County Health Rankings, 2019

Socioeconomic Factors

SOCIAL ECONOMIC INDICATORS. 2019

Area	Ranking
Carroll County	12
Audubon County	57
Calhoun County	38
Crawford County	93
Greene County	58
Sac County	24

Source: County Health Rankings, 2019

MEDIAN HOUSEHOLD INCOME, 2013 - 2017

Area	Median Household Income
Carroll County	\$54,563
Audubon County	\$48,750
Calhoun County	\$46,302
Crawford County	\$51,091
Greene County	\$52,529
Sac County	\$53,254
Iowa	\$56,570

Source: U.S. Census Bureau Quick Facts 2013 - 2017

POVERTY LEVELS FAMILIES WITH CHILDREN UNDER 18, & FEMALE HOUSEHOLDS W/CHILDREN, 2013-2017

Area	% Children Under 18 Years Old	% Adults 65 and Over	% Female-Headed Household w/Children under 18	% Families
Carroll County	12.8	8.7	31.4	7.5
Audubon County	15.3	7.7	50	9.1
Calhoun County	21.3	9.1	59.2	12.1
Crawford County	16.7	13.5	60.8	12
Greene County	11.7	6.3	32.5	8
Sac County	9.8	8	21	5.7
Iowa	14.8	7.3	37.1	7.6

Source: U.S. Census Bureau Quick Facts 2013 - 2017

FREE AND REDUCED-PRICE MEALS ELIGIBILITY, 2017

Area	Percent
Carroll County	38
Audubon County	40.4
Calhoun County	36.3
Crawford County	67.6
Greene County	46.6
Sac County	40.7
Iowa	41.3

Source: Iowa Dept. of Education, accessed from Iowa Kids Count, 2017

RECEIVED WIC, 2017

Area	Percent
Carroll County	27
Audubon County	19
Calhoun County	17.8
Crawford County	46.2
Greene County	27.8
Sac County	12.2
Iowa	26.9

Source: Iowa Dept. of Human Services, accessed from Iowa Kids Count, 2017

HOUSEHOLD SUPPORTIVE BENEFITS, 2016 & 2017

Area	2016 Food Assistance*	2017 EITC**
Carroll County	8.7%	12.7%
Audubon County	9.3%	13.9%
Calhoun County	9%	14.7%
Crawford County	11.5%	17.1%
Greene County	13.5%	17.2%
Sac County	8.4%	13.4%
Iowa	11.6%	14.5%

Sources: *Iowa Dept. Human Services, 2017; **Internal Revenue Service, 2016 both accessed from Iowa Kids Count, 2017

UNEMPLOYMENT RATES, 2017

Area	Percent
Carroll County	2.3%
Audubon County	3.1%
Calhoun County	3.1%
Crawford County	4.1%
Greene County	2.8%
Sac County	2.8%
Iowa	3.1%

Source: U.S. Bureau Labor Statistics, 2017 accessed from Iowa Kids County, 2017

HIGH SCHOOL GRADUATION RATE, 2017

Area	Percentage
Carroll County	94.9%
Audubon County	97.4%
Calhoun County	100%
Crawford County	90.6%
Greene County	85%
Sac County	93.9%
Iowa	91.1%

Source: Iowa Dept Education, 2017 accessed from Iowa Kids County, 2017

Access to Care

HEALTH ACCESS RANKING, 2019

Area	County Ranking (out of 99)
Carroll County	9
Audubon County	79
Calhoun County	60
Crawford County	91
Greene County	14
Sac County	89

Source: County Health Rankings, 2019

PRIMARY CARE PHYSICIANS, NUMBER AND RATIO, 2016

Area	Number of primary care physicians	Ratio of population to primary care physicians
Carroll County	18	1,140:1
Audubon County	4	1,420:1
Calhoun County	7	1,410:1
Crawford County	4	4,240:1
Greene County	4	2,250:1
Sac County	6	1,650:1
Iowa		1390:1

Source: Area Health Resource Files – American Medical Assoc. 2016, accessed from County Health Rankings, 2019

PRIMARY CARE PROVIDERS OTHER THAN PHYSICIANS, RATIO, 2018

Area	Ratio of population to non-physician providers
Carroll County	883:1
Audubon County	558:1
Calhoun County	812:1
Crawford County	2,437:1
Greene County	8,981:1
Sac County	1,402:1
Iowa	1,085:1

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

Hospitals in Service Area

RURAL HOSPITALS, 2019

Geographic Area	Hospital	Community
Carroll County	St. Anthony Regional Hospital	Carroll

Source: Iowa Hospital Association, Iowa Community Hospital Map, 2019

CRITICAL ACCESS HOSPITALS, 2019

Geographic Area	Hospital	Community
Carroll County	Manning Regional Healthcare Center	Manning
Audubon County	Audubon County Memorial Hospital	Audubon
Calhoun County	Stewart Memorial County Hospital	Lake City
Crawford County	Crawford County Memorial Hospital	Denison
Greene County	Greene County Medical Center	Jefferson
Sac County	Loring Hospital	Sac City

Source: Iowa Hospital Association, Iowa Community Hospital Map, 2019

COMMUNITY CLINICS

Geographic Area	Clinic	Community
Carroll County	Carroll Community and Opportunities Free Medical Clinic	Carroll
	Carroll VA Community Based Outpatient Clinic	Carroll
	McFarland Clinic	Carroll
	Richmond Community Mental Health Center	Carroll
	St Anthony Clinic	Carroll, Coon Rapids, Manning
Audubon County	Audubon County Free Clinic	Exira
	Exira Medical Clinic	

Geographic Area	Clinic	Community
Crawford County	West Iowa Community Medical Center Crawford County Clinic St Anthony Clinic	Denison Denison Westside
Greene County	McFarland Clinic Unity Point Clinic	Jefferson
Sac County	Unity Point Clinic Unity Point Clinic St Anthony Clinic	Lake View Sac City Wall Lake

Source: Free Clinics of Iowa Website (<http://www.freeclinicsofiowa.org/find-clinic>), Iowa Department of Human Services Iowa Community Mental Health Centers <http://dhs.iowa.gov/mhds/service-providers> McFarland Clinic PC Website, Unity Point Health Website, St Anthony Regional Hospital and Nursing Home Website, US Department of Veterans Affairs - VA Central Iowa Health Care System

LACKS HEALTH INSURANCE, POPULATION, CHILDREN AND ADULTS UNDER 65, 2016

Area	Children	Adults Under 65
Carroll County	2%	4%
Audubon County	3%	7%
Calhoun County	3%	6%
Crawford County	5%	11%
Greene County	3%	6%
Sac County	3%	6%
Iowa	3%	6%

Source: U.S. Census Bureau Small Area Health Insurance Estimates, 2016. Accessed from County Health Rankings, 2019

DENTISTS, NUMBER AND RATIO, 2017

Area	Number of dentists	Ratio of population to dentists
Carroll County	12	1,690:1
Audubon County	2	2,790:1
Calhoun County	6	1,620:1
Crawford County	7	2,440:1
Greene County	3	2,990:1
Sac County	3	3,270:1
Iowa		1,630:1

Source: Area Health Resource File/Nat'l Provider Identification File 2017. Accessed from County Health Rankings, 2019

MENTAL HEALTH PROVIDERS, NUMBER AND RATIO, 2018

Area	Number	Ratio of population to providers
Carroll County	17	1,200:1
Audubon County	-	-
Calhoun County	2	4,870:1
Crawford County	11	1,550:1
Greene County	6	1,500:1
Sac County	6	1,640:1
Iowa		700:1

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

OTHER HEALTH AND SUPPORT SERVICES IN SERVICE AREA, 2019

Provider	Services
Disability Services	
New Hope Village	Disability Services
WESCO Industries (Dennison)	Disability Services
In-Home Support	
Home Care Options	Home care and home habilitation
Family Resource Center	In-Home Support for people w/disabilities
Behavioral Health (Mental Health & Substance Use Disorders)	
Catholic Charities	Mental Health Emergency Assistance
Plains Area Mental Health Center	Mental Health
On the Wagon Organization	In-Pt Behavioral Health (Mental Health & Substance Rehab)
Seasons	Behavioral Health (Children, Adults, Veterans, Families) Psychiatric Crisis Trauma-Informed Behavioral Health
New Opportunities	Child Development Behavioral Health Referrals to Other Programs Child & Adolescent Health (Audubon County)
Jackson Recovery Center (Dennison)	Addiction Services
Howard Center (Sac)	Behavioral Health (Mental Health & Substance Rehab)
Parent Support	
Family Resource Center	Parent Educ & Support

Provider	Services
New Opportunities	Child Development Emergency Assistance Referrals to Other Programs
Partnership for Families	Child Development Family Educ & Support
Older Adults	
Elderbridge Agency on Aging	Care Coordination Fall Prevention Ombudsman Family Support
Transportation	
Non-Emergency Medical Transportation	Scheduled rides or transportation reimbursement to healthcare appointments for pt's with full Medicaid
Western Iowa Transit Region 12	Door-to-door public transportation for all, with reservation made 24-hours prior to ride
Medical Transportation Services	Non-emergency long distance transportation

Prevention Services

COUNTY PUBLIC HEALTH DEPARTMENTS

County	Name	Address
Carroll County	Carroll County Public Health Services, A Division of St. Anthony Home Health Agency	318 S. Maple St. Suite #3 Carroll, IA 51401
Audubon County	Audubon County Public Health Nursing Service	318 Leroy St #10 Audubon IA 50025-1255
Calhoun County	Calhoun County Public Health	501 Court Street Rockwell City, IA 50579
Crawford County	Crawford County Home Health, Hospice & Public Health	105 N. Main Street Denison, Iowa 51442
Greene County	Greene County Medical Center Public Health Department	1000 W Lincolnway St Jefferson, IA 50129-1645
Sac County	Sac County Public Health	Courthouse Annex 116 S. State St-Suite A Sac City, Iowa 50583

CHILDHOOD IMMUNIZATION RATES, 2017

Geographic Area	% 2-Year Olds
Carroll County	79
Audubon County	81
Calhoun County	83
Crawford County	64
Greene County	85
Sac County	81

Source: Iowa Department of Public Health, Immunization Program, 2017

ADOLESCENT IMMUNIZATION RATES, (13-15 YEARS), 2017

Geographic Area	Up-to-Date Immunizations	HPV
Carroll County	48	28.7
Audubon County	75	48.1
Calhoun County	51	31
Crawford County	59	31.4
Greene County	66	43.7
Sac County	44	34.6
Iowa		38.2

Source: Iowa Department of Public Health, Immunization Program, 2017

ADULTS AGE 65 AND OLDER, INFLUENZA VACCINE, 2017

Geographic Area	Percent
Carroll County	71.1
Audubon County	67.9
Calhoun County	72.6
Crawford County	56.8
Greene County	75.7
Sac County	66.4
Iowa	64.8

Source: Source: Iowa Department of Public Health, Immunization Program, 2017

MAMMOGRAMS, FEMALES AGE 67-74, 2016

Area	Percent
Carroll County	53%
Audubon County	43%
Calhoun County	40%
Crawford County	48%
Greene County	45%
Sac County	54%
Iowa	49%

Source: CMS Mapping Medicare Disparity Tool, 2016. Accessed from County Health Rankings, 2019,

FALLS EMERGENCY DEPT. RATE PER 100,000, OLDER ADULTS, 2011-2015

Area	Ages 65 - 84	Age 85 +
Carroll County	3,454.70	10,375.00
Audubon County	3,703.04	11,157.60
Calhoun County	3,095.32	10,291.44
Crawford County	3,791.83	11,161.73
Greene County	3,948.21	14,256.20
Sac County	3,875.88	10,910.62
Iowa	3,570.52	10,771.27

Source: Iowa Dept Public Health, County Health Snapshots 2017

Maternal and Child Health

LIVE BIRTHS, 2017

Area	Number
Carroll County	251
Audubon County	63
Calhoun County	98
Crawford County	219
Greene County	109
Sac County	113
Iowa	38.142

Source: Iowa Dept. of Public Health, Vital Statistics, 2017

BIRTHS TO TEENAGE MOTHERS (UNDER AGE 20)

	Births to Teen Mothers	% of Live Births
Carroll County	-	-
Crawford County	11	1.9
Greene County	7	2.5
Iowa	1,698	1.6

Source: Iowa Kids Count 2017

FIRST TRIMESTER ENTRY INTO PRENATAL CARE, 2017

Area	Prenatal Care	Percent
Carroll County	220	87.6%
Audubon County	67	85.9%
Calhoun County	81	83.5%
Crawford County	151	68.9%
Greene County	87	79.8%
Sac County	98	86.7%
Iowa	30,236	79.1%

Source: Iowa Dept Public Health, 2017. Accessed from Iowa Kids County, 2017

LOW BIRTHWEIGHT, BIRTHS WEIGHING AT LESS THAN 5.5 POUND, 2017

Area	Low Birth Weight	Percent
Carroll County	-	-
Audubon County	-	-
Calhoun County	7	7.1%
Crawford County	14	6.4%
Greene County	7	6.4%
Sac County	9	8%
Iowa	2,528	6.6%

Source: Iowa Dept Public Health, 2017. Accessed from Iowa Kids Count, 2017

INFANT MORTALITY RATE

Area	Infant Deaths	Live Births	Percent
St. Anthony Service Area	0	853	0
Iowa	202	38,142	5.3%

Source: Iowa Kids County, 2017

Chronic Disease

SELF-REPORTED HEALTH STATUS FAIR OR POOR HEALTH, ADULTS, 2016

Area	Percent
Carroll County	11%
Audubon County	13%
Calhoun County	14%
Crawford County	18%
Greene County	13%
Sac County	12%
Iowa	13%

Source: Behavioral Risk Factor Surveillance System, 2016. Accessed from County Health Rankings, 2019

HEALTH BEHAVIORS RANKING, 2019

Area	County Ranking (out of 99)
Carroll County	28
Audubon County	53
Calhoun County	84
Crawford County	77
Greene County	69
Sac County	23

Source: County Health Rankings, 2019

DIABETES PREVALENCE, ADULTS, 2015

Area	Percent
Carroll County	8%
Audubon County	12%
Calhoun County	11%
Crawford County	12%
Greene County	13%
Sac County	11%
Iowa	10%

Source: CDC Diabetes Interactive Atlas, 2015. Accessed from County Health Rankings, 2019

AGE-ADJUSTED DIABETES E.D. & HOSPITALIZATION RATES PER 100,000, 2011-2015

Area	Rate E.D. Visits	Rate Hospitalization
Carroll County	187.08	73.14
Audubon County	132.16	77.14
Calhoun County	157.95	83.15
Crawford County	181.42	67.97
Greene County	341.75	154.97
Sac County	111.56	73.20
Iowa	168.29	110.97

Source: Iowa Dept Public Health, County Health Snapshots 2017

AGE-ADJUSTED RATES HOSPITALIZATIONS, HEART CONDITIONS PER 100,000, 2011-2015

Area	Heart Attack	Heart Failure
Carroll County	118.16	159.14
Audubon County	120.57	181.32
Calhoun County	135.80	197.95
Crawford County	53.63	121.77
Greene County	148.39	181.43
Sac County	161.12	224.39
Iowa	145.38	193.57

Source: Iowa Dept Public Health, County Health Snapshots 2017

Cancer

CANCER ESTIMATES, 2016

Area	Number New Cancers	Number Cancer Deaths
Carroll County	160	60
Audubon County	45	10
Calhoun County	80	25
Crawford County	95	35
Greene County	75	25
Sac County	65	30
Iowa	18,100	6,400

Source: University of Iowa, Cancer in Iowa, 2019

TOP 3 CANCER SITES, STATEWIDE ESTIMATES, 2019

	% of All New Cancers	% of All Cancer Deaths
Females	Breast = 28.1% Lung = 12.4% Colorectal = 8.8%	Breast = 13.0% Lung = 24.3% Colorectal = 9.0%
Males	Prostate = 22.3% Lung = 13.9% Colorectal = 9.3%	Prostate = 10.3% Lung = 26.5% Colorectal = 8.6%

Source: University of Iowa, Cancer in Iowa, 2019

Ambulatory Care Sensitive Conditions

TOP ACSC DIAGNOSES TREATED AT ST. ANTHONY HOSPITAL (2018)

Diagnosis	Carroll County # Treated at St. Anthony	Total # Treated at St. Anthony
Short-Term Complications from Diabetes	100	143
Long-Term Complications from Diabetes	160	392
COPD or Asthma in Older Adults	185	223
Heart Failure	119	151
Dehydration	201	250
Bacterial Pneumonia	103	142
Urinary Tract Infection	166	226
Uncontrolled Diabetes	105	150
Lower Extremity Amputation among Patients with Diabetes*	0	1

*Patients duplicated in short- and long-term complications from diabetes. Not included in Totals.

Other Hospitalizations

HOSPITALIZATION RATES, ASTHMA, AGES 5-14, AGE ADJUSTED PER 10,000 PERSONS, 2017

Area	Asthma, Ages 5-14
Carroll County	3.01
Audubon County	*
Calhoun County	*
Crawford County	*
Greene County	*
Sac County	*
Iowa	2.97

Source: Iowa Department of Public Health Tracking Portal, 2017

RATE OF PREVENTABLE HOSPITALIZATIONS FOR ACS CONDITIONS, PER 100,000 MEDICARE ENROLLEES, 2016

Area	Rate
Carroll County	3,464
Audubon County	1,962
Calhoun County	3,399
Crawford County	3,608
Greene County	3,216
Sac County	3,162
Iowa	3,776

Source: CMS Mapping Medicare Disparities Tool, 2016. Accessed from County Health Rankings, 2019

Mortality / Leading Causes of Death

PREMATURE DEATH, BEFORE AGE 75, PER 100,000 PERSONS, 2015-2017

Area	Number	Age-Adjusted Mortality
Carroll County	236	330
Audubon County	88	430
Calhoun County	141	360
Crawford County	195	330
Greene County	125	360
Sac County	143	370
Iowa		320

Source: CDC WONDER Mortality Rate 2015-2017. Accessed from County Health Rankings, 2019

Mortality Rates - Disease Type

MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2015

Area	Heart Disease	Cancer	Stroke	Chronic Lung Disease
Carroll County	4.41	180.33	21.11	*
Audubon County	*	156.26	14.93	*
Calhoun County	*	179.04	15.72	*
Crawford County	6.57	141.54	20.90	*
Greene County	9.89	161.86	14.41	*
Sac County	6.57	167.36	38.39	*
Iowa	6.14	165.18	18.33	0.80

Source: Iowa Dept Public Health, County Health Snapshots 2017

Cancer Mortality Rates

CANCER MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2014

Geographic Area	All Sites	Digestive System	Respiratory System	Urinary System	Breast (Female)
Carroll County	178.21	30.01	43.71	14.20	14.02
Audubon County	176.35	44.39	15.56	22.34	*
Calhoun County	182.81	50.48	39.07	23.02	22.36
Crawford County	149.90	33.50	41.75	12.23	26.28
Greene County	164.93	56.93	39.56	9.92	*
Sac County	180.73	36.48	43.35	13.80	17.25
Iowa	167.80	41.08	46.87	9.30	19.21

Source: Iowa Cancer Registry 2019

CANCER MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2014

Area	Colorectal	Lung & Broncus	Prostate
Carroll County	14.66	40.34	38.96
Audubon County	25.50	15.56	39.40
Calhoun County	15.73	37.65	*
Crawford County	10.99	41.75	10.81
Greene County	22.72	39.56	25.12
Sac County	12.54	37.37	40.08
Iowa	15.92	45.52	19.63

Source: Iowa Cancer Registry 2019

MORTALITY RATES, AGE-ADJUSTED, PER 100,000 PERSONS, 2011-2015

Area	Unintentional Injury	Suicide
Carroll County	16.71	13.82
Audubon County	43.63	22.80
Calhoun County	35.48	*
Crawford County	12.41	14.69
Greene County	30.80	13.36
Sac County	26.71	17.41
Iowa	25.61	13.28

Source: Iowa Dept. Public Health, County Health Snapshots, 2017

Mental Health

FAIR OR POOR MENTAL HEALTH, ADULTS, 2016

Area	Average Days
Carroll County	3.2
Audubon County	3.2
Calhoun County	3.3
Crawford County	3.4
Greene County	3.3
Sac County	3.1
Iowa	3.3

Source: Behavioral Risk Factor Surveillance System, 2016. Accessed from County Health Rankings, 2019

SELF-REPORTED ANXIETY, ADOLESCENTS (ALL GRADES), 2016

Area	“None of the Time”	Anxiety Symptoms Reported and Currently Taking Prescr. Med
Carroll County	10%	9%
Audubon County	16%	5%
Calhoun County	21%	14%
Crawford County	13%	6%
Greene County	17%	9%
Sac County	13%	7%
Iowa	8%	8%

Source: Iowa Youth Survey, 2016

SELF-REPORTED DEPRESSION AND SUICIDAL IDEATION/BEHAVIOR, ADOLESCENTS (ALL GRADES), 2016

Area	Felt Sad or Hopeless	Seriously Considered Suicide	Attempted Suicide
Carroll County	18%	13%	5%
Audubon County	12%	11%	3%
Calhoun County	21%	17%	6%
Crawford County	21%	17%	5%
Greene County	19%	17%	5%
Sac County	19%	12%	2%
Iowa	18%	13%	4%

Source: Iowa Youth Survey, 2016

Overweight and Obesity

ADULT OBESITY & PHYSICAL INACTIVITY, 2015

Area	Percent Obese	Percent Inactive
Carroll County	33	27
Audubon County	34	30
Calhoun County	35	29
Crawford County	33	27
Greene County	36	29
Sac County	35	28
Iowa	26	19

Source: CDC Diabetes Interactive Atlas, 2015. Accessed from County Health Rankings, 2019

YOUTH, ALL GRADES, PHYSICAL ACTIVITY 2016

Area	0 Days	7 Days
Carroll County	6%	34%
Audubon County	0%	38%
Calhoun County	4%	23%
Crawford County	5%	28%
Greene County	3%	38%
Sac County	4%	28%
Iowa	5%	31%

Source: Iowa Youth Survey, 2016

PERCENTAGE OF RESIDENT WITH ACCESS TO EXERCISE OPPORTUNITIES, 2010 & 2018

Area	Percent
Carroll County	75
Audubon County	64
Calhoun County	74
Crawford County	77
Greene County	69
Sac County	79
Iowa	91

Source: ArcGIS Business Analysis 2010 & 2018. Accessed from County Health Rankings, 2019

YOUTH CONSUME 5 OR MORE SERVINGS OF FRUITS OR VEGETABLES A DAY, 2016

Area	Fruits	Vegetables
Carroll County	5%	3%
Audubon County	3%	3%
Calhoun County	5%	5%
Crawford County	5%	4%
Greene County	6%	5%
Sac County	4%	4%
Iowa	6%	5%

Source: Iowa Youth Survey, 2016

POPULATION EXPERIENCING FOOD INSECURITY, 2016

Area	Percent
Carroll County	10
Audubon County	11
Calhoun County	12
Crawford County	11
Greene County	11
Sac County	10
Iowa	12

Source: Map the Meal Gap, 2016. Accessed from County Health Rankings, 2019

OBESITY-RELATED HEALTH ISSUES

Area	Diabetes, 2017		Hypertension, 2017	
	2017 %	2030 Projection	2017 %	2030 Projection
Carroll County	8.9%	*	*	*
Audubon County	11.7%	*	*	*
Calhoun County	10.7%	*	*	*
Crawford County	11.7%	*	*	*
Greene County	10.4%	*	*	*
Sac County	10.4%	*	*	*
Iowa	9.6%	367,691 cases	31.5	765,455 cases

Source: Behavioral Risk Factor Surveillance System 2017; The State of Obesity 2018

Sexually Transmitted Diseases

STI CASES, 2016-2017

Area	Chlamydia	Gonorrhea	Primary, Secondary, Early Latent Syphilis
Carroll County	95	10	*
Audubon County	15	*	*
Calhoun County	46	*	*
Crawford County	127	24	*
Greene County	50	10	*
Sac County	37	*	*

Source: Iowa Department of Public Health, 2017. Accessed from Univ. of Iowa Health Fact Book

RATE OF CHLAMYDIA PREVALENCE, 2016

Area	Chlamydia
Carroll County	138.6
Audubon County	234.3
Calhoun County	224.4
Crawford County	427.1
Greene County	276.9
Sac County	179.6
Iowa	415.6

Source: National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, 2016. Accessed from County Health Rankings 2019

Tobacco Use

YOUTH, CURRENT TOBACCO USE, 2016

Area	All -6 th , 8 th and 11 th grades	Students in the 11 th grade
Carroll County	4%	8%
Audubon County	1%	2%
Calhoun County	1%	2%
Crawford County	4%	8%
Greene County	5%	10%
Sac County	5%	16%
Iowa	3%	6%

Source: Iowa Youth Survey, 2016

YOUTH, CURRENT E-CIGARETTE USE, 2016

Area	Percent
Carroll County	4%
Audubon County	3%
Calhoun County	12%
Crawford County	6%
Greene County	5%
Sac County	2%
Iowa	5%

Source: Iowa Youth Survey, 2016

ADULT CIGARETTE SMOKING, 2016

Area	Percent
Carroll County	14
Audubon County	15
Calhoun County	16
Crawford County	16
Greene County	15
Sac County	14
Iowa	14

Source: Behavioral Risk Health Surveillance Survey, 2016. Accessed from County Health Rankings, 2019

Alcohol and Drug Use

YOUTH ALCOHOL USE, 2016

Area	Alcohol Use in Last 30 Days (All Grades)	Binge Drinking (11 th Grade)
Carroll County	11%	21%
Audubon County	7%	5%
Calhoun County	11%	12%
Crawford County	11%	12%
Greene County	9%	15%
Sac County	10%	20%
Iowa	9%	13%

Source: Iowa Youth Survey, 2016

YOUTH WHO HAVE EVER DRIVEN A CAR AFTER ANY AMOUNT OF ALCOHOL USE, ALL GRADES. 2016

Area	Percent
Carroll County	7%
Audubon County	6%
Calhoun County	5%
Crawford County	6%
Greene County	4%
Sac County	5%
Iowa	5%

Source: Iowa Youth Survey, 2016

OF YOUTH CURRENTLY CONSUMING ALCOHOL, HOW ALCOHOL WAS OBTAINED, SELF-REPORTED, ALL GRADES 2016

Area	Bought It	Gave Someone \$ to Buy It	Parent or Guardian	Got at Party	From Friend Under 21	From Friend 21 or Over
Carroll County	0%	3%	5%	5%	4%	3%
Audubon County	0%	3%	1%	1%	0%	2%
Calhoun County	3%	3%	3%	5%	5%	4%
Crawford County	0%	2%	2%	6%	3%	3%
Greene County	1%	2%	2%	4%	3%	2%
Sac County	1%	3%	4%	5%	2%	6%
Iowa	1%	3%	2%	4%	3%	3%

Source: Iowa Youth Survey, 2016

ADULT EXCESSIVE DRINKING, 2016

Area	Percent
Carroll County	21
Audubon County	19
Calhoun County	19
Crawford County	20
Greene County	19
Sac County	19
Iowa	20

Source: Behavioral Risk Health Surveillance Survey, 2016. Accessed from County Health Rankings, 2019

ALCOHOL-IMPAIRED DRIVING FATALITIES, 2013-2017

Area	% all Driving Fatalities
Carroll County	40%
Audubon County	30%
Calhoun County	56%
Crawford County	0%
Greene County	18%
Sac County	15%
Iowa	28%

Source: Fatality Analysis Reporting System, 2013-2017. Accessed from County Health Rankings, 2019

YOUTH CURRENT MARIJUANA USE, ALL GRADES, 2016

Area	Percent
Carroll County	3%
Audubon County	-
Calhoun County	5%
Crawford County	3%
Greene County	4%
Sac County	2%
Iowa	4%

Source: Iowa Youth Survey, 2016

APPENDIX 2: PRIMARY DATA

Key Findings from Community Survey (n=265)

Do you have a healthcare provider (doctor, nurse practitioner, etc.) that you see regularly for annual examinations, screening or to be treated for an illness? (n=263, 2 skipped)

- Most respondents (217 or 82.51%) have a healthcare provider whom they see regularly, 37 or 14.07% of people have a provider but they do not see this provider regularly and only 9 people or 3.42% do not have a healthcare provider

Where do you (and/or your immediate family members) go for regular, routine healthcare services? (n=263)

- The majority of respondents (84.03%, 221) receive their care at a private doctor's office or a hospital outpatient office (17.11% , 45). Two (2) indicated they may go to a hospital emergency room for routine care, 5 to a low-cost clinic of health center and 3 indicated they do not receive routine healthcare. In the "other" responses, a majority of people indicated that they go to the MacFarland clinic for their care.

Please rate the ease with which you (and/or your immediate family members) are able to access the following types of care. (n=139)

- 96% (151) said that primary care was easy or moderately easy to access. Slightly more said that mental health care was easy or moderately easy to access (41) than those who said it was difficult or somewhat difficult to access (33). Prescription drugs (95%, 248), hospitalization (73%, 189), dental care (93%, 244), and vision (92%, 241) were seen as easy or moderately easy to access.

Please note the reasons you have had difficulty accessing any of the following services. (n=138)

- Primary Care - 41 said it was difficult to take time off from work, 40 people could not a timely appointment and 16 said they could not take time off from work or from caring for others.

Specialty Care - 32 said services were not available in the area, 18 could not get a timely appointment and 17 could not afford the cost of care.

Mental Health – 16 could not afford the cost of care, 14 said services were not available in the area and 13 could not get a time appointment.

Across all types of services, the most frequently noted reason was that people could not get a timely appointment (69), followed by difficult to take time off from work (59).

Rank the top five health-related issues that you believe are the most significant factors in terms of the health of the community in which you live (n=219)

Top Ten listed here:

- Mental Health 132
- Cancer 120
- Substance Use Disorder 82
- Obesity 80
- Heart Disease 72
- Access to Regular Care 67
- Diabetes 54

- Poverty/Financial Insecurity 53
- Lack of Exercise 52
- Alzheimer’s Disease or Dementia 45

Please indicate whether you (and/or anyone in your immediate family) have any of the following conditions and whether you are receiving regular care. (n=223)

- Overall, most people indicated that they are receiving the care they need, choose not to get care or do not have the condition for a variety of health issues.
20 people indicated they are not getting the care they need regarding being overweight/obese because they do not know where to go for such care

On average, how frequently do you engage in moderate or vigorous-intensity physical activity such as running or walking, biking, physically demanding chores or other exercise? (n=229)

- 29 exercise moderately or vigorously 6-7 times per week, 77 do so 3-5 times per week, 43 said 1-2 times per week, 36 indicated several times per month and 44 indicated less than once per month

On an average day, how many servings of vegetables do you eat (Items such as french fries, potato chips or lettuce that is on a sandwich should be excluded from your response)? (n=231)

- 165 eat one or more cups of vegetables and 66 indicated they eat less than one cup

On an average day, how many servings of fruit do you eat? (n=231)

- 132 eat one or more servings of fruit and 99 indicated they eat less than one serving

Do you regularly drink alcohol during a given week? (n=231)

- Approximately 25% of respondents indicated they drink alcohol during a given week

How often do you use tobacco (cigarettes, chewing tobacco, snuff cigars or pipe tobacco) products? (n=230)

- 211 (92%) indicated they do not use tobacco products
16 (7%) indicated they use tobacco daily.

Do you feel comfortable talking about mental health issues with your primary health care provider? (n=229)

- 192 feel comfortable talking about mental health issues with their primary healthcare provider, 23 indicated they do not feel comfortable

Do you feel comfortable talking about your children’s mental health or emotional well-being with their healthcare provider? (n=223)

- 166 said they were comfortable discussing their children’s mental health with their primary care provider, 17 do not feel comfortable

Do you know how to access resources to address mental health concerns for yourself, children or other immediate family members? (n=225)

- 177 or 79% of respondents indicated they knew how to access resources to address mental health while 43 or 19% indicated they did not.

When respondents were asked whether they believe that people are generally supportive and sympathetic to people with mental health problem (n=230)

- 98 or 43% said they disagreed or strongly disagreed
- 56 or 24% said they agreed or strongly agreed
- 76 or 33% were neutral, neither agreed or disagreed

Which of the following health topics do you think children in your community need to know more about? (220)

Top Ten listed here:

- Bullying 133
- Mental Health (such as depression or anxiety) 132
- Drug Abuse 118
- Alcohol 112
- Sexual Activity or Transmitted Diseases 100
- Reckless Driving/Speeding DUI 89
- Suicide Prevention 81
- Proper Nutrition 69
- Tobacco 53
- Getting enough sleep 50

Regarding high-quality affordable services available to new partners in our community (220)

- 92 said they were easy or moderately easy to access, 18 said they were difficult or somewhat difficult to access, 33 were neutral, and 77 said not applicable

When asked if new mother received education and other support on breastfeeding (219)

- 118 said this easy or moderately easy to access, 9 said it was difficult or somewhat difficult to access, 15 were neutral, and 77 said not applicable

When is if someone asked me or a new mother in my family about emotional well-being at least once after baby was born (219)

- 85 said this easy or moderately easy to access, 9 said it was difficult or somewhat difficult to access, 27 were neutral, and 98 said not applicable

Demographic Data on Respondents

Gender (n=221)

- Female- 199 or 90%
- Male- 21 or 9.5%
- Non-binary- 1 or 0.5%

Age (n=223)

- Under 24 - 3 or 1.35
- 25-44 - 98 or 44%
- 45-64 - 91 or 41%
- 65 or older – 31 or 14%

Race/Ethnicity(n=222)

- 99% White/Caucasian

Zip Code (n=218)

- 63% from 51401 zip code

Insurance Status (n=224)

- Private insurance - 181 or 81%
- Medicare - 23 or 10%
- Medicaid - 7 or 3%
- Uninsured - 2 or 1%
- IowaCare or Hawk - 2 or 1%
- Other - 9 or 4%

Stakeholder Interviews
(6 External Stakeholders; 2 Internal Stakeholders)

Question	Responses
What are the major health issues/priorities in the community or county?	<p>Mental health problems: depression, anxiety, suicidal ideation</p> <p>Long waits for appt's for some specialties</p> <p>Lots of services are available but aren't always taken advantage of.</p> <p>Substance use, including tobacco and alcohol</p> <p>Behavior issues in children ages 0-5 (indication of parental stress)</p> <p>Obesity, lack of exercise for adults and youth.</p> <p>Agricultural accidents</p> <p>Cancer</p>
What are the factors that contribute to these health issues?	<p>Lack of access to affordable transportation to appointments</p> <p>Insufficient mental health services, not accessible to all</p> <p>Social isolation</p> <p>People too busy, not prioritizing health</p> <p>Fewer services in smaller communities</p> <p>Unhealthy eating habits, not enough education about healthy eating</p> <p>Insufficient training on managing mental health crises and serious problems among healthcare providers and schools</p> <p>Lack of understanding by parents about how their own health behaviors affect their children's well-being</p> <p>Insufficient parent education and other supports</p> <p>Stigma associated with acknowledging mental health problems and seeking help</p> <p>Low wages for childcare workers resulting in high turnover</p> <p>Increased screen time</p> <p>Increased fast food and convenience food</p> <p>Aging population</p>
What are the strengths that this community has for improving the health of its residents?	<p>Hospital, in-patient psychiatric service, primary care providers, OB services, urgent care and growing oncology services</p> <p>Networking and coordination for services for older adults</p> <p>Community leaders advocating for health</p> <p>Carroll County Wellness Coalition</p> <p>Recreation centers and other opportunities engage in physical activity</p> <p>Sense of community and social cohesion (contrary to comment above)</p>
Where do you (or your clients) go for help with your health problems?	<p>Local primary care services, but some specialty care requires travel</p> <p>Internet for information about resources and referrals</p> <p>New urgent care center, increased access to care during off hours</p> <p>Community clinics</p>

Question	Responses
Do you (or your clients) face challenges accessing needed medical care?	<p>Access to audiology services due to lack of reimbursement to providers unless patient already diagnosed (problem for older adults)</p> <p>Lack of transportation, especially rural patients or for accessing specialty care out of county</p> <p>Poor communication from providers to patients, especially with older adults</p> <p>Lack of local mental health services</p> <p>Lack of local ear-nose-throat and cardiac rehab services</p> <p>High deductible insurance policies, causing people to delay care</p> <p>Long wait times for appointments, especially for new patients and for mental health care</p> <p>Deficient promotion of specialty services</p> <p>Lack of pediatric dentists and dentists who accept Medicaid</p>
Are there particular populations that you believe are not well served by area health and social service organizations?	<p>Low-income individuals who don't qualify for Medicaid</p> <p>Older adults, especially those without transportation, or with mental health problems and those with cognitive deficiencies</p> <p>Immigrant population unfamiliar with local norms, laws and how to navigate the system; and not welcomed by much of the community</p> <p>Limited dementia/Alzheimer's services, sometimes requiring placement outside the County; lack of 24-hour psychiatric care for patients with cognitive impairments</p>
What are the health and social services available to improve health in this community?	<p>(Much mentioned above)</p> <p>Manning Hospital's healthy living program that includes mental health services for seniors with transportation to services and programs</p> <p>First 5</p> <p>New Hope Village and others</p>
What are the priority issues that you feel St. Anthony Regional Hospital should focus on to improve the community's health?	<p>Overall, the hospital is doing a good job; would be good to provide in-patient psych services for patients with behavior problems</p> <p>Services for patients with complex oral health needs</p> <p>Educating providers about mental health issues in older adults and how health conditions affect their mental health</p> <p>New cancer center great opportunity to build on partnerships with other agencies and improve coordination and collaboration.</p> <p>Work with the community agencies on communication and coordination to address mental illness, strategize together how to increase access to and improve mental health services (and include law enforcement in the conversations)</p> <p>Lead countywide effort to focus on positive human interactions through statewide "Connections Matter" initiative</p> <p>Expand breastfeeding support</p> <p>Collaborate with others to raise the health status of whole service area</p>

Question	Responses
Do you have other recommendations for actions St. Anthony Regional Hospital could take to improve the health of the community?	Revisit the conversation about working together with the other local hospitals (Manning and Lake City) to do CHNA's together.
Would you like to play a more active role in a community health improvement effort?	Yes (all respondents)
Do you have additional comments or thoughts?	Need to address mental health needs and stigma which creates hurdle for seeking help and accessing services. Need special attention on reaching those needing help who aren't diagnosed as Severely and Persistently Mentally Ill.

List of Stakeholders Interviewed	
Name and Organizational Affiliation	Area of Expertise
Christy Jenkins, Prevention/Mentoring Director, New Opportunities, Carroll	Health needs of low-income residents in service area
Amber Holm, Option Counselors, Elderbridge Agency on Aging, Carroll	Health and social needs of the elderly in the service area
Alecia Dougherty, Plains Area Mental Health Center, Carroll	Mental health needs of resident in service area
Virginia Tuel, RN, Allied Health Services Director, New Hope, Carroll	Healthcare needs of individuals with disabilities
Julie Hodne, RN, Manning Regional Hospital	Healthcare needs of service area
Kristen Nehring, Career Options, Carroll	Healthcare needs of individuals with disabilities
Cindy Duhrkoff, Partnership for Families	Health and social needs of kids
Edward Smith, Jr. President and CEO, St Anthony Regional Hospital	Health service and medical staffing needs for service area
Barbara Toohey, Director of Quality Management, St Anthony Regional Hospital	Clinical care and quality
Rebecca Richardson, Director, Birth Place, St. Anthony Hospital	Child maternal health
Becky Wolf, Public Health Director, Greene County Public Health Department, Jefferson	Public health expertise with focus on Greene County