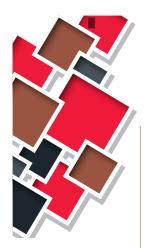
2018 COMMUNITY HEALTH NEEDS ASSESSMENT

A collaborative approach to impacting population health in Eldorado and surrounding areas





Ferrell Hospital

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1. INTRODUCTION

2018 Community Health Needs Assessment



2018 Community Health Needs Assessment Insight into Ferrell Hospital's population

Provisions in the Affordable Care Act (ACA) require charitable hospitals to conduct a Community Health Needs Assessment (CHNA). The CHNA is a systematic process involving the community to identify and analyze community health needs as well as community assets and resources in order to plan and act upon priority community health needs.

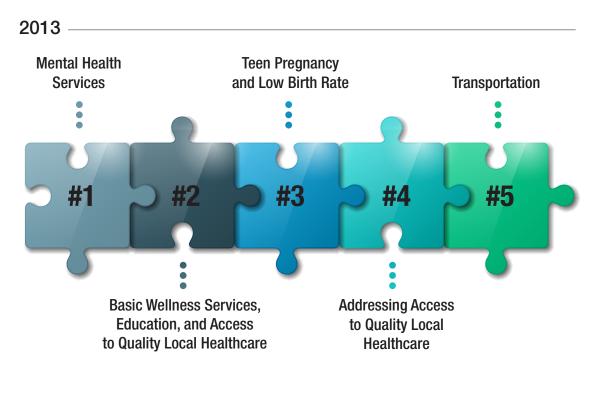
This assessment process results in a CHNA report that assists the hospital in planning, implementing, and evaluating hospital strategies and community benefit activities. The Community Health Needs Assessment was developed and conducted, in partnership with representatives from the community, by a consultant provided through the Illinois Critical Access Hospital Network (ICAHN).

ICAHN is a not-for-profit 501(c)(3) corporation established in 2003 for the purposes of sharing resources, education, promoting operational efficiencies, and improving healthcare services for member critical access and rural hospitals and their communities. ICAHN, with 57 member hospitals, is an independent network governed by a nine-member board of directors, with standing and project development committees facilitating the overall activities of the network. ICAHN continually strives to strengthen the capacity and viability of its members and rural health providers. This Community Health Needs Assessment will serve as a guide for planning and implementation of healthcare initiatives that will allow the hospital and its partners to best serve the emerging health needs of Eldorado and the surrounding area.

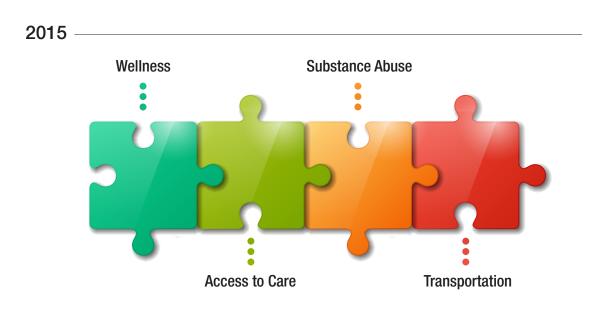


Introduction / Background

Ferrell Hospital completed two Community Health Needs Assessments prior to 2018. The first CHNA was conducted in 2013 and identified five significant needs:



The second CHNA was conducted in 2015 and identified four significant needs:



Background

In response to these needs assessments, Ferrell Hospital took the following actions:

- Partnered with Rotary to offer free meals at Choisser Kitchen
- Provided free sports physicals each school year at Ferrell Hospital Family Practice at different dates and times. Expanded to Carmi Clinic in 2017.
 Provided free sports physicals at Eldorado High School in 2017 and 2018.
 Provided free sports physicals at Carmi White County High School in 2017.
- Several staff members have become active members in the Southern Illinois Community Health Coalition. A staff member was the 2017-18 SICHC Committee President.
- Expanded the hospitalist program
- Added a pain management clinic
- Created Saturday and Sunday hours at Ferrell Hospital Family Practice
- Established infusion services
- Established a wound care program
- Hired a licensed clinical social worker
- Established a Senior Transitions program
- Established a telestroke program
- Established telehealth for Senior Transitions counseling
- Promotes and utilizes RIDES (Rural Initiative Development of Effective Services) Mass Transit
- Began to allow EMS to use the facility to provide training to staff

Executive Summary

EXECUTIVE SUMMARY

The 2018 Ferrell Hospital Community Health Needs Assessment was conducted in April through July of 2018. The Implementation Strategy was also developed in July 2018. The CHNA is influenced by the large rural service area of Ferrell Hospital.

The health profile of the Ferrell Hospital's service area is influenced by the following indicators of social determinants of health:

- Poverty- Children living in poverty
- Poverty Population below 100% of Federal Poverty Level
- Built Environment Recreation and fitness facility access

The needs identified and prioritized through the CHNA carried forward variants of previous CHNAs and added others. The identified and prioritized needs selected include:

- 1. Exploring the causes of chronic illness and improving early identification through screenings and other methods, especially cancer and heart disease
- 2. Education and guidance for seniors on the topics of Medicare, senior wellness, and other health services for older adults
- 3. Mental health, with specific reference to the following identified needs:
 - An attempt to address the local shortage of mental health services providers, including the need to improve local access to physicians
 - Improved availability of mental health and substance use and misuse treatment beds, both local and transfer
 - Improved access to local mental health services in general for persons suffering depression and other situational conditions influenced especially by trauma and/or poverty
 - Local access to Medication-Assisted Treatment for opioid use disorder and other substances
- 4. Addressing teen birth rate, low birth weight, and infant mortality through education and access to care
- 5. Local access to dental care, especially for persons on Medicaid

Executive Summary

The Implementation Plan developed by the senior staff at Ferrell Hospital is specific and thorough. The plan, set out in this report, includes these highlights:

- Utilize hospital data to ensure patients get screenings at visits
- Increase education about chronic disease and increase awareness of wellness
- Expand use of the Heart Clinic through increased availability of a cardiologist
- Develop diabetes management programs
- Develop an education program to explain the scope of Medicare coverage. including cost of tests and other services
- Expand the Senior Transitions Program for mental health
- Expand available specialists to target senior health needs, including rheumatology and urology
- Explore partnerships and funding to address substance use prevention and treatment
- Explore partnerships for Medication-Assisted Treatment, rehabilitation and recovery for Opioid Use Disorder
- Provide the community with information about existing local and distant mental health and substance abuse services
- Provide information on alternatives to opioids for pain management
- Expand outpatient counseling services
- Develop OB/GYN services in White County
- Develop education programs and materials about access to local prenatal care and services
- Utilize dietitian to advise on prenatal care
- Provide education to high school and middle school students
- Attempt to identify local available dental services information and provide that information to the public with other health services information

Service Area Demographics

For the purpose of this CHNA, Ferrell Hospital defined its primary service area and populations as the general population within the geographic area in and surrounding the city of Eldorado, defined in detail below. The hospital's patient population includes all who receive care without regard to insurance coverage or eligibility for assistance.

Ferrell Hospital's service area is comprised of approximately 918 square miles, with a population of approximately 37,217 and a population density of 41 people per square mile. The report area consists of the following rural communities:

New Haven

Norris City

Cottonwood

Elba

• Omaha

Cities

• Eldorado

- Carmi
- Harrisburg
- Shawneetown

Equality

Villages and Unincorporated Communities

- Galatia
- Junction
- Sparks Hill
- Muddy
- Raleigh
- Walpole
- Ridgway



Service Area Demographics

Total Population Change, 2000 to 2010

According to U.S. Census data, the population in the Ferrell Hospital service area fell from 40,773 people to 38,020 people between the years 2000 and 2010, a 6.75% decrease.

| Report Area | Total Population, 2000 Census | Total Population, 2010 Census | Total Population Change, 2000-2010 | Percentage Population Change, 2000-2010 |
|---------------------------|-------------------------------------|-------------------------------------|------------------------------------------|--------------------------------------------------|
| Service Area Estimates | 40,733 | 38,020 | -2,753 | -6.75% |
| Hamilton County | 8,621 | 8,457 | -164 | -1.9% |
| Saline County | 26,733 | 24,913 | -1,820 | -6.81% |
| White County | 15,371 | 14,665 | -706 | -4.59% |
| Illinois | 12,416,145 | 12,830,632 | 414,487 | 3.34% |
| Total Area (Counties) | 50,725 | 48,035 | -2,690 | -5.0% |

Data Source: Community Commons (US Census Bureau, Decennial Census. 2000-2010. Source Geography: Tract) The Hispanic population decreased in Hamilton County by 214 (2.5%), decreased in Saline County by 1,902 (7.18%), and decreased in White County by 761 (4.98%).

In Hamilton County, additional population changes were as follows: White -1.95%, Black 46.55%, American Indian/Alaska Native -9.09%, Asian, 72.73%, and Native Hawaiian/Pacific Islander 0%.

In Saline County, additional population changes were as follows: White -7.9%, Black -8.29%, American Indian/Alaska Native 12.82%, Asian 90.57%, and Native Hawaiian/Pacific Islander 325%.

In White County, additional population changes were as follows: White -4.66%, Black 40%, American Indian/Alaska Native -11.32%, Asian 24%, and Native Hawaiian/Pacific Islander 500%.

Service Area Demographics

Population by Age Groups

Population by gender in the service area is 49% male and 51% female, and the region has the following population numbers by age groups:

| Report Area | Total Population | Ages 0-4 | Ages 5-17 | Ages 18-24 | Ages 25-34 |
|------------------------|------------------|----------|-----------|------------|------------|
| Service Area Estimates | 32,217 | 2,146 | 5,952 | 2,812 | 4,371 |
| Hamilton County | 8,251 | 454 | 1,393 | 606 | 895 |
| Saline County | 24,569 | 1,456 | 3,926 | 2,088 | 2,933 |
| White County | 14,410 | 871 | 2,277 | 996 | 1,633 |
| Illinois | 12,851,684 | 790,205 | 2,200,424 | 1,242,711 | 1,780,279 |

| Report Area | Ages 35-44 | Ages 45-54 | Ages 55-64 | Ages 65+ |
|------------------------|------------|------------|------------|-----------|
| Service Area Estimates | 4,207 | 5,052 | 5,177 | 7,500 |
| Hamilton County | 946 | 1,091 | 1,201 | 1,665 |
| Saline County | 2,684 | 3,428 | 3,435 | 4,709 |
| White County | 1,517 | 1,949 | 2,028 | 3,139 |
| Illinois | 1,672,366 | 1,768,455 | 1,613,087 | 1,784,097 |

Data Source: Community Commons

II. ESTABLISHING THE CHNA INFRASTRUCTURE AND PARTNERSHIPS

2018 Community Health Needs Assessment



Establishing the CHNA Infrastructure and Partnerships

Ferrell Hospital led the planning, implementation, and completion of the Community Health Needs Assessment through a consulting arrangement with the Illinois Critical Access Hospital Network. Terry Madsen, an ICAHN consultant, attorney, former educator, and community development specialist, conferenced with hospital executive staff to define the community, scope of the project, and special needs and concerns. An internal working group, possible local sources for secondary data and key external contacts were identified, and a timeline was established.

Internal

Ferrell Hospital undertook a four-month planning and implementation effort to develop the CHNA, and to identify and prioritize community health needs for its service area. These planning and development activities included the following steps:

- The project was overseen at the operational level by the Director of Community Education, reporting directly to the CEO.
- Arrangements were made with ICAHN to facilitate three focus groups and a meeting to identify and prioritize significant needs. ICAHN was also engaged to collect, analyze, and present secondary data and to prepare a final report for submission to Ferrell Hospital.
- The Director of Community Education worked closely with ICAHN's consultant to identify and engage key community partners and to coordinate local meetings and group activities.

External

Ferrell Hospital also leveraged existing relationships that provided diverse input for a comprehensive review and analysis of community health needs in the hospital's service area. These steps included:

- The Director of Community Education secured the participation of a diverse group of representatives from the community and the health profession.
- ICAHN's consultant provided secondary data from multiple sources set out below in Section III. Data Collection and Analysis.
- Participation included representatives of county health departments serving the area served by the hospital.

III. DATA COLLECTION AND ANALYSIS

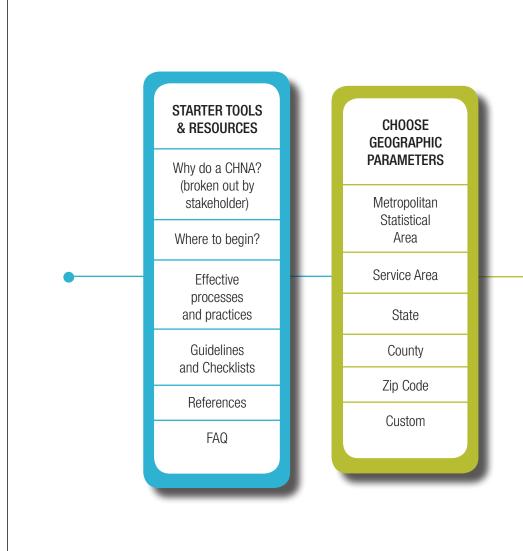
2018 Community Health Needs Assessment

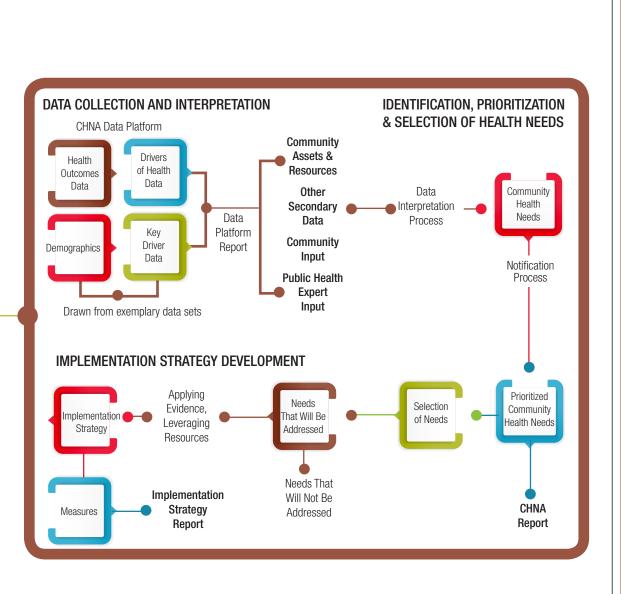


Description of Process and Methods Used

Qualitative Process

This graphic depicts the overarching framework used to guide the CHNA planning and implementation process.





Description of Data Sources

Quantitative Process

| Behavioral Risk Factor Surveillance System U.S. Census Community Commons | The BRFSS is the largest, continuously conducted telephone health survey in the world. It enables the Center for Disease Control and Prevention (CDC), state health departments, and other health agencies to monitor modifiable risk factors for chronic diseases and other leading causes of death. National census data is collected by the U.S. Census Bureau every 10 years. Community Commons is an interactive mapping, networking, and learning utility |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | for the broad-based healthy, sustainable, and livable communities' movement. |
| Illinois Department of Employment Security | The Illinois Department of Employment Security is the state's employment agency. It collects and analyzes employment information. |
| National Cancer Institute | The National Cancer Institute coordinates the National Cancer Program, which conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and the families of cancer patients. |
| Illinois Department of Public Health | The Illinois Department of Public Health is the state agency responsible for preventing and controlling disease and injury, regulating medical practitioners, and promoting sanitation. |
| HRSA | The Health Resources and Services Administration of the U.S. Department of Health and Human Services develops health professional shortage criteria for the nation and uses that data to determine the location of Health Professional Shortage Areas and Medically Underserved Areas and Populations. |

| County Health Rankings | Each year, the overall health of each county in all 50 states is assessed and ranked using the latest publicly available data through a collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Centers for Disease Control | Through the CDC's National Vital Statistics System, states collect and disseminate vital statistics as part of the U.S.'s oldest and most successful intergovernmental public health data sharing system. |
| Local IPLANS | The Illinois Project for Local Assessment of Needs (IPLAN) is a community health assessment and planning process that is conducted every five years by local health jurisdictions in Illinois. |
| ESRI | ESRI (Environmental Systems Research Institute) is an international supplier of Geographic Information System (GIS) software, web GIS, and geodatabase management applications. ESRI allows for specialized inquiries at the zip code, or other defined levels. |
| Illinois State Board of Education | The Illinois State Board of Education administers public education in the state of Illinois. Each year it releases school "report cards" which analyze the makeup, needs, and performance of local schools. |
| USDA | The United States Department of Agriculture (USDA), among its many functions, collects and analyzes information related to nutrition and local production and food availability. |
| Illinois Youth Survey | The Illinois Youth Survey examines substance abuse by youth and the perception of youth about the views of peers, parents, and others toward the use of substances. The survey is conducted by the University of Illinois and is utilized for analysis by SAMHSA and other organizations and agencies. |

Social Determinants of Health

Education – High School Graduation Rate

Within the Ferrell Hospital service area, 82.1% of students are receiving their high school diploma within four years. This is slightly lower than the Healthy People 2020 target of 82.4%. This indicator is relevant because research suggests education is one of the strongest predictors of health.

| Service Area | Total Student Cohort | Estimated Number of Diplomas Issued | Cohort Graduation Rate |
|------------------------|-------------------------|----------------------------------------|---------------------------|
| Service Area Estimates | 433 | 355 | 82.1% |
| Hamilton County | 76 | 69 | 90.8% |
| Saline County | 315 | 265 | 84.1% |
| White County | 134 | 129 | 96.3% |
| Illinois | 91,892 | 75,974 | 82.7% |

Data Source: Community Commons (US Department of Education, EDFacts. Accessed via DATA.GOV. Additional data analysis by CARES 2015-16. Source District)

Education – No High School Diploma

Within the Ferrell Hospital service area, there are 3,324 persons aged 25 and older without a high school diploma (or equivalency) or higher. This represents 12.64% of the total population aged 25 or older. This indicator is relevant because educational attainment is linked to positive health outcomes.

| Service Area | Total Population Age 25+ | Population Age 25+ With No High School Diploma | Percent Population Age 25+ With No High School Diploma |
|------------------------|-----------------------------|------------------------------------------------------|-----------------------------------------------------------------|
| Service Area Estimates | 26,307 | 3,324 | 12.64% |
| Hamilton County | 5,798 | 592 | 10.21% |
| Saline County | 17,189 | 2,394 | 13.93% |
| White County | 10,266 | 1,265 | 12.32% |
| Illinois | 8,618,284 | 1,008,608 | 11.70% |

Data Source: Community Commons (US Census Bureau, American Community Survey 2012-2016. Source Geography: Tract)

Education – Student Reading Proficiency (4th Grade)

This indicator reports the percentage of children in Grade 4 whose reading skills tested below the "proficient" level for the English Language Arts portion of the state-specific standardized test. This indicator is relevant because an inability to read English well is linked to poverty, unemployment, and barriers to healthcare access, provider communications, and health literacy/education.

| Service Area | Total Students With Valid Test Scores | Percentage of Students Scoring 'Proficient' or Better | Percentage of Students Scoring 'Not Proficient' or Worse |
|------------------------|------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Service Area Estimates | 506 | 28.13% | 71.87% |
| Hamilton County | 84 | 41.13% | 58.87% |
| Saline County | 306 | 25.60% | 74.40% |
| White County | 149 | 29.54% | 70.46% |
| Illinois | 144,944 | 39.33% | 60.67% |

Data Source: Community Commons (US Department of Education, EDFacts. Accessed via DATA.GOV. 2014-15. Source Geography: School District)

Education – Bachelor's Degree or Higher

Of the population aged 25 and older, 15.47% or 4,070 adult students have obtained a Bachelor's level degree or higher. This indicator is relevant because education attainment has been linked to positive health outcomes.

| Service Area | Total Population Age 25+ | Population Age 25+ With Bachelor's Degree or Higher | Population Age 25+ With Bachelor's Degree or Higher |
|------------------------|-----------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | 26,307 | 4,070 | 15.47% |
| Hamilton County | 5,798 | 912 | 15.73% |
| Saline County | 17,189 | 2,747 | 15.98% |
| White County | 10,266 | 1,409 | 13.72% |
| Illinois | 8,618,284 | 2,834,869 | 32.89% |

Data Source: Community Commons (US Census Bureau, American Community Survey. 2012-16. Source Geography: Tract)

Economic Stability

Poverty – Children Eligible for Free/Reduced Lunch

Within the service area, 8,821 public school students (57%) are eligible for free/ reduced price lunches out of 15,509 total students enrolled. This is higher than the Illinois statewide free/reduced price lunch eligibility rate of 49.9%. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs. Additionally, when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

| Service Area | Total Students | Number Free/Reduced Price Lunch Eligible | Percent Free/Reduced Price Lunch Eligible |
|------------------------|----------------|------------------------------------------------|-------------------------------------------------|
| Service Area Estimates | 15,509 | 8,821 | 56.9% |
| Hamilton County | 1,241 | 587 | 47.3% |
| Saline County | 4,229 | 2,506 | 59.3% |
| White County | 2,505 | 1,269 | 50.7% |
| Illinois | 2,018,739 | 1,006,936 | 49.9% |

Data Source: Community Commons (National Center for Education Statistics, NCES – Common Core of Data. 2015-16. Source Geography: Address)



Median Household Income

This indicator reports the median household income based on the latest 5-year American Community Survey estimates. This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income.

| Service Area | Total Households | Average Household Income | Median Household Income |
|------------------------|------------------|-----------------------------|----------------------------|
| Service Area Estimates | 15,473 | \$56,309 | No data |
| Hamilton County | 3,394 | \$58,434 | \$45,076 |
| Saline County | 10,010 | \$53,020 | \$40,290 |
| White County | 6,183 | \$57,865 | \$59,196 |
| Illinois | 4,802,124 | \$81,865 | \$59,196 |

Data Source: Community Commons (US Census Bureau, American Community Survey, 2012-16. Source Geography: Tract)

Population Receiving SNAP Benefits

This indicator reports the average percentage of the population receiving Supplemental Nutrition Assistance Program (SNAP) benefits for the period of July 2014 through July 2015. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs. When combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

| Service Area | Total Population | Population Receiving SNAP Benefits | Percent Population Receiving SNAP Benefits |
|------------------------|------------------|------------------------------------------|--------------------------------------------------|
| Service Area Estimates | 37,133 | 8,384 | 22.6% |
| Hamilton County | 8,200 | 1,032 | 12.6% |
| Saline County | 24,548 | 6,389 | 26.0% |
| White County | 14,327 | 2,258 | 15.8% |
| Illinois | 12,859,995 | 1,935,887 | 15.1% |

Data Source: Community Commons (US Census Bureau, Small Area Income & Poverty Estimates, 2015. Source Geography: County)

Economic Stability

Poverty – Children in Households with Income Below 100% FPL

Poverty is considered a key driver of health status. In the Ferrell Hospital service area, 25.02% or 1,944 children aged 0-17 are living in households with income below the Federal Poverty Level (FPL). This indicator is well below the state average and is relevant because poverty creates barriers to access, including health services, healthy food, and other necessities that contribute to poor health status.

| Service Area | Total Population | Population Under Age 18 | Population Under Age 18 in Poverty | Percent Population Under Age 18 in Poverty |
|---------------------------|---------------------|----------------------------|---------------------------------------|--------------------------------------------------|
| Service Area Estimates | 36,199 | 7,770 | 1,944 | 25.02% |
| Hamilton County | 8,134 | 1,801 | 319 | 17.71% |
| Saline County | 23,958 | 5,142 | 1,592 | 30.96% |
| White County | 14,004 | 3,058 | 570 | 18.64% |
| Illinois | 12,548,538 | 2,947,192 | 576,159 | 19.55% |

Data Source: Community Commons (US Census Bureau, American Community Survey, 2012-16. Source Geography: Tract)

Poverty – Population Below 100% FPL

Poverty is considered a key driver of health status. In the hospital service area, 18.32% or 6,632 individuals are living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

| Service Area | Total Population | Population in Poverty | Percent Population in Poverty |
|------------------------|------------------|--------------------------|----------------------------------|
| Service Area Estimates | 36,199 | 6,632 | 18.32% |
| Hamilton County | 8,134 | 1,219 | 14.99% |
| Saline County | 23,958 | 5,334 | 22.26% |
| White County | 14,004 | 1,960 | 14.00% |
| Illinois | 12,548,538 | 1,753,731 | 13.98% |

Data Source: Community Commons (US Census Bureau, American Community Survey, 2012-16. Source Geography: Tract)

Insurance – Uninsured Population

The lack of health insurance is considered a key driver of health status. This indicator reports the percentage of total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

| Service Area | Total Population (For Whom Insurance Status is Determined) | Total Uninsured Population | Percent Uninsured Population |
|------------------------|------------------------------------------------------------------|-------------------------------|---------------------------------|
| Service Area Estimates | 36,443 | 2,969 | 8.15% |
| Hamilton County | 8,165 | 838 | 10.26% |
| Saline County | 24,132 | 2,051 | 8.50% |
| White County | 14,076 | 1,185 | 8.42% |
| Illinois | 12,671,738 | 1,233,486 | 9.73% |

Data Source: Community Commons (US Census Bureau, American Community Survey, 2012-16. Source Geography: Tract)

Unemployment Rate

Total unemployment in the Ferrell Hospital service area for the month of June 2018 was 1,281 or 7.8% of the civilian non-institutionalized population age 16 and older (seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

| Service Area | Labor Force | Number Employed | Number Unemployed | Unemployment Rate |
|---------------------------|----------------|--------------------|----------------------|----------------------|
| Service Area Estimates | 16,372 | 15,091 | 1,281 | 7.8% |
| Hamilton County | 4,667 | 4,483 | 184 | 3.9% |
| Saline County | 9,663 | 8,990 | 643 | 6.7% |
| White County | 6,790 | 6,508 | 282 | 4.2% |
| Illinois | 6,559,734 | 6,264,990 | 294,744 | 4.5% |

Data Source: Community Commons (US Census Bureau, American Community Survey, 2012-16. Source Geography: County)

Neighborhood and Physical Environment

Violent Crime

This indicator reports the rate of violent crime offenses reported by law enforcement per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.

| Service Area | Total Population | Violent Crimes | Violent Crime (Rate per 100,000 Population) |
|------------------------|------------------|----------------|---------------------------------------------------|
| Service Area Estimates | 30,578 | 86 | 283 |
| Hamilton County | 3,684 | 1 | 18 |
| Saline County | 23,295 | 73 | 315 |
| White County | 10,516 | 24 | 231 |
| Illinois | 12,519,201 | 49,706 | 397 |

Data Source: Community Commons (Federal Bureau of Investigation, FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Accessed via the Interuniversity Consortium for Political and Social Research. 2012-14. Source Geography: County)

Built Environment – Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

| Service Area | Total Population | Number of Establishments | Establishments (Rate per 100,000 Population) |
|------------------------|------------------|-----------------------------|----------------------------------------------------|
| Service Area Estimates | 38,020 | 1 | 4 |
| Hamilton County | 8,457 | 0 | 0 |
| Saline County | 24,913 | 1 | 4 |
| White County | 14,665 | 1 | 7 |
| Illinois | 12,830,632 | 1,402 | 11 |

Data Source: Community Commons (US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2016. Source Geography: ZCTA)

Food Environment – Grocery Stores

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retaining a general line of food, such as canned and frozen foods, fresh fruits and vegetables, and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also sell food, such as supercenters and warehouse club stores are excluded.

| Service Area | Total Population | Number of Establishments | Establishments (Rate per 100,000 Population) |
|------------------------|------------------|-----------------------------|----------------------------------------------------|
| Service Area Estimates | 38,020 | 8 | 23 |
| Hamilton County | 8,457 | 1 | 12 |
| Saline County | 24,913 | 6 | 24 |
| White County | 14,665 | 5 | 34 |
| Illinois | 12,830,632 | 2,770 | 22 |

Data Source: Community Commons (US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2016. Source Geography: ZCTA)

Populations With Low Food Access

This indicator reports the percentage of the population with low food access. Low food access is defined as living more than 1/2 mile from the nearest supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.

| Service Area | Total Population | Population With Low Food Access | Percent Population With Low Food Access |
|------------------------|------------------|------------------------------------|-----------------------------------------------|
| Service Area Estimates | 38,020 | 17,457 | 45.92% |
| Hamilton County | 8,457 | 1,408 | 16.65% |
| Saline County | 24,913 | 8,872 | 35.61% |
| White County | 14,665 | 4,614 | 31.46% |
| Illinois | 12,830,632 | 2,483,877 | 19.36% |

Data Source: Community Commons (US Department of Agriculture, Economic Research Service, USDA – Food Access Research Atlas. 2015. Source Geography: Tract)

Access to Care

Access to Dentists

This indicator reports the number of dentists per 100,000 population. This indicator includes all dentists – qualified as having a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

| Service Area | Total Population 2015 | Dentists 2015 | Dentists (Rate Per 100,000 Population) |
|------------------------|--------------------------|------------------|----------------------------------------------|
| Service Area Estimates | 37,132 | 13 | 35 |
| Hamilton County | 8,200 | 1 | 12 |
| Saline County | 24,548 | 10 | 41 |
| White County | 14,327 | 6 | 42 |
| Illinois | 12,859,995 | 9,336 | 73 |

Data Source: Community Commons (US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015. Source Geography: County)

Access to Mental Health Providers

This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counselors that specialize in mental healthcare.

| Service Area | Estimated Population | Number of Mental Health Providers | Ratio of Mental Health Providers to Population (1 Provider per # of Persons) | Mental Healthcare Provider Rate (Per 100,000 Population) |
|---------------------------|-------------------------|-----------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Service Area Estimates | No data | No data | No data | No data |
| Hamilton County | No data | No data | No data | No data |
| Saline County | 24,612 | 35 | 703 | 142 |
| White County | 14,374 | 14 | 1,027 | 97 |
| Illinois | 12,806,917 | 23,090 | 555 | 180 |

Data Source: Community Commons (University of Wisconsin Population Health Institute, County Health Rankings. 2018. Source Geography: County)

Access to Primary Care

This indicator reports the number of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the American Medical Association include: general family medicine MDs and DOs, general practice MDs and DOs, general internal medicine MDs, and general pediatrics MDs.

| Service Area | Total Population 2014 | Primary Care Physicians 2014 | Primary Care Physicians, Rate Per 100,000 Population |
|------------------------|--------------------------|------------------------------------|------------------------------------------------------------|
| Service Area Estimates | 37,249 | 20 | 55 |
| Hamilton County | 8,296 | 4 | 48 |
| Saline County | 24,612 | 19 | 77 |
| White County | 14,374 | 4 | 28 |
| Illinois | 12,880,580 | 12,477 | 97 |

Data Source: Community Commons (US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014. Source Geography: County)

Federally Qualified Health Centers

This indicator reports the number of Federally Qualified Health Centers (FQHCs) in the community. This indicator is relevant because FQHCs are community assets that provide healthcare to vulnerable populations. They receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved.

| Service Area | Total Population | Number of Federally Qualified Health Centers | Rate of Federally Qualified Health Centers Per 100,000 Population |
|------------------------|------------------|----------------------------------------------------|----------------------------------------------------------------------------|
| Service Area Estimates | 38,020 | 6 | 16 |
| Hamilton County | 8,457 | 1 | 12 |
| Saline County | 24,913 | 3 | 12 |
| White County | 14,665 | 2 | 14 |
| Illinois | 12,830,632 | 364 | 3 |

Data Source: Community Commons (US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. March 2018. Source Geography: Address)

Access to Care

Medical Conditions and Circumstances

The County Health Rankings rank the health of nearly every county in the nation and show that much of what affects health occurs outside of the doctor's office. The County Health Rankings confirm the critical role that factors such as education, jobs, income, and environment play in how healthy people are and how long they live.

Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the County Health Rankings help counties understand what influences how healthy residents are and how long they will live.

The County Health Rankings look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation rates, access to healthier foods, air pollution levels, income, and rates of smoking, obesity and teen births. The County Health Rankings, based on the latest data publicly available for each county, are unique in their ability to measure the overall health of each county in all 50 states on the multiple factors that influence health. *(County Health Rankings and Roadmaps, 2012).*

Saline County is ranked 100 out of the 102 Illinois counties in the Rankings, released in April 2018. White County is ranked 89.

| Health Condition | Saline County | White County | Illinois |
|-----------------------------------------------------------|------------------|-----------------|----------|
| Adults Reporting Poor or Fair Health | 18% | 15% | 17% |
| Adults Reporting No Leisure Time/ Physical Activity | 24% | 25% | 22% |
| Adult Obesity | 29% | 28% | 28% |
| Children Under 18 Living in Poverty | 31% | 23% | 18% |
| Alcohol Impaired Driving Deaths | 22% | 21% | 33% |
| Teen Births | 54/1,000 | 50/1,000 | 26/1,000 |
| Uninsured | 6% | 6% | 8% |
| Unemployment | 9% | 7% | 6% |

Behavioral Risk Factor Surveillance System

| Saline County | State 2014 | 2014 | 2009 | 2006 |
|-------------------------------|---------------|-------|-------|-------|
| At-Risk for Binge Drinking | 20.3% | 12.1% | 12.7% | 8.0% |
| Asthma | 9.1% | 13.9% | 14.9% | 15.9% |
| Diabetes | 10.2% | 14.7% | 12.8% | 11.6% |
| Obesity | 29.5% | 32.1% | 29.8% | 25.3% |
| Smoking | 16.7% | 24.0% | 20.4% | 27.3% |

| White County | State 2014 | 2014 | 2009 | 2006 |
|-------------------------------|---------------|-------|-------|-------|
| At-Risk for Binge Drinking | 20.3% | 12.1% | 12.5% | 15.0% |
| Asthma | 9.1% | 13.9% | 15.1% | 14.5% |
| Diabetes | 10.2% | 14.7% | 9.7% | 12.5 |
| Obesity | 29.5% | 32.1% | 30.4% | 32.2% |
| Smoking | 16.7% | 24.0% | 28.7% | 22.2% |

Health Indicators

Population With Any Disability

Within the service area, 21% or 7,537 individuals are disabled in some way. This is higher than the statewide disabled population level of 10.87%. This indicator reports the percentage of the total civilian non-institutionalized with a disability. This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.

| Service Area | Total Population (For Whom Disability Status is Determined) | Total Population With A Disability | Percent Population With A Disability |
|------------------------|-------------------------------------------------------------------|---------------------------------------|-----------------------------------------|
| Service Area Estimates | 36,443 | 7,537 | 20.68% |
| Hamilton County | 8,165 | 1,333 | 16.33% |
| Saline County | 24,132 | 5,037 | 20.87% |
| White County | 14,076 | 2,794 | 19.85% |
| Illinois | 12,671,738 | 1,376,858 | 10.87% |

Data Source: Community Commons (US Census Bureau, American Community Survey. 2012-16. Source Geography: Tract)

Teen Births

This indicator reports the rate of total births to women ages 15-19 per 1,000 female population. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support needs. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

| Service Area | Female Population Ages 15-19 | Births to Mothers Ages 15-19 | Births (Per 1,000 Population) |
|------------------------|---------------------------------|---------------------------------|-------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed |
| Hamilton County | 256 | 11 | 44 |
| Saline County | 762 | 42 | 55 |
| White County | 447 | 24 | 55 |
| Illinois | 448,356 | 15,692 | 35 |

Data Source: Community Commons (US Department of Health & Human Services, Health Indicators Warehouse, Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source Geography: County)

Low Birth Weight Rate

This indicator reports the percentage of total births that are low birth weight (under 2,500 grams = less than 5.15 pounds). This indicator is relevant because low birth weight infants are at a higher risk for health problems. This indicator can also highlight the existence of health disparities.

| Service Area | Total Live Births | Low Birth Weights (Under 2,500g) | Low Weight Births, Percent of Total |
|------------------------|-------------------|-------------------------------------|----------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed |
| Hamilton County | 623 | 51 | 8.2% |
| Saline County | 2,170 | 189 | 8.7% |
| White County | 1,211 | 99 | 8.2% |
| Illinois | 1,251,656 | 105,139 | 8.4% |

Data Source: Community Commons (US Department of Health & Human Services, Health Indicators Warehouse, Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source Geography: County)



Health Indicators

Diabetes Management – Hemoglobin A1c Test for Medicare Enrollees

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test that measures blood sugar levels, administered by a healthcare professional in the past year. In the service area, 1,814 Medicare enrollees with diabetes have had an annual exam out of 2,188 Medicare enrollees in the service area with diabetes, or 82.9%. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social

| Service Area | Total Medicare Enrollees | Medicare Enrollees With Diabetes | Medicare Enrollees With Diabetes With Annual Exam | Percent Medicare Enrollees With Diabetes With Annual Exam |
|---------------------------|-----------------------------|----------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------|
| Service Area Estimates | 6,346 | 759 | 658 | 86.6% |
| Hamilton County | 1,234 | 130 | 105 | 81.5% |
| Saline County | 3,822 | 467 | 396 | 85.0% |
| White County | 2,693 | 307 | 278 | 90.6% |
| Illinois | 1,229,443 | 149,658 | 128,554 | 85.9% |

Data Source: Community Commons (Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source Geography: County)

Depression (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with depression.

| Service Area | Total Medicare Fee-for-Service Beneficiaries | Beneficiaries With Depression | Percent With Depression |
|------------------------|----------------------------------------------------|----------------------------------|----------------------------|
| Service Area Estimates | 8,380 | 1,583 | 18.9% |
| Hamilton County | 1,580 | 258 | 16.3% |
| Saline County | 5,420 | 1,105 | 20.4% |
| White County | 3,284 | 564 | 17.2% |
| Illinois | 1,451,929 | 219,143 | 15.1% |

Data Source: Community Commons (Centers for Medicare & Medicaid Services. 2015. Source Geography: County)

Preventable Hospitalizations – Medicare Population

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible "return of investment" from interventions that reduce admissions through better access to primary care resources.

| Service Area | Total Medicare Part A Enrollees | Ambulatory Care Sensitive Condition Hospital Discharges | Ambulatory Care Sensitive Condition Discharge Rate Per 1,000 |
|------------------------|------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|
| Service Area Estimates | 4,973 | 532 | 107.1% |
| Hamilton County | 955 | 143 | 150.5% |
| Saline County | 2,091 | 204 | 97.8% |
| White County | No data | No data | No data |
| Illinois | 261,763 | 13,441 | 51.3% |

Data Source: Community Commons (Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source Geography: County)

Cancer Incidence

Breast Cancer

This indicator reports the age-adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is the leading cause of death and it is important to identify cancers separately to better target interventions.

| Service Area | Estimated Total Population (Female) | New Cases (Annual Average) | Cancer Incidence Rate (Per 100,000 Population) |
|------------------------|----------------------------------------|-------------------------------|------------------------------------------------------|
| Service Area Estimates | 27,925 | 32 | 115 |
| Hamilton County | 651 | 5 | 77 |
| Saline County | 1,801 | 18 | 100 |
| White County | 1,077 | 15 | 139 |
| Illinois | 755,277 | 9,947 | 132 |

Data Source: Community Commons (State Cancer Profiles. 2011-15. Source Geography: County)



Prostate Cancer

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Service Area | Estimated Total Population (Male) | New Cases (Annual Average) | Cancer Incidence Rate (Per 100,000 Population |
|------------------------|--------------------------------------|-------------------------------|-----------------------------------------------------|
| Service Area Estimates | 27,380 | 31 | 113 |
| Hamilton County | 580 | 8 | 138 |
| Saline County | 1,690 | 19 | 112 |
| White County | 1,078 | 14 | 130 |
| Illinois | 684,247 | 7,862 | 115 |

Data Source: Community Commons (State Cancer Profiles. 2011-15. Source Geography: County)

Secondary Data

Mortality Tables

Saline County Mortality, 2015

| Cause of Mortality | Total Deaths |
|-------------------------------------------------------------------------------------|-----------------|
| Malignant Neoplasms | 84 |
| Diseases of the Heart | 72 |
| Chronic Lower Respiratory Diseases | 35 |
| Accidents | 20 |
| Alzheimer's Disease | 19 |
| Influenza and Pneumonia | 16 |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 13 |
| Cerebrovascular Diseases | 12 |
| Septicemia | 10 |
| Intentional Self-Harm (Suicide) | 5 |
| In Situ Neoplasms, Benign Neoplasms, and Neoplasms of Uncertain or Unknown Behavior | 5 |
| Diabetes Mellitus | 4 |
| Pneumonitis due to solids and liquids | 4 |
| Nutritional d Deficiencies | 3 |
| Parkinson's Disease | 2 |
| Chronic Liver Disease and Cirrhosis | 2 |
| Essential Hypertension and Hypertensive Renal Disease | 2 |
| Certain conditions developing in the perinatal period | 1 |
| Aortic Aneurysm and Dissection | 1 |
| Assault (Homicide) | 1 |

White County Mortality, 2015

| Cause of Mortality | Total Deaths |
|-----------------------------------------------------------------------|-----------------|
| Diseases of the Heart | 53 |
| Malignant Neoplasms | 45 |
| Chronic Lower Respiratory Diseases | 18 |
| Cerebrovascular Diseases | 13 |
| Septicemia | 11 |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 8 |
| Pneumonitis due to solids and liquids | 7 |
| Accidents | 7 |
| Diabetes Mellitus | 5 |
| Influenza and Pneumonia | 5 |
| Intentional Self-Harm (Suicide) | 4 |
| Alzheimer's Disease | 4 |
| Chronic Liver Disease and Cirrhosis | 3 |
| Essential Hypertension and Hypertensive Renal Disease | 3 |
| Parkinson's Disease | 2 |
| Nutritional Deficiencies | 1 |
| Complications of Medical and Surgical Care | 1 |
| Congenital malformations, deformations, and chromosomal abnormalities | 1 |

Secondary Data

Mortality Tables

Infant Mortality

This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

| Service Area | Total Births | Total Infant Deaths | Infant Mortality Rate (Per 1,000 Births) |
|------------------------|--------------|---------------------|---------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed |
| Hamilton County | 475 | 7 | 15 |
| Saline County | 1,570 | 17 | 11 |
| White County | 890 | 6 | 7 |
| Illinois | 879,035 | 6,065 | 7 |

Data Source: Community Commons (US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2006-2010. Source Geography: County)

Mortality - Cancer

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because cancer is a leading cause of death in the United States.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | 23 | 283 | 187 |
| Saline County | 24,670 | 72 | 292 | 205 |
| White County | 14,422 | 46 | 316 | 200 |
| Illinois | 2,146,397 | 1,098 | 51 | 104 |

Data Source: Community Commons (Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER, 2012-16. Source Geography: County)

Mortality - Coronary Heart Disease

This indicator reports the rate of death due to coronary heart disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | 16 | 189 | 115 |
| Saline County | 24,670 | 38 | 152 | 105 |
| White County | 14,422 | 26 | 179 | 100 |
| Illinois | 2,146,397 | 501 | 23 | 54 |

Data Source: Community Commons (Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER, 2012-16. Source Geography: County)

Mortality – Lung Disease

This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | 10 | 119 | 73 |
| Saline County | 24,670 | 28 | 112 | 77 |
| White County | 14,422 | 17 | 115 | 65 |
| Illinois | 2,146,397 | 95 | 4 | 12 |

Data Source: Community Commons (Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER, 2012-16. Source Geography: County)

Secondary Data

Mortality Tables

Mortality - Pedestrian Motor Vehicle Crash

This indicator reports the crude rate of pedestrians killed by motor vehicles per 100,000 population. This indicator is relevant because pedestrian motor vehicle crash deaths are preventable and they are a cause of premature death.

| Service Area | Total Population 2010 | Total Pedestrian Deaths 2011-2015 | Average Annual Deaths (Rate Per 100,000 Population) |
|------------------------|--------------------------|-----------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | No data | 2 | No data |
| Hamilton County | 8,457 | 0 | 0 |
| Saline County | 24,913 | 1 | 1 |
| White County | 14,665 | 1 | 2 |
| Illinois | 12,830,632 | 827 | 2 |

Data Source: Community Commons (US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-15. Source Geography: County)

Mortality - Stroke

This indicator reports the rate of death due to cerebrovascular disease (stroke) per 100,000 population. Figures are reported as crude rates, and as rates ageadjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | 8 | 92 | 53 |
| Saline County | 24,670 | 15 | 61 | 41 |
| White County | 14,422 | 11 | 75 | 42 |
| Illinois | 12,859,901 | 5,497 | 43 | 38 |

Data Source: Community Commons (Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2012-16. Source Geography: County)

Mortality - Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | No data | Suppressed | Suppressed |
| Saline County | 24,670 | 5 | 22 | 22 |
| White County | 14,422 | 3 | 22 | Suppressed |
| Illinois | 2,146,397 | 90 | 4 | 4 |

Data Source: Community Commons (Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2012-16. Source Geography: County)

Mortality – Unintentional Injury

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates, and as rates ageadjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because accidents are a leading cause of death in the U.S.

| Service Area | Total Population | Average Annual Deaths 2010-2014 | Crude Death Rate (Per 100,000 Population) | Age-Adjusted Death Rate (Per 100,000 Population) |
|------------------------|---------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| Service Area Estimates | Suppressed | Suppressed | Suppressed | Suppressed |
| Hamilton County | 8,259 | 4 | 53 | 51 |
| Saline County | 24,670 | 19 | 76 | 66 |
| White County | 16,510 | 7 | 45 | 41 |
| Illinois | 15,006,298 | 5,178 | 35 | 34 |

Primary Data

Qualitative Data

Qualitative data was reviewed to help validate the selection of health priorities. In alignment with IRS Treasury Notice 2011-52,2 and the subsequent final rules reported at 79 FR 78953, the qualitative/primary data received and reviewed included primary input from (1) At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community and, (2) members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations. The organizations and persons that participated are detailed in the appendix.

No written comments were received concerning the hospital facility's most recently conducted CHNA nor on the most recently adopted implementation strategy. A method for retaining written public comments and responses exists, but none were received.

Data was also gathered representing the broad interests of the community. The hospital took into account input from persons who represent the broad interests of the community served by the hospital, including those with special knowledge of, or expertise in public health (local, regional, state and/or tribal). Members of medically underserved, low-income, and minority populations served by the hospital or individuals or organizations representing the interests of such populations also provided input. The medically underserved are members of a population who experience health disparities, are at risk of not receiving adequate medical care as a result of being uninsured or underinsured, and/or experiencing barriers to health care due to geographic, language, financial or other barriers.

Members of the CHNA steering committee, those who both participated in focus groups and the needs identification and prioritization process, were chosen based on their unique expertise and experience, informed perspectives, and involvement with the community.

Focus Group – Community Health Leaders

The first focus group consisted of community leaders and representatives of groups that represent or serve persons that may be underserved by local medical services. The group included representatives of the health department, public transportation, schools, banks, and others. The group met at 7:30 am on April 16, 2018 at the First Christian Church. Positive developments in the service area in recent years were identified as:

- The clinic at Ferrell Hospital has extended hours
- Dr. Oldham has been a positive addition
- 1,500 miles of fiber have been installed in the area in the past 6 years
- Development of electronic medical records (EPIC)
- Partnership with Deaconess for ambulance services
- New clinic
- New physicians and nurse practitioners
- Ferrell Hospital is planning for the future
- Senior care has improved and services have expanded
- Community has come together to address opioids
- Prescription monitoring program
- Drug overdose prevention programming
- New opportunities for chronic disease management
- New pain management services
- New women's health services
- Ferrell Hospital and Egyptian Health Department are partnering on many new levels
- Improved image of Ferrell Hospital in the community
- Ferrell Hospital is reaching beyond the city limits of Eldorado
- New leadership at Ferrell Hospital is having a positive impact

Primary Data

Qualitative Data

Needs and issues were identified as:

- Education around available local mental health services
- Explore the issue of seniors stretching prescriptions because of financial circumstances
- Education and follow-up with patients about medicine use
- Poverty impacts medicine access for youth
- Improved access to health foods for youth
- Covering out-of-school nutrition needs of the 80% of students that qualify for free and reduced lunch
- Meet managed care requirements of Medicaid for providers and consumers
- Education on managed care for consumers
- Education for trauma-informed schools and communities
- Obesity
- Lack of physical activity
- Lack of access to health foods
- Better coordination and promotion of existing wellness programs
- Improved information about availability of public transportation through RIDES
- Indiana ambulances generally do not accept Illinois Medicaid
- Succession planning for health care professions from top to bottom
- Education about local mental health services
- Awareness of mental health issues

Focus Group – Medical Professionals and Partners

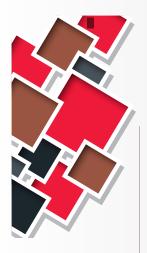
The second focus group consisted of medical professionals and partners. The group met at noon on April 16, 2018 at the First Christian Church. Positive developments in the service area in recent years were identified as:

- Ferrell Hospital has improved its image in the community
- Increased access to specialty care
- Access to satellite clinics
- Access to providers is much better
- Access to follow-up for Emergency Room patients due to better access to providers
- Access to local specialty services
- Deaconess partnership has created resources

- Nursing administration has created resources
- Nursing administration has improved
- The work environment has improved significantly
- New administration is bringing positive changes
- Access to care across the board has improved
- Ferrell Hospital has achieved standards of care in every case

Needs and issues were identified as:

- Access to transfer ambulances is still an issue
- Additional local services for mental health and substance use counseling
- Access to Medicaid services for mental health and substance abuse
- Relief for burden on Emergency Room through implementation
 of Fast Track evaluation
- Transportation for appointments is difficult to arrange
- Explore issues of cost of therapy and other alternatives to opioids in order to address pain without having patients resort to illegal solutions
- Education about managed care for patients
- Local access to more specialists urology, orthopedics, drug addiction and treatment, gastroenterology, endocrinology, oncology, podiatry – is needed to reach the ability of meeting local needs
- Education about transportation and other services
- Hard economic conditions impact access to services and medicine
- Smoking cessation, especially for youth
- Continued improvement of access to care
- Education for youth on hygiene, nutrition, life skills, and STDs
- Education for diabetes
- Child abuse



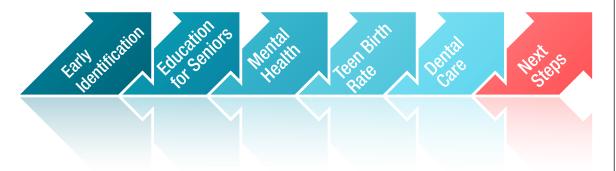
IV. IDENTIFICATION AND PRIORITIZATION OF NEEDS

2018 Community Health Needs Assessment

Identification and Prioritization of Needs

Description of the Community Health Needs Identified

The steering group, comprised of representatives from both focus groups – including the local health department and other members serving persons likely to be unserved, underserved, or otherwise experiencing unmet needs – met on June 11, 2018, to identify and prioritize significant health needs. The group reviewed notes from the focus groups and summaries of data reviewed by the consultant which included Community Commons, ESRI, Illinois Department of Public Health, CDC, USDA, Illinois Department of Labor, HRSA, County Health Rankings and Roadmaps, National Cancer Institute, and other resources. Following the review, the group identified and then prioritized the following as being the significant health needs facing the Ferrell Hospital service area.



- 1. The group identified and prioritized exploring the causes of chronic illness and improving early identification through screenings and other methods, especially for cancer and heart disease.
- 2. The group next prioritized education and guidance for seniors on the topics of Medicare, senior wellness, and other health services for older adults.
- 3. The third prioritized need fell generally under the category of mental health, with specific reference to needs for:
 - a. Attempt to address the local shortage of mental health services' providers, including the need to improve local access to psychiatrists
 - b. Improve availability of mental health and substance use and misuse treatment beds, both local and transfer

Identification and Prioritization of Needs

Description of the Community Health Needs Identified

- c. Improve access to local mental health services in general for persons suffering from depression and other situational conditions influenced especially by trauma and/or poverty
- d. Local access to Medication-Assisted Treatment for opioid use disorder and other substances
- 4. Address teen birth rate, low birth weight, and infant mortality through education and access to care
- 5. Local access to dental care, especially for persons on Medicaid

V. RESOURCES AVAILABLE TO MEET PRIORITY HEALTH NEEDS

2018 Community Health Needs Assessment



Resources Available to Meet Priority Health Needs

Ferrell Hospital Resources

Hospital Resources

- Behavioral health
 - o Depression self-screening
 - o Counseling
 - Youth and adults
 - Individual and family sessions
 - o Intensive therapy
- Breast services
- Digestive/Gastroenterology
 - o Colonoscopy
 - o Esophagogastroduodenoscopy
- Emergency care
- Ferrell Hospital clinics
 - o Ferrell Hospital Family Practice
 - o Eldorado Family Medicine
 - o Carmi Family Medicine
- Heart care
 - o Echocardiography
 - o Transesophageal echocardiography
 - o Electrocardiogram (EKG)
 - o Treadmill stress test
 - o Chemical stress test
 - o Cardiac rehabilitation
 - o Congestive heart failure clinic
- Imaging/Radiology
 - o Computerized Tomography (CT or CAT scan)
 - o Magnetic Resonance Imaging (MRI)
 - o Mammography
 - o Nuclear medicine
 - o Bone densitometry (DEXA)
 - o Ultrasound
- Laboratory

- Pain management
 - o Epidural injection
 - o Facet/medial nerve bock
 - o Facial nerve block
 - o Femoral nerve block
 - o Intercostal nerve block
 - o Intrathecal morphine and Baclofen pumps
 - o Joint injection
 - o Kyphoplasty
 - o Minimally invasive lumbar decompression
 - o Occipital nerve block
 - o Radiofrequency lesioning
 - o Sacroiliac joint injection
 - o Sciatic nerve block
 - o Selective nerve block
 - o Spinal cord stimulation
 - o Stellate ganglion block
 - o Supartz/Synvisc injection
 - o Trigger point injection
 - o Nutrition evaluation
 - o Physical therapy evaluation and treatment
 - o Physiological evaluation and treatment
 - o Social worker evaluation
- Rehabilitation
 - o Occupational therapy
 - o Physical therapy
 - Vestibular therapy
 - o Speech therapy
 - o Swallowing disorder services
 - Modified barium swallow study
 - VITAL STIM (electrical stimulation for swallowing disorders)
 - o Voice disorder services
 - o Short-term rehabilitation/swing bed
- Respiratory/pulmonary
 - o Short-term rehabilitation/swing bed

Resources Available to Meet Priority Health Needs

- Wound care
 - o Wound assessment
 - o Debridement and surgical intervention
 - o Wound VAC
 - o Compression therapy
 - o Specialty dressings

Community Resources and Partners

- Deaconess Wellness
- Deaconess Public Relations and Marketing
- Diamond Health Care
- Southern Illinois Community Health Coalition
- University of Illinois Extension
- Illinois Critical Access Hospital Network
- Schools
- Health departments
- Area dentists
- Local businesses
- Cardiologists and other specialists

VI. IMPLEMENTATION STRATEGY

2018 Community Health Needs Assessment



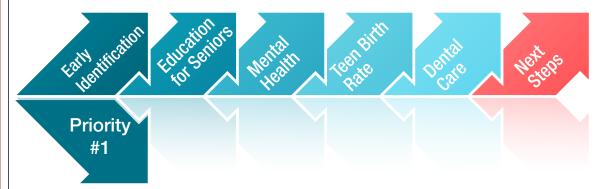
Implementation Strategy

Planning Process

The Implementation Strategy was developed through a facilitated meeting involving key administrative staff at Ferrell Hospital on July 16, 2018. The group reviewed the needs assessment process completed to that point and considered the prioritized significant needs and supporting documents. They discussed steps taken to address the previous Community Health Needs Assessment. They also considered internal and external resources potentially available to address the current prioritized needs.

The group then considered each of the prioritized needs. For each of the five categories, actions the hospital intends to take were identified along with the anticipated impact of the actions, the resources the hospital intends to commit to the actions, and the external collaborators the hospital plans to cooperate with to address the need. The plan will be evaluated by periodic review of measurable outcome indicators in conjunction with annual review and reporting.

Implementation Strategy – Priority #1



The following process by which needs will be addressed was developed:

The group identified and prioritized exploring the causes of chronic illness and improving early identification through screenings and other methods, especially for cancer and heart disease.

Actions the hospital intends to take to address the health need:

- Utilize hospital data to ensure that patients get screenings at visits
- Increase education about chronic disease and increase awareness of wellness
- Promote the Ferrell Hospital employee wellness program to other businesses
- Explore peripheral artery disease programs

- Expand use of the heart clinic through increased availability of a cardiologist
- Explore community weight loss programs
- Explore smoking cessation programs
- Develop diabetes management programs

Anticipated impacts of these actions:

- Improved early identification resulting from screenings and education
- Improved understanding of chronic illness and the importance of wellness
- Reduced levels of chronic illness in the service area within eight years
- Improved care for patients with heart disease

Programs/resources the hospital plans to commit to address the need:

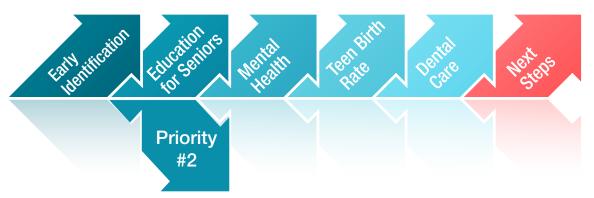
- Administration
- Medical staff
- Dietitian
- Marketing/public relations

- Deaconess Wellness
- Cardiologists and other specialists
- Local businesses

Implementation Strategy

Planning Process

Implementation Strategy – Priority #2



The group next prioritized education and guidance for seniors on the topics of Medicare, senior wellness, and other health services for older adults.

Actions the hospital intends to take to address the health need:

- Develop an education program to explain the scope of Medicare coverage, including the cost of tests and other services
- Expand the Senior Transitions Program for mental health
- Expand available specialists to target senior health needs, including rheumatology and urology
- Develop a diabetes self-management program
- Increase awareness of available local senior services through education
 and promotion

Anticipated impacts of these actions:

- Better informed senior patients
- Better access to specialists that address senior health issues
- A senior population that is better able to make informed decisions about care

Programs and resources the hospital plans to commit to address the need:

- Administration
- Medical staff
- Dietitian
- Marketing/public relations

- Diamond Health Care
- Deaconess Public Relations and Marketing

Implementation Strategy – Priority #3



The third prioritized need fell generally under the category of mental health, with specific reference to needs for:

- a. Attempt to address the local shortage of mental health services' providers, including the need to improve local access to psychiatrists
- b. Improve availability of mental health and substance use and misuse treatment beds, both local and transfer
- c. Improve access to local mental health services in general for persons suffering from depression and other situational conditions influenced especially by trauma and/or poverty
- d. Local access to Medication-Assisted Treatment (MAT) for opioid use disorder and other substances

Actions the hospital intends to take to address the health need:

- Explore partnerships and funding to address substance use prevention and treatment
- Assess program needs and choices with local providers and partners
- Explore partnerships for Medication-Assisted Treatment (MAT) and recovery and rehabilitation for opioid use disorder
- Provide the community with information about existing local and distant mental health and substance abuse services
- Provide information on alternatives to opioids for pain management
- Expand outpatient counseling services

Implementation Strategy

Planning Process

Anticipated impacts of these actions:

- A community-based approach to address mental health needs and substance abuse, including opioid misuse and use disorder
- Improved information about local and distant services for mental health and substance abuse care
- Increased access to local counseling services

Programs and resources the hospital plans to commit to address the need:

- Administration
- Medical staff
- Marketing/public relations
- Pain Management Clinic

- Southern Illinois Community Health Coalition
- Illinois Critical Access Hospital Network (Opioid Crisis Next Door)
- Health departments
- Other providers

Implementation Strategy – Priority #4



The group next identified a need to address teen birth rate, low birth weight, and infant mortality through education and access to care.

Actions the hospital intends to take to address the health need:

- Develop OB/GYN services in White County
- Explore expanding OB/GYN services to other counties
- Develop education programs and materials about access to local, prenatal care and services
- Utilize dietitian to advise on prenatal care
- Provide education to high school and middle school students
- Explore awareness classes and/or events

Anticipated impacts of these actions:

- Reduced birth weight of babies born to teens over time
- Improved access to prenatal care
- Better educated teens

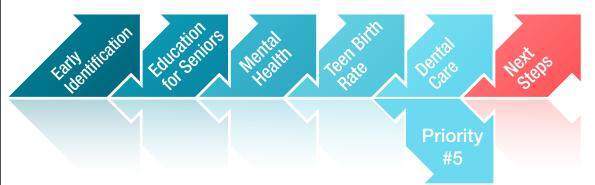
Programs/resources the hospital plans to commit to address the need:

- Administration
- Medical staff
- Dietitian
- Marketing/public relations

- Health departments
- Schools
- City and county governments
- University of Illinois Extension

Implementation Strategy

Implementation Strategy – Priority #5



The final identified and prioritized need was local access to dental care, especially for persons on Medicaid. *Ferrell Hospital does not provide dental care and has not historically provided dental services. The hospital will attempt to address this issue by taking the following steps:*

Actions the hospital intends to take to address the health need:

- Attempt to identify local available dental services information and provide that information to the public with other health services information
- Collaborate with other agencies to seek solutions to this health need
 where appropriate

Anticipated impacts of these actions:

- Increased community-wide awareness of dental access issue
- Collaboration of agencies and others to attempt to seek solutions to this health need

Programs/resources the hospital plans to commit to address the need:

- Administration
- Marketing/public relations

- Schools
- Health departments
- Other organizations that emerge as interested in the issues

VII. DOCUMENTING AND COMMUNICATING RESULTS

2018 Community Health Needs Assessment



Documenting and Communicating Results

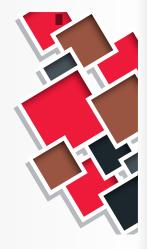
Approval

This CHNA Report will be available to the community on the hospital's public website: http://www.ferrellhosp.org. A hard copy may be viewed at the hospital by inquiring at the information desk at the main entrance.

This Community Health Needs Assessment and Implementation Plan of Ferrell Hospital was approved by the Ferrell Hospital Board of Directors on the 27th day of March, 2019.

VII. REFERENCES AND APPENDIX

2018 Community Health Needs Assessment



References and Appendix

References

- County Health Rankings, 2018 County Health Rankings
- Community Commons, 2018 Community Commons
- Illinois Department of Employment Security, 2018
- National Cancer Institute, 2018
- Illinois Department of Public Health, 2018
- Health Professional Shortage Areas (HRSA) and Medically Underserved Areas/Populations, 2018
- ESRI, 2018
- Illinois State Board of Education, Scott County Report Card, 2016 2017
- Atlas of Rural and Small Town America, USDA, 2018
- Behavioral Risk Factor Surveillance Survey Illinois Counties 2018
- Illinois Youth Survey, 2018
- Courtesy: Community Commons, <www.communitycommons.org>, July 18, 2018

(Support documentation on file and available upon request)

Appendix

Focus and Steering Group Participants

The following persons contributed to the needs assessment process through their participation in the first focus group.

Focus Group 1 – Community Health Leaders

Angie Hampton, Egyptian Health Department Gina Sirach, Southeastern Illinois College Jared Florance, Deaconess Ryan Hobbs, Eldorado School District Gene Morris, First Southern Bank and Ferrell Board Member Jeffery Drake, RIDES Mass Transit Becky Mitchell, Ridgway IL Mayor Lynn Byrd, Legence Bank Jason Barr, Clearwave Communications Mike Willis, Deaconess EMS

Appendix

Appendix

Focus Group 2 – Medical Professionals and Partners

Dr. Ahmed Tariq Casey Carlile, FNP Dr. Luke Hall Melissa Gauthier, PA Wes Henson, PA Susan Sigler, FNP Sarah Hendrix, Director of Inpatient Services Renata Lowery, Emergency Room Director Deb Mings, Director of Risk Management and Infection Control Sheena Hillyard, Clinic Practice Manager Lauren Sanders, Director of Senior Transitions

Members of the CHNA Steering Committee, most of whom both participated in focus groups and the needs identification and prioritization process, were chosen based on their unique expertise and experience, informed perspectives, and involvement with the community. The CHNA Steering Committee members included:

Dr. Luke Hall Angie Hampton, Egyptian Health Department Gene Morris, First Southern Bank and Ferrell Board Member Gina Sirach, Southeastern Illinois College

Members of the senior staff of Ferrell Hospital met in a facilitated session on July, 16, 2018 to consider the CHNA information and the identified and prioritized needs. Persons present included:

Alisa Coleman, CEO Joe Hohenberger, CFO Rachael Prather, CNO Caleigh Bruce, CCO/Director of Human Resources

