CHI Saint Joseph Health
Saint Joseph Berea

Community Health Needs Assessment

FY 2023-2025

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COMMUNITY HEALTH NEEDS ASSESSMENT
At a Glance

Madison County

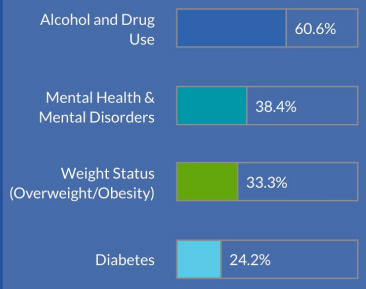
Secondary Data

- Alcohol & Drug Use
- Sexually Transmitted Infections
- Mental Health & Mental Disorders
- Weight Status, Physical Activity, Nutrition
- Older Adults
- Women's Health
- Prevention & Safety

Primary Data/Community Input

Community Survey, Key Informant Interviews, Focus Group Discussions

Pressing Health Issues:



Quality of Life Factors:

Health Equity

Health equity focuses on the fair and just distribution of health determinants, outcomes, and resources across communities.

Systemic racism
Poverty
Gender discrimination

Poorer health outcomes for groups such as Black persons, Hispanic or Latino persons, indigenous communities, people experiencing poverty and LGBTQ+ communities.

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PRIORITY HEALTH NEEDS

Madison County

Alcohol, Tobacco & Drug Use

Themes from Community Input:

- Ranked by survey respondents as the most pressing health problem (60.6%)
- Lack of education, lack of reliable income and availability of drugs cited as major factors for substance use
- Lack of residential treatment programs

Warning Indicators:

- Alcohol-Impaired Driving Deaths
- Death Rate due to Drug Poisoning
- Adults who Binge Drink

Mental Health & Mental Disorders

Themes from Community Input:

- Ranked by survey respondents as the second most pressing health problem (38.4%)
- Poverty, stress and poor coping mechanisms cited as contributing factors
- Need for more mental health services

Warning Indicators:

- Age-Adjusted Death Rate due to Alzheimer's Disease
- Depression: Medicare Population
- Age-Adjusted Death Rate due to Suicide
- Poor Mental Health: 14+ Days

Weight Status, Physical Activity & Nutrition

Themes from Community Input:

- Ranked by survey respondents as the third most pressing health problem (33.3%)
- Healthy eating options at restaurants, stores, and markets a top quality of life issue among survey respondents (22.2%)
- Lack of exercise, busy lifestyles, lack of nutritional foods and learned behaviors through multiple generations cited as key contributors to obesity

Warning Indicators:

- Grocery Store Density
- Low-Income and Low Access to a Grocery Store
- Adult Fruit and Vegetable Consumption
- Adults who are Obese
- Access to Exercise Opportunities
- Fast Food Restaurant Density

Executive Summary

Introduction & Purpose

The purpose of this Community Health Needs Assessment (CHNA) is to identify and prioritize significant health needs of the community served by Saint Joseph Berea (SJB). The priorities identified in this report help to guide the hospital's community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that nonprofit hospitals conduct a community health needs assessment at least once every three years.

CommonSpirit Health Commitment and Mission Statement

The hospital's dedication to engaging with the community, assessing priority needs, and helping to address them with community health program activities is in keeping with its mission: "As CommonSpirit Health, we make the healing presence of God known in our world by improving the health of the people we serve, especially those who are vulnerable, while we advance social justice for all."

CHNA Collaborators

CHI Saint Joseph Health commissioned Conduent Healthy Communities Institute (HCI) to conduct the 2023-2025 Community Health Needs Assessment for Saint Joseph Berea.

Community Definition

The community served by Saint Joseph Berea, also known as the hospital's primary service area (PSA), was defined based on zip codes representing 75% of all inpatient discharges. The primary service area consists of four zip codes (40403, 40447, 40475, 40456) and is primarily based in Madison County, but also extends into neighboring Jackson and Rockcastle counties.

Methods for Identifying Community Needs

Secondary data used in this assessment consisted of community health indicators, while primary data consisted of key informant interviews, a focus group discussion, and an online community survey. Findings from all these data sources were analyzed to identify the significant health needs for the community served by Saint Joseph Berea.

Secondary Data

The secondary data used in this assessment were obtained and analyzed from a community indicator database developed by Conduent Healthy Communities Institute. The database includes over 150 community health and quality of life indicators, spanning at least 24 topics, that are primarily derived from state and national public data sources. Indicator values for Madison County were compared to

other counties in Kentucky and the U.S., trends over time and Healthy People 2030 targets to assess relative areas of need. HCI's Data Scoring Tool systematically summarizes these comparisons, ranking indicators based on highest need. Each indicator is assigned a score from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome. Indicators are grouped into broader topic areas for a higher-level ranking of community health needs. Topic scores also range from 0 to 3, with 0 indicating the best outcome and 3 indicating the worst outcome. Topics receiving a secondary data score of 1.50 or higher were identified as a significant health need.

Primary Data

The primary data used in this assessment included an online community survey and qualitative data in the form of key informant interviews and a focus group discussion. Key informants invited to participate in these interviews were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations.

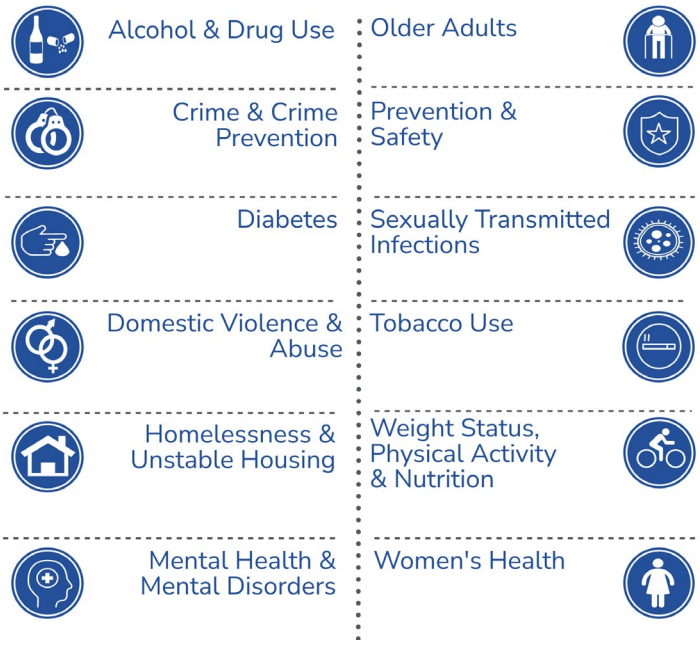
Summary of Findings

Health needs were determined to be significant if they met the following criteria:

- Secondary data analysis: topic score of 1.50 or higher
- Survey analysis: identified by 20% or more of respondents as a priority issue
- Qualitative analysis: frequency topic was discussed within/across interviews and the focus group

Through this criteria, twelve needs emerged as significant. Figure 1 illustrates the final 12 significant health needs, listed in alphabetical order, that were included for prioritization based on the findings of all forms of data collected for the Saint Joseph Berea 2023-2025 CHNA.

FIGURE 1. SIGNIFICANT HEALTH NEEDS



Prioritization

Saint Joseph Berea convened a group of community leaders to participate in a presentation of data on the 12 significant health needs. Following the presentation, participants engaged in a discussion and were asked to complete an online prioritization activity.

Process and Criteria

The online prioritization activity included two criteria for prioritization:

- Magnitude of the Issue
- Ability to Impact

Participants assigned a score of 1-3 to each health topic and criterion, with a higher score indicating a greater likelihood for that topic to be prioritized. Numerical scores for the two criteria were then combined and averaged to produce an aggregate score and ranking for each health topic.

FIGURE 2. RANKED ORDER OF HEALTH NEEDS

1. **Mental Health & Mental Disorders** (2.77)
2. **Alcohol & Drug Use** (2.68)
3. **Older Adults** (2.55)
4. **Weight Status, Physical Activity & Nutrition** (2.45)
5. **Diabetes** (2.41)
6. **Women's Health** (2.23)
7. **Domestic Violence & Abuse** (2.05)
8. **Prevention & Safety** (2.05)
9. **Sexually Transmitted Infections** (1.95)
10. **Tobacco Use** (1.91)
11. **Crime & Crime Prevention** (1.86)
12. **Homelessness & Unstable Housing** (1.77)

Prioritization Results

The list of significant health needs in Figure 2 is provided in the rank order that resulted from the prioritization process, alongside the average score assigned to each topic. The needs are listed in order of highest priority to lowest priority. For those topics with identical scores, the health needs are listed in alphabetical order.

Prioritized Areas

The prioritized list of significant health needs was presented to hospital leadership. The hospital's Healthy Communities / Community Benefit Committee reviewed the scoring results of the online prioritization activity in conjunction with the full list of health needs that were identified as significant across all seven hospitals in the CHI Saint Joseph Health system. A decision was made to combine the prioritized health areas of Alcohol & Drug Use and Tobacco Use and move forward with the significant health needs that were trending across all seven hospitals. This process resulted in a final selection of three priority health areas that will be considered for subsequent implementation planning. The three priority health needs are shown in Table 1.

TABLE 1. PRIORITIZED HEALTH NEEDS

Alcohol, Tobacco & Drug Use
Mental Health & Mental Disorders
Weight Status, Physical Activity & Nutrition

Report Adoption, Availability and Comments

This CHNA report was adopted by the CHI Saint Joseph Health Board of Directors in May 2022. The report is widely available to the public on the hospital's website: https://www.chisaintjosephhealth.org/healthycommunities. Paper copies are also available for inspection upon request at Saint Joseph Berea. Written comments on this report can be submitted through the online Assessment Feedback form: https://www.chisaintjosephhealth.org/healthy-community-chna-feedback.

Conclusion

This report describes the process and findings of a comprehensive Community Health Needs Assessment (CHNA) for the community served by Saint Joseph Berea. The prioritization of the identified significant health needs will guide the community health improvement efforts of the hospital. Following this process, Saint Joseph Berea will outline how it plans to address the prioritized health needs.

Introduction & Purpose

Saint Joseph Berea is pleased to present its fiscal year 2023-2025 Community Health Needs Assessment (CHNA).

CHNA Purpose

The purpose of this CHNA report is to identify and prioritize significant health needs of the community served by Saint Joseph Berea (SJB). The priorities identified in this report help to guide the hospital's community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that nonprofit hospitals conduct a community health needs assessment at least once every three years.

This report includes a description of:

- **The community demographics and population served;**
- **The process and methods used to obtain, analyze and synthesize primary and secondary data;**
- **The significant health needs in the community, taking into account the needs of uninsured, low-income, and marginalized groups;**
- **The process and criteria used in identifying certain health needs as significant and prioritizing those significant community needs.**

CHI Saint Joseph Health

CHI Saint Joseph Health is one of the largest and most comprehensive health systems in the Commonwealth of Kentucky. We consist of 100 locations in 20 counties, including hospitals, physician groups, clinics, primary care centers, specialty institutes and home health agencies. In total, the health system serves patients in 35 Kentucky counties.

At CHI Saint Joseph Health, we are dedicated to building healthier communities by elevating patient care. We are guided by our strong mission and faith-based heritage and work through local partnerships to expand access to care in the communities we serve.

CHI Saint Joseph Health is part of CommonSpirit Health, a nonprofit, Catholic health system dedicated to advancing health for all people. It was created in February 2019 through the alignment of Catholic Health Initiatives and Dignity Health. CommonSpirit Health is committed to creating healthier communities, delivering exceptional patient care, and ensuring every person has access to quality health care. With its national office in Chicago and a team of approximately 150,000 employees and 25,000 physicians and advanced practice clinicians, CommonSpirit Health operates 142 hospitals and more than 700 care sites across 21 states.

Saint Joseph Berea

Saint Joseph Berea, a part of CHI Saint Joseph Health, began in 1898 as an eight-bed cottage on the Berea College campus in Berea, Kentucky. Now, Saint Joseph Berea is a 25-bed critical access hospital, providing health care to residents in Madison, Jackson, Rockcastle and Garrard Counties. The hospital is known for providing excellence of care while utilizing advanced medical technology in a friendly, family-like atmosphere. The hospital houses a wide range of services to the community, including CHI Saint Joseph Health – Primary Care, Breast Center, Diabetes and Nutrition Center, cardiovascular services, Senior Renewal Center, Sleep Wellness Center, surgical services and Outpatient Infusion.

Community Benefit Leadership and Team

The Healthy Communities / Community Benefit Committee at CHI Saint Joseph Health plays a vital role in the CHNA process. The committee includes representation from community health, mission services, nursing services, violence prevention, and other hospital leadership. Committee members were invited to participate in several meetings throughout the CHNA process, including multiple presentations of data findings, virtual discussions, and an online prioritization activity. The members participating in this committee, including names, titles, and associated facilities, are provided in Appendix H.

Resources Potentially Available to Address Needs

The availability of health care resources is critical to the health of a county's residents and addressing health needs, including those identified in this assessment. A limited supply of health resources, especially providers, results in poorer health status of the community. Appendix I provides a list and description of potentially available resources to address the health needs of Saint Joseph Berea's community. The Kentucky Cabinet for Health and Family Services updates the list of these resources monthly in their report "Inventory of Health Facilities and Services" at this link: https://chfs.ky.gov/agencies/os/oig/dcn/Pages/inventory.aspx

Acknowledgements

CHI Saint Joseph Health commissioned Conduent Healthy Communities Institute (HCI) to support report development for Saint Joseph Berea's 2023-2025 Community Health Needs Assessment. HCI works with clients across the nation to drive community health outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing performance evaluation processes. Report authors from HCI include Cassandra Miller, MPH, Public Health Consultant; Era Chaudhry, MBA, MPH, Public Health Senior Analyst; and George Nguyen, Research Assistant. To learn more about Conduent Healthy Communities Institute, please visit https://www.conduent.com/community-health/.

Saint Joseph Berea gratefully acknowledges the participation of a dedicated group of external stakeholders that gave generously of their time and expertise to help guide this CHNA report (see Table 2).

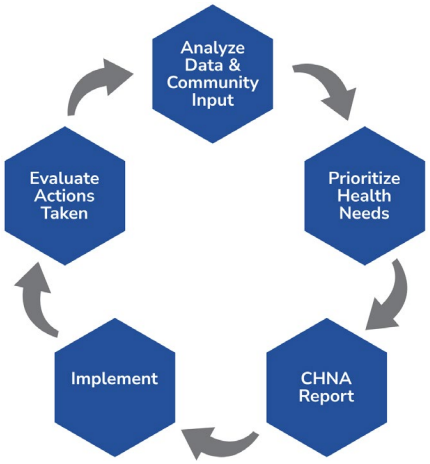
TABLE 2. EXTERNAL STAKEHOLDERS

Berea Home Village
Berea Independent School District
City of Berea
Kentucky River Foothills Development Council, Inc.
Madison County EMS
Madison County Health Department
Signature Healthcare

Look Back: Evaluation of Progress Since Prior CHNA

Saint Joseph Berea completes its CHNA every three years. An important piece of this three-year cycle includes the ongoing review of progress made on priority health topics set forth in the preceding CHNA and Implementation Strategy (Figure 3). By reviewing the actions taken to address priority health issues and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next assessment.

FIGURE 3. THE CHNA CYCLE



Priority Health Needs from Preceding CHNA

Saint Joseph Berea's priority health areas for fiscal year 2020-2022 were:

- Substance Abuse
- Obesity
- Mental Health Support

A detailed impact report outlining the goals, objectives and status of each strategy is provided in Appendix G.

Community Feedback

The 2020-2022 Community Health Needs Assessment and Implementation Strategy were made available to the public via the website https://www.chisaintjosephhealth.org/healthycommunities. Saint Joseph Berea invited written comments on the most recent CHNA and Implementation Strategy on the website where they are widely available to the public: https://www.chisaintjosephhealth.org/healthy-community-chna-feedback. No written comments had been received on the preceding CHNA at the time this report was written.

Defining the Community

Defining the community is a key component of the CHNA process as it determines the scope of the assessment and implementation strategy.

Process for Identifying the Community

For the 2023-2025 Community Health Needs Assessment, the community served by Saint Joseph Berea, also known as the hospital's primary service area (PSA), was defined based on zip codes representing 75% of all inpatient discharges. To identify those zip codes, inpatient discharge data from July 2020 – June 2021 (fiscal year 2021) were obtained and analyzed by the patient's zip code of residence. This process identified four zip codes that define Saint Joseph Berea's Primary Service Area.

Saint Joseph Berea Primary Service Area

The community served by Saint Joseph Berea is located about 40 miles south of Lexington, Kentucky. The geographical boundary of the hospital's primary service area is defined by four zip codes and is primarily based in Madison County, but also extends into neighboring Jackson and Rockcastle counties. The service area is home to an estimated 108,401 residents. The four zip codes that define the Saint Joseph Berea Primary Service Area (PSA) are colored in blue in the map below (Figure 4). The zip codes and corresponding city/county names that comprise the hospital's PSA are listed in Table 3.

FIGURE 4. SAINT JOSEPH BEREA PRIMARY SERVICE AREA

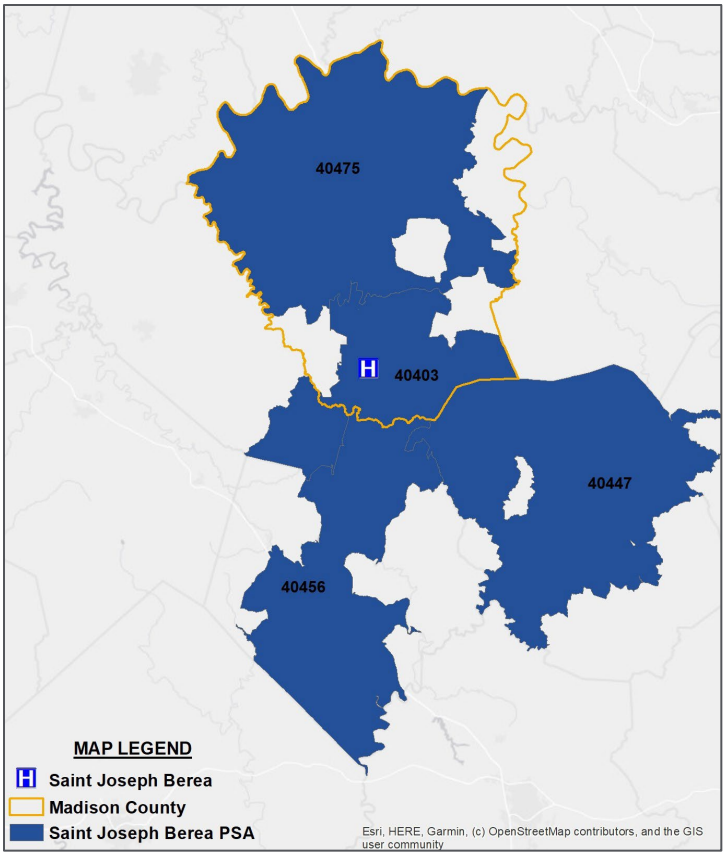


TABLE 3. ZIP CODES COMPRISING SJB PRIMARY SERVICE AREA, BY INPATIENT DISCHARGES

Zip Code	City	County	State	Inpatient Discharges	Percent of Total
40403	Berea	Madison	KY	363	48.4%
40447	Mc Kee	Jackson	KY	124	16.5%
40475	Richmond	Madison	KY	72	9.6%
40456	Mount Vernon	Rockcastle	KY	32	4.3%
Other				159	21.2%
Fiscal Year 2021 Total Discharges				**750**	**100%**

Health Professional Shortage Areas & Medically Underserved Areas

Three medically underserved communities have been designated within the hospital's primary service area by the Health Resources and Services Administration (HRSA), including Jackson County (MUA/P: 1211126189), Madison Service Area (MUA/P: 01268), and Rockcastle County (MUA/P: 01291).

HRSA has also designated Health Help, Inc., Kentucky River Foothills Development Council, Inc., and Madison Family Clinic as health professional shortage areas for primary care, dental health, and mental health discipline professionals.

Geographic Levels of Data

Due to variability in the geographic level in which public health data sets are available, data within this report may be presented at various geographic levels:

- Saint Joseph Berea Primary Service Area (SJB PSA) – an aggregate of the four zip codes defined in Table 3
- Madison County – the county representing the greatest proportion of inpatient discharges at Saint Joseph Berea

Demographic Profile

The demographics of a community significantly impact its health profile. Different racial, ethnic, age and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts. The following section explores the demographic profile of the community served by Saint Joseph Berea.

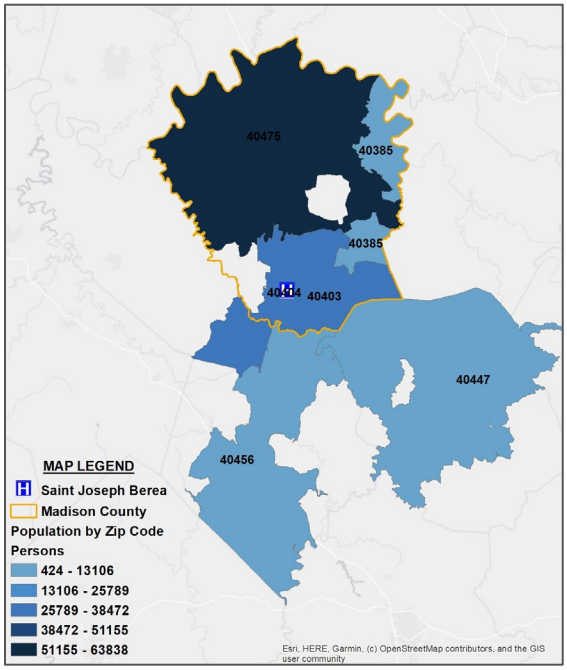
Geography and Data Sources

Data are presented in this section at the geographic level of the hospital's primary service area, an aggregate of the four zip codes defined earlier in this report (see Saint Joseph Berea Primary Service Area, Table 3). Comparisons to the county, state, and national value are also provided when available. All demographic estimates are sourced from Claritas Pop-Facts® (2021 population estimates) and American Community Survey one-year (2019) or five-year (2015-2019) estimates unless otherwise indicated.

Population

According to the 2021 Claritas Pop-Facts® population estimates, Saint Joseph Berea's Primary Service Area has an estimated population of 108,401 persons. Figure 5 shows the population size by each zip code, with the darkest blue representing the zip codes with the largest population. Table 4 provides the actual population estimates for each zip code. The most populated zip code area within the hospital's primary service area is zip code 40475 (Richmond) with a population of 63,838 (Table 4). The second most populated area is zip code 40403 (Berea), with a population of 27,651 (Table 4). This zip code also represents the greatest portion of inpatient discharges, at 48.4% (see Saint Joseph Berea Primary Service Area, Table 3). All 5 zip codes in the hospital's primary service area have been designated rural, according to the Federal Office of Rural Health Policy. This designation is important for government functions related to policymaking, regulation, and program administration.[1]

FIGURE 5. POPULATION BY ZIP CODE*



*Map shows all zip codes in the hospital's primary service area and Madison County

TABLE 4. POPULATION BY ZIP CODE

Zip Code	City	Population
40475	Richmond	63,838
40403	Berea	27,651
40456	Mount Vernon	9,431
40447	Mc Kee	7,481

[1] Rural Health Information Hub https://www.ruralhealthinfo.org/

Age

Figure 6 shows the population of the hospital's primary service area by age group.

When compared to Kentucky and the U.S., the hospital's primary service area has a slightly lower proportion of residents aged 0-17 and a slightly higher proportion of residents aged 18-64. (Figure 7).

FIGURE 6. POPULATION BY AGE, SJB PRIMARY SERVICE AREA

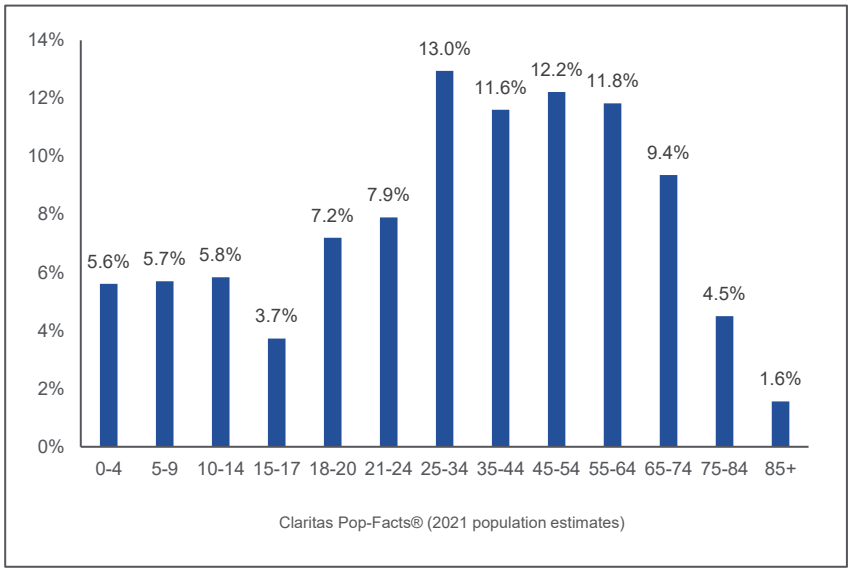
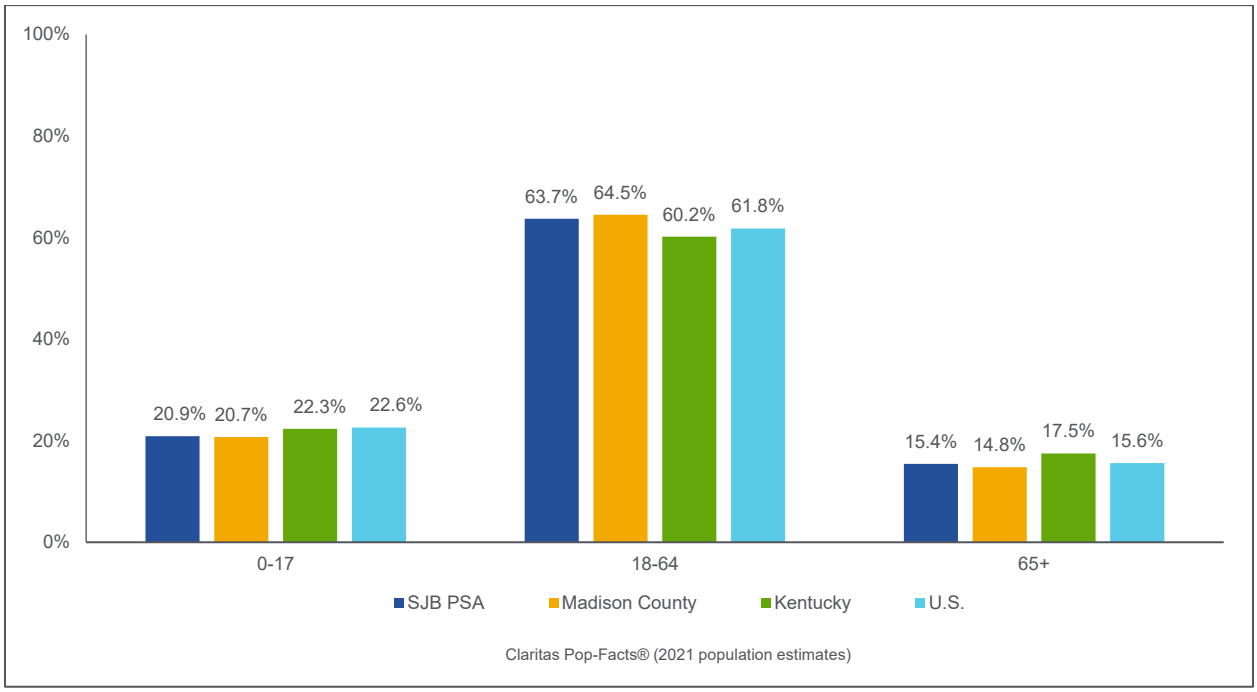


FIGURE 7. POPULATION BY AGE: COUNTY, STATE AND U.S. COMPARISONS



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Saint Joseph Berea

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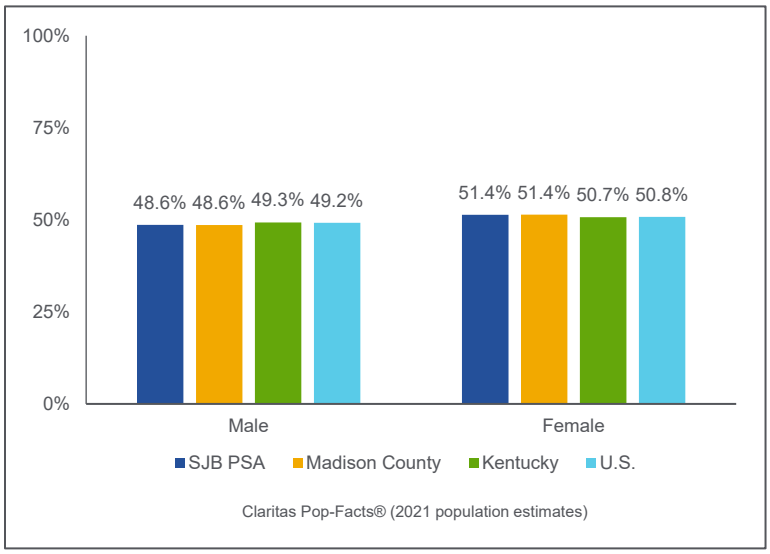
FIGURE 8. POPULATION BY SEX: COUNTY, STATE AND U.S. COMPARISONS



Sex

Figure 8 shows the population of the hospital's primary service area by sex. Males comprise 48.6% of the population, whereas females comprise 51.4% of the population in the SJB PSA.

Race and Ethnicity

The racial and ethnic composition of a population is important in planning for future community needs, particularly for schools, businesses, community centers, health care, and childcare. Analysis of health and social determinants of health data by race/ethnicity can also help identify disparities in housing, employment, income, and poverty.

The racial makeup of the hospital's primary service area shows 91.6% of the population identifying as White, as indicated in Figure 9. The proportion of Black/African American community members is the second largest of all races in the SJB PSA at 3.9% and is the only other race that makes up more than 3% of the population.

FIGURE 9. POPULATION BY RACE, SJB PRIMARY SERVICE AREA

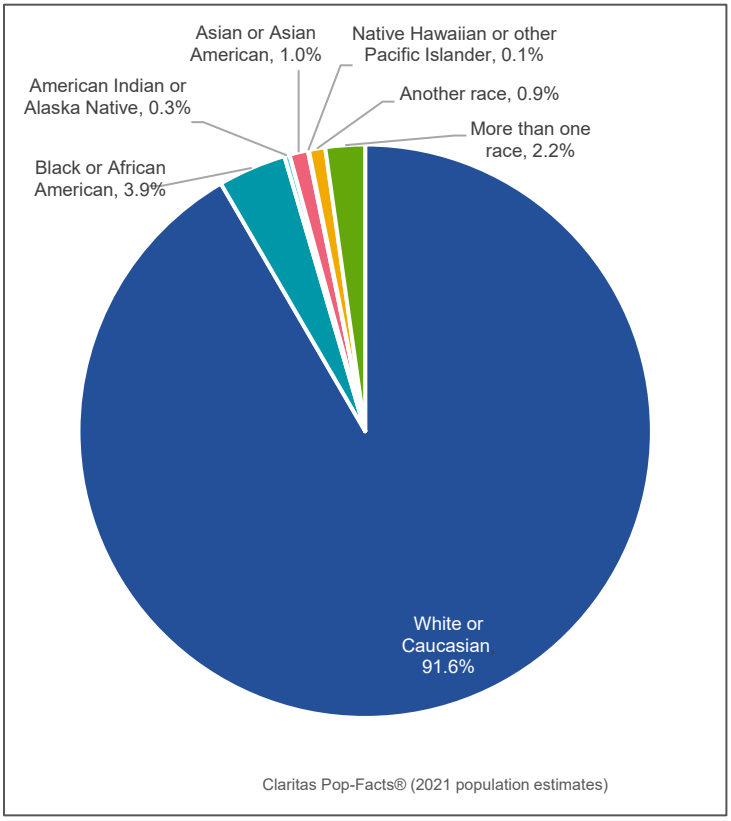


FIGURE 10. POPULATION BY RACE: COUNTY, STATE AND U.S. COMPARISONS

White community members represent a higher proportion of the population in the SJB PSA when compared to Kentucky and the U.S., while Black/African American community members represent a lower proportion of the population when compared to Kentucky and the U.S. (Figure 10).

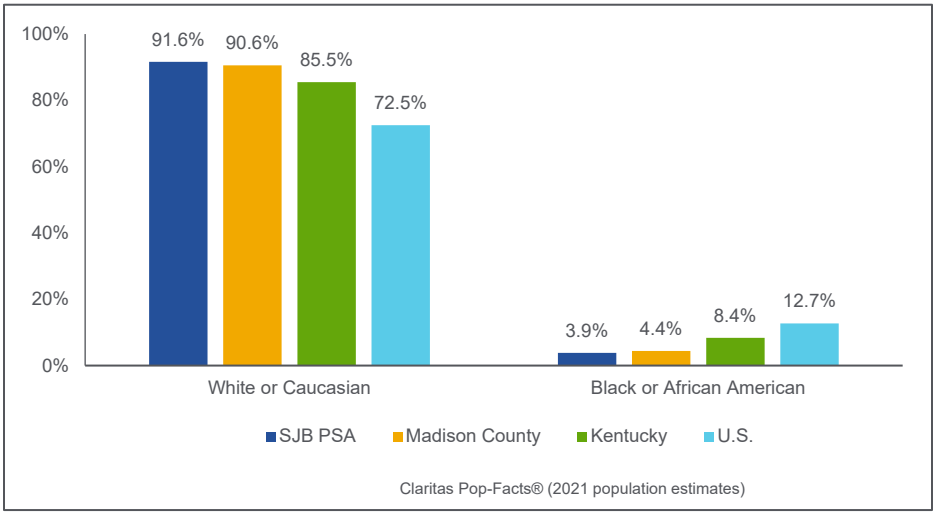
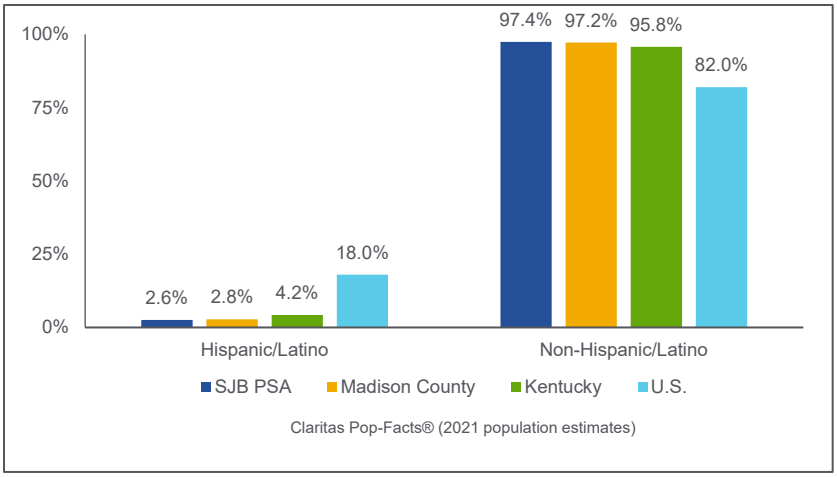


FIGURE 11. POPULATION BY ETHNICITY: COUNTY, STATE AND U.S. COMPARISONS



As shown in Figure 11, 2.6% of the population in the SJB PSA identify as Hispanic/Latino. This is a smaller proportion of the population when compared to Kentucky and the U.S.

Language and Immigration

Understanding countries of origin and language spoken at home can help inform the cultural and linguistic context for the health and public health system. According to the American Community Survey, 2.9% of residents in Madison County are born outside the U.S., which is lower than the state value of 3.9% and the national value of 13.6%.[2]

In the hospital's primary service area, 94.0% of the population age five and older speak only English at home, which is higher than both the state value of 91.9% and the national value of 78.4% (Figure 12). This data indicates that 6.0% of the population in the hospital's primary service area speak a language other than English at home.

FIGURE 12. POPULATION 5+ BY LANGUAGE SPOKEN AT HOME: COUNTY, STATE AND U.S. COMPARISONS

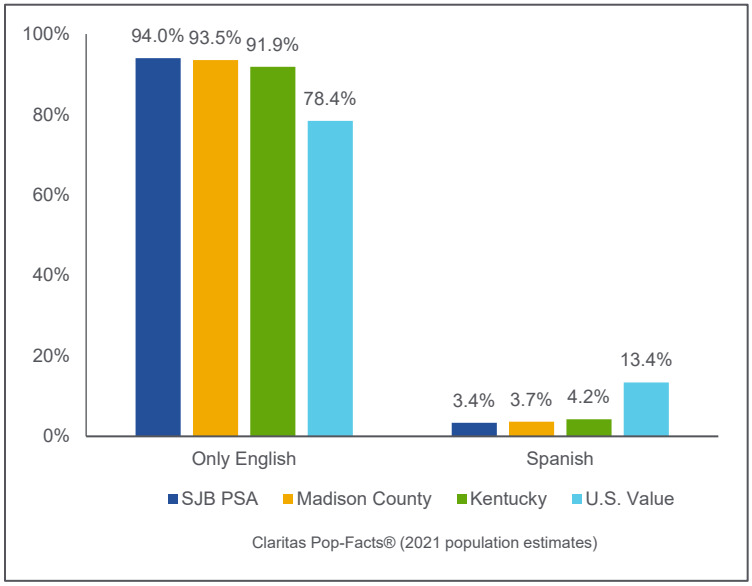
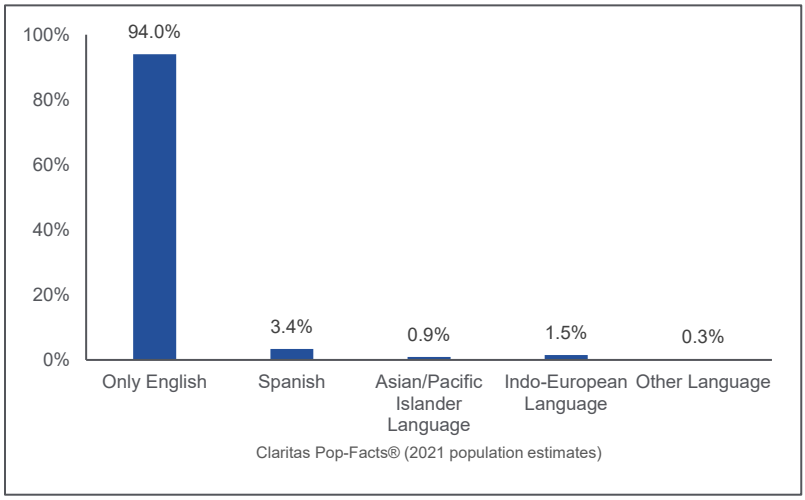


FIGURE 13. POPULATION AGE 5+ BY LANGUAGE SPOKEN AT HOME, SJB PRIMARY SERVICE AREA



The most common languages spoken at home are English (94.0%), Spanish (3.4%), and Indo-European languages (1.5%). (Figure 13).

[2] American Community Survey, 2015-2019

Social & Economic Determinants of Health

This section explores the economic, environmental, and social determinants of health impacting the community served by Saint Joseph Berea. Social determinants are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.

Geography and Data Sources

Data in this section are presented at various geographic levels (zip code, primary service area, and/or county) depending on data availability. When available, comparisons to county, state and/or national values are provided. It should be noted that hospital service area or county level data can sometimes mask what could be going on at the zip code level in many communities. While indicators may be strong when examined at a higher level, zip code level analysis can reveal disparities.

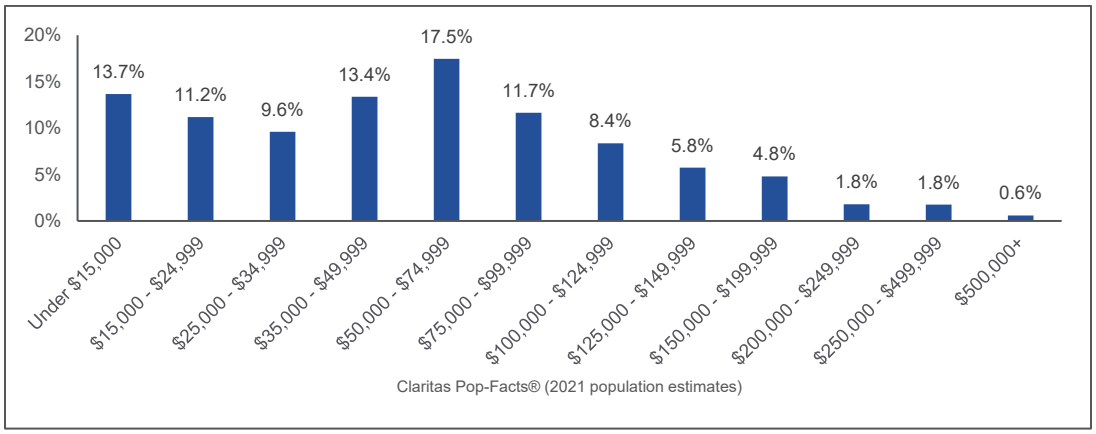
All demographic estimates are sourced from Claritas Pop-Facts® (2021 population estimates) and American Community Survey one-year (2019) or five-year (2015-2019) estimates unless otherwise indicated.

Income

Income has been shown to be strongly associated with morbidity and mortality, influencing health through various clinical, behavioral, social, and environmental factors. Those with greater wealth are more likely to have higher life expectancy and reduced risk of a range of health conditions including heart disease, diabetes, obesity, and stroke. Poor health can also contribute to reduced income by limiting one's ability to work.[3]

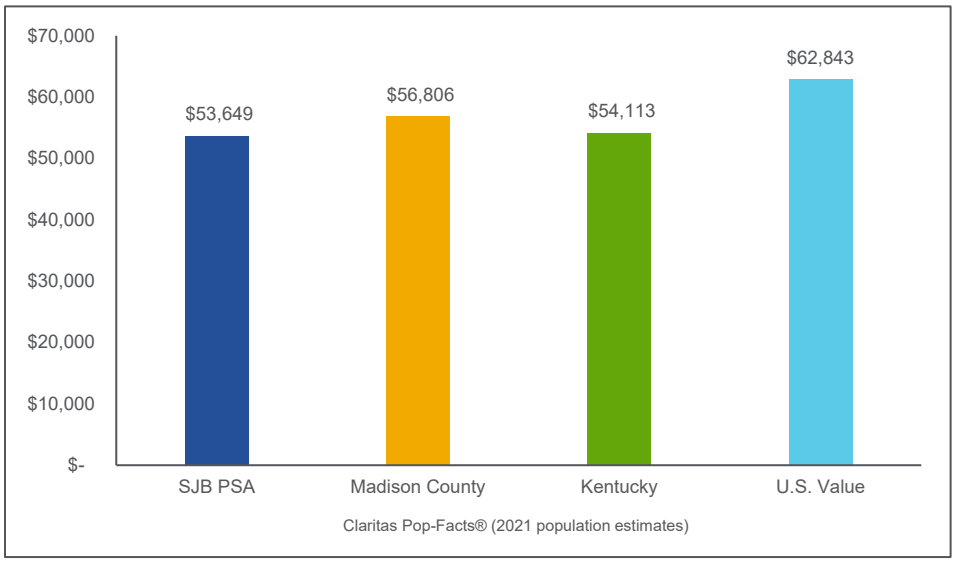
Figure 14 provides a breakdown of households by income in the hospital's primary service area. A household income of $50,000 - $74,999 is shared by the largest proportion of households in the SJB PSA (17.5%). Households with an income of less than $15,000 make up 13.7% of households in the SJB PSA.

FIGURE 14. HOUSEHOLDS BY INCOME, SJB PRIMARY SERVICE AREA



[3] Robert Wood Johnson Foundation. Health, Income, and Poverty. https://www.rwjf.org/en/library/research/2018/10/health--income-and-poverty-where-we-are-and-what-could-help.html

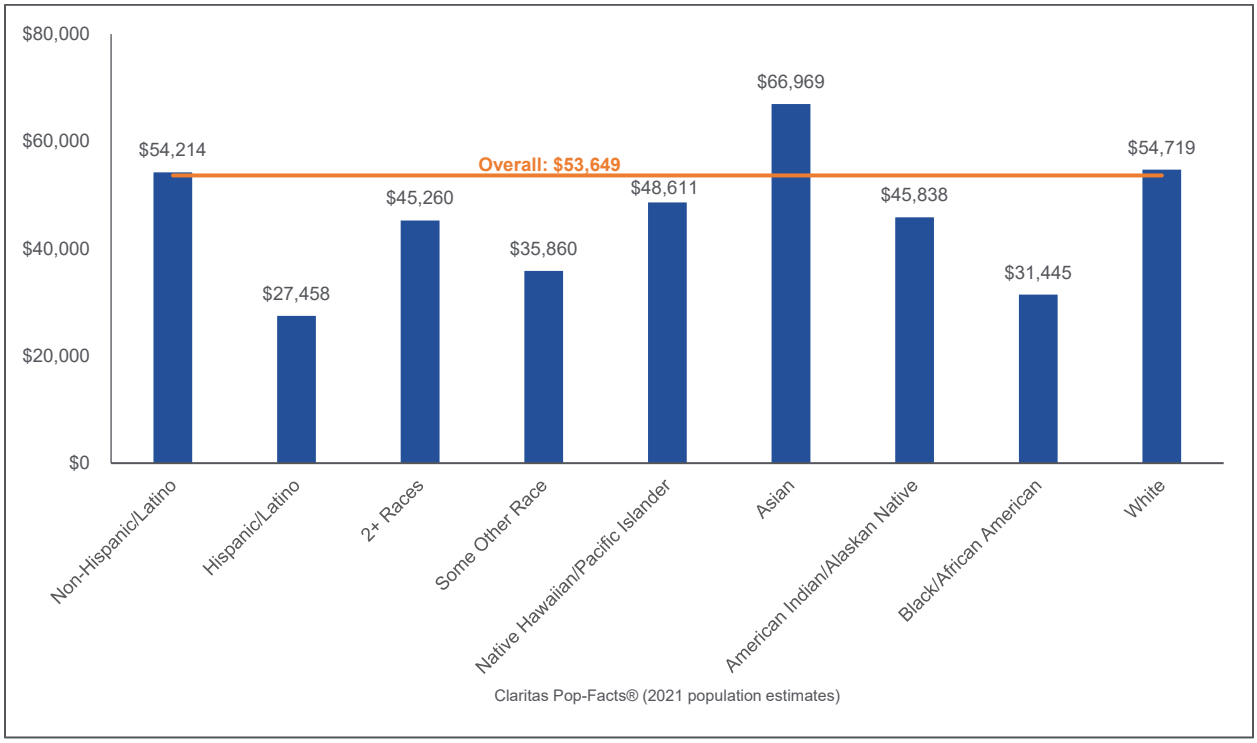
FIGURE 15. MEDIAN HOUSEHOLD INCOME: COUNTY, STATE AND U.S. COMPARISONS



The median household income for the SJB PSA is $53,649, which is lower than both the state value of $54,113 and national value of $62,843 (Figure 15).

Figure 16 shows the median household income by race and ethnicity. Three racial/ethnic groups – White, Asian, and Non-Hispanic/Latino – have median household incomes above the overall median value. All other races have incomes below the overall value, with the Hispanic/Latino and Black/African American populations having the lowest median household incomes at $27,458 and $31,445, respectively.

FIGURE 16. MEDIAN HOUSEHOLD INCOME BY RACE/ETHNICITY, SJB PRIMARY SERVICE AREA



CHI Saint Joseph Health
Saint Joseph Berea

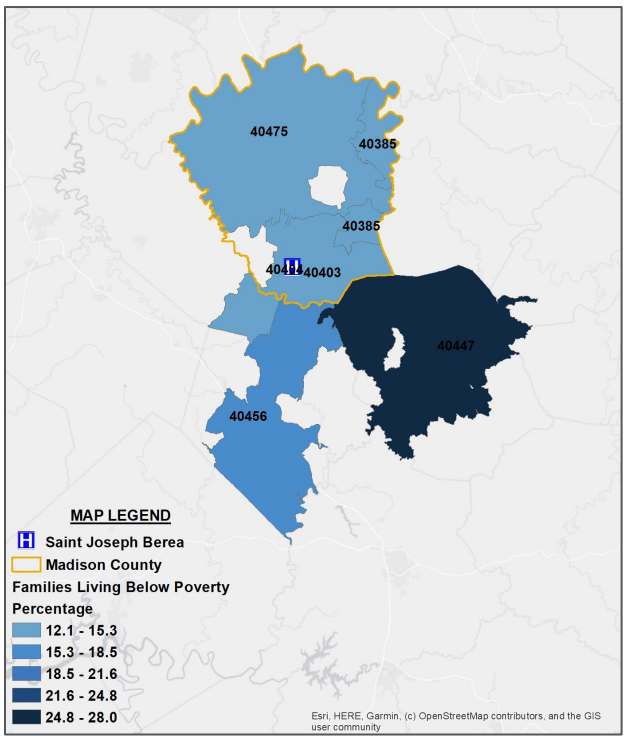
CONDUENT

Poverty

Federal poverty thresholds are set every year by the Census Bureau and vary by size of family and ages of family members. People living in poverty are less likely to have access to health care, healthy food, stable housing, and opportunities for physical activity. These disparities mean people living in poverty are more likely to experience poorer health outcomes and premature death from preventable diseases.[4]

Figure 17 shows the percentage of families living below the poverty level by zip code. The darker blue colors represent a higher percentage of families living below the poverty level, with zip codes 40447 (Mc Kee) and 40456 (Mount Vernon) having the highest percentages at 26.5% and 18.2%, respectively. Overall, 14.3% of families in the SJB PSA live below the poverty level, which is higher than both the state value of 12.9% and the national value of 9.5%. The percentage of families living below poverty for each zip code in the SJB PSA is provided in Table 5.

FIGURE 17. FAMILIES LIVING BELOW POVERTY LEVEL BY ZIP CODE*



*Map shows all zip codes in the hospital's primary service area and Madison County

TABLE 5. FAMILIES LIVING BELOW POVERTY LEVEL BY ZIP CODE

Zip Code	City	Families Below Poverty Level (%)
40447	Mc Kee	26.5%
40456	Mount Vernon	18.2%
40403	Berea	13.2%
40475	Richmond	12.4%
--	**SJB PSA**	**14.3%**
--	**Madison County**	**12.4%**
--	**Kentucky**	**12.9%**
--	**U.S.**	**9.5%**

[4] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability/reduce-proportion-people-living-poverty-sdoh-01

Employment

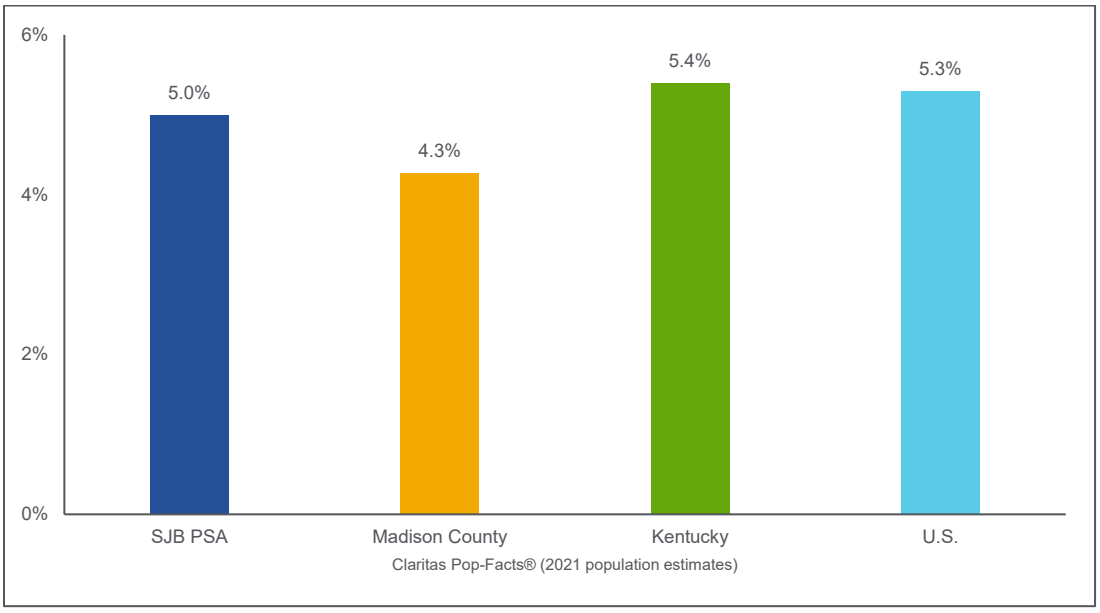
A community's employment rate is a key indicator of the local economy. An individual's type and level of employment impacts access to health care, work environment, health behaviors and health outcomes. Stable employment can help provide benefits and conditions for maintaining good health. In contrast, poor or unstable work and working conditions are linked to poor physical and mental health outcomes. [5]

Unemployment and underemployment can limit access to health insurance coverage and preventive care services. Underemployment is described as involuntary part-time employment, poverty-wage employment, and insecure employment.[5]

Type of employment and working conditions can also have significant impacts on health. Work-related stress, injury, and exposure to harmful chemicals are examples of ways employment can lead to poorer health.[5]

Figure 18 shows the population aged 16 and over who are unemployed. The unemployment rate for the hospital's primary service area is 5.0%, which is lower than both the state value of 5.4% and the national value of 5.3%.

FIGURE 18. POPULATION 16+ UNEMPLOYED



[5] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/employment

Education

Education is an important indicator for health and wellbeing across the lifespan. Education can lead to improved health by increasing health knowledge, providing better job opportunities and higher income, and improving social and psychological factors linked to health. People with higher levels of education are likely to live longer, to experience better health outcomes, and practice health-promoting behaviors.[6]

Figure 19 shows the percentage of the population 25 years or older by educational attainment.

FIGURE 19. POPULATION 25+ BY EDUCATIONAL ATTAINMENT, SJB PRIMARY SERVICE AREA

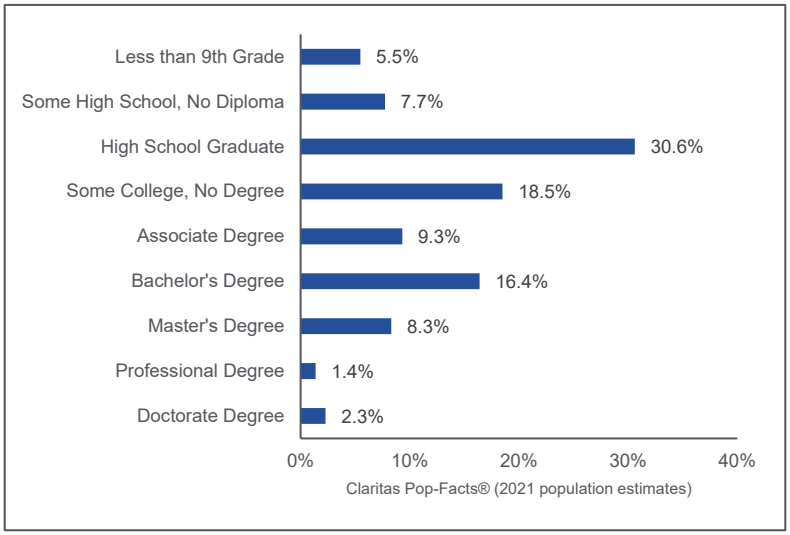
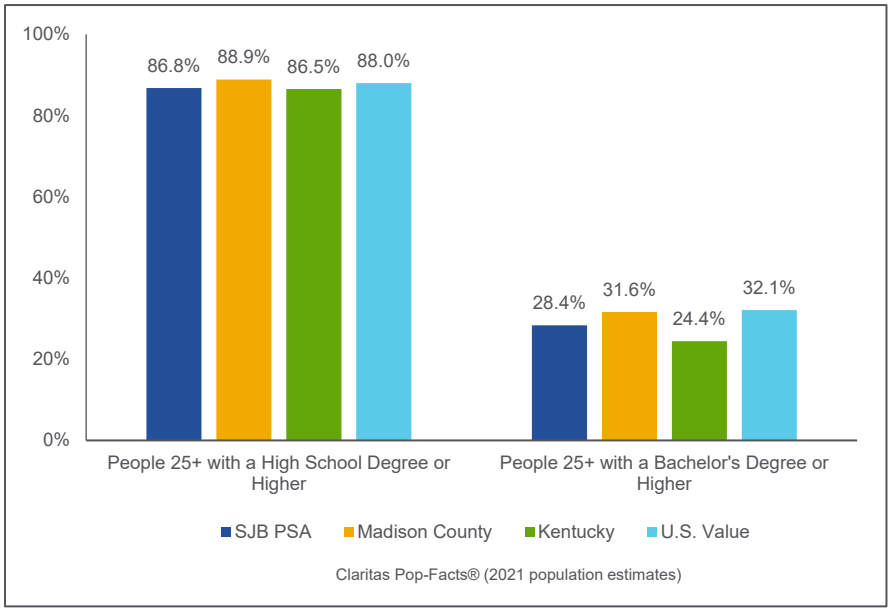


FIGURE 20. POPULATION 25+ BY EDUCATIONAL ATTAINMENT: COUNTY, STATE AND U.S. COMPARISONS



Another indicator related to education is on-time high school graduation. A high school diploma is a requirement for many employment opportunities and for higher education. Not graduating high school is linked to a variety of negative health impacts, including limited employment prospects, low wages, and poverty.[7]

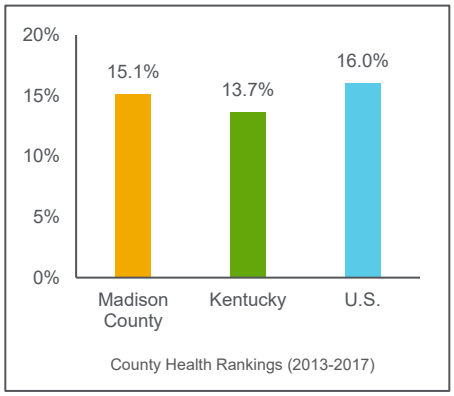
Figure 20 shows that the hospital's primary service area has a higher percentage of residents with a high school degree and bachelor's degree when compared to the state; however, the SJB PSA has a lower percentage of residents with a high school degree and bachelor's degree when compared to the nation.

[6] Robert Wood Johnson Foundation, Education and Health. https://www.rwjf.org/en/library/research/2011/05/education-matters-for-health.html

[7] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/high-school-graduation

Housing

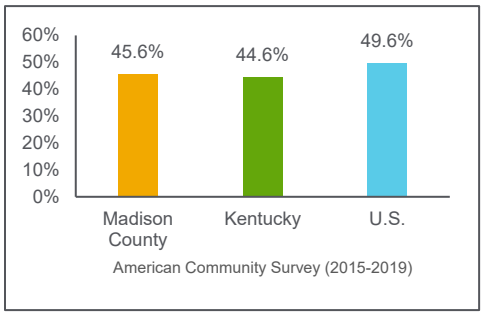
FIGURE 21. HOUSEHOLDS WITH SEVERE HOUSING PROBLEMS



Safe, stable, and affordable housing provides a critical foundation for health and wellbeing. Exposure to health hazards and toxins in the home can cause significant damage to an individual or family's health.[8]

Figure 21 shows the percentage of houses with severe housing problems. This indicator measures the percentage of households with at least one of the following problems: overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities. In Madison County, 15.1% of households were found to have at least one of those problems, which is lower than the national value (16.0%), but higher than the state value (13.7%).

FIGURE 22. RENTERS SPENDING 30% OR MORE OF HOUSEHOLD INCOME ON RENT

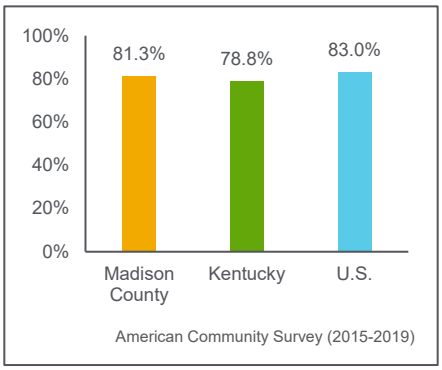


When families must spend a large portion of their income on housing, they may not have enough money to pay for things like healthy foods or health care. This is linked to increased stress, mental health problems, and an increased risk of disease.[9]

Figure 22 shows the percentage of renters who are spending 30% or more of their household income on rent. The value in Madison County, 45.6%, is lower than the national value (49.6%), but higher than the state value (44.6%).

Neighborhood and Built Environment

FIGURE 23. HOUSEHOLDS WITH AN INTERNET SUBSCRIPTION



Access to the internet is an important indicator for health and wellbeing. Internet access is essential for basic health care access, including making appointments with providers, getting test results, and accessing medical records. Access to the internet is also increasingly essential for obtaining home-based telemedicine services.[10]

Internet access may also help individuals seek employment opportunities, conduct remote work, and participate in online educational activities.[10]

Figure 23 shows the percentage of households that have an internet subscription. The rate in Madison County, 81.3%, is higher than the state value (78.8%), but lower than the national value (83.0%).

[8] County Health Rankings, Housing and Transit. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-and-transit

[9] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/browse-objectives/housing-and-homes/reduce-proportion-families-spend-more-30-percent-income-housing-sdoh-04

[10] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/browse-objectives/neighborhood-and-built-environment/increase-proportion-adults-broadband-internet-hchit-05

Disparities and Health Equity

Identifying disparities by population groups and geography helps to inform and focus priorities and strategies. Understanding disparities also helps us better understand root causes that impact health in a community and inform action towards health equity.

Health Equity

Health equity focuses on the fair distribution of health determinants, outcomes, and resources across communities.[11] National trends have shown that systemic racism, poverty, and gender discrimination have led to poorer health outcomes for groups such as Black/African American persons, Hispanic/Latino persons, indigenous communities, people with incomes below the federal poverty level, and LGBTQ+ communities.

Race, Ethnicity, Age & Gender Disparities

Primary and secondary data revealed significant community health disparities by race, ethnicity, gender, and age. It is important to note that while much of the data is presented to show differences and disparities of data by population groups, differences within each population group can be as great as differences between different groups. For instance, Asian or Asian and Pacific Islander persons encompasses individuals from over 40 different countries with very different languages, cultures, and histories in the U.S. Information and themes captured through key informant interviews, a focus group discussion, and an online community survey have been shared to provide a more comprehensive and nuanced understanding of each community's experiences.

Secondary Data

Community health disparities were assessed in the secondary data using the Index of Disparity[12] analysis, which identifies disparities based on how far each subgroup (by race, ethnicity or gender) is from the overall county value. For more detailed methodology related to the Index of Disparity, see Appendix B.

Table 6 below identifies secondary data indicators with a statistically significant race, ethnicity, or gender disparity for Madison County, based on the Index of Disparity.

[11] Klein R, Huang D. Defining and measuring disparities, inequities, and inequalities in the Healthy People initiative. National Center for Health Statistics. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/ppt/nchs2010/41_klein.pdf

[12] Pearcy, J. & Keppel, K. (2002). A Summary Measure of Health Disparity. Public Health Reports, 117, 273-280.

TABLE 6. INDICATORS WITH SIGNIFICANT RACE, ETHNICITY OR GENDER DISPARITIES

Health Indicator	Group Negatively Impacted
Age-Adjusted Death Rate due to Alzheimer's Disease	Female
Age-Adjusted Death Rate due to Cancer	Male
Age-Adjusted Death Rate due to Coronary Heart Disease	Male
Age-Adjusted Death Rate due to Lung Cancer	Male
Age-Adjusted Death Rate due to Unintentional Injuries	Male
Children Living Below Poverty Level	Black/African American, Hispanic/Latino
Oral Cavity and Pharynx Cancer Incidence Rate	Male
People 65+ Living Below Poverty Level	Black/African American, American Indian/Alaska Native
Workers Commuting by Public Transportation	Black/African American, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multiple Races, Other Race, Hispanic/Latino
Workers who Walk to Work	White, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Other Race

The Index of Disparity analysis for Madison County reveals that the male population is disproportionately impacted for several chronic diseases, including coronary heart disease, lung cancer and oral cancer. Further, the male population is disproportionately impacted for death rates due to unintentional injuries, while the female population is disproportionately impacted for Alzheimer's disease.

The Black/African American, Hispanic/Latino and American Indian/Alaska Native populations are disproportionately impacted across various measures of poverty, which is often associated with poorer health outcomes. These indicators include Children Living Below Poverty Level and People 65+ Living Below Poverty Level. Finally, multiple racial and ethnic groups are disproportionately impacted across various measures of transportation (Table 6).

Primary Data

Key informants and focus group participants mentioned that people with lower incomes and financial challenges tend to struggle the most. Several key informants pointed to a growing homeless population, fueled by mental health issues and drug use. One key informant mentioned that the Black/African American and Hispanic/Latino populations are disproportionately impacted when it comes to diet, obesity, and diabetes, but added that the county is primarily white. Additionally, key informants emphasized that older adults experience more barriers to accessing health care and services when compared to younger populations. Primary concerns affecting the older adult population include high rates of chronic disease and financial instability. Those with lower educational attainment were also cited as struggling more than others when it comes to accessing services. Many of these challenges are documented further in Barriers to Care.

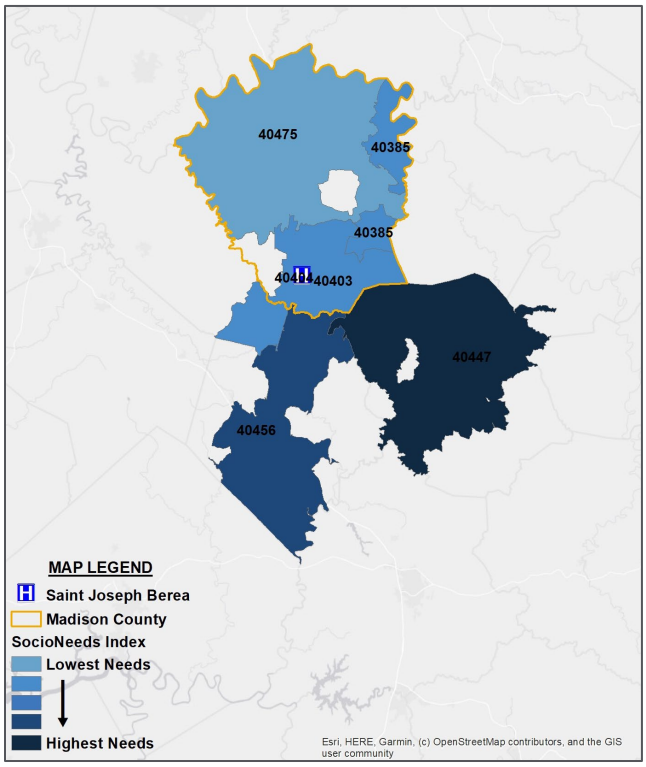
Geographic Disparities

In addition to disparities by race, ethnicity, gender, and age, this assessment also identified specific zip codes/municipalities with differences in outcomes related to health and social determinants of health. Geographic disparities were identified using the SocioNeeds Index and Food Insecurity Index. These indices have been developed by Conduent Healthy Communities Institute to easily identify areas of high socioeconomic need or food insecurity. Conduent's SocioNeeds Index estimates areas of highest socioeconomic need correlated with poor health outcomes. Conduent's Food Insecurity Index estimates areas of low food accessibility correlated with social and economic hardship. For both indices, counties, zip codes, and census tracts with a population over 300 are assigned index values ranging from 0 to 100, with higher values indicating greater need. Understanding where there are communities with higher need is critical to targeting prevention and outreach activities.

SocioNeeds Index

Conduent's SocioNeeds Index (SNI) estimates areas of high socioeconomic need, which are correlated with poor health outcomes. Zip codes are ranked based on their index value to identify relative levels of need, as illustrated by the map in Figure 24. The following zip codes in the SJB PSA had the highest level of socioeconomic need (as indicated by the darkest shades of blue): 40447 (Mc Kee) and 40456 (Mount Vernon) with index values of 97.2 and 86.0, respectively. Table 7 provides the index values for each zip code.

FIGURE 24. SOCIONEEDS INDEX*



*Map shows all zip codes in the hospital's primary service area and Madison County

TABLE 7. SOCIONEEDS INDEX VALUES BY ZIP CODE

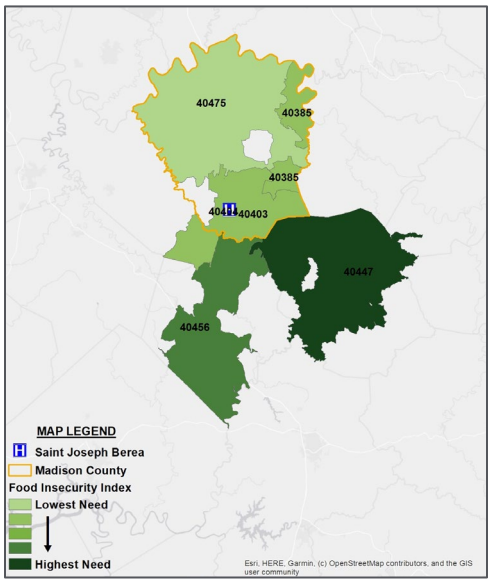
Zip Code	City	Index Value
40447	Mc Kee	97.2
40456	Mount Vernon	86.0
40403	Berea	65.5
40475	Richmond	54.7
--	**Madison County**	**45.2***

*County index values are calculated separately from zip code index values, and the two should not be compared to each other. While index values range from 0-100 at both the county and zip code level, zip code index values represent the percentile of each zip code among all U.S. zip codes, while county index values represent the percentile of each county among all U.S. counties.

Food Insecurity Index

Conduent's Food Insecurity Index estimates areas of low food accessibility correlated with social and economic hardship. Zip codes are ranked based on their index value to identify relative levels of need, as illustrated by the map in Figure 25. The following zip codes had the highest level of food insecurity (as indicated by the darkest shades of green): 40447 (Mc Kee) and 40456 (Mount Vernon) with index values of 94.2 and 84.8, respectively. Table 8 provides the index values for each zip code.

FIGURE 25. FOOD INSECURITY INDEX



*Map shows all zip codes in the hospital's primary service area and Madison County

TABLE 8. FOOD INSECURITY INDEX VALUES BY ZIP CODE

Zip Code	City	Index Value
40447	Mc Kee	94.2
40456	Mount Vernon	84.8
40403	Berea	76.1
40475	Richmond	65.3
--	**Madison County**	**59.2***

*County index values are calculated separately from zip code index values, and the two should not be compared to each other. While index values range from 0-100 at both the county and zip code level, zip code index values represent the percentile of each zip code among all U.S. zip codes, while county index values represent the percentile of each county among all U.S. counties.

Primary Data

Rural communities, including the outskirts of city limits, were mentioned frequently by key informants as geographic areas of greater need. Key informants noted a higher concentration of poverty, lack of transportation, and less access to resources as ongoing concerns for residents in these areas, particularly those areas close to the neighboring counties of Jackson and Estill. Another key informant added that certain health issues, like heart attacks and strokes, seem to be more prevalent in the rural areas, while drug overdoses are distributed more evenly throughout the county. Some of the most distressed census tracts, according to one key informant, are located in the city of Richmond. Within the city limits of Berea, Haiti Road was identified as an area with greater concentrations of people experiencing homelessness and increased drug use, while Glades Road was cited as an area with a higher concentration of poverty, especially among older adults.

Future Considerations

While disparities in health outcomes by race, ethnicity, gender, age, and geography are critical components in assessing the needs of a community, it is equally important to understand the social determinants of health and other upstream factors that influence a community's health. The challenges and barriers faced by a community must be balanced by identifying practical, community-driven

solutions. Together, these factors come together to inform and focus strategies to positively impact a community's health and mitigate the disparities faced along gender, racial, ethnic, or geographic lines in the community served by Saint Joseph Berea.

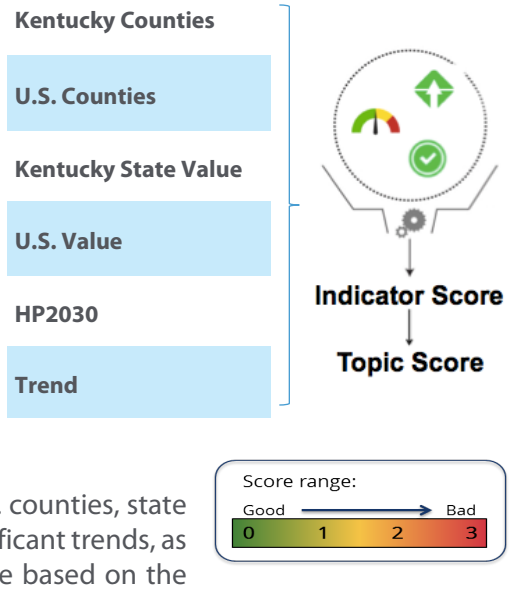
Primary and Secondary Data Methodology and Key Findings

Overview

Multiple types of data were collected and analyzed to inform this Community Health Needs Assessment. Primary data consisted of key informant interviews, a focus group discussion and a community survey, while secondary data included indicators spanning health outcomes, health behaviors and social determinants of health. The methods used to analyze each type of data are outlined below. The findings from each data source were then synthesized and organized by health topic to present a comprehensive overview of the health needs in Madison County.

Secondary Data Sources & Analysis

FIGURE 26. SECONDARY DATA SCORING



Secondary data used for this assessment were collected and analyzed from a community indicator database developed by Conduent Healthy Communities Institute (HCI). The database, maintained by researchers and analysts at HCI, includes over 150 community indicators, spanning at least 24 topics in the areas of health, determinants of health, and quality of life. The data are primarily derived from state and national public secondary data sources. The value for each of these indicators is compared to other communities, national targets, and to previous time periods.

HCI's Data Scoring Tool systematically summarizes multiple comparisons and ranks indicators based on highest need. For each indicator, the Madison County value was compared to a distribution of Kentucky and U.S. counties, state and national values, Healthy People 2030 targets, and significant trends, as shown in Figure 26. Each indicator was then given a score based on the available comparisons. These scores range from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected from other communities, and changes in methodology over time. These indicators were grouped into topic areas for a higher-level ranking of community health needs.

Due to the limited availability of zip code, census tract, or other sub-county health data, the data scoring technique is only available at the county level. The data scoring results for Saint Joseph Berea are therefore presented in the context of Madison County.

Table 9 shows the health and quality of life topic scoring results for Madison County, with Prevention & Safety as the poorest performing topic area with a score of 2.39, followed by Mental Health & Mental Disorders with a score of 1.99. Topics that received a score of 1.50 or higher were considered a significant health need. Eleven topics scored at or above the threshold. Topic areas with fewer than three indicators were considered a data gap.

Table 9 shows only those topic areas that met the threshold of 1.50 to be considered a significant health need. Please see Appendix A for the full list of health and quality of life topics, including the list of national and state indicators that are categorized into and included in the secondary data analysis for each topic area. Further details on the quantitative data scoring methodology are also available in Appendix A.

TABLE 9. TOPIC SCORING RESULTS

Topic Area	Score
Prevention & Safety	2.39
Mental Health & Mental Disorders	1.99
Sexually Transmitted Infections	1.84
Alcohol & Drug Use	1.83
Women's Health	1.76
Mortality Data	1.63
Weight Status, Physical Activity & Nutrition	1.62
Wellness & Lifestyle	1.62
Older Adults	1.59
Environmental Health	1.57
Other Conditions	1.53

Primary Data Collection & Analysis

To ensure the perspectives of community members were considered, input was collected from residents of the community served by Saint Joseph Berea. Primary data used in this assessment consisted of key informant interviews, a focus group discussion, and an online community survey. These findings expanded upon information gathered from the secondary data analysis to inform this Community Health Needs Assessment.

Community Survey

Saint Joseph Berea gathered community input from an online survey to inform its Community Health Needs Assessment. The survey was promoted across the five primary counties served by the seven CHI Saint Joseph Health hospital facilities: Fayette, Laurel, Madison, Montgomery, and Nelson counties in Kentucky. Responses were collected from September 2, 2021, to October 20, 2021. Both an English and Spanish version of the survey were made available. A paper survey was also developed, but its distribution was limited due to health concerns and the challenge of many distribution sites operating at limited capacity during the COVID-19 pandemic. The survey consisted of 47 questions related to top health needs in the community, individuals' perception of their overall health, individuals' access to health care services, as well as social and economic determinants of health. The list of survey questions is available in Appendix E.

Survey marketing and outreach efforts included email invitations, social media and other marketing efforts through CHI Saint Joseph Health and its partner organizations. A total of 870 responses were collected for the entire survey target area, which included all seven hospital facilities spanning Fayette, Laurel, Madison, Montgomery and Nelson counties in Kentucky. Out of those survey responses, 105 (12.1%) were from community members residing in Madison County. For purposes of this CHNA, the survey data that follows is based on an analysis of responses from community members residing in Madison County.

Demographic Profile of Survey Respondents

Madison County survey respondents were more likely to be educated, have a higher income, identify as female, identify as White, identify as Non-Hispanic/Latino, and skew older when compared to the actual population estimates reflected in the demographic data for Madison County. See Appendix C for additional details on the demographic profile of survey respondents.

Community Survey Analysis Results

Survey participants were asked about the most important health issues and which quality of life issues they would most like to see addressed in the community. The top responses for these questions are shown in Figures 27 and 28 below.

FIGURE 27. MOST IMPORTANT COMMUNITY HEALTH ISSUES AMONG SURVEY RESPONDENTS

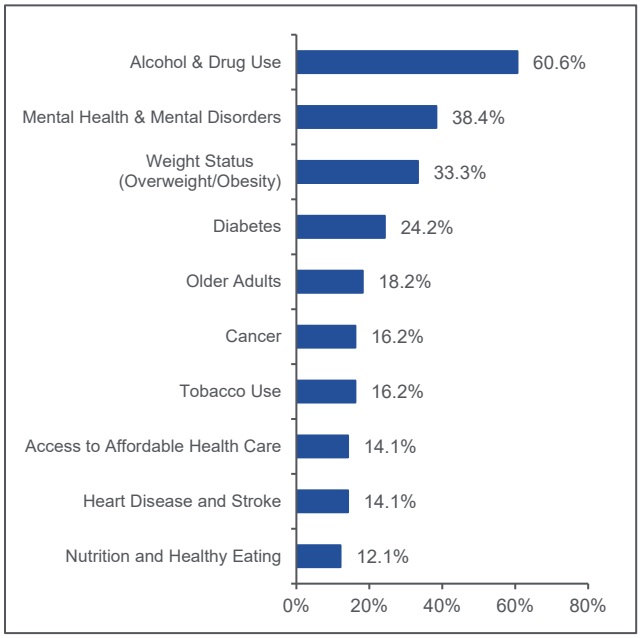
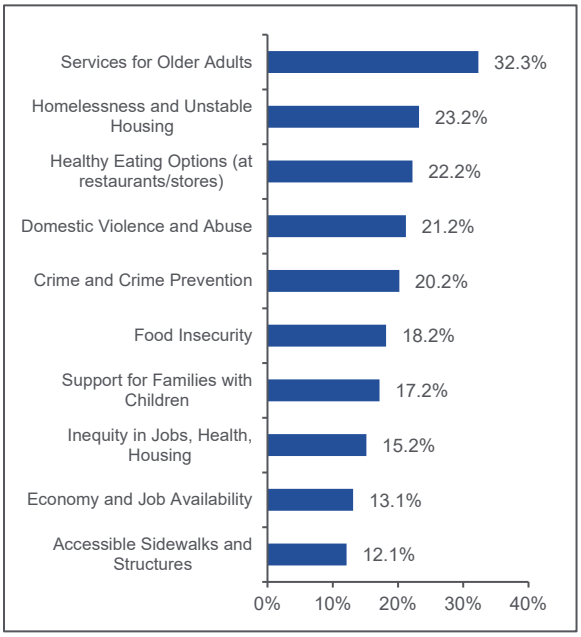


FIGURE 28. MOST IMPORTANT QUALITY OF LIFE ISSUES AMONG SURVEY RESPONDENTS



As shown in Figure 27, the most important community health issues identified by survey respondents were Alcohol & Drug Use (60.6% of respondents), Mental Health & Mental Disorders (38.4%), Weight Status (33.3%) and Diabetes (24.2%). A health topic was considered to be a significant need if at least 20% of survey respondents identified it as a top health issue.

As shown in Figure 28, Services for Older Adults was identified by survey respondents as the most pressing quality of life issue (32.3% of respondents), followed by Homelessness and Unstable Housing (23.2%), Healthy Eating Options at restaurants, stores and markets (22.2%), Domestic Violence and Abuse (21.2%) and Crime and Crime Prevention (20.2%). Similar to the health topics, a quality of life topic was considered to be a significant need if at least 20% of survey respondents identified it as a pressing issue.

Qualitative Data: Key Informant Interviews & Focus Group Discussion

Five key informant interviews and one focus group discussion were conducted to gain deeper understanding of health issues impacting the residents of the community served by Saint Joseph Berea. Community members invited to participate were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations.

A total of 11 different organizations participated in the process, including the local health department, social service organizations, local businesses, and representatives from the education sector. Table 10 lists the organizations that participated in these discussions.

TABLE 10. ORGANIZATIONS PARTICIPATING IN INTERVIEWS & DISCUSSIONS

Berea Home Village
Berea Independent School District
CHI Saint Joseph Health
City of Berea
Kentucky River Foothills Development Council, Inc.
Madison County EMS
Madison County Health Department
Saint Joseph Berea
Signature Healthcare

These discussions took place between August 2021 and October 2021. Due to the ongoing COVID-19 pandemic, each discussion was conducted virtually by phone and/or webinar. A questionnaire was developed to guide each interview and the focus group discussion. Discussion topics included (1) biggest perceived health needs in the community, (2) barriers of concern, and (3) the impact of health issues on vulnerable populations. Interviewees were also asked about their knowledge around health topics where there were data gaps in the secondary data. Additionally, questions were included to get feedback about the impact of COVID-19 on the community (see COVID-19 Impact Snapshot in Appendix D). The list of questions included in the key informant interviews and focus group discussion can be found in Appendix E.

Key Informant & Focus Group Analysis Results

The project team captured detailed transcripts of the key informant interviews and focus group discussion. The text from these transcripts were analyzed using the qualitative analysis tool Dedoose®[13]. Text was coded using a pre-designed codebook, organized by themes and analyzed for significant observations. Figure 29 summarizes the main themes and topics that emerged from these discussions.

[13] Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: Sociocultural Research Consultants, LLC www.dedoose.com

FIGURE 29. KEY THEMES FROM QUALITATIVE DATA

Top Health Concerns/Issues	Barriers to Care	Most Negatively Impacted Populations
• Alcohol & Drug Use • Mental Health & Mental Disorders • Obesity • Tobacco Use	• Awareness • Cost / Lack of Insurance / Underinsurance • Education • Fear or stigma • Lack of services • Transportation	• Low Education • Low Income • Homeless • Minorities (esp. Black/African American and Hispanic/Latino populations) • Older Adults • Geographic: Glades Rd and Haiti Rd (Berea), rural areas

The findings from the qualitative analysis were combined with findings from the secondary data and survey analysis, and are incorporated throughout this report in more detail (see Prioritized Health Needs, Barriers to Care and Appendix D: COVID-19 Impact Snapshot sections of this report).

Data Considerations

A key part of any data collection and analysis process is recognizing potential limitations within the data considered. Each data source used in this assessment was evaluated based on its strengths and limitations during data synthesis and should be kept in mind when reviewing this report.

For both primary and secondary data, immense efforts were made to include as wide a range of community health indicators, key informant experts, focus group participants and survey respondents as possible. Although the topics by which data are organized cover a wide range of health and quality of life areas, within each topic there is a varying scope and depth of secondary data indicators and primary data findings.

Secondary data were limited by the availability of data, with some health topics having a robust set of indicators, while others were more limited. Population health and demographic data are often delayed in their release, so data is presented for the most recent years available for any given data source. There is also variability in the geographic level at which data sets are available, ranging from census tract or zip code to statewide or national geographies. Whenever possible, the most relevant localized data is reported. Due to variations in geographic boundaries, population sizes, and data collection techniques for different locations (hospital service areas, zip codes, and counties), some datasets are not available for the same time spans or at the same level of localization. The Index of Disparity[14], used to analyze disparities for the secondary data, is also limited by data availability – some secondary data sources do not include subpopulation data and others only display values for a select number of race/ethnic groups. Finally, persistent gaps in data systems exist for certain community health issues.

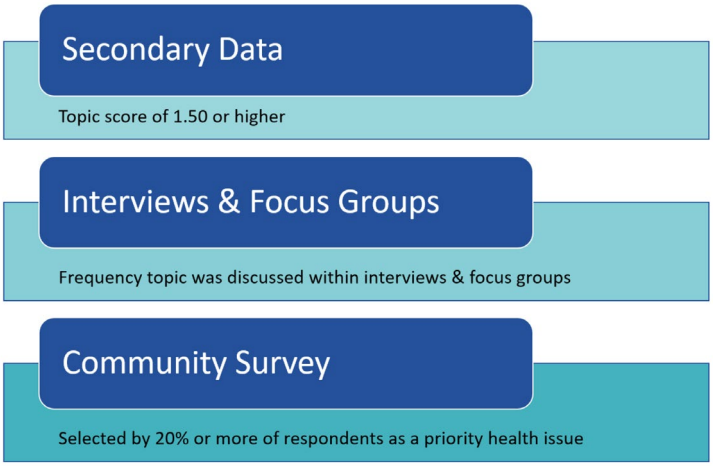
For the primary data, the breadth of findings is dependent upon who was selected to be a key informant or who self-selected to participate in the focus group discussion. Additionally, the community survey was a convenience sample, which means results may be vulnerable to selection bias and make the findings less generalizable.

[14] Pearcy, J. & Keppel, K. (2002). A Summary Measure of Health Disparity. Public Health Reports, 117, 273-280.

Identification of Significant Health Needs

Secondary data used in this assessment consisted of community health indicators, while primary data consisted of key informant interviews, a focus group discussion, and an online community survey. Findings from all these data sources were analyzed and combined to identify the significant health needs for the community served by Saint Joseph Berea.

FIGURE 30. CRITERIA USED TO DETERMINE SIGNIFICANT HEALTH NEEDS



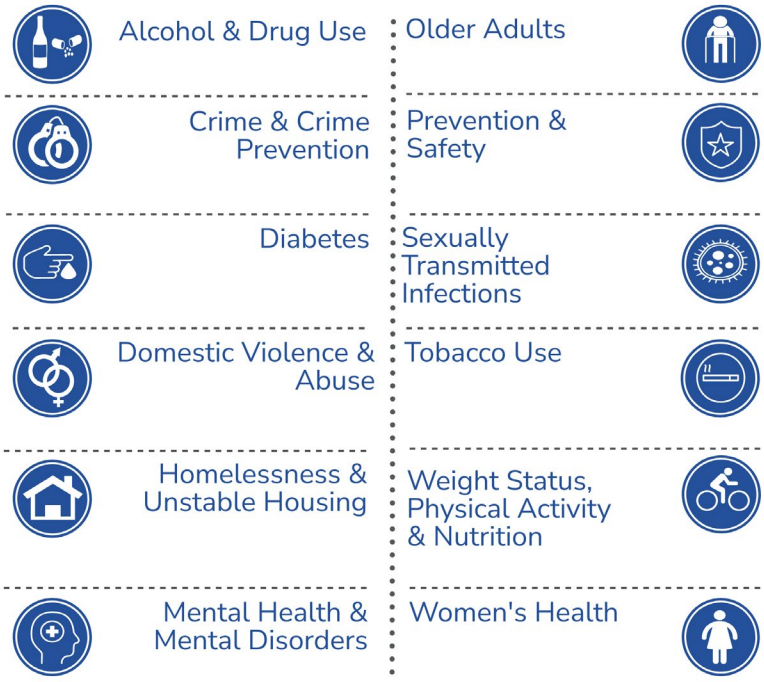
Criteria for Significant Health Needs

Health needs were determined to be significant if they met certain criteria in at least one of the three data sources: a secondary data score of 1.50 or higher, frequency by which the topic was discussed within/across interviews and the focus group, and identification as a priority issue by 20% or more of survey respondents. Figure 30 summarizes these criteria.

Significant Health Needs

Based on the criteria shown in Figure 30, twelve needs emerged as significant. Figure 31 illustrates the final 12 significant health needs, listed in alphabetical order, that were included for prioritization based on the findings of all forms of data collected for the Saint Joseph Berea 2023-2025 CHNA.

FIGURE 31. SIGNIFICANT HEALTH NEEDS



Data Synthesis

To gain a comprehensive understanding of the significant health needs, the findings from all three data sources were analyzed for areas of overlap.

Overlapping Evidence of Need

Table 11 outlines the 12 significant health needs (in alphabetical order) alongside the corresponding data sets that identified the need as significant. Secondary data identified seven needs as significant. Discussions with key informants and focus group participants identified four topic areas of greater need, and the community survey identified eight needs as significant.

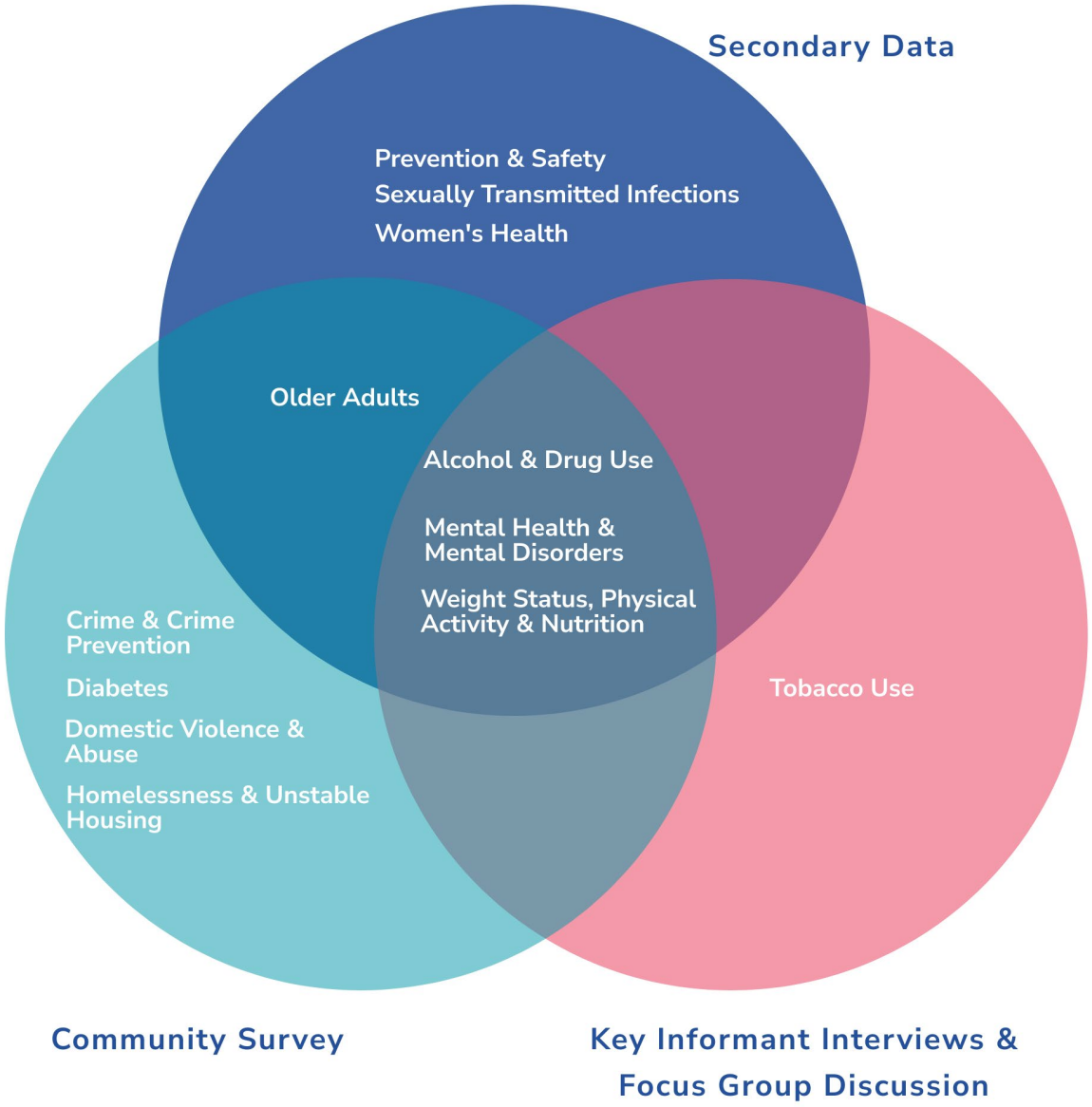
TABLE 11. OVERLAPPING EVIDENCE OF NEED

Topic	Data Source(s)
Alcohol & Drug Use	Community Survey, Secondary Data, Qualitative Data
Crime & Crime Prevention	Community Survey
Diabetes	Community Survey
Domestic Violence & Abuse	Community Survey
Homelessness & Unstable Housing	Community Survey
Mental Health & Mental Disorders	Community Survey, Secondary Data, Qualitative Data
Older Adults	Community Survey, Secondary Data
Prevention & Safety	Secondary Data
Sexually Transmitted Infections	Secondary Data
Tobacco Use	Qualitative Data
Weight Status, Physical Activity & Nutrition	Community Survey, Secondary Data, Qualitative Data
Women's Health	Secondary Data

Venn Diagram

The Venn Diagram in Figure 32 visually displays the results of the primary and secondary data synthesis. Three topics were considered significant across all 3 data sources – Alcohol & Drug Use, Mental Health & Mental Disorders, and Weight Status, Physical Activity & Nutrition. One topic was considered significant across two data sources, Older Adults, which was identified as a significant need through both secondary data and the community survey. For all other topic areas, the evidence was present in just one source of data. It should be noted, however, that this may be reflective of the strength and limitations of each type of data that was considered in this process.

FIGURE 32. DATA SYNTHESIS RESULTS



Significant Needs Identified Across CHI Saint Joseph Health

In reviewing the significant health needs identified for the community served by Saint Joseph Berea, it's also important to consider the significant health needs identified systemwide. While each facility has the authority to prioritize and select which health areas it will ultimately consider for subsequent implementation planning, there are obvious benefits to prioritizing those health areas that overlap with other hospitals in the system, including consistency, resource sharing and most importantly, the ability to have a larger impact.

The seven facilities that make up CHI Saint Joseph Health and are required to conduct a CHNA include Saint Joseph Hospital, Saint Joseph East, Continuing Care Hospital, Saint Joseph Berea, Saint Joseph London, Saint Joseph Mount Sterling, and Flaget Memorial Hospital. These seven facilities are primarily based in Fayette, Laurel, Madison, Montgomery, and Nelson counties in Kentucky.

Across all seven facilities, a total of 24 needs emerged as significant. Figure 33 shows how the 12 significant health topics that were identified for Saint Joseph Berea and Madison County overlap with the other four counties and six facilities comprising the CHI Saint Joseph Health system.

FIGURE 33. SIGNIFICANT HEALTH NEEDS IDENTIFIED ACROSS CHI SAINT JOSEPH HEALTH SYSTEM

Madison County (Saint Joseph Berea)	**Fayette County** (Saint Joseph Hospital, Saint Joseph East, Continuing Care Hospital)	**Laurel County** (Saint Joseph London)	**Montgomery County** (Saint Joseph Mount Sterling)	**Nelson County** (Flaget Memorial Hospital)
Alcohol & Drug Use	Alcohol & Drug Use	Alcohol & Drug Use	Alcohol & Drug Use	Alcohol & Drug Use
Crime & Crime Prevention	Crime & Crime Prevention	Crime & Crime Prevention		Crime & Crime Prevention
Diabetes	Diabetes	Diabetes	Diabetes	
Domestic Violence & Abuse		Domestic Violence & Abuse		
Homelessness & Unstable Housing	Homelessness & Unstable Housing			
Mental Health & Mental Disorders	Mental Health & Mental Disorders	Mental Health & Mental Disorders	Mental Health & Mental Disorders	Mental Health & Mental Disorders
Older Adults		Older Adults	Older Adults	Older Adults
Prevention & Safety	Prevention & Safety		Prevention & Safety	
Sexually Transmitted Infections	Sexually Transmitted Infections		Sexually Transmitted Infections	Sexually Transmitted Infections
Tobacco Use	Tobacco Use	Tobacco Use	Tobacco Use	Tobacco Use
Weight Status, Physical Activity & Nutrition	Weight Status, Physical Activity & Nutrition	Weight Status, Physical Activity & Nutrition	Weight Status, Physical Activity & Nutrition	Weight Status, Physical Activity & Nutrition
Women's Health		Women's Health		

As seen in Figure 33, four topics emerged as a significant need across all five counties: (1) Alcohol & Drug Use (2) Mental Health & Mental Disorders (3) Tobacco Use and (4) Weight Status, Physical Activity & Nutrition.

Prioritization

To better target activities to address the most pressing health needs in the community, Saint Joseph Berea convened a group of community leaders to participate in a presentation of data on significant health needs facilitated by HCI. Following the presentation and question session, participants were given access to an online link to complete a scoring exercise to assign a score to each significant health need based on a set of criteria. The process was conducted virtually to maintain social distancing and safety guidelines related to the COVID-19 pandemic.

Leadership at CHI Saint Joseph Health and Saint Joseph Berea, including the hospital's Healthy Communities / Community Benefit Committee, reviewed the scoring results of the significant community needs alongside additional supporting evidence and identified three priority areas to be considered for subsequent implementation planning.

Process

An invitation to participate in the Saint Joseph Berea CHNA data synthesis presentation and virtual prioritization activity was sent out in the weeks preceding the meeting held on November 9, 2021. A total of 17 individuals representing local hospital systems, the health department, educational institutions as well as community-based organizations and nonprofits attended the virtual presentation and of these, eleven completed the online prioritization activity.

During the November 9th meeting, the group reviewed and discussed the results of HCI's primary and secondary data analyses leading to the significant health needs shown in Figure 31. A one-page handout called a "Prioritization Cheat Sheet" (see Appendix F) was provided to participants to support the virtual prioritization activity. From there, participants were given one day to access an online link and assign a score to each of the significant health needs based on how well they met the criteria set forth by the hospital. The group also agreed that root causes, disparities, and social determinants of health would be considered for all prioritized health topics resulting from the online prioritization activity.

The criteria for prioritization included:

1. Magnitude of the Issue
    - How many people in the community are or will be impacted?
    - How does the identified need impact health and quality of life?
    - Has the need changed over time?

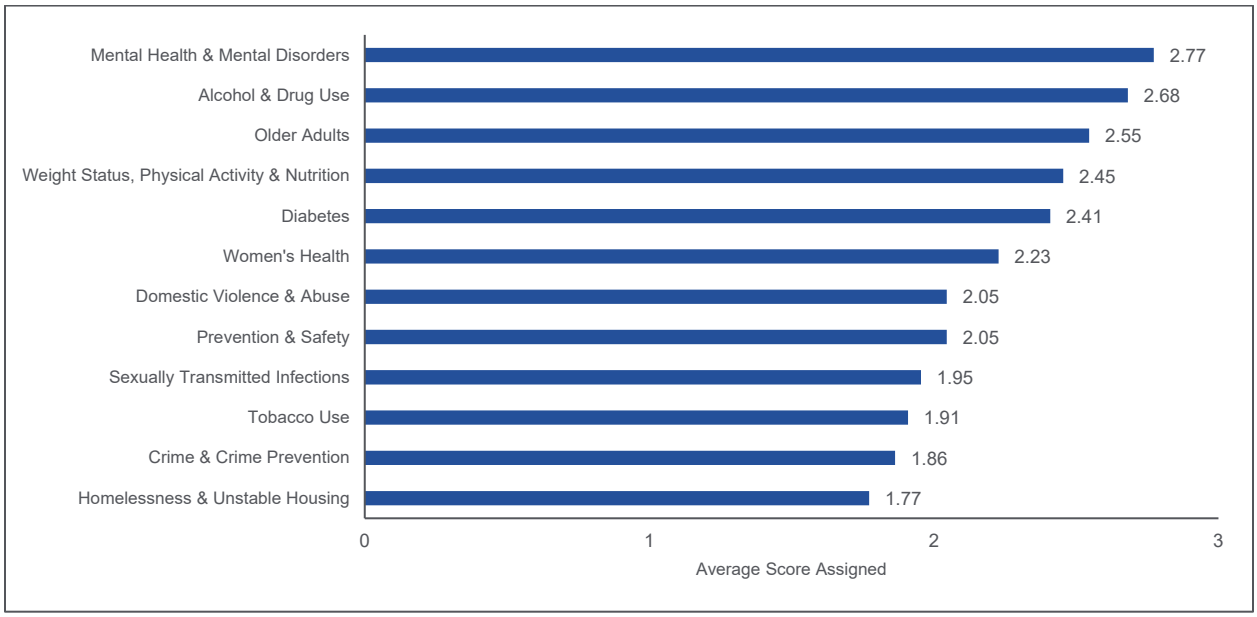
2. Ability to Impact
    - Can actionable and measurable goals be defined to address the health need? Are those goals achievable in a reasonable time frame?
    - Does the hospital or health system have the expertise or resources to address the identified health need?
    - Can the need be addressed in collaboration with community partners? Are organizations already addressing the health issue?

Participants assigned a score of 1-3 to each health topic and criterion, with a higher score indicating a greater likelihood for that topic to be prioritized. For example, participants assigned a score of 1-3 to each topic based on whether the magnitude was (1) least concerning, (2) somewhat concerning or (3)

most concerning. Along a similar line, participants assigned a score of 1-3 to each topic based on (1) least ability to impact (2) some ability to impact or (3) most ability to impact. In addition to considering the data presented by HCI in the presentation and on the prioritization cheat sheet, participants were encouraged to use their own judgment and knowledge of the community in considering how well a health topic met the criteria.

Completion of the online exercise resulted in a numerical score for each health topic and criterion. Numerical scores for the two criteria were equally weighted and averaged to produce an aggregate score and overall ranking for each health topic. The aggregate ranking can be seen in Figure 34 below. For those topics with identical scores, the health needs are listed in alphabetical order.

FIGURE 34. AGGREGATE RESULTS OF ONLINE PRIORITIZATION ACTIVITY



Prioritized Significant Health Needs

The ranked order of significant health needs that resulted from the prioritization process were presented to leadership at CHI Saint Joseph Health and Saint Joseph Berea, including the hospital's Healthy Communities / Community Benefit Committee. The committee reviewed the scoring results of the online prioritization activity for Saint Joseph Berea, in conjunction with the trending health needs that were identified as significant across all seven facilities in the CHI Saint Joseph Health system (Figure 33). While Tobacco Use did not score as high as Mental Health & Mental Disorders, Alcohol & Drug Use and Weight Status, Physical Activity & Nutrition in the online prioritization activity for Saint Joseph Berea (Figure 34), the committee ultimately decided to prioritize the four health needs that were identified as significant across all seven hospital facilities: Alcohol & Drug Use, Mental Health & Mental Disorders, Tobacco Use, and Weight Status, Physical Activity & Nutrition (Figure 33).

TABLE 12. PRIORITIZED HEALTH NEEDS

Alcohol, Tobacco & Drug Use
Mental Health & Mental Disorders
Weight Status, Physical Activity & Nutrition

A decision was made to combine the prioritized health areas of Alcohol & Drug Use and Tobacco Use, resulting in a final selection of three priority health areas that will be considered for subsequent implementation planning (Table 12). The three health needs shown

in Table 12 were identified as a priority not only for Saint Joseph Berea, but across all seven facilities comprising CHI Saint Joseph Health: Saint Joseph Hospital, Saint Joseph East, Continuing Care Hospital, Saint Joseph Berea, Saint Joseph London, Saint Joseph Mount Sterling, and Flaget Memorial Hospital.

Many of these health topics are consistent with the priority areas that emerged from the previous CHNA process, not only for Saint Joseph Berea, but for other facilities as well. The committee strategically selected the topics shown in Table 12 as the final prioritized health needs for all seven facilities to allow for consistency across the system, resulting in a larger footprint and more substantial impact. By selecting these overlapping health needs, CHI Saint Joseph Health has positioned itself to achieve greater collective impact through means of a common agenda, shared goals/objectives, and mutually reinforcing activities, all of which will be outlined in each hospital's upcoming implementation plan. Saint Joseph Berea plans to build upon efforts that emerged from its previous CHNA process, collaborating with other facilities and community partners, to address the three priority health needs outlined in Table 12.

A deeper dive into the primary and secondary data for each of these priority health topics is provided in the next section of the report. This information highlights how each topic became a high priority health need for Saint Joseph Berea.

Prioritized Significant Health Needs

The following section provides a detailed description of each prioritized health need. An overview is provided for each health topic, followed by a table highlighting the poorest performing indicators and a description of key themes that emerged from primary data. The three prioritized health needs are presented in alphabetical order.

Geographic Level of Analysis

As discussed previously in the Methodology section, the data scoring technique is only available at the county level. The data scoring results for Saint Joseph Berea are therefore presented in the context of Madison County.

Prioritized Health Topic #1: Alcohol, Tobacco and Drug Use

Alcohol & Drug Use

Secondary Data Score: **1.83**

Key Themes from Community Input

- Ranked by survey respondents as the most pressing health problem (60.6%)
- Generational drug/alcohol use, genetics, lack of education, lack of reliable income and availability of drugs cited as major factors for substance use
- Lack of residential treatment programs, especially for men

Warning Indicators

- Alcohol-Impaired Driving Deaths
- Death Rate due to Drug Poisoning
- Adults who Binge Drink

Tobacco Use

Secondary Data Score: N/A

Key Themes from Community Input

- 16.2% of survey respondents rated tobacco use as a top health issue (ranked 7th out of 26 issues)
- Education, cultural issues and lifestyle choices cited as contributing factors for tobacco use
- Significance and influence of tobacco farming

Overview

Alcohol & Drug Use was identified as a significant health need through all three data sources: secondary data, the community survey, and qualitative data, while Tobacco Use was identified as a significant health need through just one data source, qualitative data (see Data Synthesis, Table 11 and Figure 32).

Secondary Data

From the secondary data scoring results, Alcohol & Drug Use had the fourth highest data score of all topic areas, with a score of 1.83. Further analysis was done to identify specific indicators of concern. Those indicators with high data scores (scoring at or above the threshold of 1.50) were categorized as indicators of concern and are listed in Table 13 below. See Appendix A for the full list of indicators categorized within this topic, including the source from which each indicator was derived.

TABLE 13. DATA SCORING RESULTS FOR ALCOHOL & DRUG USE

SCORE	ALCOHOL & DRUG USE	Madison County	Kentucky	U.S.	Kentucky Counties	U.S. Counties	Trend
3.00	Alcohol-Impaired Driving Deaths (2015-2019) *percent of driving deaths with alcohol involvement*	35.2	25.5	27 **HP2030*** 28.3			
2.92	Death Rate due to Drug Poisoning (2017-2019) *deaths/100,000 population*	52.1	31.8	21			

1.81	Adults who Binge Drink (2017-2019) *percent*	16	15	—		—	

*HP2030 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2030 represents a Healthy People target to be met by 2030.

From the secondary data results, there are several indicators within this topic that raise concern for Madison County. The worst performing indicator is Alcohol-Impaired Driving Deaths, which shows the percentage of motor vehicle crash deaths with alcohol involvement. The value for Madison County, 35.2%, is in the worst 25% of counties in the state and nation. Further, the county has not met the Healthy People 2030 target of 28.3% and the rate has increased significantly in recent years. Another indicator related to alcohol use is the percentage of adults who reported binge drinking. The county value of 16% is higher than the Kentucky value, in the worst 50% of counties in the state, and has increased in recent years, although not significantly. Finally, the Death Rate due to Drug Poisoning is another indicator of concern. In Madison County, there were 52.1 deaths due to drug poisoning per 100,000 people in 2017-2019, which is higher than both the state and national values, and in the worst 25% of counties in Kentucky and the U.S. Even more concerning, the rate has increased significantly in recent years.

Primary Data

Alcohol & Drug Use

Alcohol & Drug Use ranked as the most pressing health problem among survey respondents, with 60.6% of respondents identifying Alcohol & Drug Use as a top priority in Madison County (Figure 27). The high rate of deaths due to drug poisoning reported in the secondary data for Madison County is supported with findings from the qualitative data. Nearly every key informant and focus group participant emphasized concern with the growing drug problem. Key informants pointed to heroin and opioid use as devastating a large portion of the population. Opioids and substance use disorder were cited as affecting all sectors in the community, with one key informant noting that "it's not selective – it affects everyone and is everyone's problem!" Several key informants pointed out the number of grandparents and older adults raising young children due to addiction issues within the family. Stigma was identified as a major barrier to care. Further, people experiencing addiction often have severe health issues. One key informant pointed out the connection between injection drug use and hepatitis C comorbidities.

> "It's hard to find someone that hasn't had a child or loved one lost to the opioid epidemic."
> – Key Informant

Lack of education, lack of reliable income, genetics and generational drug/alcohol use were cited as some of the major factors for substance use. One key informant referred to overdose deaths as "deaths of despair," adding that "people are using drugs to cope."

> "The number of administrations of naloxone is staggering!"
> – Key Informant

One key informant commended the local health department on their needle exchange program, while another key informant pointed to the "Leave Behind Program" as an opportunity to leave Narcan with a person's family for future use.

Several key informants suggested the need for more education / prevention programs and more behavioral health services to help curb the growing drug epidemic. One key informant emphasized the need for more residential treatment programs, especially for men. Another key informant cited the need for a balance of treatment, stating "we are not going to incarcerate our way out of a drug problem – we need to look at criminal justice reform and require treatment as part of each sentence."

> The level of drug use in Madison County is higher due to its proximity to the I-75 highway and the supply of illegal drugs that travel along that route.
> – Key Informant

Tobacco Use

Tobacco Use was ranked as the seventh most pressing health issue among survey respondents, with 16.2% of respondents identifying Tobacco Use as a top priority in the community (Figure 27). Education, cultural issues, and lifestyle choices were cited as major factors for tobacco use. One key informant pointed to tobacco production in Kentucky and Madison County as having a huge influence on tobacco use. This key informant added that "education is working, but we have a long way to go!"

> Smoking is very prevalent in our community!
> – Focus Group Participant

> Kentucky and Madison County are big burley tobacco producers! Family tradition contributes to our high smoking rates.
> – Key Informant

Prioritized Health Topic #2: Mental Health and Mental Disorders

Mental Health & Mental Disorders

Secondary Data Score: **1.99**

Key Themes from Community Input

- Ranked by survey respondents as the second most pressing health problem (38.4%)
- Poverty, stress and poor coping mechanisms cited as contributing factors
- Need for increased mental health services

Warning Indicators

- Age-Adjusted Death Rate due to Alzheimer's Disease
- Depression: Medicare Population
- Age-Adjusted Death Rate due to Suicide

Overview

Mental Health & Mental Disorders was identified as a significant health need through all three data sources: secondary data, the community survey, and qualitative data (see Data Synthesis, Table 11 and Figure 32).

Secondary Data

From the secondary data scoring results, Mental Health & Mental Disorders had the second highest data score of all topic areas, with a score of 1.99. Further analysis was done to identify specific indicators of concern. Those indicators with high data scores (scoring at or above the threshold of 1.50) were categorized as indicators of concern and are listed in Table 14 below. See Appendix A for the full list of indicators categorized within this topic, including the source from which each indicator was derived.

TABLE 14. DATA SCORING RESULTS FOR MENTAL HEALTH & MENTAL DISORDERS

SCORE	MENTAL HEALTH & MENTAL DISORDERS	Madison County	Kentucky	U.S.	Kentucky Counties	U.S. Counties	Trend
2.64	Age-Adjusted Death Rate due to Alzheimer's Disease (2017-2019) *deaths/100,000 population*	48.3	33.2	30.5			

2.31	Depression: Medicare Population (2018) *percent*	21.6	21.5	18.4			
2.25	Age-Adjusted Death Rate due to Suicide (2017-2019) *deaths/100,000 population*	17.3	17	14.1 **HP2030*** 12.8	—		
1.92	Poor Mental Health: 14+ Days (2018) *percent*	16.9	—	12.7			—
1.64	Alzheimer's Disease or Dementia: Medicare Population (2018) *percent*	10.2	10.3	10.8			

*HP2030 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2030 represents a Healthy People target to be met by 2030.

Death rates due to Alzheimer's disease and suicide, poor self-reported mental health, and depression are all areas of concern related to Mental Health & Mental Disorders. The worst performing indicator is the Age-Adjusted Death Rate due to Alzheimer's Disease. The value for Madison County, 48.3 deaths per 100,000 people, is in the worst 25% of counties in Kentucky and the U.S. Another indicator of concern is the Age-Adjusted Death Rate due to Suicide. The value for Madison County, 17.3 deaths per 100,000 people, is higher than both the state and national values, and has not met the Healthy People 2030 target of 12.8 deaths per 100,000 people. Even more concerning, the rate has increased significantly over recent years. Within the Medicare population, rates of depression and Alzheimer's disease are also a concern. In Madison County, 21.6% of Medicare beneficiaries were treated for depression, which is in the worst 25% of counties in the U.S. Another 10.2% of Medicare beneficiaries were treated for Alzheimer's disease or dementia. Although this value is slightly lower than the state and national values, the county still performs in the worst 50% of counties in the state and the value has increased over recent years, although not significantly. Finally, the indicator Poor Mental Health: 14+ Days shows the percentage of adults who stated that their mental health was not good 14 or more days in the past month. The value for Madison County, 16.9%, is higher than the national value of 12.7% and in the worst 25% of counties in the nation.

Primary Data

Mental Health & Mental Disorders was ranked as the second most pressing health problem among survey respondents, with 38.4% of respondents identifying Mental Health & Mental Disorders as a top priority in Madison County (Figure 27). Twelve percent of survey respondents reported that children in their home have experienced behavioral or mental health challenges. While mental health has always

been a concern, key informants pointed out that the COVID-19 pandemic has instilled even more fear, stress, and anxiety within community members due to economic duress and social isolation.

> There are cultural issues and stigma attached to seeking mental health services – people don't want to be seen going to these services!
> – Key Informant

Access to mental health services was a common theme among key informants and survey respondents, with 11.2% of survey respondents reporting that they did not receive necessary mental health services in the past year. The top reasons cited for not receiving mental health services/treatment included cost, inadequate insurance and not knowing where to go. Stigma was cited as a barrier to care among key informants and focus group participants, while fear was cited as a major barrier to care within the Hispanic/Latino population.

Several key informants emphasized the relationship between drugs/addiction and mental health, with poverty, stress, and poor coping mechanisms cited as some of the major contributing factors to mental health issues. One key informant explained that not having coping mechanisms can lead to substance use and self-medication. Another key informant observed an increase in suicide attempts in recent years, with the highest rate in the 18-21 age group.

> We're really in a crisis with mental health, which leads to other issues including substance abuse and obesity.
> – Key Informant

Lack of mental health services was also cited as a major concern, with one key informant stating that "mental health and adult protective services are so overwhelmed!" Another key informant explained that suicide prevention is "scattered around" and pointed to the need for a group focused on this particular issue.

Prioritized Health Topic #3: Weight Status, Physical Activity & Nutrition

Weight Status, Physical Activity & Nutrition

Secondary Data Score: **1.62**

Key Themes from Community Input

- Weight status (overweight/obesity) was ranked by survey respondents as the third most pressing health problem (33.3%)
- 22.2% of survey respondents rated "healthy eating options at restaurants, stores and markets" as a top quality of life issue
- Lack of exercise, busy lifestyles, lack of nutritional foods and learned behaviors through multiple generations cited as key contributors to obesity

Warning Indicators

- Grocery Store Density
- Low-Income and Low Access to a Grocery Store
- Adults Who Are Obese

Overview

Weight Status, Physical Activity & Nutrition was identified as a significant health need through all three data sources: secondary data, the community survey, and qualitative data (see Data Synthesis, Table 11 and Figure 32).

Secondary Data

From the secondary data scoring results, Weight Status, Physical Activity & Nutrition had the seventh highest data score of all topic areas, with a score of 1.62. Further analysis was done to identify specific indicators of concern. Those indicators with high data scores (scoring at or above the threshold of 1.50) were categorized as indicators of concern and are listed in Table 15 below. See Appendix A for the full list of indicators categorized within this topic, including the source from which each indicator was derived.

TABLE 15. DATA SCORING RESULTS FOR WEIGHT STATUS, PHYSICAL ACTIVITY & NUTRITION

SCORE	WEIGHT STATUS, PHYSICAL ACTIVITY & NUTRITION	Madison County	Kentucky	U.S.	Kentucky Counties	U.S. Counties	Trend
2.00	Grocery Store Density (2016) *stores/1,000 population*	0.09	—	—			

2.00	Low-Income and Low Access to a Grocery Store (2015) *percent*	10.8	—	—			—
1.97	Adult Fruit and Vegetable Consumption (2017-2019) *percent*	9	12	—		—	
1.97	Adults Who Are Obese (2017-2019) *percent*	42	36	—		—	
1.83	Access to Exercise Opportunities (2020) *percent*	65.6	71.1	84			—
1.83	Children with Low Access to a Grocery Store (2015) *percent*	4.4	—	—			—
1.83	People with Low Access to a Grocery Store (2015) *percent*	22	—	—			—
1.67	Farmers Market Density (2018) *markets/1,000 population*	0.01	—	—	—	—	
1.67	Fast Food Restaurant Density (2016) *restaurants/1,000 population*	0.73	—	—			
1.67	People 65+ with Low Access to a Grocery Store (2015) *percent*	2.6	—	—			—
1.64	SNAP Certified Stores (2017) *stores/1,000 population*	0.9	—	—			

1.56	Adults who are Sedentary (2017-2019) *percent*	32	33	**HP2030*** 21.2		—	
1.53	Food Environment Index (2021) *index*	7.1	6.9	7.8			
1.50	Households with No Car and Low Access to a Grocery Store (2015) *percent*	3.4	—	—			—

*HP2030 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2030 represents a Healthy People target to be met by 2030.

The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions, including heart disease, type 2 diabetes, stroke, and cancer.[15] In Madison County, 42% of adults are obese. This is higher than the state value of 36% and has increased in recent years, although not significantly.

Additional indicators of concern include health behaviors, such as Adult Fruit and Vegetable Consumption and Adults who are Sedentary. In Madison County, 9% of adults eat five or more servings of fruits and vegetables per day, which is lower than the state value of 12% and is trending in a negative direction, although not significantly. Another 32% of adults in the county are sedentary, which means they did not participate in any leisure-time physical activities other than their regular job during the past month. While this is slightly lower than the state value of 33%, the county is far from the Healthy People 2030 target of 21.2%. Studies have shown that sedentary lifestyles can increase the risk of many chronic diseases, including obesity, heart disease and type 2 diabetes.[16]

Proximity to exercise opportunities, such as parks and recreation facilities, has been linked to an increase in physical activity among residents.[16] The percentage of individuals who live reasonably close to a park or recreational facility in Madison County is 65.6%, which is lower than both the state value (71.1%) and national value (84%).

Other poorly performing indicators within this topic are related to the built environment and food access. Grocery Store Density shows the number of supermarkets and grocery stores per 1,000 population. The value for Madison County, 0.09 grocery stores per 1,000 people, is in the worst 25% of counties in Kentucky and the U.S. and is trending in an undesirable direction, although not significantly. Further, the number of fast food restaurants per 1,000 people is in the worst 50% of counties when compared to Kentucky and the U.S. The indicator SNAP Certified Stores shows the number of stores per 1,000 population certified to accept Supplemental Nutrition Assistance Program benefits, including supermarkets, convenience stores, warehouse club stores and specialized food stores. Madison County performs in the worst 50% of counties in the state for this indicator, although the value has increased in

[15] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/browse-objectives/overweight-and-obesity
[16] U.S. Department of Health and Human Services, Healthy People 2030. https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity

a desirable direction in recent years. Madison County also fares poorly when considering the number of farmers markets per 1,000 people. The Food Environment Index combines two measures of food access: the percentage of the population that is low-income and has low access to a grocery store, and the percentage of the population that did not have access to a reliable source of food during the past year. The index ranges from 0 (worst) to 10 (best) and equally weights the two measures. The value for Madison County, 7.1, is in the worst 50% of counties in the state and nation. Other poorly performing indicators that are measures of food access include Low-Income and Low Access to a Grocery Store, Children with Low Access to a Grocery Store, People with Low Access to a Grocery Store, People 65+ with Low Access to a Grocery Store, and Households with No Car and Low Access to a Grocery Store. HCI's Food Insecurity Index, discussed earlier in this report, can be used to help identify geographic areas of low food accessibility within the community served by Saint Joseph Berea.

Primary Data

One-third (33.3%) of survey respondents rated Weight Status as a pressing health issue, and it ranked as the third most pressing health problem overall (Figure 27). Nutrition & Healthy Eating ranked as the tenth most pressing health issue (12.1%, Figure 27), while Physical Activity ranked as the 11th most pressing health issue (8.1%).

Among survey respondents with children living in the home, 12.0% reported having one or more children that are overweight. Obesity and its contribution to chronic disease was a topic of concern among key informants. Insights from qualitative data point to a lack of exercise, busy lifestyles, lack of nutritional foods and learned behaviors through multiple generations as being key contributors to obesity. One key informant described the impact of the Appalachian culture, explaining that many foods are fried and "people learn how to prepare meals the way their parents taught them." Another key informant mentioned that the Black/African American and Hispanic/Latino populations are disproportionately impacted when it comes to diet, obesity, and diabetes. Several key informants emphasized the need for more and improved education about health and wellbeing, with a specific focus on education within the school system.

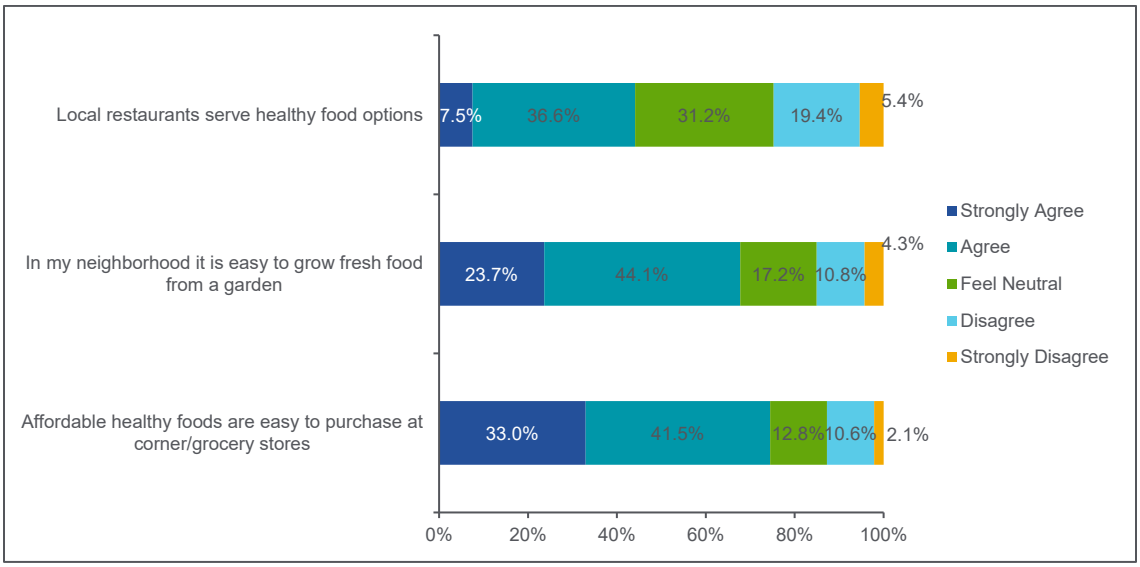
> "I see small children with bottles of Coke and Mountain Dew and Little Debbie's running around all the time!"
> – Focus Group Participant

Ability to access safe parks and walking paths was rated by 5.1% of survey respondents as a priority issue, while another 5.1% of survey respondents would like to see more and/or improved bike lanes in the community. Using a Likert scale, a five-point scale used to allow the individual to express how much they agree or disagree with a particular statement, 14.9% of survey respondents disagreed or strongly disagreed that the community has good sidewalks/trails for walking safely, and another 9.8% of survey respondents disagreed or strongly disagreed that the community has good parks and recreational facilities. Just over 15% of survey respondents reported that the COVID-19 pandemic has made it difficult to exercise.

> This is a largely Appalachian area – people come from poor families that prepared unhealthy foods. We have lots of diet issues, people don't have the ability to purchase healthy foods, they lack transportation and there's just a general lack of importance to eating healthy.
> – Key Informant

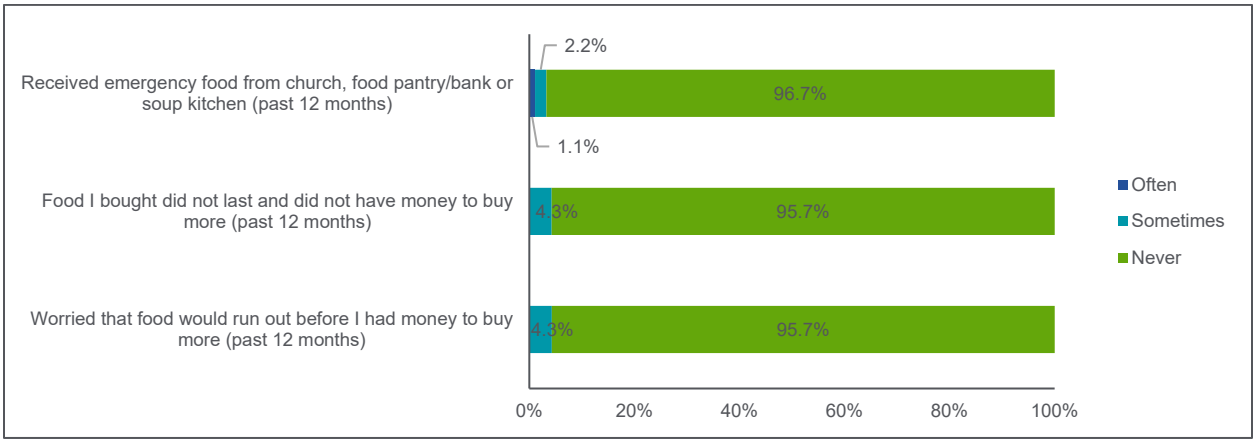
The secondary data indicators that point to an unhealthy food environment are corroborated with results from the community survey. Healthy eating options at restaurants, stores, and markets was ranked by survey respondents as the third most pressing quality of life issue (22.2% of respondents, Figure 28). Survey respondents were also asked to answer a few questions about access to food in their community. Based on a five-point Likert scale, 24.7% of survey respondents disagreed or strongly disagreed that local restaurants serve healthy food options, 15.1% of respondents disagreed or strongly disagreed that it is easy to grow/harvest and eat fresh food from a home garden in their neighborhood, and 12.8% of survey respondents disagreed or strongly disagreed that affordable, healthy food options are easy to purchase at nearby corner stores, grocery stores or farmers markets (Figure 35).

FIGURE 35. SURVEY RESPONDENTS' PERCEPTION OF ACCESS TO FOOD IN THE COMMUNITY



Just over 18% of survey respondents rated food insecurity or hunger as a top quality of life issue they would like to see addressed in the community, and it ranked as the sixth most pressing quality of life issue overall (Figure 28). Among survey respondents, 4.3% reported they "sometimes" or "often" worried that their food would run out before they had money to buy more (Figure 36). Another 4.3% of survey respondents reported there was a time in the past 12 months when the food they bought just did not last, and they did not have money to buy more (Figure 36). Finally, 3.3% of survey respondents reported receiving emergency food from a church or food pantry in the past 12 months (Figure 36). Key informants and focus group participants spoke of food insecurity as an issue that needs to be addressed in the community, adding that obesity disproportionately impacts people with lower income and lower education levels.

FIGURE 36. FOOD INSECURITY AMONG SURVEY RESPONDENTS



Non-Prioritized Significant Health Needs

The following significant health needs, presented in alphabetical order, emerged from a review of the primary and secondary data. However, Saint Joseph Berea will not focus on these topics in their Implementation Strategy.

Key themes from community input are included where relevant for each non-prioritized health need along with the secondary data score and warning indicators.

Non-Prioritized Health Need #1: Crime & Crime Prevention

Crime & Crime Prevention

Secondary Data Score: **N/A**

Key Themes from Community Input

- 20.2% of survey respondents rated crime & crime prevention as a top quality of life issue
- 10.6% of survey respondents disagreed that crime is not a major issue in their neighborhood

Non-Prioritized Health Need #2: Diabetes

Diabetes

Secondary Data Score: **0.95**

Key Themes from Community Input

- 24.2% of survey respondents rated diabetes as a top health issue (ranked 4th out of 26 issues)
- Lower-income, African American and Hispanic populations cited as being disproportionately impacted

> "Many members of our African American population suffer from poor diet, diabetes, and obesity. I'm starting to see this in the Hispanic population as well."
>
> – Key Informant

Non-Prioritized Health Need #3: Domestic Violence & Abuse

Domestic Violence & Abuse

Secondary Data Score: **N/A**

Key Themes from Community Input

- 21.2% of survey respondents rated domestic violence and abuse as a top quality of life issue

> Suicide attempts are high among the 18–21 year-old group. Substance use is often involved, or there are intimate partner relationship issues.
>
> – Key Informant

Non-Prioritized Health Need #4: Homelessness & Unstable Housing

Homelessness & Unstable Housing

Secondary Data Score: **N/A**

Key Themes from Community Input

- Ranked by survey respondents as the second most pressing quality of life issue (23.2%)
- 17.2% of survey respondents disagreed that there are affordable places to live
- 4.3% of survey respondents reported their current housing situation does not meet their needs

> There's a significant homeless population in Madison County. Many are affected by myriad health problems. We have 6 beds / small apartments where families can stay up to 6 months, but we do not have an emergency shelter. We need an emergency shelter for homeless populations!
>
> – Key Informant

Non-Prioritized Health Need #5: Older Adults

Older Adults

Secondary Data Score: **1.59**

Key Themes from Community Input

- "Services for Seniors/Elderly" ranked as the most pressing quality of life issue among survey respondents (32.3%)
- Lack of transportation and challenges accessing digital information cited as issues affecting older adults

Warning Indicators

- Age-Adjusted Death Rate due to Alzheimer's Disease
- Depression: Medicare Population
- People 65+ Living Alone

> "Baby boomers are the largest growing demographic and we're woefully prepared to deal with aging and the elderly."
> – Key Informant

Non-Prioritized Health Need #6: Prevention & Safety

Prevention & Safety

Secondary Data Score: **2.39**

Key Themes from Community Input

- 3.0% of survey respondents rated Injury and Violence as a top health issue
- Key informants emphasized effectiveness of senior interventions (for injuries, falls, broken hips)

> "Injury prevention is still an issue – things like falls and car collisions – and it's important for quality of life."
> – Key Informant

Warning Indicators

- Death Rate due to Drug Poisoning
- Age-Adjusted Death Rate due to Unintentional Injuries

> "Falls are expensive and change a person's trajectory as well as their family's!"
> – Key Informant

Non-Prioritized Health Need #7: Sexually Transmitted Infections

Sexually Transmitted Infections

Secondary Data Score: **1.84**

Warning Indicators

- Chlamydia Incidence Rate

Non-Prioritized Health Need #8: Women's Health

Women's Health

Secondary Data Score: **1.76**

Key Themes from Community Input

- 2.0% of survey respondents rated women's health as a top health issue

Warning Indicators

- Cervical Cancer Incidence Rate
- Breast Cancer Incidence Rate
- Cervical Cancer Screening: 21-65

Barriers to Care

A critical component in assessing the needs of a community includes identifying barriers to health care and social services, which can inform and focus strategies for addressing the prioritized health needs. Survey respondents, key informants and focus group participants were asked to identify any barriers to health care observed or experienced in the community. The following section explores those barriers that were identified through the primary data collection.

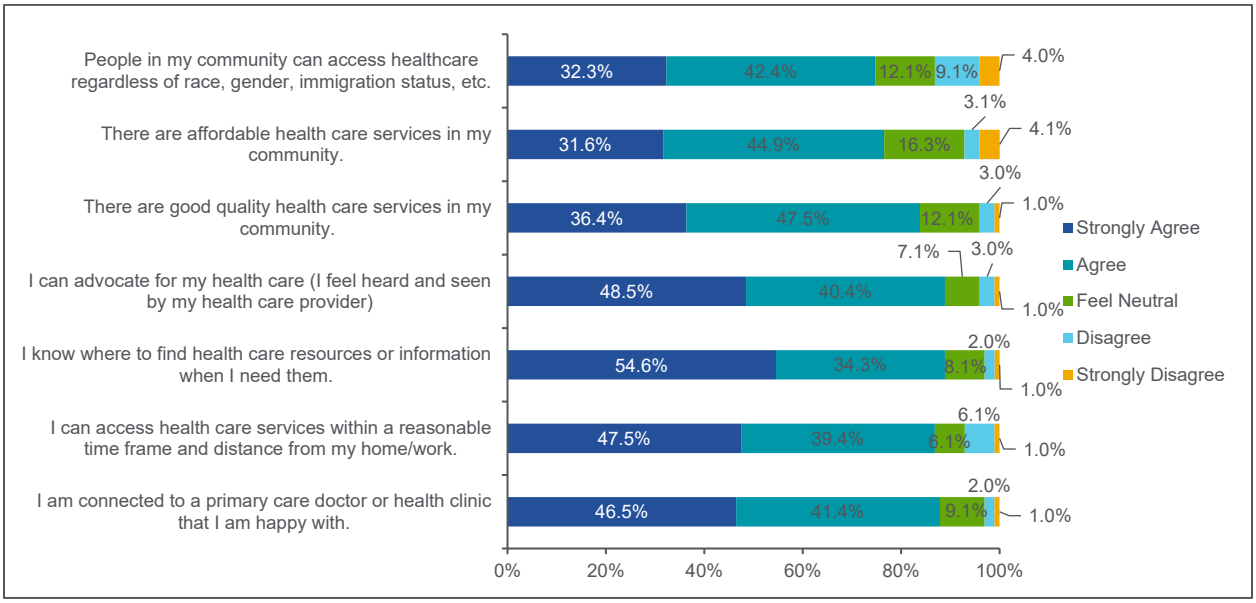
Transportation

The geography of the Saint Joseph Berea Primary Service Area lends itself to transportation issues. As described earlier in this report (see Defining the Community), the hospital's primary service area is defined by four zip codes, which are centered around the town of Berea. The service area also extends to the north (Richmond) and also includes rural areas to the south (Mount Vernon and Mc Kee). As discussed earlier (see Demographic Profile, Population), all four zip codes in the hospital's primary service area have been designated rural. The spread of the population throughout these rural towns creates difficulties for many of those in need of care. Key informants and focus group participants frequently mentioned transportation when discussing barriers to care, with an emphasis on rural communities and elderly populations. One key informant described the existing transportation service but mentioned that the route only runs within Richmond and Berea, adding that people who live farther out in the county need to pay more money. One focus group participant added that transportation can especially be an issue for those that need to access specialty appointments in Lexington or another city. Another focus group participant emphasized that funding for transportation services has dwindled over the years. Using a five-point Likert scale, 28.0% of survey respondents in Madison County disagreed or strongly disagreed that public transportation is easy to access. Indicators of concern from the secondary data analysis include Alcohol-Impaired Driving Deaths, Workers Commuting by Public Transportation, Solo Drivers with a Long Commute, and Households with No Car and Low Access to a Grocery Store. Additional details for these indicators can be found in Appendix A.

Cost, Lack of Insurance, Underinsurance

Access to affordable health care ranked as the eighth most pressing health problem among survey respondents, with 14.1% of respondents identifying affordable health care as a top priority in Madison County (Figure 27). Based on a five-point Likert scale, 7.2% of survey respondents disagreed or strongly disagreed that there are affordable health care services in the community (Figure 37).

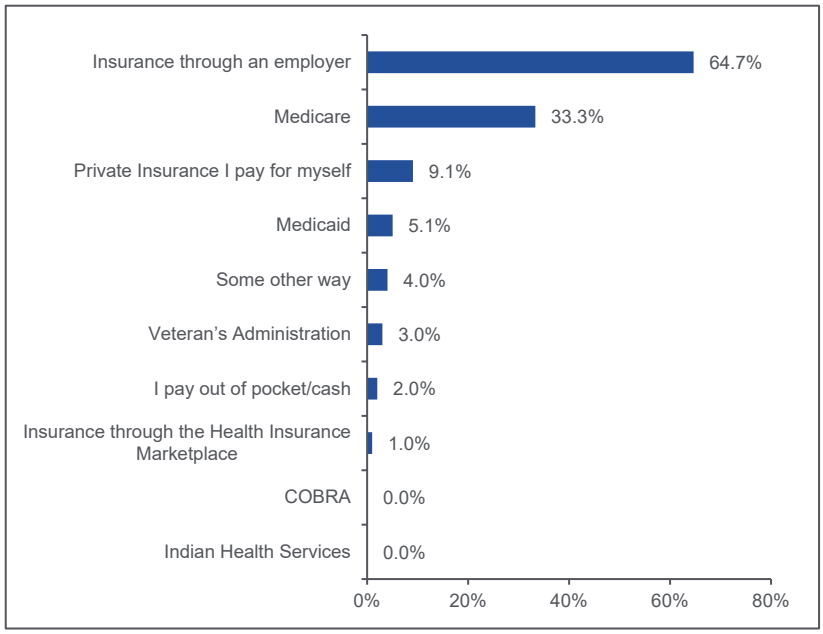
FIGURE 37. SURVEY RESPONDENTS' PERCEPTION OF HEALTH CARE SERVICES IN THEIR COMMUNITY



Among key informants and focus group participants, the most common barriers cited to accessing health care were related to overall cost, lack of insurance or underinsurance. One key informant emphasized that even with health coverage, many people still lack the disposable income necessary for co-pays, so they do without. In addition, those with health insurance may still lack dental or vision coverage.

Nearly all survey respondents reported having health coverage, with respondents reporting the following types of health plan(s) used to pay for health care services: health coverage through an employer (64.7%), Medicare (33.3%), private insurance (9.1%), and Medicaid (Figure 38).

FIGURE 38. SURVEY RESPONDENTS: WHAT TYPE OF HEALTH PLAN(S) DO YOU USE TO PAY FOR YOUR HEALTH CARE SERVICES? (SELECT ALL THAT APPLY)



The economic secondary data further support the primary data findings around cost and access. The median household income of the hospital's primary service area is $53,649, which is lower than both the state value ($54,113) and national value ($62,843). In addition, there is a disparity of approximately $22,000 in median household income for Black/African American residents and $26,000 for Hispanic/Latino residents (see Social & Economic Determinants of Health, Figures 15 and 16, for more details).

Awareness, Access to Information and Navigating the System

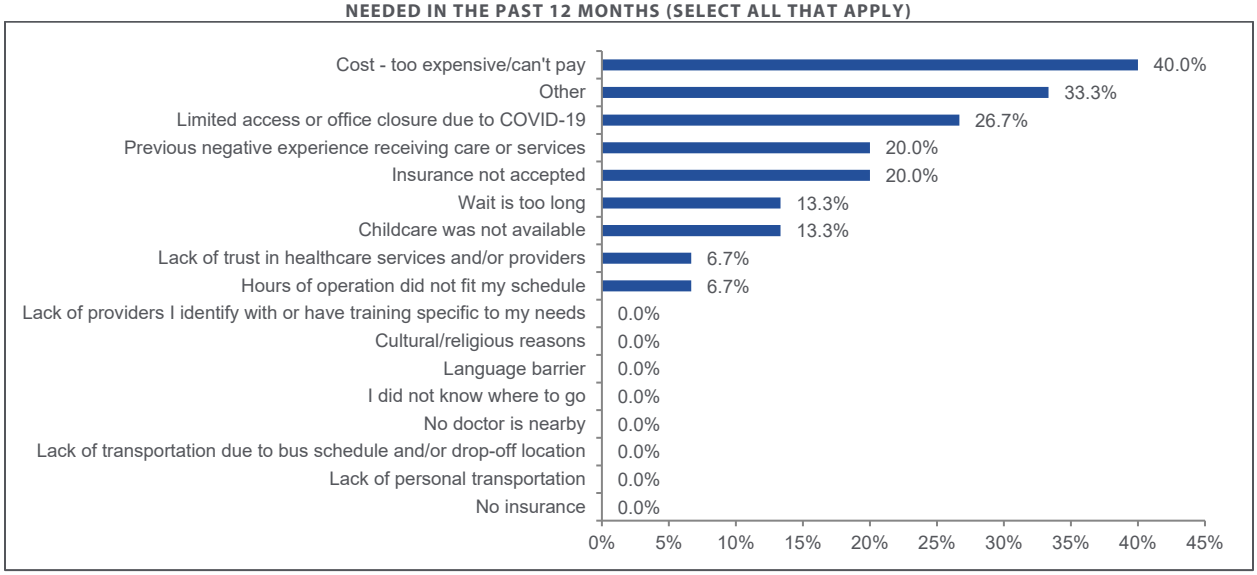
Knowledge of available resources and the ability to access information is another barrier to care, especially for those who don't have broadband or internet access. Findings from the secondary data indicate that 81.3% of households in Madison County had an internet subscription in 2015-2019 (Figure 23). While this is higher than the state value of 78.8%, lack of access to a computer or internet can make it difficult to access information, identify available services and schedule necessary appointments.

Key informants also noted health system knowledge/navigation as a barrier for accessing care and pointed to a need for more outreach and consistent messaging about services and resources available to the community. One key informant described the "long, complicated process of Medicaid enrollment" as a barrier, while another key informant pointed to the COVID-19 pandemic as having a substantial impact on access to basic information, especially for seniors who may not know how to access the internet. Finally, basic health care education was cited as another barrier to care, as one key informant described that "many people do not understand or know when to go to the doctor."

Fear, Discrimination, Language & Culture

Just over 16% of survey respondents reported they were unable to get necessary health care services at least once in the past 12 months. For community survey respondents that did not receive the care they needed, 20.0% reported a previous negative experience receiving care or services, while another 6.7% reported a lack of trust in health care services and/or providers (Figure 39).

FIGURE 39. SURVEY RESPONDENTS: SELECT THE TOP REASONS YOU DID NOT RECEIVE THE HEALTH CARE SERVICES THAT YOU NEEDED IN THE PAST 12 MONTHS (SELECT ALL THAT APPLY)



As shown earlier in Figure 37, 4.0% of survey respondents disagreed or strongly disagreed with the statement: "I feel like I can advocate for my health care (I feel heard and seen by my health care provider)," while another 13.1% of survey respondents disagreed or strongly disagreed that people in the community can access health care services regardless of race, gender, sexual orientation, or immigration status.

Lack of trust continues to be a big issue. One key informant stated that "social services are often bureaucratic and not person-centered, which can be intimidating and off-putting." Another key

informant explained that there is a lot of mistrust in our society with the health care system, adding that this has been a concern with vaccination rates during the COVID-19 pandemic. One focus group participant pointed out that the Hispanic/Latino population is often hesitant due to fear of paperwork. The stigma of seeking mental health treatment also continues to be a concern.

Conclusion

This Community Health Needs Assessment (CHNA), conducted for Saint Joseph Berea, helps the hospital meet the federal requirement for charitable hospital organizations to conduct a community health needs assessment every three years [IRS Section 501(r) (3)]. CHI Saint Joseph Health and Saint Joseph Berea partnered with Conduent Healthy Communities Institute to develop this 2023-2025 CHNA.

This assessment used a comprehensive set of secondary and primary data to determine the 12 significant health needs in the community served by Saint Joseph Berea. The prioritization process identified three priorities to be considered for subsequent implementation planning: Alcohol, Tobacco & Drug Use, Mental Health & Mental Disorders and Weight Status, Physical Activity & Nutrition.

The findings in this report will be used to guide the development of the Saint Joseph Berea Implementation Strategy, which will outline strategies to address identified priorities and improve the health of the community.

Please use this online form to send any comments or feedback about this CHNA: https://www.chisaintjosephhealth.org/healthy-community-chna-feedback. Feedback received will be incorporated into the next CHNA process.

Appendices Summary

The following support documents are shared in a separate appendix available on the CHI Saint Joseph Health website: https://www.chisaintjosephhealth.org/healthycommunities.

A. Secondary Data Methodology and Data Scoring Tables

A description of the Conduent HCI data scoring methodology, including a list of secondary data sources used in the analysis and county-level topic and indicator scoring results.

B. Index of Disparity

A description of the methods used to identify disparities within the secondary data by race, ethnicity, and gender.

C. Demographic Profile of Survey Respondents

A series of charts illustrating the demographics of community survey respondents.

D. COVID-19 Impact Snapshot

A summary of the impact of the COVID-19 pandemic, including findings from the community survey, key informants and focus group participants.

E. Community Input Assessment Tools

Data collection tools that were vital in capturing community feedback, including the community survey, key informant questions and focus group guide.

F. Prioritization Toolkit

A one-page cheat sheet provided to participants to help guide the virtual prioritization activity.

G. Impact Report

A detailed progress report on the hospital's prioritized health needs from its prior CHNA and Implementation Strategy (2020-2022). Goals, objectives, strategies, target population and status are outlined in a detailed framework.

H. Healthy Communities / Community Benefit Committee

A list of members serving on the Healthy Communities / Community Benefit Committee at CHI Saint Joseph Health.

Resources Potentially Available to Address Needs

A list of community resources available to organizations and individuals that live in the community.

Adoption/Approval

CHI Saint Joseph Health's Board of Directors includes representation across the state and supports the work that each facility completes to improve the health of their community. The Board of Directors approves Saint Joseph Berea's community health needs assessment and the methods used to identify priority areas of need in the community served by Saint Joseph Berea.

Martha E. Jones — May 27, 2022

Martha E. Jones — Date

Chair, CHI Saint Joseph Health Board of Directors

25MAY2022

Anthony Houston, Ed.D., FACHE — Date

Market CEO, CHI Saint Joseph Health