COMMUNITY HEALTH NEEDS ASSESSMENT

> OSF St. Mary Medical Center

Knox County
Warren County

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Community Health Needs Assessment

2022

Collaboration for sustaining health equity

EXECUTIVE SUMMARY

The Knox County and Warren County Community Health Needs Assessment is a collaborative undertaking by OSF St. Mary Medical Center to highlight the health needs and well-being of residents in Knox and Warren Counties. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Knox County and Warren County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Knox County and Warren County region, the predictors for and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Results from this study can be used for strategic decision-making purposes as they directly relate to the health needs of the community. The study was designed to assess issues and trends impacting the communities served by the collaborative, as well as perceptions of targeted stakeholder groups.

This study includes a detailed analysis of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publicly available sources as well as private sources of data. Additionally, primary data were collected for the general population and the at-risk or economically disadvantaged population. Areas of investigation included perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to medical care, dental care, prescription medications and mental-health counseling. Additionally, demographic characteristics of respondents were utilized to provide insights into why certain segments of the population responded differently.

Ultimately, the identification and prioritization of the most important health-related issues in the Knox County and Warren County region were identified. The collaborative team considered health needs based on: (1) magnitude of the issue (i.e., what percentage of the population was impacted by the issue); (2) severity of the issue in terms of its relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method, three significant health needs were identified and determined to have equal priority:

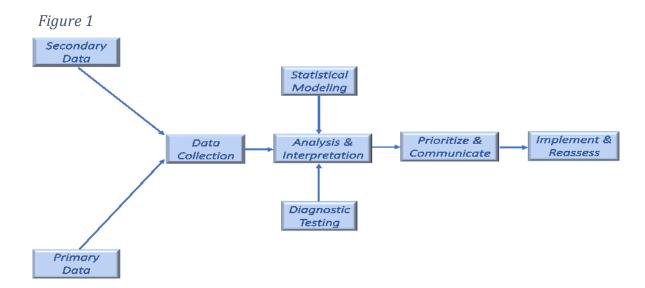
- **Healthy Behaviors** defined as active living and healthy eating, and their impact on obesity
- **Behavioral Health** including mental health and substance abuse
- > Healthy Aging

I. INTRODUCTION

Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010, added new requirements for tax-exempt charitable hospital organizations to conduct community health needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health needs assessment (CHNA) takes into account input from specific individuals who represent the broad interests of the community served by OSF St. Mary Medical Center including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, create a plan, and act upon unmet community health needs. Results from this assessment will be made widely available to the public. This CHNA Report was approved by the OSF HealthCare System's Board of Directors on July 25, 2022.

The structure of the CHNA is based on standards used by the Internal Revenue Service to develop Form 990, Schedule H–Hospitals, designated solely for tax-exempt charitable hospital organizations. The fundamental areas of the community health needs assessment are illustrated below (Figure 1).



Collaborative Team and Community Engagement

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members of the collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included representatives from OSF St. Mary Medical Center, members of the Knox County and Warren County Health Departments, and administrators from key community partner organizations. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met in the first and second quarter of 2022. Additionally, numerous meetings were held between the facilitators and specific individuals during the process.

Specifically, members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Note that the collaborative team provided input for all sections of the CHNA. Individuals, affiliations, titles and expertise can be found in APPENDIX 1: MEMBERS OF COLLABORATIVE TEAM.

Definition of the Community

In order to determine the geographic boundaries for OSF St. Mary Medical Center, analyses were completed to identify what percentage of inpatient and outpatient activity was represented by Knox and Warren Counties. Data show that Knox and Warren Counties represent 84% of all patients for the hospital.

In addition to defining the community by geographic boundaries, this study targets the at-risk population as an area of potential opportunity to improve the health of the community. Note that the at-risk population was defined as those individuals who were eligible to receive Medicaid based on the State of Illinois guidelines using household size and income level.

Purpose of the Community Health-Needs Assessment

In the initial meeting, the collaborative committee identified the purpose of this study. Specifically, this study has been designed to provide necessary information to health-care organizations, including hospitals, clinics and health departments, in order to create strategic plans in program design, access and delivery. Results of this study will act as a platform that allows health-care organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, hospitals, clinics, agencies and health departments will use this CHNA to improve the quality of healthcare in Knox County and Warren County. When feasible, data are assessed longitudinally to identify trends and patterns by comparing with results from the 2019 CHNA and benchmarked with State of Illinois averages.

Community Feedback from Previous Assessments

The 2019 CHNA and implementation plan were made widely available to the community to allow for feedback. Specifically, the hospital posted both a full version and a summary version of the 2019 CHNA on its website. In order to encourage written feedback, the hospital specifically included a section labeled *Share Your Feedback* and provided instructions regarding how individuals from the community could provide comments to the CHNA. While no written feedback was received by individuals from the community via the available mechanism for the CHNA or implementation plan, verbal feedback was provided by key stakeholders from community-service organizations and incorporated as part of the collaborative process.

2019 CHNA Health Needs and Implementation Plans

The 2019 CHNA for Knox and Warren Counties identified two significant health needs. These included: Healthy Behaviors and Behavioral Health. Specific actions were taken to address these needs. Detailed discussions of goals and strategies to improve these health needs can be seen in APPENDIX 2: ACTIVITIES RELATED TO 2019 CHNA PRIORITIZED NEEDS. Note that numerous challenges associated with the COVID-19 pandemic had significant impact on the activities discussed in appendix 2.



Social Determinants of Health

This CHNA incorporates important factors associated with Social Determinants of Health (SDOH). SDOH are important environmental factors, such as where people are born, live, work and play, that affect people's well-being, physical and mental health, and quality of life. According to research conducted by the U.S. Department of Health and Human Services, *Healthy People 2030* has identified five SDOH that should be included in assessing community health (Figure 2).

Figure 2

Social Determinants of Health



Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved January 15, 2022, from https://health.gov/healthypeople/objectives-and-data/social-determinants-health

Assessment of SDOH is included in the CHNA, as social determinants help contribute to health inequities and disparities. Simply creating interventions without incorporating SDOH will have limited impact on improving community health for people living in underserved or at-risk areas.

II. METHODS

To complete the comprehensive community health-needs assessment, multiple sources were examined. Secondary statistical data were used to assess the community profile, morbidity rates and causes of mortality. Additionally, based on a survey sample from Knox and Warren Counties, a study was completed to examine perceptions of the community health-related issues, healthy behaviors, behavioral health, food security, social determinants of health and access to healthcare.

Secondary Data Collection

Existing secondary statistical data were first used to develop an overall assessment of health-related issues in the community. Within each section of the report, there are definitions, importance of categories, data and interpretations. At the end of each chapter, there is a section on key takeaways.

Based on several retreats, a separate OSF Collaborative Team used COMPdata Informatics (affiliated with Illinois Health and Hospital Association (IHA)) to identify six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, diabetes and infections. In order to define each disease category, modified definitions developed by Sg2 were used. Sg2 specializes in consulting for health-care organizations. Their team of experts includes MDs, PhDs, RNs and health-care leaders with extensive strategic, operational, clinical, academic, technological and financial experience.

Primary Data Collection

In addition to existing secondary data sources, primary survey data were also collected. This section describes the research methods used to collect, code, verify and analyze primary survey data. Specifically, the research design used for this study: survey design, data collection and data integrity.

Survey Instrument Design

Initially, all publicly available health-needs assessments in the U.S. were assessed to identify common themes and approaches to collecting community health-needs data. By leveraging best practices from these surveys, a new survey in 2021 was designed for use with both the general population and the atrisk community. To ensure that all critical areas were being addressed, the entire collaborative team was involved in survey design/approval through several fact-finding sessions. Additionally, several focus groups were used to collect the qualitative information necessary to design survey items. Specifically, for the community health-needs assessment, eight specific sets of items were included:

- Ratings of health issues in the community to assess the importance of various community health concerns. Survey items included assessments of topics such as cancer, diabetes and obesity.
- Ratings of unhealthy behaviors in the community to assess the importance of various unhealthy behaviors. Survey items included assessments of topics such as violence, drug abuse and smoking.
- ➤ Ratings of issues concerning well-being to assess the importance of various issues relating to well-being in the community. Survey items included assessments of topics such as access to healthcare, safer neighborhoods and effective public transportation.
- Accessibility to healthcare to assess the degree to which residents could access healthcare when needed. Survey items included assessments of topics such as access to medical, dental and mental-healthcare, as well as access to prescription medication.
- Healthy behaviors to assess the degree to which residents exhibited healthy behaviors. The survey items included assessments of topics such as exercise, healthy eating habits and cancer screenings.
- **Behavioral health** to assess community issues related to areas such as anxiety and depression.

- Food security to assess access to healthy food alternatives.
- Social determinants of health to assess the impact that social determinants may have on the above-mentioned areas.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the eight categories discussed above. A copy of the final survey is included in APPENDIX 3: SURVEY.

Sample Size

In order to identify our potential population, we first identified the percentage of the Knox County and Warren County population that was living in poverty. Specifically, we multiplied the population of the county by its respective poverty rate to identify the minimum sample size to study the at-risk population. The poverty rates for Knox County and Warren County were 18.2 and 12.9 percent, respectively. A total population of 49,141 was used for Knox County; yielding a total of 8,944 residents living in poverty. Likewise, Warren County total population is 16,548; yielding a total of 2,135 residents living in poverty in the Warren County area.

A normal approximation to the hypergeometric distribution was assumed given the targeted sample size.

```
n = (Nz2pq)/(E2 (N-1) + z2 pq)
```

where:

n = the required sample size

N = the population size

z = the value that specified the confidence interval (use 95% CI)

pg = population proportions (set at .05)

E = desired accuracy of sample proportions (set at \pm -.05)

For the total Knox County and Warren County areas, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 382 for Knox County and 376 for Warren County. The data collection effort for this CHNA yielded a total of 449 usable responses for Knox County and 380 usable responses for Warren County. This exceeded the threshold of the desired 95% confidence interval.

To provide a representative profile, efforts were made to ensure that the demography of the sample was aligned with population demographics according to U.S. Census data. Counties were then weighted based on population size. Sample characteristics can be seen in APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS.

Data Collection

Survey data were collected in the 3rd and 4th quarter of 2021. To collect data in this study, two techniques were used. First, an online version of the survey was created. Second, a paper version of the survey was distributed. In order to be sensitive to the needs of respondents, surveys stressed assurance

of complete anonymity. Note that versions of both the online survey and paper survey were translated into Spanish.

To specifically target the at-risk population, surveys were distributed at homeless shelters, food pantries and soup kitchens. Since the at-risk population was specifically targeted as part of the data collection effort, this became a stratified sample, as other groups were not specifically targeted based on their socio-economic status.

Note that use of electronic surveys to collect community-level data may create a potential for bias from convenience sampling error. To recognize for potential bias in the community sample, a second control sample of data was collected. Specifically, the control sample consisted of random patients surveyed at the hospital, assuming that patients receiving care represent an unbiased representation of the community. All questions on the patient version of the survey pertaining to access to healthcare were removed, as these questions were not relevant to current patients. Data from the community sample and the control sample were compared using t-tests and tetrachoric correlations when appropriate. Results show that the community sample did not exhibit any significance patterns of bias. If specific relationships exhibited a potential for bias between the community sample and the control sample, they are identified in the social-determinants sections of the analyses within each chapter.

Data Integrity

Comprehensive analyses were performed to verify the integrity of the data for this research. Without proper validation of the raw data, any interpretation of results could be inaccurate and misleading if used for decision-making. Therefore, several tests were performed to ensure that the data were valid. These tests were performed before any analyses were undertaken. Data were checked for coding accuracy, using descriptive frequency statistics to verify that all data items were correct. This was followed by analyses of means and standard deviations and comparison of primary data statistics to existing secondary data.

Analytic Techniques

To ensure statistical validity, several different analytic techniques were used. Specifically, frequencies and descriptive statistics were used for identifying patterns in residents' ratings of various health concerns. Additionally, appropriate statistical techniques were used for identification of existing relationships between perceptions, behaviors and demographic data. Specifically, Pearson correlations, X² tests and tetrachoric correlations were used when appropriate, given characteristics of the specific data being analyzed.

CHAPTER 1 OUTLINE

- 1.1 Population
- 1.2 Age, Gender and Race Distribution
- 1.3 Household/Family
- 1.4 Economic Information
- 1.5 Education
- 1.6 Internet Accessibility
- 1.7 Key Takeaways from Chapter 1

CHAPTER 1: DEMOGRAPHY AND SOCIAL DETERMINANTS

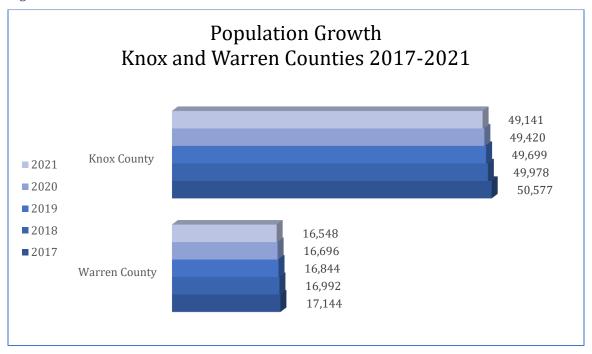
1.1 Population

Importance of the measure: Population data characterize individuals residing in Knox County and Warren County. Population data provide an overview of population growth trends and build a foundation for additional analysis of data.

Population Growth

Data from the last census indicate the population of Knox County decreased (1436) between 2017 and 2021. The population of Warren County also decreased (596) between 2017 and 2021 (Figure 3).

Figure 3



1.2 Age, Gender and Race Distribution

Importance of the measure: Population data broken down by age, gender, and race groups provide a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of healthcare services. Understanding the cultural diversity of communities is essential when considering health-care infrastructure and service delivery systems.

Age

Figure 4 and Figure 5 illustrate the percentage of individuals in Knox and Warren Counties in each age group. Note the 35–49 years age group in Warren County decreased 5% and the 50–64 years age group decreased 4%. In Knox County, the 35–49 years age group decreased by 32% and the 50-64 years age group increased by 40%. The elderly population (residents aged 65 and older) increased less than 1% in Warren County and 5% in Knox County between 2015 and 2019.

Figure 4

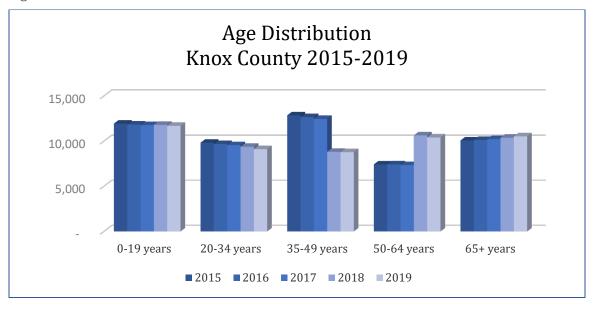
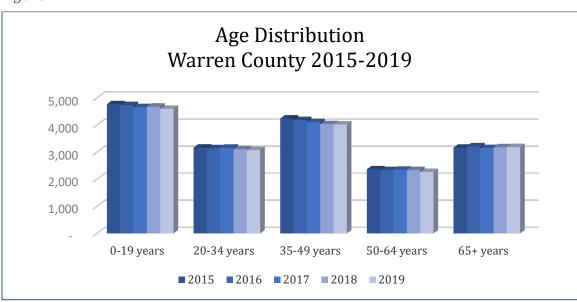


Figure 5



Source: US Census

Gender

The gender distribution of Knox County (Figure 6) residents has remained relatively consistent between 2017 and 2019, whereas in Warren County the male population has increased 3%.

Figure 6

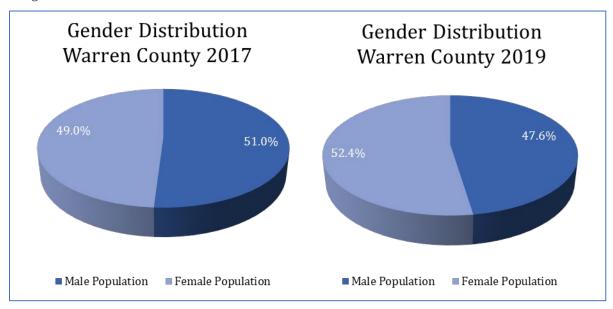
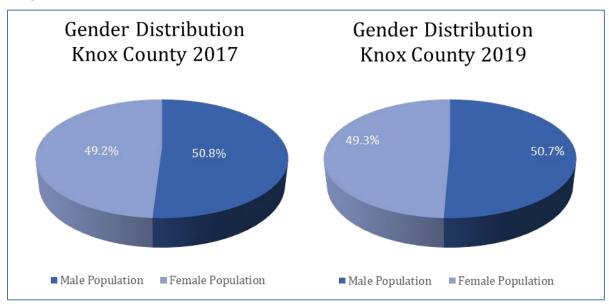


Figure 7



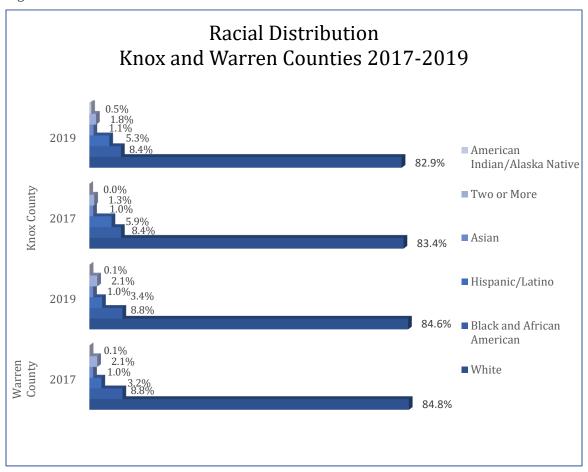
Source: US Census

Race

With regard to race and ethnic background, Knox County and Warren County are largely homogenous. Data from 2019 suggest that White ethnicity comprises 82.9% of the population in Knox County and 83.4% of the population in Warren County. However, the non-White population of Knox County has been increasing (from 16.6% to 17.1% in 2019), with Black ethnicity comprising 8.4% of the population, multiracial ethnicity comprising 1.8% of the population, and Hispanic/Latino (LatinX) ethnicity comprising 5.3% of the population. The non-White population of Warren County is also increasing (from 15.2% to

15.4% in 2019), with Black ethnicity comprising 8.8% of the population, multi-racial ethnicity comprising 2.1% of the population, and Hispanic/Latino (LatinX) ethnicity comprising 3.4% of the population (Figure 8).

Figure 8



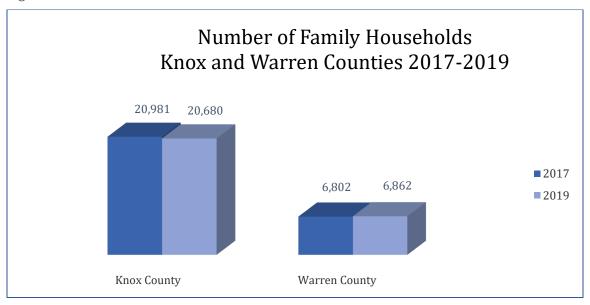
Source: US Census

1.3 Household/Family

Importance of the measure: Families are an important component of a robust society in Knox and Warren Counties, as they dramatically impact the health and development of children and provide support and well-being for older adults.

As indicated in Figure 9, the number of family households in Knox County slightly decreased while Warren County slightly increased from 2017 to 2019.

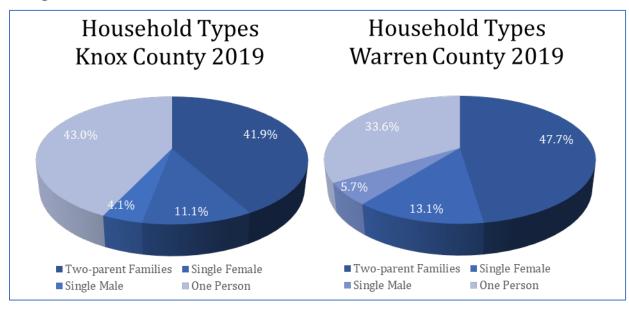
Figure 9



Family Composition

In Knox County, data from 2019 suggest the percentage of two-parent families is 41.9%. One-person households represent 43% of the county population, and single-female represents 11.1%, and single-male represents 4.1%. In Warren County, two-parent families represent 47.7% of household types, one-person represents 33.6% of household types, single-female represents 13.1%, and single-male represents 5.7% (Figure 10).

Figure 10

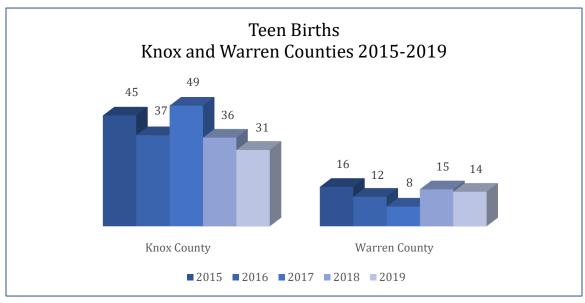


Source: US Census

Early Sexual Activity Leading to Births from Teenage Mothers

Knox County and Warren County both experienced a slight fluctuation in teenage birth count. The teen birth count decreased overall from 2015-2019 (Figure 11).

Figure 11



Source: Illinois Department of Public Health

1.4 Economic Information

Importance of the measure: Median income divides households into two segments with one-half of households earning more than the median income and the other half earning less. Because median income is not significantly impacted by unusually high or low-income values, it is considered a more reliable indicator than average income. To live in poverty means to lack sufficient income to meet one's basic needs. Accordingly, poverty is associated with numerous chronic social, health, education and employment conditions.

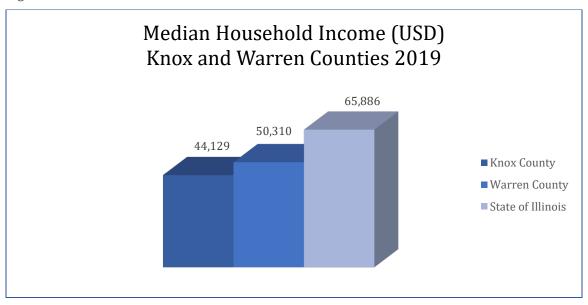
Economic Climate

Economic climate is a measure of a community's financial resources and resiliency. Key risk influencers include income, cost of living and opportunity. For Knox and Warren Counties, 42% of the population is at elevated risk for economic climate. This is higher than the State of Illinois average of 35% (SocialScape® powered by SociallyDetermined®, 2022).

Median Income Level

For 2019, the median household income in both Knox and Warren Counties was lower than the State of Illinois (Figure 12).

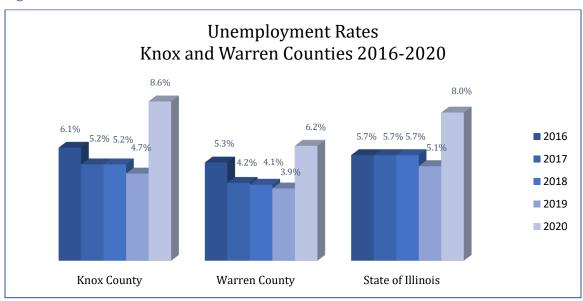
Figure 12



Unemployment

For the years 2016 and 2020, the Knox County unemployment rate was close to the State of Illinois unemployment rate. However, it is higher for years 2016 and 2020. The Warren County unemployment rate was lower than the State of Illinois unemployment rate for years 2016-2020. Overall, the unemployment rate increased in 2020, likely due to the COVID-19 pandemic (Figure 13).

Figure 13



Source: Bureau of Labor Statistics

Individuals in Poverty

In Knox County, the percentage of individuals living in poverty between 2017 and 2019 increased slightly. The poverty rate for individuals is 18.2%, which is higher than the State of Illinois individual poverty rate of 11.4%. Warren County experienced a decline (nearly 1%) in percentage of individuals living in poverty between 2017 and 2019. The individual poverty rate in Warren County (12.9%) is higher than the State of Illinois individual poverty rate (11.4%) (Figure 14).

Poverty Rate
Knox and Warren Countites 2017-2019

13.8% 12.9% 12.6% 11.4% 2017
2017
2019

Figure 14

Source: US Census

1.5 Education

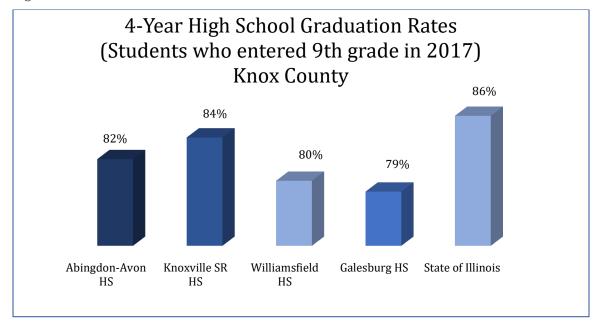
Importance of the measure: According to the National Center for Educational Statistics¹, "The better educated a person is, the more likely that person is to report being in 'excellent' or 'very good' health, regardless of income." Research suggests that the higher the level of educational attainment and the more successful one is in school, the better one's health will be and the greater likelihood of one selecting healthy lifestyle choices. Accordingly, years of education is strongly related to an individual's propensity to earn a higher salary, gain better employment, and foster multifaceted success in life.

High School Graduation Rates

Students who entered 9th grade in 2017 in Knox and Warren Counties reported high school graduation rates lower than the State average of 86% (Figure 15 and Figure 16).

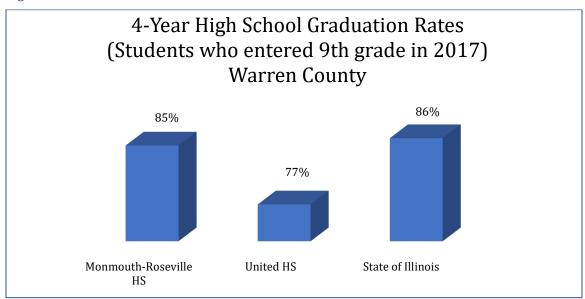
¹ NCES 2005

Figure 15



Source: Illinois Report Card

Figure 16

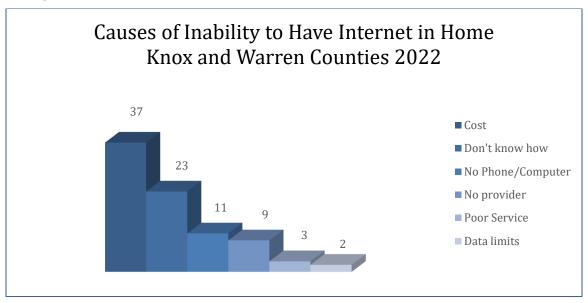


Source: Illinois Report Card

1.6 Internet Accessibility

Survey respondents were asked if they had Internet access. Of respondents, 92% indicated they had Internet in their homes. For those who did not have Internet in their home, cost was the most frequently cited reason (Figure 17). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 17



Source: CHNA Survey

Digital Landscape

Digital landscape is a community's access to digital tools and the digital literacy to use them. Key risk influencers include affordability, accessibility and digital literacy. For Knox and Warren Counties, 22% of the population is at elevated risk for digital landscape. This is higher than the State of Illinois average of 9% (SocialScape® powered by SociallyDetermined®, 2022).



Social Determinants Related to Internet Access

Several factors show significant relationships with an individual's Internet access. The following relationships were found using correlational analyses:

Access to Internet tends to be higher for younger people, those with higher education and those with higher income. Access to Internet tends to be lower for people with an unstable (e.g., homeless) housing environment.

1.7 Key Takeaways from Chapter 1

- ✓ POPULATION DECREASED OVER THE LAST 5 YEARS
- ✓ POPULATION APPROACHING AGE 65 IS INCREASING
- ✓ IN KNOX AND WARREN COUNTIES, SINGLE FEMALE HEAD-OF-HOUSE-HOUSEHOLD REPRESENTS 11% AND 13% OF THE POPULATION RESPECTIVELY. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.

CHAPTER 2 OUTLINE

- 2.1 Accessibility
- 2.2 Wellness
- 2.3 Access to Information
- 2.4 Physical Environment
- 2.5 Health Status
- 2.6 Key Takeaways from Chapter 2

CHAPTER 2: PREVENTION BEHAVIORS

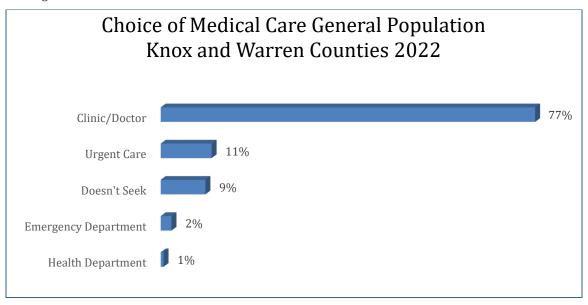
2.1 Accessibility

Importance of the measure: It is critical for health-care services to be accessible. Therefore, accessibility to healthcare must address both the associated financial costs and the supply and demand of medical services.

Choice of Medical Care

Survey respondents were asked to select the type of health-care facility used when sick. Six different alternatives were presented, including clinic or doctor's office, emergency department, urgent-care facility, health department, no medical treatment and other. The most common response for source of medical care was clinic/doctor's office, chosen by 77% of survey respondents. This was followed by urgent care (11%), not seeking medical attention (9%) the emergency department at a hospital (2%), and the health department (1%) (Figure 18).

Figure 18



Source: CHNA Survey

COMPARISON TO 2019 CHNA

Most choices were similar to the 2019 CHNA. However, while there was a 3% reduction in use of the emergency department, there was a 3% increase in choosing not to seek medical care when needed.

Social Determinants Related to Choice of Medical Care

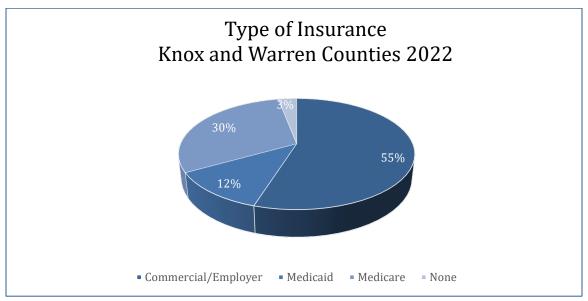
Several factors show significant relationships with an individual's choice of medical care. The following relationships were found using correlational analyses:

- Clinic/Doctor's Office tends to be used more often by older people, White people and those with higher education and higher income. Clinic/Doctor's office is used less often by Black people and people with an unstable (e.g., homeless) housing environment.
- Urgent Care did not have any significant correlates.
- **Emergency Department** tends to be used more often by younger people, those with less education, those with lower income and people with an unstable (e.g., homeless) housing environment.
- Do Not Seek Medical Care tends to be rated higher by younger people and men.
- Health Department tends to be rated higher by Black people.

Insurance Coverage

According to survey data, 55% of the residents are covered by commercial/employer insurance, followed by Medicare (30%), and Medicaid (12%). Only 3% of respondents indicated they did not have any health insurance (Figure 19). Note that respondents could choose more than one type of insurance, so percentages may not equal 100.

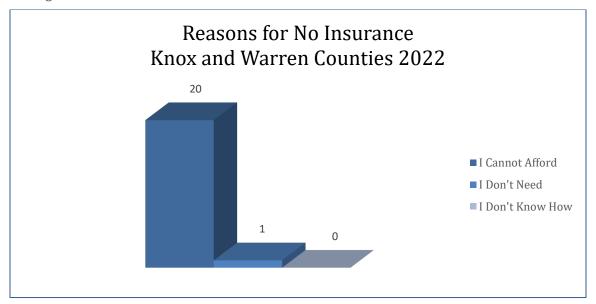
Figure 19



Source: CHNA Survey

Data from the survey show that for the 3% of individuals who do not have insurance, the most prevalent reason was cost (Figure 20). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 20



Source: CHNA Survey

Comparison to 2019 CHNA

Compared to survey data from the 2019 CHNA, results were similar for those with no insurance and for those with Medicare.

(M)

Social Determinants Related to Type of Insurance

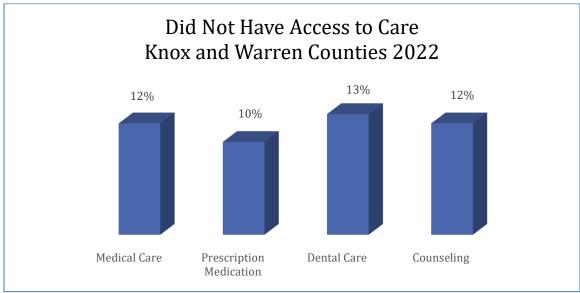
Several characteristics show significant relationships with an individual's type of insurance. The following relationships were found using correlational analyses:

- Medicare tends to be used more frequently by women, those with lower education, Black people and LatinX people.
- ➤ **Medicaid** tends to be used more frequently by men, younger people, LatinX people, those with lower income and people with an unstable (e.g., homeless) housing environment. Medicaid tends to be used less by White people.
- Commercial/employer insurance is used more often by younger people, those with higher education and those with higher income. Private insurance is used less by LatinX people and people with an unstable (e.g., homeless) housing environment.
- No Insurance tends to be reported more often by men, younger people, those with lower education and people with an unstable (e.g., homeless) housing environment. No insurance tends to be reported less often by Black people.

Access to Care

In the CHNA survey, respondents were asked, "Was there a time when you needed care but were not able to get it?" Access to four types of care were assessed: medical care, prescription medication, dental care and counseling. Survey results show that 12% of the population did not have access to medical care when needed; 10% of the population did not have access to prescription medication when needed; 13% of the population did not have access to dental care when needed; and 12% of the population did not have access to counseling when needed (Figure 21).

Figure 21



Source: CHNA Survey

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Social Determinants Related to Access to Care

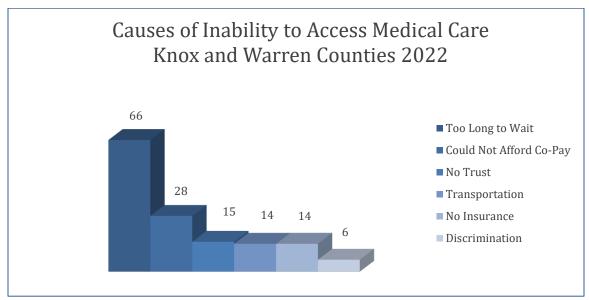
Several characteristics show a significant relationship with an individual's ability to access care when needed. The following relationships were found using correlational analyses:

- Access to medical care tends to be higher for older people, White people and those with higher income. Access to medical care tends to be lower for Black people.
- Access to prescription medications tends to be higher for older people, those with higher education and those with higher income. Access to prescription medication tends to be lower for Black people and people with an unstable (e.g., homeless) housing environment.
- ➤ Access to dental care tends to be higher for older people, White people, those with higher education and those with higher income. Access to dental care tends to be lower for people with an unstable (e.g., homeless) housing environment.
- Access to counseling tends to be higher for older people, White people and those with higher income. Access to counseling tends to be lower for LatinX people.

Reasons for No Access - Medical Care

Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. The leading causes of the inability to gain access to medical care were too long to wait for an appointment (66) and the inability to afford the copay (28). Note that these data are displayed in frequencies rather than percentages given the low number of responses (Figure 22).

Figure 22

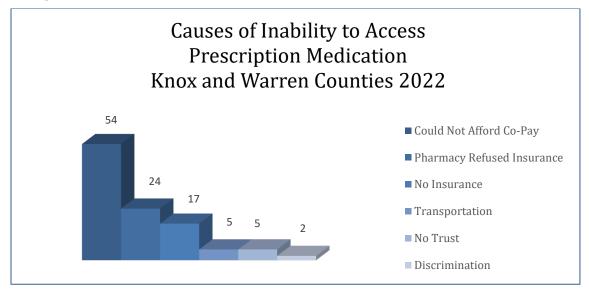


Source: CHNA Survey

Reasons for No Access - Prescription Medication

Survey respondents who reported they were not able to get prescription medication when needed were asked a follow-up question. Based on frequencies, the leading cause of the inability to gain access to prescription medicine was the inability to afford copayments or deductibles (54) (Figure 23).

Figure 23

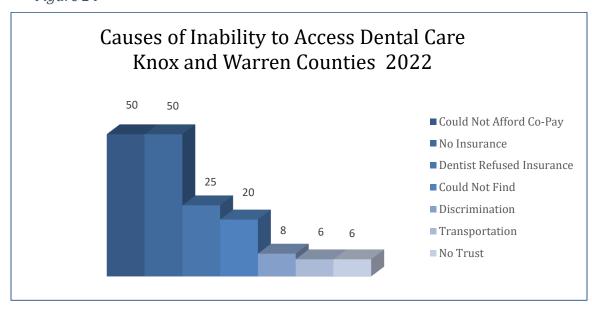


Source: CHNA Survey

Reasons for No Access - Dental Care

Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading causes of inability to gain access to dental care were the inability to afford copayments or deductibles (50) and no insurance (50). Note that these data are displayed in frequencies rather than percentages given the low number of responses (Figure 24).

Figure 24

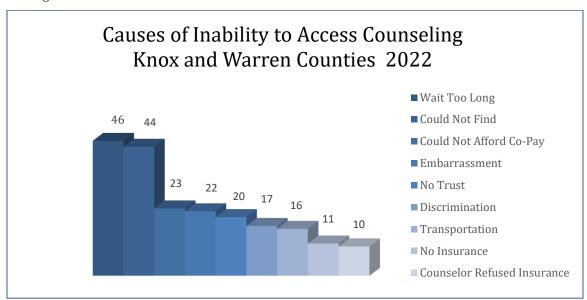


Source: CHNA Survey

Reasons for No Access - Counseling

Survey respondents who reported they were not able to get counseling when needed were asked a follow-up question. The leading causes of the inability to gain access to counseling were the wait was too long (46) and could not find a counselor (44). Note that these data are displayed in frequencies rather than percentages given the low number of responses (Figure 25).

Figure 25



Source: CHNA Survey

Comparison to 2019 CHNA

Access to Medical Care – showed an increase in access of 2%.

Access to Prescription Medication – showed an increase in access of 2%.

Access to Dental Care – showed a decrease in access of 2%.

Access to Counseling – showed a significant decrease of 5%.

Transportation Network

Transportation network is a measure of the adequacy of the transportation network to facilitate access to care. Key risk influencers include access and proximity to resources. While survey data indicate transportation was not a leading cause of inaccessibility, for Knox and Warren Counties, 25% of the population is at elevated risk for transportation network. This is higher than the State of Illinois average of 6% (SocialScape® powered by SociallyDetermined®, 2022).

2.2 Wellness

Importance of the measure: Preventative health-care measures, including getting a flu shot, engaging in a healthy lifestyle and undertaking screenings for diseases are essential to combating morbidity and mortality while reducing health-care costs.

Frequency of Flu Shots

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. Figure 26 shows that the percentage of people who have had a flu shot in the past year is 25.8% for Knox County compared to 37.4% in Warren County. Results are more positive for Warren County as they are greater than the State of Illinois at 34.5%. Note that data have not been updated by the Illinois Department of Public Health.

Flu Shot in the Past Year Knox and Warren Counties 2015-2019

37.4%

25.8%

Warren County

State of Illinois

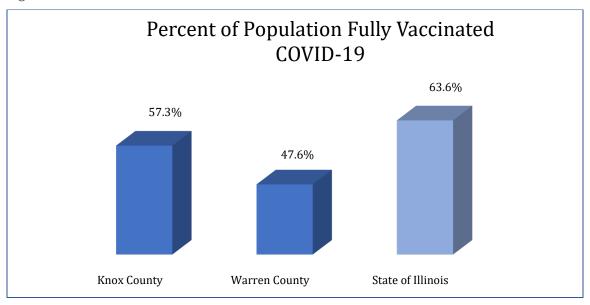
Figure 26

Source: CHNA Survey

COVID-19 Vaccinations

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. Figure 27 shows that the percentage of people who have been fully vaccinated from the COVID-19 virus. Knox County, although greater than 50%, remained lower than State average of 63.6%. Warren County is significantly below the State average at 47.6%. Additionally, given the recency of the COVID-19 virus, no historical comparisons are made at this time.

Figure 27

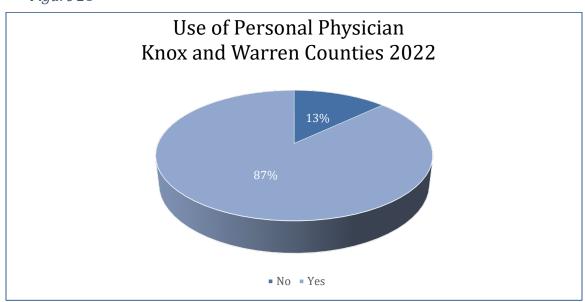


Source: Illinois Department of Public Health (02-27-22)

Personal Physician

The CHNA survey asked respondents if they had a personal physician. Having a personal physician suggests that individuals are more likely to get wellness check-ups and less likely to use an emergency department as a primary healthcare service. According to survey data, 87% of residents have a personal physician (Figure 28).

Figure 28



Source: CHNA Survey

Comparison to 2019 CHNA

Survey results for having a personal physician are similar compared to the 2019 CHNA. Specifically, there is a 1% increase for those having a personal physician.



Social Determinants Related to Having a Personal Physician

The following characteristics show significant relationships with having a personal physician. The following relationships were found using correlational analyses:

➤ **Having a personal physician** tends to be more likely for older people, women, and White people. Black people are less likely to report having a personal physician.

Cancer Screening

Early detection of cancer may greatly improve the probability of successful treatment. In the case of colorectal cancer, early detection of precancerous polyps can prevent cancer. Cancer screening is a new section to the 2019 CHNA. Specifically, four types of cancer screening were measured: breast, cervical, prostate and colorectal.

Results from the CHNA survey show that 73% of women had a breast screening in the past five years and 63% of women had a cervical screening. For men, 43% had a prostate screening in the past five years. For women and men over the age of 50, 66% had a colorectal screening in the last five years (Figure 29).

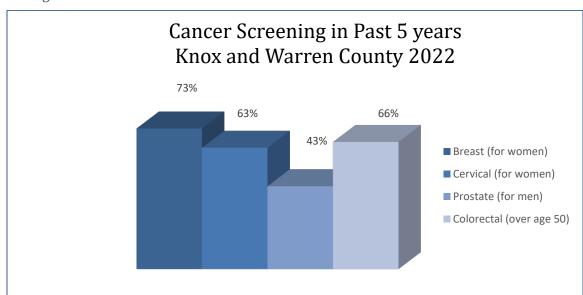


Figure 29

Source: CHNA Survey

Comparison to 2019 CHNA

Survey results for having a breast cancer screening and prostate screening are similar compared to the 2019 CHNA. However, there was an increase of 8% for those receiving a colorectal screening. Note this is the first-year data have been collected for cervical screenings, so no comparison is possible.

(M)

Social Determinants Related to Cancer Screenings

Multiple characteristics show significant relationships with cancer screening. The following relationships were found using correlational analyses:

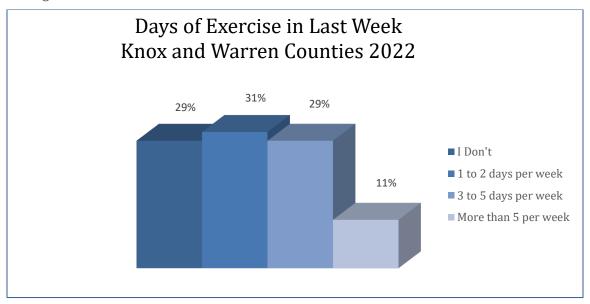
- **Breast screening** tends to be more likely for older people, White women and those with a higher level of income. Breast screening tends to be less likely for LatinX women.
- **Cervical screening** tends to be more likely for younger people, those with a higher level of education and those with a higher income
- ➤ **Prostate screening** tends to be more likely for older men, those with a higher level of education and those with a higher income. Prostate screening is less likely for men in an unstable (e.g., homeless) housing environment.
- ➤ Colorectal screening tends to be more likely for women, older people, White people, those with a higher level of education and those with a higher income. Colorectal screening tends to be less likely for LatinX people.

Physical Exercise

A healthy lifestyle, comprised of regular physical activity, has been shown to increase physical, mental, and emotional well-being.

Specifically, 29% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week (Figure 30).

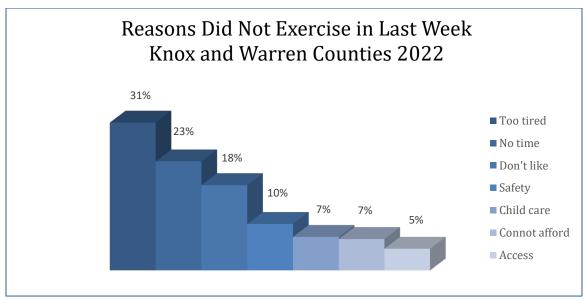
Figure 30



Source: CHNA Survey

To find out why some residents do not exercise at all, a follow up question was asked. Similar to the 2019 CHNA, the most common reasons for not exercising are not having enough energy (31%), not enough time (23%) and a dislike of exercise (18%) (Figure 31).

Figure 31



Source: CHNA Survey

Comparison to 2019 CHNA

Results show no significant change compared to 2019 CHNA results.



Social Determinants Related to Exercise

Multiple characteristics show significant relationships with frequency of exercise. The following relationships were found using correlational analyses:

Frequency of exercise tends to be more likely for those with higher education and higher income.

Healthy Eating

A healthy lifestyle, comprised of a proper diet, has been shown to increase physical, mental and emotional well-being. Consequently, nutrition and diet are critical to preventative care.

Almost two-thirds (64%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 6% (Figure 32).

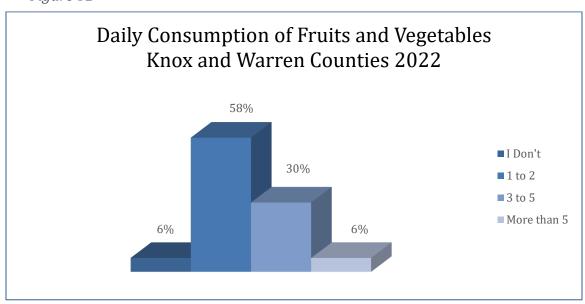
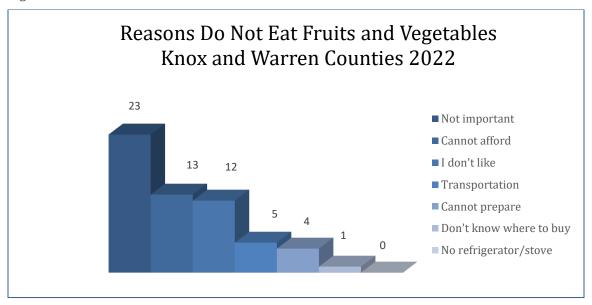


Figure 32

Source: CHNA Survey

Those individuals who indicated they do not eat any fruits or vegetables were asked a follow up question. Reasons most frequently given for failing to eat more fruits and vegetables are a lack of importance (23), expense involved (13) and dislike of fruits and vegetables (12) (Figure 33). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 33



Comparison to 2019 CHNA

Results show no significant change compared to 2019 CHNA results.

Social Determinants Related to Healthy Eating

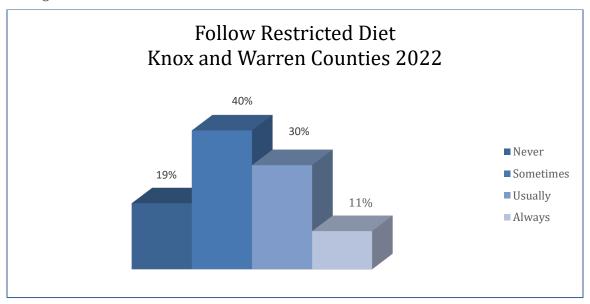
Multiple characteristics show significant relationships with healthy eating. The following relationships were found using correlational analyses:

Consumption of fruits and vegetables tends to be more likely for older people, those with a higher level of education and those with higher income.

Restricted Diet

Respondents were also asked if they followed a restricted diet if recently diagnosed with a morbidity. Of respondents, 41% usually or always follow a restricted diet (Figure 34).

Figure 34



Comparison to 2019 CHNA

Results show no significant change compared to 2019 CHNA results.

Health Literacy

Health literacy is a measure of factors in the community that impact healthcare access, navigation and adherence. Key risk influencers include culture, demographics and education. For Knox and Warren Counties, 32% of the population is at elevated risk for health literacy. This is lower than the State of Illinois average of 34% (SocialScape® powered by SociallyDetermined®, 2022).

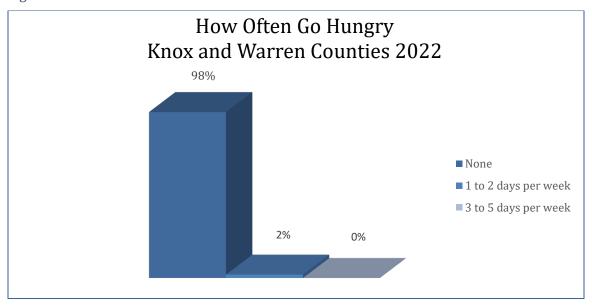
2.3 Understanding Food Insecurity

Importance of the measure: It is essential that everyone has access to food and drink necessary for living healthy lives. Food insecurity exists when people don't have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs for a healthy life.

Prevalence of Hunger

Respondents were asked, "How many days a week do you or your family members go hungry?" The vast majority of respondents indicated they do not go hungry, however, 2% indicated they go hungry 1 or more days per week (Figure 35).

Figure 35



Comparison to 2019 CHNA

Results show a 3% decrease compared to 2019 CHNA results for those who go hungry.



Social Determinants Related to Prevalence of Hunger

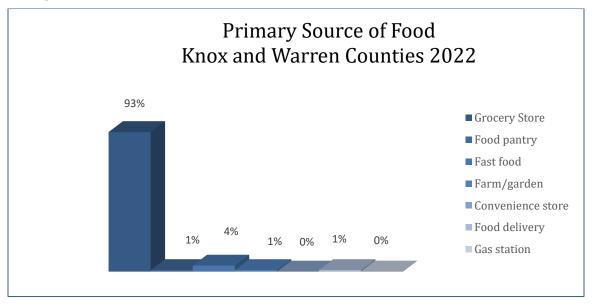
Multiple characteristics show significant relationships with hunger. The following relationships were found using correlational analyses:

Prevalence of Hunger tends to be more likely for men, those with less education, less income and those in an unstable (e.g., homeless) housing environment.

Primary Source of Food

Respondents were asked to identify their primary source of food. It can be seen that the majority (93%) identified a grocery store (Figure 36).

Figure 36



Food Landscape

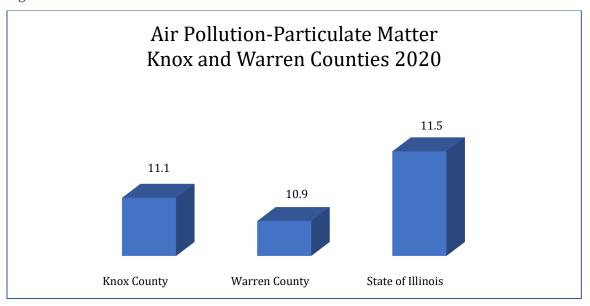
Food landscape is a measure of the conditions that affect the ability of residents to access health, affordable nutrition. Key risk influencers include accessibility, affordability and literacy. For Knox and Warren Counties, 38% of the population is at elevated risk for food landscape. This is higher than the State of Illinois average of 25%. (SocialScape® powered by SociallyDetermined®, 2022).

2.4 Physical Environment

Importance of the measure: According to the County Health Rankings, Air Pollution - Particulate Matter (APPM) is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases are emitted from power plants, manufacturing facilities and automobiles.

The relationship between elevated air pollution, particularly fine particulate matter and ozone, and compromised health has been well documented. Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma and other adverse pulmonary effects. The APPM for Knox County (11.1) is slightly lower than the State average of 11.5. The AAPM for Warren County (10.9) is also slightly lower than the State average of 11.5 (Figure 37).

Figure 37



Source: County Health Rankings 2021

2.5 Health Status

Importance of the measure: Self-perceptions of health can provide important insights to help manage population health. Not only do self-perceptions provide benchmarks regarding health status, but they can also provide insights into how accurately people perceive their own health.

Mental Health

The survey asked respondents to indicate specific issues, such as depression and stress/anxiety. Of respondents, 56% indicated they did not feel depressed in the last 30 days (Figure 38) and 64% indicated they did not feel anxious or stressed (Figure 39).

Figure 38

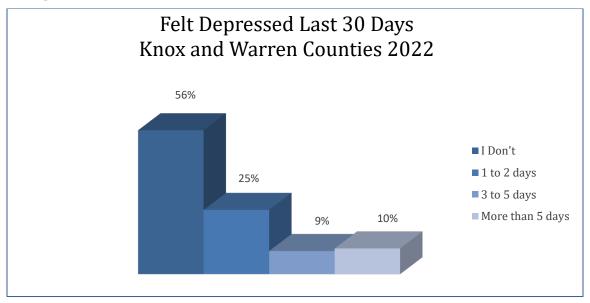
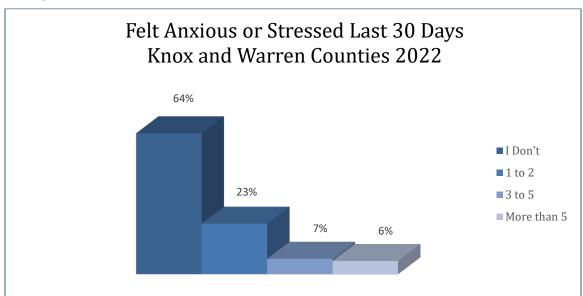


Figure 39



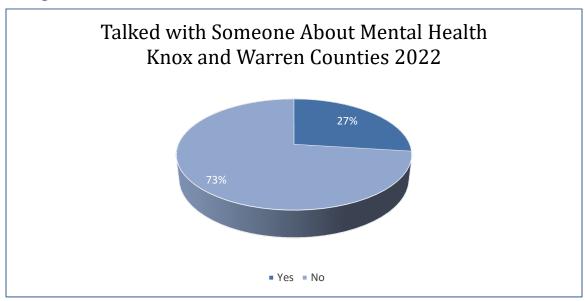
Source: CHNA Survey

Comparison to 2019 CHNA

Results show a 4% decrease compared to 2019 CHNA for those that experience depression and a 7% increase for those experiencing stress/anxiety.

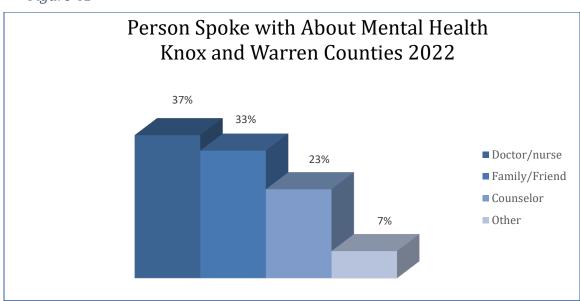
Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents, 27% indicated that they spoke to someone (Figure 40), the most common response was a doctor/nurse (37%) (Figure 41).

Figure 40



Source: CHNA Survey

Figure 41



Source: CHNA Survey



Social Determinants Related to Behavioral Health

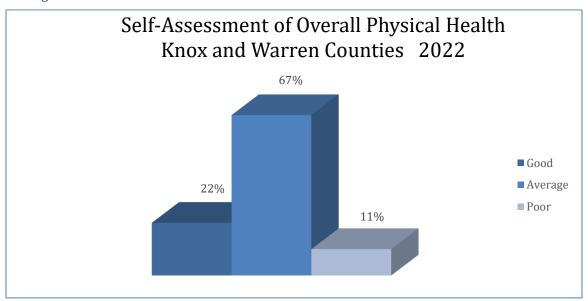
Multiple characteristics show significant relationships with behavioral health. The following relationships were found using correlational analyses:

- **Depression** tends to be rated higher for younger people and those with less income.
- > Stress and anxiety tends to be rated higher for younger people and those with less income.

Self-Perceptions of Overall Health

In regard to self-assessment of overall physical health, 11% of respondents reported having poor overall physical health (Figure 42).

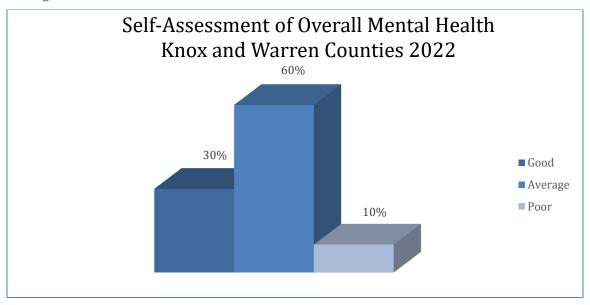
Figure 42



Source: CHNA Survey

In regard to self-assessment of overall mental health, 10% of respondents stated they have poor overall mental health (Figure 43).

Figure 43



Comparison to 2019 CHNA

Results are similar for self-perceptions of physical health and mental health compared to 2019.

Social Determinants Related to Self-Perceptions of Health

Multiple characteristics show significant relationships with self-perceptions of health. The following relationships were found using correlational analyses:

- Perceptions of physical health tend to be higher for older people, those with higher education and those with higher income.
- Perceptions of mental health tend to be higher for older people and those with higher income.

2.6 Key Takeaways from Chapter 2

- ✓ INCREASED IN PEOPLE CHOOSING NOT TO SEEK HEALTHCARE WHEN NEEDED.
- ✓ DECREASED RATE OF ACCESS TO COUNSELING.
- ✓ COVID-19 VACCINATION RATES ARE LOWER THAN STATE AVERAGES.
- ✓ PROSTATE SCREENING IS RELATIVELY LOW COMPARED TO BREAST AND COLORECTAL SCREENING.
- ✓ THE MAJORITY OF PEOPLE EXERCISE LESS THAN 2 TIMES PER WEEK AND CONSUME 2 OR FEWER SERVINGS OF FRUITS/VEGETABLES PER DAY.
- ✓ A SIGNIFICANT NUMBER OF RESPONDENTS EXPERIENCED DEPRESSION AND/OR STRESS IN THE LAST 30 DAYS.

CHAPTER 3 OUTLINE

- 3.1 Tobacco Use
- 3.2 Drug and Alcohol Use
- 3.3 Overweight and Obesity
- 3.4 Predictors of Heart Disease
- 3.5 Key Takeaways from Chapter 3

CHAPTER 3: SYMPTOMS AND PREDICTORS

3.1 Tobacco Use

Importance of the measure: In order to appropriately allocate health-care resources, a thorough analysis of the leading indicators regarding morbidity and disease must be conducted. In this way, health-care organizations can target affected populations more effectively. Research suggests tobacco use facilitates a wide variety of adverse medical conditions.

CHNA survey data show 91% of respondents do not smoke (Figure 44) and 97% of respondents do not vape (Figure 45).

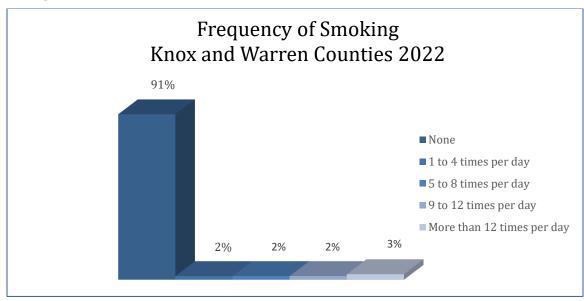
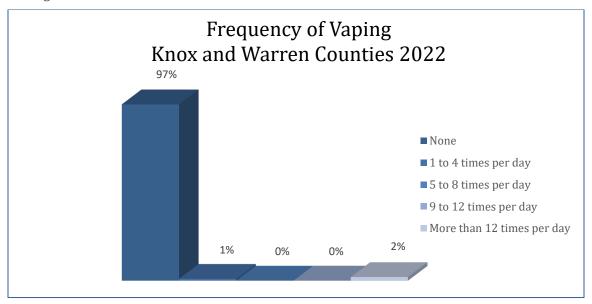


Figure 44

Source: CHNA Survey

Figure 45



Comparison to 2019 CHNA

Results show an improvement for those who do not smoke by 5%.

Social Determinants Related to Smoking or Vaping

Multiple characteristics show significant relationships with smoking or vaping. The following relationships were found using correlational analyses:

- Smoking tends to be rated higher by those with less education and a lower income.
- **Vaping** tends to be rated higher by younger people and those living in an unstable (e.g., homeless) housing environment.

3.2 Drug and Alcohol Abuse

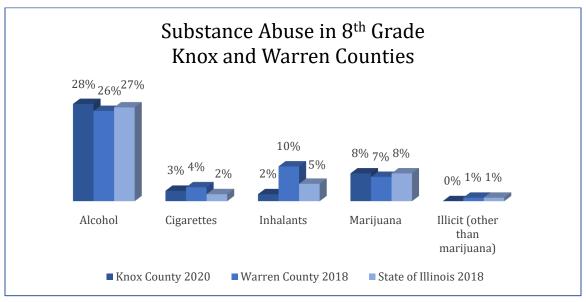
Importance of the measure: Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors of high school students is a leading indicator of adult substance abuse in later years.

Youth Substance Abuse

Data from the 2018 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Knox County and Warren County are similar to State averages in all categories among 8th graders except inhalants which is significantly higher in Warren

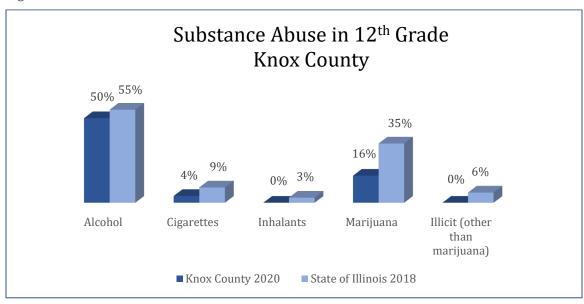
County (Figure 46). Among 12 the graders, Knox County is below State averages in all categories. Current data are not available for 12th graders in Warren County (Figure 47).

Figure 46



Source: University of Illinois Center for Prevention Research and Development

Figure 47



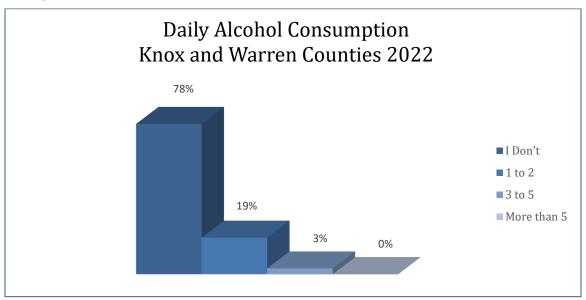
Source: University of Illinois Center for Prevention Research and Development

Adult Substance Use

The CHNA survey asked respondents to indicate usage of several substances. Of respondents, 78% indicated they did not consume alcohol on a typical day (Figure 48), 91% indicated they do not take prescription medication improperly including opioids on a typical day (Figure 49), 96% indicated they do not use marijuana on a typical day (Figure 50) and 100% indicated they do not use illegal substances on a

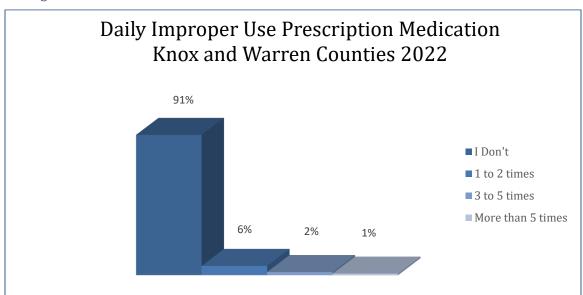
typical day (Figure 51). Note this is the first year that the CHNA has measured separated categories of substance use, so there is no comparison to the 2019 CHNA.

Figure 48



Source: CHNA Survey

Figure 49



Source: CHNA Survey

Figure 50

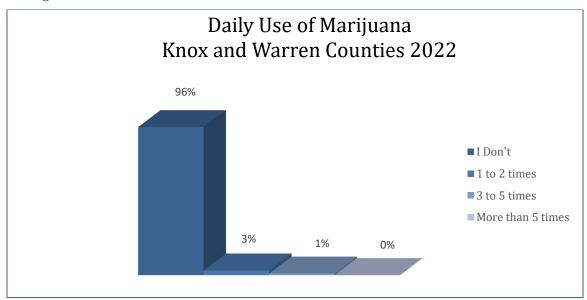
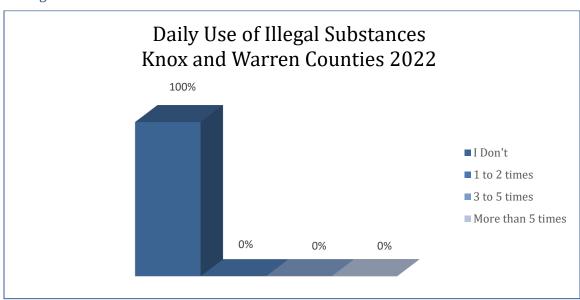


Figure 51



Source: CHNA Survey

Social Determinants Related to Substance Use

Multiple characteristics show significant relationships with substance abuse. The following relationships were found using correlational analyses:

- Alcohol consumption tends to be rated higher by men and those with higher income.
- Misuse of prescription medication including opioids tends to be rated higher by older people, those with less education, those with lower income and those in an unstable (e.g., homeless) housing environment.

- Marijuana use tends to be rated higher by younger people, Black people, those with less education, those with lower income and those in an unstable (e.g., homeless) housing environment. Use of marijuana tends to be rated lower by White people.
- Illegal substance use showed no significant correlations.

3.3 Overweight and Obesity

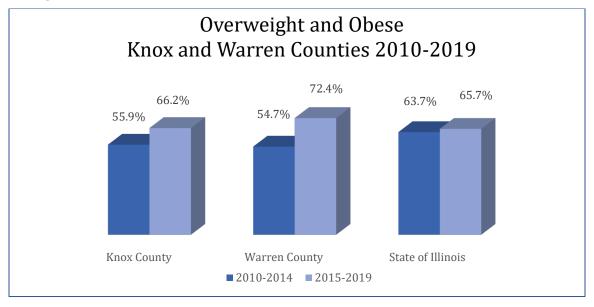
Importance of the measure: Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Knox and Warren Counties. The US Surgeon General has characterized obesity as "the fastest-growing, most threatening disease in America today." According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion, ranking Illinois 6th in the nation for obesity-attributed medical costs.

With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children.

With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

In both Knox County and Warren County, the number of people diagnosed with obesity and being overweight has increased from 2010-2014 to 2015-2019. Note specifically that the percentage of obese and overweight people in Knox County has increased from 55.9% to 66.2% and the percentage of obese and overweight people in Warren County has increased from 54.7% to 72.4%. Overweight and obesity rates in Illinois have also increased from 2010 (63.7%) to 2019 (65.7%) (Figure 52). Note that data have not been updated by the Illinois Department of Public Health. However, note in the 2022 CHNA survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.

Figure 52

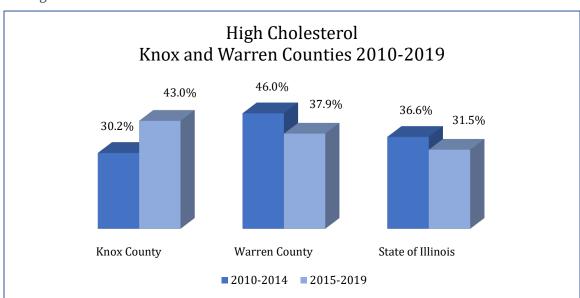


Source: Illinois Behavioral Risk Factor Surveillance System

3.4 Predictors of Heart Disease

The percentage of residents who report they have high cholesterol is higher in Warren County (37.9%) than the State of Illinois average of 31.5% (2015-2019). Residents in Knox County were significantly higher (43%) (Figure 53). Note that data have not been updated by the Illinois Department of Public Health.

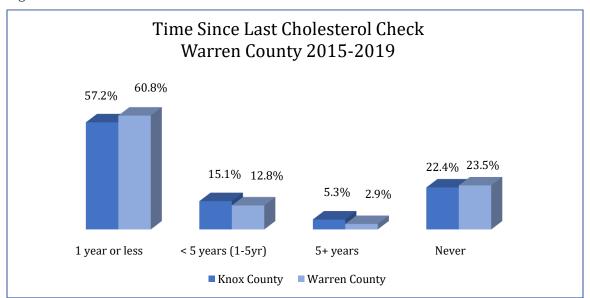
Figure 53



Source: Illinois Behavioral Risk Factor Surveillance System

However, most residents of Knox County report having their cholesterol checked recently. The percentage of residents not having their cholesterol checked in Knox County is 22.4%, and in Warren County is 23.5%. Note that data have not been updated by the Illinois Department of Public Health.

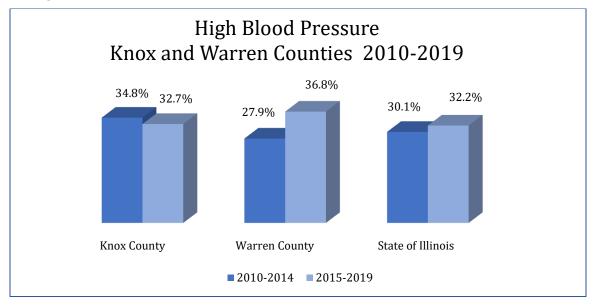
Figure 54



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Knox County has a higher percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Knox County residents reporting they have high blood pressure in 2019 decreased from 34.8% to 32.7% in 2019. In Warren County, the percentage of residents with high blood pressure has increased from 27.9% to 36.8% over the same time period, above the State of Illinois average of 32.2% (Figure 55). Note that data have not been updated by the Illinois Department of Public Health.

Figure 55



Source: Source: Illinois Behavioral Risk Factor Surveillance System

3.5 Key Takeaways from Chapter 3

- ✓ SUBSTANCE ABUSE AMONG 8TH AND 12TH GRADERS IS AT OR ABOVE STATE AVERAGES IN MANY CATEGORIES.
- ✓ OBESITY IS INCREASING AND HIGHER THAN STATE AVERAGES IN BOTH COUNTIES. OVER 2/3 THE POPULATION IS OVERWEIGHT OR OBESE.
- ✓ 9% OF RESPONDENTS INDICATED THEY MISUSE PRESCRIPTION MEDICATION INCLUDING OPIOID USE.

CHAPTER 4 OUTLINE

- 4.1 Self-Identified Health Conditions
- 4.2 Healthy Babies
- 4.3 Cardiovascular Disease
- 4.4. Respiratory
- 4.5 Cancer
- 4.6 Diabetes
- 4.7 Infectious Disease
- 4.8 Injuries
- 4.9 Mortality
- 4.10 Key Takeaways from Chapter 4

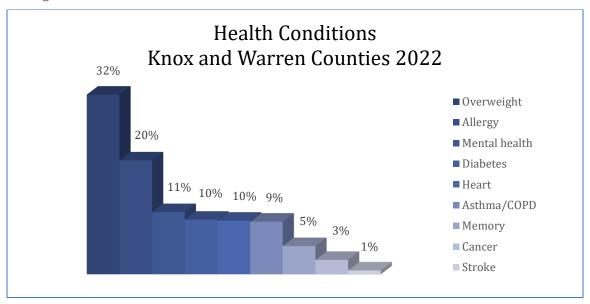
CHAPTER 4: MORBIDITY AND MORTALITY

Given the lack of recent disease/morbidity data from existing secondary data sources, much of the data used in this chapter was manually gathered from Knox County and Warren County hospitals using COMPdata Informatics. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

4.1 Self-Identified Health Conditions

Survey respondents were asked to self-identify any health conditions. Note that being overweight (32%) was significantly higher than any other health conditions. This percentage is significantly lower than secondary sources. Specifically, Behavioral Risk Factor Surveillance System (BRFSS) data indicate that roughly two-thirds of the population is overweight or obese. Most other self-identified morbidities reflected existing sources of secondary data accurately (e.g., diabetes 10%) (Figure 56).

Figure 56



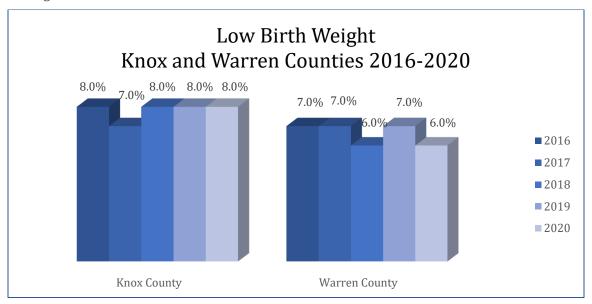
4.2 Healthy Babies

Importance of the measure: Regular prenatal care is a vital aspect in producing healthy babies and children. Screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of healthy babies. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies.

Low Birth Weight Rates

Low birth weight rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth weight rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low birth weight in Knox County has fluctuated between 2017 and 2018 but is overall the same. The percentage of babies born with low birth weight in Warren County has declined between 2019 and 2020. (Figure 57).

Figure 57



Source: County Health Rankings

4.3 Cardiovascular Disease

Importance of the measure: Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease and atherosclerosis.

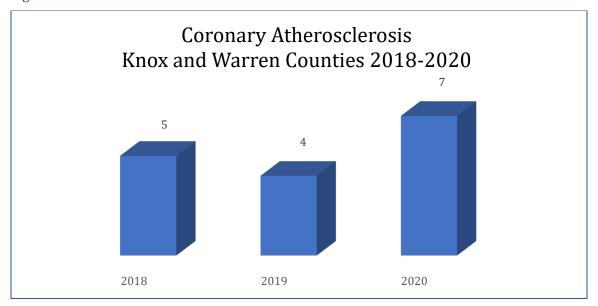
Coronary Atherosclerosis

Coronary Atherosclerosis, sometimes-called hardening of the arteries, can slowly narrow and harden the arteries throughout the body. When atherosclerosis affects the arteries of the heart, it is called coronary artery disease.

Coronary artery disease is a leading cause of death for Americans. Most of these deaths are from heart attacks caused by sudden blood clots in the heart's arteries.

The number of cases of coronary atherosclerosis complication at Knox County and Warren County area hospitals has increased from 4 total cases in 2019 to 7 cases in 2020. Warren County only had 1 case in 2019 (Figure 58. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

Figure 58

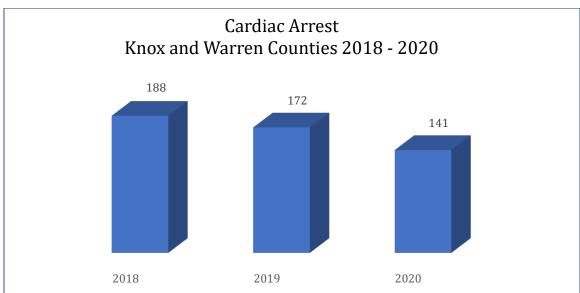


Source: COMPdata Informatics 2021

Cardiac Arrest

Cases of dysrhythmia and cardiac arrest at Knox County and Warren County area hospitals decreased by 31 cases between 2019 and 2020 (Figure 59). Note that hospital-level data only show hospital admissions.

Figure 59

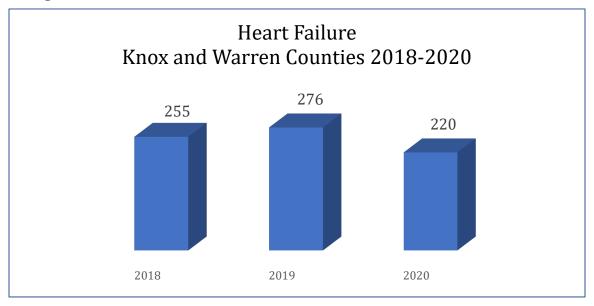


Source: COMPdata Informatics 2021

Heart Failure

The number of treated cases of heart failure at Knox County and Warren County area hospitals decreased. In 2019, 276 cases were reported and in 2020 there were 220 cases reported (Figure 60). Note that hospital-level data only show hospital admissions.

Figure 60

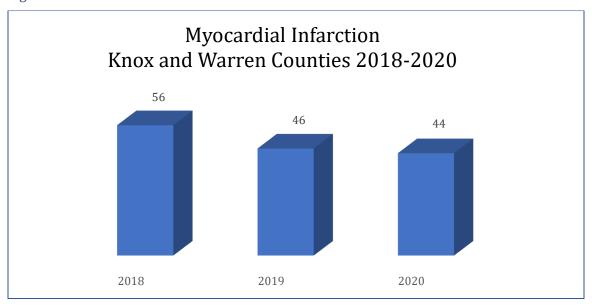


Source: COMPdata Informatics 2021

Myocardial Infarction

The number of treated cases of myocardial infarction at area hospitals in Knox County and Warren County fluctuated from 2018 to 2020. The number of cases of myocardial infarction decreased by 10 in 2019 then decreased by 2 in 2020 (Figure 61). Note that hospital-level data only show hospital admissions.

Figure 61

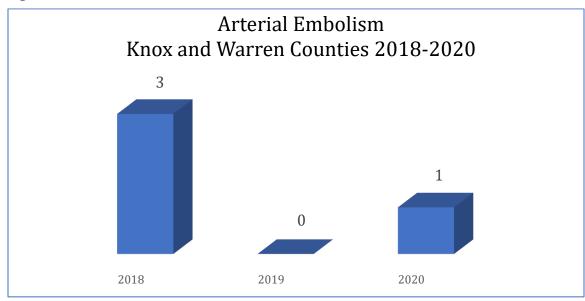


Source: COMPdata Informatics 2021

Arterial Embolism

There was 1 treated case of arterial embolism Knox County and Warren County area hospitals in 2020. Note that hospital-level data only show hospital admissions.

Figure 62

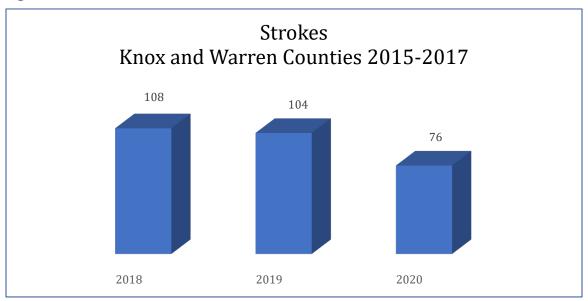


Source: COMPdata Informatics 2021

Strokes

The number of treated cases of stroke at Knox County and Warren County area hospitals decreased between 2018 and 2020 (Figure 63). Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

Figure 63



Source: COMPdata Informatics 2021

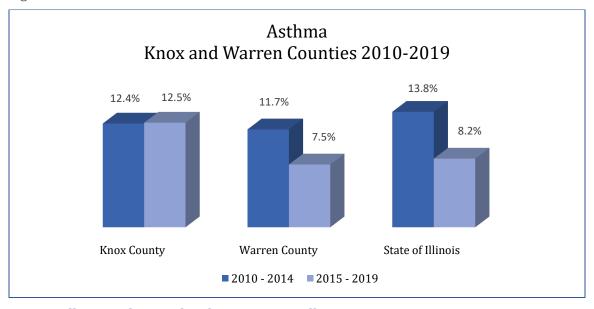
4.4 Respiratory

Importance of the measure: Disease of the respiratory system includes acute upper respiratory infections such as influenza, pneumonia, bronchitis, asthma, emphysema and Chronic Obstructive Pulmonary Disease (COPD). These conditions are characterized by breathlessness, wheezing, chronic coughing, frequent respiratory infections and chest tightness. Many respiratory conditions can be successfully controlled with medical supervision and treatment. However, children and adults who do not have access to adequate medical care are likely to experience repeated serious episodes, trips to the emergency room and absences from school and work. Hospitalization rates illustrate the worst episodes of respiratory diseases and are a proxy measure for inadequate treatment.

Asthma

The percentage of residents who have been diagnosed with asthma increased in Knox County and decreased in Warren County between 2010-2014 and 2015-2019, while State averages have decreased over the same time frame. According to the Illinois BRFSS, asthma rates only in Warren County (7.5%) are lower than the State of Illinois (8.2%). Knox County (12.5%) is higher than state average (Figure 64). Note that data has not been updated past 2019 by the Illinois Department of Public Health.

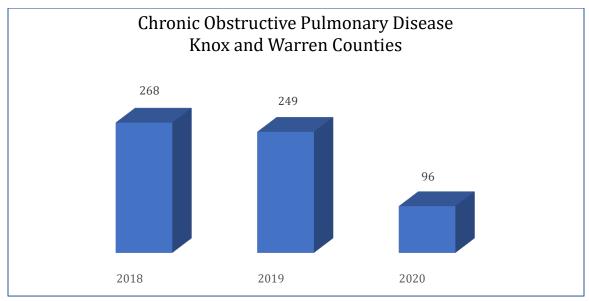
Figure 64



Source: Illinois Behavioral Risk Factor Surveillance System

Treated cases of COPD at Knox County and Warren County area hospitals decreased between 2018 and 2020, with a significant decrease in 2020 (Figure 65). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Figure 65



Source: COMPdata Informatics 2021

4.5 Cancer

Importance of the measure: Cancer is caused by the abnormal growth of cells in the body and many causes of cancer have been identified. Generally, each type of cancer has its own symptoms, outlook for cure,

and methods for treatment. Cancer is one of the leading causes of death in both Knox and Warren Counties.

For the top three prevalent cancers in Knox County and Warren County, comparisons are illustrated in Figure 66. Specifically, for Knox and Warren County, prostate cancer is lower than the State, while lung and breast cancer rates are higher than the State of Illinois.

Top 3 Cancer Incidence (per 100,000)
Knox and Warren Counties 2014-2018

Lung Cancer

75.8
73.8
64.3

Breast Cancer,
Invasive

Prostate Cancer

Knox County

Warren County

State of Illinois

Figure 66

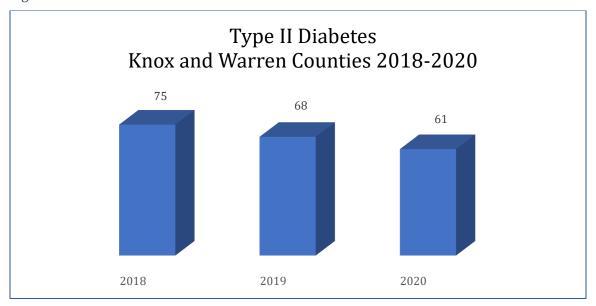
Source: Illinois Department of Public Health

4.6 Diabetes

Importance of the measure: Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 5-10% of individuals with diabetes have Type I diabetes (previously known as juvenile diabetes).

Inpatient cases of Type II diabetes from Knox County and Warren County decreased between 2018 (75 cases) and 2020 (61 cases) (Figure 67). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

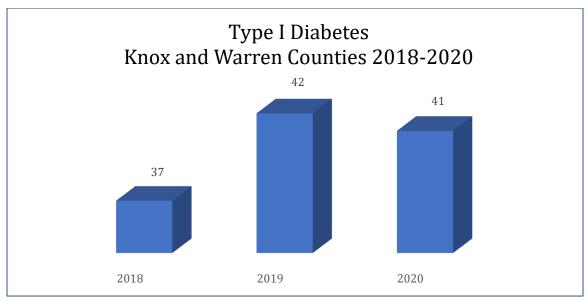
Figure 67



Source: COMPdata Informatics 2021

Inpatient cases of Type I diabetes show an increase from 2018 (37) to 2020 (41) for Knox and Warren Counties (Figure 68). Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

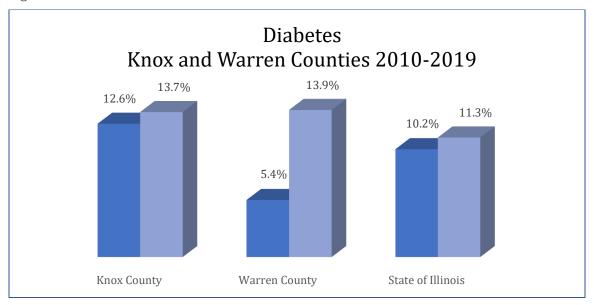
Figure 68



Source: COMPdata Informatics 2021

Data from the Illinois BRFSS indicate that 13.7% of Knox County residents and 13.9% of Warren County residents have diabetes (Figure 69). Trends in Knox and Warren County are concerning, as the prevalence of diabetes is increasing and higher in Knox and Warren County compared to data from the State of Illinois. Note that data have not been updated by the Illinois Department of Public Health.

Figure 69



Source: Illinois Behavioral Risk Factor Surveillance System

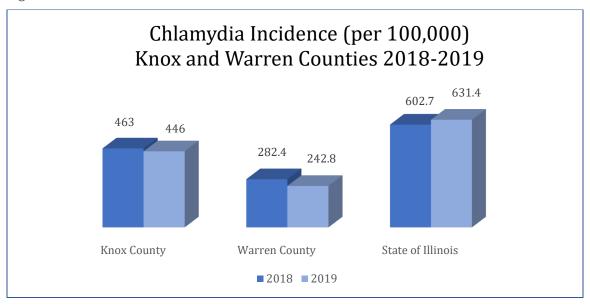
4.7 Infectious Diseases

Importance of the measure: Infectious diseases, including sexually transmitted infections and hepatitis, are related to high-risk sexual behavior, drug and alcohol abuse, limited access to healthcare, and poverty. It would be highly cost-effective for both individuals and society if more programs focused on prevention rather than treatment of infectious diseases.

Chlamydia and Gonorrhea Cases

The data for the number of infections of chlamydia in Knox County from 2018-2019 indicate a slight decrease. Warren County experienced a decrease during the same time period. Rates of chlamydia in both Knox County and Warren County are lower than State averages. There is an increase of incidence of chlamydia across the State of Illinois (Figure 70).

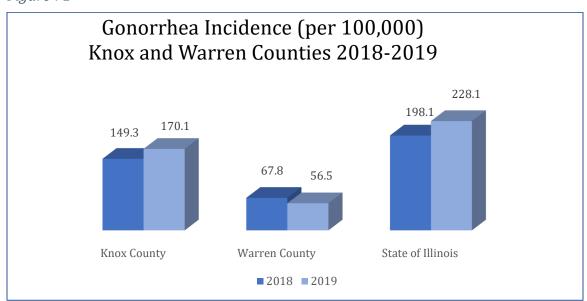
Figure 70



Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in Knox County indicate an increase from 2018-2019. Both Knox County and the State of Illinois experienced a significant increase from 2018-2019. Rates of gonorrhea in Warren County have decreased during this same period and is lower than the State average (Figure 71).

Figure 71



Source: Illinois Department of Public Health and Human Services

Vaccine Preventable Diseases

A vaccine-preventable disease is an infectious disease for which an effective preventive vaccine exists. If a person acquires a vaccine-preventable disease and dies, the death is considered a vaccine-preventable

death. According to the Michigan Public Health Department, the most common and serious vaccine-preventable diseases are: Varicella (chickenpox), Tetanus (lockjaw), Pertussis (whooping cough), Poliomyelitis (Polio), Measles (Rubeola), Mumps, Rubella (German measles), Diphtheria, Hepatitis B and Hemophilic Influenza Type B (HIB) Infections. These diseases used to strike thousands of children each year. Today there are relatively few cases, but outbreaks still occur each year because some babies are not immunized. Knox County and Warren County has shown no significant outbreaks compared to state statistics, but there are limited data available. (Table 1 and Table 2). Note data has not been updated by the State beyond years displayed in table. Also note that COVID-19 vaccine rates are presented in Chapter 2 of this CHNA.

Table 1
Vaccine Preventable Diseases 2006-2016 Knox County and Warren County Region

| Mumps | N/A | N/A | 2006 | 2011 |
|-------------------|-----|-----|------|------|
| Knox County | | | 1 | N/A |
| Warren County | | | 1 | 1 |
| State of Illinois | | | 798 | 78 |

| Pertussis | 2010 | 2011 | 2012 | 2012 |
|-------------------|------|------|------|------|
| Knox County | 1 | 3 | 4 | 4 |
| Warren County | 2 | 1 | 1 | 1 |
| State of Illinois | 1057 | 1509 | 2026 | 785 |

| Varicella | 2013 | 2014 | 2015 | 2016 |
|-------------------|------|------|------|------|
| Knox County | 13 | 4 | 4 | 2 |
| Warren County | 5 | 1 | 1 | 2 |
| State of Illinois | 731 | 596 | 443 | 469 |

Source: Illinois Department of Public Health

Table 2
Tuberculosis 2017-2019 Knox County and Warren County Region

| Tuberculosis | 2017 | 2018 | 2019 |
|-------------------|------|------|------|
| Knox County | 1 | 2 | 1 |
| Warren County | 1 | 1 | n/a |
| State of Illinois | 336 | 319 | 326 |

Source: Illinois Department of Public Health

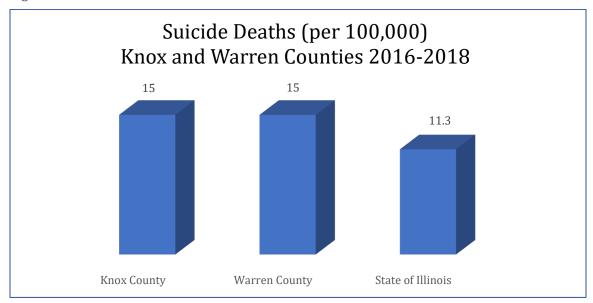
4.8 Injuries

Importance of the measure: Suicide is intentional self-harm resulting in death. These injuries are often indicative of serious mental health problems requiring the treatment of other trauma-inducing issues. Unintentional injuries can occur, in part, from violent crimes.

Suicide

The number of suicides in Knox and Warren Counties indicate higher incidence than State of Illinois averages, as there were approximately 15 per 100,000 people in Knox and Warren Counties in 2018 (Figure 72).

Figure 72

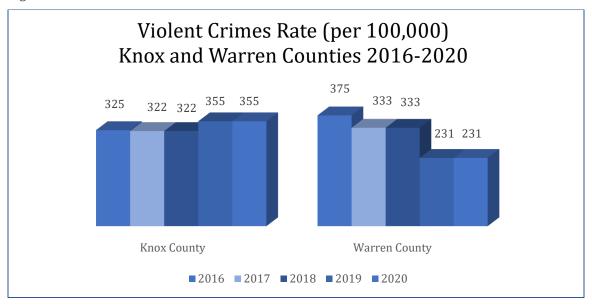


Source: Illinois Department of Public Health

Violent Crimes

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery and aggravated assault. Violent crime is represented as an annual rate per 100,000 people (Figure 73). The number of violent crimes has increased significantly for 2016-2020 in Knox County. The number of violent crimes has decreased in Warren County for the same time period.

Figure 73



Source: Illinois County Health Rankings and Roadmaps

4.9 Mortality

Importance of the measure: Presenting data that focuses on causes of mortality provides an opportunity to define and quantify which diseases are causing the most deaths.

The top three leading causes of death in the State of Illinois, Knox County, and Warren County are similar as a percentage of total deaths in 2020. Diseases of the Heart are the cause of 21.1% of deaths and Cancer is the cause of 17% of deaths in Knox County. Diseases of the Heart are the cause of 27.3% of deaths and Cancer is the cause of 20.3% of deaths in Warren County. COVID-19 is the third leading cause of death with 13% in Knox County, 12.1% in Warren County and 11.8% in the State of Illinois. (Table 3).

Table 3

| Top 5 Leading Causes of Death for all Races by County & State 2020 | | | | | |
|--|--------------------------------|--------------------------------|--------------------------------|--|--|
| Rank | Knox County | Warren County | State of Illinois | | |
| 1 | Diseases of Heart (21.1%) | Diseases of Heart (27.3%) | Diseases of Heart (20.7%) | | |
| 2 | Malignant Neoplasm (17.0%) | Malignant Neoplasm (20.3%) | Malignant Neoplasm (18.1%) | | |
| 3 | COVID-19 (13%) | COVID-19 (12.1%) | COVID-19 (11.8%) | | |
| 4 | Accidents (3.4%) | Accidents (3.5%) | Cerebrovascular Disease (5.4%) | | |
| 5 | Cerebrovascular Disease (3.3%) | Cerebrovascular Disease (3.1%) | Accidents (5.1%) | | |

Source: Illinois Department of Public Health

4.10 Key Takeaways from Chapter 4

- ✓ THERE IS A SIGNIFICANT DECREASE IN ASTHMA IN WARREN COUNTY.
- ✓ SUICIDE RATES IN COUNTIES ARE HIGHER THAN STATE AVERAGES.
- ✓ LUNG AND BREAST CANCER ARE HIGHER IN BOTH COUNTIES COMPARED TO THE STATE.
- ✓ DIABETES RATES HAVE INCREASED AND ARE HIGHER THAN STATE AVERAGES.
- ✓ CANCER, HEART DISEASE AND COVID-19 ARE THE LEADING CAUSES OF MORTALITY.

CHAPTER 5 OUTLINE

- 5.1 Perceptions of Health Issues
- 5.2 Perceptions of Unhealthy Behavior
- 5.3 Perceptions of Issues with Well Being
- 5.4 Summary of Community Health Issues
- 5.5 Community Resources
- 5.6 Significant Needs Identified and Prioritized

CHAPTER 5: PRIORITIZATION OF HEALTH-RELATED ISSUES

In this chapter, the most critical health-related needs in the community are identified. To accomplish this, community perceptions of health issues, unhealthy behaviors and issues related to well-being were first considered. Key takeaways from each chapter were then used to identify important health-related issues in the community. Next, a comprehensive inventory of community resources was completed; and finally, the most significant health needs in the community are prioritized.

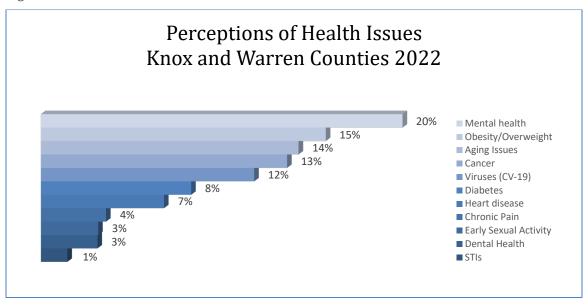
Specific criteria used to identify these issues included: (1) magnitude in the community; (2) severity in the community; (3) potential for impact to the community.

5.1 Perceptions of Health Issues

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 11 different options.

The health issue that rated highest mental health (20%), followed by obesity/overweight (15%), aging issues (14%) cancer (13%) and diabetes (12%) (Figure 74). These five factors were significantly higher than other categories based on t-tests between sample means.

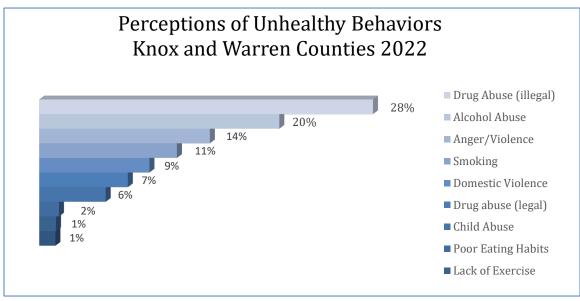
Figure 74



5.2 Perceptions of Unhealthy Behaviors

Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 10 choices. The two unhealthy behaviors that rated highest were drug abuse (illegal) at 28% and alcohol abuse at 20% (Figure 75). These two factors were significantly higher than other categories based on *t-tests* between sample means.

Figure 75

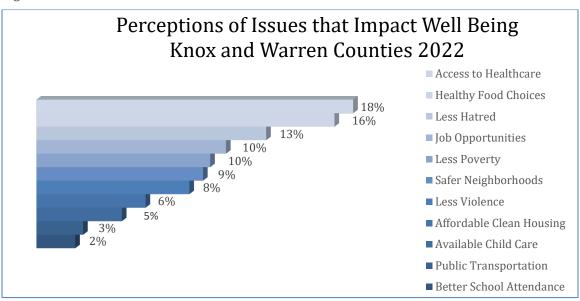


5.3 Perceptions of Issues Impacting Well Being

Respondents were asked to select the three most important issues impacting well-being in the community out of a total of 11 choices.

The issue impacting well-being that rated highest was access to healthcare (18%). It was followed by healthy food choices (16%) and less hatred (13%) (Figure 76).

Figure 76



Source: CHNA Survey

5.4 Summary of Community Health Issues

Based on findings from the previous analyses, a chapter-by-chapter summary of key takeaways is used to provide a foundation for identification of the most important health-related issues in the community. Considerations for identifying key takeaways include magnitude in the community, strategic importance to the community, existing community resources and potential for impact and trends and future forecasts.

Demographics (Chapter 1) – Three factors were identified as the most important areas of impact from the demographic analyses:

- Population decreased
- Population over age 65 increased
- Single female head-of-house-household represents 11% to 13% of the population

Prevention Behaviors (Chapter 2) – Six factors were identified as the most important areas of impact from the chapter on prevention behaviors:

- Increase in people not choosing to seek healthcare
- Decreased access to counseling

- COVID-19 vaccination rates
- Prostate screening is relatively low
- Exercise and healthy eating behaviors
- Depression and stress/anxiety

Symptoms and Predictors (Chapter 3) – Three factors were identified as the most important areas of impact from the chapter on symptoms and predictors:

- Substance abuse among youth
- Overweight and obesity
- Opioid abuse among adults

Morbidity and Mortality (Chapter 4) – Four factors were identified as the most important areas of impact from the chapter on morbidity/mortality behaviors:

- Lung and breast cancer
- Suicide rates
- Diabetes rates
- Cancer, heart disease and COVID-19 are the leading causes of mortality

Potential Health-Related Needs Considered for Prioritization

Before the prioritization of significant community health-related needs was performed, results were aggregated into 9 potential categories. Based on similarities and duplication, the 9 potential areas considered are:

- Aging issues
- > Access to counseling
- > Healthy behaviors nutrition & exercise
- Behavioral health
- Overweight/Obesity
- Substance abuse
- Cancer
- > COVID-19
- Diabetes

5.5 Community Resources

After summarizing potential categories for prioritization in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 9 health-related areas were being addressed. A resource matrix can be seen in APPENDIX 5: RESOURCE MATRIX relating to the 9 health-related issues.

There are numerous forms of resources in the community. They are categorized as recreational facilities, county health departments, community agencies and area hospitals/clinics. A detailed list of community resources and descriptions appears in APPENDIX 6: DESCRIPTION OF COMMUNITY RESOURCES.

5.6 Significant Needs Identified and Prioritized

In order to prioritize the previously identified dimensions, the collaborative team considered health needs based on: (1) magnitude of the issues (e.g., what percentage of the population was impacted by the issue); (2) severity of the issues in terms of their relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method (as seen in APPENDIX 7: PRIORITIZATION METHODOLOGY), the collaborative team identified two significant health needs and considered them equal priorities:

- Healthy Behaviors defined as active living and healthy eating, and their impact on obesity
- > Behavioral Health including mental health and substance abuse
- > Healthy Aging

HEALTHY BEHAVIORS – ACTIVE LIVING, HEALTHY EATING AND SUBSEQUENT OBESITY

HEALTHY EATING. Almost two-thirds (64%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 6%. The most prevalent reasons for failing to eat more fruits and vegetables were lack of importance, affordability, and the lack of desire.

ACTIVE LIVING. A healthy lifestyle, comprised of regular physical activity and balanced diet, has been shown to increase physical, mental and emotional well-being. Note that 29% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week. The most common reasons for not exercising are not having enough energy (31%), no time (23%) or a dislike of exercise (18%).

OBESITY. In Knox County, nearly two-thirds (66.2%) of residents were diagnosed with obesity and being overweight. In Warren County, nearly three-quarters (72.4%) of residents were diagnosed with obesity and being overweight. In the 2022 CHNA survey, respondents indicated that being overweight was the second most important health issue and was rated as the most prevalently diagnosed health condition. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Knox and Warren Counties. The U.S. Surgeon General has characterized obesity as "the fastest-growing, most threatening disease in America today." According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children. With adults, obesity has far-reaching consequences. Testimony to the Illinois

General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

BEHAVIORAL HEALTH – MENTAL HEALTH AND SUBSTANCE ABUSE

MENTAL HEALTH. The CHNA survey asked respondents to indicate prevalence of specific issues, namely depression and stress/anxiety. Of respondents, 44% indicated they felt depressed in the last 30 days and 36% indicated they felt anxious or stressed. Depression tends to be rated higher by younger people and those with less income. Similarly, stress and anxiety tend to be rated higher for younger people and those with less income. Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents 27% indicated that they spoke to someone, the most common response was to a doctor/nurse (37%). In regard to self-assessment of overall mental health, 10% of respondents stated they have poor overall mental health. In the 2022 CHNA survey, respondents indicated that mental health was the most important health issue.

SUBSTANCE ABUSE. Of survey respondents, 22% indicated they consume at least one alcoholic drink each day. Alcohol consumption tends to be rated higher by men and those with higher income. Of survey respondents, 9% indicated they improperly use prescription medications each day to feel better and 4% indicated the use marijuana each day. Note that misuse of prescription medication (oftentimes opioid use) tends to be rated higher by older people, those with lower education, those with less income and those living in an unstable (e.g., homeless) living environment. Marijuana use tends to be rated higher by younger people, Black people, those with lower education, those with less income and those living in an unstable (e.g., homeless) living environment.

In the 2022 CHNA survey, respondents rated drug abuse (illegal) as the most prevalent unhealthy behavior (28%) in Knox and Warren Counties, followed by alcohol abuse (20%).

AGING ISSUES

In the CHNA survey, respondents rated aging issues (14%) as the third most important health issue. The percentage of individuals aged 50-64 increased by 40.2% in Knox County between 2015 and 2019. The percentage of individuals aged 65 and older increased 4.5% in Knox County between 2015 and 2019. Alzheimer's disease was the 6th leading cause of death in Warren County and was also the 6th leading cause of death in Knox County in 2020. Illinois is projected to see an 18.2% increase in Alzheimer's disease incidence between 2018 and 2025. Alzheimer's and dementia care in the U.S. will cost an estimated \$277 billion. According to a 2015 study, the average cost of dementia care (over a five-year period) was \$287,038, compared to \$175,136 (heart disease) and \$173,383 (cancer).

III. APPENDICES

APPENDIX 1: MEMBERS OF COLLABORATIVE TEAM

Members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Individuals, affiliations, titles and expertise are as follows:

Lisa DeKezel serves as President of OSF HealthCare St. Mary Medical Center in Galesburg, Illinois and President of OSF HealthCare Holy Family Medical Center in Monmouth, Illinois, directing all internal operations and the development of short-term tactics within long-term strategy to provide high quality, cost-effective health care for the communities they serve. Prior to joining OSF, Lisa has served as Vice President of Hammond-Henry Hospital in Geneseo, Illinois and as an independent health care consultant in the development of various hospital systems and ambulatory settings across multiple states. Lisa is a Registered Nurse by background and is passionate about ensuring access to local, quality healthcare services for rural health populations. Lisa received her Bachelor of Science in Nursing from Grand Canyon University in Phoenix, Arizona. She went on to earn her Master of Jurisprudence in Health Law and Policy from Loyola University Chicago. Lisa was born and raised locally in the rural communities she serves. She and her husband, Damian, have a blended family of eight children and 12 grandchildren. Lisa enjoys spending time with her family and friends and working outdoors. She is actively involved with her church and community, as well as missions work with youth both local and abroad.

Roxanna Crosser earned her Bachelor of Science degree in Medical Terminology from Western Illinois University in Macomb and was introduced to OSF HealthCare during her clinical internship at OSF St. Francis Medical Center. She received her Master of Hospital Administration from Governors State University. Roxanna started her career with OSF in 1985 as a Laboratory Supervisor at OSF St. Mary Medical Center. She has held numerous positions with OSF St. Mary including Assistant Administrator for Human Resources and Special Projects, Senior Assistant Administrator for Staff Services, Vice President for Operations, President, and most recently CEO, Western Region. She serves on many OSF committees and boards as the organization defines and plans for strategic direction in the ever-changing healthcare environment. She serves as facilitator for the OSF Ministry Development Program and is a mentor for several aspiring leaders within the Ministry. She is active in many professional organizations, including the American College of Healthcare Executives. She has served as an Illinois Performance for Excellence examiner. She was on the Board of Directors of Bridgeway. On a personal note, family and giving back to the community are extremely important to Roxanna. She is married to Paul; they have three grown children and beautiful grandchildren. She is an active member of her church and participates in many charity and service events offered in the community.

Connie Wessels is the Program Manager, Community Health for the Upper Western Region. She has served in that role since November 2020. Previously she served as the Director of Education Resources, which included Community Health and Wellness. Prior to that Connie was the Director of Pediatrics. She has been with OSF St. Mary Medical Center over 44 years. She received her RN from Rockford Memorial School of Nursing and her BSN from the University of Illinois-Chicago.

Connie has been involved with many community groups including the Human Service Council, Leadership Greater Galesburg and WIN. Currently she serves on the Galesburg Public Schools Foundation and the Workforce Innovation boards. She is a Relay for Life team member and serves on the outreach committee at First Lutheran church.

Harley Brooks is the VP CMO and Regional Director of Multispecialty Services for the Upper West Region of OSF. He received his MD degree from University of Alabama School of Medicine and his MBA in Health Care Management from Loyola University in Chicago. He came to Galesburg and the surrounding communities after working on the south side of Chicago for more than 20 years and taking care of the urban underserved population. His passion is rural access to care.

Curt Lipe is the Director of Entity Finance for OSF Healthcare St. Mary Medical Center in Galesburg, Illinois and OSF Healthcare Holy Family Medical Center in Monmouth, Illinois. He received his bachelor's degree from Southern Illinois University at Carbondale, Illinois. He has been with OSF Healthcare for 35 years.

Shelley Willett is the Coordinator of Volunteer and Auxiliary Services at OSF Healthcare St. Mary Medical Center. She has been with OSF for over 32 years. She completed her associate degree in Business Administration from Carl Sandburg College in 2012 and her bachelor degree in General Studies from Western Illinois University in 2016. Shelley is currently a member of the Kiwanis Club and enjoys volunteering for the United Way.

Josh Gibb is the Executive Director of the Galesburg Community Foundation. He attended Carl Sandburg College and received his degree at Western Illinois University. Josh is involved in several different activities in our community. He is a member of the Galesburg Lions Club and an active member of Hope Wesleyan Church. He serves on the OSF Healthcare St. Mary Medical Center Advisory Board, Board of Directors for the Chamber of Commerce and Leadership Greater Galesburg. He is also a member of the Western Illinois Estate Planning. Josh has an interest in history and politics. Most of his activities center on the children's interests, karate, showing cattle, superheroes and "helping." Josh and his wife Stacy have four children Esther, Miles, Maxwell and Simon.

Stephen C. (Steve) Mathers is a graduate of Northwestern University and the College of Law at the University of Illinois. A Knox County native, he enlisted in U. S. Army Military Intelligence, receiving a Bronze Star while serving in Viet Nam, before returning to practice law. He was elected & reelected Circuit Judge for the six-county 9th Judicial Circuit, where he served for 35 years. He retired in 2010, but consented to being recalled by the IL Supreme Court, twice, to serve out unexpired terms of office. Mathers was appointed to various Supreme Court Committees, including the Board of Admissions to the Bar. He was elected President of the statewide Illinois Judges Association in 2000. He has served on the Council at OSF St. Mary since 2011.

Michele Gabriel is Public Health Administrator for the Knox County Health Department, and serves as CEO for the Knox Community Health Center. She has been with the Health Department since 2000 and has served in various roles throughout her tenure. Michele maintains a broad business background, strong communication skills, with both staff and the public, a solid customer service background, experience in marketing and, public and media relations. She is additionally responsible for grant-writing, program development and evaluation, marketing, and performance improvement activities. Beginning at a lower level and working her way up has provided her with an expansive public health background working in areas such as; administration, emergency preparedness, IPLAN (Community Health Improvement), quality improvement, and strategic planning. She received her bachelor's degree in Business Administration from Monmouth College in 2000, and Master's in Public Health from the University of Illinois, College of Medicine at Peoria in August 2009. Michele has broad experience in working within a community, both as a volunteer

and as an employee. She believes that it is only through community collaboration that public health can achieve its goal of Healthy People in a Healthy Community. Additionally, she has experience in both working for a Board of Directors and well as serving on a Board of Directors; therefore, understands both the dynamics of Boards, as well as how important it is to make tough decisions.

Alice Snyder graduated from the Medical College of Georgia (now the Georgia Regents University) with her BSN in 1985. She obtained her MSN and her MBA from Georgia College and State University in 1988 and 1990, respectively. She has most recently graduated with her DHA (Doctorate Healthcare Administration) from A. T. Still University in 2017. Alice serves as the Chief Nursing Officer at OSF St. Mary Medical Center. She has served in various nursing leadership roles since 1988 and the executive nursing role at various organizations since 2002.

Membership of professional organizations include:

- Texas Organization of Nurse Executives 2002-2007
- American College of HealthCare Executives 2004 present
- Texas Hospital Association Leadership Development Council 2003-2006
- American Organization of Nurse Executives 2004-present
- Illinois Organization of Nurse Leaders June 2012 present

Current certifications include:

- Nurse Executive, Advanced Board Certified (NEA BC)
- National Managed Care Certification (NMCC)
- Fellow, American College of Healthcare Executives (FACHE)

Community involvement and experience include:

- United Way Campaign Coordinator 1994-1999
- United Way Campaign Coordinator of the Year Heart of Georgia United Way Chairman's Award
 1997
- HCA Georgia Federal Credit Union Supervisory Committee Member 1992-1996
- The Stepping Stone (Child Advocacy Center) Board member (Treasurer, Chairman Finance Committee and member of fundraising committees)
- United Way Campaign Corporate Cabinet 1999 to 2002
- United Way of Plainview Budget and Finance Committee 2003-2004; 2004-2005; 2005-2006; 2006-2007
- Area Health Education Center Advisory Committee 2002-2004; 2004 2006
- Member, Rotary of Plainview/Rotary International 2002 2006
- Rotary of Plainview, Board of Directors 2003-2004; 2004 2006
- United Way Campaign Coordinator 2005-2006
- Member, Rotary of Fort Smith 2007-2012
- Relay for Life, OSF St. Mary Scrubs Team 2013 present
- Galesburg Sunrise Rotary 2014 present

Alice has served as a consultant, speaker, and author with expertise in leadership, as well.

Carrie McCance was born and raised in Galesburg, IL. She has over 25 years' experience in Sales and Marketing. She graduated Western Illinois University with a Bachelor's Degree in Journalism. She has worked at OSF HealthCare for 10 years. Prior to that, she was the Executive Director of the Western Illinois Red Cross. Some of the clubs and organizations Carrie has been involved with include: Leadership Illinois, Critter Cove Public Relations, Galesburg Chamber of Commerce Ambassador, YMCA board member, Women's Issue Network (President, Vice President and Secretary), Relay for Life Team Captain, United Way Team Captain, Alzheimer's Walk Team Captain, Out of Darkness Team Member, Greda Business Task Force, Board Member of Galesburg Christian School, Public Relations Director Galesburg Christian School, Leadership Greater Galesburg, Altrusa Club, Rotary Club, Special Olympics Committee, Knox County Humane Society, Guardian Angels, Illinois Society Association of Executives, Society of Government Meeting Planners and Alpha Sigma Alpha Sorority.

William Nelson (Bill), President & CEO, Bridgeway Inc. -Bill received a M.S.Ed. in Counseling from Western Illinois University in 1988 and is a Licensed Clinical Professional Counselor (LCPC).

Bill has demonstrated a progressive career in human services direct care and administration over 33 years. Bill began his career at Bridgeway (formerly Spoon River Center) in 1988 as an outpatient mental health and substance abuse counselor. Bill served in a variety of positions before becoming the Vice President of Family Services Division for Bridgeway Inc. in March 1996. This was followed by his promotion to Senior Vice President in September 2000. He assumed the duties of Chief Operating Officer in April 2005. In addition, Bill began serving as the Corporate Compliance Officer and Director of Quality Management in July 1, 2008. Bill was promoted to serve as President of Bridgeway's Services Division in October 2014. On July 1, 2015, Bridgeway named Bill to serve as the President and CEO.

Bill is experienced in clinical and program operations, corporate compliance, quality assurance, quality improvement, utilization management, strategic planning, public policy, legislative advocacy and national accreditation standards and executive management.

Bill has served on boards of directors and leadership positions with other organizations such as, IARF, ACCSES, SHPA and Triumph Services Inc. Bill and the Bridgeway organization participate nationally in Mental Health Corporations of America and National Council for Mental Wellbeing associations.

Robin Nevling is the Director of Education and Professional Practice for the upper Western Region hospitals at OSF. Robin has been a nurse for 30 years and spent the early part of her career in the emergency department. For the past 15 years, Robin has been in nursing leadership both in academia and in the hospital setting. Robin has a Master's Degree in Nursing and is currently working on her Ph.D. She calls this area home and looks forward to serving the people in the upper Western Region.

Brianne Nichols is a Peace Corps Coverdell Fellow at Western Illinois University pursuing her Masters of Science in Public Health. She is currently serving as an AmeriCorps Volunteer at the Knox County Health Department and is overseeing the Illinois Project for Local Assessment of Needs (IPLAN). Prior to serving with the Knox County Health Department, Brianne served as an AmeriCorps volunteer with the Good Food Collaborative, an NGO focused on preventing food insecurity through education, outreach, and a mobile food pantry. She created nutrition and cooking educational materials for children in McDonough County. Brianne is a Returned Peace Corps Volunteer, and served in Albania as a Health Education Volunteer from 2017 to 2019. She worked with school health education, focusing on sexual and

reproductive health and nutrition education. Brianne graduated in 2015 with a B.S. in Human and Nutrition and Dietetics from West Virginia University

Greg Kneer is a retired Certified Public Accountant having practiced public accounting for 42 years in the Galesburg, Illinois area. Currently he is a Council member of the OSF HealthCare St Mary Community Council. He also volunteers at OSF HealthCare St Mary Medical Center. Mr. Kneer is a member and treasurer of the Knoxville United Methodist Church and member of its governing council. He volunteers at the Knoxville Community Food Pantry and assists the Knoxville Community Fire Protection District's Board of Trustees. He is an Army and Vietnam veteran.

John Asplund is the Superintendent of Schools for Galesburg CUSD #205. He has been a public school administrator for the past twenty-four years. Dr. Asplund earned his Doctor of Education degree from Illinois State University. He holds advanced degrees from Western Illinois University and a Bachelor of Arts degree from Augustana College.

Randy Conlon was born and raised in Galesburg. He graduated from Galesburg High School in 1979 and attended Carl Sandburg College. After a few years in sales he started his own business and was co-owner of Office Specialists, Inc from 1989-2019. In 2019 they sold the business and Randy has continued in a management capacity with the new ownership. He has served on several boards and volunteered for various organizations in the Galesburg and surrounding areas.

Stephanie Hilten currently serves as the Major Gift officer for the OSF Healthcare Foundation, focusing on philanthropy within the St. Mary Medical Center and Holy Family Medical communities. Stephanie has been with OSF since 2019.

Pam McNelly graduated from Greenville University with a BS in Organizational Leadership and Management and Accounting Degrees. She worked in the financial services, insurance and investment business her entire career, retiring then end of 2014 from Northwestern Mutual. Pam joined OSF St. Mary Medical Center in 2015 as a volunteer and became a board member on the Advisory Board in 2018. She has been working with the Community Health Needs Assessment since becoming involved with St. Mary.

In addition to collaborative team members, the following **facilitators** managed the process and prepared the Community Health Needs Assessment. Their qualifications and expertise are as follows:

Michelle A. Carrothers (Coordinator) is currently the Vice President of Strategic Reimbursement for OSF Healthcare System, a position she has served in since 2014. She serves as a Business Leader for the Ministry Community Health Needs Assessment process. Michelle has over 35 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her Fellow of the Healthcare Financial Management Association Certification in 2011. Currently she serves on the National Board of Examiners for HFMA. Michelle serves on various Peoria Community Board of Directors and Illinois Hospital Association committees.

Dawn Tuley (Coordinator) is a Strategic Reimbursement Senior Analyst at OSF Healthcare System. She has worked for OSF Healthcare System since 2004 and acts as the coordinator for 15 Hospital Community Health Need Assessments. In addition, she coordinates the submission of the Community Benefit Attorney General report and the filing of the IRS Form 990 Schedule H since 2008. Dawn holds a Master's

in Healthcare Administration from Purdue University and is certified in Community Benefit. Dawn has been a member of the McMahon-Illini Chapter of Healthcare Financial Management Association for over twelve years. She has served as the Vice President, President-Elect and two terms as the Chapter President on the board of Directors. She has earned a silver, bronze, gold and Metal of Honor from her work with the McMahon-Illini HFMA Chapter. She is currently serving as a Director on the board.

Dr. Laurence G. Weinzimmer, Ph.D. (Principal Investigator) is the Caterpillar Inc. Professor of Strategic Management in the Foster College of Business at Bradley University in Peoria, IL. An internationally recognized thought leader in organizational strategy and leadership, he is a sought-after consultant to numerous *Fortune 100* companies and not-for-profit organizations. Dr. Weinzimmer has authored over 100 academic papers and four books, including two national best sellers. His work appears in 15 languages, and he has been widely honored for his research accomplishments by many prestigious organizations, including the Academy of Management. Dr. Weinzimmer has served as principal investigator for numerous community assessments, including the United Way, Economic Development Council and numerous hospitals. His approach to Community Health Needs Assessments was identified by the Healthcare Financial Management Association (HFMA) as a Best-in-Practice methodology. Dr. Weinzimmer was contracted for assistance in conducting the CHNA.

APPENDIX 2: ACTIVITIES RELATED TO 2019 CHNA PRIORITIZED NEEDS

Two major health needs were identified and prioritized in the Knox County and Warren County 2019 CHNA. Below are examples of the activities, measures and impact during the last three years to address these needs.

1. Healthy Behaviors - Defined as Active Living and Healthy Eating, and their Impact on Obesity

Goal 1: Increase awareness of the importance of proper nutrition for overall health and wellness.

- 1. Wellness Edge for Kids Program Healthy Eating, Physical Activity, and Stress Reduction. Increase the number of participants by 2 annually.
 - a. Day summer program not held in 7/2020 due to COVID-19. Wellness Edge program not held in summer of 2021. Lunches were distributed to students during the summer at Lombard School and at Rotary Park. The lunches were provided through United Way.
- 2. Distribute and promote articles and education on healthy eating, weight loss and exercise through traditional and social media. Increase and track # of articles on social media. Baseline is to increase # of articles by 1. Expand education class to teach healthy behaviors. Baseline to increase participants by 1.
 - a. Provides monthly articles on Healthy eating to the Register Mail. Healthy Eating / Sports Nutrition radio interviews were given. 4/20 post on Facebook regarding fruits and vegetables in your diet. 6/20 FB post on healthy smoothie recipes. 7/20, 8/20, 9/20 FB post on safe summer cookouts, fresh salads and healthy eating. 9/30/21 Education to promote traditional and social media.
- 3. Healthy Kids U Program An 8-week program that helps children ages 8 through 15 and their families develop healthier habits through hands on games, activities and education. Participants also have access to the YMCA's facilities during the duration of the program. Increase the number of sessions to 2 per year.
 - a. Healthy Kids U held in fall 2020 with 9 students from an after-school program.

Goal 2: Increase awareness of the importance of exercise for overall health and well-being.

- 1. Increase mission partner participation in OSF4Life. Increase participation by 3%. Baseline for 2019 is 38% mission partner participation.
 - a. Ministry wide OSF4Life platform ended 12/31/20. 4 Sessions of "Know Your Numbers" were held for employees in which 15 participated. Upper Western Region wellness coleader provides monthly newsletters.
- 2. Healthy Kids U Program An 8-week program that helps children ages 8 through 15 and their families develop healthier habits through hands on games, activities and education. Participants

also have access to the YMCA's facilities during the duration of the program. Increase the number of sessions to 2 per year. Baseline 2019 is 1, 8-week session.

- a. Healthy Kids U program held for students only at after school program held at Gale school. 9/21/21 Healthy Kids U program held and open house at YMCA with promotions done with school in which no children registered for sessions.
- 3. Sponsor events that promote healthy behaviors.
 - a. 5-2-1-0 Nutrition kits were delivered to 285 Galesburg 5th graders. Klein Pediatric activity-2/2021 gave 105 flu immunizations given to students and staff. Flu Immunizations given to 42 employees. Commit2Fit weight loss challenge began 4/1/21. In collaboration with United Way and the Fish Food pantry volunteers delivered food without transportation to pick it up 9/30/21.

2. Behavioral Health - Including Mental Health and Substance Abuse Mental Health

Goal 1: Increase awareness of the effects of substance abuse in grades 8th through 12th.

- 1. Distribute and promote articles and education on healthy behaviors and substance use through traditional and social media. Determine baseline and increase # of articles on social media, expand education class to teach healthy behaviors by 1.
 - a. Facebook article-Child Adolescent Behavioral Health. 9/21 baseline was not determined.
- 2. Work with local school districts to educate on the health determinants of substance abuse. Meet with school district administration in 2nd quarter. Present and distribute information to students in grades 8-12. Determine baseline.
 - a. Mission Partner talked to High School about providing substance abuse articles.
- 3. Schedule mental health first aid classes to clinical staff and local high school students. Increase the number of providers trained. (No session in 2019) Increase number high school age children trained by 1 school yearly.
 - a. Due to COVID-19 no mental health first aid classes were held.

Goal 2: Increase education in the community regarding mental health services.

- 1. Increase awareness: Resource Link Care Coordinator will meet with all new providers, schools and other social services about services.
 - **a.** Silvercloud has 102 users. Facebook articles on Silvercloud posted. 4/20 post on stress and how behaviors put you at risk. Anxiety and depression posts on 5/20, 6/3, 6/23 and 9/3.
- 2. Provide education in low-income housing units for those with limited access to care and resources. Meet with Knox County Housing Authority in 2nd quarter.

- **a.** Education was not offered to Housing units due to COVID restrictions. Continued Collaborating with local agencies for the Unmet Needs Committee to identify barriers for families struggling with various health and financial issues.
- 3. Adopt "Stop the Stigma" campaign from other OSF facilities.
 - **a.** Track the number of fliers distributed to outside organizations and social media posts to determine baseline. "Stop the Stigma" Campaign on hold due to Covid-19.
- 4. Discuss depression, stress and anxiety at community events, including schools. Track # of events attended to determine a baseline.
 - a. Facebook articles Tips on behavioral health and COVID.
- 5. Provide free Behavioral Health Navigation Service. Increase number of patients served by Behavioral Health Navigators by 1 %
 - **a.** 163 in 2020; 398 in 2021

APPENDIX 3: SURVEY

Knox and Warren County 2021 COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

INSTRUCTIONS

We want to know how you view our community, and other factors that may impact your health. We are inviting you to participate in a research study about community health needs. Your opinions are important! This survey will take about 12 minutes to complete. All of your individual responses are anonymous and confidential. We will use the survey results to better understand and address health needs in our community.

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| CO | MMUNITY PERCEPTIONS | | |
|-----------------|---|----------|--|
| 1. W | hat would you say are the three (3) biggest HE | ALT | |
| Ш | Aging issues, such as Alzheimer's disease, | Ш | Early sexual activity |
| | hearing loss, memory loss, arthritis, falls | | Heart disease/heart attack |
| | Cancer | | Mental health issues (including depression, anger) |
| | Chronic pain | | Obesity/overweight |
| | Dental health (including tooth pain) | | Sexually transmitted infections |
| | Diabetes | | Viruses (including COVID-19) |
| 2. W | hat would you say are the three (3) most UNH | ŒAL | THY BEHAVIORS in our community? |
| | Angry behavior/violence | | Drug abuse (legal drugs) |
| | Alcohol abuse | | Lack of exercise |
| | Child abuse | | Poor eating habits |
| | Domestic violence | | Risky sexual behavior |
| | Drug abuse (illegal drugs) | | Smoking/vaping (tobacco use) |
| 3. W | hat would you say are the three (3) most impor | rtant fa | actors that would improve your WELL-BEING? |
| П | Access to health services | П | Job opportunities |
| \Box | Affordable healthy housing | \Box | Less hatred & more social acceptance |
| \Box | Availability of child care | П | Less poverty |
| | Better school attendance | | Less violence |
| | Good public transportation | | Safer neighborhoods/schools |
| | Healthy food choices | | out in inglice income sentents |
| The f you i | CESS TO CARE following questions ask about your own health a n any way. Iical Care | nd hea | alth choices. Remember, this survey will not be linked to |
| 1. W | hen you get sick, where do you go? (Please cl | hoose | only one answer). |
| | linic/Doctor's office | | ent |
| _ | a don't seek medical attention, why not? ear of Discrimination Lack of trust C | ost | ☐ I have experienced bias ☐ Do not need |
| 2. In | the last YEAR, was there a time when you nee | eded n | nedical care but were not able to get it? |
| □ Y | es (please answer #3) | □N | to (please go to #4: Prescription Medicine) |
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| 3. If you were not able to get medical care, why no | t? (Please choose all that apply). |
|--|---|
| Didn't have health insurance. | Too long to wait for appointment. |
| Couldn't afford to pay my co-pay or deductible. | Didn't have a way to get to the doctor. |
| Fear of discrimination. | Lack of trust |
| Prescription Medicine | |
| | eded prescription medicine but were not able to get it? |
| Yes (please answer #5) | ☐ No (please go to #6: Dental Care) |
| 5. If you were not able to get prescription medicine | e, why not? (Please choose all that apply). |
| Didn't have health insurance. | Pharmacy refused to take my insurance or Medicaid. |
| Couldn't afford to pay my co-pay or deductible. | Didn't have a way to get to the pharmacy. |
| Fear of discrimination. | Lack of trust |
| Dental Care | |
| 6. In the last YEAR, was there a time when you nee | eded dental care but were not able to get it? |
| Yes (please answer #7) | No (please go to #8: Mental-Health Counseling) |
| 7. If you were not able to get dental care, why not? | (Please choose all that apply). |
| Didn't have dental insurance. | The dentist refused my insurance/Medicaid |
| Couldn't afford to pay my co-pay or deductible. | Didn't have a way to get to the dentist. |
| Fear of discrimination. | Lack of trust. |
| Not sure where to find available dentist | _ |
| Mental-Health Counseling | |
| 8. In the last YEAR, was there a time when you nee | eded mental-health counseling but could not get it? |
| Yes (please answer #9) | ☐ No (please go to next section – HEALTHY BEHAVIORS) |
| 9. If you were not able to get mental-health counsel | ling, why not? (Please choose all that apply). |
| Didn't have insurance. | The counselor refused to take insurance/Medicaid. |
| Couldn't afford to pay my co-pay or deductible | Em barrassment. |
| Didn't have a way to get to a counselor. | Cannot find counselor. |
| Fear of discrimination. | Lack of trust. |
| Long wait time. | _ |
| HEALTHY BEHAVIORS | |
| | nd health choices. Remember, this survey will not be linked to |
| you in any way. | |
| Exercise | |
| 1. In the last WEEK how many times did you parti- fitness classes) that lasted for at least 30 minutes? | cipate in exercise, (such as jogging, walking, weight-lifting, |
| ☐ None (please answer #2) ☐ 1 – 2 times | 3 - 5 times More than 5 times |
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| 2. If you answered "none" to the question about exercise, why didn't you exercise in the past week? (Please |
|--|
| choose all that apply). |
| Don't have any time to exercise. Don't like to exercise. |
| ☐ Can't afford the fees to exercise. ☐ Don't have child care while I exercise. |
| Don't have access to an exercise facility. |
| Safety issues. |
| Healthy Eating |
| 3. On a typical DAY, how many servings/separate portions of fruits and/or vegetables did you have? An |
| example would be a banana (but not banana flavored pudding). |
| None (please answer #4) ☐ 1 - 2 servings ☐ 3 - 5 servings ☐ More than 5 servings |
| 4. If you answered "none" to the questions about fruits and vegetables, why didn't you eat fruits/vegetables? |
| (Please choose all that apply). |
| Don't have transportation to get fruits/vegetables Don't like fruits/vegetables |
| It is not important to me Can't afford fruits/vegetables |
| Don't know how to prepare fruits/vegetables Don't have a refrigerator/stove |
| Don't know where to buy fruits/vegetables |
| 5 When it was minor as a first 12 (Dlane shape only one angular |
| 5. Where is your primary source of food? (Please choose only one answer). Grocery store Fast food Gas station Food delivery program |
| Food pantry Farm/garden Convenience store |
| |
| 6. Please check the box next to any health conditions that you have. (Please choose all that apply). |
| If you don't have any health conditions, please check the first box and go to question #8: Smoking. |
| ☐ I do not have any health conditions ☐ Diabetes ☐ Mental-health conditions |
| Allergy Stroke Stroke |
| Asthma/COPD Uverweight |
| ☐ Cancer ☐ Memory problems |
| 7. If you identified any conditions in Question #6, how often do you follow an eating plan to manage your |
| condition(s)? |
| Never Usually Always |
| Smoking |
| 8. On a typical DAY, how many cigarettes do you smoke? |
| None $\boxed{1-4}$ $\boxed{5-8}$ $\boxed{9-12}$ $\boxed{\text{More than } 12}$ |
| |
| Vaping |
| 9. On a typical DAY, how many times do you use electronic vaping? |
| None □ 1 - 4 □ 5 - 8 □ 9 - 12 □ More than 12 |
| |
| |
| GENERAL HEALTH |
| 10. Where do you get most of your health information and how would you like to get health information in the |
| future? (For example, do you get health information from your doctor, from the Internet, etc.). |
| |

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| 11. Do you have a | n personal physician/d | octor? | Yes | No | | | |
|---|---|---|---------------------|------------------------------|--|--|--|
| 12. How many da | ys a week do you or y ☐ 1–2 days | our family m | | gry? han 5 days | | | |
| 13. In the last 30 l | DAYS, how many day | ys have you fe | | lown, hopeless han 5 days | ? | | |
| activities? | DAYS, how often has | | | | om your normal daily | | |
| | 1-2 days AR have you talked w | • | out your ment | han 5 days al health? | | | |
| Yes (please answard) 16. If you talked to Doctor/nurse | o anyone about your | ease go to #17) mental health, Family/1 | who was it? | Other | | | |
| — 17. How often do | | | | to you or used | differently than how the | | |
| |] 1—2 times coholic drinks do you | 3-5 time | | e than 5 times | | | |
| 19. How often do | you use marijaunia o | -5 drinks n a typical D <i>A</i> | More than 5 | drinks | | | |
| □ None □ 1-2 times □ 3-5 times □ More than 5 times 20. How often do you use substances such as inhalants, ecstasy, cocaine, meth or heroin on a typical DAY? | | | | | | | |
| ∐ None 21. Do you feel sa | 1-2 times afe where you live? | _ | 3-5 times Yes | ∐ Mo | re than 5 times | | |
| Breast/man Prostate exa | ears, have you had a: nmography exam am py/colorectal cancer scr | eening | Yes Yes Yes | □ No □ No □ No | Not applicable Not applicable Not applicable | | |
| Cervical ca Overall Healt | ncer screening/pap sme | ar [| Yes | ☐ No | Not applicable | | |
| 21. My overall pl 22. My overall m | hysical health is: | Below avera | | - | ove average ove average | | |
| INTERNET 1. Do you have In | ternet at home? For | example, can y | you watch You | tube at home? | | | |
| Yes (please go t | to next section — BACK | GROUND INF | FORMATION) | No (please | answer #2) | | |
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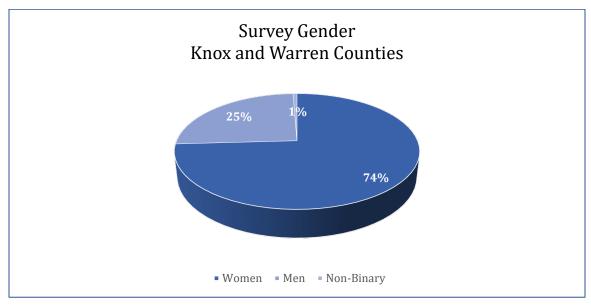
| 2. If don't have Internet, why not? Cost No available Internet provider I don't know how Data limits Poor Internet service No phone or computer |
|---|
| BACKGROUND INFORMATION |
| 1. What county do you live in? |
| ☐ Knox ☐ Warren ☐ Other |
| 2. What is your Zip Code? |
| 3. What type of health insurance do you have? (Please choose all that apply). |
| ☐ Medicare ☐ Medicaid/State insurance ☐ Commercial/Employer |
| ☐ Don't have (Please answer #4) |
| 4. If you answered "don't have" to the question about health insurance, why don't you have insurance? (Please choose all that apply). |
| □ Can't afford health insurance □ Don't need health insurance □ Don't know how to get health insurance □ Other |
| 5. What is your gender? |
| 6. What is your sexual orientation? Heterosexual Queer Lesbian Gay Bisexual Prefer not to answer |
| 7. What is your age? Under 20 21-35 36-50 51-65 Over 65 |
| 8. What is your racial or ethnic identification? (Please choose only one answer). |
| White/Caucasian Black/African American Hispanic/LatinX Pacific Islander Native American Asian/South Asian Multiracial Other. |
| 9. What is your highest level of education? (Please choose only one answer). |
| □ Grade/Junior high school □ Some high school □ High school degree (or GED) □ Some college (no degree) □ Associate's degree □ Certificate/technical degree □ Bachelor's degree □ Graduate degree □ Other: |
| 10. What was your household/total income last year, before taxes? (Please choose only one answer). |
| Less than \$20,000 □ \$20,001 to \$40,000 □ \$40,001 to \$60,000 □ \$60,001 to \$80,000 □ \$80,001 to \$100,000 □ More than \$100,000 |
| 11. What is your housing status? |
| ☐ Do not have ☐ Have housing, but worried about losing it ☐ Have housing, NOT worried about losing it |
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Collaboration for sustaining health equity • 2022

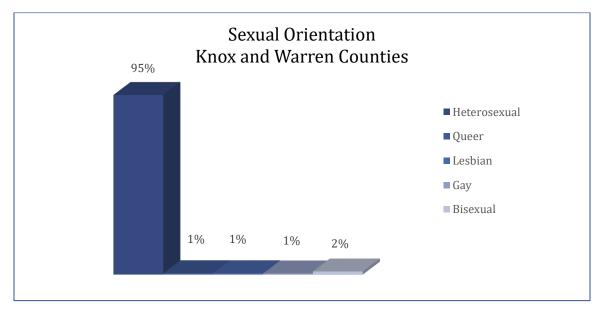
| 14. How often do you communicate with people you care about and feel close to? (For example, talking, texting, meeting with friends/family?) Less than once per week 1-2 times per week 3 - 5 times per week More than 5 times per week |
|---|
| |
| |
| 13. How many people live with you? |
| running water |
| ☐ leaking roof ☐ mold ☐ heat ☐ air conditioning |
| 12. If you answered that you have housing, does your house have: |

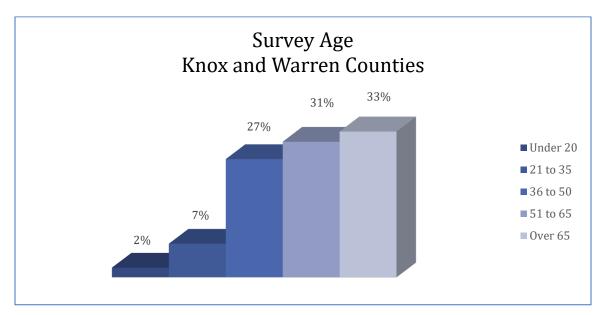
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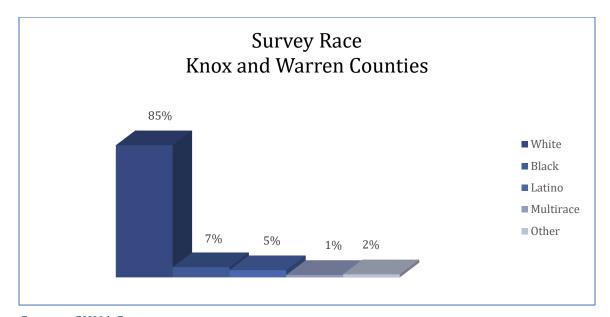
APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS

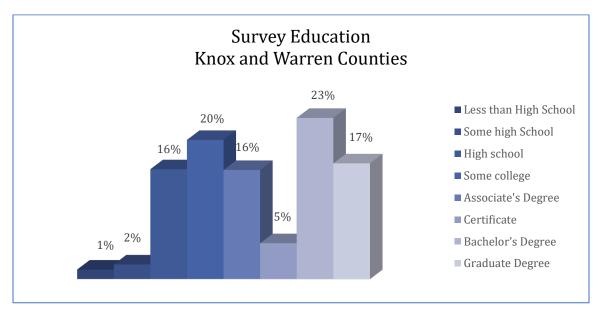


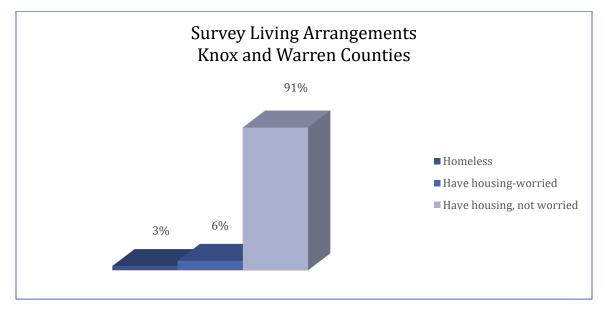
Source: CHNA Survey

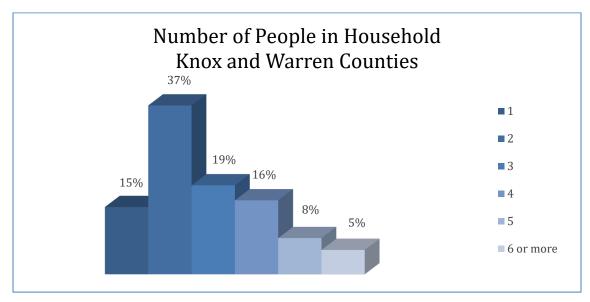






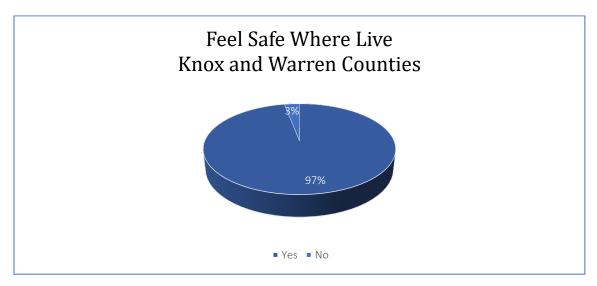


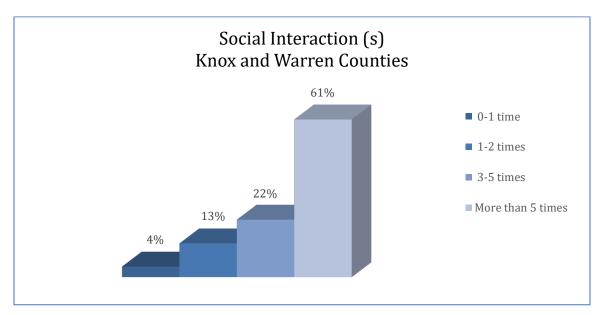




Housing Environment

Housing environment is a measure of the housing-related standard of living in a community. Key risk influencers include affordability, crowding and quality. For Knox and Warren Counties, 58% of the population is at elevated risk for Housing environment. This is lower than the State of Illinois average of 33% (SocialScape® powered by SociallyDetermined®, 2022).





APPENDIX 5: RESOURCE MATRIX

| | Aging Issues | Cancer Screenings | Healthy Behaviors/ Nutrition & Exercise | Behavioral Health | Obesity | Access to Counseling | Substance Abuse | COVID- 19 | Diabetes |
|--|-----------------|----------------------|--|----------------------|---------|----------------------|--------------------|--------------|----------|
| Recreational Facilities | | | | | | | | | |
| YMCA of Knox County | 1 | | 3 | | 1 | | | | |
| YMCA of Warren County | 1 | | 3 | | 1 | | | | |
| Galesburg Parks and Recreation | | | 2 | | | | | | |
| Monmouth Parks and Recreation | | | 2 | | | | | | |
| Health Departments | | | | | | | | | |
| Knox County Health Department | 1 | 1 | 2 | 1 | 1 | | 1 | 2 | |
| Warren County Health Department | 1 | | 2 | 1 | 1 | | 1 | 2 | |
| Community Agencies | | | | | | | | | |
| United Way of Knox County | 1 | | 2 | 1 | | | | | |
| United Way of Warren County | 1 | | 2 | 1 | | | 1 | | |
| Crossroads Counseling and Life Coaching | | | 1 | 1 | | 2 | 1 | | |
| University of Illinois Knox Co. Extension | 1 | | 2 | | | | | | |
| University of Illinois Warren Co. Extension | 1 | | 2 | | | | | | |
| FISH Food Pantry | | | 3 | | | | | | |
| First Lutheran Church-Galesburg Food Pantry | | | 1 | | | | | | |
| Jamieson Community Center | 1 | | 2 | 1 | | | 1 | | |
| First Christian Church Food Bank | | | 1 | | | | | | |
| Helping Hands Food Pantry | | | 1 | | | | | | |
| Gordon Behrents Senior Center/KCCDD | 2 | | 1 | 2 | | | | | |
| VNA Community Services | 2 | | 2 | 1 | | 1 | | | |
| Western IL Area Agency on Aging | 3 | | 2 | 1 | | 1 | | | |
| Knox Community Health Center | 2 | | 2 | 1 | 1 | | | | 1 |
| Salvation Army | 2 | | 1 | 1 | | | 1 | | |
| Women, Infants, Children's Nutrition Prog | | | 2 | | | | | | |
| Bridgeway | | | 1 | 3 | | 1 | 3 | | |
| Illinois Tobacco Quit Line | | | 1 | | | | 2 | | |
| Al Anon | | | 1 | 1 | | | 2 | | |

| | Aging Issues | Cancer Screenings | Healthy Behaviors/ Nutrition & Exercise | Behavioral Health | Obesity | Access to Counseling | Substance Abuse | COVID- 19 | Diabetes |
|---------------------------------------|-----------------|----------------------|--|----------------------|---------|-------------------------|--------------------|--------------|----------|
| Hospitals / Clinics | | | | | | | | | |
| OSF Healthcare St Mary Medical Center | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 3 |
| OSF Medical Group/Clinics- Galesburg | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 3 |
| OSF Medical Group- Knoxville | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 3 |
| OSF Medical Group- Abingdon | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 3 |
| OSF HC Holy Family Medical Center | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 3 |
| OSF HC Clinics Roseville/Monmouth | 3 | 3 | 3 | 2 | 1 | | 2 | 1 | 3 |
| OSF Medical Group- Galva | 3 | 3 | 3 | 2 | 1 | | 2 | 1 | 3 |
| OSF Prompt Care-Galesburg | 1 | | 1 | 1 | | | 1 | 1 | |
| OSF HC Cardiovascular Institute | 3 | | 3 | | 1 | | | 1 | |
| OSF Home Care and Hospice | 3 | | 2 | | | | | 1 | 1 |
| The Galesburg OP VA Clinic | 2 | 1 | 2 | 2 | | | 1 | | |
| Illinois Cancer Care Clinic | 1 | 1 | 2 | | | | | | |
| Fresenius Kidney Care Galesburg | | | 2 | | | | | | 1 |
| Knox County Human Services Council | 1 | | 1 | 1 | | 1 | | | |
| Soderstrom Skin Institute | | 1 | 1 | | | | | | |
| OSF Healthcare Resource Link | | | | 3 | | | | | |
| Family Planning Service | | | 2 | 1 | | | | | |

⁽¹⁾⁼ low; (2)= moderate; (3) = high, in terms of degree to which the need is being addressed

APPENDIX 6: DESCRIPTION OF COMMUNITY RESOURCES

RECREATIONAL FACILITIES (4)

Knox County YMCA

The YMCA is a leading agency committed to strengthening the community through youth development, healthy living and social responsibility.

Warren County YMCA

The Warren County YMCA offers high quality after school programs, swimming and gymnastics instruction, youth sports, teen programs, Day Camp and a variety of recreational experiences for children and adults of all ages. The YMCA focus is on Health and Wellness. Workout facilities are available 24 hours a day to accommodate any schedule.

Galesburg Parks and Recreation

Galesburg Parks and Recreation serve Galesburg and surrounding communities by providing parks, amenities, recreational facilities, programs and community partnerships.

Monmouth Parks and Recreation

The Monmouth Parks and Recreation Department maintains nine parks, the Gibson Woods golf course and the Municipal Pool.

HEALTH DEPARTMENTS (2)

Knox County Health Department

The Health Department's Mission is to serve Knox County by assessing health and environmental needs, developing policies and assuring those needs are effectively addressed. The program areas focus on family health, environmental health, disease prevention and wellness promotion. A federally-funded community health center operates within the Knox County Health Department providing medical, dental, and behavioral health services.

Warren County Health Department

The Warren County Health Department enhances the health and safety of the community by promoting public health education and awareness, providing essential health services, and encouraging collaborative efforts throughout Warren County.

COMMUNITY AGENCIES/PRIVATE PRACTICES (21)

United Way of Knox County

The United Way improves lives by mobilizing the caring power of communities to advance the common good. Locally they allocate funds to 15 different partner agencies and offer 9 different programs. Community partners include Goodwill, Camp Kidz, Fish, Gordan Behrents Senior Center, Child AdvocThey Center, Salvation Army, CASA, Camp Big Sky and American Red Cross. The 2-1-1 resource connects people with essential information and services.

United Way of Warren County

The United Way is a recognized leader in helping solve community problems by gathering and distributing, in an efficient and accountable manner, community resources which respond to priority health and human service needs. The United Way and OSF Healthcare Holy Family are sponsors of the 2-1-1 resource center.

Crossroads Counseling and Life Coaching

Crossroads Counseling and Life Coaching offers counseling and life coaching from licensed professionals. They provide services for a wide variety of life situations such as depression, anxiety, ADHD, dementia, parenting, autism, grief, traumatic events, childhood disorders and other difficult life transitions.

University of Illinois Knox County Extension

The University of Illinois Extension provides practical education in food safety and nutrition, family health and wellness, etc. to help people, businesses, and communities solve problems, develop skills, and build a better future.

University of Illinois Warren County Extension

Warren County Extension office provides educational programs to the community on numerous subjects including health and nutrition to both youth and adult audiences.

FISH Food Pantry

FISH of Galesburg provides food for those in need. The pantry is open Monday through Friday from 10 to 3. In partnership with United Way delivery of food assistance is available on Thursdays.

Jamieson Center

Jamieson Community Center is a non-profit agency primarily serving residents of Warren County. Their programs are designed to increase food security and help people with essential services. Programs include Senior Nutrition, Food Pantry, Thrift store, weekend meals for elementary students, emergency bill pay, energy assistance and a Learning Center.

First Christian Church-Food Pantry

The First Christian Church offers a food bank to assist families in need in addition to their many programs built to strengthen families and individuals in Warren County.

First Lutheran Church of Galesburg-Food Pantry

The First Lutheran Church offers food to assist those community members in need. The food pantry is open on the second and fourth Thursday's from 1-2 and on the third Wednesday of the month from 5:30-6:30.

Helping Hands-Food Pantry

The Helping Hands Food Pantry of Roseville exists to improve quality of life for Warren County, IL residents by providing assistance to families in need and by developing programs to strengthen families and individuals.

Illinois Cancer Care

Illinois Cancer Care is a comprehensive practice treating patients with cancer and blood diseases.

Gordon Behrents Senior Center

The Senior Center provides adult day services designed to prevent premature long-term care placement, promote client independence and provide respite to families and caregivers.

Soderstrom Skin Institute

Soderstrom Skin Institute diagnoses and treats all skin conditions.

VNA Community Services

The VNA helps Seniors 60 years and older in and around Galesburg. Services include congregate and home delivered meals, education, Medicare and options counseling, benefits access applications, energy assistance program, caregivers support and a Fitness Center.

Western Illinois Area Agency on Aging

The Western Illinois Area Agency on Aging was founded under an amendment to the Older American Act to help older Americans live in their homes with safety and dignity as long as possible with support and services. Services include home delivered meals, transportation, legal assistance, outreach, Medicare and options counseling, senior centers and family caregiver programs.

Knox County Health Center

The Primary care center is community based and patient directed existing to serve those who have limited access to health care. The Center provides comprehensive health care services as well as supportive services (education, translation and transportation, etc.) that promote access to health care. Services include: physicals, adult wellness, chronic disease management and behavioral health screenings.

Salvation Army

The Galesburg Salvation Army provides support to individuals and families in our communities by providing food, financial support, counseling, and adult and youth programs. They offer recreational activities while supporting spiritual and mental needs.

Women, Infants, and Children's Nutrition Program

Women, Infants, and Children's (WIC) supplemental nutrition program is conducted by the Warren County Health Department. WIC encourages breastfeeding, proper nutrition during pregnancy; and nutrition for children from birth through age 5 for qualified women and children.

Bridgeway Mental Health and Family Services

Bridgeway is an organization providing community based health and human services to a wide variety of individuals in need. Bridgeway's three core programs are: Behavioral Health Services, Developmental and Intellectual Disabilities services and Community and Center based employment opportunities for people with disabilities.

Illinois Tobacco Quit Line

Illinois Tobacco Quit Line provides free telephone counseling to assist individuals in quitting tobacco use. ITQL provides Nicotine Replacement Therapy in the form of patches, lozenges, and gum for qualified individuals (those that do not have access to those products thru insurance or Medicaid) for 8 weeks per 12-month period.

AL-Anon

Al-Anon is a mutual support group of peers who share their experience in applying the Al-Anon principles to problems related to the effects of a problem drinker in their lives. Meetings offered in Warren and Knox County.

HOSPITALS/CLINICS (13)

OSF Healthcare St. Mary Medical Center

OSF HC St. Mary Medical Center has been serving the Galesburg community since 1909. The acute care hospital services patients in a seven county area including Knox, Warren, Mercer, Henderson, Henry, McDonough and Fulton. Health care services include the Family Birthing Center, cancer, lung, cardiovascular care, behavioral health and specialty services.

OSF Healthcare Holy Family Medical Center

OSF HC Holy Family is an acute and outpatient care hospital. The critical care hospital is located in Monmouth and serves patients of Warren, Henderson and Mercer counties, Services include emergency, 24-hour inpatient care, diagnostic imaging, rehabilitation, specialty and ancillary services.

OSF Medical Group-Abingdon/Knoxville

The OSF Medical Group/Clinics in Knoxville and Abingdon specialize in Family Medicine. Nurse Practitioners, Advance Practice Nurses, and other support staff is used to treat individuals with various conditions, such as diabetes, dermatology, infectious disease, urology, sports medicine, podiatry, sleep disorder, and more.

OSF Prompt Care-Galesburg

Prompt Care is a walk-in clinic designed to assess and treat minor illnesses and injuries. Lab and X-ray services are available. The clinic is open seven days a week.

OSF Galesburg Clinic

Galesburg Clinic is a multi-specialty group offering services in internal medicine, cardiology, gastroenterology, neurology, urology, obstetrics, behavioral health, podiatry, pediatrics, pulmonology, surgical services, and general practice.

OSF Home Care and Hospice

OSF Home Care and Hospice offer health care and services to home-bound individuals and end of life services through Hospice.

Galesburg VA Clinic

The Galesburg VA clinic is an urgent care center and medical clinic. This OP clinic assists our Veterans with healthcare and social services.

Knox County Human Services Council

The Knox County Human Services Council provides a forum for social service professionals and agencies to exchange information of mutual interest and benefit and to coordinate efforts to enhance the delivery of social, health, educational and other services available to Knox County residents.

Fresenius Kidney Care-Galesburg

Fresenius offers dialysis treatment, resources, recipes, and support for individuals living with kidney disease and ESRD

OSF Medical Group Clinic Monmouth/Roseville

The OSF Medical Group Clinics in Monmouth and Roseville provide a wide range of medical care to the community focusing mainly on primary care.

OSF Multi-Specialty Group

OSF Multi-Specialty Group offers a wide range of medical and surgical care, as well as other specialty services, through provider offices located throughout Warren County.

Family Planning Service

The mission of the Family Planning Service of Western Illinois is to provide high quality comprehensive reproductive healthcare in a confidential setting and to educate clients and the community about taking responsibility for reproductive health.

OSF HealthCare Resource Link

Resource Link provides services to equip primary care Physician practices to identify, diagnose and treat mental health issues

APPENDIX 7: PRIORITIZATION METHODOLOGY

5-Step Prioritization of Community Health Issues

Step 1. Review Data for Potential Health Issues

Step 2. Briefly Discuss Relationships Among Issues

Step 3. Apply "PEARL" Test from Hanlon Method²

Screen out health problems based on the following feasibility factors:

Propriety – Is a program for the health problem appropriate?

Economics – Does it make economic sense to address the problem?

Acceptability - Will a community accept the program? Is it wanted?

Resources – Is funding available for a program?

Legality - Do current laws allow program activities to be implemented?

Step 4. Use Voting Technique to Narrow Potential Issues

Prioritize Issues. Use a weighted-scale approach (1-5 scale) to rate remaining issues based on:

- 1. Magnitude size of the issue in the community. Considerations include, but are not limited to:
 - Percentage of general population impacted
 - Prevalence of issue in low-income communities
 - Trends and future forecasts
- **2. Severity** importance of issue in terms of relationships with morbidities, comorbidities and mortality. Considerations include, but are not limited to:
 - Does an issue lead to serious diseases/death
 - Urgency of issue to improve population health
- **3. Potential for impact through collaboration** can management of the issue make a difference in the community?

Considerations include, but are not limited to:

- Availability and efficacy of solutions
- Feasibility of success

² "Guide to Prioritization Techniques." National Connection for Local Public Health (NACCHO)