

# Community Health Needs Assessment

2018 Final Report



Submitted by:



August 2018

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## Executive Summary

Beginning in January 2018, Beacon Health System undertook a comprehensive Community Health Needs Assessment (CHNA). This assessment looked to evaluate the health needs of Elkhart, Marshall, and St. Joseph counties. Statistics, feedback, and recommendations were collected through secondary data, a key informant survey, and a community survey on a variety of topics around health indicators and the social determinates of health. enFocus, a nonprofit based in the South Bend – Elkhart region, was contracted by Beacon Health System to complete the assessment.

The goal of the CHNA is to provide Beacon Health system with a clear picture of the Elkhart, Marshall, and St. Joseph County communities. The findings from the assessment will be used by Beacon Health System to prioritize health issues in the community.

The project worked in the following areas to understand the community health needs:

- Secondary Data Research - information related to the current state of our community’s economic, social, and health status published by established sources. Data was collected for a three-year period in order to establish trends. Over 4,300 points were collected and analyzed.
- Key Informant Interviews - a survey of community leaders to understand what they view as the top health issues. The list of key informants was identified and contacted by BCH staff. A total of 120 completed responses were collected and analyzed.
- Community Survey - a survey of the general public to understand what they view as health the most relevant health issues. A significant focus was put on achieving a representative sample and reaching traditionally vulnerable and hard to reach populations while achieving a statically significant sample size. In order to achieve a 99% confidence level with a 5% margin of error, the goal was to obtain at least 670 survey responses for the three-county area. Beacon and enFocus partnered with over 35 organizations and 7 events held to collect over 1,400 responses with a 77% completion rate.
- Analysis and Ranking – the three data streams were aggregated, and top health issues were ranked. This analysis lead to the identification of the top needs for each of the counties served by Beacon Health System.

The Analysis and Ranking process lead to the identification of the following top needs:

- Overweight/Obesity
- Healthcare Coverage/Insurance
- Substance and Alcohol abuse
- Mental Health/Suicide
- Diabetes
- Violence/Safety/Trauma

### Community Health Issues (Ranking)

Elkhart County	Marshall County	St. Joseph County
1. Healthcare Coverage/Insurance	1. Overweight/Obesity	1. Overweight/Obesity
2. Overweight/Obesity	2. Substance and Alcohol Abuse	2. Healthcare Coverage/Insurance
3. Substance and Alcohol Abuse	3. Diabetes	3. Substance and Alcohol Abuse
4. Mental Health/Suicide	4. Healthcare Coverage/Insurance	4. Mental Health/Suicide
5. Diabetes	5. Mental Health/Suicide	5. Diabetes

## Introduction

### Community Health Needs Assessment (CHNA)

In accordance with the IRS requirements, “in conducting a CHNA, a hospital facility must *define the community it serves* and *assess the health needs of that community*. In assessing the community's health needs, the hospital facility must *solicit and take into account input received from persons who represent the broad interests of its community*. The hospital facility must also *document the CHNA in a written report (CHNA report) that is adopted for the hospital facility* by an authorized body of the hospital facility. Finally, the hospital facility must *make the CHNA report widely available to the public*. A hospital facility is considered to have conducted a CHNA on the date it has completed all of these steps, including making the CHNA report widely available to the public”<sup>1</sup>.

In addition to the federal requirements, a community-wide needs assessment such as the CHNA enables community members, government bodies and institutions, private and philanthropic institutions, representatives of the local businesses and workforce development organizations, and neighborhood and faith-based associations, among other stakeholders, to have a comprehensive understanding of the health-related gaps or needs of a given population, and to identify existing and potential resources (infrastructure, partnerships, funding opportunities) to address such needs.

### Background

The process of building this report started in February 2018. Beacon Community Health (BCH) and enFocus came together to plan the deployment of a data-driven, evidence-based assessment of the community health needs of the communities served by Beacon Health System in St. Joseph, Elkhart and Marshall Counties.

This process also included an assessment on pediatric needs (Pediatric Health Needs Assessment, PHNA), as maternal and child healthcare are key to ensure quality of life, promote healthy habits and prevent future medical conditions that could afflict the residents of the three counties. Additionally, the needs of children are defined by developmental, physical and cognitive factors that are inherently different than those of adults, therefore requiring an assessment of its own. Information for the PHNA has been included in a separate report.

The data here contained was collected via surveys of the general public, key informant interviews and a comprehensive review of secondary data, in order to comply with the requirements contained in the Patient Protection and Affordable Care Act, and the Internal Revenue Service (IRS) to Non-for-profit hospitals in the country, to present a CHNA every three years. In addition to meeting the legal requirements, the CHNA has been designed to serve two fundamental purposes: 1) to identify community health needs, and 2) to prioritize such needs and determine the strategic objectives for BCH programming.

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<sup>1</sup>Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals; Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return (Vol. 79, Ser. 250). (2014). Washington, DC: Department of the Treasury.

## Assessment Methodology

### Methodology Overview

This CHNA Report aims to guide strategic decisions. Using the information of the report, BCH will be able to determine what programs and projects should be developed and/or supported, whether within BCH or through partner community organizations, to improve the effectiveness of their Community Outreach Services. Therefore, the methodology followed for this needs assessment was based on three steps: 1) Identify needs; 2) Analyze the links between the needs and the information required to make decisions; 3) Make recommendations that guide decision-making.

To identify needs, the following sub-steps were completed<sup>2</sup>:

- 1) Identify partners for the needs assessment: the St. Joseph County Health Improvement Alliance (SJCHIA) provided feedback on the Community Survey datapoints, and local organizations from St. Joseph and Elkhart counties used different communication channels (listservs, social media, newsletters) to promote the Community Survey among their contacts and clients (see partner list below).
- 2) Determine what data are required to identify needs by focusing on defining what information is needed to make an informed and justifiable decision, through consultations with experts (i.e. SJCHIA) and a thorough literature review to identify best practices.
- 3) Determine potential sources of data to inform the needs assessment, such as healthcare experts, Electronic Hospital Records (EHRs), US Census information, Public and Population Health Research available, among other sources.
- 4) Plan to collect information that is not already available, by designing, implementing and analyzing data collection instruments, i.e. the Key Informant and the Community Surveys.
- 5) Pilot test questionnaires and information gathering tools.
- 6) Collect information using a variety of tools and techniques and include sources that represent varying perspectives on the primary health needs.

### Defining the Community

To define the ‘community’ for Beacon’s CHNA, enFocus and BCH staff focused on identifying the geographic areas in which the majority of the health system’s clientele reside. This was taken from qualitative conversations with Beacon staff, a review of past CHNAs, and analysis of Beacon’s EMR data. Through this analysis, three counties were identified as encompassing the Beacon Healthcare Community: Elkhart, St. Joseph, and Marshall counties. Information about each county has been included in the Secondary Data Profile Report.

### Community Representation

The aim was to achieve a representative sample of the community through the community survey. Special effort was made to get feedback from hard to reach and minority populations. The survey was pushed out through digital platforms and listservs in both English and Spanish. Additionally, the BCH/enFocus team partnered with 35 different organizations to collect feedback and attended 8 community events (listed below) to directly target to populations who don’t typically contribute to community surveys. A variety of strategies were used to engage populations based on recommendations and restrictions from the partner organizations.

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<sup>2</sup> Watkins, R., West-Meiers, M., & Visser, Y. L. (2012). A guide to assessing needs: Essential tools for collecting information, making decisions, and achieving development results. Washington, D.C.: World Bank.

## Data Collection

The IRS regulations on the CHNA have established that “in assessing the health needs of its community, a hospital facility must take into account input received from, at a minimum, the following three sources: (1) At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community; (2) members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations; and (3) written comments received on the hospital facility's most recently conducted CHNA and most recently adopted implementation strategy.” To meet this standard information was collected from three major data streams that were analyzed, in aggregate, to inform the identification of community health needs.

**Key Informant Survey:** This digital survey was distributed to influential health leaders from the communities of St. Joseph, Elkhart and Marshall Counties. The survey was designed to provide a qualitative overview of the community needs, capacities and resources that can be improved and/or promoted to address social determinants of health and healthcare disparities in the identified Beacon community. Representatives from all relevant sectors (education, government, for-profit, non-profit, healthcare) assumed their role as stakeholders and provided their insight on community health needs.

120 community representatives completed the Key Informant Survey. 49.5% of the respondents identified themselves as Representatives of Health Care/Public Health Organizations, 15.8% as Representatives from Education/Youth Services, 14.9% as Representatives from Non-Profit/Social services and 20% as representatives from other organizations, such as businesses, faith-based organizations, government agencies or departments, and community leaders.

**Community Needs Survey:** This digital survey went out to the whole community. The backbone is rooted in the CDC's Behavioral Risk Factor Surveillance System (BRFSS). However, the survey has been adjusted to fit the local environment and collect data requested by partner organizations.

Aiming to promote ownership and participation from the community in the three counties, BCH held early consultations with the St. Joseph County Health Improvement Alliance (SJCHIA), asking for feedback on the data points to be collected in the Community Survey. The comments and recommendations from the SJCHIA were consolidated and analyzed. 79 organization representatives and individuals from the SJCHIA filled in the Feedback Survey. From these recommendations, 54 data points were identified as relevant for the Community Survey, 12 of which addressed issues related to children's health needs related to the PHNA process.

For the CHNA Primary Data Collection, a Community Survey was developed, focusing on five main issues: Demographic information, Access Barriers to Healthcare, Current Health Status, Social Determinants of Health, and Behavioral Determinants of Health. With the aim of carrying out the data collection through the Community Survey, enFocus designed a data collection methodology that ensured quality and validity standards, as this data will inform the decisions of BCH and other stakeholders relative to the prioritization and resource allocation for community outreach programs.

The Community Survey aimed to reach a large number of people in a short period of time, using digital and physical (printed) platforms. In order to achieve a 99% confidence level with a 5% margin of error the goal was to obtain at least 670 survey responses for the three-county area. To do so, BCH and enFocus required the contribution of partners and stakeholders, to reach an increasing number of participants (cascade effect). enFocus approached community organizations and stakeholders to use existing databases and mailing lists to distribute the Community Survey to residents of St. Joseph and

Elkhart Counties. Through these organizations enFocus also ensured that under-represented populations (Medically Underserved, Low-Income, and Minority Populations) were engaged in the consultation process, actively reaching out to them, ensuring that needs and perceptions from a wide range of demographic and socioeconomic groups were taken into consideration in the definition of top community health issues. The following organizations helped increase the reach of the survey:

St. Joseph County:

- 100 Black Men of SJC
- Center for the Homeless
- Community Foundation of St. Joseph County
- Goodwill Industries
- Hope Ministries
- Imani Unidad
- IUSB Division of Health Sciences
- IUSB School of Nursing
- Ivy Tech Community College
- La Casa de Amistad
- The LGBTQ Center
- Notre Dame
- South Bend Community School Corporation
- South Bend-Elkhart Regional Partnership
- South Bend Heritage Foundation
- South Bend Veterans Center
- St. Joseph County Public Library
- St. Margaret's House
- TREES, Inc
- United Church of Christ
- United Religious Community
- United Way
- Youth Service Bureau South Bend

Elkhart County:

- Community Foundation of Elkhart County
- Church Community Services
- Elkhart County Public Library
- Faith Mission of Elkhart
- Greater Elkhart Chamber of Commerce
- Heart City Health
- Mosaic Health & Healing Arts
- Minority Health Coalition
- Northern Indiana Hispanic Health Coalition
- RETA – Reason Enough to Act
- Ribbon of Hope Cancer Support
- United Health Services

Community Outreach Events:

- Faith Mission of Elkhart
- Elkhart County Public Library
- Best Week Ever
- St. Joseph County Public Library
- Minority Health Coalition
- Northern Indiana Hispanic Health Coalition
- Center for the Homeless
- Heart City Health

**Secondary Data Collection:** For the Secondary Data Collection, enFocus collected relevant data from reputable sources of federal and state levels of government, as well as from the academia and well-known national research centers. The main sources of secondary information for this needs assessment were:

- Centers for Disease Control and Prevention (CDC). WONDER Online Databases.
- Indiana University, Kelley School of Business. STATS Indiana Statistical Data Utility.
- Indiana University, Indiana Business Research Center at the Kelly School of Business. Indiana Indicators.



- University of Wisconsin. County Health Rankings and Roadmaps (CHRR).
- United States Census Bureau, American FactFinder. 2016 American Community Survey estimates.
- Substance Abuse and Mental Health Services Administration (SAMHSA).

Efforts focused on collecting data and indicators that could provide descriptive information on demographic and socioeconomic characteristics, health status, and health determinants of the communities of interest of this Report (behaviors, social and physical environment, access to healthcare services). To achieve a viable and trusted data set the following process was used:

- Identify data or indicators that may be contained in previously written CHNA reports.
- List the characteristics or attributes to select Secondary Data sources. For each item, list 3-5 potential sources to obtain that information. Below is a list of key characteristics to select Secondary Data Sources:
  - o Methodologically sound (valid, reliable, and collected over time)
  - o Feasible (available or collectable)
  - o Meaningful (relevant, actionable, and ideally, linked to evidence-based interventions)
  - o Important (linked to significant disease burden or disparity in the target community)
- Develop a document (protocol) for data review. Complete the protocol for every source of secondary data reviewed.
- Identify specific instances where information from different documents may disagree, documents containing similar information, potential sources for additional information, and information that is not available either at local, State or National levels.

To the extent possible, to be able to compare trends and scales, the aim was to collect Secondary Data at County (for Elkhart, Marshall, and St. Joseph Counties), State and National level, from the most recent available 3 years (2014, 2015, 2016).

## Timeframe

The data collection and analysis process started on February 13<sup>th</sup> and concluded on July 13<sup>th</sup>, 2018. The Key Informant Survey collected information from March 28<sup>th</sup> to August 20<sup>th</sup>, 2018. The Community Survey was launched on May 7<sup>th</sup> and was closed on August 20<sup>th</sup>, 2018.

## County Demographic Profile

### Population and Age composition

<i>Indicator</i>	<i>Unit</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
Total Population	#	203,781	46,556	269,141
Under 18 years of age	%	27.9	25.1	23.9
65 years of age and older	%	14.0	16.9	15.0

*Source: US Census Bureau. Estimates 2016.*

**Race/Ethnicity composition**

<i>Indicator</i>	<i>Unit</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
African American	%	5.8	0.6	12.9
American Indian/ Alaskan Native	%	0.6	0.4	0.5
Asian	%	1.2	0.7	2.4
Native Hawaiian	%	0.1	0.1	0.1
Hispanic	%	15.5	9.7	8.6
Non-Hispanic White	%	75.5	87.8	73.3

Source: US Census Bureau. Estimates 2016.

**Female participation as percentage of the total county population**

<i>Indicator</i>	<i>Unit</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
Female	%	50.5	50.2	51.4

Source: US Census Bureau. Estimates 2016.

**Unemployment**

<i>Indicator</i>	<i>Unit</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
Unemployment	%	3.5	3.8	4.5

Source: US Census Bureau. Estimates 2016.

**Health and Access to Healthcare**

<i>Indicator</i>	<i>Unit</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
Population without health insurance (2015)	%	15	15.1	8.6
Uninsured adults (2015)	%	18.14	15.34	13.78
Uninsured children (2015)	%	12.18	9.66	5.88
Primary Health Physician Density (2015)	#	1,850	2,130	1,045
Mental Health Provider Density (2016)	#	896	1,171	506
Dentist Density (2016)	#	2,885	2,617	1,772
Poor or Fair Health (Self-reported, 2016)	%	16.3	17.5	16.9

Source: University of Wisconsin Population Health Institute. County Health Rankings Key Findings 2018.

## Findings

### Community Health Needs Ranking Methodology

In order to identify top needs a Decision Matrix was used. This tool is ideal when health problems are considered against a large number of criteria. Three criteria were selected rank health needs: 1) the precedence ranking obtained from the Community Survey; 2) the precedence ranking obtained from the Key Informant Survey; and 3) the data trend on each health issue for the most recent 3 years.

By no means this ranking is to be considered definitive. It is used for illustrative purposes, to highlight the participatory approach of the assessment process, that aims to contribute to more informed and better decisions for the community and to increase the acceptance of final decisions by stakeholders.

A rating scale from 0 to 2 was determined:

- 0 = criterion not met
- 1 = criterion met
- 2 = criterion met well

Each criterion was assigned a condition to be met in order to be scored:

Community Survey:

- Health issues considered the most important by more than 20% of the respondents = 2
- Health issues considered most important by 10%-20% of the respondents = 1
- Health issues considered most important by less than 10% of the respondents = 0

Key Informant Survey:

- Health issues considered most important by more than 10% of the respondents = 2
- Health issues considered most important by 5%-10% of the respondents = 1
- Health issues considered most important by less than 5% of the respondents = 0

Secondary data trends:

- Health issues that, in the timeframe examined, are worsening: = 2
- Health issues that, in the timeframe examined, are stable: = 1
- Health issues that, in the timeframe examined, are improving: = 0

Each criterion was awarded a weight, accounting for its level of importance for the ranking:

- Community Survey: 33.33%
- Key Informant Survey: 33.33%
- Secondary data trend: 33.33%

Each health issue was scored. Ranks were assigned to the health issues with the highest score receiving a rank of (1).

Data for the ranking was taken from the answers to three questions: one in the Community Survey asking residents of the three counties assessed “*What are the top 3 health issues you see in your community?*”,

the other questions were in the Key Informant Survey: “What are the top 5 health issues you see in your community?” and “Of those health issues mentioned, which ONE is the most significant?”

These questions were selected because they best represent 1) the importance of each problem to community members, 2) the opportunity to intervene on each health issue identified at the prevention level, and 3) whether the issue is a root cause of health other problems. The abovementioned questions also allowed for comparisons with relevant secondary data and indicators that represent the magnitude and severity of each selected health concern, as well as trend analysis of each issue in, at least, a 3-year context.

Final scores and rankings were calculated by adding weighted scores for each health issue.

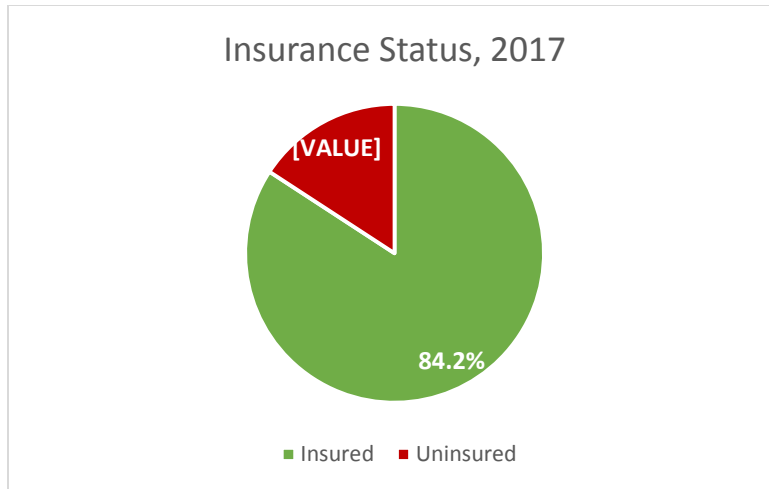
	Community Survey		Key Informant Survey		Secondary Data Trend		TOTAL SCORE	Ranking
	Score	33%	Score	33%	Score	33%		
Overweight/Obesity	2.00	0.67	2.00	0.67	2.00	0.67	2.00	1
Substance and Alcohol abuse (including opioids)	2.00	0.67	2.00	0.67	2.00	0.67	2.00	2
Mental health/Suicide	2.00	0.67	2.00	0.67	2.00	0.67	2.00	3
Healthcare Coverage/Insurance	2.00	0.67	2.00	0.67	-	-	1.33	4
Diabetes	2.00	0.67	-	-	2.00	0.67	1.33	5
Violence/Safety/Trauma	1.00	0.33	1.00	0.33	2.00	0.67	1.33	6

### Health Issues in context: Hospital Records Data Analysis

Over the past three years information has been exported from Beacon Healthcare’s Electronic Hospital Records (EHRs) for the six health issues identified in through the 2015 CHNA process. enFocus has worked with BCH to analyze these records and provide statistics and predictive analytics to understand what ongoing needs are. The enFocus team analyzed and compared the 2016 and 2017 EHR datasets to help provide additional context to what the health needs of the community are and what trends were.

#### Access to Care

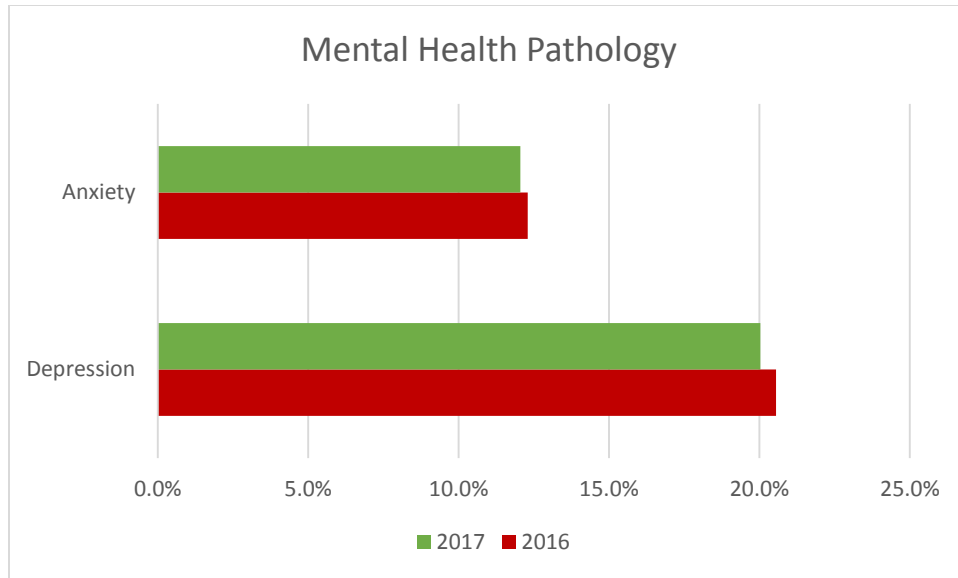
The Electronic Hospital Records (EHRs) data from the Memorial Hospital South Bend (MHSB) and the Elkhart General Hospital (EGH) for 2016 and 2017 were examined. According to this information, MHSB and EGH received 121,509 visits during 2017. That is an increase in the number of visits of 65% when compared to the previous year. The insurance status of the visitors shows that 15.8% were not insured.



Access to Care: Data Summary			
	2016	2017	Change
Total visits	42,372	121,509	65%
Insurance Status			
Insured	-	84.2%	-
Uninsured	-	15.8%	-
PCP Status			
Has PCP	-	67.7%	-
No PCP	-	32.3%	-
Race/Ethnicity			
White	65.4%	64.8%	-0.7%
Black	24.5%	24.8%	0.3%
Hispanic	8.4%	8.6%	0.2%
Asian	0.4%	0.4%	0.0%
Other	0.9%	0.9%	0.1%
Unknown	0.5%	0.6%	0.1%
Sex			
Male	45.4%	45.6%	0.1%
Female	54.6%	54.4%	-0.1%
Age groups			
<20	22.6%	21.8%	-0.8%
20-29	17.0%	16.7%	-0.3%
30-39	14.3%	14.1%	-0.2%
40-49	12.0%	11.7%	-0.4%
50+	34.1%	35.8%	1.7%

## Mental Health

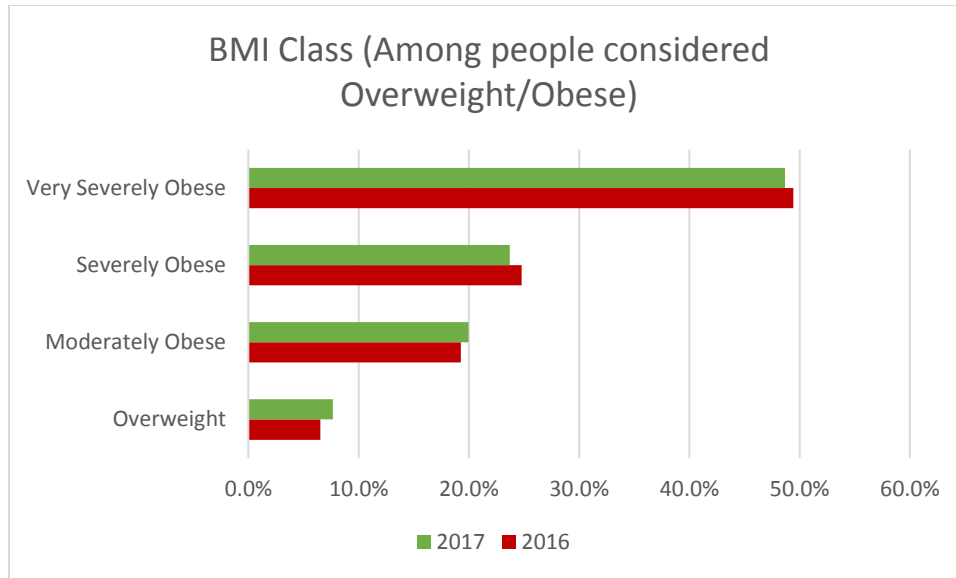
The number of visits to both hospitals for Mental Health issues has increased in a 3.9% from 2016 to 2017. However, when comparing the proportion of patients with Depression and Anxiety between these years, the proportion of patients diagnosed with Depression and Anxiety has reduced.



Mental Health: Data Summary			
	2016	2017	Change
Total visits	23,949	24,931	3.9%
<b>Race/Ethnicity</b>			
White	73.5%	72.5%	-1.0%
Black	19.6%	20.3%	0.7%
Hispanic	4.1%	4.3%	0.2%
Asian	0.6%	0.5%	-0.1%
Other	1.2%	1.3%	0.1%
Unknown	1.0%	1.1%	0.1%
<b>Sex</b>			
Male	50.1%	50.2%	0.1%
Female	49.9%	49.8%	-0.1%
<b>Age Group</b>			
<20	19.2%	16.9%	-2.3%
20-29	11.8%	11.8%	0.1%
30-39	11.0%	11.9%	0.9%
40-49	12.2%	12.2%	0.0%
>50	45.9%	47.2%	1.3%
<b>Diagnosis</b>			
Depression	20.6%	20.0%	-0.5%
Anxiety	12.3%	12.1%	-0.2%

### Overweight and Obesity

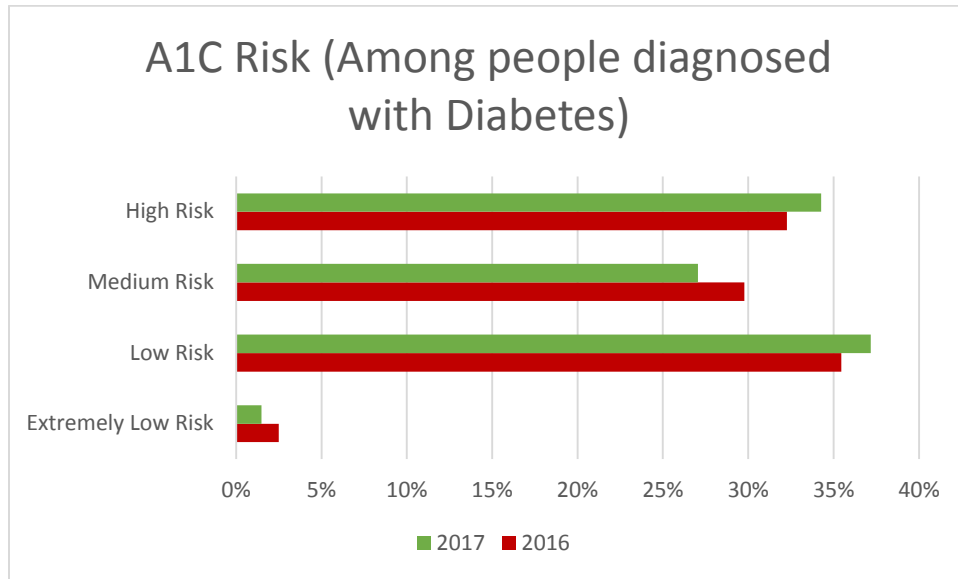
Nearly 49% of all people diagnosed with overweight and obesity that visited MHSB or EGH were considered “Very Severely Obese”.



Obesity: Data Summary			
	2016	2017	Change
Total visits	11,529	12,251	5.9%
Race/Ethnicity			
White	77.6%	77.0%	-0.6%
Black	16.4%	17.0%	0.7%
Hispanic	4.8%	4.8%	0.0%
Asian	0.1%	0.2%	0.0%
Other	0.4%	0.4%	0.0%
Unknown	0.7%	0.6%	-0.1%
Sex			
Male	35.8%	36.4%	0.7%
Female	64.2%	63.6%	-0.7%
Age Group			
<20	5.2%	4.9%	-0.3%
20-29	8.3%	8.6%	0.3%
30-39	11.5%	11.0%	-0.5%
40-49	15.1%	15.2%	0.1%
>50	59.9%	60.4%	0.5%
BMI Class (Among people considered Overweight/Obese)			
Overweight	6.5%	7.6%	1.1%
Moderately Obese	19.3%	20.0%	0.7%
Severely Obese	24.8%	23.7%	-1.1%
Very Severely Obese	49.4%	48.7%	-0.8%

## Diabetes

Nearly one third of all people diagnosed with diabetes that visited MHSB or EGH were at “High Risk”, meaning that their A1C levels are 9.0 or higher.

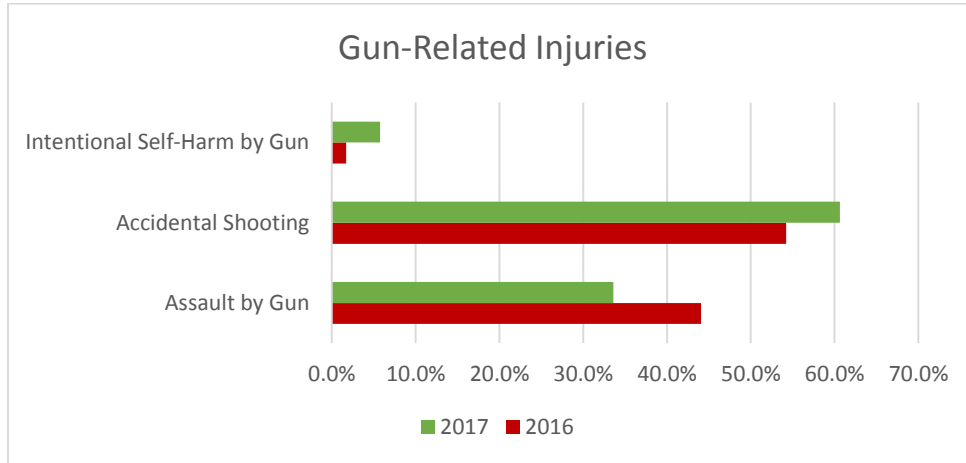


Diabetes: Data Summary			
	2016	2017	Change
Total visits	10,403	10,730	3%
Emergency Department Visits			
1 or more	40.7%	36.2%	-4.5%
Race/Ethnicity			
White	68.5%	68.9%	0.3%
Black	23.9%	23.7%	-0.2%
Hispanic	5.8%	5.8%	0.0%
Asian	0.4%	0.3%	-0.1%
Other	0.6%	0.7%	0.1%
Unknown	0.7%	0.6%	-0.1%
Sex			
Male	49.1%	48.5%	-0.6%
Female	50.9%	51.5%	0.6%
Age groups			
<20	2.4%	2.2%	-0.3%
20-29	2.8%	3.2%	0.4%
30-39	5.4%	5.1%	-0.3%
40-49	11.4%	10.5%	-0.8%
50+	78.0%	78.9%	1.0%
A1C Risk (Among people diagnosed with Diabetes)			
Extremely Low Risk	3%	1.5%	-1.0%
Low Risk	35%	37.2%	1.7%
Medium Risk	30%	27.1%	-2.7%
High Risk	32%	34.3%	2.0%



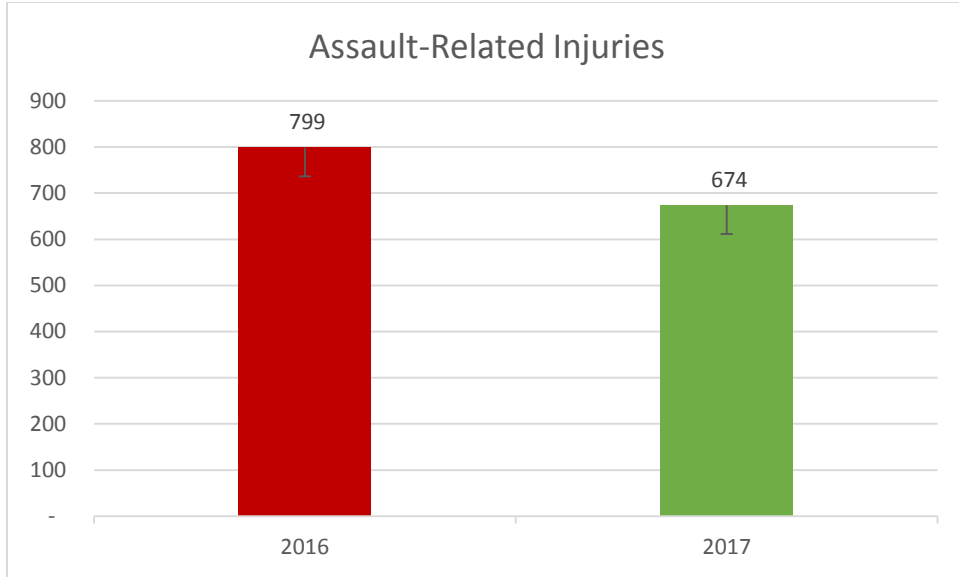
## Violence

The number of hospital visits for gun-related injuries has increased between 2016 and 2017 in 3.3%. for 61% of the visits on 2017, the cause of injury was “Accidental Shooting”. The proportion of people visiting the hospitals for injuries caused by “Intentional Self-harm by gun” has tripled from 2016 to 2017. More than 83% of the visits to both hospitals caused by gun-related injuries were made by men in 2017.



Violence: Data Summary			
Gun-Related Injuries			
	2016	2017	Change
Total visits	118	122	3.3%
Race/Ethnicity			
White	34.7%	32.0%	-2.8%
Black	56.8%	59.8%	3.1%
Hispanic	5.1%	4.1%	-1.0%
Asian	0.0%	0.0%	0.0%
Other	1.7%	4.1%	2.4%
Unknown	1.7%	0.0%	-1.7%
Sex			
Male	85.6%	83.6%	-2.0%
Female	14.4%	16.4%	2.0%
Age Group			
<20	30.5%	23.0%	-7.6%
20-29	30.5%	41.8%	11.3%
30-39	25.4%	11.5%	-13.9%
40-49	7.6%	11.5%	3.8%
>50	5.9%	12.3%	6.4%
Cause of Injury			
Assault by Gun	44.1%	33.6%	-10.5%
Accidental Shooting	54.2%	60.7%	6.4%
Intentional Self-Harm by Gun	1.7%	5.7%	4.0%

The number of visits to the hospital caused by Assault-related injuries decreased 18.5% from 2016 to 2017. More than 49% of the hospital visitors for this cause were black residents.



Violence: Data Summary			
Assault-Related Injuries			
	2016	2017	Change
Total visits	799	674	-18.5%
Race/Ethnicity			
White	41.7%	40.9%	-0.7%
Black	49.1%	49.4%	0.3%
Hispanic	6.3%	6.5%	0.3%
Asian	0.4%	0.1%	-0.2%
Other	2.0%	2.5%	0.5%
Unknown	0.6%	0.4%	-0.2%
Sex			
Male	63.7%	59.5%	-4.2%
Female	36.3%	40.5%	4.2%
Age Group			
<20	14.8%	13.4%	-1.4%
20-29	30.8%	32.0%	1.3%
30-39	26.2%	22.6%	-3.6%
40-49	13.9%	16.2%	2.3%
>50	14.4%	15.9%	1.5%

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## Annex 1: Key Informant Survey

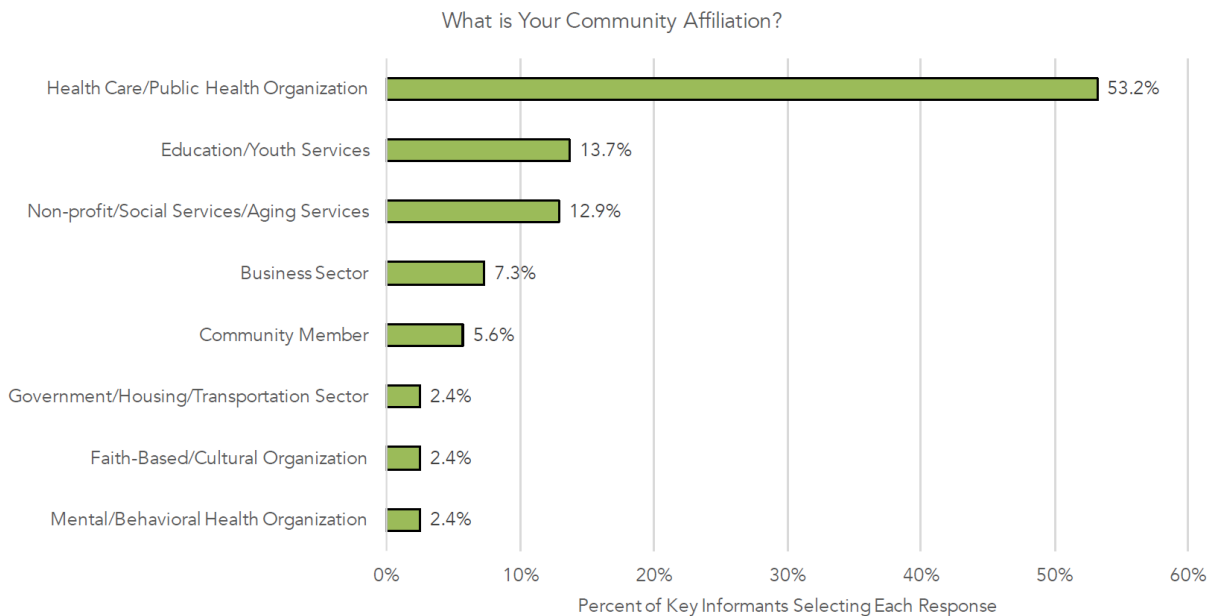
### Background

Key Informants were identified in Elkhart, Marshall, and St. Joseph Counties in Indiana and invited to participate in a survey. The goal of the survey was to collect a both quantitative and qualitative information feedback on the current status of community health in their place of residence. As in previous CHNA’s key informants were defined as “community stakeholders with expert knowledge, including public health and health care professionals, social service providers, nonprofit leaders, school health providers, and other community leaders.”

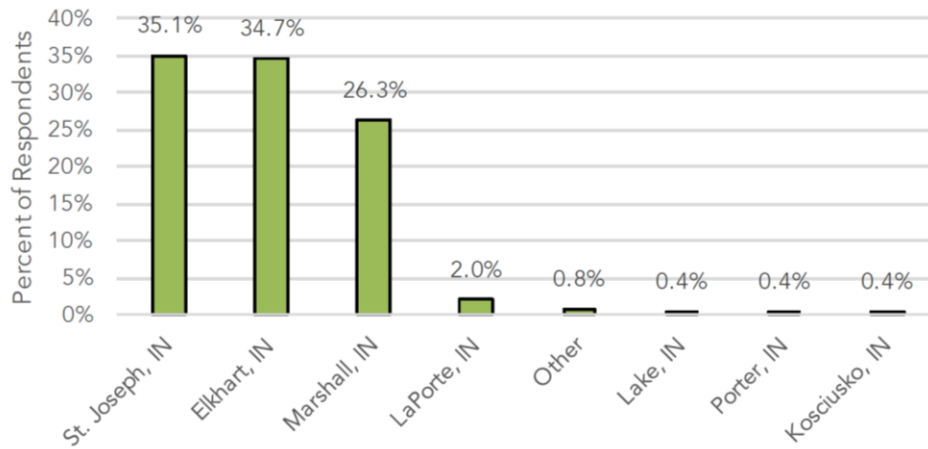
enFocus and Beacon Community Health staff worked together to identify a list of key informant participants. A total of 119 key informants completed the survey between March 2018 – August 2018. Respondents were able to choose more than one county. Therefore, the counts may be greater than the actual number of key informants who completed the survey. Because of this a focus was put on calculating percentages rather than showing raw number counts.

### Respondent Profiles

Gender of Respondents	
<b>Male</b>	26%
<b>Female</b>	64%
<b>No Response</b>	10%

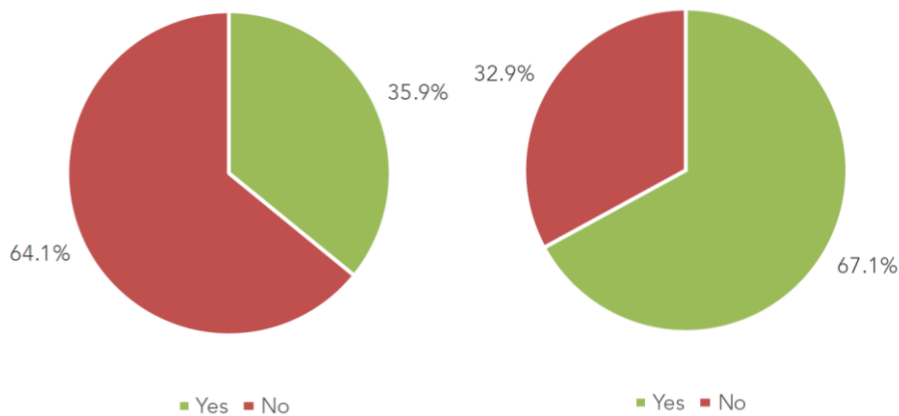


### Counties that Respondent Organizations Serve



Responses showed that a very limited number of respondents used past CHNA data. However, a significant number stated they planned on utilizing the 2018 CHNA data. This is an exciting development in terms of return on investment for the CHNA process but also on the pervasiveness of data driven programming and decision-making.

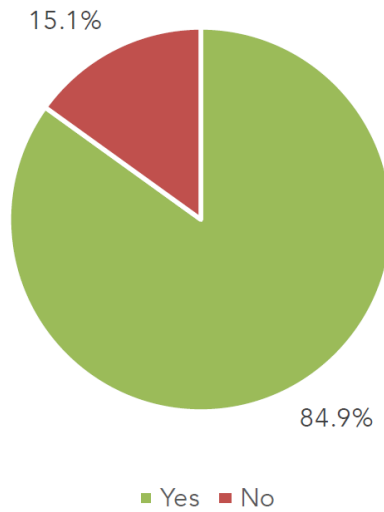
Did Organizations Use the 2012 or 2015 CHNA Results to Inform Decisions?      Do Organizations Plan to Use the 2018 CHNA Results to Inform Decisions?



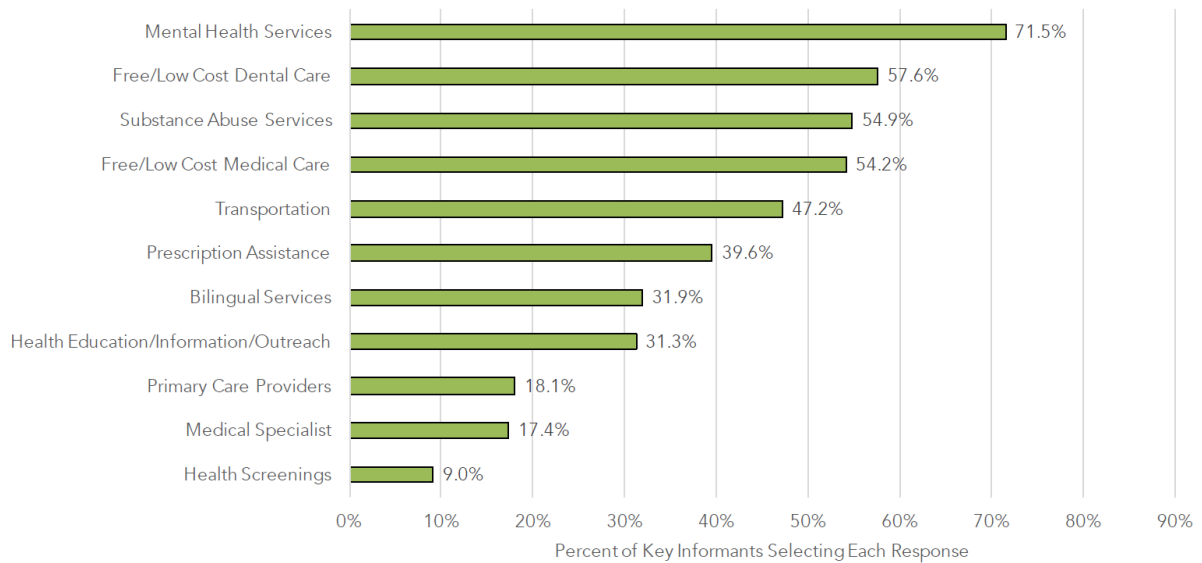
### Current Status

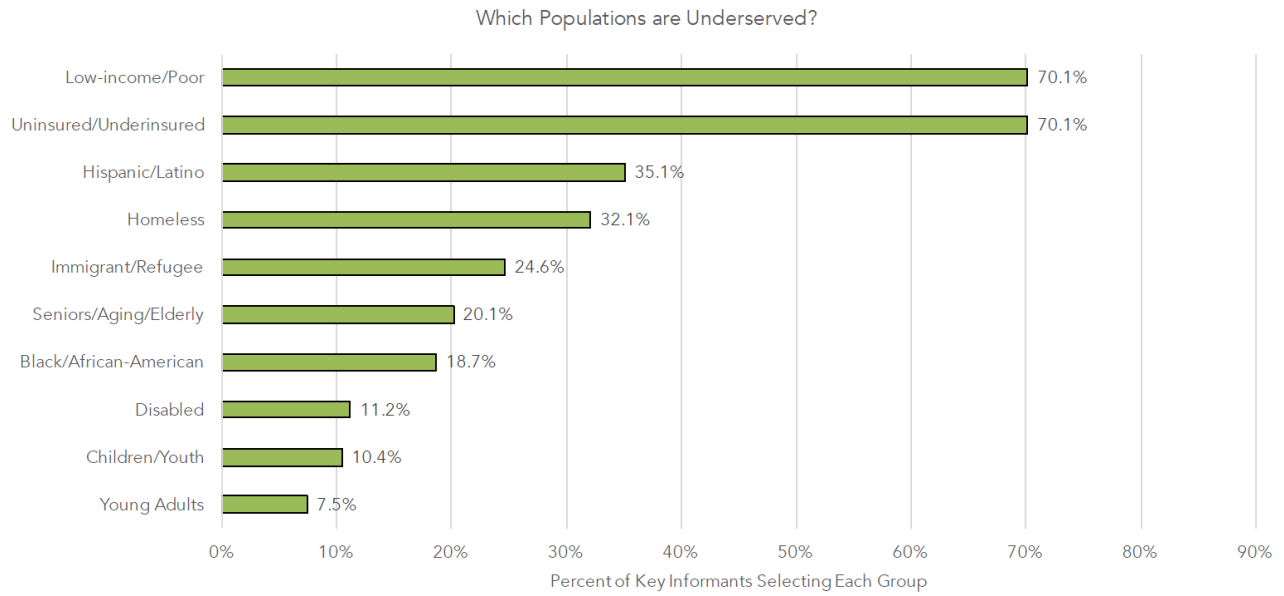
A series of questions were asked to help understand how key informants viewed the current status of community health and were given the opportunity to identify services and populations that were underserved. A significant number of respondents felt there were populations being inadequately served. When asked to identify the areas of greatest need Mental Health Services, Free/Low Cost Dental Care, Substance Abuse Services and Free/Low Cost Medical Care all had over 50% of key informants identify them as problem issues. When asked which populations were underserved, Low-Income/Poor and Uninsured/Under Insured were by far the most identified issue.

Are there specific populations in this community that you think are not being adequately served by local health services?



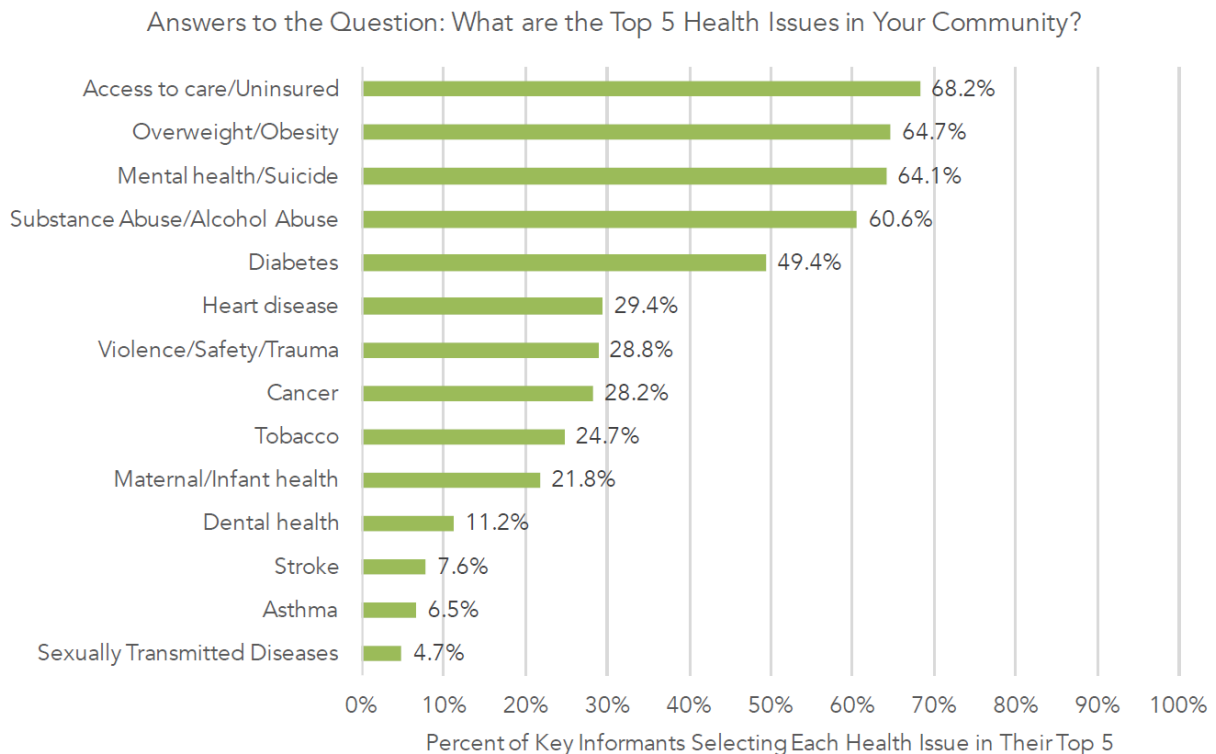
What Resources or Services Are Missing in the Community?



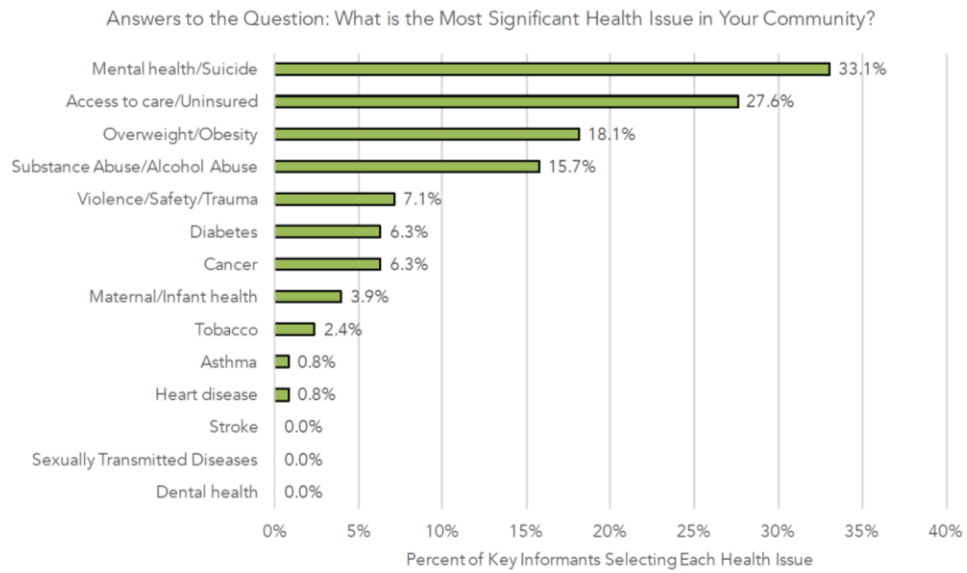


### Key Health Issues

Key informants were asked to choose the top 5 issues in their community from a list of 12 options as well as given an option to write in issues. Access to Care/Uninsured, Overweight/Obesity, Mental Health/Suicide, and Substance Abuse/Alcohol Abuse were the most identified health issues across the three counties as well as in each individual county.

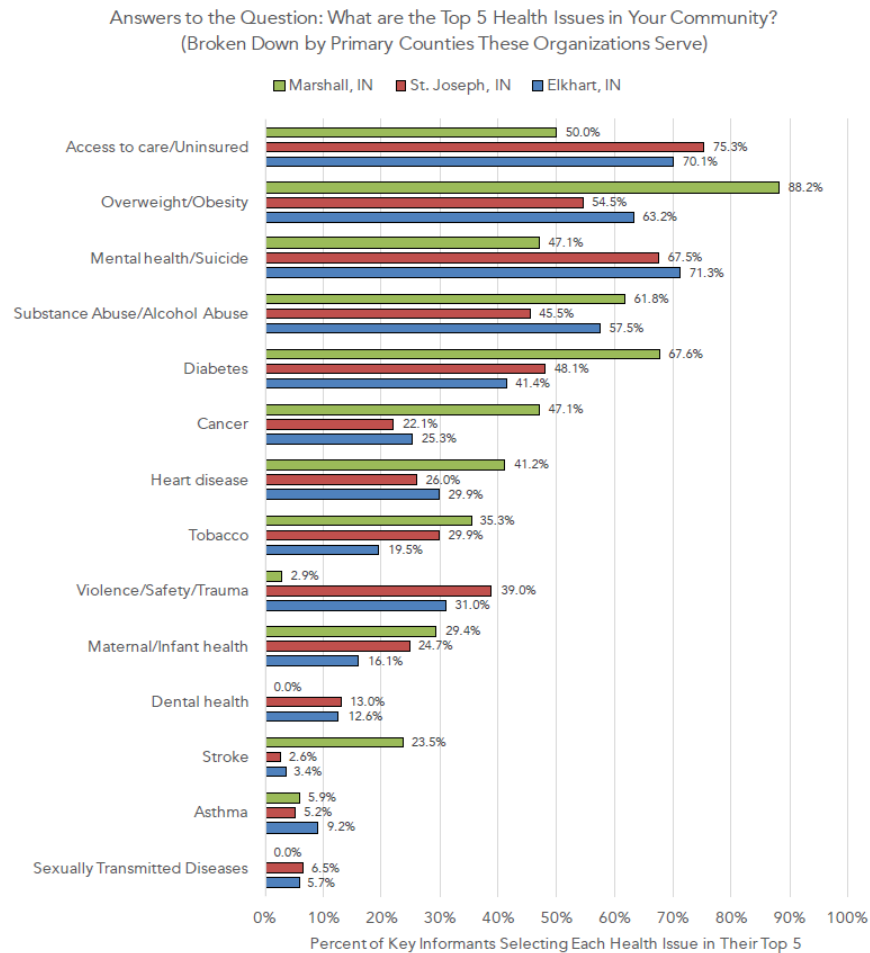






When asked to identify what the one most pressing health issue was in their community key informants again identified Mental Health/Suicide as the top issue on average as well as in every community. However, there was a lack of consensus among the key informants as no single issue received more than 33% of the vote.

## Beacon Health System - CHNA Summary Report



Upon closer analysis at the county level, there are commonalities in the areas of greatest need. The following were the top-rated issues in each county:

### Elkhart:

- Mental Health/Suicide
- Access to Care/Uninsured
- Overweight/Obesity

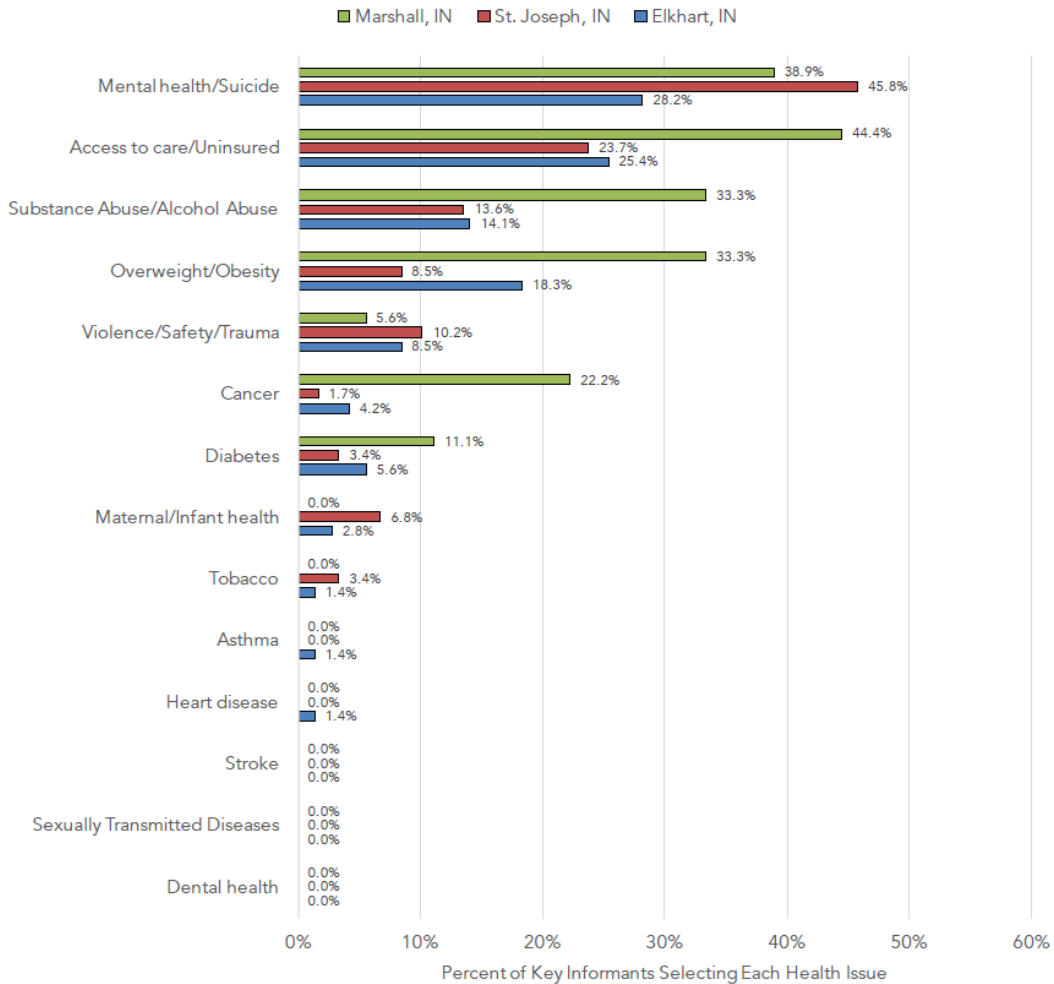
### Marshall:

- Overweight/Obesity
- Diabetes
- Substance Abuse/Alcohol Abuse

### St. Joseph

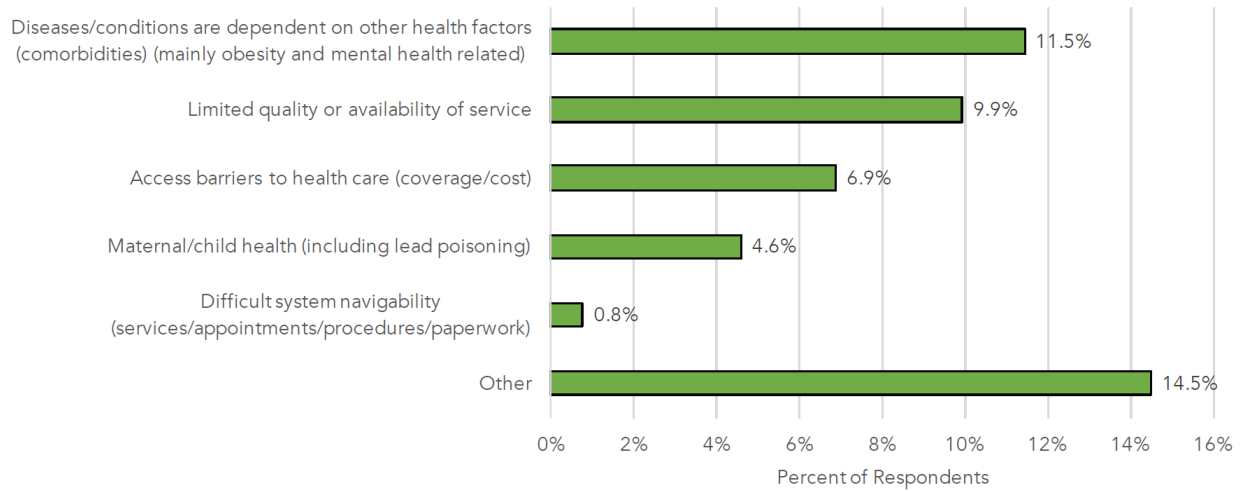
- Access to Care/Uninsured
- Mental Health/Suicide
- Overweight/Obesity

Answers to the Question: What is the Most Significant Health Issue in Your Community?



When given the opportunity to identify other health options that hadn't been listed key informants listed a number of specific topics that were comorbidities or the larger issues (specifically around obesity and mental health). However, ability to obtain healthcare in terms of availability and overcoming barriers were also highly mentioned.

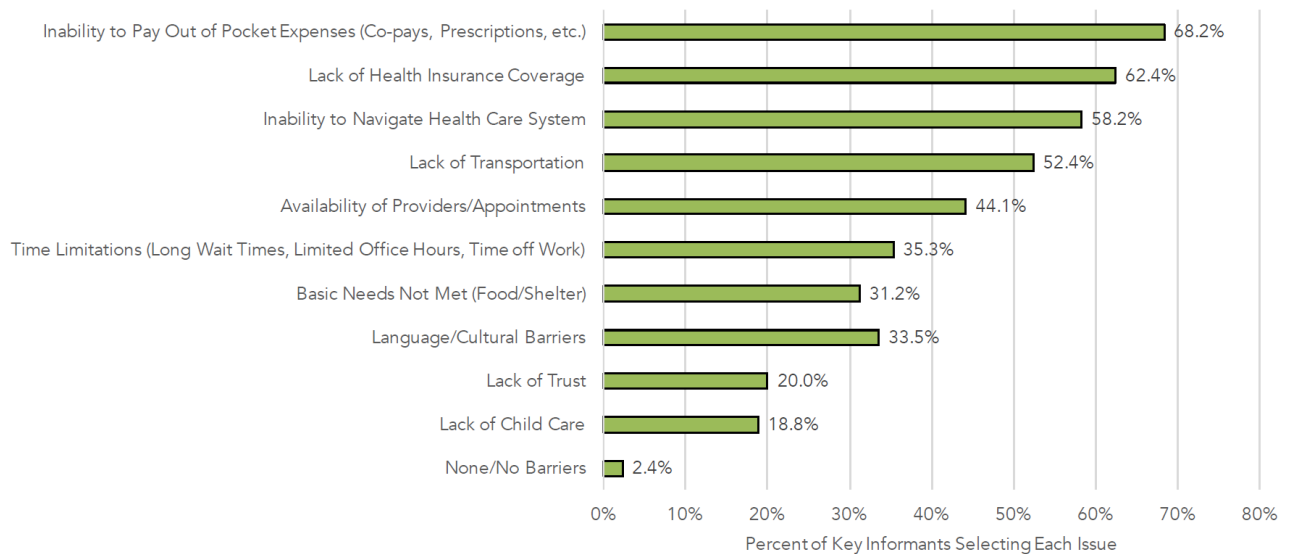
Additional Comments Regarding Health Issues  
(Free Responses Grouped into Categories)



### Access to Care

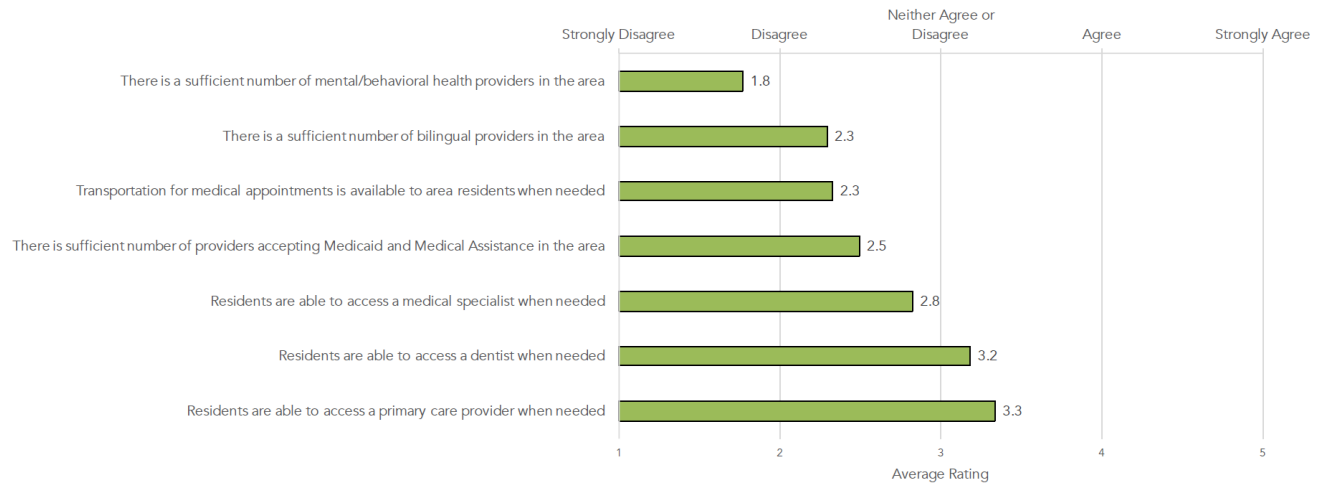
A significant focus was put on understanding what issues existed in accessing health care. According to key informant respondents there is an overall lack of access to healthcare services. The most significant area of need was identified as mental/behavioral health providers. However, transportation, bilingual providers, and providers accepting Medicaid and Medical Assistance were also identified as problem areas with very few respondents responding positively to the prompt.

What are the Most Significant Barriers to Accessing Health Care?

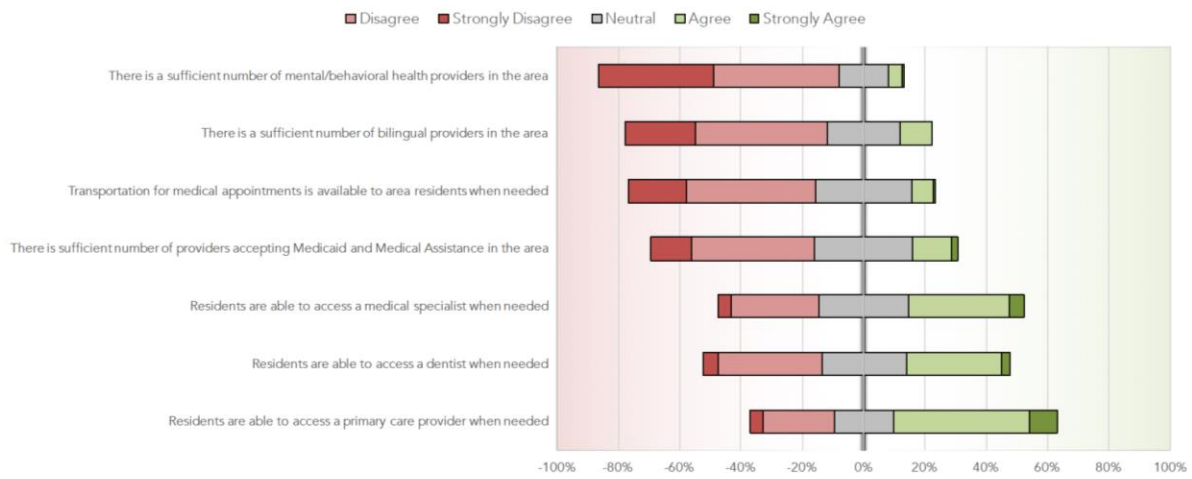


# Beacon Health System - CHNA Summary Report

Rate each of the following statements about Health Care Access in the area

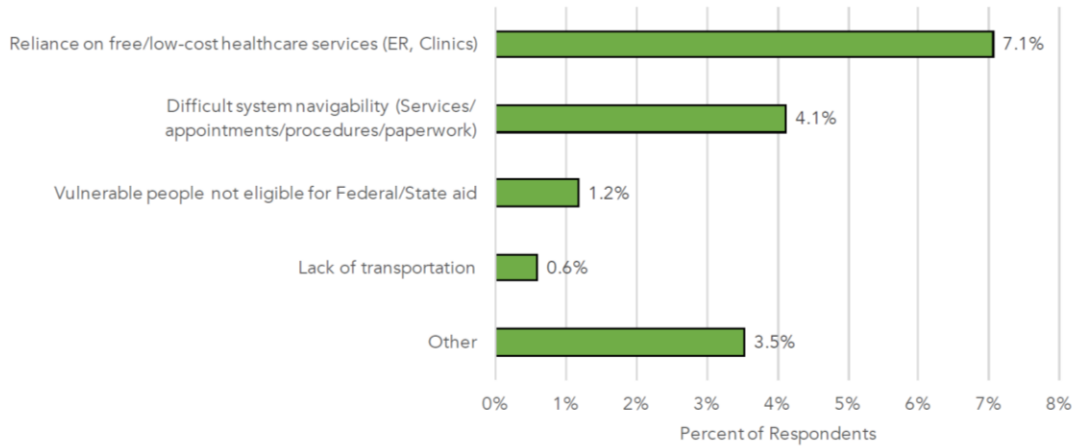


Ratings of Statements About Health Care Access in the Area



When asked to provide additional comments about uninsured/underinsured many brought-up reliance on ER services and low-cost clinics. Difficulty navigating the system was also one of the most mentioned topics.

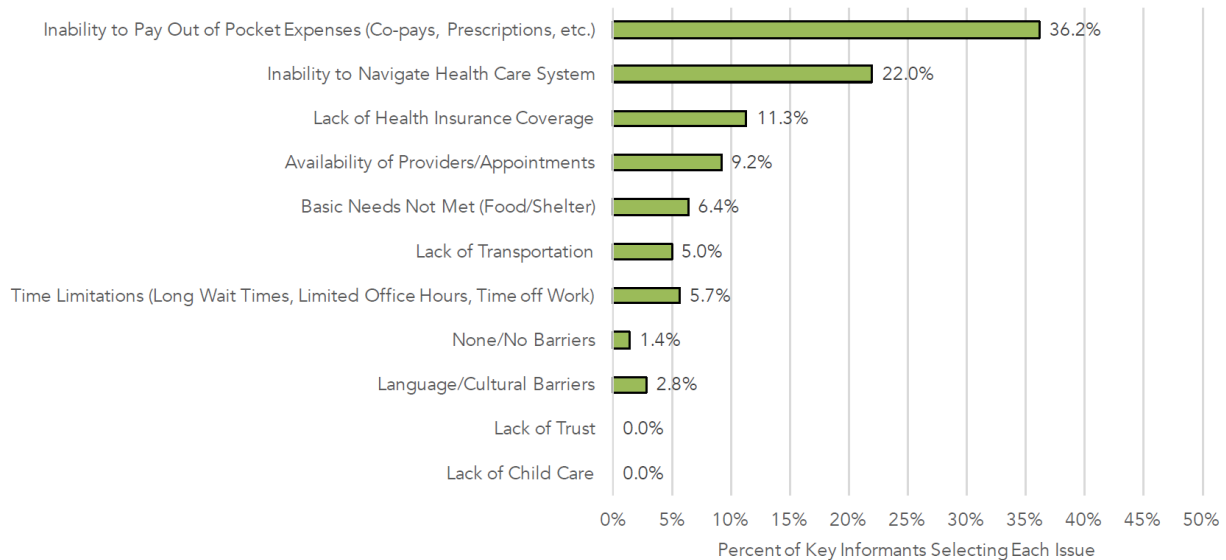
Additional Comments Regarding Uninsured/Underinsured & Underserved Populations  
(Free Responses Grouped into Categories)

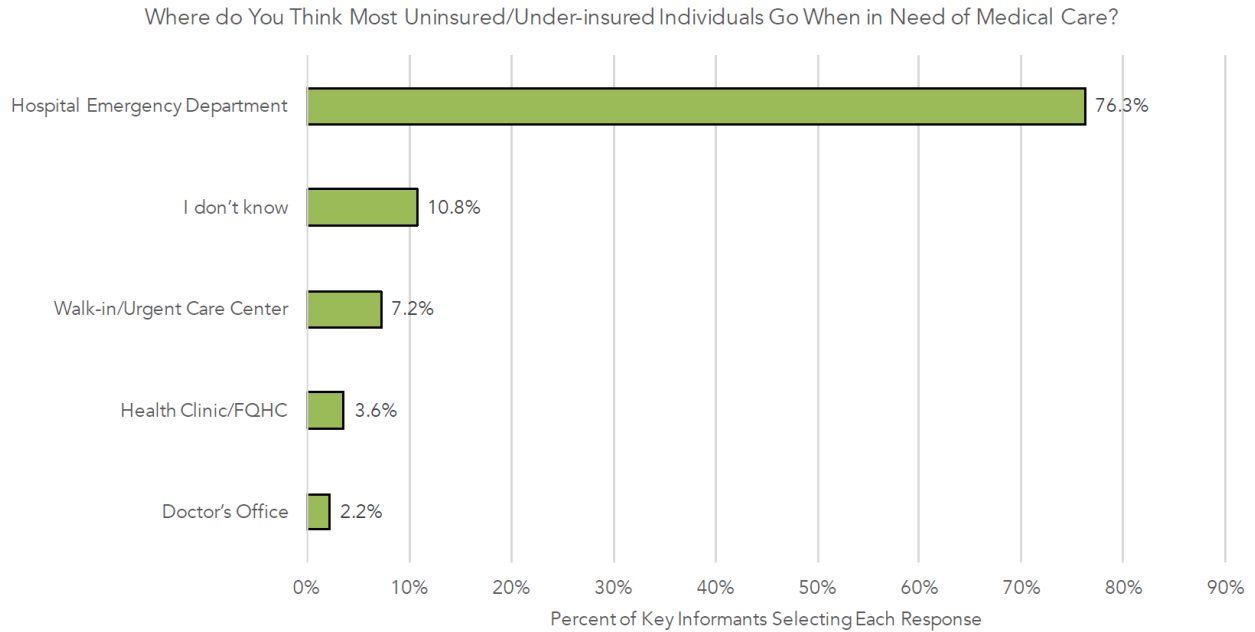


## Barriers to Care

To understand the specific reason why individuals could have issues receiving care, key informants were asked what they thought were the biggest issues. Far and away the most significant issue was Cost/Unaffordability of Healthcare. In addition, issues with navigating the health care and system insurance coverage were major barriers. Responses also showed that the hospital emergency room was by far the most common place key informants felt the uninsured/underinsured utilized for healthcare needs.

What is the Single Most Significant Barrier to Accessing Health Care?

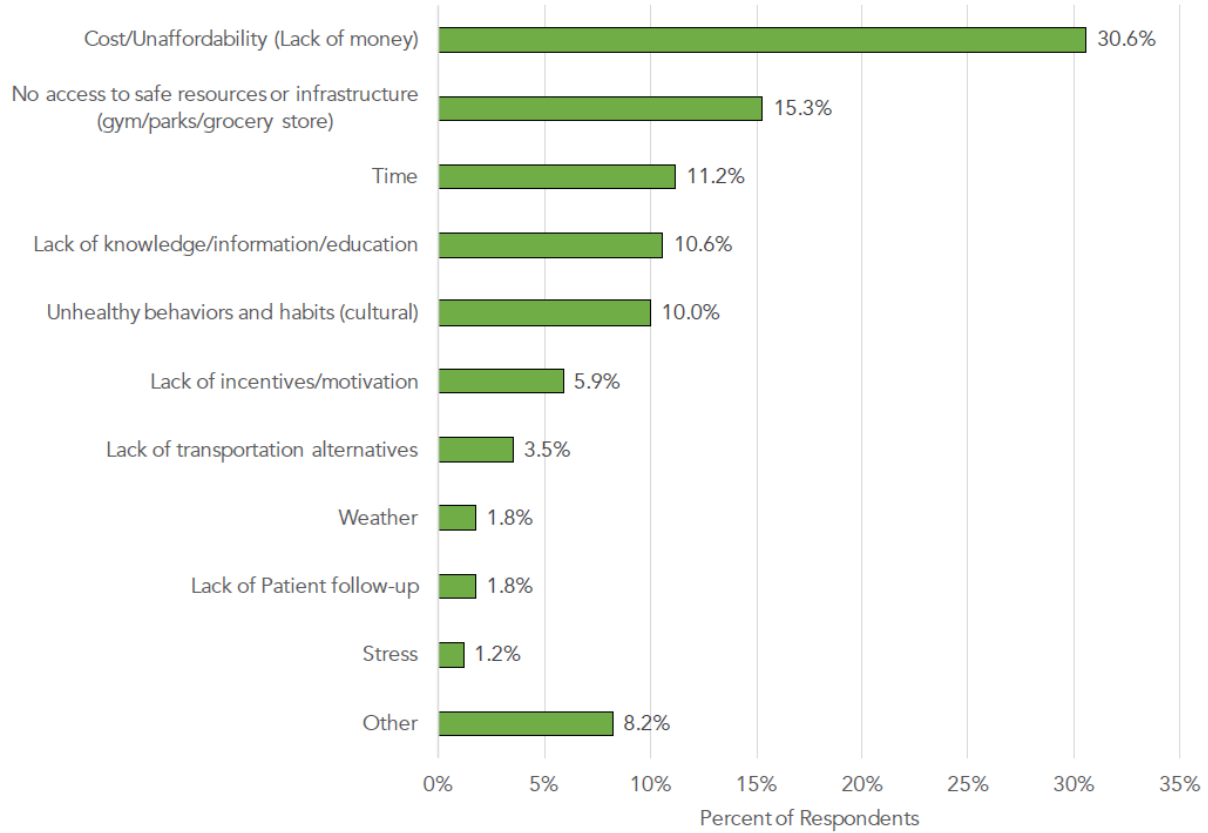




## Opportunities

Key informants were prompted to provide feedback on areas where people in the community were struggling as well as identify places where community health showed strength. Regarding challenges, comments related to the economic well-being of the community was the most significant area. Access to health resources/infrastructure was also a major area of concern. Regarding areas of strength, key informants felt that programming and outreach was being done well throughout the community.

Additional comments regarding challenges people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy and/or trying to manage chronic conditions like diabetes or heart disease  
(Free Responses Grouped into Categor





## Annex 2: Secondary Data Review

### Background

According to the “County Health Rankings and Roadmaps” (CHRR)<sup>3</sup>, in the 2018 Health Outcomes, Marshall County ranked 15<sup>th</sup>, Elkhart as 35<sup>th</sup>, and St. Joseph at the 59<sup>th</sup> place, among the 92 counties in Indiana. The Health Outcomes results take into consideration indicators such as premature deaths, poor or fair health of the population, the number of days of poor physical and mental health reported in the last month, and birthweight rates, to determine comparable levels of Length and Quality of Life.

County Health Rankings	Elkhart		Marshall		St. Joseph	
Years compared	2018	(2017)	2018	(2017)	2018	(2017)
<b>Health Outcomes</b>	<b>30</b>	<b>(35)</b>	<b>15</b>	<b>(16)</b>	<b>59</b>	<b>(54)</b>
- Mortality (premature death)	23	(21)	12	(11)	46	(45)
- Morbidity (poor health)	43	(55)	30	(33)	71	(62)
<b>Health factors</b>	<b>45</b>	<b>(59)</b>	<b>25</b>	<b>(21)</b>	<b>57</b>	<b>(51)</b>
- Health behaviors	54	(57)	21	(21)	57	(50)
- Clinical care	57	(66)	62	(59)	11	(10)
- Social-economic	43	(53)	25	(20)	62	(66)
- Physical environment	24	(80)	34	(32)	75	(25)

Source: *County Health Rankings and Roadmaps*

<http://www.countyhealthrankings.org/app/indiana/2018/overview>

The Health Factors ranking compares a series of indicators relevant to each one of the health determinants on which Public Health programs and policies might have an impact: Health Behaviors, Clinical Care, Socio-Economic Factors, and Physical Environment. These factors influencing health are foundational to achieving long and healthy lives. They also influence other important drivers of health and health equity, by impacting people’s abilities to make healthy choices, afford care, or even manage stress caused by unmet basic needs. And it is more so for marginalized groups. As the CHRR states, “even within counties, policies and practices marginalize many racial and ethnic groups, keeping them from resources and supports necessary to thrive.”<sup>4</sup>

Based on the CHRR Health Model, this report provides data analysis from primary and secondary sources on Health Factors that influence “how long and how well we live”. The factors whose data has been collected and interpreted, from both primary and secondary data sources, are:

- Health behaviors: Tobacco Use, Diet and Exercise, Alcohol and Drug Use, Sexual Activity.
- Clinical Care: Access to Care.
- Social and Economic Factors: Education, Employment, Community Safety.
- Physical Environment: Housing and Transportation.
- Chronic Health Conditions: Mental health issues, Diabetes, Cancer

<sup>3</sup> County Health Rankings and Roadmaps. (2018). Indiana Rankings. Retrieved July 17, 2018, from <http://www.countyhealthrankings.org/>. University of Wisconsin and Robert Wood Johnson Foundation

<sup>4</sup> University of Wisconsin Population Health Institute. County Health Rankings 2018, Indiana. Retrieved from [http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2018\\_IN.pdf](http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2018_IN.pdf)

## Health Behaviors

### Tobacco Use

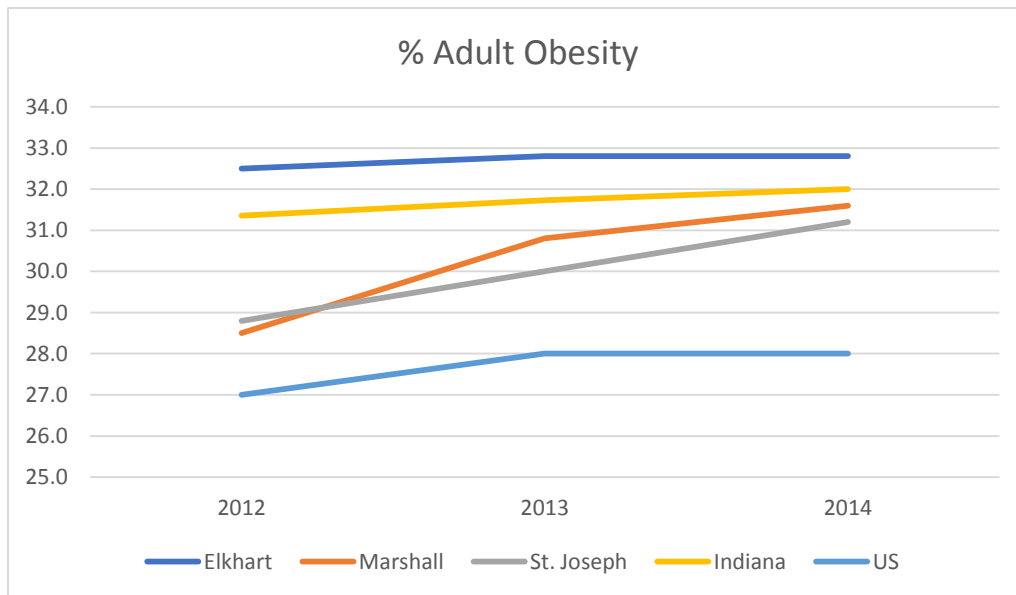
Among the assessed counties, Elkhart has the largest proportion of Adults that “both report that they currently smoke every day or most days and have smoked at least 100 cigarettes in their lifetime”, with 20.7%. The Adult Smoking rate for all three counties is higher than the National rate (17%), but lower than the State of Indiana rate (21.1%). The Healthy People program of the ODPHP<sup>5</sup> has set as national target to reduce tobacco use by adults to 12% by 2020.

*Adult Smoking*

<i>Unit</i>	(%)	(%)	(%)
<i>Year</i>	2014	2015	2016
Elkhart	19.90	18.53	20.74
Marshall	21.50	17.88	19.43
St. Joseph	20.50	18.41	20.29
Indiana	22.90	20.55	21.14
US	17.00	18.00	17.00

### Diet and Exercise

Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. The information provided by the County Health Rankings and Roadmaps program, shows that, by 2014, nearly 1/3 of the total adult population in the three counties assessed was obese, meaning that the Body Mass Index (BMI) of its residents was equal or higher than 30 kg/m<sup>2</sup>. Among the three counties, Elkhart is the only one with a percentage of adult obese population higher than the Indiana State proportion. However, Elkhart, Marshall and St. Joseph Counties, as well as the State of Indiana have a higher percentage of adult obesity than the national rate.



<sup>5</sup> Office of Disease Prevention and Health Promotion.

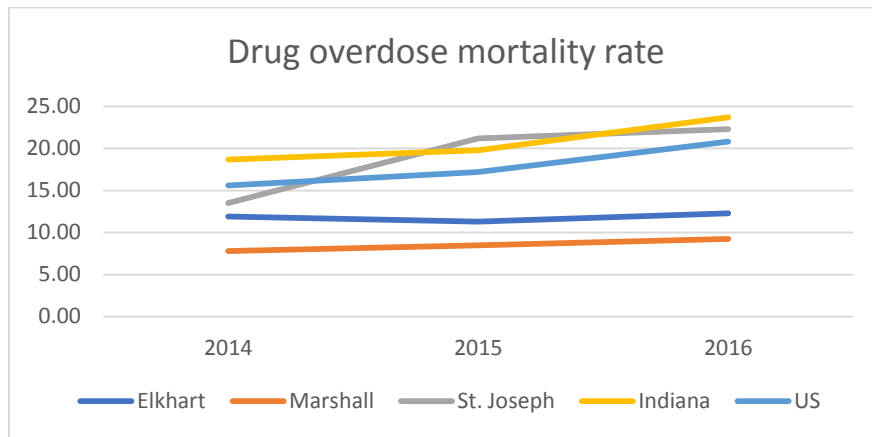
*Adult Obesity*

<i>Unit</i>	(%)	(%)	(%)
<i>Year</i>	2012	2013	2014
Elkhart	32.5	32.8	32.8
Marshall	28.5	30.8	31.6
St. Joseph	28.8	30.0	31.2
Indiana	31.4	31.7	32.0
US	27.0	28.0	28.0

Despite having the highest adult obesity rate, the growth rate of this indicator in Elkhart (0.92% growth between 2012 and 2014) is lower than the growth rates in Marshall and St. Joseph Counties (10.88% and 8.33 % change in two years, respectively). The Healthy People program has set as national target to reduce the percentage of persons aged 20 years and over from 33.9% (in 2005-08) to 30.5% by 2020.

**Alcohol and Drug Use**

The increase in the rate of deaths caused by drug overdose from 2014 to 2016 is a major concern for Public Health nationwide. For the years examined, the national rate has increased 33%, going from 15.6 deaths per 100,000 people to 20.8, between 2014 and 2016.



*Drug overdose mortality rate*

<i>Unit</i>	Deaths per 100,000 population		
<i>Year</i>	2014	2015	2016
Elkhart	11.90	11.30	12.30
Marshall	7.79	8.51	9.25
St. Joseph	13.50	21.20	22.30
Indiana	18.70	19.80	23.70
US	15.60	17.20	20.80

An important increase in the rate of drug overdose deaths is also observed in the State of Indiana (26.7%). From the three counties examined in this report, St. Joseph is the one that has shown a larger growth in the overdose mortality rate between 2014 and 2016: 65.2%.

By 2016, St. Joseph County had a higher Drug Overdose Mortality rate than the United States (22.3 and 20.8 deaths per 100,000 inhabitants, respectively). With lower rates, Elkhart (12.3) and Marshall (9.3) rates increased in previous years.

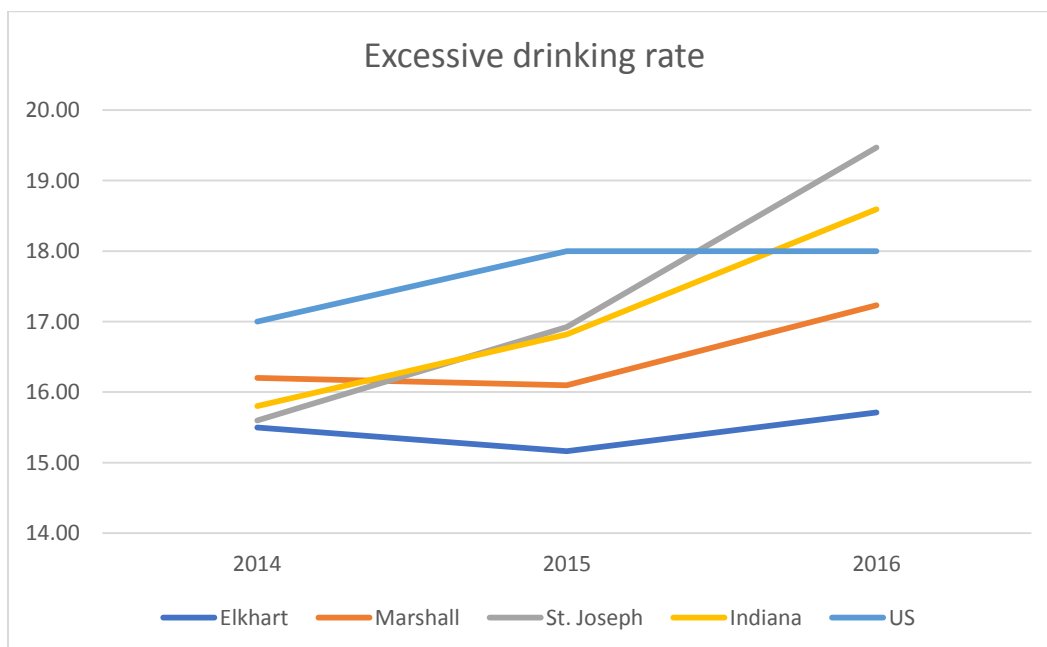
Drug Overdose Deaths are the number of deaths due to drug poisoning per 100,000 population, and counts the number of deaths caused by “accidental, intentional, and undetermined poisoning by and exposure to: 1) nonopioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs, medicaments and biological substances.”<sup>6</sup>

Drug overdose deaths<sup>7</sup>:

- Are a leading contributor to premature death and are largely preventable.
- Since 2000, the rate of drug overdose deaths has increased by 137 percent nationwide.
- Since 2000, there has been a 200 percent increase in deaths involving opioids (opioid pain relievers and heroin).

Alcohol drinking increased in the examined years between 2014 and 2016, according to the secondary data collected for this needs assessment. Excessive alcohol consumption over time is considered a risk factor that increases the probability for hypertension, heart disease, fetal alcohol syndrome, liver disease, and other pathologies, including cancer.

Alcohol consumption is also related to behavioral changes that can harm the person consuming alcohol and others around them: intra-familial violence, risky sexual behaviors, and motor vehicle crashes are just some of the consequences of excessive drinking.



<sup>6</sup> County Health Rankings and Roadmaps. (2018). Drug overdose deaths. Retrieved July 17, 2018, from <http://www.countyhealthrankings.org/>. University of Wisconsin and Robert Wood Johnson Foundation

<sup>7</sup> County Health Rankings and Roadmaps. (2018). Drug overdose deaths. Retrieved July 17, 2018, from <http://www.countyhealthrankings.org/>. University of Wisconsin and Robert Wood Johnson Foundation

*Excessive drinking*

<i>Year</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
<i>Unit</i>	<i>(%)</i>	<i>(%)</i>	<i>(%)</i>
Elkhart	15.50	15.16	15.71
Marshall	16.20	16.10	17.23
St. Joseph	15.60	16.92	19.47
Indiana	15.80	16.82	18.59
US	17.00	18.00	18.00

From 2014 to 2016, the Excessive Drinking rate<sup>8</sup> increased 24.8% in St. Joseph County. This rate also increased in Elkhart (1.8% increase) and Marshall (6.4% increase), but not as much as in St. Joseph. Elkhart (15.7%) and Marshall (17.2%) counties, in 2016, were below the national Excessive Drinking rate (18%). St. Joseph County had the highest rate in 2016 among the areas compared (including the State of Indiana), with 19.5% of its adults reporting binge drinking or heavy drinking.

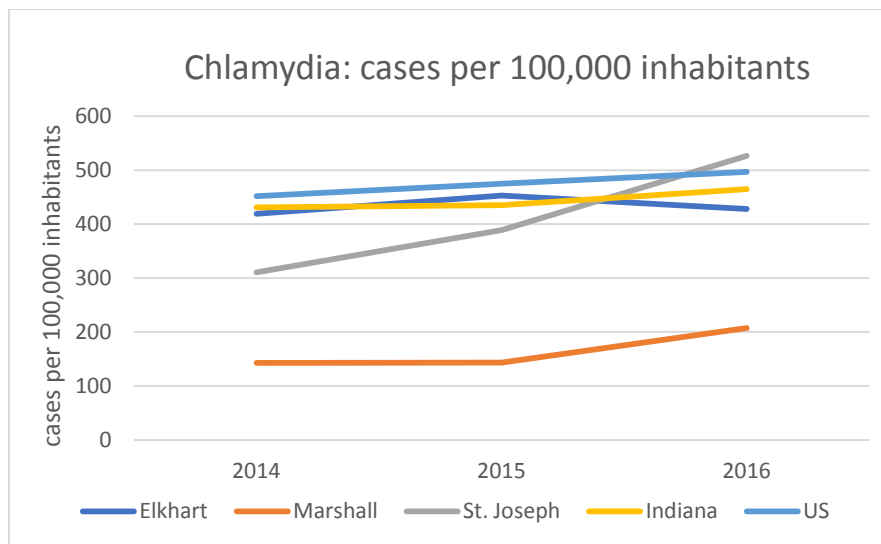
**Sexual Activity**

CHRR considers the chlamydia incidence rate as a marker for Sexual Activity, given that it is the most common bacterial Sexual Transmitted Infection (STI). Chlamydia incidence rates are associated with unsafe sexual activity.

It is worth noting that, for the years assessed, the chlamydia incidence rate has been increasing: between 2014 and 2016, the national and state rates have increased 10% and 8% respectively. It is also important to point out that the rate for St. Joseph County has increased the most between the years examined, going from 310.9 cases per 100,000 inhabitants in 2014 to 526.6 cases per 100,000 in 2016 (a growth of 69%). The rate in Marshall County has also increased in 45%, from 142.7 cases (2014) to 207.5 cases per 100,000 in two years (45%) growth.

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<sup>8</sup> Percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average.



*Chlamydia rate (per 100,000 inhabitants)*

Year	2014	2015	2016
Elkhart	419.1	453.1	428
Marshall	142.7	143.3	207.5
St. Joseph	310.9	389	526.6
Indiana	431.3	435.5	465
US	452.2	475	497.3

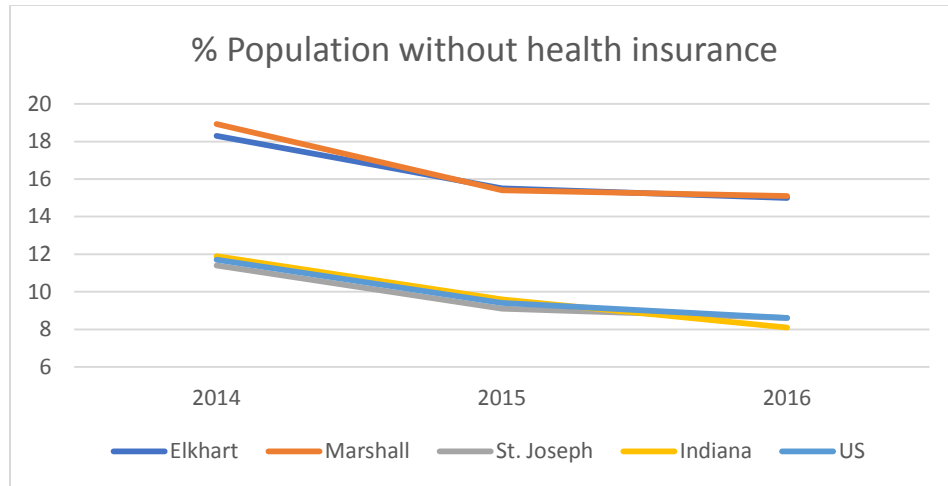
## Clinical Care

### Access to Care

Access to healthcare is comprised by insurance coverage, effective access to health providers, and the availability of affordable healthcare services that are accessible to residents: “Together, health insurance, local care options, and a usual source of care help to ensure access to health care. Having access to care allows individuals to enter the health care system, find care easily and locally, pay for care, and get their health needs met.”<sup>9</sup>

The rate of uninsured at National and State levels has decreased from 2014 to 2016. By 2016, the rate was in one digit both in the United States (overall) and in Indiana. The only county within the three assessed in this report to have accomplished something similar is St. Joseph. Nevertheless, the rate of uninsured in both Elkhart and Marshall Counties continued to drop from above 18% to 15%.

<sup>9</sup> County Health Rankings and Roadmaps. (2018). Access to Care Retrieved July 17, 2018, from <http://www.countyhealthrankings.org/>. University of Wisconsin and Robert Wood Johnson Foundation

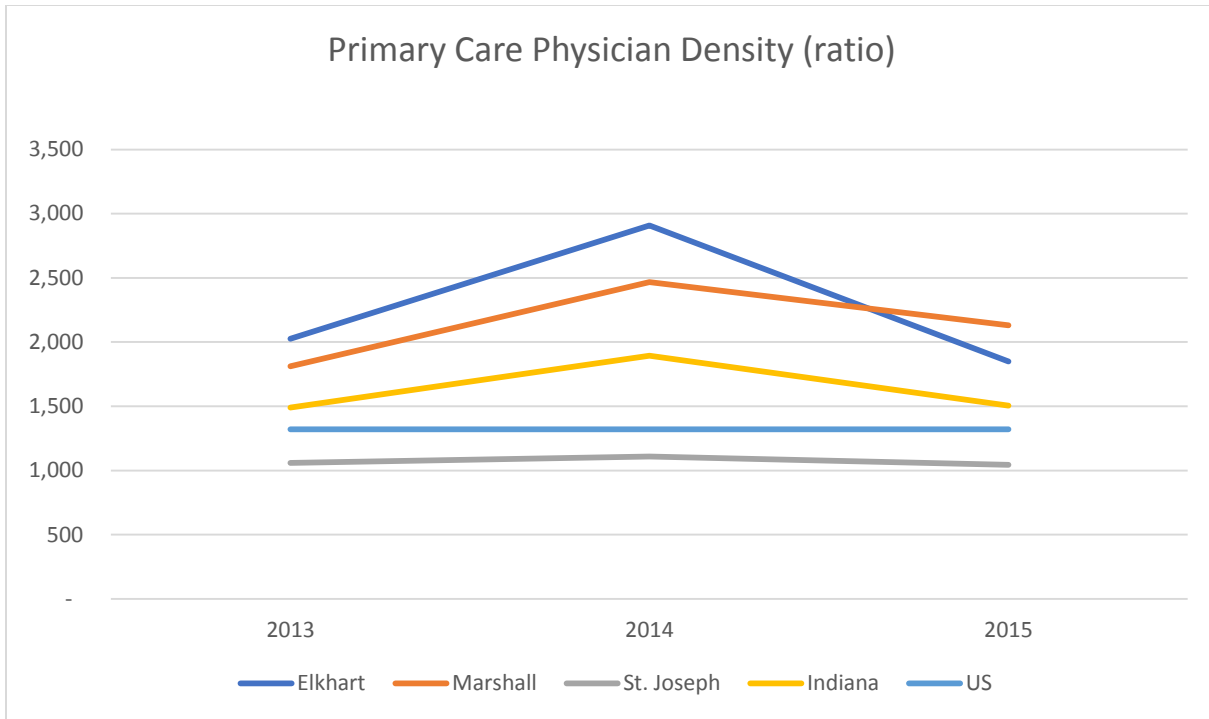


*Population without health*

*insurance*

Year	2014	2015	2016
Unit	(%)	(%)	(%)
Elkhart	18.3	15.5	15
Marshall	19	15.4	15.1
St. Joseph	11.4	9.1	8.6
Indiana	11.9	9.6	8.1
US	11.7	9.4	8.6

Regarding access to physicians and health professionals, the data available between 2013 and 2015 shows that the Primary Care Physician density ratio has been improving slowly in all three counties assessed and in the State of Indiana, although the density ratio peaked (meaning a larger number of patients per physician when compared to the other two years) in 2014.



*Primary Care Physician density  
Inhabitants per 1 physician (Ratio)*

Year	2013	2014	2015
Elkhart	2,026	2,907	1,850
Marshall	1,812	2,466	2,130
St. Joseph	1,058	1,110	1,045
Indiana	1,490	1,895	1,505
US	1,320	1,320	1,320

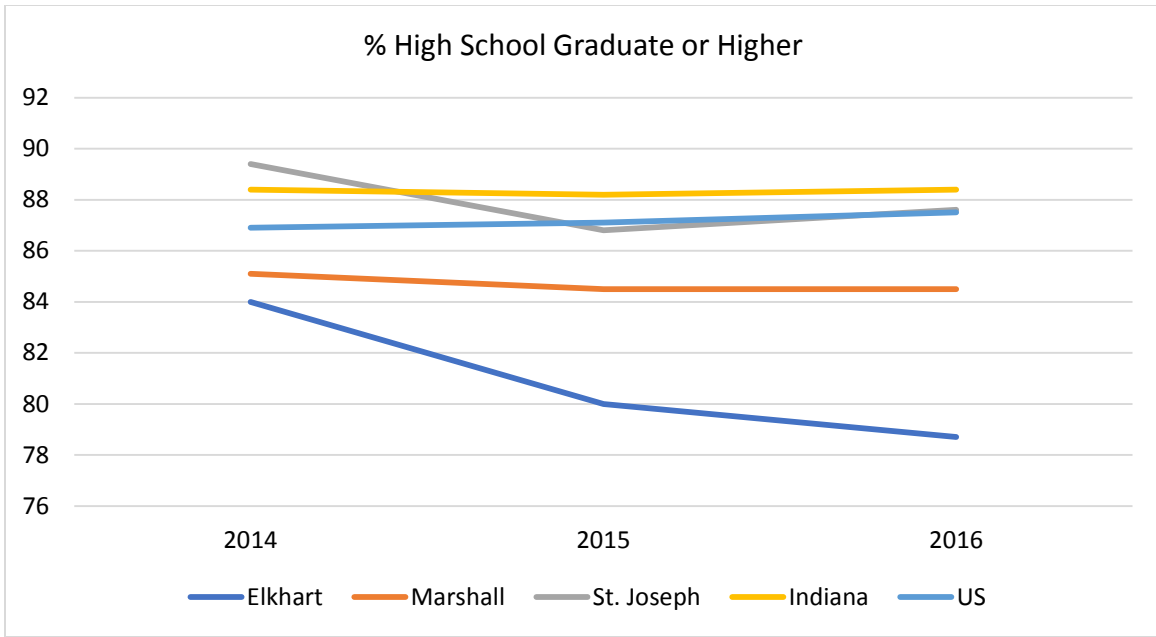
## Social and Economic Factors

### Education

A higher level of education is associated with being less likely to smoke, more likely to exercise, a better physical health and earning a higher salary than less educated persons with similar demographic backgrounds. Education is likely to impact health outcomes by improving cognitive skills, access to information and problem-solving capacities.

Overall, Indiana has a higher rate of people that have completed high-school level education or above than the national level. When compared, St. Joseph County has the higher rate of people that have completed high-school (87.4%). Elkhart is the county with the lowest rate: 78.7%. For all three counties assessed in this report, the rate of high-school graduates has reduced between 2014 and 2016.

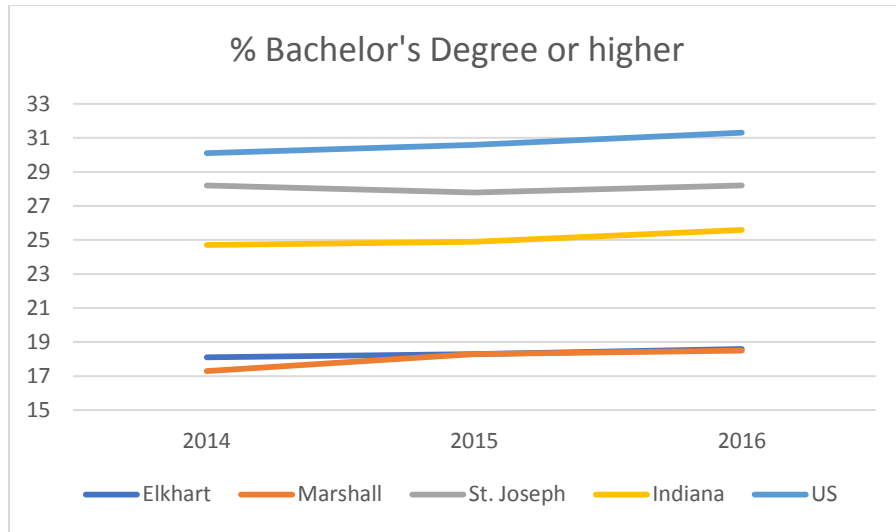




*High School graduated or higher*

Unit	(%)	(%)	(%)
Year	2014	2015	2016
Elkhart	84	80	78.7
Marshall	85.1	84.5	84.5
St. Joseph	89.4	86.8	87.6
Indiana	88.4	88.2	88.4
US	86.9	87.1	87.5

When examining the rate of adults with ages between 25 and 44 with a bachelor’s degree or more advanced studies, the trend seems to have a positive slope. By 2016, there was a difference of almost 10% between the county with the higher number of persons with a bachelor’s degree or higher (St. Joseph, 28.2%) and the other two counties assessed (Marshall: 18.5%; Elkhart: 18.6%).



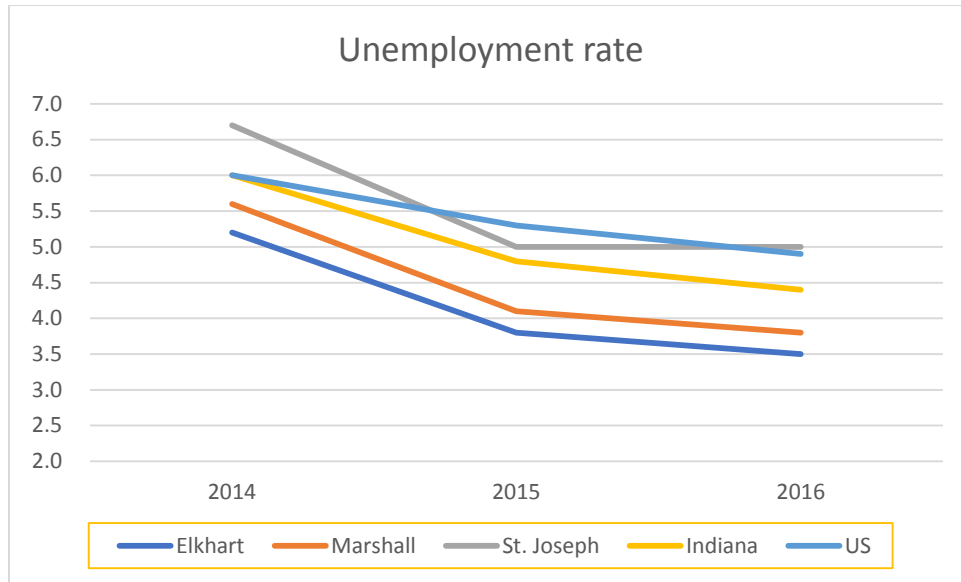
*Bachelor's Degree or higher*

Unit	(%)	(%)	(%)
Year	2014	2015	2016
Elkhart	18.1	18.3	18.6
Marshall	17.3	18.3	18.5
St. Joseph	28.2	27.8	28.2
Indiana	24.7	24.9	25.6
US	30.1	30.6	31.3

**Employment**

The unemployment rate measures the proportion of population aged 16 and older unemployed but seeking work. According to information from the US Department of Labor, between 2014 and 2016 the National unemployment rate has dropped from 6% to 4.9%. This trend has been similar for the State of Indiana and for all three counties assessed in this report.

It is also observable that the unemployment rate Elkhart and Marshall Counties is less than 4% by 2016, being lower than the Indiana unemployment rate (4.4%), the national rate (4.9%) and even that of St. Joseph County (5%).



*Unemployment*

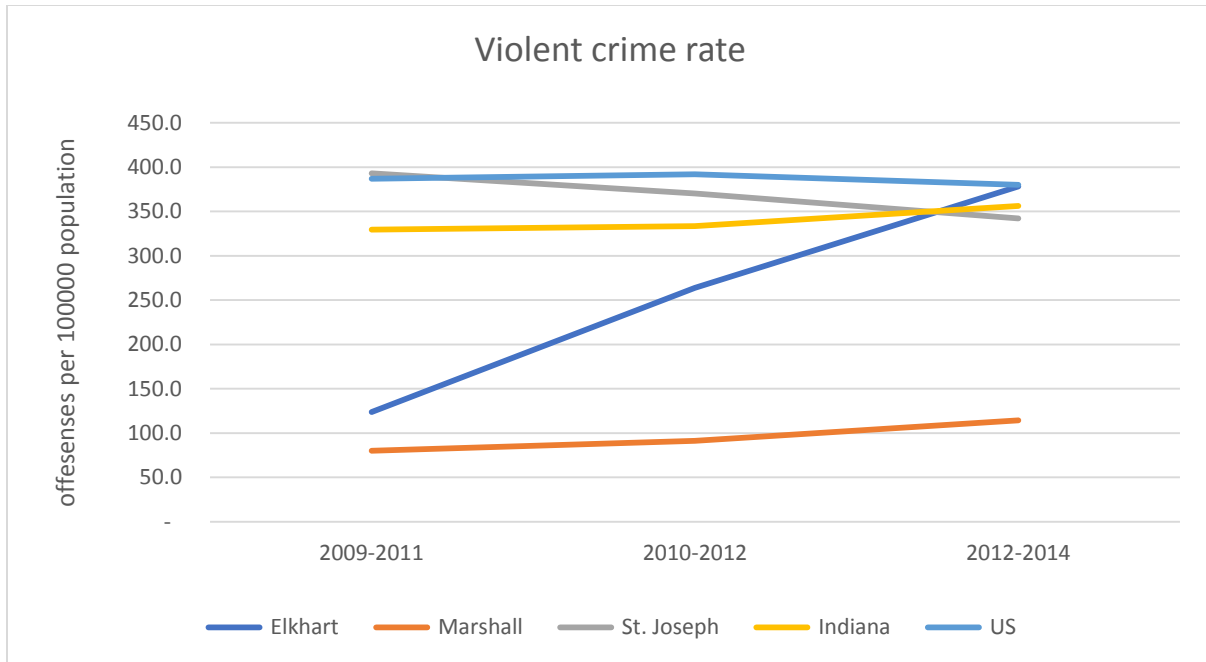
Unit	(%)	(%)	(%)
Year	2014	2015	2016
Elkhart	5.2	3.8	3.5
Marshall	5.6	4.1	3.8
St. Joseph	6.7	5.0	5.0
Indiana	6.0	4.8	4.4
US	6.0	5.3	4.9

### Community Safety

Exposure to high levels of violent crime can compromise the physical safety of people, increase their stress levels, and prevent them from engaging in healthy behaviors and outdoor activities. The Violent Crime rate is the number of violent crimes reported per 100,000 inhabitants. These crimes involve face-to-face confrontation between victim and perpetrator, and include homicide, rape, robbery and aggravated assault.

Available information on Violent Crime rates provide average rates for each 3-year group, as described in the graphic above and the table below. The national and the State of Indiana Violent Crime rates have followed a parallel trajectory during the years examined being, however, the State rate lower than the national rate.

St. Joseph is the only county where the Violent Crime rate is decreasing. However, it remains high, only surpassed by the State of Indiana and Elkhart County. In the last cut-off (2012-2014) Elkhart appears to have a higher rate than St. Joseph County. Marshall County Violent Crime rate has also increased, but not as much as Elkhart's.

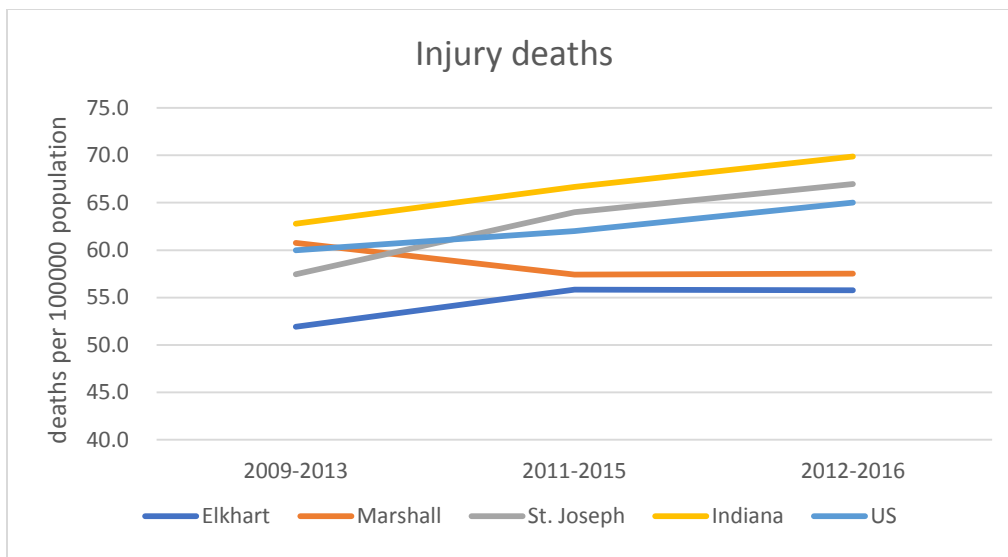


*Violent Crime Rate*

Unit	crime offenses per 100,000 population		
Year	2009-2011	2010-2012	2012-2014
Elkhart	123.9	263.9	378.3
Marshall	80.0	91.1	114.4
St. Joseph	393.2	370.5	342.4
Indiana	329.4	333.6	356.2
US	387.0	392.0	380.0

The Injury Deaths rate provides the number of deaths from intentional and unintentional injuries per 100,000 population. Indiana’s Injury Deaths rate has been higher than the national rate during the timeframe analyzed. Despite having a lower rate than the US, in average, in the period 2009-2013, by the period 2012-2016 St. Joseph had surpassed the national rate.

All geographical levels have experienced an increase in the Injury Deaths rate, except Marshall County that witnessed a drop between the periods 2009-13 and 2011-15.



*Injury deaths*

<i>Unit</i>	<i>deaths per 100,000 population</i>		
<i>Year</i>	2009-2013	2011-2015	2012-2016
Elkhart	51.9	55.8	55.8
Marshall	60.8	57.4	57.5
St. Joseph	57.4	64.0	67.0
Indiana	62.8	66.7	69.9
US	60.0	62.0	65.0

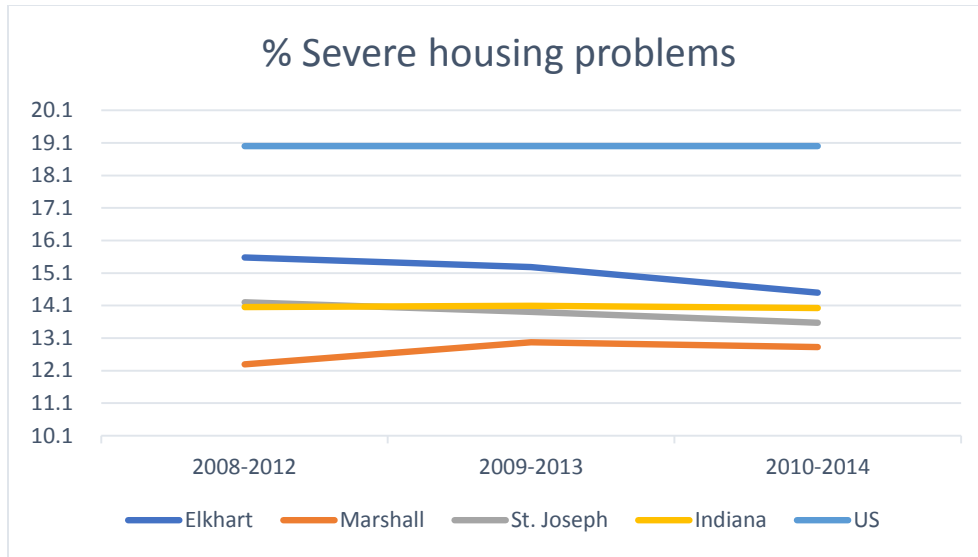
## Physical Environment

### Housing conditions

Severe Housing Problems Rate provides information on the proportion of households with at least one of four housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities. Severe Housing Problems serves as a marker for health as adequate housing “protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control, it can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases”<sup>10</sup>.

The national rate of Severe Housing Problems has been at a steady level of 19% of households that have at least one of the problems mentioned above. The three counties assessed and the State of Indiana (14%) have a proportion of households with problems below the national rate. Elkhart County is the county with the highest rate (14.5%), followed by St. Joseph (13.6%) and Marshall (12.8%).

<sup>10</sup> University of Wisconsin (2018). County Health Rankings and Roadmaps. Retrieved from: <http://www.countyhealthrankings.org/app/indiana/2018/measure/factors/136/description>

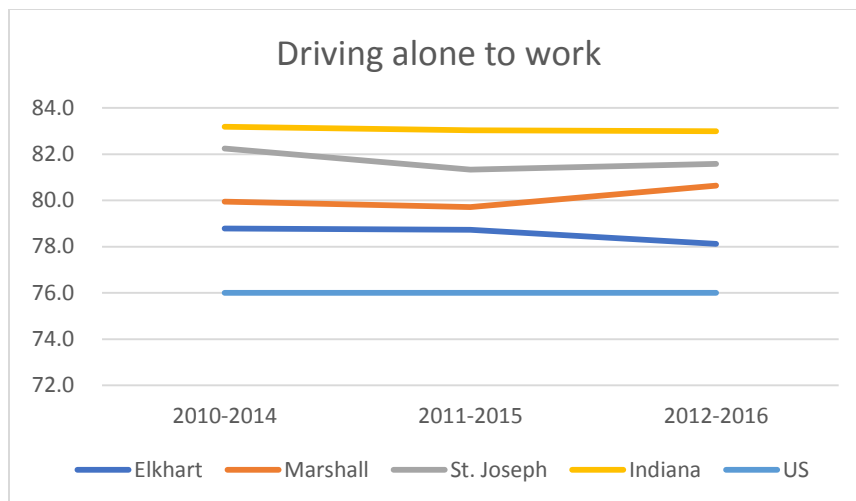


*Severe housing problems*

<i>Unit</i>	<i>(%)</i>	<i>(%)</i>	<i>(%)</i>
<i>Year</i>	<i>2008-2012</i>	<i>2009-2013</i>	<i>2010-2014</i>
Elkhart	15.6	15.3	14.5
Marshall	12.3	13.0	12.8
St. Joseph	14.2	13.9	13.6
Indiana	14.1	14.1	14.0
US	19.0	19.0	19.0

### Transportation

Driving Alone to Work is the percentage of the workforce that usually drives alone to work. According to the CHRR, “in most counties, driving alone is also the primary form of transportation to work”. If choices for commuting to work include walking, biking, using public transportation, carpooling or individuals driving alone, 76% of people in the workforce in the United States drive alone to work, on average, every year. The State of Indiana and the three counties assessed have a higher percentage of the workforce that drives alone to work than the national rate. Marshall County has experienced a slight increase in its rate over the years, while Elkhart County has seen a reduction, between the years assessed.



*Driving alone to work*

	2010-2014	2011-2015	2012-2016
Elkhart	78.8	78.7	78.1
Marshall	79.9	79.7	80.6
St. Joseph	82.2	81.3	81.6
Indiana	83.2	83.0	83.0
US	76.0	76.0	76.0

## Chronic Health Conditions

### Mental health issues

According to the Centers for Disease Control (CDC), “mental illness is associated with increased occurrence of chronic diseases such as cardiovascular disease, diabetes, obesity, asthma, epilepsy and cancer.” It is also associated with lower use of medical care, reduced adherence to treatment therapies for chronic diseases and higher risks of adverse health outcomes. From information provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), for the substate region of North Central Indiana<sup>11</sup>, the information collected provides the following results related to mental health issues:

Mental Health Issues, 2014-2016 NSDUH	US	Indiana	North Central Region (Indiana)
Serious Mental Illness in the Past Year among Adults Aged 18 or Older	4.12%	4.84%	4.72%
Any Mental Illness in the Past Year among Adults Aged 18 or Older	18.09%	20.06%	20.52%
Received Mental Health Services in the Past Year among Adults Aged 18 or Older	14.47%	16.39%	16.33%
Had Serious Thoughts of Suicide in the Past Year among Adults Aged 18 or Older	4.01%	4.20%	4.33%

<sup>11</sup> The Substance Abuse and Mental Health Services Administration (SAMHSA), provides model-based small area substance use and mental disorders information, based on data from the combined 2014-2016 National Survey on Drug Use and Health (NSDUHs). They have defined the North Central Indiana region as comprised by the following counties: Cass, Elkhart, Fulton, Howard, Kosciusko, La Porte, Marshall, Miami, St. Joseph, Tipton and Wabash

Major Depressive Episode in the Past Year among Adults Aged 18 or Older	6.66%	7.59%	7.19%
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Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016<sup>12</sup>.

According to the data from the 2014-2016 NSDUH, the prevalence estimates for the North Central Region of Indiana show that 4.7% of resident adults have suffered from a serious mental illness (diagnoses resulting in serious functional impairment) in the year previous to the survey.

The 2014-2016 NSDUH also provides prevalence estimates of residents (18 years of age and above) of the North Central Region of Indiana that “at any time in the past 12 months” seriously thought about trying to kill themselves (4.3%), and on the percentage of adult residents that have had a major depressive episode in the past year (7.2%).

From the available statistical records contained in STATS Indiana<sup>13</sup>, information on the number of suicide cases was retrieved for the three counties assessed:

*Self-Inflicted Harm (Suicide)*

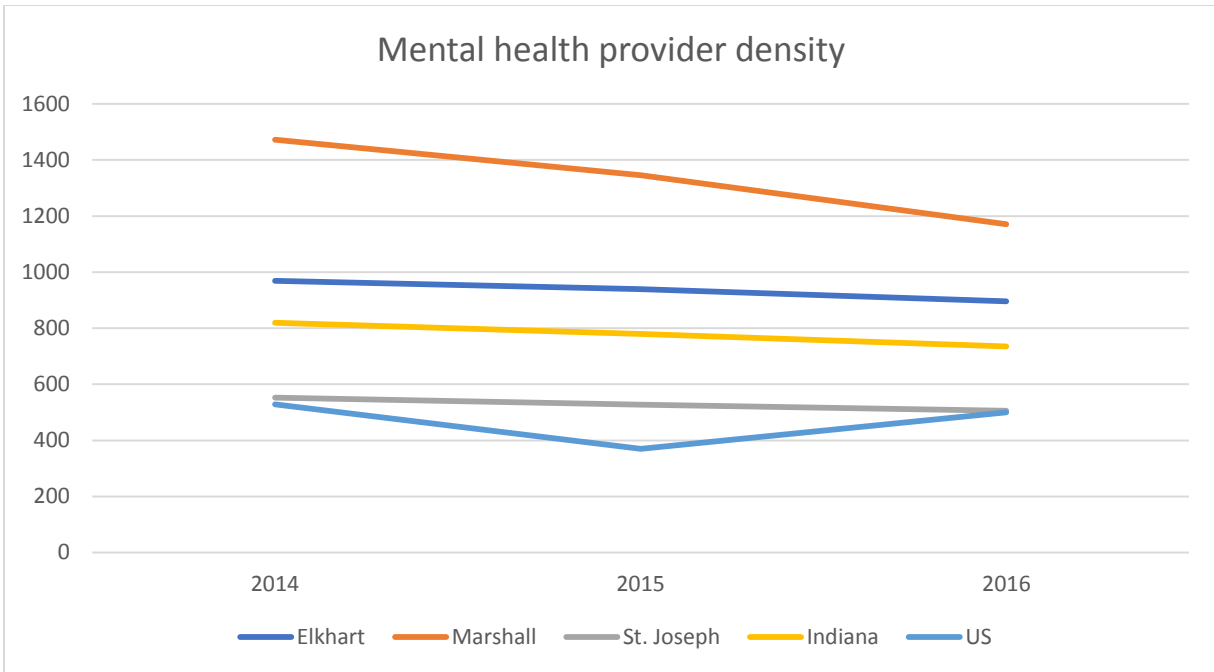
Year	2013	2014	2015
Unit	#	#	#
Elkhart	22	16	32
Marshall	5	11	7
St. Joseph	36	35	40
Indiana	937	941	959

The Mental Health Provider density ratio in the assessed counties shows that the number of inhabitants per Mental Health practitioner through the years examined (from 2014 to 2016) is decreasing. Marshall County has the highest ratio between the three counties. St. Joseph County Mental Health provider density is the closest to the national ratio in 2016.

<sup>12</sup> Retrieved July 17th, 2018. <https://www.samhsa.gov/data/report/2014-2016-nsduh-substate-region-estimates-%E2%80%93-excel-tables-and-csv-files>

<sup>13</sup> STATS Indiana is the statistical data utility for the State of Indiana developed and maintained by the Indiana University’s Kelley School of Business. Retrieved from <http://www.stats.indiana.edu/vitals/>

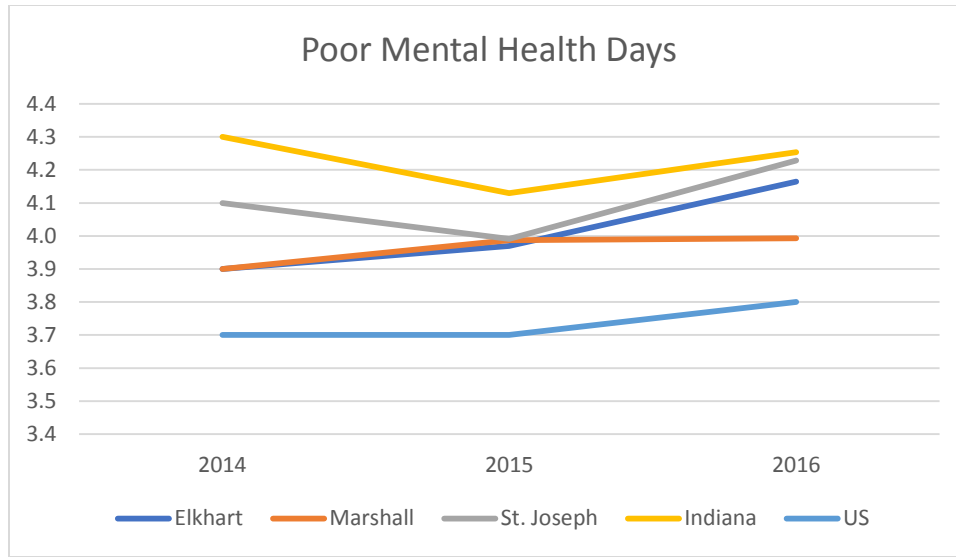




*Mental health provider density*

Year	2014	2015	2016
Elkhart	969	939	896
Marshall	1,472	1,346	1,171
St. Joseph	552	527	506
Indiana	820	780	735
US	529	370	500

The number of poor mental health days (in the past 30 days) is the average number of days a county’s adult respondents report that their mental health was not good, as per data collected by the County Health Rankings and Roadmaps program for the years 2014 to 2016. In average, Elkhart residents had 4.2 days of poor mental health in the 30 days previous to being surveyed. St. Joseph County averaged the same number, with Marshall residents having 4 days.

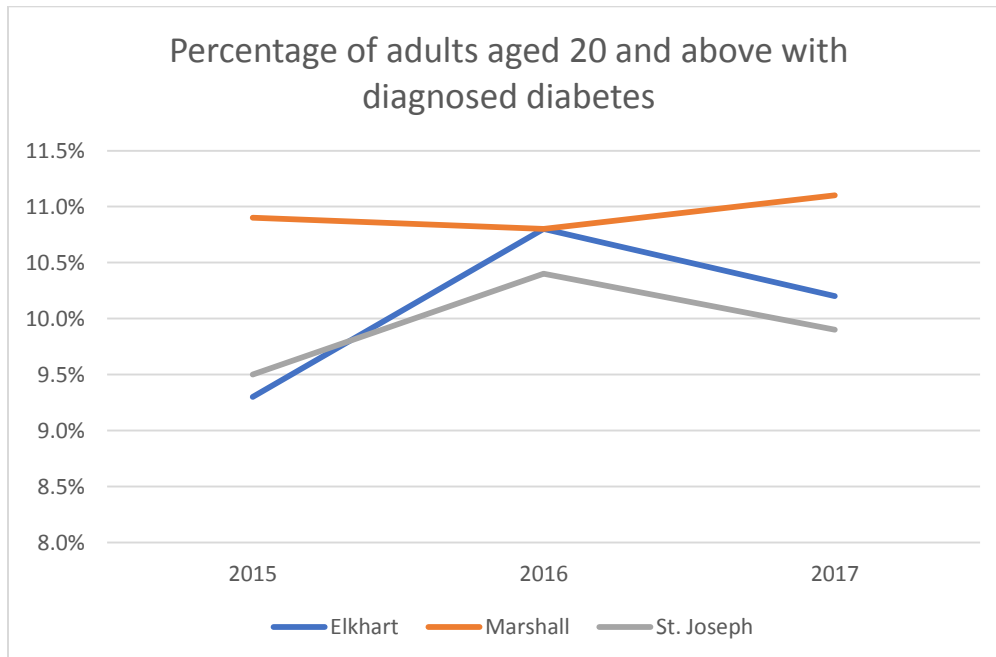


Poor mental health days

Year	2014	2015	2016
Elkhart	3.9	4.0	4.2
Marshall	3.9	4.0	4.0
St. Joseph	4.1	4.0	4.2
Indiana	4.3	4.1	4.3
US	3.7	3.7	3.8

**Diabetes**

The data collected by the CDC on diabetes shows that the percentage of adults diagnosed with diabetes has increased in all three counties between 2015 and 2017. 10.2% of adults aged 20 and above in Elkhart, 11.1% in Marshall and 9.9% in St. Joseph were diagnosed with diabetes in 2017.



*Percentage of adults aged 20 and above with diagnosed diabetes.*

Year	2015	2016	2017
Elkhart	9.3%	10.8%	10.2%
Marshall	10.9%	10.8%	11.1%
St. Joseph	9.5%	10.4%	9.9%

Source: University of Wisconsin. *County Health Rankings Key Findings 2016-2018; CDC Diabetes Interactive Atlas*

Diabetes is a relevant indicator on health behaviors, like dietary habits, exercising, smoking, alcohol abuse, to mention a few. For 2015, the National rate for diagnosed diabetes was 8.7%, according to the CDC’s United States Diabetes Surveillance System (USDSS). As per 2016, St. Joseph County was ranked in 3<sup>rd</sup> place in Indiana as one of the counties with the most deaths caused by diabetes, with 99. Elkhart occupied the 6<sup>th</sup> place, and Marshall county the 29<sup>th</sup>, among 92 counties.

*Diabetes mellitus, number of deaths*

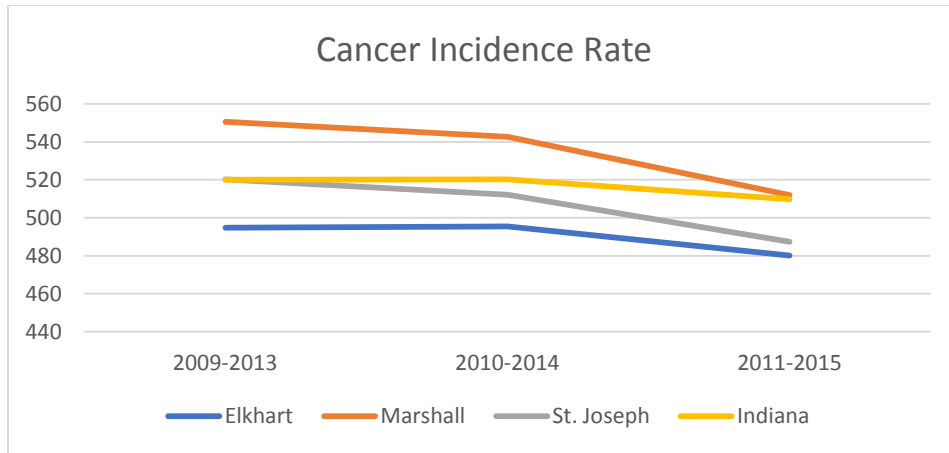
Year	2014	2015	2016
Unit	#	#	#
Elkhart	55	41	62
Marshall	12	31	17
St. Joseph	67	100	99
Indiana	1,942	1,818	2,026

Source: STATS Indiana. <http://www.stats.indiana.edu/vitals/>

**Cancer**

The Cancer Incidence rate measures the average number of new cancer cases per year, for each of the year groups represented in the graphic and table below. According to the information available in the Indiana State Cancer Registry<sup>14</sup>, the average rate of new cases per 100,000 inhabitants has reduced in all geographical areas examined. For the period 2009-13, the average rate for St. Joseph and the State of Indiana was very similar (520.3 and 520 respectively). For the examined period 2011-15, however, St. Joseph County had experienced an important drop in its Cancer Incidence rate. Marshall County also witnessed an improvement in the average number of new cancer cases per year between the examined periods 2009-13 and 2011-15, going from 494.8 cases per 100,000 inhabitants per year to 480.2.

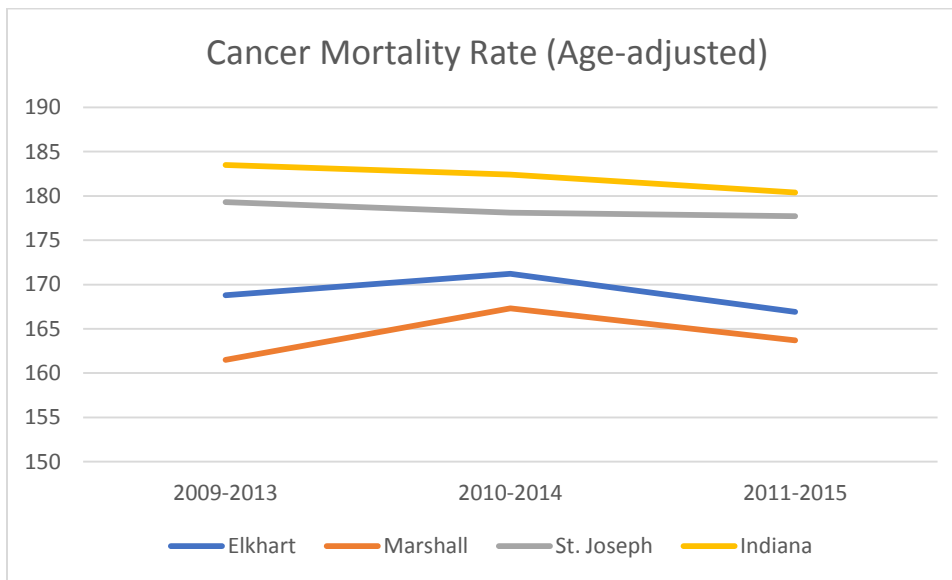
<sup>14</sup> Indiana State Department of Health (2017). Indiana State Cancer Registry. Retrieved from <https://www.in.gov/isdh/24360.htm>



*Incidence rate (new cases)*

	2009-2013	2010-2014	2011-2015
Elkhart	494.8	495.4	480.2
Marshall	550.5	542.6	511.9
St. Joseph	520.3	512.1	487.3
Indiana	520	520.2	509.8

Compared to the State of Indiana, the three assessed counties have a lower 5-year average Cancer Mortality Rate. Marshall County has had the lowest 5-year average rate for the three cut-off measurements. However, is the only county that has witnessed growth of its Cancer Mortality Rate. St. Joseph has the highest rate among the three counties for the period 2011-15, with 177.7 deaths per 100,000 inhabitants, against 166.9 in Elkhart and 163.7 in Marshall.



*Age-adjusted Cancer Mortality Rate*

	2009-2013	2010-2014	2011-2015
Elkhart	168.8	171.2	166.9
Marshall	161.5	167.3	163.7
St. Joseph	179.3	178.1	177.7
Indiana	183.5	182.4	180.4

## Annex 3: Community Survey

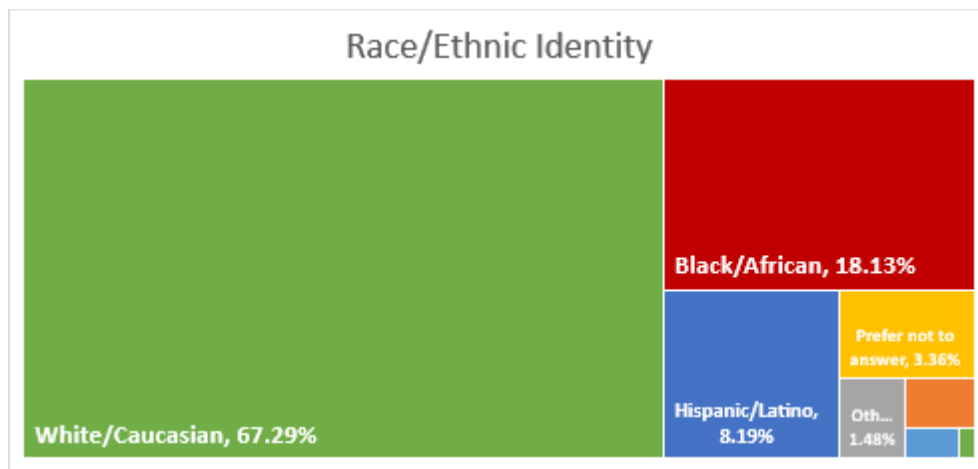
### Background

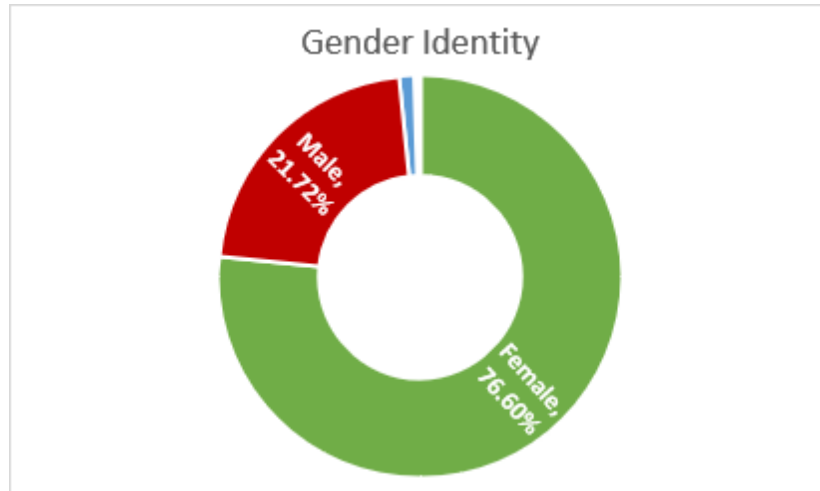
A Community Survey, focusing on five main issues (Demographic information, Access Barriers to Healthcare, Current Health Status, Social Determinants of Health, and Behavioral Determinants of Health) was designed by enFocus in collaboration with the BCH team, based in the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire.

The Community Survey’s purpose was to reach a large number of people in a short period of time, using digital and physical platforms. In order to achieve this, BCH and enFocus required the contribution of partners and stakeholders, to reach an increasing number of participants (cascade effect). The Survey was also present to marginalized, under-served and under-represented populations, ensuring that needs and perceptions from a wide range of demographic and socioeconomic groups were taken into consideration in the definition of the top community health concerns.

### Demographics

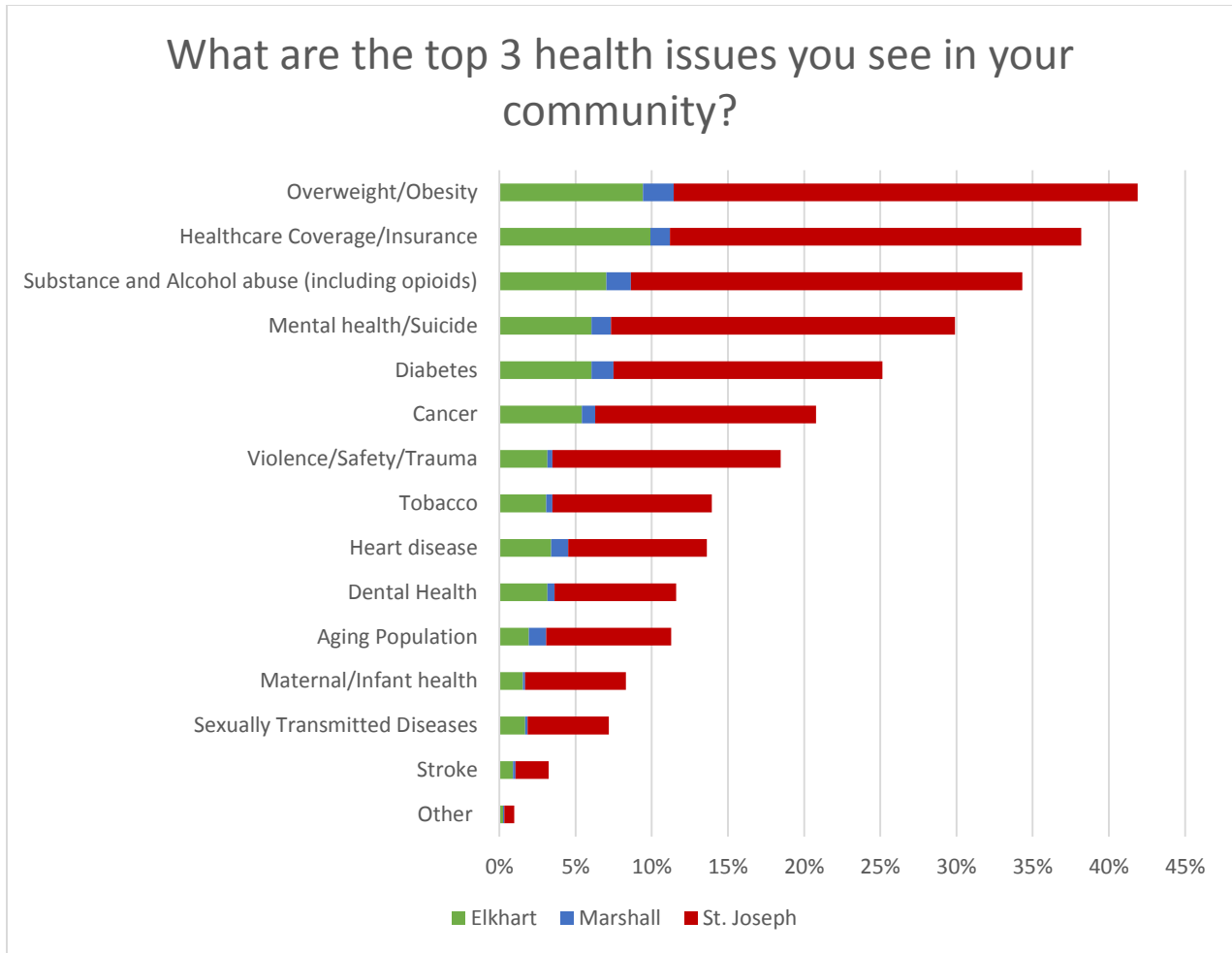
67.3% of the people that completed the survey self-identified their race/ethnicity as “White/Caucasian”. 18% self-identified as “Black/African”, and 8.2% as “Hispanic/Latino”, and 3.4% of the persons interviewed marked the option “prefer not to answer”. 77% of the respondents identified their gender identity as “Female”. 22% of the surveyed persons self-identified their gender as “Male”.





### Key Health Issues

When asked “What are the top 3 health issues you see in your community?”, respondents had the possibility to choose what they considered the 3 most pressing gaps in health and healthcare, from a range of 14 options, and being able to provide their own suggestions. In aggregate, the participant residents of the three-county area (Elkhart-Marshall-St. Joseph), ranked as the top-5 health concerns for their community: 1) Overweight and Obesity (46%), 2) Adequate access to healthcare (43%), 3) Substance and Alcohol abuse (including opioids) (39%), 4) Mental health and Suicide (35%), and 5) Diabetes (31%). Elkhart, Marshall and St. Joseph residents identified their top health issues as follows:



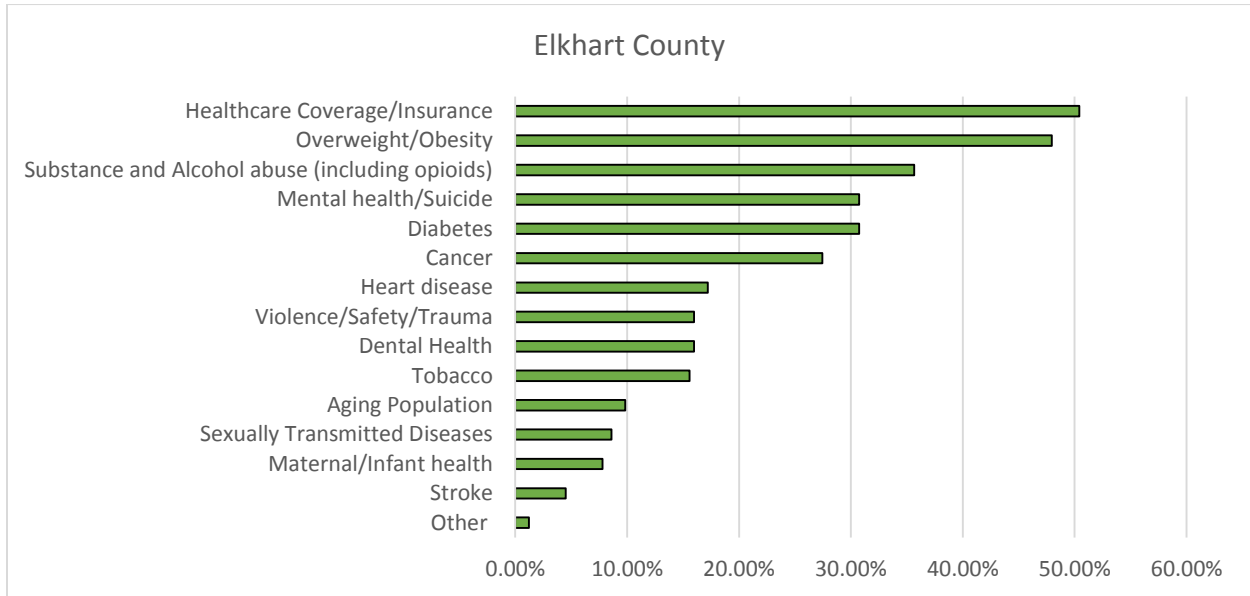
#### Community Health Concerns per County

Elkhart County	Marshall County	St. Joseph County
1. Healthcare Coverage/Insurance	1. Overweight/Obesity	1. Overweight/Obesity
2. Overweight/Obesity	2. Substance and Alcohol abuse	2. Healthcare Coverage/Insurance
3. Substance and Alcohol abuse	3. Diabetes	3. Substance and Alcohol abuse
4. Mental Health/Suicide	4. Healthcare Coverage/Insurance	4. Mental Health/Suicide
5. Diabetes	5. Mental Health/Suicide	5. Diabetes

Source: Community Survey

Elkhart County

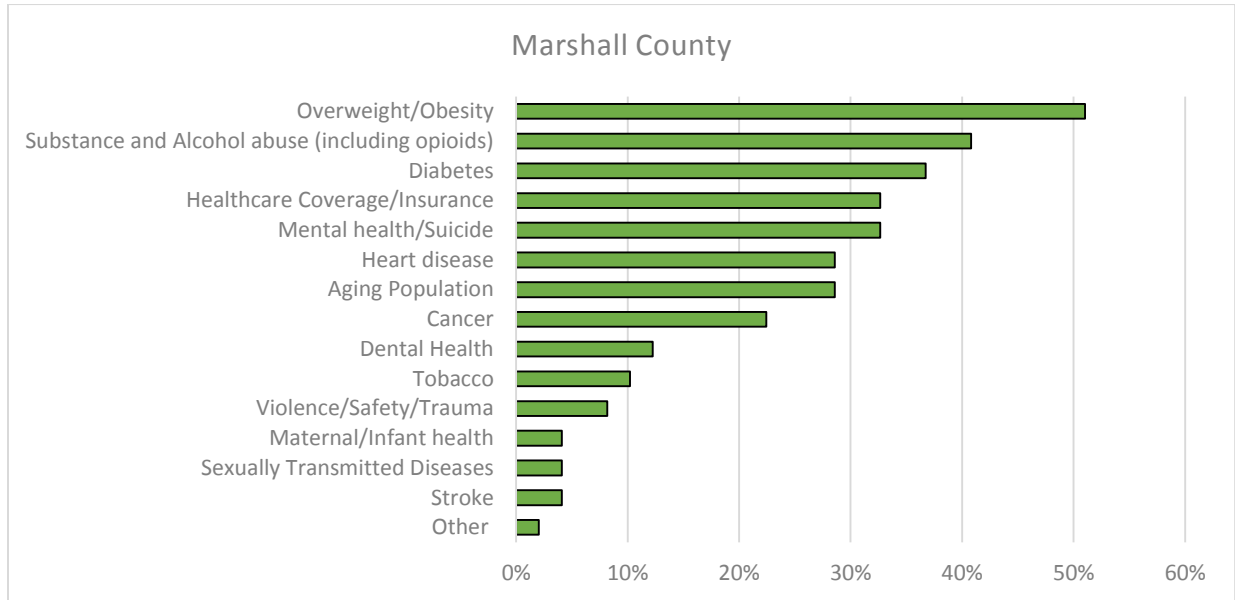
Elkhart County residents that participated on the Community Survey identified their top health needs as follows: Healthcare Coverage/Insurance stands in the first place as the top health issue for surveyed Elkhart residents (50.4%), followed by Overweight/Obesity (48%). Substance and Alcohol Abuse is also a concern for 35.7% of the survey participants. Mental Health/Suicide and Diabetes (31% each) complete the top 5 community health issues.





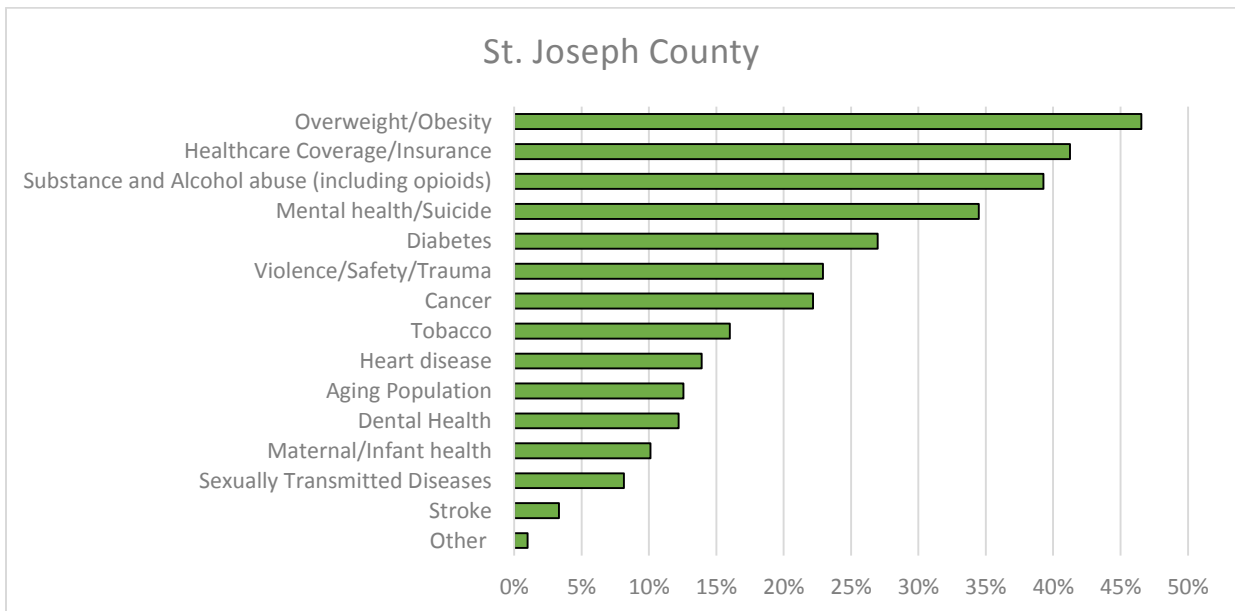
Marshall County

Surveyed residents of Marshall County have ranked Overweight/Obesity (51%) as their top issue of concern. In second position, with 41% of consulted residents considering them as important health issues, appears Substance and Alcohol Abuse. In third place, is Diabetes (37%). Healthcare Coverage and Insurance and Mental Health/Suicide close the top-5 list, with 33% of the surveyed residents in Marshall County considering both as an important health concern.



St. Joseph County

The residents of St. Joseph County that were consulted for this needs assessment ranked their health concerns with Overweight and Obesity as their most important health concern (46.6%). Healthcare coverage and Insurance was ranked second (41%), followed by Substance and Alcohol Abuse (39%). Mental Health and Suicide (34.5%) and Diabetes (27%) close the list of top health issues.



## Health Behaviors

### Tobacco Use

Overall, 21% of the respondents to the question “During the last 12 months, how often did you use tobacco?” used tobacco, during the last year, at least once a month. 14% of the total respondents self-reported having consumed tobacco “every day” during the same period.

Elkhart County has the largest proportion of self-reported tobacco users (28%). 24% of the total residents of Elkhart that participated answered the abovementioned question reported having consumed tobacco “every day” or “a few times a week”. 17% of the respondents from St. Joseph reported a similar behavior, whereas 14% of surveyed residents from Marshall County answered having used tobacco “every day” during the last 12 months.

*During the last 12 months, how often did you use tobacco?*

	Elkhart	Marshall	St. Joseph
Every day	17%	14%	13%
A few times a week	7%	0%	4%
About once a week	1%	0%	1%
A few times a month	2%	0%	1%
Once a month	1%	0%	1%
I don't consume	72%	86%	80%

### Diet and Exercise

The Community Survey collected data from 1,244 individuals from the three counties on their weight and height, to calculate their BMI. 20% of the surveyed people that provided data to calculate the BMI were from Elkhart, 4.6% from Marshall, and 69% from St. Joseph. According to the information provided, 80% of the surveyed residents of Elkhart are obese or overweight (their BMI is equal or higher than 25). 74% of the participants from Marshall and 68.6% of the participants from St. Joseph Counties are suffering from the same condition.

<i>BMI</i>	<i>Elkhart</i>	<i>Marshall</i>	<i>St. Joseph</i>
Under 18.5	0.8%	0.0%	1.3%
18.5 - 24.9	19.0%	26.3%	30.1%
25-29.9	30.2%	29.8%	27.9%
30 or more	50.0%	43.9%	40.7%

*Source: Community Survey*

When asked about dietary habits, surveyed residents of the three counties self-reported having consumed fruits and vegetables consistently in the past 12 months. 74.7% of the participants from Elkhart County reported having consumed fruit “every day” or “a few times a week” in the past year, and 77% reported having the same consumption pattern with vegetables. 73.5% of Marshall County participants in the survey ate fruits and 81.6% ate vegetables either “every day” or “a few times a week”, while St. Joseph’s participants that included fruits and vegetables in their diet more often added up to 82.5% for fruits and 85% for vegetables.

*During the past 12 months, how often did you eat fruits\*?*

	Elkhart	Marshall	St. Joseph
Every day	42.0%	46.9%	44.5%
A few times a week	32.7%	26.5%	38.0%
About once a week	6.1%	6.1%	7.2%
A few times a month	6.1%	4.1%	5.5%
Once a month	0.4%	8.2%	1.8%
I don't consume	12.7%	8.2%	3.0%

\*(1 unit of fresh fruit, ½ cup of canned fruit or 1 small glass of juice)

*During the past 12 months, how often did you eat vegetables\*?*

	Elkhart	Marshall	St. Joseph
Every day	48.4%	59.2%	50.9%
A few times a week	28.7%	22.4%	33.9%
About once a week	7.4%	4.1%	7.3%
A few times a month	4.1%	2.0%	3.4%
Once a month	0.8%	4.1%	1.9%
I don't consume	10.7%	8.2%	2.6%

\*(1 unit of fresh vegetables, ½ cup of canned vegetables)

*Source: Community Survey*

Participants in the Community Survey were also asked about their physical activity habits: 38% of surveyed Elkhart residents participated in a physical activity less than one day per week in the past 12 months, 33% of Marshall County participants had the same behavior, as well as 32% of the interviewed residents of St. Joseph County that responded the question: “During the past 12 months, how often did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking?”.

*During the past 12 months, how often did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking?*

	Elkhart	Marshall	St. Joseph
Every day	23.8%	18.8%	26.4%
A few times a week	38.5%	47.9%	41.5%
About once a week	10.2%	8.3%	13.2%
A few times a month	11.5%	12.5%	8.3%
Once a month	4.9%	2.1%	2.7%
I didn't participate	11.1%	10.4%	7.9%

*Source: Community Survey*

Overweight and obesity are associated with:

- Excessive calorie consumption
- Insufficient physical activity
- Lack of access to affordable, healthy food
- Increased risk for type 2 diabetes, heart disease, stroke, hypertension, cancer, Alzheimer’s disease, dementia, liver disease, kidney disease, osteoarthritis, and respiratory problems, among other health conditions.

### Alcohol and Drug Use

The residents of the three counties that participated in the Community Survey were asked how often, during the past 12 months, they had used the following drugs:

**Marijuana or hashish:** 5% of the participants in Elkhart and 7% of the respondents in St. Joseph self-reported having consumed marijuana or hashish once a month or more, in the past 12 months.

*During the past 12 months, how often did you...  
Use marijuana or hashish?*

	Elkhart	Marshall	St. Joseph
Every day	3.69%	0.00%	0.97%
A few times a week	0.82%	0.00%	2.44%
About once a week	0.00%	0.00%	1.10%
A few times a month	0.41%	0.00%	0.97%
Once a month	0.41%	0.00%	1.34%
I don't consume	94.67%	100.00%	93.18%

**Cocaine or crack:** Of the surveyed residents per county, 4.5% in Elkhart, 2% in Marshall and 2% in St. Joseph self-reported having consumed cocaine or crack at least once a month, in the past year.

*During the past 12 months, how often did you...  
Use cocaine or crack?*

	Elkhart	Marshall	St. Joseph
Every day	0.41%	0.00%	0.37%
A few times a week	0.00%	0.00%	0.49%
About once a week	0.41%	0.00%	0.37%
A few times a month	0.00%	0.00%	0.00%
Once a month	3.69%	2.04%	0.73%
I don't consume	95.49%	97.96%	98.05%

**Heroin:** 0.4% of the surveyed residents in Elkhart and 0.5% from St. Joseph self-reported having used heroin once a month or more, in the past 12 months.

*During the past 12 months, how often did you...  
Use heroin?*

	Elkhart	Marshall	St. Joseph
Every day	0.41%	0.00%	0.24%
A few times a week	0.00%	0.00%	0.00%
About once a week	0.00%	0.00%	0.12%
A few times a month	0.00%	0.00%	0.00%
Once a month	0.00%	0.00%	0.12%
I don't consume	99.59%	100.00%	99.51%

**Methamphetamine:** 0.82% of the surveyed respondents from Elkhart and 0.85% of the respondents from St. Joseph self-reported having used methamphetamines once a month or more, in the year previous to the Community Survey.

*During the past 12 months, how often did you...  
Use methamphetamine?*

	Elkhart	Marshall	St. Joseph
Every day	0.41%	0.00%	0.37%
A few times a week	0.00%	0.00%	0.00%
About once a week	0.00%	0.00%	0.00%
A few times a month	0.41%	0.00%	0.24%
Once a month	0.00%	0.00%	0.12%
I don't consume	99.18%	100.00%	99.15%

Prescribed medicines for acute or chronic pain/painkillers (opioids): The percentage of surveyed residents from the three counties that self-reported having consumed opioids in the past 12 months was: 17.6% for Elkhart, 6% for Marshall, and 18.8% for St. Joseph. In Elkhart, 5.3% of the respondents reported having consumed opioids “every day”. The same did 4% of the participant residents in Marshall and 5% of the ones from St. Joseph County.

*During the past 12 months, how often did you...  
Use prescribed medicines for acute or chronic  
pain/painkillers (opioids)?*

	Elkhart	Marshall	St. Joseph
Every day	5.33%	4.08%	4.99%
A few times a week	1.23%	0.00%	2.31%
About once a week	0.41%	0.00%	0.61%
A few times a month	3.28%	2.04%	2.31%
Once a month	3.28%	0.00%	4.38%
I don't consume	82.38%	93.88%	81.24%

To the question “During the past 12 months, how often did you drink alcohol?”, the residents of Elkhart, Marshall and St. Joseph Counties approached to complete the Community Survey, self-reported that:

- In Elkhart, 57% of them had consumed alcohol more than once a month in the past 12 months; and that 7% of the total respondents from Elkhart consumed alcohol every day in the same period of time.
- 8% of surveyed residents from Marshall consumed alcohol every day during the past 12 months. 41% of the total participants from this county reported not having consumed alcohol during the same period of time.
- 56.6% of the residents of St. Joseph that completed this question in the Community Survey self-reported having drunk alcohol at least once a month in the past year. 3% of the surveyed St. Joseph residents did drink alcohol on a daily basis in the 12 months previous to the survey.

*During the past 12 months, how often did you...  
Drink alcohol?*

	Elkhart	Marshall	St. Joseph
Every day	6.97%	8.16%	3.17%
A few times a week	11.89%	10.20%	9.99%
About once a week	4.92%	10.20%	7.67%
A few times a month	17.21%	12.24%	17.78%
Once a month	15.98%	18.37%	18.03%
I don't consume	43.03%	40.82%	43.36%

*Source: Community Survey*

## Clinical Care

### Access to Care

When asked “What type of health coverage (insurance) do you have now?”, participants from Elkhart County that self-reported being “not insured” represented the 14.1% of the total, 7.3% of respondents from Marshall County self-reported not having insurance, and 5.4% of surveyed residents from St. Joseph did the same.

*What type of health coverage (insurance) do you have now?*

	Elkhart	Marshall	St. Joseph
Insurance through employer	46.18%	58.18%	47.58%
Self-purchased insurance	8.02%	3.64%	7.39%
Medicare/Medicaid/Other Government program	29.77%	27.27%	35.91%
Not insured	14.12%	7.27%	5.43%
Prefer not to answer	1.91%	0.00%	2.31%
Other	0.00%	3.64%	1.39%

*Source: Community Survey*

The residents of the three counties that participated in the Community Survey were asked the following question: “In general, would you say that you agree or disagree with the following statements about HEALTH CARE ACCESS in your community?”. In general, surveyed residents of the three assessed counties “Agree” or “Strongly Agree” with being able to access a primary care provider in their communities when needed (56.5% in Elkhart, 75.5% in Marshall, and 59% in St. Joseph either “Agree” or “Strongly Agree” with the statement).

*Residents in the area are able to access a primary care provider when needed (Family Doctor, Pediatrician, General Practitioner)*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	8.54%	20.73%	14.23%	47.97%	8.54%	
Marshall	4.08%	4.08%	16.33%	46.94%	28.57%	
St. Joseph	6.46%	13.41%	21.22%	47.32%	11.59%	

The opinions of Community Survey participants about the availability providers accepting Medicaid or Medical Assistance in their area, shows that nearly one third of Elkhart residents interviewed “Agree” or “Strongly Agree” with the number of providers being sufficient, and less than ¼ of Marshall participants thinks likewise. In St. Joseph County, 35.5% of the surveyed residents “Agree” or “Strongly Agree” with the number of Medicaid/Medical Assistance providers being sufficient for the local demand of services.

*There is a sufficient number of providers accepting Medicaid and Medical Assistance in the area*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	20.41%	22.45%	26.12%	26.53%	4.49%	
Marshall	6.25%	18.75%	54.17%	14.58%	6.25%	
St. Joseph	10.12%	16.34%	38.05%	27.32%	8.17%	

## Social and Economic Factors

### Education

Interviewed residents from the three counties were asked “What is the highest level of education you have completed?”. 73% of the participant residents of St. Joseph self-reported having started or completed higher education. 74% of Elkhart participants responded likewise. Overall, 17% of all surveyed respondents from the three counties have had some college, while 27% of surveyed residents of the area have a bachelor’s degree.

*What is the highest level of education you have completed?*

	Elkhart	Marshall	St. Joseph
Incomplete High School	16%	16%	18%
High School/GED	6%	4%	4%
Some College	20%	21%	15%
Bachelor’s Degree	26%	26%	28%
Master’s Degree	19%	18%	18%
Advanced Graduate work or Ph.D.	9%	11%	11%
Prefer not to answer	4%	5%	5%

### Employment

Residents that participated in the Community Survey self-reported about their employment status at the time they completed the questionnaire. 9% of the respondents from St. Joseph responded being unemployed (7% were looking for work at the time, 2% were not looking for job opportunities). 6% of Elkhart surveyed residents responded that they were unemployed by the time they completed the survey (4% were looking for a job, while 2% were not looking for work).

In Elkhart and Marshall, the proportion of participants that reported having a full-time job was 50% and 49% respectively. The percentage of respondents from St. Joseph with a full-time employment was 44%.

*What is your current employment status?*

	Elkhart	Marshall	St. Joseph
Employed full time (40 hours or more per week)	52%	49%	44%
Employed part time (up to 39 hours per week)	11%	18%	14%
Unemployed and currently looking for work	4%	0%	7%
Unemployed and not currently looking for work	2%	2%	1%
Student	2%	4%	4%
Retired	13%	14%	14%
Homemaker	5%	8%	5%
Self-employed	2%	0%	3%
Unable to work	6%	2%	6%
Prefer not to answer	2%	2%	2%

**Community Safety**

60% of Elkhart residents that participated in the Community Survey report knowing All, Most or Some of their neighbors. 67% of persons from Marshall that completed the survey reported likewise, as did 61% of St. Joseph County residents interviewed.

*How many of your neighbors do you know?*

	All	Most	Some	A few	None	Scale
Elkhart	12%	20%	28%	28%	12%	
Marshall	20%	31%	16%	27%	6%	
St. Joseph	8%	26%	27%	28%	11%	

When asked if they would agree or disagree with the statement “There is a STRONG sense of community in my neighborhood”, 49% of interviewed Marshall surveyed residents responded that they either “Agree” or “Strongly Agree” with the statement. 39% of St. Joseph County participants did the same, as well as 34% of Elkhart residents that completed the survey.

*In general, would you say that you agree or disagree with the following statements about your neighborhood?*

*There is a STRONG sense of community in my neighborhood*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	10%	24%	32%	28%	6%	
Marshall	10%	16%	24%	39%	10%	
St. Joseph	7%	21%	33%	30%	9%	

When asked if they would agree or disagree with the statement “I OFTEN participate in activities in my neighborhood”, 26% of residents from St. Joseph and 29% Elkhart self-reported that they either “Agree” or “Strongly Agree” with the statement. 37% of surveyed Marshall residents responded similarly.



*In general, would you say that you agree or disagree with the following statements about your neighborhood?  
I OFTEN participate in activities in my neighborhood*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	15%	30%	27%	26%	3%	
Marshall	18%	10%	35%	33%	4%	
St. Joseph	14%	30%	30%	21%	5%	

To the statement “I FEEL SAFE in my neighborhood”, 68% of Elkhart participants, 84% of Marshall’s, and 68% of St. Joseph surveyed residents self-reported that they “Agree” or “Strongly Agree” with it.

*In general, would you say that you agree or disagree with the following statements about your neighborhood?  
I FEEL SAFE in my neighborhood*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	8%	8%	16%	50%	18%	
Marshall	2%	4%	10%	51%	33%	
St. Joseph	4%	8%	20%	49%	19%	

66% of Elkhart respondents, 84% of Marshall’s, and 65% in St. Joseph’s either “Agreed” or “Strongly Agreed” with the statement: “My neighborhood is CLEAN”.

*In general, would you say that you agree or disagree with the following statements about your neighborhood?  
My neighborhood is CLEAN*

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Scale
Elkhart	7%	11%	17%	45%	20%	
Marshall	4%	2%	10%	53%	31%	
St. Joseph	5%	9%	18%	47%	22%	

## Physical Environment

### Housing

When asked about their current housing situation at the moment of filling in the Community Survey, 6% of St. Joseph participants and 4% of Elkhart’s self-reported their housing situation as “Resident of transitional housing” or “In unstable/non-permanent housing situation”. The largest proportion of Homeowners was registered in Marshall County (79% of the participants). St. Joseph County had the largest proportion of renters among their Survey respondents (31%).

*Which of the following best describes your current housing situation?*

	Elkhart	Marshall	St. Joseph
Homeowner	56%	79%	53%
Renter	29%	15%	31%
Living with family/friend	10%	6%	9%
Resident of transitional housing	3%	0%	4%
In unstable/non-permanent housing situation	1%	0%	2%
Other	1%	0%	1%

Access to utilities (Heating, Electricity and Water) is above 92% in Elkhart and Marshall Counties, whereas in St. Joseph is just above 82%. It is worth mentioning that respondents from the three counties have more restricted access to phone landlines (46% overall) than to Internet (72% overall).

*Does your home have access to: (Select all that apply)*

	Elkhart	Marshall	St. Joseph
Heating	93%	96%	82%
Electricity	93%	98%	83%
Water	91%	96%	81%
Phone landline	48%	56%	45%
Internet	75%	94%	70%
Refrigerator	91%	98%	79%
TV	89%	94%	77%

Surveyed residents in all three counties consider that access to parks and green areas is high in all three counties' communities (81% of St. Joseph residents consider it so, as well as 80% of Marshall's and 78% of Elkhart's residents. Worship places are also considered to be available within a mile from respondents' neighborhoods.

*Within a mile from your neighborhood, do you have access to the following?*

	Elkhart	Marshall	St. Joseph
Grocery store/Supermarket/Farmer's Market	69%	60%	64%
Pharmacies	66%	54%	59%
Parks/Green areas	74%	78%	68%
Library	57%	62%	58%
Kindergarten/Child care	69%	60%	64%
Schools	66%	54%	59%
Church/Mosque/Shrine/Synagogue/Temple	74%	78%	68%
Community garden	57%	62%	58%
Clinic/Health Center	69%	60%	64%

In Elkhart, people consider that they have access within a mile from their neighborhoods to Parks (74%), Worship places (74%), Grocery Stores (69%), Child Care services (69%) and Clinic or Health Centers

(69%). Only 57% of Elkhart residents self-reported that they have access (within a mile) from their neighborhood to a Library and Community Gardens.

In Marshall County consider that neighborhoods are within a mile from Parks and Worship places in 78% of the cases, where as only 54% of respondents thought that Pharmacies and Schools were within a 1-mile range from their neighborhood.

In St. Joseph County, 68% of the surveyed residents responded that Parks and Worship places were within a 1-mile range from their communities. 59% of the respondents considered that Schools and Pharmacies were within that range, and 58% thought so of Community Gardens and Libraries.

### Transportation

A large proportion of surveyed residents from Elkhart, Marshall and St. Joseph Counties rely on personal or friends’/relatives’ automobiles as primary means of transportation: in Elkhart, 89% of respondents do so; 100% in Marshall; and 85% in St. Joseph County. 4% of the respondents from Elkhart and 9% of the respondents from St. Joseph use as primary means of transportation the City Bus Service. 1% of surveyed residents from Elkhart and 1% of surveyed residents from St. Joseph use mainly bicycles for their commute.

*What is your primary means of transportation?*

	Elkhart	Marshall	St. Joseph
Personal automobile	84%	96%	81%
Friend, relative or neighbor’s automobile	4%	4%	4%
Taxi/Uber/Lyft	0%	0%	0%
City bus service	4%	0%	9%
Bicycle	1%	0%	1%
Walking	5%	0%	3%
Other	0%	0%	1%

## Chronic Health Conditions

### Mental Health

Surveyed residents from the three counties self-reported their mental health status. Overall, 20% of the participants from Elkhart, Marshall and St. Joseph County reported that their mental health is either fair or poor. Elkhart residents reported the largest proportion of people with poor/fair mental health per county, with 26% of the respondents.

*Would you say that, in general, your mental health is...*

	Elkhart	Marshall	St. Joseph	Overall
Poor	4%	0%	3%	3%
Fair	22%	16%	16%	17%
Good	31%	22%	33%	32%
Very good	27%	33%	30%	29%
Excellent	16%	29%	18%	19%

*Source: Community Survey*

To the question “Has a doctor, nurse or other health professional EVER told you that you have anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, Post-traumatic Stress Disorder, or social anxiety disorder)?”, 21% of the overall respondents in the three counties responded affirmatively.

Self-reported anxiety disorder

Elkhart	Marshall	St. Joseph
20.9%	28.9%	19.9%

24% of surveyed residents from the three counties self-reported that they have been told at some point that they had a depressive disorder. 26% of Elkhart residents that responded the question “Has a doctor, nurse or other health professional EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?” responded affirmatively, the same as 24% of the residents of Marshall County and 23% of those from St. Joseph County that were interviewed.

Self-reported depressive disorder

Elkhart	Marshall	St. Joseph
26.2%	24.4%	22.7%

### Diabetes

Residents from Elkhart, Marshall and St. Joseph Counties that participated in the Community Survey were asked if a health practitioner had ever told them that they have diabetes. 13% of the surveyed residents of Elkhart responded affirmatively; the same did 10.3% of Marshall residents that completed the questionnaire. For St. Joseph, 9% of the respondents of the Community Survey self-reported having been diagnosed with diabetes.

*Has a doctor, nurse or other health professional EVER told you that you have diabetes?*

	Elkhart	Marshall	St. Joseph
Prefer not to answer	16.72%	15.52%	19.34%
Yes	13.24%	10.34%	8.87%
Yes, ONLY during pregnancy	3.48%	3.45%	2.79%
No	60.98%	63.79%	63.01%
No, pre-diabetes or borderline diabetes	5.57%	6.90%	5.98%

### Cancer

Survey participants were asked the following question: “Have you EVER been told by a doctor, nurse, or other health professional that you had cancer?”. 8.5% of Elkhart respondents, 8.6% of St. Joseph respondents and 8.2% of Marshall respondents answered this question affirmatively.

*Have you EVER been told by a doctor, nurse, or other health professional that you had cancer?*

	Elkhart	Marshall	St. Joseph
Yes	8.5%	8.2%	8.6%
No	89.8%	89.8%	89.7%
Prefers not to answer	1.6%	2.0%	1.7%

The participants that responded “YES” to the question above, were asked about the type of cancer they were diagnosed with. The most common answer was breast cancer (25% of Marshall respondents, 38% of St. Joseph’s and 32% of Elkhart’s, among surveyed residents that had been diagnosed with cancer). The most common types of cancer per county were:

- Elkhart: Breast: 32%; Lung, Mouth and Skin (not including melanoma): 11% each.
- Marshall: Melanoma: 50%, Breast and Colon: 25% each.
- St. Joseph: Breast: 37%; Skin (not including melanoma): 13%; Cervical and Melanoma: 8% each.

*What type of cancer was it?*

	Elkhart	Marshall	St. Joseph
Bladder	5%	0%	0%
Breast	32%	25%	39%
Cervical	11%	0%	8%
Colon (intestine)	0%	25%	0%
Endometrial	5%	0%	2%
Esophageal (esophagus)	0%	0%	0%
Leukemia (blood)	0%	0%	2%
Lung	11%	0%	2%
Melanoma	5%	50%	6%
Neuroblastoma	0%	0%	0%
Non-Hodgkin’s Lymphoma	5%	0%	3%
Oral (Mouth)	11%	0%	0%
Ovarian (Ovaries)	0%	0%	2%
Other skin cancer	11%	0%	14%
Pancreatic (pancreas)	0%	0%	0%
Prostate	0%	0%	9%
Renal (kidney)	0%	0%	3%
Testicular	0%	0%	2%
Thyroid	0%	0%	5%
Other	5%	0%	5%

Persons that self-reported having been diagnosed with cancer were asked “Have you EVER received instructions from a doctor, nurse, or other health professional about where you should return or who you should see for routine cancer check-ups after completing your treatment for cancer?” among the cancer-diagnosed participants from Elkhart and St. Joseph, 14% and 11% answered “NO”, respectively. 25% of respondents diagnosed with cancer from Marshall County also answered “NO” to this question.

*Have you EVER received instructions from a doctor, nurse, or other health professional about where you should return or who you should see for routine cancer check-ups after completing your treatment for cancer?*

	Elkhart	Marshall	St. Joseph
Yes	81%	75%	79%
No	14%	25%	11%
Not sure	5%	0%	10%

19% of surveyed residents of Elkhart and 17% of residents of St. Joseph that have been diagnosed with cancer self-reported having memory problems caused by their cancer or their cancer treatment.

*Do you currently have memory problems caused by your cancer or cancer treatment*

	Elkhart	Marshall	St. Joseph
Yes	19%	0%	17%
No	81%	100%	74%
Prefers not to answer	0%	0%	9%