2019 Community Health Needs Assessment
Parkview Huntington Hospital, Huntington County

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Contributors

Indiana Partnership for Healthy Communities

The Indiana Partnership for Healthy Communities (IN-PHC) is a collaboration between **the Polis Center at IUPUI** (Polis) and the **Indiana University Richard M. Fairbanks School of Public Health** (FSPH). Formed with support from the Indiana Clinical and Translational Sciences Institute (I-CTSI), its mission is to help build the capacity of hospitals, local health departments, and community-based organizations to improve the health of Indiana communities. IN-PHC does this by translating knowledge generated by the academy and by communities into improved and sustainable processes for understanding and effecting community health.

The Polis Center at IUPUI

Focused on finding practical, effective, and cost-efficient ways for communities to enhance their capacity for meaningful change, Polis uses innovative approaches to understand communities. Polis enhances community capacity for collaborative, data-informed decision making and action using place-sensitive analysis. Team members include:

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Focused on research and service in public health and health care systems, FSPH conducts high quality program evaluation and applied research on methods for understanding and addressing community health issues. Team members include:

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Executive Summary

To assist Parkview Health in completing its 2019 community health needs assessment (CHNA), the Polis Center and the Richard M. Fairbanks School of Public Health designed and conducted both primary and secondary data collection and analysis activities for the seven counties in northeast Indiana that compose Parkview's primary service area, including: Allen, Huntington, Kosciusko, Lagrange, Noble, Wabash, and Whitley. This report is particular to **Huntington County.**

The CHNA team assessed the health needs of the Parkview Health region as a whole, as well as the needs of the individual counties. A preliminary list of community health needs was identified using secondary data from the Healthy Communities Institute database as well as other state and national data sources. This list of community health needs was augmented with local input collected via a community phone survey and a local provider survey.

The Parkview service area includes relatively large Amish and Hispanic populations. Because these populations are often underrepresented in online and telephone surveys, a paper survey was conducted in the Amish Community and a focus group in the Hispanic community to better understand their community health concerns.

The assessment team objectively prioritized the identified community health needs using the Hanlon Basic Priority Rating Method recommended by the National Association of County and City Health Officials (*Guide-to-Prioritization-Techniques.pdf*, n.d.). This method rates health concerns based on: 1) size of the health problem, 2) seriousness of the health problem, and 3) availability of evidence-based interventions.

The top health concerns identified for Huntington County are **cardiovascular disease** (stroke and heart disease), **diabetes** (adults 20+ with diabetes), **aging** (Alzheimer's Disease), and **substance use and abuse** (non-fatal emergency department visits due to opioid overdoses).

As the next step in selecting health priorities for its community health improvement planning efforts, the CHNA team recommended that Parkview screen the identified health concerns based on feasibility of available public health interventions. Feasibility includes the suitability and community acceptability, availability of resources, cost-benefits ratio, and legality of potential interventions. Based on a consideration of these factors, Parkview Health Huntington Hospital selected substance use/mental health and obesity as their top health priorities for Huntington County for 2020-2022.

Organization of the Report

This CHNA report was designed to support Parkview Health's community benefit programming efforts and to fulfill its IRS reporting requirements. As such, it provides a description of the following:

1. **Description of Service Area** (The hospital primary service area)
2. **The Community** (Socio-demographics of the populations residing in the primary service area and availability of social services relevant to public health)
3. **Data Sources** (Primary and secondary data sources used to conduct the CHNA)
4. **Identification of Community Health Needs** (The process for identifying community health needs and social determinants of health via primary and secondary data analysis)
5. **Ranking of Identified Community Health Needs** (The process and criteria used for scoring and ranking the identified community health needs and the results (the top ranked needs). The full set of indicator rankings is included in **Appendix B: Scoring of Community Health Needs.)**
6. **Priority Selection** (Priorities selected by Parkview Health)
7. **Data Limitations** (Data limitations and information gaps)

INTRODUCTION

The IRS requires all nonprofit hospitals to complete a Community Health Needs Assessment (CHNA) every three years. Parkview Health partnered with The Polis Center at IUPUI (Polis) and the Indiana University Richard M. Fairbanks School of Public Health (FSPH) to design and conduct a 2019 CHNA for each of its seven hospitals. This report provides an overview of the CHNA processes and methods used to identify and prioritize significant health needs of the community served by the Parkview Health region.

DESCRIPTION OF SERVICE AREA

Parkview Huntington Hospital serves the Huntington County as shown in *Figure 1*: Primary Service Area of Parkview Hospitals.

Figure 1: Primary Service Area of Parkview Hospitals in Huntington County
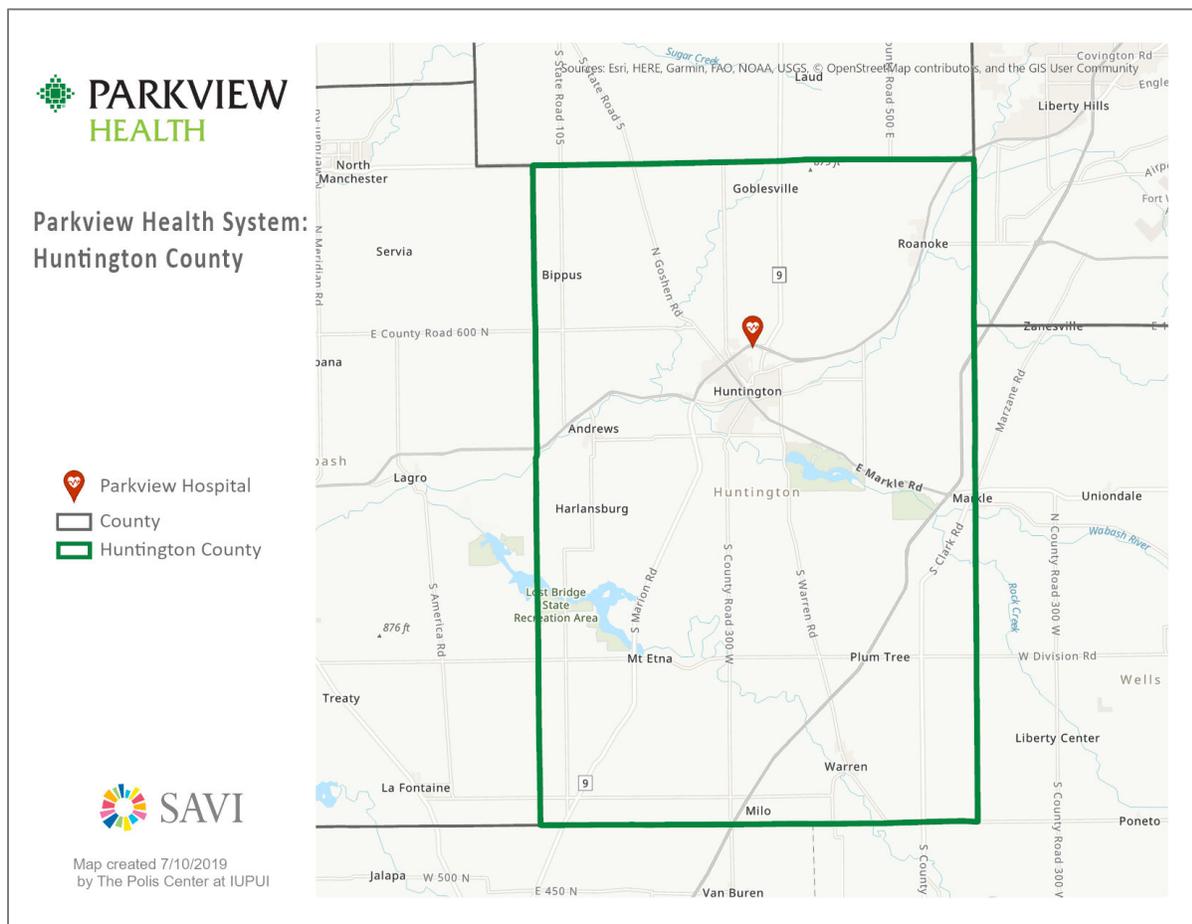
THE COMMUNITY

DEMOGRAPHICS

Population Size

The seven-county Parkview Health service area comprises about 10% of the total population in Indiana *(Table 1)*. Based on population density, only Huntington County is considered rural/urban mixed. (Ayres, Waldorf, & McKendree, n.d.).

Table 1: Population

	Parkview Health	Indiana	U.S.
Population	634,457	6,614,418	321,004,407

Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Huntington County population did not see a significant change from 2014 to 2017 *(Table 2)*.

Table 2: Population in Parkview Counties, 2014 and 2017

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
2017	367,747	36,520	78,720	38,720	47,421	31,848	33,481
2014	360,990	36,959	77,790	37,759	47,497	32,492	33,307

Source: Stats Indiana

Age

The median age in Huntington County is 40.3 years *(Table 3)*.

Table 3: Median Age in Years

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
2017	35.7	40.3	38.0	31.5	38.5	42.0	41.0	36.8	37.5
2014	35.6	39.9	38.0	30.9	37.6	42.3	40.6	36.6	37.2

Source: US Census Bureau (American Community Survey Five-year Averages)

Huntington County has a similar population age makeup to the rest of Indiana. About two-thirds of the population belong to the 18-64-year-old age group and only 5.6 percent belonging to 0-4-year-old age group *(Figure 2*: Population by Age Group).

Figure 2: Population by Age Group
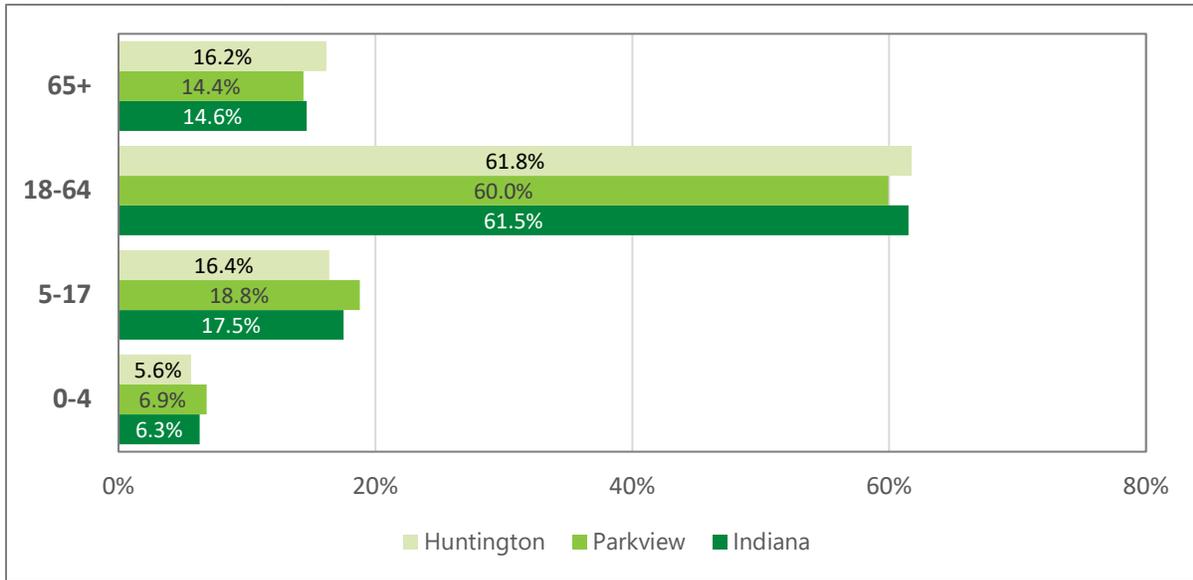
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Figure 3: Age Pyramid
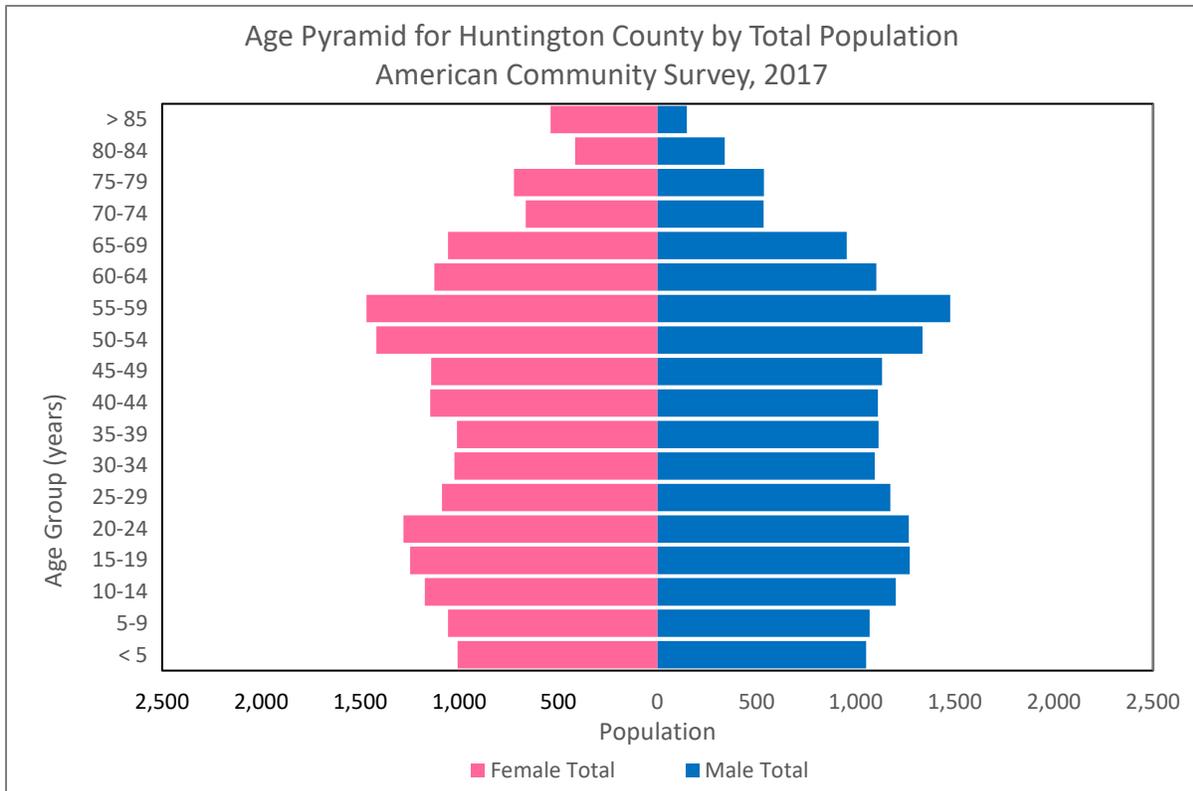
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Figure 3: Age Pyramid shows the age sex distribution for Huntington County. The age pyramid for Huntington County resembles a restrictive type of age pyramid. ("From Population Pyramids to Pillars – Population Reference Bureau," n.d.). There is relatively lower number of

young (25-39 years) population. The highest number of population is in the 55- 59 age group followed by 50-54 years age group. These are the baby boomer generation which are rapidly progressing towards old and older age groups. Therefore, focus needs to be diverted towards establishing and enhancing services (clinical and social needs) for this aging population.

Because different age groups require different levels and types of care, strategies for improving community health outcomes should incorporate the needs of each generation. The percentage of the population under 18 years hovers under 25% for Huntington County (*Figure 4*: Child and Senior Population*). At the other end of the age spectrum are individuals 65 years and older. *Figure 4* demonstrates that the 65 and older population is at 16.2% for Huntington County. Adequate health care is critical to allow the senior population to age in place and maintain their quality of life as they grow older.

Figure 4: Child and Senior Population
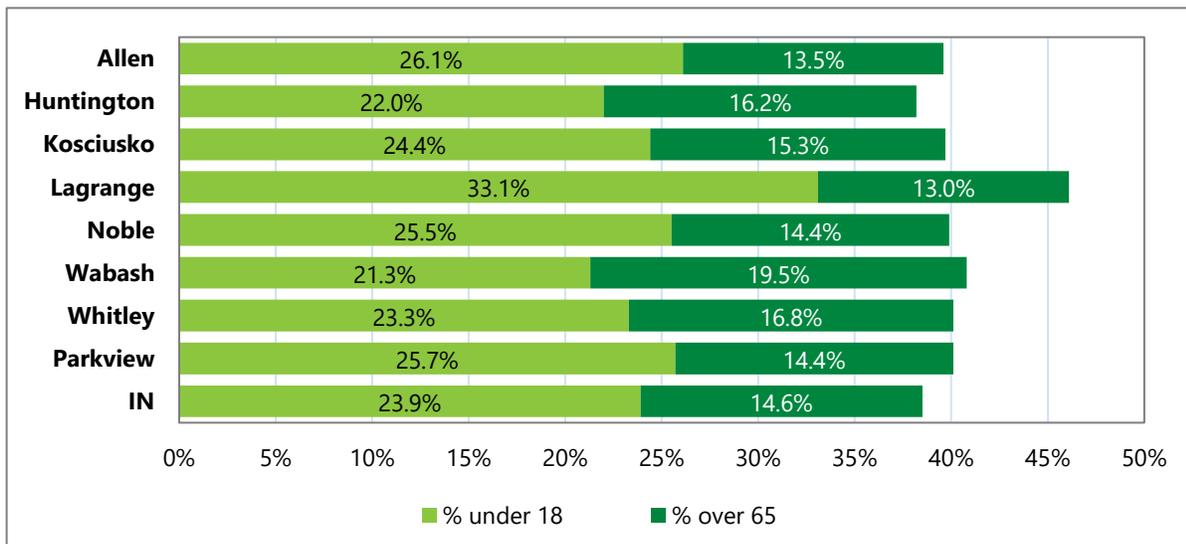
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Race and Ethnicity

Many racial and ethnic groups experience disparities in health and healthcare. These groups may face unique challenges in accessing healthcare due to linguistic, social, or cultural differences. Therefore, it is important to be cognizant of the racial and ethnic makeup of the hospital service area and to design and implement culturally competent healthcare services.

As illustrated by *Table 4* and *Figure 5*, the racial composition of Huntington County is predominantly non-Hispanic White, which is similar to the entire Parkview Health region and the rest of Indiana. However, some racial diversity exists in some of the Parkview Health counties.

	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
White	2017	74.6%	95.2%	88.6%	94.4%	87.6%	94.5%	95.7%	81.8%	79.8%
	2014	75.6%	95.8%	89.2%	94.8%	88.2%	95.0%	96.0%	82.7%	80.8%
Black/ African American	2017	11.3%	0.8%	0.7%	0.1%	0.4%	0.9%	0.4%	6.8%	9.1%
	2014	11.5%	0.6%	0.7%	0.1%	0.3%	0.5%	0.3%	6.8%	9.0%
Hispanic/ Latino	2017	7.2%	2.2%	7.9%	3.9%	10.2%	2.5%	1.9%	6.5%	6.7%
	2014	6.8%	1.9%	7.7%	3.8%	9.8%	2.2%	1.8%	6.2%	6.3%
Other Race or Ethnicity	2017	6.9%	1.8%	2.8%	1.6%	1.8%	2.1%	2.0%	4.9%	4.4%
	2014	6.1%	1.7%	2.4%	1.3%	1.7%	2.3%	1.9%	4.3%	3.9%

Table 4: Percent of Population by Race and Ethnicity

Source: US Census (American Community Survey Five-year Averages)

Figure 5: Race and Ethnicity
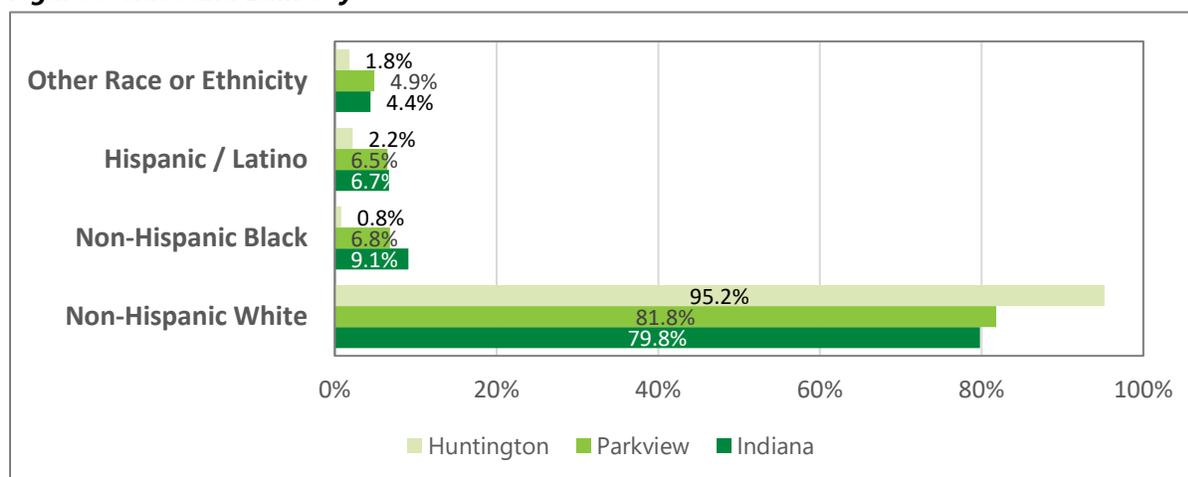
Source: US Census (American Community Survey Five-year Averages)

Northeast Indiana is home to a large Amish population. According to the 2010 U.S. Religion Census, more than 14,000 Amish lived in LaGrange County, accounting for 37.9% of its total population, making it the second largest county (by population) for the Amish in the United States. Huntington County does not have any Amish population (0%), as shown by the county-level map of the Amish population in the Parkview Health region (*Figure 6*).

Figure 6: Amish Population by County in Parkview Service Area
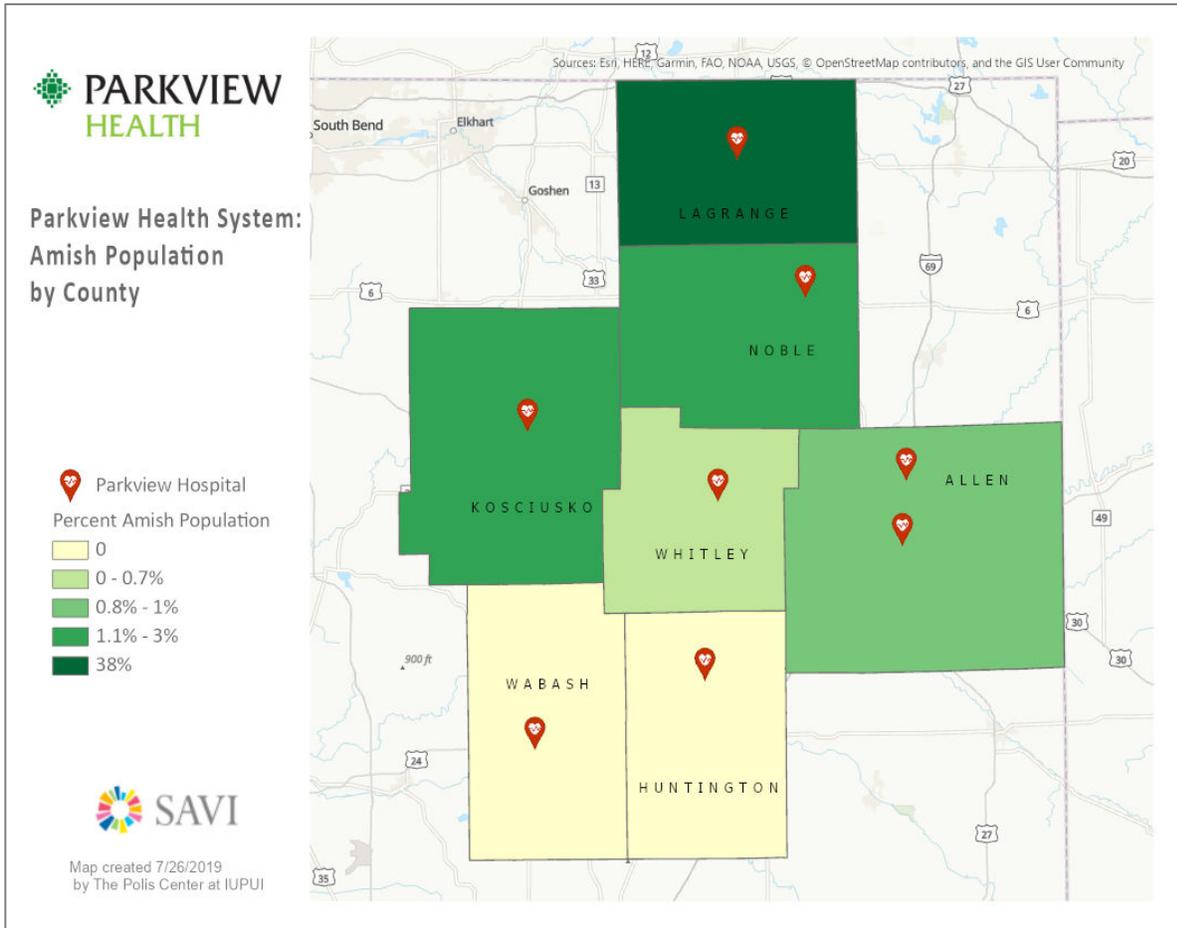
Source: Association of Religion Data Archives, 2010 US Religion Census

SOCIOECONOMIC STATUS

Socioeconomic status (SES) is a powerful determinant of health outcomes. SES refers to one's access to financial, educational, and social resources. SES underlies three major determinants of health, including environmental exposure, health behavior, and health care. In addition, chronic stress associated with lower SES may increase morbidity and mortality. When using socioeconomic factors to understand potential health risks, income, poverty, employment status and educational status are typically considered.

Median Household Income

The median household income in the region ranges from a low of $49,052 in Wabash County to a high of $58,336 in LaGrange County. The median household income in Huntington County is $50,063 in 2017, which shows an increase of 5.7% since 2014. (*Table 5*).

Table 5: Median Household Income

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
2017	$51,091	$50,063	$57,190	$58,336	$52,393	$49,052	$57,041	$52,540	$52,182
2014	$49,124	$47,356	$52,706	$49,112	$49,102	$45,657	$54,023	$49,540	$48,737

Source: US Census Bureau (American Community Survey Five-year Averages)

Racial disparities regarding median household income are evident in *Figure 7.* The median household income for African American households is much lower than white and even lower than the median household income for African Americans in the state. For Asian population the median household income in the service area is lower than the median household income for Asians in the state. These gaps in income among different racial groups ultimately effect lifestyle and neighborhood choices, ability to afford health insurance, and access to health care. In Huntington County, the racial disparities in income are similar to the rest of the region and the state of Indiana (*Figure 7*).

Figure 7: Median Household Income by Race and Ethnicity
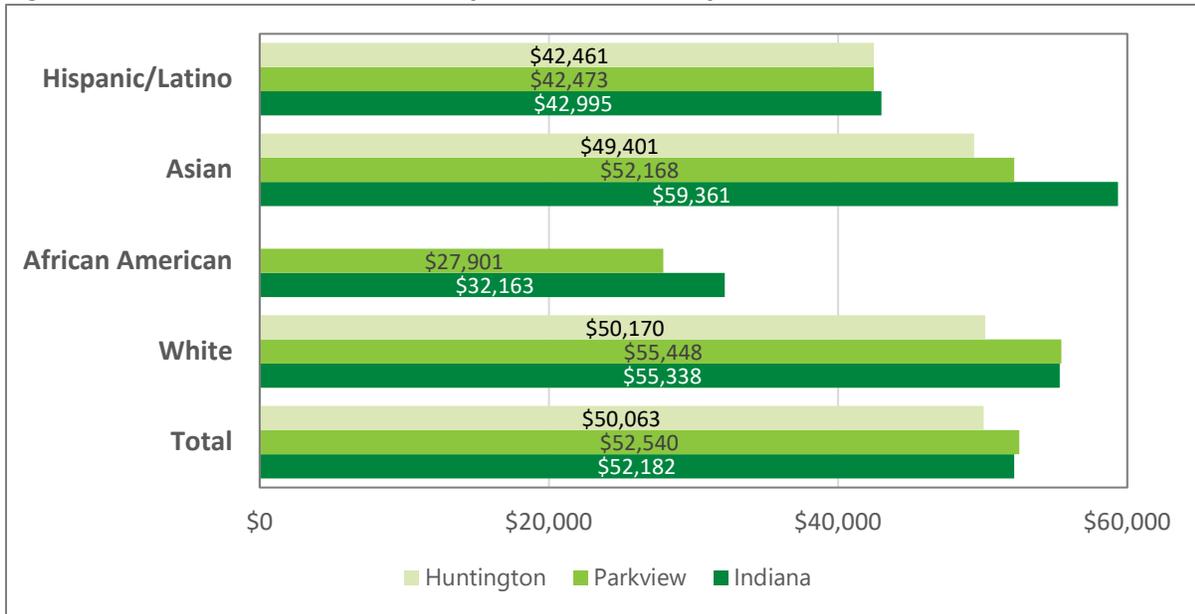
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)
Median Household Income for African American population not available from American Community Survey for Huntington County for 2013-2017.

Poverty

The percentage of the population living below poverty in Huntington County (11.6%) is lower than the state percentage (14.6%) (*Table 6*).

Table 6: Percentage of Population below Poverty Line

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
2017	14.7%	11.6%	11.2%	9.1%	9.3%	13.3%	9.5%	13.0%	14.6%
2014	15.5%	11.6%	12.4%	15.3%	12.8%	14.9%	8.9%	14.3%	15.5%

Source: US Census Bureau (American Community Survey Five-year Averages)

Racial disparities exist for the percentage of population living under poverty level. Racial disparities in poverty result from cumulative disadvantage over the life course, as the effects of hardship in one domain spill over into other domains. With lower median income than Whites, it is no surprise that the highest percentage of population living under poverty in Huntington County is the Hispanic/Latino population (38.3%) (*Figure 8*).

Figure 8: Population below the Federal Poverty Level by Race/Ethnicity
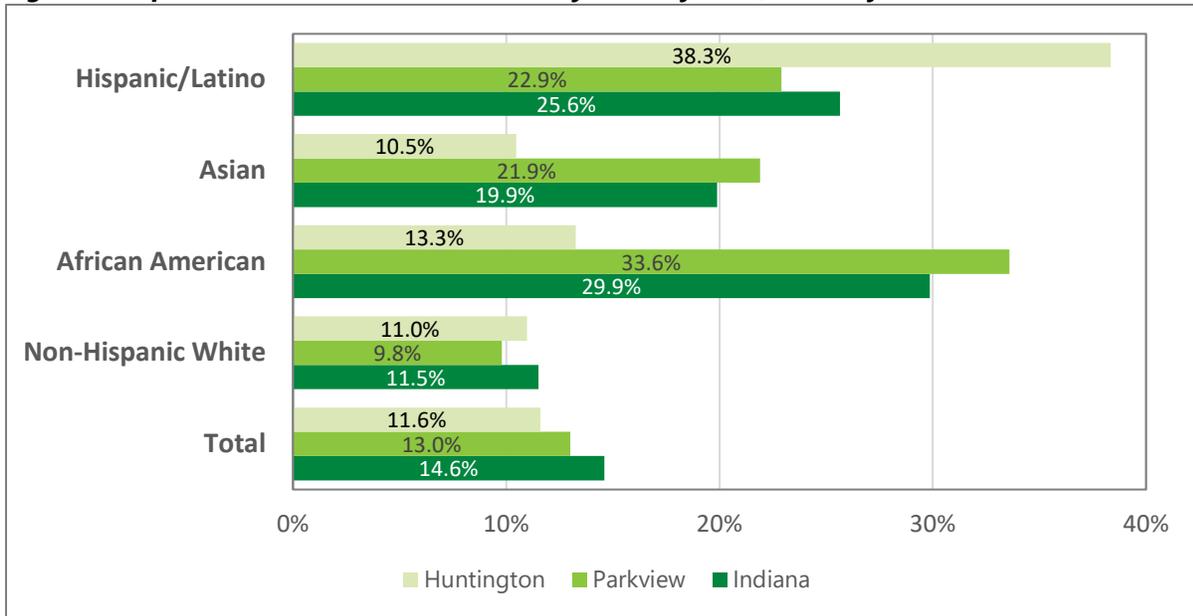
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Unemployment

Unemployment is another important indicator for assessing social and economic status of a geographic area or population. Unemployment in Huntington County is only (3.9%) which is lower than the state (6.1%) (*Table 7*).

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
2017	6.3%	3.9%	4.6%	2.9%	5.7%	5.5%	3.6%	5.6%	6.1%
2014	9.0%	8.7%	7.7%	7.1%	10.0%	7.4%	6.4%	8.6%	8.8%

Table 7: Percentage of Population Unemployed

Source: US Census Bureau (American Community Survey Five-year Averages)

Figure 9: Unemployment Rate by Race/Ethnicity
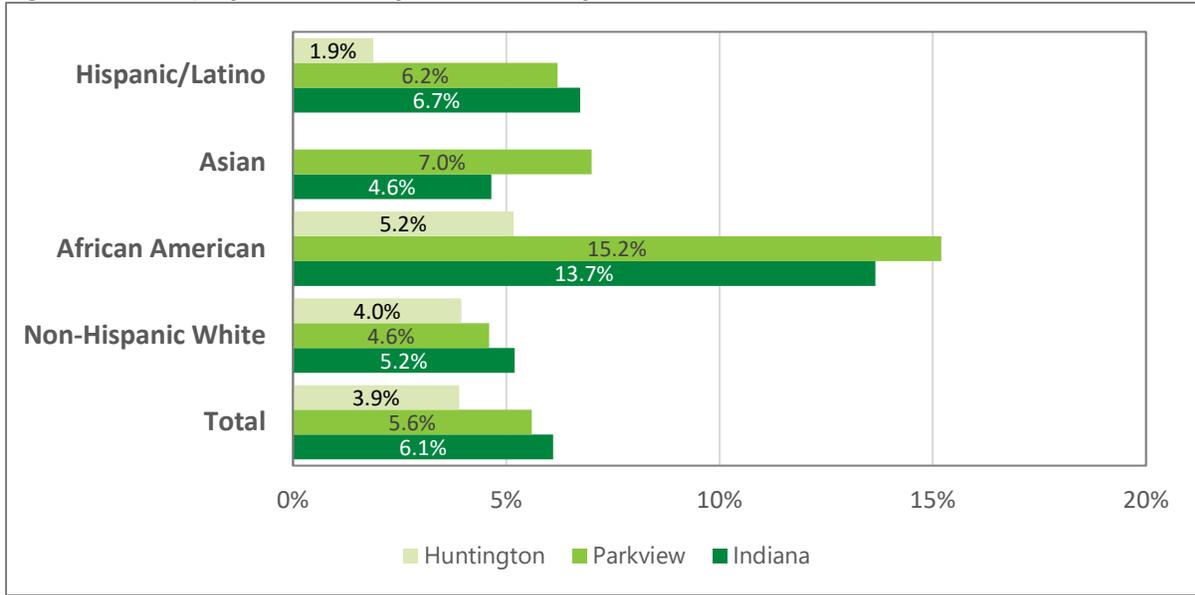
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Education

Education is a powerful predictor of other social measures. Education leads to higher incomes and lower poverty and unemployment, which in turn lead to greater economic stability. Identifying populations with limited education may help to identify areas of special health service needs.

Table 8 shows the percentage of population without a high school diploma or equivalent. The proportion of the population without a high school diploma decreased from 11.1% in 2014 to 9.5% in 2017 for Huntington County. This is lower than the Parkview region (12.7%) and the state (11.7%) (*Table 8*).

Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
2017	10.6%	9.5%	15.2%	36.7%	15.0%	11.3%	8.9%	12.7%	11.7%
2014	10.7%	11.1%	14.9%	36.9%	16.0%	12.0%	8.9%	13.0%	12.4%

Table 8: Population without High School Diploma

Source: US Census Bureau (American Community Survey Five-year Averages)

Figure 10: Percent of Households with No High School Diploma
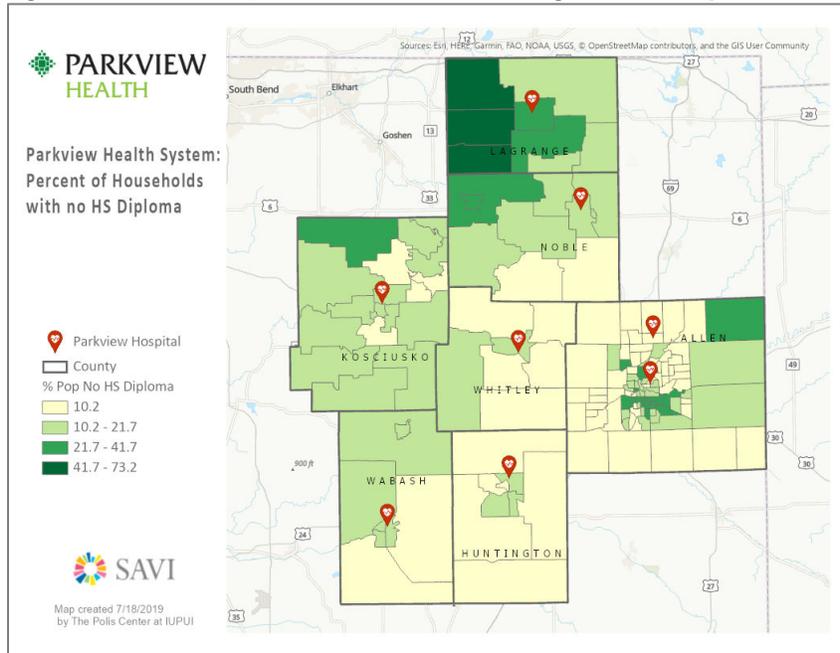
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Overall, the Parkview Health region seems to have almost similar percentage of population without a high school diploma as the rest of the state. However, racial disparities are still seen with educational attainment. (*Figure 11*). A little less than half of the total Hispanic population constitutes of individuals who are without a high school diploma. These are followed by the Asian population where almost a third of the population is without a high school diploma. With these racial minorities already at a disadvantage in terms of income and poverty, this added inequity further deteriorates their chances of attaining good health outcomes.

Figure 11: Population without a High School Diploma by Race/Ethnicity
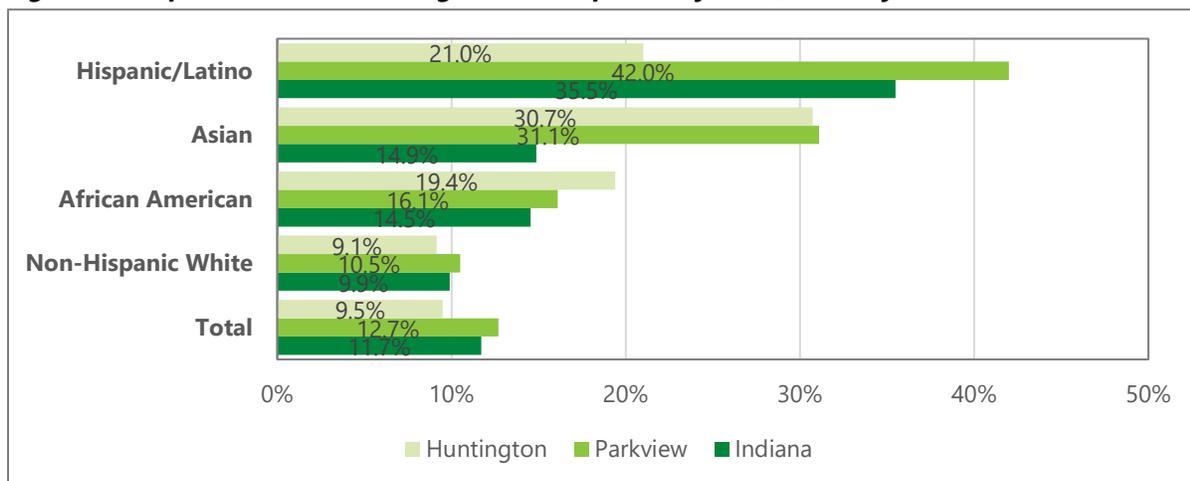
ACCESS TO HEALTHCARE

Access to healthcare is another important social determinant of health. It is commonly measured by lack of access to primary care services and by lack of health insurance.

Medically Underserved Areas and Populations

Medically underserved areas and medically underserved populations identify geographic areas and populations with a lack of access to primary care services. The Health Resources and Services Administration identified several medically underserved *areas (Figure 12,* light green) in the southwest end of the Parkview Health Region. The percentage of medically underserved *populations* were identified mainly in Wabash County (*Figure 12*, darker green).

Figure 12: Medically Underserved Areas and Populations
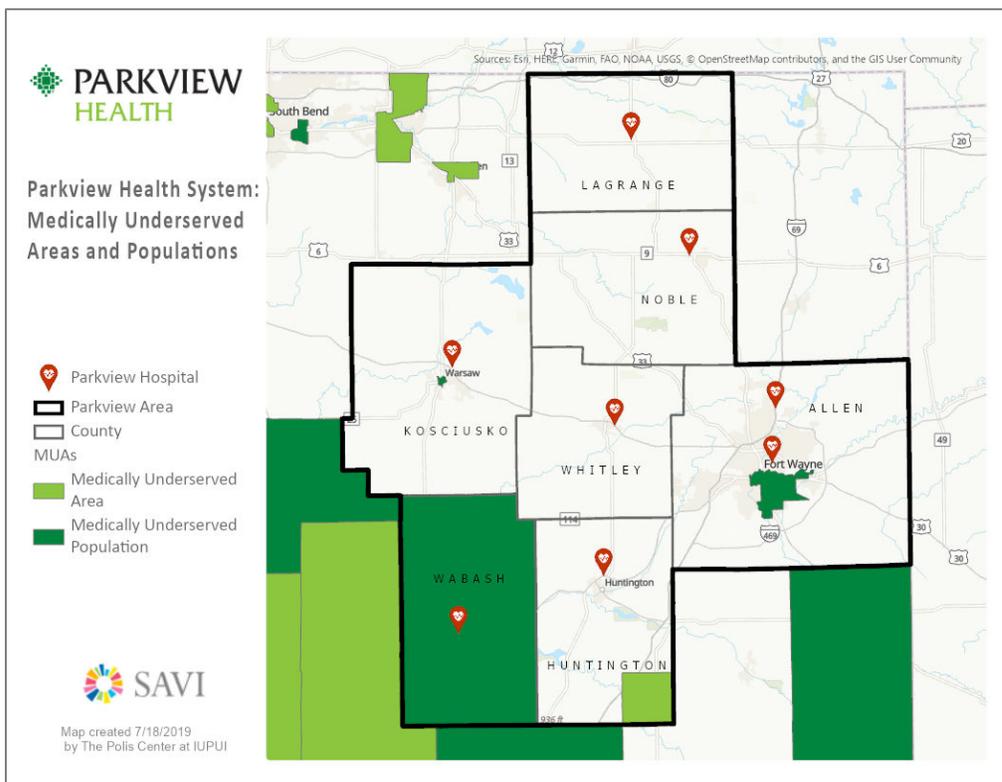
Source: Health Resources & Services Administration, 2019

Health Insurance

The percentage of the population without health insurance in Huntington County is 9.4% which is lower than the Indiana average (10.3%) (*Table 9*). The map in *Figure 13* presents this information at the census tract level to illustrate the geographic distribution of those without health insurance.

Demographic	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Parkview	IN
Population without health insurance	2017	10.8%	9.4%	11.8%	39.7%	9.2%	9.3%	7.6%	12.3%	10.3%
	2014	14.5%	11.8%	15.6%	44.5%	14.8%	10.3%	9.1%	15.8%	13.8%
Adults without health insurance	2017	14.7%	12.2%	15.1%	37.7%	12.1%	13.3%	10.9%	15.4%	14.0%
	2014	19.7%	16.4%	20.2%	45.0%	19.7%	15.0%	12.7%	12.3%	18.9%
Children without health insurance	2017	7.5%	8.3%	10.5%	53.1%	7.1%	6.4%	4.4%	11.2%	7.0%
	2014	9.1%	6.9%	12.8%	56.6%	10.5%	5.6%	5.1%	12.9%	8.2%

Table 9: Health Insurance　　Source: US Census Bureau (American Community Survey Five-year Averages)

Figure 13: Percent of Population with No Health Insurance
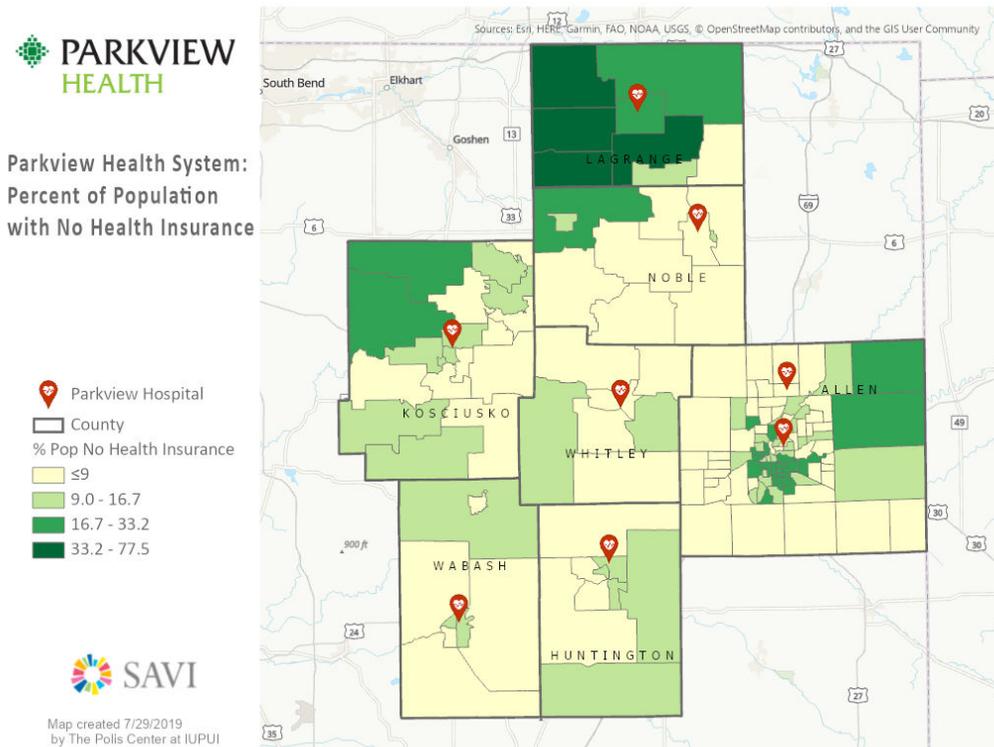
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

Transportation

Transportation is a critical factor that influences people's health and the health of a community. As six of the seven counties in the service area are rural or mixed urban/rural, having a personal vehicle is of utmost importance as lower population density in rural areas often leads to lower ridership for fixed transit routes and a smaller tax base to fund maintenance and repair of transportation systems. The municipal portion of Huntington County has between 5.4% and 13.5% of households without a vehicle, while the more rural areas have ≤ 5.4% households without a vehicle.

Figure 14: Households with No Vehicle
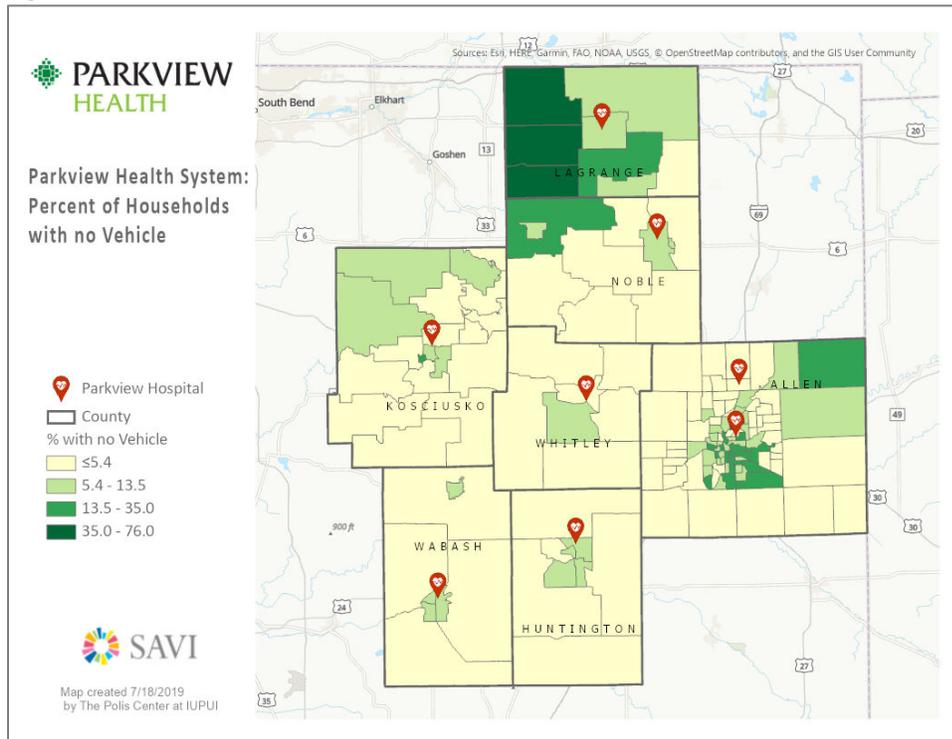
Source: US Census Bureau (American Community Survey 2013-2017 Five-year Averages)

DATA COLLECTION

The identification of health needs for Parkview Health region was carried out using two types of data: 1) secondary data from the Healthy Communities Institute (HCI) dashboard and other local and national agencies (e.g. County Health Rankings, etc.) and 2) primary data obtained through an online survey of Parkview healthcare providers (e.g., physicians, nurses, social workers, etc.) and a survey of community residents in each Parkview Health county. To supplement these data, a focus group was conducted with Hispanic community members in Kosciusko County and a survey of the Amish community was conducted in La Grange County. These data sources are described in the following sections.

SECONDARY DATA

The Parkview Health Community Dashboard developed by HCI was used as a primary source of secondary data. This dashboard includes data from the Indiana Hospital Association as well as the Indiana State Department of Health, National Cancer Institute, Centers for Disease Control and Prevention, Centers for Medicaid and Medicare Services, the National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, Institute for Health Metrics and Evaluation, County Health Rankings website, US Census Bureau, US Department of Agriculture, and other sources. Additional state and national secondary data sources were accessed by the CHNA team for more recent and geographically specific information, including the following:

- **American Community Survey:** The American Community Survey (ACS) helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is the premier source for detailed population and housing information about our nation.
- **Annie E. Casey Foundation:** The Annie E. Casey Foundation is a private philanthropic organization that works to build a brighter future for disadvantaged children in the United States. The KIDS COUNT Data Book offers a national look at the well-being of America's children and families by exploring how states are performing on key data indicators.
- **Center for Disease Control and Prevention:** As a federally-funded agency, CDC serves as a great resource for mortality and morbidity data for all the infectious and chronic diseases and other conditions.
- **County Health Rankings:** A Robert Wood Johnson Foundation program implemented by the University of Wisconsin Population Health Institute that releases new estimates annually measuring health across all US counties. These data are compiled from a variety

of providers and typically combines data across multiple years to release estimates for areas with small populations, such as rural counties.

- **Centers for Medicare & Medicaid Services:** The Centers for Medicare and Medicaid Services (CMS) provides health coverage to more than 100 million people through Medicare, Medicaid, and the Children's Health Insurance Program, and the Health Insurance Marketplace. The CMS seeks to strengthen and modernize the nation's health care system to provide access to high quality care and improved health at lower costs.
- **Feeding America:** A nonprofit organization working to feed America's hungry through foodbanks. Data are compiled from the Current Population Survey, American Community Survey, and Bureau of Labor Statistics to produce food-insecurity reports.
- **Indiana INdicators:** A free data resource providing current Indiana health-related data at the state and county levels and developed by the Indiana State Department of Health, Indiana Hospital Association, and Indiana Business Research Center.
- **Indiana State Department of Health (ISDH):** The ISDH's annual natality report includes information on live births in Indiana as well as a mortality report compiling information on the deaths of Indiana residents.
- **National Cancer Institute:** The National Cancer Institute (NCI) is the federal government's principal agency for cancer research and training. NCI maintain large registries of information about people diagnosed with cancer to help identify important issues that affect cancer patients and survivors.
- **National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention**: The National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention is one of the larger centers at CDC and a federal source of data about sexually transmitted infections and diseases.
- **The National Environmental Public Health Tracking Network:** The Tracking Network brings together health data and environment data from national, state, and city sources and provides supporting information to make the data easier to understand.
- **US Census Bureau:** A leading source of data on the people and economy of the US.
- **2018 Indiana Association of Adult Day Services (IAADS) Survey:** The 5th Annual Indiana Adult Day Center Survey was conducted during the summer of 2018 by the Member Relations Committee of the IAADS Board of Directors. For the first time, centers were given the option to complete the survey online as well as by telephone. Seventy-seven percent of those responding used the online option. Results were tabulated based on individual survey data.

Results of the secondary data analysis are presented in **Secondary Data Analysis** section.

PRIMARY DATA

This assessment used two sources of community input for Huntington County: 1) an online survey of healthcare and social service providers and 2) a phone survey of the broader community. The associated data collection efforts are described below. Results of the provider survey are included in **Provider Survey Results**.

Parkview Provider Survey

An online survey of health and social service providers in the seven-county area in January 2019 to collect provider perceptions about community health needs and concerns. The survey was designed by Polis and FSPH in partnership with Parkview Health and implemented using Qualtrics, an online survey service. The Parkview Community Benefits team collaborated with the leadership team in each hospital to distribute the survey to health and social service providers in their county.

A total of 265 providers responded to the survey. The survey covered aspects of the provider's work including the setting in which they practiced, the duration of time in practice in the region/county, and their perception of the chief public health concerns, barriers to care, and available resources in their communities. The majority of respondents primarily practiced in Allen County (31.3%). Huntington County had the second highest provider survey response. (29.1%) (*Table 10*).

County	Count	% of Respondents
Allen	83	31.3%
Huntington	77	29.1%
Kosciusko	8	3.0%
LaGrange	27	10.2%
Noble	24	9.1%
Wabash	26	9.8%
Whitley	20	7.5%
Total	265	

Table 10: Provider Survey Respondents

Providers were asked about the duration for which they had been in practice in the Parkview area. About one-third (1/3) of the respondents had been in practice for more than 20 years. This suggests that a good proportion of the responding providers had spent most of their careers in the Parkview area and so likely were aware of the community's needs and concerns. A little more than a quarter (27%) of providers were relatively new in the region with one to five years of practice in this region (*Figure 15*).

Figure 15: Years Practiced in Parkview Area (Huntington Respondents)
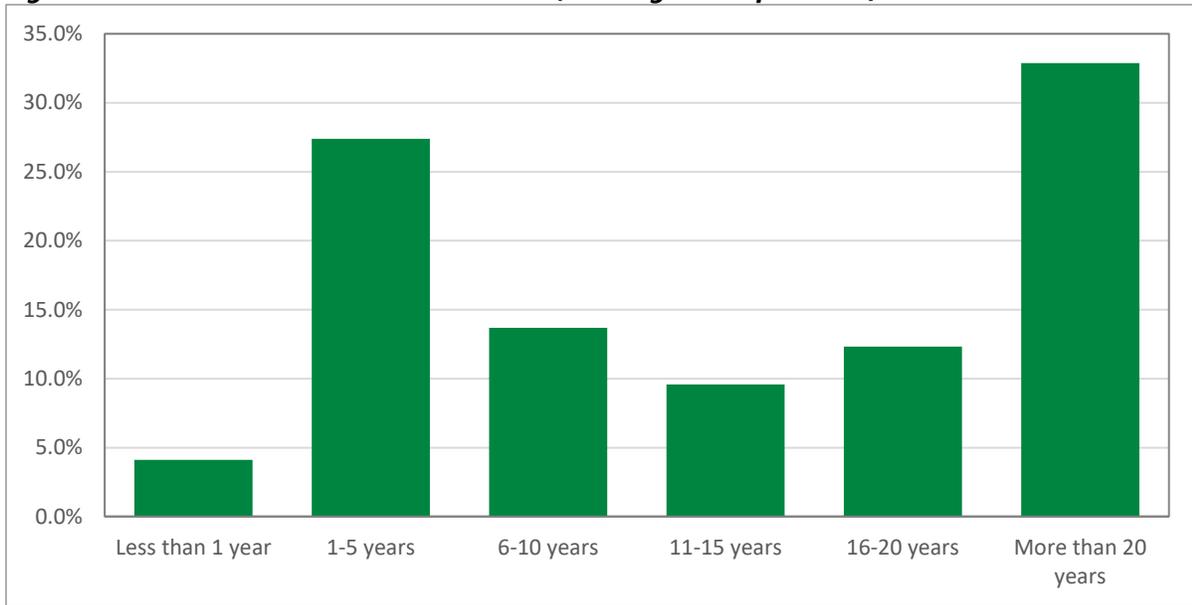
The highest proportion of provider survey respondents in Huntington County were social workers/case managers and nurses (11.7 %), followed by physicians (10.4 %) (*Table 11*).

Profession	Allen (n=83)	Huntington (n=77)	Kosciusko (n=8)	LaGrange (n=27)	Noble (n=24)	Wabash (n=26)	Whitley (n=20)	All (265)
Physician	27.7%	10.4%	12.5%	11.1%	8.3%	11.5%	10.0%	**15.8%**
Physician's Assistant	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	**0.8%**
Nurse Practitioner	25.3%	2.6%	0.0%	0.0%	0.0%	7.7%	0.0%	**9.4%**
Registered Nurse	3.6%	11.7%	0.0%	22.2%	16.7%	11.5%	15.0%	**10.6%**
Mental/Behavioral Health	7.2%	1.3%	0.0%	3.7%	0.0%	3.8%	0.0%	**3.4%**
Nutritionist	0.0%	2.6%	0.0%	0.0%	8.3%	0.0%	0.0%	**1.5%**
Wellness Practitioner	1.2%	9.1%	0.0%	3.7%	4.2%	0.0%	0.0%	**3.8%**
Public Health/Community Health Practitioner	3.6%	5.2%	0.0%	3.7%	4.2%	7.7%	5.0%	**4.5%**
Social Worker/Case Management	10.8%	11.7%	25.0%	3.7%	16.7%	15.4%	15.0%	**12.1%**
Educator/Counselor	0.0%	6.5%	25.0%	18.5%	8.3%	7.7%	10.0%	**6.8%**
First Responder	0.0%	5.2%	0.0%	0.0%	4.2%	3.8%	0.0%	**2.3%**
Other Health	3.6%	9.1%	0.0%	0.0%	0.0%	7.7%	0.0%	**4.5%**
Other Social Services	3.6%	3.9%	0.0%	3.7%	8.3%	3.8%	0.0%	**3.8%**
Other	4.8%	9.1%	12.5%	18.5%	8.3%	15.4%	25.0%	**10.6%**
No response to this question	7.2%	11.7%	25.0%	11.1%	12.5%	3.8%	15.0%	**10.2%**

Table 11: Respondents by Provider Type

Community Survey

A community phone survey was conducted from April through June 2019 by the Survey Research Lab at the School of Public Health at the University of Alabama School, a partner of the Richard M. Fairbanks School of Public Health). The survey was designed to collect community perspectives on the top community health issues in the Parkview Health service area. A random, population sample of 700 individuals was selected from the seven-county Parkview Health service area (*Figure 16*).

Figure 16: Community Survey Respondents by ZIP Code
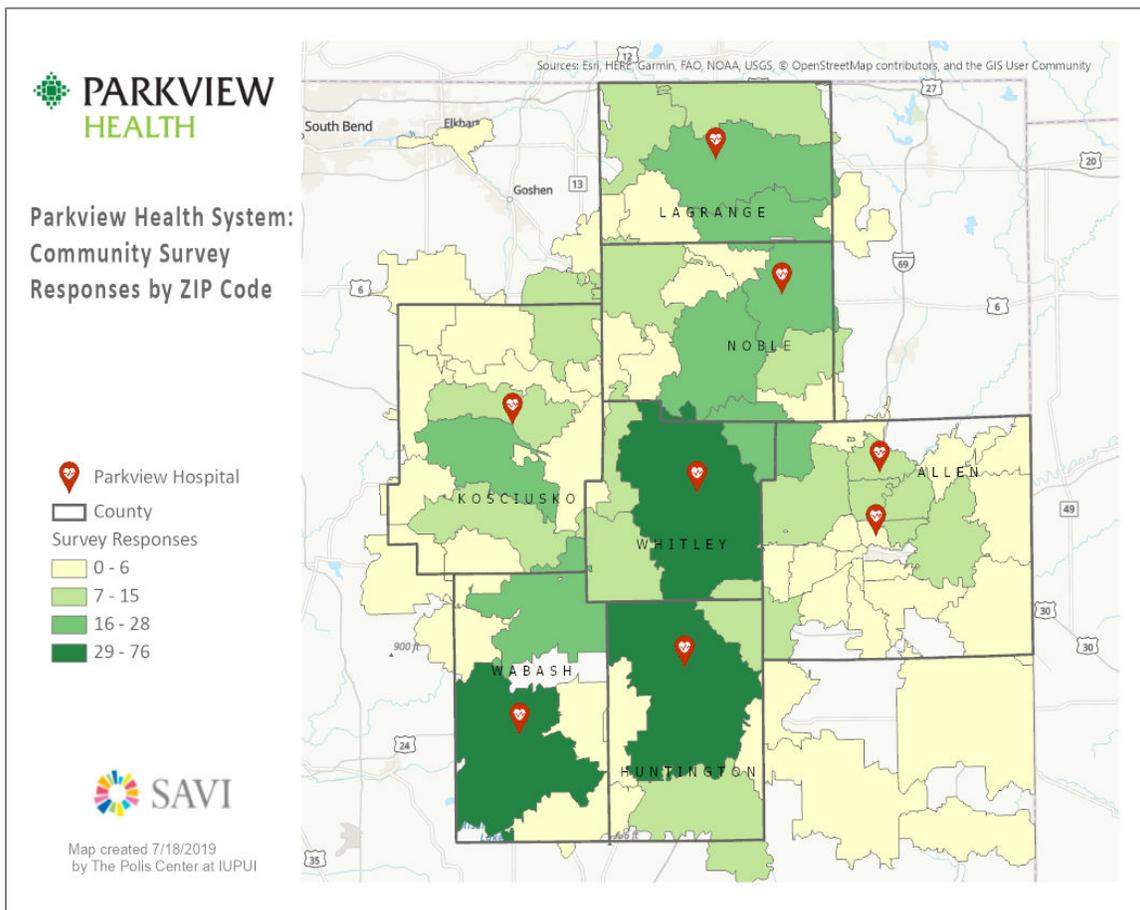
One question asked respondents to choose what they perceived as top health concerns in their community. A second question asked respondents to indicate how important listed health and community services were for their community.

The survey results were algorithmically weighted to control for differences in the demographic makeup of survey participants compared to the total population of each region. Results of the community survey are included in **Community Survey Results.**

SECONDARY DATA ANALYSIS

COMMUNITY HEALTH ISSUES

Based on the review of more than two hundred (200) HCI indicators, *Table 12*: County Health Indicators Performing in Bottom Quartile of State lists the health outcomes and behavior for which any county in the Parkview Health primary service area was in the lowest performing quartile of Indiana counties. Each of these indicators was included in the assessment of community health problems and potential community health priorities.

Thirty-six (36) HCI health indicators were in the bottom performing quartile. Some HCI health indicators relate to the same health condition (e.g., incidence rate and age-adjusted death rate for breast cancer). If at least one indicator for a specific health condition was in the bottom quartile, then that condition was considered a potential community health concern for Parkview Health. For example, breast cancer incidence rate was not in the bottom quartile for Kosciusko County, but the age-adjusted rate of breast cancer was. As such, breast cancer is considered a health concern for Kosciusko County. Indicators that were duplicative in terms of identifying a health condition as being of concern were removed, thus reducing the number of health indicators used for the CHNA to 28 indicators. The 28 indicators were categorized into 15 general health concerns, as shown in *Table 12*: County Health Indicators Performing in Bottom Quartile of State.

Associated rates for each of these indicators are included in **Appendix B** in the Size of Health Problem column.

Table 12: County Health Indicators Performing in Bottom Quartile of State

Health Issue (in alphabetical order)	Health Indicator	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Aging	Alzheimer's Disease or Dementia *						X	
	Osteoporosis*		X					
Alcohol Use	Alcohol-Impaired Driving Deaths	X					X	
Asthma	Asthma*	X	X	X			X	
Cancer	Breast Cancer‡			X			X	
	Oral Cavity and Pharynx Cancer†							X
	Prostate Cancer‡					X	X	X
Cardiovascular Disease	Cerebrovascular Disease (Stroke) ‡					X		
	Coronary Heart Disease‡						X	
	Hyperlipidemia: Medicare Population		X				X	
Chronic Kidney Disease	Chronic Kidney Disease*		X					
Respiratory Diseases	Chronic Lower Respiratory Diseases‡		X			X		
Diabetes	Diabetes‡						X	
Drug Use	Controlled Substances Dispensed				X			
	Non-Fatal ED Visits due to Opioid Overdoses						X	
Infectious Diseases	Salmonella Infection†		X	X		X	X	X
	Influenza and Pneumonia‡		X				X	
	Gonorrhea†	X						
	Chlamydia†	X						
	Hepatitis C Prevalence						X	
Maternal/Child Health	Mothers Who Did Not Receive Early Prenatal Care	X		X	X	X		
	Child Abuse Rate						X	
	Babies with Low Birth Weight		X					
Mental Health	Depression*	X						
Obesity	Adults 20+ who are Obese			X	X			
Tobacco Use	Adults who Smoke		X					
	Mothers who Smoked During Pregnancy						X	
Unintentional Injuries	Unintentional Injuries‡						X	
County		Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
# Indicators in the Lowest Quartile in the State		6	9	5	3	5	15	3

*Medicare population. †Incidence Rate. ‡Age-Adjusted Death Rate.   Data Source: Parkview Health Community Dashboard, 2019.

Aging

Alzheimer's disease is a chronic, incurable, progressive disorder that affects and disrupts cognition and eventually renders the patient unable to perform basic tasks. Most people with Alzheimer's begin to present symptoms in their 60s. Osteoporosis is an incurable disease that causes bones to become brittle leading to bone fracture and other complications ("FastStats - Osteoporosis," n.d.). It is most common in post-menopausal women. *Table 14* shows that Huntington County has relatively higher rates of Alzheimer's disease and Osteoporosis than some of the other counties in the region.

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Alzheimer's Disease‡ (per 100,000)	2017	36.6	24.5	27.2	37.3	30.3	46.0	23.9
	2014	30.1	23.1	33.3	25.5	38.9	25.8	20.0
Alzheimer's Disease or Dementia* (%)	2017	11.4%	11.1%	10.3%	10.7%	9.7%	12.7%	10.2%
	2014	11.0%	10.5%	9.5%	8.3%	7.9%	10.4%	9.0%
Osteoporosis* (%)	2017	5.9%	7.1%	4.9%	4.9%	4.8%	6.3%	5.1%
	2014	5.7%	6.5%	4.5%	4.7%	5.2%	6.4%	4.6%

Table 13: Aging   *Medicare population. ‡Age-Adjusted Death Rate*

Cancer

Cancer (the suite of diseases resulting in abnormally and often uncontrollable growth of malignant cells) collectively forms the second leading cause of death in the United States. Although, overall mortality due to cancer continues to decline, it is still the second leading cause of death ("Cancer Data and Statistics | CDC," 2019). *Table 15* compares the rates of cancer in each county. The age adjusted death rates for breast, oral cavity and pharynx and prostate cancer have decreased in Huntington County from 2014 to 2017.

Table 14: Cancer (per 100,000)

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Breast Cancer‡	2015	23.2	21.4	28.3	18.8	23.8	25.7	17.9
	2014	25.9	25.7	28.0	16.9	22.5	24.3	19.3
Colorectal Cancer‡	2015	14.8	17.5	18.6	12.0	15.7	15.4	12.3
	2014	15.6	17.0	16.2	10.9	16.9	13.2	13.1
Oral Cavity and Pharynx	2015	11.6	7.7	11.2	11.2	12.7	11.7	17.4
	2014	11.3	9.1	10.9	N/A	11.3	13.8	8.1
Prostate Cancer‡	2015	22.2	17.3	23.1	22.7	26.4	27.0	31.5
	2014	21.4	24.8	23.8	N/A	31.0	28.5	39.9

†Incidence Rate. ‡Age-Adjusted Death Rate.

Cardiovascular Disease

Heart disease is the leading cause of death according to the CDC ("Heart Disease Facts & Statistics | cdc.gov," 2018). The most common of these is coronary artery disease, which can lead to heart attack ("Heart Disease Facts & Statistics | cdc.gov," 2018). Heart disease affects populations of all races and genders, and usually occurs in middle age.

Table 15: Cardiovascular Disease (per 100,000)   *Medicare Population. ‡Age-Adjusted Death Rate*

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Coronary Heart Disease‡	2017	85.1	99.6	93.0	92.7	96.1	120.1	90.6
	2014	90.7	101.7	92.7	77.1	119.3	97.6	98.0
Stroke‡	2017	36.5	42.6	38.3	34.8	46.2	45.5	37.9
	2014	39.2	63.2	41.9	54.1	46.8	35.5	27.3
Heart Attacks‡	2016	61.5	62.0	68.9	57.7	55.7	99.3	60.9
	2014	69.4	69.1	71.5	62.6	62.0	96.8	68.8
Hyperlipidemia *(%)	2017	39.4%	44.4%	42.1%	37.4%	35.3%	44.5%	39.2%
	2014	42.8%	43.5%	45.1%	41.0%	41.3%	41.1%	41.0%
Stroke* (%)	2017	3.9%	3.4%	3.6%	2.2%	3.2%	3.3%	2.8%
	2014	3.9%	3.2%	3.1%	2.6%	2.8%	3.2%	3.1%

Chronic Kidney Disease

Chronic kidney disease is a gradual loss of kidney function. In the early stages of this disease, it is possible that very few signs or symptoms will be present, but the disease can lead ultimately to kidney failure and death (*National Chronic Kidney Disease Fact Sheet, 2017*, n.d.). *Table 17* shows that Huntington County had the highest age-adjusted death rate for kidney disease in 2014 and 2017, as well as the highest prevalence of chronic kidney disease among the Medicare population in the same years compared to the other six Parkview counties.

Table 16: Chronic Kidney Disease   *Medicare population. ‡Age-Adjusted Death Rate*

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Chronic Kidney Disease*	2017	24.7%	28.8%	23.6%	21.4%	23.8%	24.4%	22.2%
	2014	18.0%	21.8%	16.1%	14.0%	14.9%	17.5%	16.3%
Kidney Disease‡ (per 100,000)	2017	21.8	27.6	13.1	N/A	23.4	16.3	20.6
	2014	24.9	31.2	15.1	N/A	18.5	15.5	N/A

Diabetes

Diabetes is a group of diseases which affect the way the body uses blood sugar. A diabetes diagnosis means a person has too much blood sugar, which can lead to other more serious health complications ("Diabetes and Prediabetes | CDC," n.d.) (*Table 18)*. Huntington County has the highest age adjusted death rate for diabetes (30.8%).

Table 17: Diabetes   ‡Age-Adjusted Death Rate. *Medicare population

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Diabetes‡ (per 100,000)	2017	27.2	30.8	30.2	26.3	29.9	28.9	22.0
	2014	21.8	18.1	30.3	25.9	32.4	45.3	26.2
Diabetes* (%)	2017	26.3	27.8	27.4	26.5	27.2	29.4	26.7
	2014	25.3	26.5	27.4	25.8	26.6	27.2	24.4

Drug and Alcohol Abuse and Addiction

Drug use and dependence can cause accidental death, unintentional injury, or other health problems. Substance abuse is preventable and may be treatable. According to the CDC, excessive alcohol use can lead to an increased risk of health problems, such as liver disease ("CDC - Fact Sheets-Alcohol Use And Health: Alcohol," 2018) and unintentional injuries. Allen County had the highest percentage of adults who drink excessively at 18.7% in 2017 as well as the highest percentage of alcohol-impaired driving deaths at 33.3% (*Table 19*). The rate of non-fatal emergency department visits due to opioid overdoses increased notably in Huntington County from 2014 to 2017.

Table 18: Substance Abuse

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Adults who Drink Excessively (%)	2016	18.7%	17.7%	17.3%	18.2%	17.8%	16.9%	18.0%
	2014	16.2%	15.6%	16.3%	16.4%	15.8%	14.9%	16.1%
Alcohol-Impaired Driving Deaths (%)	2017	33.3%	17.4%	16.7%	15.0%	9.4%	29.0%	22.2%
	2014	30.2%	4.6%	36.6%	34.2%	11.1%	23.7%	29.2%
Non-Fatal ED Visits - Opioid Overdoses ^	2017	88.8	107.3	98.5	N/A	56.7*	159.0	137.5*
	2014	13.9	65.5**	28.0	N/A	N/A	77.8**	N/A
Controlled Substances Dispensed ^^	2016	0.8	1.0	0.9	3.3	0.9	1.2	1.0
	2014	1.5	1.9	1.6	0.9	1.7	2.0	1.9
Substance Abuse Treatment Rate: Alcohol ^	2015	198.9	122.9	165.4	172.6	184.4	329.8	110.8
	2014	197.9	92.6	113.3	179.5	182.7	257.3	104.8

*2016 data. **2015 data. ^per 100,000. ^^per capita

Food Safety

Salmonellosis is an infection with Salmonella bacterium. Salmonella are usually transmitted to humans by eating foods contaminated with animal feces. Contaminated foods are often of animal origin, such as beef, poultry, milk, or eggs, but any food, including vegetables, may become contaminated. Most persons infected with Salmonella develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection ("Salmonella Homepage | CDC," 2019). The illness usually lasts four to seven days, and most persons recover without treatment. *Table 20 i*ndicates that the highest rate of salmonella infection in 2017 was in Whitley County at 23.7 per 100,000 population (*Table 20*). Huntington County had a salmonella infection rate of 16.5 per 100,000 (*Table 20*).

Table 19: Food Safety (per 100,000).

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Salmonella Infection†	2017	13.1	16.5	20.2	15.3	16.9	22.3	23.7
	2014	7.9	24.7*	17.8	28.1*	21.0	15.7*	23.9**

*2016 data. **2015 data. †Incidence Rate.

Infectious Disease

Hepatitis C and influenza are types of infectious diseases caused by viruses. Hepatitis C is a contagious liver disease ranging from mild to severe illnesses transmitted primarily from the sharing of needles. Influenza is a contagious disease that in most cases causes the complication of pneumonia. Wabash County had the highest prevalence rate of Hepatitis C in 2017 and 2014, 194.0 and 77.5, respectively. In 2017, Huntington County had the highest age-adjusted death rate of influenza and pneumonia i.e., 27.7 per 100,000 population, among the counties for which data were reported. (*Table 21*).

Table 20: Infectious Disease (per 100,000)   *2012 data. ‡Age-Adjusted Death Rate.*

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Hepatitis C Prevalence	2017	83.1	82.6	72.0	N/A	48.5	194.0	N/A
	2014	65.6	54.5	39.5	N/A	52.5	77.5	N/A
Influenza / Pneumonia‡	2017	9.3	27.7	17.0	N/A	15.7	19.3	N/A
	2014	12.4	18.7	16.5	N/A	18.0	17.0	20.6*

Maternal, Infant, and Child Health

Maternal, infant, and child health care is a broad category which encompasses a variety of health indicators related to pregnancy, birth, and complications at the time of and immediately following birth. Affected populations include mothers and their children. Although all county percentages decreased for mothers who did not receive prenatal care during the first trimester of pregnancy, LaGrange County had the highest percentage (56.2%) and Huntington County had the lowest (23.6%). In contrast, Huntington County had the highest percentage of preterm births (11.1%) and LaGrange County had the lowest percentage of mothers who smoked during pregnancy (6.2%). The rate of child abuse cases per 1,000 children was highest in 2017 and 2014 in Wabash County, 26.3 and 26.9, respectively (*Table 22*).

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Babies with Low Birth Weight (%)	2017	8.8%	9.7%	6.7%	6.9%	5.7%	7.9%	5.8%
	2014	9.4%	7.0%	7.6%	5.6%	6.2%	9.1%	7.3%
Child Abuse Rate§	2015	10.3	16.6	8.4	10.2	18.1	26.3	13.3
	2014	8.9	20.7	6.8	11.6	11.5	26.9	10.2
Mothers with no prenatal care in 1st trimester (%)	2017	41.6%	23.6%	55.7%	56.2%	37.7%	28.2%	30.8%
	2014	45.2%	32.2%	63.8%	62.1%	38.4%	36.1%	32.8%
Mothers who Smoked During Pregnancy (%)	2017	10.3%	21.5%	15.1%	6.2%	16.7%	26.3%	14.1%
	2014	10.3%	16.8%	15.6%	6.7%	19.0%	25.2%	17.5%
Preterm Births (%)	2017	9.6%	11.1%	8.4%	7.7%	6.5%	10.1%	9.2%
	2014	10.1%	7.2%	9.0%	5.6%	8.7%	9.4%	8.7%

Table 21: Maternal/Infant/Child Health   §Cases per 1,000 children.

Mental Health

Depression is a serious illness that affects an individual's ability to perform daily tasks or cope with daily life. Individuals with depression are at higher risk for other mental illnesses, injury, or death ("NIMH » Depression," n.d.). Depression is also linked to economic and social burdens, which may perpetuate depressive episodes. Depression among the Medicare population was second highest in 2017 for Huntington County (20.8%) (*Table 23*).

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Depression* (%)	2017	21.2%	20.8%	18.4%	17.8%	19.8%	19.7%	18.1%
	2014	20.7%	18.2%	16.4%	16.7%	19.0%	15.4%	18.1%

Table 22: Mental Health   *2012 data. ‡Age-Adjusted Death Rate.

Obesity

Obesity (having a body mass index greater than 30.0) affects all age groups and disproportionately affects people of lower socioeconomic statuses and racial/ethnic groups. There are many complications that can occur as a direct or indirect result of obesity. *Table 24* shows the percentage of adults who are obese.

Table 23: Obesity

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Adults 20+ who are Obese (%)	2015	31.6%	33.9%	36.4%	36.8%	33.2%	34.2%	35.4%
	2014	28.7%	31.9%	34.3%	34.1%	33.9%	32.7%	36.6%

Respiratory Diseases

Respiratory diseases affect the lungs and other parts of the respiratory system. Chronic lower respiratory disease (CLRD) refers to a diverse group of disorders, such as asthma, emphysema, bronchitis, and chronic obstructive pulmonary disease. Asthma is a chronic, incurable disease which causes many symptoms that make breathing difficult ("CDC - Data and Statistics - Chronic Obstructive Pulmonary Disease (COPD)," 2019). The disease burden is high due to expensive and potentially life-long costs associated with managing symptoms of asthma.

Table 25 shows the percentage of the Medicare population who have asthma. Since 2014, the percentage of asthma among the Medicare population has increased in four counties. The age-adjusted death rate for CLRD was highest in 2017 and 2014 for Noble County (72.7 and 78.3, respectively)

Table 24: Respiratory Disease (per 100,000)   **Medicare population. ‡Age-Adjusted Death Rate.*

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Asthma* (%)	2017	6.1%	6.6%	5.6%	3.5%	5.0%	5.7%	5.0%
	2014	5.6%	6.0%	4.5%	3.6%	5.5%	4.8%	5.5%
Chronic Lower Respiratory Diseases‡	2017	50.3	69.4	53.4	50.2	72.7	54.7	49.4
	2014	54.5	58.6	63.3	48.1	78.3	64.7	54.7

Sexually Transmitted Infections

Chlamydia and gonorrhea are two common sexually transmitted diseases (STD) that, in some cases, present no symptoms, but can lead to serious health problems if left untreated ("Chlamydia - STD information from CDC," 2019; "Gonorrhea - STD information from CDC," 2019) . Younger populations, those with multiple partners, and those who do not use a condom during sex are at high risk to contract these and other sexually transmitted infections. Those who have or have had sexually transmitted infections in the past are at even greater risk. Allen County had the highest incidence rates of chlamydia and gonorrhea in both 2017 and 2014 (*Table 26*). Huntington County had an increase in both the chlamydia and gonorrhea incidence rates from 2014 to 2017 (*Table 26*).

Table 25: Sexually Transmitted Infections (per 100,000)

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Chlamydia†	2016	597.9	294.8	281.1	118.5	331.0	227.1	317.3
	2014	514.6	252.8	198.8	60.5	250.2	182.3	144.2
Gonorrhea†	2016	188.1	43.7	64.9	10.3	60.8	34.2	35.9
	2014	151.8	19.0	62.9	7.9	46.2	12.4	15.0

†Incidence Rate.

Tobacco Use/Smoking

Smoking is the leading cause of preventable death (CDC Tobacco Free, 2017). People of all ages, races, and genders are susceptible to the effects of smoking and secondhand smoke. *Table 27* shows the adult smoking rate. The rates for adults who smoked had a 0.3% increase for Huntington County from 2014- 2016.

Table 26: Smoking

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Adults who Smoke (%)	2016	18.8%	21.8%	18.7%	20.7%	20.8%	18.9%	18.6%
	2014	20.4%	21.5%	18.5%	22.2%	20.4%	19.2%	18.1%

Prevention and Safety

Unintentional injuries are a leading cause of death for Americans of all ages, regardless of gender, race, or economic status. Major categories of unintentional injuries include motor vehicle collisions, poisonings, and falls. *Table 28* shows that data for motor vehicle injuries for Huntington County is not available. The unintentional injuries death rate per 100,000 has seen an increase in Huntington County from 2014 to 2017, 41.7 to 53.8, respectively.

Table 27: Prevention and Safety (per 100,000)   *2012 data. ‡Age-Adjusted Death Rate*

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Motor Vehicle Traffic Collisions‡	2017	10.2	N/A	14.1	N/A	N/A	28.7	N/A
	2014	8.7	N/A	12.0	19.2*	14.7*	34.6	N/A
Unintentional Injuries‡	2017	50.6	53.8	51.4	26.1	44.9	74.0	47.6
	2014	39.0	41.7	42.0	33.5	49.7	59.9	35.2

SOCIAL DETERMINANTS OF HEALTH (SDOH)

Social determinants of health are the conditions in which people are born, grow, live, work and age. These indicators affect a wide range of health risks and outcomes (Artiga, May 10, 2018). SDOH include factors like socioeconomic status, education, neighborhood, physical environment, employment, and social support networks, as well as access to health care. The effect of individual social determinants of health is difficult to discern as these factors are interdependent and interconnected. Evidence shows that poverty limits access to food, safe neighborhoods, and better education. On the other hand, poorer neighborhoods are severely affected by food insecurities and lower educational status. These ultimately lead to poor health outcomes and reduced life expectancies. A person's ZIP Code can affect his or her health which ultimately leads to a concentration of health disparities in geographical locations identified as poor neighborhoods. Considering the Maslow's Hierarchy of Needs pyramid, it is evident that basic needs like food, shelter, safety, and security serve as the basis of better overall physical and mental health of individuals (Mcleod, n.d.). Focused social determinants of health, also referred to as "upstream" factors by the public health sector, decrease the risk of diseases and the predisposing behavioral and other risk factors (Booske, Athens, Kindig, Park, & Remington, n.d.). *Table 29* and *Table 30* list the social indicators and access indicators, respectively, for which counties in the Parkview region are in the bottom-performing quartile.

Table 28: County Social Indicators in Bottom-Performing Quartile of State

Social Issue	Indicator	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Economy	Households with Cash Public Assistance Income						X	
	Per Capita Income				X			
Education	4th Grade Proficiency in English/Language Arts					X		
	4th Grade Proficiency in Math						X	
	8th Grade Proficiency in English/Language Arts					X	X	
	High School Graduation						X	
	People 25+ w/ a Bachelor's Degree or Higher				X			
	People 25+ w/ a High School Degree or Higher			X	X	X		
	Student-to-Teacher Ratio	X						X
Employment	Female Population 16+ in Civilian Labor Force				X			
	Total Employment Change			X				X
Social Environment	Households w/ Internet Subscription				X			
	Households w/ >=1 Types of Computing Devices				X			
	People 65+ Living Alone	X						
	Voter Turnout: Presidential Election	X				X		
County		**Allen**	**Huntington**	**Kosciusko**	**LaGrange**	**Noble**	**Wabash**	**Whitley**
# Indicators in Lowest Quartile in State		3	0	2	6	4	4	2

Data Source: Parkview Health Community Dashboard, 2019.

Table 29: County Access Indicators in Bottom Performing Quartile of State

Issue	Access Indicator	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Access to Health Services	Adults with Health Insurance: 18-64			X	X	X		
	Persons with Health Insurance			X	X	X		
	Children with Health Insurance			X	X			
	Clinical Care Ranking			X	X	X		
	Non-Physician Primary Care Provider Rate†				X	X	X	X
	Primary Care Provider Rate†				X	X		
	Dentist Rate†				X			
	Mental Health Provider Rate†				X			
	Preventable Hospital Stays*					X		
Food Access	Food Insecure Children Likely Ineligible for Assistance							X
	Food Insecurity Rate	X						
	Children with Low Access to a Grocery Store	X						
	Low-Income and Low Access to a Grocery Store	X	X					
	People 65+ with Low Access to a Grocery Store	X	X					
	People with Low Access to a Grocery Store	X	X					
	Households w/o Car & Low Access to Grocery Store				X			
	Fast Food Restaurant Density		X				X	
	SNAP Certified Stores			X		X		
Access to Safe and Healthy Environment	Physical Environment Ranking				X	X		
	Houses Built Prior to 1950		X				X	
	Violent Crime Rate	X						
	Access to Exercise Opportunities				X			
Housing Affordability and Supply	Homeownership				X			
	Spending >=30% Household Income on Rent		X					
	Severe Housing Problems			X				
Transportation	Households without a Vehicle			X				
	Workers Commuting by Public Transportation				X	X		
	Workers who Drive Alone to Work						X	X
	Workers who Walk to Work	X						X
County		**Allen**	**Huntington**	**Kosciusko**	**LaGrange**	**Noble**	**Wabash**	**Whitley**
# Indicators in the Lowest Quartile in the State		7	6	7	13	9	4	4

*Medicare population. †Providers per 100,000 population. Data Source: Parkview Health Community Dashboard, 2019.

Access to Health Services

Access to comprehensive, quality healthcare services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans. LaGrange County had the lowest percentage of adults with health insurance ages 18-64, children with health insurance, dentist rate, mental health provider rate, persons with health insurance, and primary care provider rate (*Table 31*). LaGrange County is also home to a large Amish population who may be using other means of healthcare mentioned in these categories.

Table 30: Access to Health Services

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Adults with Health Insurance: 18-64 (%)	2017	89.0%	91.0%	87.0%	75.7%	88.0%	89.5%	90.3%
Children with Health Insurance (%)	2017	93.2%	95.0%	91.0%	74.7%	93.2%	94.3%	94.2%
Dentist Rate†	2017	64	41	32	23	27	41	41
Mental Health Provider Rate†	2018	164	63	144	28	82	198	66
Non-Physician Primary Care Provider Rate†	2018	143	69	43	33	21	25	18
Persons with Health Insurance (%)	2017	90.3%	92.1%	88.2%	75.1%	89.6%	90.8%	91.4%
Preventable Hospital Stays* (per 1,000)	2015	52.5	67.0	59.2	55.6	79.2	50.7	40.8
Primary Care Provider Rate†	2016	65	63	40	26	27	41	54

*Medicare population. †Providers per 100,000 population.

Built/Physical Environment

The built environment is the space in which we live, work, learn, and play. It includes workplaces and housing, businesses and schools, landscapes and infrastructure. Built environment influences the public's health, particularly in relation to chronic diseases.

Despite significant evidence that an active lifestyle along with proper nutrition and reduced exposure to toxic conditions can lower the burden of chronic disease, our built environments are not well-designed to facilitate healthy behaviors or create good health conditions. LaGrange County had the lowest access to exercise opportunities (26.4%) while Allen County had the highest (78.5%) (*Table 32*). Huntington County had the highest percent of households built prior to 1950, at 45.8%. Households built prior to 1950 could be a concern for the public's health if they have not undergone substantial updates to remove lead-based paint.

This type of paint is a toxin that causes nervous system damage, stunted growth, and delayed development.

Table 31: Built/Physical Environment

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Access to Exercise Opportunities	2019	78.5%	76.3%	67.4%	23.4%	64.0%	67.7%	57.4%
Households Built Prior to 1950	2013-2017	19.6%	45.8%	22.8%	25.3%	30.5%	44.1%	28.0%

*Households.

Economy

The lower one's income, the higher the risk of disease and premature death. As shown in *Table 33,* per capita income in Parkview Region is highest in Whitley County ($28,073) and lowest in LaGrange County ($22,780). The highest percentage of population with Cash Public Assistance is in Wabash (2.3%) and lowest in Whitley County (0.9%).

Among minorities, income is one of the driving forces behind health disparities. Racial health disparities observed among non-Hispanic Whites, Blacks, and Hispanics are minimized by the disparities due to income observed within each racial group. That is, higher-income Blacks, Hispanics, and Native Americans have better health than members of their groups with less income and this income gradient appears to be more strongly tied to health than their race or ethnicity.

Table 32: Economy

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Asset Limited, Income Constrained, Employed*	2016	22.1%	26.5%	28.4%	29.3%	25.7%	25.0%	21.5%
Cash Public Assistance Income (%)*	2013-2017	2.2%	1.7%	1.8%	1.0%	1.5%	2.3%	0.9%
Per Capita Income ($)	2013-2017	$26,932	$24,222	$27,884	$22,780	$25,260	$24,700	$28,073

*Households.

Education

Education has an indirect effect on the health of individuals. Education is important for higher-paid jobs, economic productivity and a healthier population. Educational attainment not only defines income status and job opportunities; it also affects life expectancy. Between 1990 and 2008, the life expectancy gap between the most and least educated Americans grew from 13 to 14 years among males and from 8 to 10 years among females (Rosoff & Lohoff, 2019). The gap has widened since the 1960s. Individuals with low educational attainment levels have a higher risk of heart disease, diabetes, and diminished physical abilities due to health reasons, or are disabled. They also tend to have higher rates of risky behaviors like smoking, drinking, and illicit drug use. *Table 34* shows educational attainment level in the Parkview region.

Table 33: Education

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
4th Grade Students Proficient in English/Language Arts (%)	2017	63.2%	74.4%	65.0%	65.4%	58.0%	69.4%	64.2%
4th Grade Students Proficient in Math (%)	2017	56.9%	62.9%	62.9%	67.0%	57.7%	54.9%	60.3%
8th Grade Students Proficient in English/Language Arts (%)	2017	61.8%	70.7%	58.3%	63.9%	51.5%	55.7%	63.5%
High School Graduation (%)	2017	91.8%	91.8%	92.6%	92.3%	91.2%	87.1%	91.3%
People 25+ with a Bachelor's Degree or Higher (%)	2013-2017	27.5%	18.1%	22.3%	9.9%	14.0%	18.7%	19.5%
People 25+ with a High School Degree or Higher (%)	2013-2017	89.4%	90.5%	84.8%	63.3%	85.0%	88.7%	91.1%
Student-to-Teacher Ratio (Students per teacher)	2016-2017	18.5	15.2	16.3	15.2	16.1	17.2	18.1

Employment

Employment has a multifaceted effect on the health of individuals. Well-paid jobs translate into better access to nutritious food, education, healthier/safer neighborhoods, and good health insurance benefits for individuals and their families. Conversely, low-paid jobs or job layoffs result in poor health and stress-related conditions such as stroke, heart attack, heart disease, or arthritis. Additionally, good health influenced by healthy and safe working conditions.

Allen County had the highest female population ages 16+ in the civilian labor force at 62.0%. The total employment change was positive for most counties, but Kosciusko and Whitley Counties decreased by 1.1% and 2.7%, respectively (*Table 35*).

Table 34: Employment

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Female Population 16+ in Civilian Labor Force)	2013-2017	62.0%	59.6%	57.2%	47.1%	59.8%	55.3%	57.0%
Total Employment Change	2015-2016	2.4%	2.1%	-1.1%	4.4%	3.7%	2.2%	-2.7%

Food Security

Food security measures accessibility to and affordability of food. According to the World Health Organization (WHO), the three pillars of food security are availability, access, and use/misuse ("What is food security? | WFP | United Nations World Food Programme-Fighting Hunger Worldwide," n.d.). On the other hand, food insecurity refers to the inability to afford enough food for an active, healthy life ("Food Insecurity," n.d.). Food insecurity is associated with adverse health outcomes in children and adults. It is linked to an increased risk of depression, cardiovascular disease, and peripheral arterial disease in older adults (Laraia, 2013). Access to healthy, nutritious food-- including fruits and vegetables--is of utmost importance to live a healthy lifestyle.

Allen County has the highest rate of children with low access to a grocery store, highest food insecurity rate, greatest population with low-income and low access to a grocery store, most people ages 65+ with low access to a grocery store, and greatest number of people with low access to a grocery store (*Table* 35: Access to Food).

Table 35: Access to Food

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Children w/ Low Access to a Grocery Store	2015	7.8%	5.4%	4.9%	0.0%	1.7%	1.9%	1.3%
Fast Food Restaurant Density*	2014	0.66	0.84	0.69	0.21	0.55	0.81	0.60
Food Insecurity Rate	2017	13.3%	11.4%	10.0%	9.2%	9.4%	11.9%	10.1%
Households w/ No Car and Low Access to a Grocery Store	2015	2.7%	2.1%	3.1%	21.4%	2.9%	2.6%	1.5%
Low-Income and Low Access to a Grocery Store	2015	9.8%	8.5%	5.6%	0.1%	2.1%	4.7%	1.9%
65+ with Low Access to a Grocery Store	2015	3.8%	3.6%	2.4%	0.0%	0.5%	1.1%	0.6%
Low Access to a Grocery Store	2015	30.4%	22.2%	18.3%	0.2%	5.7%	10.5%	5.1%
SNAP Certified Stores*	2016	0.8	0.8	0.8	0.5	0.7	0.9	0.8

*Per 1,000 population

Homeownership and Housing Affordability

The net income and wealth of an individual affects homeownership. "Housing is commonly considered *affordable* when a family spends less than 30 percent of its income to rent or buy a residence. ("How Does Housing Affect Health?," 2011). The shortage of affordable housing limits a family's options in choosing their place of residence. This ultimately leads to poor families living in subsidized housing in neighborhoods that are unsafe and lack the assets needed for healthier lifestyle e.g., parks, bike paths, walking tracks, recreational activities, and grocery stores with healthy selections. The burden faced by families to afford housing affects their ability to meet other essential needs like nutrition and healthcare.

Whitley County had the highest percentage of homeownership at 73.4% and Kosciusko County had the lowest at 59.5%. Severe housing problems are highest in LaGrange County (15.1%). Huntington County has the least affordable rental housing with nearly half of the renters spending more than 30% of their income (*Table 37*).

Table 36: Homeownership

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Homeownership	2013-2017	62.5%	69.8%	59.5%	68.0%	66.4%	67.5%	73.4%
Renters Spending 30% or More of Household Income on Rent	2013-2017	45.1%	47.3%	37.9%	32.0%	39.8%	45.0%	39.9%
Severe Housing Problems	2011-2015	11.8%	10.6%	10.9%	15.1%	12.2%	10.9%	8.5%

Public Safety

Public safety is another important social determinant of health. Just as affordable housing is important in achieving positive health outcomes, the conditions/environment surrounding the housing affect health outcomes. High crime rates can lead to mental distress, a lower quality-of-life, an increase in negative health outcomes, premature death, or non-fatal injuries (Margolin, Vickerman, Oliver, & Gordis, 2010). An example of the negative effect of a high crime rate in the neighborhood is a reluctance of residents to walk outdoors or permit their children to play or bike outside which encourages obesity and related health issues.

Huntington County has the lowest violent crime rate in the region. (*Table 38*).

Table 37: Public Safety *2009-2011

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Violent Crime Rate	2014-2016	295.9	33.0	159.3	103.5	158.0	50.7	45.5*

Social Environment

Social support and interaction are the most important factors in predicting one's physical health and well-being, regardless of age ("The importance of social interaction to human health ," n.d.). Today, people socialize more often with others through technology. Social media has become the preferred method of making, maintaining, and communicating with friendships and filling leisure time. Individuals use the Internet for various day-to-day activities like banking, paying bills, shopping, studying, and more.

LaGrange County has the lowest percentage of households with an Internet subscription and households with one or more types of computing devices, 54.8% and 63.9%, respectively (*Table 39*). The high Amish population in LaGrange County may contribute to this. Civic engagement defined by voting shows more than 50% turnout in all counties.

An aging population suffers from a higher risk of social isolation than a younger population as indicated by Americas Health Rankings. The percentage of individuals age 65 and older living alone ranges from 16.2% in LaGrange County to 30.4% in Allen County.

Table 38: Social Environment

Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Households with an Internet Subscription	2013-2017	78.9%	73.7%	75.3%	54.8%	76.1%	70.9%	76.0%
Households with >= 1 Type of Computing Device	2013-2017	88.1%	85.4%	85.5%	63.9%	85.5%	85.4%	88.0%
People 65+ Living Alone	2013-2017	30.4%	26.1%	24.4%	16.2%	28.1%	27.6%	25.7%
Voter Turnout: Presidential Election	2016	55%	63%	61%	71%	56%	61%	71%

Transportation

Transportation is often cited as a barrier to healthcare access, especially in rural areas. The consequences of this hurdle include rescheduled or missed appointments, delayed care, and missed or delayed medication use ("Traveling Towards Disease: Transportation Barriers to Health Care Access," n.d.) which leads to inadequate management of chronic illness and deficient health outcomes. In Indiana, a nonexistent comprehensive public transportation system contributes to this dilemma *(Table 40)*. Individuals using public transport to commute to work is less than one percent in all counties. Households without a vehicle is highest in LaGrange County at 27.8%. The preference of the Amish population to use horses and wagons rather than motor vehicles is likely reflected in this observation.

Table 39: Transportation

| Indicator	Year	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley
Households without a Vehicle	2013-2017	6.3%	4.8%	6.3%	27.8%	5.3%	4.5%	3.6%
Workers Commuting by Public Transportation	2013-2017	0.8%	0.3%	0.1%	0.2%	0.0%	0.7%	0.3%

COMMUNITY PERCEPTIONS

PROVIDER SURVEY RESULTS

Top Community Health Concerns (Provider Perceptions)

Providers perceive that the top three greatest community health needs are **substance abuse services** (88.1 %), **mental health counseling** (70.1 %), and **obesity** (67.2 %) (*Figure 17*).

Figure 17: Community Health Issues of Greatest Concern (Provider Perceptions)
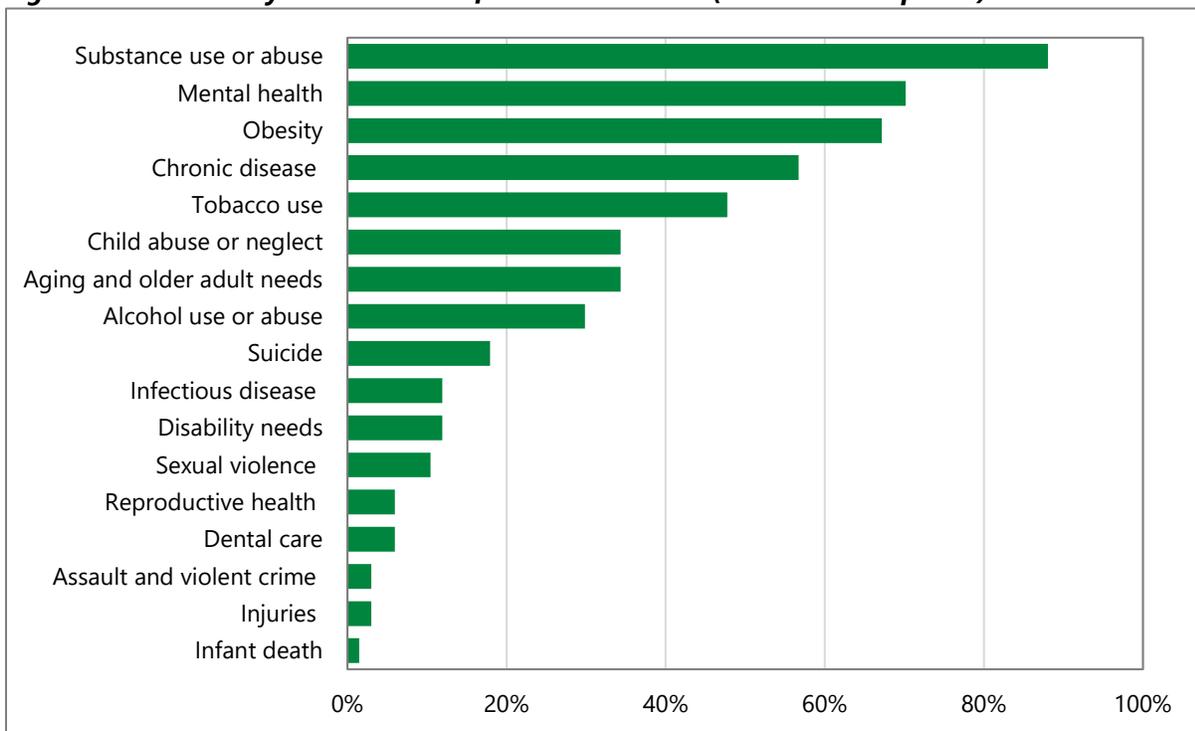
Most Important Service Needs (Provider Perceptions)

The three most important service needs identified by providers across the Parkview Health service area include **aging and older adult programs** (76.8 %), **access to food** (73.6 %), and **job training** (67.2 %) (*Figure 18*)

Figure 18: Greatest Social Service Needs (Provider Perceptions)
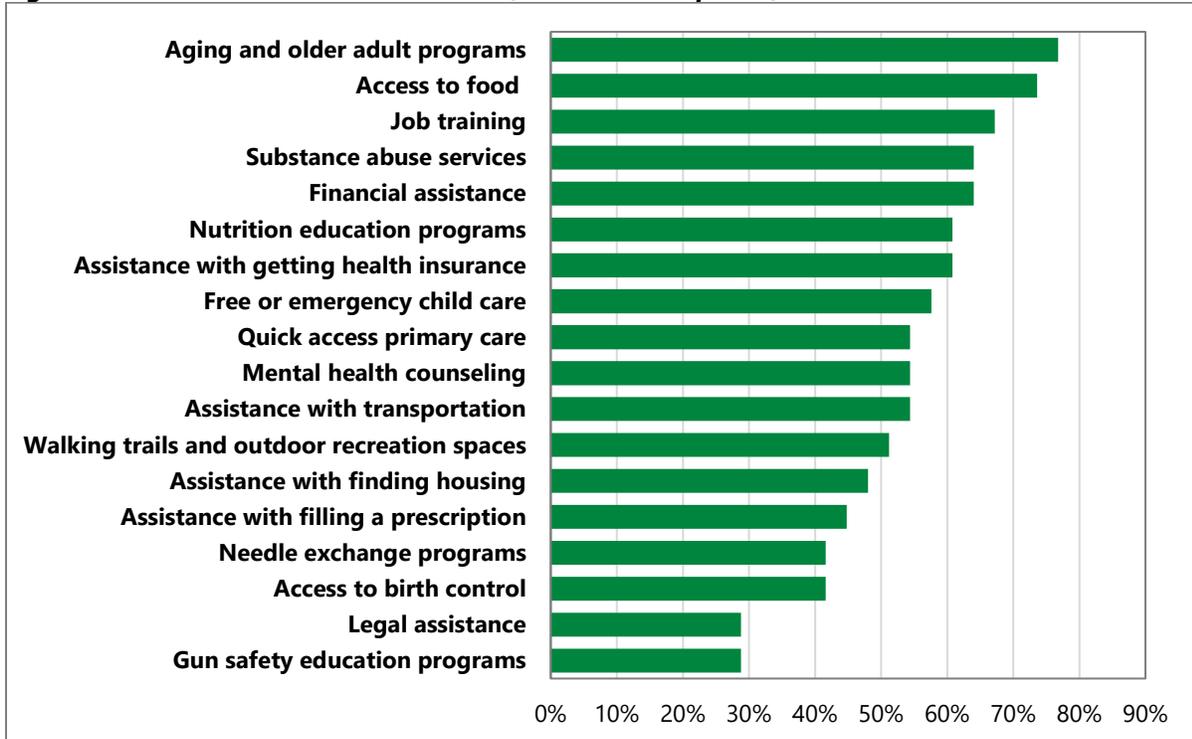
Top Barriers to Care/Service Access (Provider Perceptions)

Providers identified **cost** as the biggest barrier faced by community members when accessing care/services (85.9%). Providers also identified **education/health literacy** (60.9 %), **lack of insurance** (50.0%), and **transportation** (50%) as major concerns (*Figure 19*).

Figure 19: Top Barriers to Patients Accessing Care/Services (Provider Perceptions)
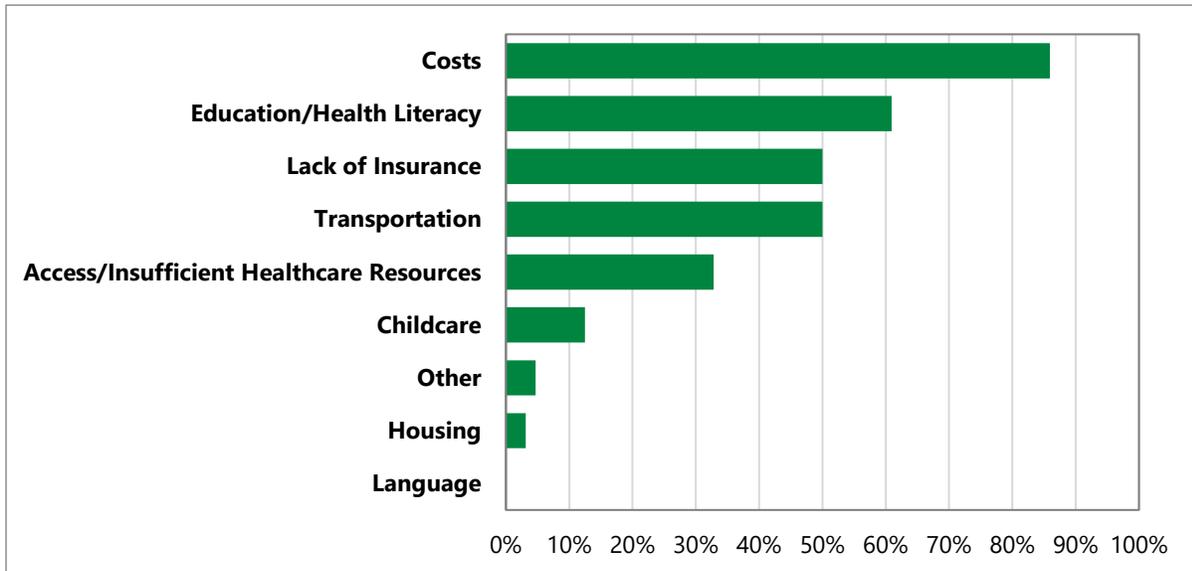
Top Barriers to Care/Service Delivery (Provider Perceptions)

Providers identify the top barriers in care/service delivery as the **lack of collaboration or communication in community member care** (49.2%), **insufficient healthcare resources**, (38.1%), and the **effective quality improvement strategies** (33.3%) (*Figure 20*).

Figure 20: Top Barriers to Providing Care/Services (Provider Perceptions)
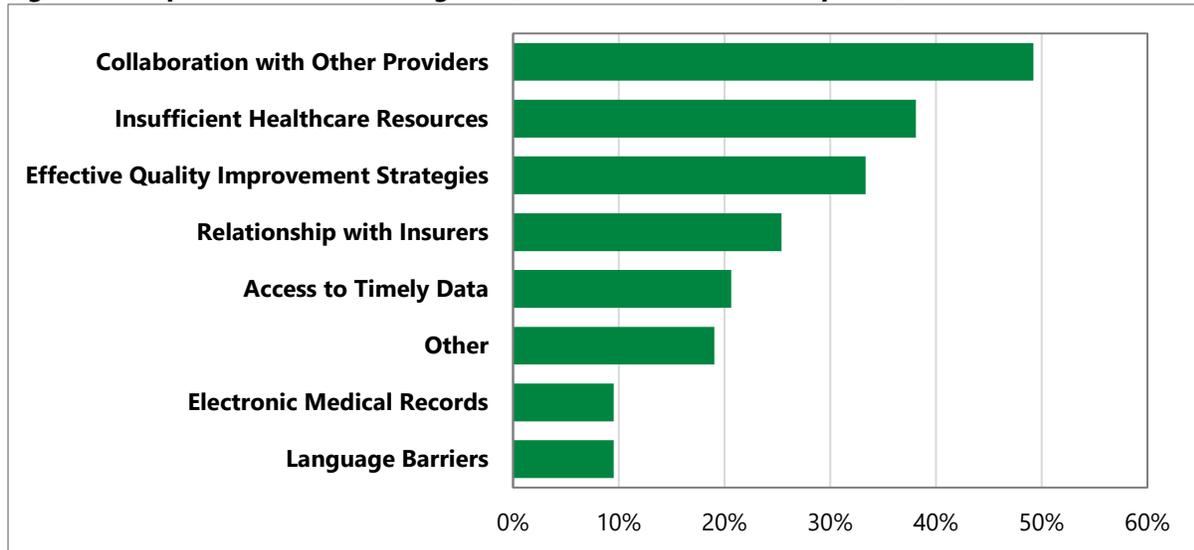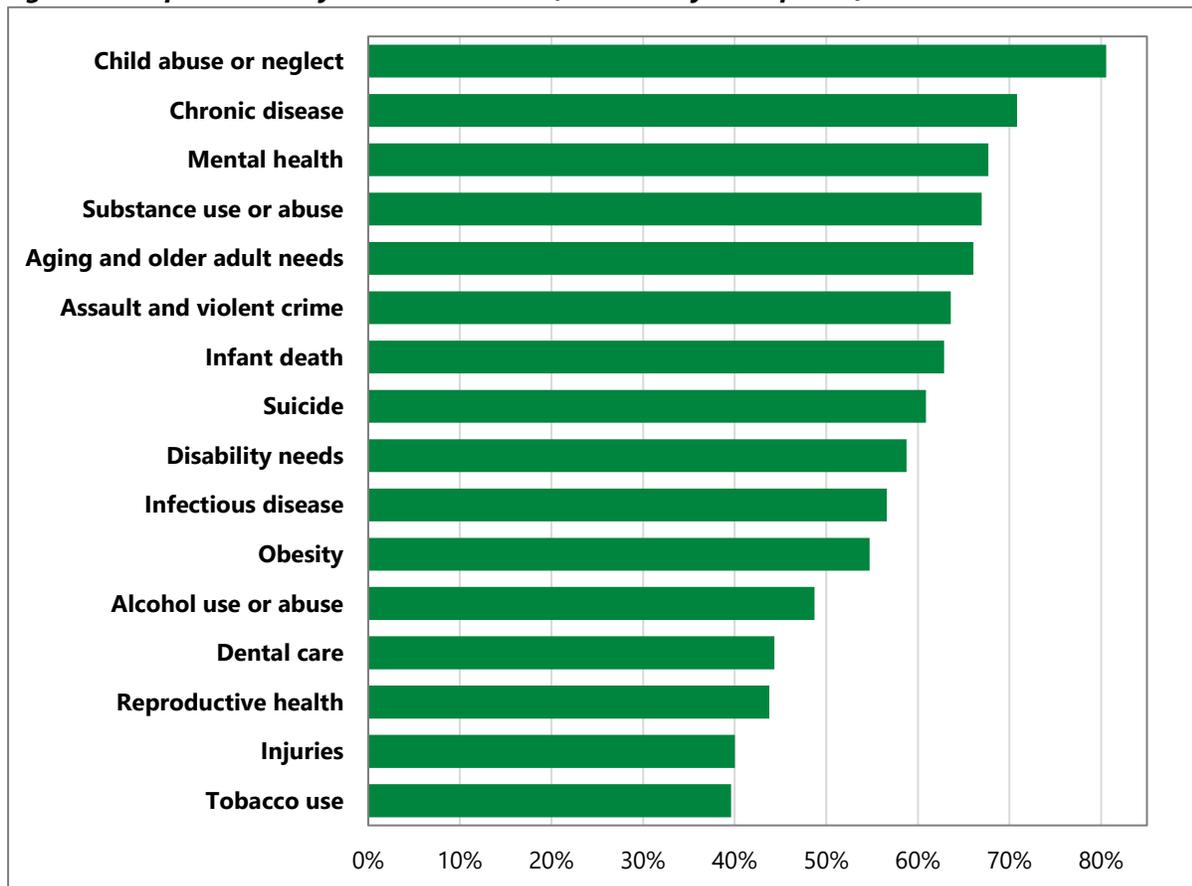
COMMUNITY SURVEY RESULTS

Community Health Concerns

Public survey respondents in the Parkview region ranked **child abuse or neglect** as their top (80.6%) health concern, followed by **chronic disease** (70.8%) and **mental health** (67.7%). (*Figure 21*).

*Figure 21: Top Community Health Concerns (Community Perceptions)*

Social Issues Important to the Community

Substance abuse services is most frequently indicated by community respondents as a top social service issue for their community (67.0%), followed by **mental health counseling** (64.9%) and **access to food** (53.5%) (*Figure 22*).

Figure 22: Top Social Service Needs (Community Perceptions)
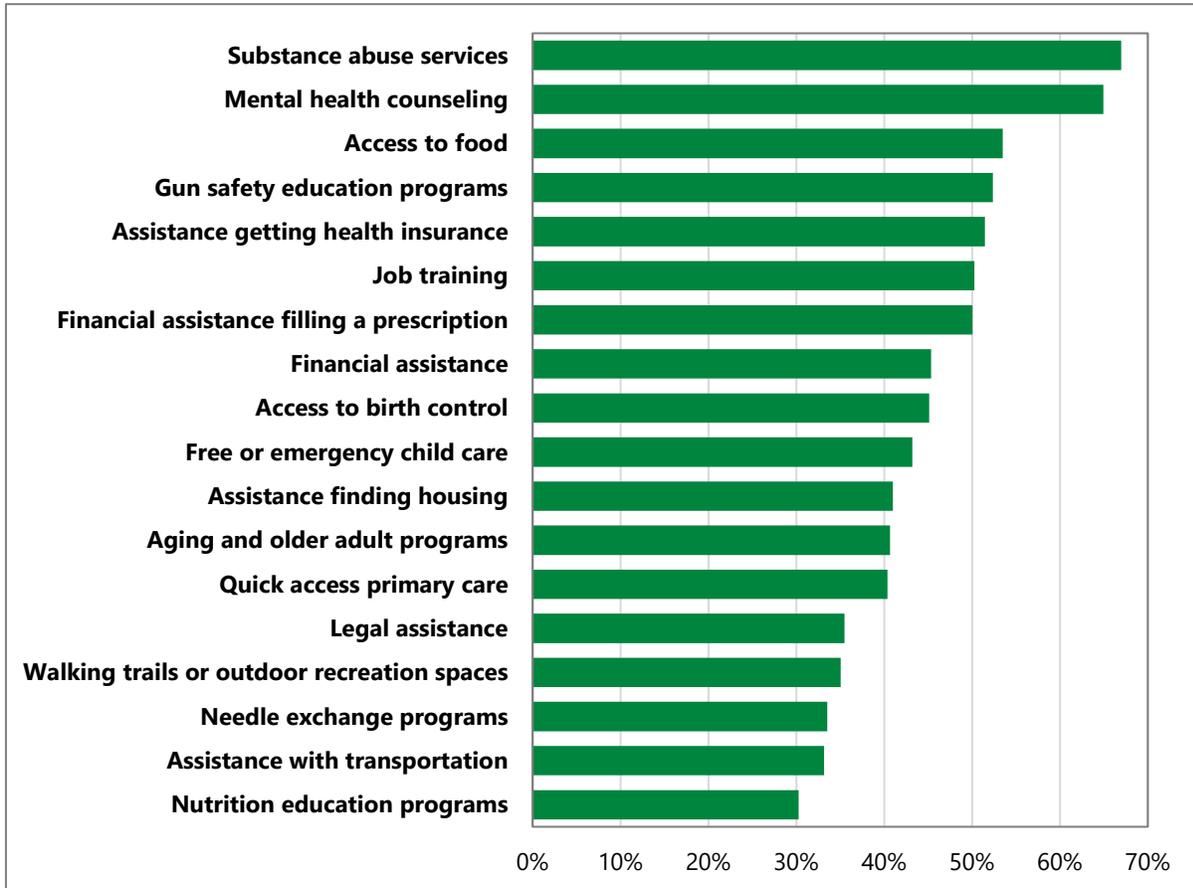
HISPANIC FOCUS GROUP RESULTS

The Hispanic focus group participants identified the top five unmet service needs in Kosciusko County as (in order) **substance use or abuse** (54%), **alcohol use or abuse** (46%), and **chronic disease** (diabetes, cancer, and heart disease etc. (38%).

Figure 23: Top Community Health Concerns (Hispanic Focus Group Perceptions)
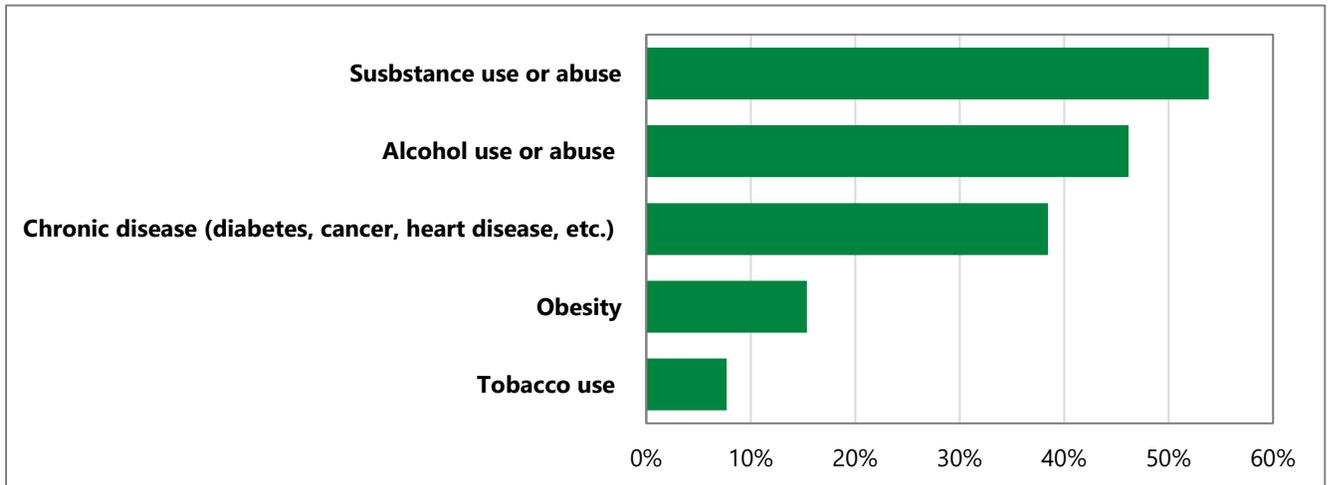
The group identified the highest priority unmet needs as **assistance with getting health insurance** (54%), **substance abuse services treatment** (prevention or treatment) (38%), and **legal assistance** (including for immigration status) (8%).

Figure 24: Top Social Service Needs (Hispanic Focus Group Perceptions)
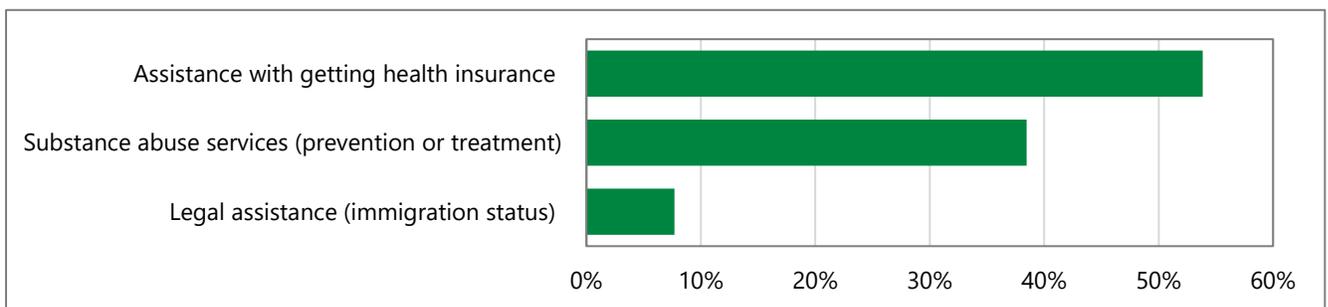
More details can be found in the Hispanic Focus Group Report, produced as a companion piece to this CHNA report.

RANKING COMMUNITY HEALTH NEEDS

PROCESS AND CRITERIA

A modified Hanlon Method prioritized health concerns for Parkview Health hospital communities. This method, also known as the Basic Priority Rating System (BPRS) 2.0, is recommended by the National Association of County and City Health Officials (NACCHO) for prioritizing community health needs (*Guide-to-Prioritization-Techniques.pdf*, n.d.). Although complex to implement, it is useful when the desired outcome is an objectively selected list. Explicit identification of factors must be considered to set priorities which enables a transparent and replicable process. As illustrated in Figure 25, priority scores (D) are calculated based on the size of the health problem (A), seriousness of the health problem (B), and the availability of effective health interventions (C).

Figure 25: Components of the Priority Score

Priority Score
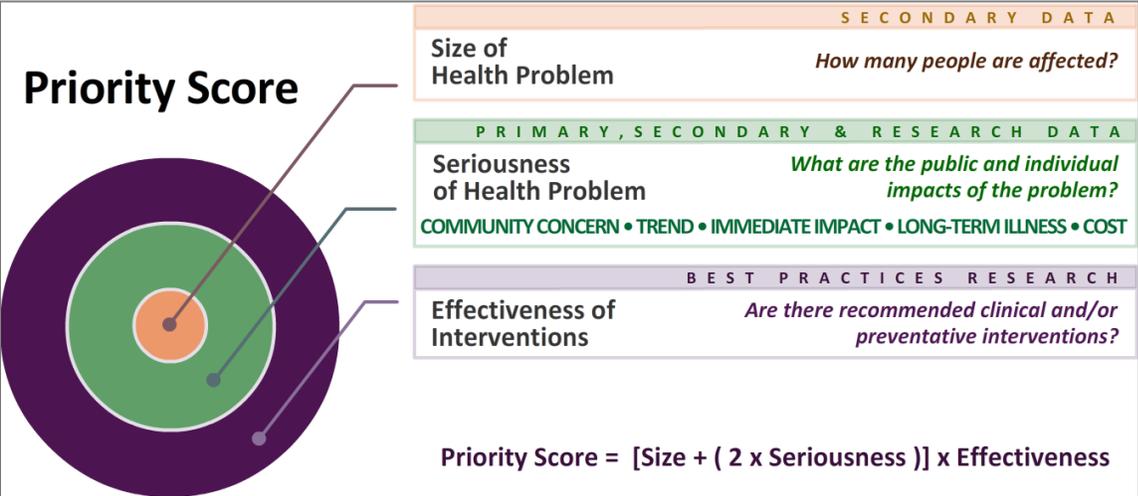
SECONDARY DATA
Size of Health Problem — *How many people are affected?*

PRIMARY, SECONDARY & RESEARCH DATA
Seriousness of Health Problem — *What are the public and individual impacts of the problem?*
COMMUNITY CONCERN • TREND • IMMEDIATE IMPACT • LONG-TERM ILLNESS • COST

BEST PRACTICES RESEARCH
Effectiveness of Interventions — *Are there recommended clinical and/or preventative interventions?*

Priority Score = [Size + (2 x Seriousness)] x Effectiveness

Size of Health Problem

How many people are affected?

Population percentage estimates of each health problem are calculated and used to measure the **size** of a health problem following the recommendations of Neiger et al. (Neiger, Thackeray, & Fagen, 2011). The assigned size score of each health indicator is shown in column A of the scoring tables in Appendix B.

Seriousness of Health Problem

PRIMARY, SECONDARY & RESEARCH DATA

What are the public and individual impacts of the problem?

COMMUNITY CONCERN • TREND • IMMEDIATE IMPACT • LONG-TERM ILLNESS • COST

The **seriousness** of each health problem was determined based on five questions.

1. Is there an immediate potential impact on the larger community?
   — Is there a **communicable nature** of the health problem?
   — Are there **behavioral effects** related to the health problem **on others**?
   — Is there **emotional and physical impact** of the health problem **on others** with respect to caregiving?
2. Is there a measurable **public health concern**?
   (Measured using the Community and Provider Survey results)
3. Does the problem cause **long term illness**?
   (Years of life lived with a disability and years lost due to premature death)
4. Is there an **increasing prevalence** of the problem in the community?
   (Based on time trends of affected population)
5. Are there **high costs** associated with the problem?
   (Healthcare spending associated with the health problem)

Seriousness scores are shown in column B of the scoring tables in Appendix B.

BEST PRACTICES RESEARCH

Effectiveness of Interventions

Are there recommended clinical and/or preventative interventions?

The final criterion, **effectiveness of interventions**, was calculated using two resources for systematic reviews: *CDC's Community Guide* and *HealthEvidence.org*. The *Community Guide* recommended by NACCHO was used as the main source ("Health Evidence," n.d.; "The Guide to Community Preventive Services (The Community Guide)," n.d.). The *Community Guide* conducts systematic reviews of interventions in many topic areas to learn what works to promote public health. The Community Preventive Services Task Force uses the results of these reviews to issue evidence-based recommendations and findings to the public health community. Only the Task Force's recommended interventions were considered in this report.

For health problems not found in the *Community Guide, Healthevidence.org* was used. *Healthevidence.org* is a registry of systematic reviews maintained by McMaster University in Canada to promote evidence-based public health. Interventions evaluated in high-quality studies and recommended by reviewers were used in this report.

Scores were assigned based on whether a policy or preventive and/or therapeutic intervention was recommended by either of these sources, as outlined below.

— At least one recommended policy, preventive, or therapeutic intervention = 1 point
— No recommended interventions = 0 points

For each health indicator, the effectiveness score, basic priority score, and resulting rank are shown in columns C, D, and E, respectively, of the table in Appendix B.

RANKING OF COMMUNITY HEALTH ISSUES

Health Need / Concern	Health Indicator	2019 Rank								2016 Rank
		Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Avg Rank	
1. **Cardiovascular Disease**	Stroke Hospitalizations	1	2	1	1	1	1	1	1.1	6
	Heart Disease Hospitalizations	1	1	1	1	1	1	3	1.3	
2. **Diabetes**	Adults 20+ with Diabetes	1	2	1	1	1	1	3	1.4	3
3. **Aging**	Alzheimer's Disease	5	4	4	1	4	4	3	3.6	12
4. **Obesity**	Adults 20+ who are Obese	5	6	6	1	4	4	3	4.1	2
5. **Drug & Alcohol Use and Addiction**	Non-Fatal ED Visits due to Opioid Overdoses	1	4	4	12	10	4	11	6.6	5
6. Mental Health	Percent of Population with Frequent Mental Distress	7	7	7	10	6	7	7	7.3	10
Drug & Alcohol Use and Addiction	Adults who Drink Excessively	8	7	8	6	6	10	9	7.7	5
7. Tobacco Use	Adults who Smoke	8	7	12	8	8	8	7	8.3	1
8. Maternal Child Health	Child Abuse and Neglect	10	10	17	6	8	8	1	8.6	4

Table 40: Top Ranking Indicators

The 2019 top-ranking indicators for the Parkview Health region are shown in *Table 41*. For Huntington County, two of the top three health concerns– **cardiovascular disease and diabetes**–are etiologically and clinically related health issues. If we consider the top 10 health concerns in the region, two other related needs are identified: **drug and alcohol use** and **addiction and mental health**. Mental health disorders are one of the risk factors for developing substance use disorder. Child abuse and neglect–showing up at topmost health concern for Whitley County–is also a risk factor for substance use. These rankings are indicative of interrelated and interconnected health conditions, providing a broader picture of the health issue experienced by the community and rendering credence to the methodology adopted for this purpose. Comparing the rankings for 2019 community health needs assessment for Parkview Region with 2016 community health needs assessments, we see that among the top five health needs, aging has moved to the top five (from 12 to 4) while obesity has moved down (from 2 to 6) for Huntington County. Changes in the methodology for calculating "size of the health issue" and "effectiveness of intervention" may have contributed to this change.

SELECTING 2020-2022 PRIORITIES

PRIORITY SELECTION PROCESS

As part of its priority selection process, Parkview Health considered the availability of evidence-based interventions designed to address its top ranking health issues. The "PEARL" (Propriety, Economics, Acceptability, Resources, and Legality) test eliminates impractical or impracticable interventions (Vilnius & Dandoy, 1990).

The Indiana Partnership for Healthy Communities presented an overview of the Regional Community Health Needs Assessment (CHNA) findings on July 16, 2019 to a group of attendees representing the Parkview Health System. In total, over 60 individuals participated in the prioritization process, including representatives from hospital service lines, community hospitals, healthcare providers/physicians, executive leadership team, community health, and the board of directors. After a thorough review of the data and considerable discussion, the group used an electronic voting system to rank the various health needs identified in the CHNA.   Ultimately, the group voted on Substance Use Disorder/Mental Health as the shared health priority across the Parkview System.

The 2019 Community Health Needs Assessment including secondary data, provider, and community surveys were reviewed by members of our Parkview Huntington Hospital's executive team and community health improvement staff. The assessment's results were then presented to the Parkview Huntington Hospital's Board of Directors by a community health improvement staff member. Discussion took place and the board approved (adopted) continuing our previous health priority of obesity along with the system-wide priority of substance use disorder/mental health for the next three years (2020-2022).

SELECTED PRIORITIES

Parkview Huntington Hospital selected two health concerns as their top priorities for 2020-2022.

1. Substance use and mental health
2. Obesity

RESOURCES

Resources in the Parkview Huntington Hospital service area for addressing community health are mentioned in Appendix C.

DATA LIMITATIONS

Secondary Data: One of the most notable limitations of the secondary data is that different data sources applied different models to estimate community health indicators. Some indicators were based on administrative data while others were based on sample surveys. In addition, secondary data was sourced from different data years, based on data availability. The available data ranged from a 2010-2014 five-year average to 2018.

Another notable limitation is that when morbidity rates were not available, hospitalization rates and mortality rates were used. Hospitalization rates are available from state hospital associations and are often used as surrogate measures of community health need. Hospitalization rates typically are based on patient home address versus treatment location, which is appropriate when attempting to use these rates to measure community health. However, a limitation is that hospitalization rates and mortality rates may underreport the rate of a health condition because hospitalization rates only capture data from individuals who seek hospital care and do not capture data from individuals who have the health condition but do not receive associated hospital care. Another limitation is that populations with closer proximity to a hospital facility may be more likely to seek treatment for health conditions, implying that a hospital facility has populations with higher rates of health conditions.

Provider Survey: The principal limitation of the provider survey is that it was not conducted using a random sampling technique and may reflect response bias. This means that the responses were not necessarily representative of the full population of Parkview providers. Another limitation is that respondents were asked to select from pre-defined lists of disadvantaged populations and potential concerns. While the list of possible concerns was developed based on expert knowledge, it is possible that there are other concerns that were not listed.

Community Survey: A general limitation of broad community surveys is that participation tends to be greater among retirees or those otherwise unemployed compared to younger, employed persons. To address this concern, statistical weighting is used by the Survey Research Laboratory of the School of Public Health at the University of Alabama at Birmingham. Also, although the size of the random population sample allowed for conclusions to be made for the Parkview Health System primary service area as a whole, a sufficient sample was not obtained in each county to allow for county specific statistics to be generated. This made the information obtained from the Provider Survey even more important.

THREE YEAR IMPACT REPORT

OVERVIEW

The findings of the 2016 CHNA guided our decision to adopt two health priorities for our community: Obesity and Alcohol & Substance Use Disorder/Addiction.

The continued strategic goals of the obesity initiatives are to:

1. Increase overall awareness of healthy lifestyle choices
2. Increase the number of adults who report consuming fruits and vegetables on a daily basis
3. Increase the number of nutritional and activity based programs offered for families in our community

The other vast priority of alcohol & substance use disorder/addiction's goals are to:

1. Increase overall awareness of substance use disorder and addiction
2. Decrease the number of adults who report thinking of or using alcohol and drugs
3. Increase the number of prevention and treatment based programs offered in our community

We have funded between twelve and sixteen external community partners over the last three years to help improve the health of our communities in addition to our hospital's internal wellness programing. Parkview Huntington Hospital has contributed approximately $300,000 annually to partners to increase the impact of our endeavors.

SAMPLE HIGHLIGHTS: OBESITY INITIATIVES

All ages have benefited from the community garden, run by Purdue Extension and financially supported by Parkview Huntington. Over 22,000 pounds of produce was harvested and donated to the underserved in our community between 2016-2019. Over 90% of the garden's visitors indicated increased consumption of fruit and vegetables because of the garden. This year, the community garden was moved to a new location and is now closer to a population living in a food desert after a local supermarket across the street closed its doors.

Funded "Double Bucks Days" in 2017 and 2018 at our farmers' market allowed SNAP vouchers to go even further. The first year, $112 worth of Double Bucks were distributed and the following year, the amount nearly tripled to $324. Unfortunately, a temporary location change in 2019 did not make the program possible.

The Living Towers Garden funded program has provided three hydroponic gardens to a local elementary school. In 2017, the gardens produced enough vegetables to make 250 salads, and two years later, over 450 salads were provided to a total of 75 elementary students. They continue to expand their program, and this year they donated a tower garden to a local preschool.

We supported both afterschool and summer programming, POWER Club and Boost Camp, both of which focus on improving the health of school-aged children that may not be interested in traditional afterschool/summer sports and activities. These programs offer students alternative opportunities to be physically active while addressing mental health and providing nutrition education. Annually, POWER Club touches an average of 15 middle-schoolers and Boost Camp has had an average response of 20 children since 2017.

A new program for 2019 supports monthly cooking classes. Classes reach an average of 15 individuals at a local food pantry and teach participants to prepare healthy, budget-friendly meals at home, often incorporating food offerings from the pantry and the community garden.

A year-round funded produce option that benefited an average of over 1,200 individuals on a monthly basis since July 2017 has expanded this year to another one of the county's food pantries. It reached an additional 2,172 individuals since January.

Thirty percent of elementary students in the free lunch program are benefiting from Blessings in a Backpack, a weekend nutrition supplementation program. Blessings fed about 317 elementary students in the 2018-2019 academic year (up from 20 children in 2011). Fruit and vegetables are included in the bags. Seventy-six percent of teachers either agree or strongly agree that behavior, attitude, and attendance improved as a result of this program.

In collaboration with the YMCA, approximately four hundred third graders in Huntington County annually have the opportunity to participate in a week-long swim program that teaches children the benefits of swimming as a lifelong fitness activity and seeks to increase swimming skills. In 2017 and 2018, the number of self-sufficient swimmers increased by 17% and 18% respectively.

Adults from group homes, transitional housing, and a mental health facility are able to increase their activity with the supported *Access to Wellness* program through the YMCA. This program has grown from one group home in 2017 having three participants complete a 12-week fitness program to over 300 individual visits per month documented so far in 2019.

Additionally, the YMCA Partners with Youth (PWY) financial assistance program applicants are exceeding physical activity and emotional well-being goals (see below) with 60% of participants reporting the recommended 150 minutes of exercise per week and 50% reporting an emotional state of well-being of five or above on a scale of 1-10.

2015 2016 2017 2018 2019

How many hours per week are you physically active?

Describe your current state of emotional well-being

Number of fruits & vegetables consumed per day

Top barrier to reaching your health & wellness goals

Does anyone in your household smoke?

How important is maintaining a healthy lifestyle?

Parkview Huntington Hospital's diabetes support group, senior exercise class, and chronic pain support group have also addressed key elements to tackle the obesity epidemic. Regular attendance at these groups averages six, eight, and five community members, respectively.

SAMPLE HIGHLIGHTS: ALCOHOL AND SUBSTANCE USE DISORDER/ADDICTION INITIATIVES

Parkview Huntington Hospital identified a gap in smoking cessation services for the community after the local YMCA stopped offering classes late 2016. As a result, Parkview Huntington Hospital supported one of their registered nurses to become certified in smoking cessation. The hospital now provides a series of eight sessions over seven weeks using the Freedom from Smoking® curriculum, free of charge for community members. Since 2017 thirty-four individuals have completed this course in Huntington County and six quit as a result of this program.

The Huntington community, through the City's Prevention Taskforce, worked to better understand substance use disorder through community dialogues in 2018. The four public conversations covered topics of:

1. Stories of Individuals in Recovery

2. Stories from Loved Ones of those in Recovery
3. Addictions and the Legal System
4. Treatment and Other Recovery Options

Mental health has been the primary topic of the 2019 community conversations. A Parkview Huntington Hospital staff member regularly attends these discussions.

Partners are working to prevent and treat addiction at all ages. The Boys & Girls Club, through their Drug Prevention Program, showed improvement from 38% to 80% of participants stating they "Do things to make themselves a better person" at the end of the program. Similarly, in 2018 (49% vs. 86%) of youth reported they "always" try to do the right thing.

Place of Grace transitional home serves women reentering the community after incarceration. Over 87 percent of graduates have been gainfully employed by graduation, and 100 percent reported an increase in knowledge of community resources and an increase in self-esteem because of programing offered.

One hundred percent of Celebrate Recovery participants reported an improvement in their mental health compared to goal of 90 percent.

Youth for Christ is a new partner for 2019. One hundred students participated in core student leadership meetings that included a service project with Blessings in a Backpack, surpassing their goal of 80 students. They hosted small group meetings addressing personal growth, healthy relationships, accountability, support systems, and sense of belonging, with 80 students participating in these meetings. Adult ministry leaders held one-on-one appointments with 225 students, and their substance use disorder programming reached 370 students this year. We have requested pre/post testing to be done to measure outcomes.

Another new 2019 partner, McMillen Health Center, held 20 preventive health education sessions focusing on drug prevention for students in grades K-3, serving a total of 615 students. Approximately 22% of students demonstrated increased knowledge (compared to their goal of 35%).

CONCLUSION

Based on the accomplishments and results of the current implementation plan, Parkview Huntington Hospital will continue to address these issues through external and internal resources with the goal of improving community health. The above along with the 2019 CHNA priority determination process will help mold future Implementation Plans.

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APPENDIX A: PROVIDER SURVEY

Table 41: Most Urgent Community Needs Identified in Provider Survey

Community Need	Allen	Huntington	Kosciusko	LaGrange	Noble	Wabash	Whitley	Region
	% of Providers Responding that Need was Amongst the Most Urgent							
Substance abuse services	79.5%	64.0%	66.7%	93.3%	81.3%	95.7%	87.5%	83.2%
Mental health counseling	80.8%	54.4%	66.7%	79.7%	75.7%	73.9%	68.8%	75.7%
Assistance with transportation	61.6%	54.4%	50.0%	74.5%	71.1%	73.9%	75.0%	62.4%
Financial assistance	61.6%	64.0%	50.0%	69.5%	58.8%	69.6%	81.3%	61.9%
Assistance with getting health insurance	71.2%	60.8%	33.3%	56.1%	64.3%	60.9%	68.8%	57.9%
Access to food	52.1%	73.6%	33.3%	64.7%	60.2%	65.2%	50.0%	55.4%
Aging and older adult programs	60.3%	76.8%	50.0%	46.3%	74.9%	52.2%	50.0%	54.0%
Job training	52.1%	67.2%	16.7%	42.0%	48.0%	52.2%	75.0%	52.5%
Free or emergency child care	45.2%	57.6%	50.0%	46.8%	43.3%	43.5%	56.3%	48.0%
Assistance with finding housing	47.9%	48.0%	66.7%	64.3%	43.6%	60.9%	31.3%	46.0%
Quick access primary care	42.5%	54.4%	33.3%	74.5%	80.1%	21.7%	37.5%	45.0%
Walking trails, outdoor recreation spaces	43.8%	51.2%	33.3%	60.4%	60.2%	30.4%	37.5%	43.1%
Nutrition education programs	49.3%	60.8%	50.0%	32.5%	49.7%	39.1%	31.3%	40.6%
Assistance with filling a prescription	50.7%	44.8%	33.3%	51.3%	32.5%	39.1%	43.8%	40.1%
Access to birth control	43.8%	41.6%	0.0%	32.0%	37.7%	21.7%	56.3%	34.7%
Needle exchange programs	31.5%	41.6%	0.0%	22.7%	21.1%	26.1%	25.0%	27.7%
Gun safety education programs	39.7%	28.8%	16.7%	9.1%	21.6%	30.4%	31.3%	26.2%
Legal assistance	31.5%	28.8%	16.7%	9.1%	32.2%	30.4%	0.0%	22.8%

APPENDIX B: SCORING OF COMMUNITY HEALTH NEEDS

Table 42: Priority Scores and Ranking

HCI Health Indicator (Those in lowest performing quartile of Indiana counties for at least one county served by a Parkview Health hospital)	HUNTINGTON										
	Size of Health Problem (A)^		Seriousness of Health Problem (B)‡						Effectiveness of Interventions (C)^^	Priority Score (D)^^^	Rank
	Size of Health Problem (%)	Score	Q1	Q2	Q3	Q4	Q5	Score	Score		
Heart Disease Hospitalizations	1.19	5	0	3	2	1	2	8	1	21	1
Stroke Hospitalizations	0.21	3	0.5	3	2	1	2	8.5	1	20	2
Adults 20+ with Diabetes	12.10	7	0.5	3	0.5	1	1.5	6.5	1	20	2
Alzheimer's Disease or Dementia	1.64	5	2	2	1	1	1	7	1	19	4
Non-Fatal Emergency Department Visits due to Opioid Overdoses	0.11	3	2	3.5	0.5	2	0	8	1	19	4
Adults 20+ who are Obese	33.90	9	0	2	0.5	1	1	4.5	1	18	6
Adults who Drink Excessively	17.70	8	2	1	0.5	1	0	4.5	1	17	7
Percent of Population with Frequent Mental Distress	12.30	7	0.5	1.5	1	1	1	5	1	17	7
Adults who Smoke	21.80	8	1	1	0	1	1.5	4.5	1	17	7
Osteoporosis: Medicare Population (Prorated)	1.15	5	0.5	2	1	1	1	5.5	1	16	10
Adult Asthma Prevalence	10.00	7	0.5	3	0	1	0	4.5	1	16	10
Breast Cancer Incidence Rate	0.12	3	0	3	2	1	0.5	6.5	1	16	10
Child Abuse and Neglect Rate	1.66	5	2	2.5	0	1	0	5.5	1	16	10
Mothers who did not Receive Early Prenatal Care	23.60	8	1.5	1	0	1	0	3.5	1	15	14
Prostate Cancer Incidence Rate	0.09	2	0	3	2	0.5	0.5	6	1	14	15
Oral Cavity and Pharynx Cancer Incidence Rate	0.01	0	0	3	2	0.5	0.5	6	1	12	16
Hepatitis C Prevalence	0.08	2	2	1	0	1.5	0.5	5	1	12	16
Chlamydia Incidence Rate	0.30	3	2	1	0	1.5	0	4.5	1	12	16
Injury Emergency Department Visits Per 10k	9.87	6	0	0	0.5	1	1	2.5	1	11	19
Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	0.07	2	0	3	0	1	0	4	1	10	20
Salmonella Infection Incidence Rate	0.02	1	2	1	1	0	0.5	4.5	1	10	20
Gonorrhea Incidence Rate	0.04	1	2	1	0	1.5	0	4.5	1	10	20

	Rate										Score
Age-Adjusted Death Rate due to Influenza and Pneumonia	0.03	1	1	1	0	1	0.5	3.5	1	8	23
Chronic Kidney Disease: Medicare Population (Prorated)	4.66	5	0	3	0	1	0	4	0	0	24

^ Size (A) [10]

Score	% of Population
10	> = 50%
9	25 to < 50%
8	17.5 to < 25%
7	10 to < 17.5%
6	5 to < 10%
5	1 to < 5%
4	0.50 to < 1%
3	0.10 to < 0.50%
2	0.05 to < 0.10%
1	0.01 – < 0.05%
0	0 – < 0.01% (1/100 of 1%)

‡ Seriousness (B)
Includes Q1 – Q5, as follows:

Q1 Impact on Others
Three aspects of the health issue:
1. Communicable? 1 if Yes, 0 if No.
2. Behavioral effects on others? 1 if Yes, 0 if No.
3. Caregiving required? 1 if Constant, 0.5 if Periodic, 0 if None.
Impact value equals the sum of the above.

Q2 Level of Community Concern
Based on % of community survey respondents that indicated issue was a priority need. Possible values: 0, 0.5, 1, 1.5, 2. These were then combined with provider survey results with same possible values yielding total values from 0-4
A value of 4 represents the highest level of concern and 0 the lowest.

Q3 Severity (Disability)
Based on time lived with disability and time lost due to premature death [1]
Possible values: 0, 0.5, 1, 1.5, 2.
A value of 2 represents highest level of disability and 0 the lowest.

Q4 Urgency
Based on rate of increasing trend as measured as a rolling rate of change for all years available in the time series.
Possible values: 0, 0.5, 1, 1.5, 2.
A value of 2 represents highest rate of increase and 0 the lowest.

Q5 Economic Costs
Based on estimated % of total U.S. healthcare costs [2-17]
Possible values: 0, 0.5, 1, 1.5, 2.
A value of 2 represents highest cost and 0 the lowest.

Score
Q1 + Q2 + Q3 + Q4 + Q5

^^Effectiveness of Intervention (C)
Based on existence of at least one evidence-based intervention, as per evidence presented in the CDC Community Guide or HealthEvidence.org (2019).

Evidence-based Interventions	Score
Yes	1
No	0

^^^Priority Score (D)
= [A + (2 x B)] x C

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APPENDIX C: RESOURCES

Name	City	ZIP Code	Service
MATERNAL, INFANT, CHILD HEALTH			
Parkview Huntington Hospital	Huntington	46750	Breastfeeding Support Group
Huntington County Division of Family Resources	Huntington	46750	Family Planning Eligibility Program
Huntington County (Area Five) WIC	Huntington	46750	WIC Care
ABUSE/ADDICTION			
Friends Counseling Center - Huntington	Huntington	46750	Counseling
Friends Counseling Center - Wabash	Wabash	46992	Counseling
Indiana Dream Center	Huntington	46750	Substance Abuse Services
Bowen Center - Huntington	Huntington	46750	Substance Abuse Services
Bowen Center - Wabash	Wabash	46992	Substance Abuse Services
MENTAL HEALTH			
Youth Services Bureau Huntington County	Huntington	46750	Anger Management
Friends Counseling Center - Huntington	Huntington	46750	Counseling
Crossroad Child & Family Services - Huntington	Huntington	46750	Outpatient Mental Health Services
Bowen Center - Huntington	Huntington	46750	Outpatient Treatment Services
Youth Services Bureau Huntington County	Huntington	46750	Teen Suicide Prevention
Bowen Center - Huntington	Huntington	46750	Wraparound for Children's Mental Health
AGING			
Huntington County Council on Aging	Huntington	46750	Information and Referral
Huntington County Council on Aging	Huntington	46750	Senior Center
CARDIOVASCULAR DISEASE			
Huntington County Health Dept	Huntington	46750	Heath Screenings
HEALTHCARE ACCESS			
Brightpoint	Huntington	46750	Covering Kids and Families
Parkview Huntington Hospital	Huntington	46750	Health Insurance
Huntington County Division of Family Resources	Huntington	46750	Medicaid/Hoosier Healthwise/Hoosier Care Connect