



2021 Community Health Needs Assessment

River Bend Hospital & North Central Health Services

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EXECUTIVE SUMMARY

On behalf of River Bend Hospital and North Central Health Services, Inc. (NCHS), a community health needs assessment (CHNA) was conducted in 2021 to identify the significant health and social service needs, both met and unmet, within the surrounding community. The 2021 CHNA was conducted by North Central Health Services and River Bend Hospital for the approximate 344,000 residents of Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren, and White Counties located in Indiana.

The chief objectives of the CHNA were to 1) identify significant health needs within the community to ultimately improve the health of the area's residents and 2) voluntarily satisfy the federal guidelines within the Patient Protection and Affordable Care Act (PPACA) of 2010. Data for this CHNA were collected from primary and secondary data sources to identify key findings and gaps that may exist between health needs and services provided within the communities served within the River Bend Hospital and NCHS service areas.

This CHNA pursued an extensive range of data collection and analysis methods to broadly identify health and social service needs in the service area as perceived by the general community, organizational stakeholders and service providers, and public health, social service, and business leaders. Particular attention was devoted to ensuring that the voices of those most disenfranchised in our communities were heard. Five methods of primary data collection were used, including: 1) a survey that collected data from a random sample of over 2,000 of the community's residents, 2) a convenience survey that collected data from over 500 individuals seeking care and services at organizational partner agencies within the service area, a survey of over 22,000 youth attending schools in the service area that were participating in the organization's Resilient Youth Initiative (RYI), 4) focus groups that solicited input from approximately 60 individuals within the service area, and 5) a survey of stakeholders from community partners related to their perceptions of strategies related to the 2018 CHNA. Several secondary data sources were reviewed to identify key findings with strategic implications and for benchmarking.

Highlighted are important findings identified through the CHNA process:

- Critical challenges to mental health are prevalent across the service area, particularly among the region's most disenfranchised communities.
- Children and adolescents in the service area face exposures to adverse experiences that challenge their mental health, social well-being, and that are related to substance use and abuse.
- The community suffers from a shortage of mental health professionals, particularly qualified psychiatrists, psychologists, social workers, and primary mental health care providers. Increased fiscal and human resources to enhance access to such care providers remains a priority.
- Substance use and abuse are among the health-related issues that both community members and service providers perceive as priorities that need to be addressed.
- Across the issues of substance use, substance abuse, and mental health, multiple co-morbidities are present including social factors such as poverty, homelessness, and food insecurity.

These issues also share determinants related to limited access to primary care and the consequences of limited primary care for those facing chronic health conditions such as obesity and diabetes. The resulting 2021 CHNA provides a foundation for the development and evaluation of community-based health and social service programs, provides a roadmap for philanthropic efforts, and results in the availability of extensive and comprehensive data about our communities that service organizations can use to inform decisions about the programs and care most likely to be of benefit in our communities.

ORGANIZATIONAL BACKGROUND



North Central Health Services

North Central Health Services (NCHS) was created in 1984 to serve as the parent company of a family of corporations which included Lafayette Home Hospital, Home Hospital Foundation, and Service Frontiers Incorporated. Today, NCHS has a primary responsibility to operate River Bend Hospital, which is a nonprofit inpatient psychiatric hospital, licensed and certified by the Indiana FSSA Division of Mental Health and Addiction and accredited by the Joint Commission. NCHS also is a grantmaking organization providing grants to 501(c)(3) organizations serving the citizens of Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren, and White Counties in Indiana for projects that relate to health and healthy communities.

River Bend Hospital

River Bend Hospital is a nonprofit inpatient psychiatric hospital licensed and certified by the Indiana FSSA Division of Mental Health and Addiction and accredited by the Joint Commission. Inpatient care is provided to adults by behavioral medicine specialists including psychiatrists, psychologists, social workers, activity therapists, and nurse professionals. They are well supported by others in the health profession and together create a therapeutic environment designed for short-term intervention and mental health enhancement. River Bend Hospital accepts patients from throughout North Central Indiana. It works cooperatively with others in behavioral health organizations to create a competent, caring environment for improving and restoring the mental health of our citizens.

Service Area and Community of the Hospital

The 2021 CHNA was conducted by North Central Health Services and River Bend Hospital for the approximate 344,000 residents of Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren, and White Counties located in Indiana. In section three (Review of Existing Health and Social Indicators) of this report, a more detailed description of the population characteristics of the service area is provided.

2021 CHNA PROCESS AND METHODS

CHNA Overview

North Central Health Services and River Bend Hospital conducted a comprehensive community health needs assessment (CHNA) consistent with the requirements set forth in section 9007 of the Patient Protection and Affordable Care Act (PPACA) of 2010.

The CHNA requirements were effective starting taxable years beginning after March 23, 2012. On December 29, 2014, the Treasury Department and the IRS published the final regulations for section 501(r) located in 26 CFR parts 1, 53, and 602. The Hospital is licensed and certified by the Indiana FSSA Division of Mental Health and Addiction and accredited by the Joint Commission, and not licensed, registered, or recognized by the state of Indiana as a hospital facility. River Bend is a nonprofit psychiatric facility that provides adult inpatient care by behavioral medicine specialists including psychiatrists, psychologists, social workers, activity therapists, and nurse professionals. The organization is not required to comply with Internal Revenue Code 501(r) per the definition defined in section 501(r)(2)(A)(i) for Hospital facilities. The Indiana Administrative Code Section 16-18-2-179(b) specifically excludes from the definition of Hospital “institutions included to diagnose, care, and treat individuals with a mental illness.” However, in the community's best interest, River Bend’s management elected to have an assessment conducted in a good faith effort to support and improve the health of the community it serves.

The assessment was developed to identify the significant health needs in the community and gaps that may exist in services provided. It was also created to provide the community with information to assess essential mental health care, preventive care, and treatment services. This endeavor represents NCHS’s and the Hospital’s efforts to share information that can lead to improved mental health care and quality of care available to the community while reinforcing and augmenting the existing infrastructure of services and providers.

CHNA Activities and Methods

A comprehensive community health needs assessment was conducted beginning in 2020 and completed in 2021, the results of which are reflected in this report. Table 1 provides an overview of the overall process and specific methods related to each. Within each respective section of this report, additional details regarding methods, participants, and measures are provided.

Table 1. 2020-2021 Community Health Needs Assessment Methods

CHNA ACTIVITIES	DESCRIPTION OF ACTIVITIES
Identification of the Service Population	North Central Health Services and River Bend Hospital staff identified its community served through a review of patient-related data and other geographic boundaries related to the hospital's service area and determined that the geographic boundaries of a ten-county service area were to be included in the service population.

<p>Review of Existing Health Indicator Data</p>	<p>North Central Health Services and River Bend Hospital, in collaboration with public health researchers, conducted a review of existing data and indicators relevant to this assessment. Subsequent to this review of data, a summary of key data to be considered during the CHNA process was developed.</p>
<p>Stakeholder Survey</p>	<p>In addition to posting the 2018 CHNA on public websites and providing contact information should community members have feedback, North Central Health Services and River Bend Hospital sought to collect information directly from stakeholders in the service area. A survey collected feedback about the 2018 CHNA and how its priorities retained relevance for 2021. Of particular interest in the stakeholder survey was the extent to which they perceived COVID-19 to impact priority setting in unique ways.</p>
<p>Community Health Surveys</p>	<p>In collaboration with nine other hospital systems in 2018, health department representatives, community organizations, and with faculty researchers from the University of Evansville and Indiana University Bloomington, North Central Health Services and River Bend Hospital developed and surveyed to collect data from residents of counties in the service area. The survey process included: a) a random sample that recruited proportionately from all zip codes in the ten-county service area and b) a convenience sample survey that sought to collect the same data from individuals seeking care and services at organizations in that same service area.</p>
<p>Resilient Youth Initiative (RYI) Survey</p>	<p>As a component of the evaluation of NCHS' Resilient Youth Initiative, a survey was conducted among approximately 22,000 youth attending RYI participating schools during the 2019-2020 school year. A follow-up survey was conducted in 2021 that enabled the comparison of results across the two samples.</p>
<p>Community Focus Group Discussions</p>	<p>Community focus group discussions were held in counties within the service area. The purpose of these focus groups were to: a) discuss insights from the existing health indicator data summary, b) discuss the factors associated with ongoing health issues identified in that data, and c) to gather other local community input relevant to a comprehensive consideration of the health needs of those counties and the whole service area.</p>
<p>Health Needs Prioritization Session</p>	<p>North Central Health Services and River Bend Hospital held a meeting of key stakeholders and organizational leadership to review data from all activities conducted for the CHNA. Subsequent to a formal presentation and discussion of the data, attendees in the meeting participated in a process to identify the top health needs that would inform the development of the implementation plan.</p>
<p>Review of Resources and Partners</p>	<p>Based upon the results of the CHNA activities, North Central Health Services and River Bend Hospital developed a list of local resources and partnerships that would be relevant to addressing the needs identified via the CHNA and the subsequent implementation plan.</p>

2021 REVIEW OF EXISTING INDICATORS RELATED TO THE GEOGRAPHIC, POPULATION, HEALTH AND SOCIAL CHARACTERISTICS OF THE SERVICE AREA

Geographic Characteristics of the Service Area

NCHS and River Bend Hospital provide services to an eight-county service area encompassing Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren, and White counties. All data summarized in this section of the report were derived from U.S. Census Bureau (2019) and County Health Rankings and Roadmaps (2021).

The combined service area spans roughly 3,500 square miles of the north-central and west-central regions of the state, including urban and rural areas. The economic base of the region is primarily supported by agricultural, industrial, and academic activities. The population per square mile is considerably lower than the state’s average population, and the majority of the population (49%) resides in Tippecanoe County. Table 2 provides a summary of key geographic and population characteristics of counties in the service area.



Table 2. Population and geographic characteristics of the service area.

Population Characteristics	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Land area in square miles	406.42	372.22	405.07	395.66	504.61	499.81	364.68	505.13	3453.6	35,826.11
Total Population	8,748	20,257	32,399	16,346	38,338	195,732	8,265	24,102	344,187	6,732,219
Population per square mile	21.8	54.1	82	43.6	75.6	345.7	23.3	48.8	99.6	181
Persons per household	2.49	2.49	2.63	2.33	2.41	2.48	2.43	2.41	2.45	2.52

Demographic Characteristics of Service Area Population

The section below provides a summary of service area demographic characteristics. Data indicates that the service area is slightly older, less racially diverse, has fewer residents who have completed a bachelor’s degree, and fewer residents living in poverty compared to the rest of the state. The distribution of service area residents by gender, ethnicity, and employment status is similar to state averages. Table 3 presents the demographic data.

Age. The median age of service area residents is 43.57 years, with the majority being categorized as “older adults” between the ages of 45-64 years. The service area has a slightly older population when compared to the state’s median age (36.5 years) and a higher percentage of residents that fall in the

“older adult” age category (18.28% versus 16.10%, respectively). Across counties, children ages 0-4 years account for the smallest proportion of the population (6.0%), which is below the state average (6.2%).

Gender. Approximately half of the residents (49.9%) identify as female, and the distribution is similar to the state’s overall population (50.7%).

Race and ethnicity. Ninety-five percent of residents in the service area identify their race as White, and 6.7% report their ethnicity as Hispanic or Latino origin. The largest proportion of non-whites (17%) resides in Tippecanoe County. State-level data indicate that 84.8% of Indiana residents identify as White and 7.3% identify as Hispanic or Latino, which suggests that the service area is slightly less racially diverse in comparison. In particular, the percentage of service area residents that identify their race as “Black Alone” (1.5%) is significantly lower than the rest of the state’s population (9.9%).

Language. Slightly less than 7% of the area's residents (6.6%) report that a language other than English is spoken in the home, although this rate is 16.2% for Tippecanoe and 12.7% for Clinton, both of which are well above the region's average.

Education. Education rates indicate that approximately 90% of the area's residents hold a high school diploma, and approximately 20% hold a bachelor's degree or higher.

Table 3. Demographic characteristics of the service area by county.

Age	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Persons under 5 years	6.20%	5.70%	6.90%	5.70%	5.80%	5.80%	5.80%	6.10%	6.00%	6.20%
Persons under 18 years	25.00%	22.10%	26.10%	21.70%	22.70%	20.60%	22.20%	23.20%	22.95%	23.30%
Persons 65 years and over	18.00%	20.00%	16.80%	20.30%	18.30%	11.90%	20.60%	20.30%	18.28%	16.10%
Reported Gender	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Women	50.10%	49.70%	50.20%	50.10%	49.20%	48.90%	50.40%	50.20%	49.85%	50.70%
Men	49.90%	50.30%	49.80%	49.90%	50.80%	51.10%	49.60%	49.80%	50.15%	49.30%
Reported Race	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
White alone	96.90%	97.30%	97.10%	97.40%	96.10%	82.70%	97.40%	96.40%	95.16%	84.80%
Black or African American alone	1.10%	1.00%	0.80%	0.60%	1.10%	5.90%	0.40%	0.90%	1.48%	9.90%
American Indian and Alaska Native alone	0.30%	0.40%	0.50%	0.40%	0.40%	0.40%	0.30%	0.70%	0.43%	0.40%
Asian alone	0.20%	0.20%	0.50%	0.30%	0.90%	8.80%	0.60%	0.60%	1.51%	2.60%
Native Hawaiian and Other Pacific Islander alone	0.10%	0.0	0.0	0.10%	0.0	0.10%	0.10%	0.10%	0.06%	0.10%
Two or More Races	1.30%	1.10%	1.10%	1.30%	1.40%	2.20%	1.20%	1.30%	1.36%	2.20%
Reported Ethnicity	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Hispanic or Latino	5.40%	4.30%	16.50%	2.70%	4.90%	8.70%	2.20%	8.80%	6.69%	7.30%
Education	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
High school graduate or higher	89.90%	88.40%	85.70%	89.00%	89.80%	91.60%	92.00%	88.80%	89.40%	88.80%
Bachelor's degree or higher	16.10%	16.70%	16.30%	14.90%	18.20%	38.70%	19.40%	16.40%	19.59%	26.50%

Poverty. The 2019 poverty rate across the service area was 11.14% slightly below the statewide rate of 11.9%. The county with the highest poverty rate was Tippecanoe (16.1%). The average annual unemployment rate for 2017 was 3.5%, which mirrors the overall state average (3.5%). A total of 14.3% of children across the service area live in poverty, with more similarities across the service reason for child poverty than other socio-demographic indicators. Table 4 presents the poverty data.

Table 4. Poverty rates across the service area by county.

Poverty	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Persons in poverty	8.70%	8.70%	11.30%	12.50%	12.10%	16.10%	9.40%	10.30%	11.14%	11.90%
Children in poverty	13.0%	12.0%	16.0%	17.0%	16.0%	14.0%	14.0%	13.0%	14.38%	15.00%

LEADING HEALTH INDICATORS

Data Related to Mortality

The data describing leading causes of mortality in the service area are drawn from the Indiana State Department of Health, Indiana Mortality Report 2019 (ISDH, 2019). Table 5 summarizes data for selected leading causes of death classified by the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) death code.

An examination of data from the service area suggests that malignant neoplasms (cancers) and major cardiovascular diseases were the two primary causes of mortality through 2019. These findings are consistent with national and state mortality data. The ten leading causes of death across the State of Indiana during the same timeframe were: (1) heart disease, (2) cancer, (3) chronic lower respiratory disease, (4) accidents, (5) stroke, (6) Alzheimer's disease, (7) diabetes, (8) kidney disease, (9) septicemia, and (10) suicide. Modifiable lifestyle factors such as diet, physical activity, and alcohol and tobacco use are known to contribute to risk for many of the leading causes of morbidity within the service area. They should be a focus of prevention and intervention efforts. Table 5 presents key mortality data for counties in the service area.

Table 5. Age adjusted death rate per 100,000 population by cause and county, 2019.

County	Malignant Neoplasms (Cancer)	Diabetes Mellitus	Alzheimer's Disease	Major Cardiovascular Diseases	Influenza and pneumonia	Chronic Lower Respiratory Disease	Chronic Liver and Kidney Diseases	All other Diseases	Motor Vehicle Accidents	All Causes
Benton	146.5	0.0	0.0	226.9	0.0	0.0	0.0	108.1	0.0	725.2
Carroll	163.2	0.0	0.0	145.3	0.0	35.0	0.0	119.1	0.0	584.3
Clinton	170.8	0.0	0.0	198.4	0.0	60.8	0.0	205.4	0.0	792.8
Fountain	240.7	0.0	0.0	317.1	0.0	86.5	0.0	167.4	0.0	1038.4
Montgomery	157.4	17.9	22.7	279.2	0.0	50.2	15.7	159.6	0.0	789.6
Tippecanoe	166.1	25.8	24.6	178.9	8.2	49.2	9.0	146.3	6.7	678.3
Warren	106.9	0.0	0.0	325.7	0.0	64.8	6.99	116.4	0.0	730.3
White	191.3	0.0	0.0	257.5	0.0	52.8	0.0	199.5	0.0	877.3

Data Related to Morbidity

Chronic Disease

This section of the report provides an overview of the service area's data related to selected chronic diseases including asthma, diabetes, heart disease, high blood pressure, and high cholesterol.

Asthma prevalence. Adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or another health professional that they had asthma are a typical indicator for this chronic condition. This indicator is relevant because asthma is a prevalent problem in the U.S. and is often exacerbated by environmental conditions such as poor air quality. Rates of asthma in the majority of counties in the service area were lower than state and national averages. The only county that exceeded state and national benchmarks was Montgomery, with 17.2% of adults reporting an asthma diagnosis.

Diabetes prevalence. The percentage of adults aged 20 and older who a doctor has ever said that they have diabetes is a relevant indicator because diabetes is a prevalent problem in the U.S. and may indicate a lifestyle that places individuals at risk for premature morbidity as well as developing other health problems. The prevalence of diabetes was higher in six of the ten service area counties (above 10% of the population) when compared to state and national rates, with both Tippecanoe and Warren counties being the two with prevalence rates below 10%. However, it is important to note that Tippecanoe County has the highest mortality rate from diabetes in the service area, as indicated in the mortality table on the previous page.

Heart disease (adult) prevalence. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is associated with high blood pressure, high cholesterol, and heart attacks. The prevalence of heart disease exceeded state and national benchmarks in three counties (Carroll, Clinton, Fountain) in the service area. When examining rates, the prevalence of heart disease in Clinton County was over four percentage points higher than the state average and five percentage points higher than the national average. Heart disease is a leading cause of mortality and morbidity, and interventions to reduce rates in disproportionately affected counties are needed.

High blood pressure (adult) prevalence. This indicator is relevant because it is often associated with heart disease and stroke. The data suggest that three counties (Carroll, Tippecanoe, White) in the service area demonstrate a higher prevalence of individuals with high blood pressure when compared to state and national averages.

High cholesterol (adult) prevalence. This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or another health professional that they had high blood cholesterol. High cholesterol has relevance because it can be a marker of risk for heart disease. Five counties in the service area surpassed state and national averages for the percentage of adults with high cholesterol. Counties of particular concern include Fountain and White where nearly half of adults or more report high cholesterol.

Infectious Disease

The subsequent section, and Tables 6 & 7, summarize data from the Indiana State Department of Health Epidemiology Resource Center’s Annual Report of Infectious Diseases 2016. Diseases are categorized in the following ways: (1) Vaccine Preventable (i.e., Mumps, Pertussis), (2) Vector Borne (i.e., Lyme Disease), (3) Viral Hepatitis (i.e., Hepatitis C), and (4) Enteric (i.e., Salmonellosis). The categorization of disease has implications for prevention efforts, and each will be discussed in the section on prevention. Sexually transmitted disease (STD) data are reported separately.

Table 6. Cases per 100,000 population by disease and county, 2016 (Lyme Disease), 2019 (all others)

County	Mumps (Vaccine Preventable)	Pertussis (Vaccine Preventable)	Lyme Disease (Vector Borne)	Hepatitis C (Chronic)	Salmonellosis (Enteric)
Benton	<5	< 5	0	90.0	< 5
Carroll	<5	< 5	5.00	49.4	< 5
Clinton	< 5	< 5	3.10	104.9	< 5

Fountain	< 5	< 5	6.10	67.3	30.6
Montgomery	< 5	< 5	10.50	83.5	< 5
Tippecanoe	<5	5.2	3.20	85.8	4.1
Warren	< 5	< 5	0	0	< 5
White	< 5	< 5	4.20	83.0	0
Indiana State	<5	2.68	2.29	123.11	11.9

Source: ISDH, Infectious Diseases Report, 2016, 2019

Sexually transmitted diseases. The following section describes the reported cases of Chlamydia, Gonorrhea, Syphilis, and HIV in the service area. Data represent diagnosis or prevalence rates by 100,000 population. Chlamydia remains a significant issue across the service area, with gonorrhea also being prevalent in most counties. Syphilis diagnoses are an issue in Tippecanoe and the region overall, except for Warren County, which has individuals living with HIV, although at much lower rates than the state overall.

Table 7. STI rates by county across service area, 2019

STI	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Chlamydia diagnosis	308.6	286.3	324.1	305.9	620.5	560.5	242	344.4	374	526.3
Gonorrhea diagnosis	0	54.3	52.5	36.7	67.8	164	0	74.7	56.3	177.1
Syphilis diagnosis	0	0	0	0	0	2.6	0	0	na	4.8
HIV Prevalence	69.3	39.7	68.2	48.9	88.7	96.9	0	82.9	61.8	189.9

Health Indicators and Service Area County Health Rankings

The data presented in the health indicators section of the report summarizes population health outcomes; health factors and health behaviors; clinical care; and social, economic, and physical environment factors for the service area, Indiana State, and the top US performers (i.e., top 10th percentile). The 2021 data were drawn from county-level reports compiled by County Health Rankings and Roadmaps (2021), which utilizes a variety of original data sources and measures.

Health Rankings

County Health Rankings are based on a conceptual model of population health that includes both Health Outcomes (length and quality of life) and Health Factors (determinants of health) (see Figure 1). These Outcomes and Factors are broken down into a number of components that are broken down further into subcomponents called Focus Areas.

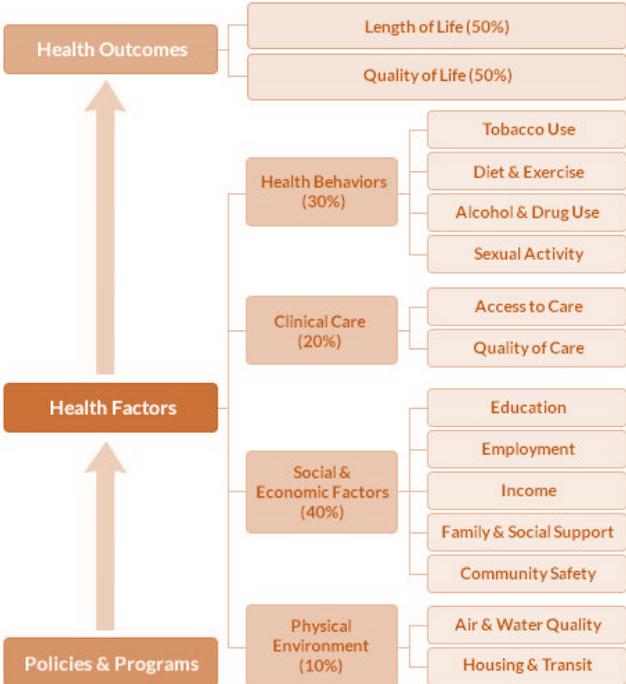


Figure 1. County Health Ranking Model – ranking system.

The County Health Ranking Model provides the foundation for the ranking process. Counties in each of the 50 states are ranked according to summaries of a variety of health measures and those with high ranks, e.g., 1 or 2, are considered to be the “healthiest.” Counties are ranked relative to the health of other counties in the same state, which allows for comparisons between counties.

This data will provide context to help communities understand the factors that contribute to population health outcomes. The health outcomes of any community are determined by multiple behavioral, social, economic, and environmental factors as well as access to health care services. Collectively, the factors

that contribute to health outcomes are referred to as the social determinates of health (SDOH). According to the US Centers of Disease Control and Prevention (CDC), the application of information gained from assessments of community-level SDOH can improve individual and population health outcomes as well as advance health equity (CDC, 2018).

It is important to recognize that each community has unique strengths and challenges. County-level data provides communities the opportunity to identify and capitalize on strengths that promote community health as well as identify and address challenges that threaten community health outcomes. Therefore, if a county’s overall health outcomes rank is better than the health factors rank, it suggests that the health outcomes rank may decline in the future if no action toward improvement is taken. If a county’s health outcomes rank is worse than its health factors rank, the health outcomes rank may improve in the future with appropriate intervention.

The data and comparisons presented in this section of the report provide important information that can be used to identify areas of strength as well as challenges and, in doing so, provide opportunities for the development and implementation of strategies that support improved community health outcomes across the service area.

Service Area County Rankings

Rankings indicate significant variability among the ten counties in the service area, with Warren ranking 4th in the state and Clinton ranking 52nd (see Table 8). The majority of counties in the service area were ranked within the top 50th percentile and only two counties (Clinton and Fountain) ranked in the 75th percentile.

Table 8. Service area overall rankings by county.

County	Health Outcomes Rank	Health Factors Rank
Benton	25	27
Carroll	13	46
Clinton	52	38
Fountain	51	66
Montgomery	38	25
Tippecanoe	11	8
Warren	4	29
White	39	21

A variety of indicators contribute to the ranking of each county, including length of life, quality of life, health behaviors, clinical care, social and economic factors, and physical environment.

Table 9 below provides a summary of the rankings by county across the service area for these indicators.

Table 9. Indicator Areas for County Rankings

	Length of life	Quality of Life	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
County	Rank	Rank	Rank	Rank	Rank	Rank
Benton	17	38	46	35	29	11
Carroll	11	13	54	61	25	82
Clinton	61	42	45	48	35	40
Fountain	69	34	68	74	60	70
Montgomery	45	30	23	10	54	24
Tippecanoe	10	12	5	11	23	2
Warren	3	5	48	66	22	5
White	52	16	34	28	19	10

Health Outcomes

Population health outcome rankings for the service area are formulated from composite scores calculated by measuring a variety of factors, including those that contribute to length and quality of life. While the service area did not exceed the benchmarks set by the top US performers, the summative data indicate that the service area’s overall performance is above the state average for all indicators except the percentage of residents reporting poor/fair health. Table 10 summarizes this data.

Table 10. Summary of service area health outcomes.

Length of Life	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Premature deaths	6,900	6,400	9,100	9,500	8,300	6,300	5,600	8,800	7,612	8,300
Quality of Life	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Poor or fair health	21%	18%	21%	19%	19%	17%	17%	19%	18.80%	18%
Poor physical health days	4.5	4.1	4.3	4.3	4.1	3.9	4	4.1	4.1625	4
Poor mental health days	5	4.7	4.8	4.9	4.9	4.6	4.7	4.6	4.775	4.7
Low birthweight	6%	7%	7%	7%	7%	7%	5%	7%	6.60%	8%

Health Outcome Strengths and Challenges for the Service Area

Strengths

- Premature death and age-adjusted premature mortality rates were lower in the service area when compared to the state average.
- The percentage of service area residents that gave birth to a low-birth-weight infant was lower than the state average.

Challenges

- The number of poor physical health days reported by service area residents was similar to the state average.
- The number of poor mental health days reported by residents in the service area was equal to the state average.
- The percentage of service area residents reporting fair to poor health was slightly higher than the state average.

Population Health Factors

Population health factor rankings for the service area were formulated using composite scores for a variety of factors, including: (1) health behaviors, (2) clinical care, (3) social and economic factors, and (4) physical environment factors. A county-by-county comparison of combined population health factor rankings indicates that Tippecanoe ranked the best at 8th in the state. At the same time, Fountain performed the worst and was ranked 66th among the 92 Indiana counties.

The individual factors accounted for in these ranking categories are presented separately below for health behaviors and clinical care factors.

Health Behaviors. Health behavior outcome rankings for the service area are formulated from composite scores that are calculated by measuring of a variety of factors, including adult smoking, adult obesity, drug overdose mortality, excessive drinking, alcohol-impaired driving deaths, food insecurity, physical inactivity, access to opportunities to exercise, sexually transmitted infection rates, and teen birth rate. Table 11 presents these health behavior indicators.

Table 11. Health behaviors indicators by county across service area, 2021

Health Behaviors	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area	Indiana
Adult smoking	25%	23%	23%	25%	24%	20%	23%	23%	23%	22%
Adult obesity	36%	41%	37%	34%	29%	30%	38%	30%	34%	34%
Food environment index	8	8.4	8.5	7.7	7.9	7.6	8.4	8.3	8.1	7
Physical inactivity	29%	31%	34%	32%	29%	24%	31%	33%	30.30%	27%
Access to exercise opportunities	58%	52%	63%	52%	64%	79%	34%	46%	56.00%	75%
Excessive drinking	18%	18%	17%	18%	18%	17%	19%	19%	18%	19%
Alcohol-impaired driving deaths	0%	25%	19%	13%	13%	19%	27%	12%	16%	19%
Sexually transmitted infections	209	259.5	365.1	345.3	347.8	607.1	243.9	363.9	342.7	523.9
Teen births	25	20	33	36	38	15	20	33	27.5	25

Adult smoking and obesity rates among service area residents were at the state average. The percentage of physically inactive adults (30.3%) was higher in the service area when compared to the state average (27.0%). Further, only 56% of service area residents indicated that they had opportunities to exercise, which is well below the state average of 75%. Excessive drinking was reported by 18% of the service area residents, compared to 19.0% of Indiana residents. The percentage of alcohol-impaired driving deaths was slightly lower in the service area (16%) when compared to the state average (19%).

Health Behavior Strengths and Challenges for the Service Area

Strengths

- Sexually transmitted infection rates are lower than the state average.
- Excessive drinking rates were slightly lower in the service area when compared to state averages.
- Alcohol-impaired driving deaths rates were lower in the service area when compared to state averages.

Challenges

- Adult smoking rates in the service area are equivalent to state averages.
- Physical inactivity rates were higher among service area residents when compared to state averages.
- Access to exercise opportunities are lower in the service area than the state average.
- Adult obesity rates are equivalent to state averages.
- The teen birth rate was higher in the service area when compared to the state rate.

Clinical Care.

Clinical care rankings for the service area are formulated from composite scores that are calculated by measuring of a variety of factors, including health care costs, percentage of uninsured children and adults, ratio of health care providers to the total population, preventable hospital stays, mammography screening, and flu vaccination rates. The summative data indicate that the service area’s overall performance was similar to the state averages across most indicator areas. Table 12 summarizes these clinical care indicators.

Table 12. Summary of clinical care indicators.

Clinical Factors	Benton	Carroll	Clinton	Fountain	Montgomery	Tippecanoe	Warren	White	Service Area Indiana	
Uninsured	10%	10%	12%	9%	10%	10%	7%	12%	10%	10%
Primary care physicians	na	6,710:1	6,450:1	5,450:1	2,560:1	1,450:1	na	3,020:1	na	1,500:1
Dentists	2,190:1	2,530:1	2,160:1	2,720:1	1,920:1	2,100:1	8,270:1	3,440:1	na	1,750:1
Mental health providers	4,370:1	1,350:1	2,310:1	1,360:1	940:1	680:1	na	2,410:1	na	1012:1
Preventable hospital stays	3,992	4,171	3,561	5,129	3,908	3,905	4,913	2,956	4,066	4,795
Mammography screening	42%	36%	41%	42%	51%	45%	31%	46%	41%	42%
Flu vaccinations	55%	53%	57%	43%	58%	57%	43%	53%	52%	52%

Clinical Care Strengths and Challenges for the Service Area

Strengths

- Preventable hospital stays are slightly lower than the state average.

Challenges

- The percentage of uninsured is equivalent to the state average.
- The ratio of health care providers to residents was significantly lower in the service area when compared to state averages. The low number of providers or lack of data makes comparisons difficult and indicates a weakened infrastructure for some areas.
- The percentage of service area residents that received mammography screening was lower when compared to the state average.

Mental Health and Substance Abuse

Mental health status and substance use/abuse are important determinants of community members' overall health and well-being. As such, indicators of mental health and substance use/abuse can provide information that helps communities identify areas of strength as well as challenges to overall population health outcomes.

Mental health and substance abuse indicators include: (1) serious mental illness (SMI); (2) any mental illness (AMI); (3) suicidal ideation and attempts; (4) alcohol use, abuse, and dependence; (5) substance use, abuse, and dependence; (6) access and utilization of treatment services; and (7) the availability of alcohol, illicit drugs, and prescription drugs with the potential for abuse. Data drawn from these indicators can be applied to developing and implementing community-based interventions that improve population health outcomes.

This section of the report summarizes behavioral health indicators for the state and, when available, the service area. The data presented were drawn from the following sources: The Substance Abuse and Mental Health Services Administration's (SAMSHA, 2015) Behavioral Health Barometer, Indiana 2015 (SAMSHA, 2015); the Indiana State Department of Health's (ISDH) Suicide in Indiana Report 2011-2015 (ISDH, 2017); and the ISDH's Indiana Epidemiological Resource Center (IPRC) data (ISDH, 2018).

Mental Health. According to Healthy People 2020, the burden of mental illness in the United States is among the highest of all diseases, and mental disorders are among the most common causes of disability (USDHHS, 2018). Mental health is essential to an individual's well-being, healthy family and interpersonal relationships, and the ability to live a full and productive life. Mental health disorders have a serious impact on physical health. They are associated with the prevalence, progression, and outcome of some of today's most pressing chronic diseases, including diabetes, heart disease, and cancer. Early diagnosis and treatment can decrease the disease burden of mental health disorders as well as associated chronic diseases. Efforts to improve the nation's mental health is a top priority.

State-level data suggest that the percentage of Indiana adults over the age of 18 years that report past-year serious mental illness (SMI), and past-year serious thoughts of suicide is higher than the national average (SAMSHA, 2015). Between 2010 and 2014, a higher percentage of Indiana adults reported receiving treatment or counseling for any mental illness (AMI) in the past year when compared to the national average. However, 2014 data indicate that a lower percentage reported improved functioning due to treatment received in the Public Mental Health System compared to the national average.

Among adults served in Indiana’s public mental health system in 2014, 47.4% of those aged 18–20, 56.1% of those aged 21–64, and 92.6% of those aged 65 or older were not in the labor force. Further, 2016 BRFSS data examining depression among state residents found that 15.9% had been told they had depression at some point. Table 13 summarizes this data.

Table 13. Summary of Indiana state-level and national-level mental health data for adults aged 18 years and above.

	State-level %	National level %	Data Years
Past-year serious mental illness (SMI)	4.8	4.2	2013-2014
Past-year serious thoughts of suicide	4.1	3.9	2013-2014
Any mental illness (AMI) that received treatment/counseling in the past year	43.6	42.7	2010-2014
Consumers that reported improved functioning from treatment received in the Public Mental Health System in the past year	66.3	70.9	2014

Adolescent Mental Health. The available state-level data indicate that the percentage of Indiana youth aged 12-17 years that experienced a major depressive episode during 2013-2014 was similar to the national average (12.2% versus 11%, respectively) (SAMSHA, 2015). Of those who experienced a major depressive episode between 2010 and 2014, 62.4% did not receive treatment. The percentage of children and adolescents aged 17 years and younger living in Indiana that received treatment in the public health system that reported improved functioning as a result of treatment was lower than the national average (64.3% versus 69.5%, respectively).

Poor Mental Health Days. Table 14 presents the average number of reported mentally unhealthy days per month on the BRFSS through 2019. An examination of the data indicates broad similarities across all counties in the service area and a high degree of consistency with the state average.

Table 14. Past 30-day poor mental health days, 2019.

County	Past 30 days, # of poor mental health days
Benton	5.0
Carroll	4.7
Clinton	4.8
Fountain	4.9
Montgomery	4.9
Tippecanoe	4.6
Warren	4.7
White	4.6
Indiana State	4.7
Service Area	4.7

Frequent Mental Distress and Insufficient Sleep. Table 15 presents the percentage of service area residents that reported frequent mental distress and the percentage that reported insufficient sleep on the Behavioral Risk Factor Survey through 2019, as published in the County Health Rankings. According to the CDC, persons getting insufficient sleep are “more likely to suffer from chronic diseases such as hypertension, diabetes, depression, and obesity, ...” (CDC, Insufficient Sleep Is a Public Health Problem, 2015). All counties in the service area had similar rates of frequent mental distress and insufficient sleep when compared to the state average.

Table 15. Percentage of population reporting frequent mental distress and insufficient sleep by county, 2019.

County	Frequent Mental Distress (%)	Insufficient sleep (%)
Benton	17	38
Carroll	15	35
Clinton	16	37
Fountain	16	37
Montgomery	15	36
Tippecanoe	14	39
Warren	15	36
White	15	36
Indiana State	15	38

Mental Health Providers. The availability of mental health care providers (e.g., psychiatrists, psychologists, clinical social works, counselors) is an indicator of access to health care. The data suggests that the area population is critically underserved. Improving access to mental health care has the potential to reduce poor population health outcomes and should be a top priority for the service area. Table 16 summarizes mental health provider ratio data by county.

Table 16. Ratio of mental health care providers by county, 2021.

County	Ratio
Benton	4,370:1
Carroll	1,350:1
Clinton	2,310:1
Fountain	1,360:1
Montgomery	940:1
Tippecanoe	680:1
Warren	N/A
White	2,410:1
Indiana State	1012:1

Suicide. Suicide is considered a leading indicator of mental health and remains a significant public health concern. Suicide affects people of all ages, racial and ethnic backgrounds, and genders. Risk for suicide includes depression, other mental disorders, or substance abuse disorders; certain medical conditions; chronic pain; a prior suicide attempt; family history of a mental disorder or substance abuse; family history of suicide; family violence, including physical or sexual abuse; having guns or other firearms in the home; having recently been released from prison or jail; and being exposed to others' suicidal behavior, such as that of family members, peers, or celebrities. Reducing suicide rates is a goal of Healthy People 2020 and should be prioritized in communities with rates that exceed state and national averages.

An examination of service area suicide death rates for the years 2011-2015 indicate that rates were highest in Benton County (25.1 per 100,000 population) and lowest in Tippecanoe County (11.4 per 100,000 population) (ISDH, 2017). The raw number of hospitalizations related to a suicide attempt during 2011-2014 was highest in Tippecanoe County (n=329) and lowest in Benton County (n=16). Likewise, the raw number of emergency department (ED) visits resulting from a suicide attempt was highest among the residents of Tippecanoe County (n=564) and lowest among the residents of Warren County (n=17). It is important to consider the wide variability in county population size within the service area when interpreting the raw data. For example, while Tippecanoe County had the largest number of both hospitalizations and ED visits during the assessment period, it also accounts for 49% of the total population of the service area.

Table 17. Suicide deaths (2011-2015), hospitalizations and ED visits (2011-2014) by county of residence, Indiana.

County	Suicides (Rate)	Hospitalizations (#)	ED Visits (#)
Benton	11 (25.1)	16	32
Carroll	16 (16.0)	31	56
Clinton	19 (11.6)	146	298
Fountain	15 (17.8)	43	100
Montgomery	27 (14.4)	84	175
Tippecanoe	96 (11.4)	329	564
Warren	6 (14.4)	17	33
White	15 (12.3)	54	141

Substance Use and Abuse. Healthy People 2020 (USDHHS, 2018) reports that substance abuse is associated with a range of destructive social conditions, including family disruptions, financial problems, lost productivity, failure in school, domestic violence, child abuse, and crime. Further, both social attitudes and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. Substance abuse contributes to a number of adverse health outcomes and public health problems, including cardiovascular conditions; pregnancy complications; teenage pregnancy; Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS); sexually transmitted diseases (STDs); domestic violence; child abuse; motor vehicle crashes; homicide; and suicide. Reducing the prevalence of substance abuse is among the nation's leading public health priorities.

Table 18 summarizes the substance abuse treatment incidence rate for the service area between 2011-2015 (ISDH, 2018). As ISDH only releases reports of such data in broad multi-year waves, this data available in 2018 is the most recent data at the level of counties within the service area.

The incidence rate for treatment across the state was 590.9 per 100,000 population during the years 2011-2015, and the service area average was 472.9 per 100,000 population. An examination of the treatment rates by county suggests that Montgomery had the highest incidence rate of individuals in treatment for substance abuse (901.5 per 100,000 population) and ranked 17th among the 92 Indiana counties. In comparison, Tippecanoe had the lowest observed rate (260.2 per 100,000 population) in the service area and ranked 88th in the state. Only two counties in the service area exceeded state rates and those were Montgomery and White.

Table 18. Substance abuse total treatment incidence rate per 100,000 population 2011-2015 by county.

County	Incidence Rate per 100,000 population	State Rank
Benton	515.9	64
Carroll	564.1	58
Clinton	512.1	66
Fountain	413.2	76
Montgomery	901.5	17
Tippecanoe	260.2	88
Warren	296.6	83
White	640.9	44
Indiana State	590.9	n/a

Drug Overdose Deaths. Table 19 presents a summary of drug overdose counts for 2019. In many cases, county-level data were not reported, and other data sources suggest that the service area fell below the state average for drug overdose deaths. Among the counties reporting data, Montgomery, Tippecanoe, and Fountain surpassed the state average during the reporting period, indicating the need for targeted intervention.

Table 19. Number and rate of drug overdose deaths by county, 2019.

County	Count
Benton	N/A
Carroll	17
Clinton	27
Fountain	28
Montgomery	31
Tippecanoe	19
Warren	N/A
White	19
Indiana State Average	26

Drug and Alcohol Availability

Availability serves as a marker of risk and should be considered when examining the rates of use and abuse. One mechanism of preventing substance use and abuse is limiting access in the community. The section below provides summative alcohol and drug availability data for the service area.

Alcohol Outlet Density. This indicator is defined as the number of alcohol sales outlets in relation to the total population for 2020. Across the service region, due to its size of the population, Tippecanoe holds the most alcohol licenses, yet its overall density is among the lower range for the area. White County has the highest density of alcohol outlets in the region.

Table 20. Alcohol Outlet Density per 10,000 population, 2020

County	Alcohol Licenses	Alcohol Outlet Density per 10,000
Benton	26	30
Carroll	31	15.4
Clinton	68	21.1
Fountain	38	23.1
Montgomery	70	18.3
Tippecanoe	323	16.9
Warren	8	9.7
White	64	26.5

Opioid Prescription Dispensations. Opioid prescription dispensations to Indiana residents were collected from the Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT). Dispensation data includes three opioid prescription categories: opioid analgesics, opioid antidiarrheals/antitussives, and opioid antagonists and treatment addiction medications. Data is reported by the county of residence of the patient who received the dispensation and may or may not be where the prescription was written or filled.

While data were unavailable for many counties in the service area, the available information indicates that Fountain and Jasper had significantly higher rates of opioid prescription dispensation when compared to the state average. Because data were not adjusted for age or terminal illness, findings should be interpreted with caution. However, the risk of developing dependence associated with certain types of opioid medications is high even when used as prescribed. Therefore, education and monitoring may be warranted.

Table 21. Prescription rate per 1,000 by county 2018, not adjusted for age or terminal diagnosis status.

County	Rate	State Rank
Benton	N/A	N/A
Carroll	N/A	N/A
Clinton	N/A	N/A
Fountain	245.5	46
Montgomery	N/A	N/A
Tippecanoe	153.9	89
Warren	N/A	N/A
White	205.9	73
Indiana State	218.4	

Summary

While many health and social service providers are well informed on the major data that guides their delivery, implementation, and evaluation of community-based services, the purpose of an extensive review of data for the CHNA process is to provide a foundation for the consideration of newly collected data and to help guide the decision-making process that will influence the allocation of resources in future years.

While NCHS and River Bend Hospital serve a large and complex geographic region of Indiana, there are some apparent trends in the data that were used collectively with the other data gathered during the CHNA.

Mortality Indicators. Data suggest that cancers and cardiovascular diseases continue to be the top causes of mortality in the region, consistent with state and national trends. These and other mortality causes are largely related to modifiable lifestyle factors; those of priority for NCHS and River Bend Hospital include the use of substances and overall health maintenance through diet and physical activity.

Morbidity Indicators. The region continues to observe disproportionate rates of diabetes and heart disease in several counties within the service area. Most chronic diseases can be prevented through behavioral modifications such as maintaining a healthy diet, engaging in regular physical activity, avoiding excessive alcohol consumption, avoiding tobacco, and receiving regular health screenings. In addition to modifying individual behaviors, chronic disease prevention efforts can be supported within communities by providing community members opportunities to make healthier choices.

Infectious Disease. The majority of the service area had low recorded incidence rates of preventable infectious diseases. Sexually transmitted infections are generally below state average levels except for Tippecanoe and Montgomery Counties, particularly chlamydia. Each county continues to have a stable prevalence of HIV infection. Incidence of primary and secondary Syphilis was low across most of the service area for all reported years. The data suggest that sexual health, as measured by disease incidence, is comparatively better in the service than in the state overall. The elevated rates in Tippecanoe County and Montgomery County indicate that intervention to reduce STD transmission is warranted.

Health Rankings. Rankings indicate significant variability among the eight counties in the service area, with Warren ranking 4th in the state and Fountain and Clinton ranking 51st and 52nd, respectively. The majority of counties in the service area were ranked within the top 50th percentile, and only two counties (Clinton and Fountain) ranked in the 75th percentile.

Health Outcomes. Population health outcome rankings for the service area are formulated from composite scores calculated by measuring a variety of factors, including those that contribute to length and quality of life. While the service area did not exceed the benchmarks set by the top US performers, the summative data indicate that the service area's overall performance is above or at the state average for many indicators except the percentage of residents reporting poor/fair health.

Health Behaviors. Health behavior data for the region considered various factors, including adult smoking, adult obesity, drug overdose mortality, excessive drinking, alcohol-impaired driving deaths, food insecurity, physical inactivity, access to opportunities to exercise, sexually transmitted infection rates, and teen birth rate. Summative data indicate that the service area's overall performance is at or above the state average for all indicators except the percentage of residents reporting physical inactivity, opportunities to exercise, and teen birth rate.

Clinical Care. Clinical care considerations for the region included a variety of factors, including health care costs, percentage of uninsured children and adults, the ratio of health care providers to the total population, preventable hospital stays, and mammography screening. The summative data indicate that the service area’s overall performance is generally in line with state averages, although there is great variability in ratios related to provider availability.

Mental Health and Substance Abuse. There were slightly fewer poor mental health days reported in the service area when compared to the state average, but a higher number reported in Benton, Clinton, Fountain, Montgomery, Tippecanoe, and White counties compared to the national average during the same time period. All counties in the service area had slightly lower percentage rates of frequent mental distress and insufficient sleep when compared to the state average. The region remains underserved with regard to mental health providers, with all counties below the state and national averages. Characteristics of suicide and suicide attempts, the use of specific substances, and treatment for substance abuse varied considerably across the counties in the region but remain at levels of concern and reinforce the need for the specific substance abuse and mental health services of NCHS and River Bend Hospital.

Using Existing Indicators for Prioritization Process

During the prioritization process (see Section 8 of this report), data from this report were considered along with data from the other CHNA activities. While participants in the prioritization process had the opportunity to review the data presented in this section of the report (section 3), a summary of this data was prepared and presented in the format of a “Status Review of Indicators.” The purpose of this was to articulate a summary “risk” level for health issues considered in this data review by situating that data within the context of a range of factors including: prevalence/incidence, comorbidity factors, situational and structural considerations, health infrastructure considerations, and variance across the counties in the service area. Issues were assigned one of three levels, including: reduced risk (green), critical for monitoring (yellow), and urgent (red). Below are the summaries of the data as shared with stakeholders during the prioritization process.

Morbidity	Asthma	Green
	Diabetes	Yellow
	Heart Disease	Red
	High Blood Pressure	Yellow
	High Cholesterol	Red
	Infectious Disease	Green
	STI	Yellow
Mortality	Cancer and Cardiovascular Disease	Red
	Preventable Factors Known	Green

Health Outcomes	Length of Life	Yellow
	Poor Physical Health Days	Yellow
	Poor Mental Health Days	Red
	Poor Overall Health	Green
	Quality of Life	Yellow
	Low Birth Weight	Green
Mental Health	Poor Mental Health Days	Yellow
	Frequent Mental Distress	Green
	Mental Health Providers	Red
	Suicide	Yellow
	Suicide Attempts/Hospitalizations	Yellow
Clinical Care	Costs of Care	Green
	Uninsured Adults	Yellow
	Uninsured Children	Red
	Primary Care Providers	Yellow
	Mental Health Providers	Red
	Dental Care Providers	Yellow
	Preventable Hospital Stays	Red
	Diabetes Monitoring	Green
	Mammography Screening	Yellow
Substance Abuse	Drug Overdose	Yellow
	Treatment	Yellow
	Alcohol Density	Red
	Meth Lab Seizures	Red
	Opioid Dispensations	Red
Health Behaviors	Smoking	Yellow
	Physical Inactivity	Red
	Obesity	Yellow
	Drug Overdose	Yellow
	Excessive Drinking	Red
	Alcohol Driving Deaths	Red
	Food Insecurity	Yellow
	Teen Birth	Red

STAKEHOLDER SURVEY



The previous CHNA conducted by North Central Health Services (NCHS) and River Bend Hospital was in 2018. Since that time, the document has been available to the public on the organizations’ websites. At the beginning of the 2021 CHNA, no comments had been received based upon those posted documents.

To ensure that those providing services in the region were allowed to provide feedback on the most recent CHNA and its relations to priorities in 2021, NCHS and River Bend Hospital developed a survey to collect feedback about the 2018 CHNA. The survey was distributed to a range of service-providing organizations in the eight-county area covered by this CHNA. Following is a description of the results of the survey.

Participants

A total of 20 completed surveys were received from individuals who had an affiliation with at least one key stakeholder organization in the Hospital's service area.

Participants were asked to indicate the extent to which they provided services in the eight-county area. As is the case in the broad service area, most organizations serve more than one county. Table 22 provides an overview of the extent to which participants in this review described themselves as being affiliated with an organization that provides services in the eight counties.

Table 22. Counties Served by Organizations Represented by Participants (n = 20)

Counties Served	Number	Percent
Benton	7	35.0
Carroll	8	40.0
Clinton	9	45.0
Fountain	8	40.0
Montgomery	9	45.0
Tippecanoe	13	65.0
Warren	8	40.0
White	8	40.0

Engagement in CHNA Activities

Participants were asked to describe whether they had participated in any activities that they knew were related to the 2018 CHNA and the 2018 CHNA. Slightly over one-third of the participants (35%, n = 7)

reported participating in the 2018 CHNA activities, and 45.0% (n = 9) reported participating in the 2021 CHNA activities.

Perceptions of the 2018 CHNA Priorities

The 2018 CHNA resulted in the establishment of eight “priority needs.” Participants in the survey were provided each of those priorities and asked, “whether the need reflected an issue that was important to prioritize in 2021.” Table 23 provides an overview of responses.

Table 23. Perceptions of 2021 Relevance for 2018 CHNA Priority Needs (n = 20)

2018 Priority Area	% Perceive as High Priority for 2021
Increase number of mental health providers	90%
Expand access to mental health care	90%
Expand access to suicide prevention and crisis intervention programs	80%
Assist mental health care and resource organizations in capacity building	70%
Increase access to substance use disorder treatment, prevention, and recovery	75%
Increase access to resources to prevent obesity and preventable chronic diseases	30%
Enhance resources to address the social determinants of health	60%
Increase access to health care within underserved communities	65%

Perceptions of Hospital's Commitment to 2018 Priorities

Participants were asked to provide their perception of the extent to which the Hospital had remained focused on the priorities it established during the 2018 CHNA. Table 24 provides a summary of participant responses.

Table 24. Perceptions of Hospital's Commitment to 2018 Priorities (n = 20)

2018 Priority Areas	% Perceive Has Been a High Priority	% Perceive Has Been Somewhat a Priority
Increase number of mental health providers	75%	20%
Expand access to mental health care	60%	30%
Expand access to suicide prevention and crisis intervention programs	40%	55%
Assist mental health care and resource organizations in capacity building	35%	55%
Increase access to substance use disorder treatment, prevention, and recovery	55%	35%
Increase access to resources to prevent obesity and preventable chronic diseases	25%	50%
Enhance resources to address the social determinants of health	25%	70%
Increase access to health care within underserved communities	30%	50%

Perceptions of COVID-19 Impact on Priority Areas

Participants were asked to provide their perception of the extent to which the COVID-19 pandemic had influenced whether 2018 priority areas had been impacted in terms of whether they were more or less of a priority for 2021. Table 25 provides a summary of participant responses.

Table 25. Perceptions of COVID-19 Impact on 2018 Priorities (n = 20)

2018 Priority Areas	More of Priority Due to COVID (%)	Less of Priority Due to COVID (%)	Not Impacted by COVID (%)
Increase number of mental health providers	90%	5%	5%
Expand access to mental health care	90%	5%	5%
Expand access to suicide prevention and crisis intervention programs	85%	10%	5%
Assist mental health care and resource organizations in capacity building	80%	15%	5%
Increase access to substance use disorder treatment, prevention, and recovery	65%	25%	10%
Increase access to resources to prevent obesity and preventable chronic diseases	40%	40%	20%
Enhance resources to address the social determinants of health	45%	40%	15%
Increase access to health care within underserved communities	80%	15%	5%

Additional Feedback on 2018 and 2021 CHNA Priority Needs

Participants were given the opportunity to provide additional feedback about the needs prioritized during 2018 and the extent to which they ranked them as priorities for 2021. Of the participants, seven (35%) provided additional feedback. Table 26 presents the additional comments from participants related to their perceptions of priorities.

Table 26. Participant perceptions on priorities for 2018 and 2021 (n = 7)

Do you have any additional comments about the priorities above and why you may have rated them as you did?
To me they are all connected. The mental health crisis is here now and substance use disorder is a mental health problem first. Chronic disease may be connected to mental health and vice versa and access points can be connected with mental health provision as well as with PCP's. Capacity building for existing programs that demonstrate outcomes and provide crisis intervention are immediate needs and align with federal initiatives which combined could make a huge impact in our ability to serve the region at the level that would create serious positive outcomes in our region. Addressing the critical mental health provider shortage requires legislative action that would yield results in a decade. We don't have that kind of time or leverage. Underserved communities and social determinants of health should remain a top priority as intergenerational and collective trauma and poverty must be interrupted before any true cultural healing can begin. It is important that we de-aggregate our data to ensure communities of color and LGBTQ communities are being studied in a manner reflective of our determination to improve access and begin those healing conversations.
I work with at risk teenagers. Mental health and substance abuse are high priorities in my line of work.
Mental health issues and substance use disorders are skyrocketing along with suicide attempts and success, it is destroying lives and families at alarming rates.
We were already in a mental health crisis before the pandemic hit.
Mental Health a priority
I think that the pandemic has put a focus on mental health and suicide prevention. That would be the reason I would rank those things above others.
Mental health is the root of many addictions, criminal activities, and poverty. I think it is a must to normalize admission of the need for mental health treatment. I think it is also very important to diagnose and treat while young.

Of particular interest during the stakeholder survey was to assess perceptions of the impact of COVID-19 on three key areas of focus for the Hospital, including addressing mental health issues, addressing substance use and abuse issues, and addressing obesity and preventable chronic disease. The tables below provide the additional perceptions of survey participants on these three issues.

Table 27. Perceptions of COVID-19 impact on addressing mental health issues (n = 18)

Think about the lessons we have learned and the challenges we have faced as a result of Covid-19, and its implications for similar possible challenges in the future. For each of the issues below we ask that you comment on your perceptions of the needs that organizations like yours might now have in order to strengthen our community health infrastructure. - ADDRESSING MENTAL HEALTH ISSUES IN THE COMMUNITY
Many partners in the community have worked together to share information and resources that are available in Clinton County. We all share each others information on social media as well.
Crucial both now and in the future. Many societal issues can be traced back to mental health issues.
Our organization provides full continuum of care as a mental health non profit in our region. We have been focusing largely on how to assist the people who use our Navigator services who will experience a 6 month wait for clinical services while managing a pandemic in a mental health crisis. We would love the support of NCHS in establishing a peer recovery network capable of meeting the demand we are facing now and the greater demand that exists within populations we haven't yet reached. Between our screening data, our crisis center response and Navigator program, we are seeing a picture of need that requires new strategies. We believe that community engagement, education and intervention are mandatory and we need the staff and training to provide it with our partners. We need funds, technical assistance and targeted labor to meet our objectives.
Covid limited face to face interactions which increased the ability to hide or mask problems. As much as possible we would like to see counseling services become in person or home visits made.
There is a imminent need to access mental health care at a quicker rate, waiting 8-12 weeks is not acceptable and is detrimental and with the increase in need it has become apparent that Indiana is severely lacking in its ability to serve its residents in a timely fashion. It is clear that we need to increase the value of masters clinicians to draw them to the state and keep those who are trained here to serve our community.
From observation, Food Finders estimates that 90% of our single clients between the ages of 18 and 60 struggle with a serious mental health disorder. In the general population approximately 50% are affected by a mental health challenge in their household. Our organization would like to have a person dedicated to helping these clients access mental health services so the appointment could be scheduled from the food bank, while they are here. It would also be helpful for our Resource Coordinators to know when one of our clients has a caseworker. We sometimes duplicate the work that is being done by another.
Mental health providers who employ evidence based practices with the goal of recovery of mental health disorders.
The team members are more aware of how the pressure of work can affect their home life as well as the social life, therefore knowing that there is help out there for anyone needing to work thru the issues at hand.
We have a lack of professionals to treat mental health, one mental health center has 10 positions that have been open for more than a year. Others do not take private insurance as their staff do not possess the certification necessary for them to bill a third party.
NAMI provides free support groups and educational classes to persons with a mental health condition and to their loved ones. The challenge has been having enough volunteers and staff to accomodate the need, much like agencies providing therapuetic services.
Prior to the pandemic, we reached over 500 individuals through our support groups and classes. At this time, to allow social distancing, we have to limit the number of people into our building due to the small space.
We need more volunteers, paid staff, and physical space, in order to reach more people in need.
Mental health agencies need more clinicians and psychiatrists. We have a broken system. We need more mental health training in the workforce and businesses.
Mental healthcare can be addressed through a variety of means. I believe in looking at mental health care with an open approach would be advantageous. Art therapy and music therapy and access to the arts is vitally important to provide diverse resources for individuals with mental health issues. Funding for these efforts would help to provide greater access for individuals- especially in underserved communities.
COVID-19 has really shined a bright light on this area. If we get a grant request in this area, we typically fund it. We might expect more requests in the near future.
Kids have suffered, not just learning loss, but a nearly a year of social development. We are seeing that many of the children that attend our program behave like those that are typically a year younger.
Increased reach out to decrease stigma, build prevention, and educate for awareness. Will need to enhance access to services with increased providers so this initiative can be supported.
We need expanded telehealth opportunities for individuals and expanded internet capabilities outside of the main urban centers of the region. This will greatly improve access for those who lack transportation or have a health concern that makes in-person mental health support difficult to attend.

Table 28. Perceptions of COVID-19 impact on addressing substance use and abuse (n = 15)

Think about the lessons we have learned and the challenges we have faced as a result of Covid-19, and its implications for similar possible challenges in the future. For each of the issues below we ask that you comment on your perceptions of the needs that organizations like yours might now have in order to strengthen our community health infrastructure. - ADDRESSING SUBSTANCE USE AND ABUSE ISSUES WITHIN THE COMMUNITY
Brianna Hope and other great things have come from COVID-19
Substance abuse is a critical societal issue that has to be addressed through both philanthropic and government involvement.
The link between substance use and mental health cannot be overstated. We have good relationships with our partners regarding SUD response but would like to connect more meaningfully with our partners and we believe this will be accomplished through peer sharing. We have a plan for this.
Covid increased stress and as a result increased substance abuse as a primary coping mechanism. Continuing to teach ways to manage stress in healthy ways as well as healthy forms of communication. For kids/teens, reminding them of the resources they have when an adult is not leading appropriately.
We need more recovery options and stigma reduction and understanding of those facing the disease. A way must be found to serve those who are in poverty without requiring payment, more institutions need opened to serve incoming residents quickly. Being placed on a waiting list to come in or financial obligations that can not be met is killing individuals.
I love the idea of the Recovery Cafe because I have seen how our clients depend upon one another. I think the cafe should be in a storefront or home and should be open many more hours to be effective in helping addicts maintain sobriety. With very limited hours the cafe will not add much to our community.
Psychiatric medication providers to reduce their stimulant and benzodiazepine prescriptions. More oversight and intervention when providers are prescribing these combinations or at high doses to patients with little to no monitoring.
Our team has worked with the community members to continue to find solutions for others to be able to work together for the good of the same team and recognize the stress that can cause abuse of the issues at hand.
We lack a detox facility and residential treatment.
Often times mental health and substance use goes hand in hand.
As mentioned before we do have enough volunteers, staff or the physical space to accomodate the need.
Many individuals that have used and abused substances do so as a way to numb themselves of the emotions that they are feeling. These emotions can manifest themselves physically as well. Individuals need every outlet to express their feelings especially when verbalizing what they are expressing is not possible.
We might receive a grant request every once in a while for something in this area, but I could see the substance use and abuse having increased during covid and there might be a greater need now.
Isolation has led many people to seek comfort in drugs and alcohol. Many dealt with the loss of a job or loved one. Also, many parents aren't used to so much time with their children. If the family situation wasn't good before COVID, it most likely was made worse by the extended time spent together.
Increased access to care through our EDs, PCP offices. Employment of harm reduction models. Will need more robust ancillary support for programming to support sobriety.
We lack supportive housing for individuals dealing with SUD as they transition from a treatment program or incarceration to living in the community.

Table 29. Perceptions of COVID-19 impact on addressing obesity and preventable chronic disease (n = 11)

Think about the lessons we have learned and the challenges we have faced as a result of Covid-19, and its implications for similar possible challenges in the future. For each of the issues below we ask that you comment on your perceptions of the needs that organizations like yours might now have in order to strengthen our community health infrastructure. - ADDRESSING OBESITY AND PREVENTABLE CHRONIC DISEASE
YMCA had classes available but turnout was low. It also included a bi-lingual educator so we were reaching all ethnics backgrounds of Clinton County.
We know that chronic illness and mental health are intrinsically linked and this bears out with our screening data. We would like to connect more completely to the entire health care system in order to capture how we can support those who are experiencing dual conditions in order to parcel out how they are connected and therefor how they can be treated. We would love help leveraging our screening data in order to present targeted trainings to address the correlation. WE would also enjoy using our space in a holistic manner to include dual diagnosis support groups or facilitation of training by others.
Creating indoor workouts or more walking routes in our community would be a great deterrent of obesity and disease. More lessons on healthy meal planning would also be beneficial.
Obesity and other chronic diseases need addressed, they are rarely recognized and have life long consequences, they also need stigma reduction.
Food Finders spends \$20,000 per month for produce for our Fresh Market on Greenbush St. We find that this food is taken very quickly by our clients. Low income people want to eat healthy food but it is too costly for them. In order to decrease rates of obesity and chronic illness our community needs to make healthy food available for low income people. Food Finders is only able to maintain our produce because of funding provided by individual donations. When our donations wain we buy less healthy food because we must.
More monitoring of metabolic issues (weight, triglycerides and blood sugars) to patients prescribed psychiatric medications. More options for weight management programs.
This challenge is such a long term issue that is bundled together with mental health an substance abuse that finding the right combination of support and interaction with life coaches, there might be a solution to address the issues that are revealed in this situation.
Mental Health has a direct effect on our physical health. Would focusing more on people's mental health cause their physical health to improve?
This issue has not been something that our organization as funded or given grants for. It will probably continue to not be something we focus on.
People were bored and stuck at home. Many chose to eat. Also, appointments were limited or made more complicated. Those not very invested chose not to keep up communication and treatment for chronic problems.
Working with other organizations, such as JumpIN, to enhance efforts. Recognize need for intervention and support with structural, upstream factors as well with individuals.

Also of interest to the Hospital was the extent to which COVID-19 might have created their unique funding needs for stakeholder organizations that would help them be better prepared to partner for service delivery in the areas of mental health, substance abuse, and chronic disease. Table 30 below presents the perceptions of participants.

Table 30. Perception of COVID-19 impact on funding needs (n = 12)

As you think about how your organizational needs might have changed as a result of Covid-19 and other issues, are there unique funding needs your organization might have to help you be better prepared to partner for service delivery in the areas of mental health, substance abuse, and chronic disease?
HCCC (Healthy Communities of Clinton County) works well with funding agencies to help provide our community needs. We are using a Navigator (one stop shop theme) to get the clinics what they need instead of having to run all over the community. They are doing a great job.
My organization partners with NCHS on several programs and Stephanie Long, CEO of NCHS plays a critical role in discussions around health related issues within the community. During my short tenure as CEO of The Community Foundation of Greater Lafayette, I have enjoyed working with the staff of NCHS in a variety of different ways from a series to educate nonprofit partners on best practices to Stephanie gathering area funders together on a monthly basis to discuss area needs.
We would benefit from a capacity building grant to fulfill our peer recovery program which would allow for collaboration between all of our partner agencies who utilize peers in a niche model. For instance, substance use peers as mobile responders for those suffering an overdose or assisting in placement for inpatient SUD, SMI peers to create long-standing pathways to lifetime recovery and Institutional peers such as the CMHC or Meridian Health working with our "bridge" peers to transition from inpatient to outpatient and into recovery. We feel adamantly that this is the best answer for our communities' needs.
Ideas on fun competitions that could happen at school (Which class can drink the most water? Which class can log the most miles?)
We would like to have a mental health navigator at our Fresh Market that could make appointments for our clients before they leave our facility. We would like to find a source for dependable funding to purchase milk, eggs, and produce for our Fresh Market. We would like to have dependable funding for our education program in order to educate our clients on healthy eating. These are not new needs but the need is greater because more people are food insecure as a result of COVID and economic indicators point to a very slow recovery for the low-wage job sector.
The federal government printing more money has elevated some of the pains of the pandemic for the minute, but this will come back around in a bad way and make the suffering last longer and could be more damaging to everyone.
We currently have a part-time casemanager and it would be ideal to have a full time case manager to be a liason to mental health providers.
1. Having a our own building big enough to provide multiple support groups or activities for people experiencing mental health and/or substance use disorders. 2. Having enough funds to support activitites and staff to facilitate activities.
There is a greater demand for our programs and services. Many of the rural communities that we serve have no local organization to provide them with access and therefore they need us to fill that void.
I think it is too early to tell what we might need moving forward in the aftermath of COVID-19. So far we have been surprised by how all ramifications of COVID-19 have been delayed.
We need better staff training to relate with and handle children experiencing directly or living with parents that are experiencing the above problems.
Continued support of the use of telemedicine to improve access of care.

Lastly, participants were provided an opportunity to provide any additional feedback about the 2021 CHNA. Table 31 presents the additional comments received from participants.

Table 31. Additional comments from participants regarding 2021 CHNA (n = 7)

Lastly, are there any other issues you would like to raise as North Central Health Services and River Bend Hospital conduct their 2021 Community Health Needs Assessment?
<p>We just received our local needs as the following in Clinton County</p> <ol style="list-style-type: none"> 1. Mental Health/Substance Abuse/ACE 2. Homelessness
<p>We recognize the importance of arrest diversion in it's purist sense and appreciate West Lafayette's efforts to bring a social worker aboard. In a sense she will operate as a one-person mobile response team. With 988 coming down from a federal level in July 2022, we are preparing our NSPL center (National Suicide Prevention Lifeline) for implementation. The connection between mobile response units, call centers and stabilization units (such as Meridian and River Bend Hospital) must be coordinated. We would appreciate any guidance and look forward to working with NCHS and River Bend Hospital along with all of our partners to meet the needs of our communities with a collaborative approach.</p>
<p>Schools don't always have funds to create fun and comfortable learning environments. From seating to wall decorations to healthy snacks on hand throughout the day, the school climate can become more welcoming and holistic.</p>
<p>Housing continues to be an overwhelming need for those who are no/low income.</p>
<p>I'd like to see a movement to improve the quality of services, perhaps rather than a quantity reimbursement structure a quality reimbursement structure. A quality reimbursement structure includes reassessment of diagnosis and treatment strategies when the patient is not responding, examining when patients fail to follow up and addressing obstacles to treatment, monitoring patient response with a clear definition of wellness that is unique to the patient and their needs. There is an incredible amount of burn out in community mental health, this leads to staff turnover, and ineffective treatments. I would also like to see improved communication and partnership between primary and mental health care, perhaps investing in collaborative care models.</p>
<p>More of a rant.....</p> <p>Insurance should not dictate the treatment you receive.</p> <p>High risk individuals should be put on the top of wait list. We've had a person die by suicide waiting to get into services. This is unacceptable.</p>
<p>I think that walkability in counties and towns is important. Connectivity is important for physical health and wellness and the ability to walk and exercise safely outside. Having safe ways to access your town and community on foot is good for mental health as well. Many rural counties do not have this. Small changes could be made with great value added. Unfortunately those small changes have a price tag that often times small communities can't afford.</p>

Summary of Stakeholder Survey

Data from stakeholders indicate strong support for the priorities established during the 2018 CHNA and the perception that the Hospital has remained committed to addressing those priorities. When asked to indicate their perceptions of whether those same issues remain a priority in 2021, there was general agreement for most, particularly those related to mental health and substance abuse, and the provider-based and structural supports needed to deliver the services necessary to address them.

Stakeholders' perceptions also endorsed the notion of the need for a continuum of care across partners in the region, given the interdependent nature of factors that contribute to mental health, substance abuse, and other chronic conditions. This information also reinforces some of the data points presented in the CHNA Focus Group section of this CNHA (section 7), particularly the need to address children's issues, transportation, housing, and other social determinants of health.

Participants in the survey also provided helpful insights into the extent to which the COVID-19 pandemic has challenged the systems and structures through which care is provided in the service area and gave specific examples of new initiatives that philanthropic organizations could consider and address through collaborations and partnerships among the diverse sectors of the health care, public health, and social service systems in the region.

COMMUNITY CHNA SURVEY



Survey Methods

Purpose of the Survey

To collect primary data from the Hospital's service area population, a community health needs survey was designed, fielded, and analyzed in 2018. Given the challenges of COVID-19 and the strengths of the

2018 survey, the Hospital decided to continue using the results of this survey rather than to conduct another extensive survey.

To ensure that the perspectives of the residents of the service area were included in this assessment, the hospital used a rigorous population-based methodological approach to cover the service area. Further, the Hospital sought to ensure that the perspectives of those in service-receiving communities (particularly those engaged with community-based health and social service organizations) were also considered. The Hospital also used a convenience sample design to collect additional supplemental data.

This section of the CHNA document includes a description of the survey methods and the results of the responses to the survey by the participants in the service areas of North Central Health Services.

Survey Development

To develop the survey used for the CHNA, the Hospital partnered with faculty from Indiana-based universities who had expertise in community-based survey research. Dr. William McConnell of the University of Evansville served as the lead researcher on the project, in partnership with Dr. Michael Reece and Dr. Catherine Sherwood-Laughlin (both of the Indiana University School of Public Health). The University of Evansville contracted with the Center for Survey Research (CSR) at Indiana University to administer this survey in two phases: phase I was conducted as a paper survey mailed to a random address-based sample and phase II was conducted as a paper survey administered by the hospitals to a convenience sample of their choosing. The survey was conducted with the approval of the Institutional Review Board (IRB) of the University of Evansville.

Planning and development for the survey began in the winter of 2017. The university faculty joined a collaborative of eight major hospital systems that served populations in Indiana and Illinois. A goal of the collaborative was to align survey activities to increase cost-efficiency and to work toward the development of a data infrastructure that would be useful across the systems and also of enhanced utility to the health and social service organizations with which those hospitals partner on initiatives to improve health in their respective local communities.

Using a construct-based approach that identified the leading areas to be included in the survey, the hospitals and faculty developed a survey. The survey included measures validated for use in similar projects by other researchers and additional measures developed by the partners for specific needs of this CHNA. The survey covered ten major areas. Table 32 provides an overview of the constructs covered in the survey and a description of the measures associated with each construct.

Table 32. Survey Constructs and Measures

SURVEY CONSTRUCTS	DESCRIPTION OF MEASURES
Demographics	This section included measures related to the socio-demographics of the survey participants, including: county of residence, age, gender, ethnicity, race, education, household income, employment, and number of adults and children in household.
Perceived Health and Well-Being	This section included a revised version of the U.S. Centers for Disease Control and Prevention's Health-Related Quality of Life measure. Items included the single-item HRQOL assessment of perceived overall health and additional assessments of physical health, mental health, and social well-being. Also included was a measure of overall life satisfaction and a measure of current level of life stress.
Health Care Coverage and Relationships	This section included a single measure of whether the participant had health insurance or some other type of coverage for health care and a single measure of whether they had a current personal health care provider.
Health Care Engagement	This section included a measure related to the types of care with which the participant had engaged in the previous 12 months. A total of 14 specific types of health care engagement were assessed.
Health-Related Behaviors	This section included a measure that asked participants to self-report their participation in a range of health-related behaviors. A total of 11 health behaviors were assessed.
Health Care Resource Challenges	This section included measures related to the extent to which participants had found themselves in need of avoiding care due to a lack of fiscal resources. Specifically assessed was the extent to which participants had to forego three types of health care, including seeing a medical provider, filling a prescription, and securing transportation for a health purpose or appointment.
Felt Social Determinants	This section included measures to assess the extent to which participants felt the impact of ten specific social determinants, including economics, education, community cohesion, policy, environment, housing, psychosocial, transportation, social ecological, and employment.
Perceived Priority Health Needs	This section included a measure to assess participants' perceptions of the importance of 21 health issues to their local community.
Perceived Resource Allocation Priorities	This section included a measure to assess participants' perceptions of the extent to which 21 health issues were of priority for the allocation of resources in their local community.
Perceived Importance of Social and Health Services	This section included a measure to assess the extent to which participants perceived 20 different health and social service programs to be of importance to their community.

Sample Development

To collect data, two separate samples were accessed. One sample, described below, included a random sample of individuals representative of the hospital's service area. Additionally, the hospital collaborated with health and social service organization partners to form a convenience sample that included those engaged in services.

Phase One Random Sample. The target population for Phase I of the 2018 Community Health Needs Assessment Survey consisted of noninstitutionalized adult residents, aged 18 years or older, in the catchment areas of the participating hospitals. Sampling was performed on a household basis using an address-based sample.

The faculty collaborated with the hospitals to determine catchment areas using county and zip code boundaries. Geographic areas that were shared between hospitals were reduced such that each geographic area was sampled one time.

Sampling was determined using a multistage sampling design. At the first stage, sample units were drawn randomly from an address-based sampling frame of each area. Sample frames were limited to residential addresses excluding P.O. boxes (unless marked in the sample frame as 'only way to get mail'), seasonal, vacant, throwback, and drop-off point addresses. At the second stage, a within-household respondent was selected by asking the adult with the most recent birthday to complete the survey.

A set of address-based records representing the hospital's service population were purchased from Marketing Systems Group (MSG) to develop the sample area. MSG used proprietary sampling methods and provided assurance of appropriate and accurate coverage for the target population. The sample list delivered by MSG included postal address information, FIPS code (county designator), and appended demographic information for age, gender, Hispanic surname, Asian surname, number of adults at address, number of children at address, household income class, marital status, ethnicity, and home ownership status. Upon receipt of the sample, it was stored in a secure database created and maintained by the CSR and was reviewed and corrected for any clerical errors. Using these records, a recruitment sample was constructed for the hospital's service population. A total of 18,106 households were included in the sample for North Central Health Services.

Phase Two Convenience Sample. A phase two sample was also constructed by the hospital and its community-based partners for purposes of collecting data from those likely to be missed in address-based recruitment. The hospital partnered with community-based organizations that provide health and social services to individuals in their service area who agreed to assist with collecting data from program participants on a specific date in a specific location.

Data Collection

Phase One Random Sample. The questionnaire was printed as a four-page booklet on a single 11" x 17" sheet with a fold in the center. Each questionnaire was printed with a unique, numeric survey identifier that matched a record in the sample. A separate sheet was folded over the questionnaire and printed with a cover letter, study information sheet, and return mailing instructions. The questionnaire packet was assembled in a 9" x 12" windowed envelope and included an 8¾" x 11½" postage-paid, business reply envelope for survey returns.

The field period for the 2018 Community Health Needs Assessment Survey was April 2, 2018, through June 29, 2018. Each sampled address received up to two questionnaire attempts. The addresses were divided into four batches based on USPS pre-sort, and each batch was mailed one at a time over the course of two weeks. The second questionnaire for each address was mailed approximately four weeks after the first questionnaire. The addresses of returned questionnaires were excluded from the lists for the second questionnaire attempt.

After the second questionnaire attempt, a postcard follow-up was reintroduced in hopes of increasing response. In addition to reminding people to mail in their completed questionnaires, the postcard also provided a website address that allowed people to take the survey online as a member of the secondary convenience sample.

Paper questionnaires were returned to CSR in postage-paid, business reply envelopes provided in the questionnaire packet. Completed survey returns were counted, checked for unclear marks, batched in groups of 50 surveys, and scanned into ABBYY FlexiCapture OCR software for data processing. CSR's

scanning partner, DataForce (dba MJT, US), received the scanned survey images electronically and reviewed the data via ABBYY FlexiCapture data verification software to ensure quality control. Missing responses and multiple responses to a single item were flagged. The compiled data was transmitted back to CSR via a secure file transfer protocol (SFTP) server.

Phase Two Convenience Sample. The collection of data in the convenience sample phase utilized the same survey used in the random sample. For this phase of data collection, the survey was available both in English and Spanish. Additionally, an online version of the questionnaire was programmed in the Qualtrics survey platform. During data collection at community-based organizations, the hospital had the choice to use the online version of the survey (using a phone or tablet) or the paper-based survey. Once collected, data were shipped to CSR for scanning.

Data Management

All surveys were returned to CSR for scanning and organization. Data files were stored by CSR on a secure file server and processed using R statistical programming software. Respondent-provided counties and zip codes were cross-checked against the sample file. Discrepancies and misspellings were verified against the original scanned image of the response and, if reasonably similar, corrected prior to final data submission. After data processing, identifiers to allow filtering by hospital catchment area and weighting variables were added (only for the random sample). The final dataset was converted to a format for analysis in STATA statistical analysis software and transmitted to the researchers via Slashtmp, Indiana University's secure file transfer system.

Weighting of Samples

This section provides an overview of weighting activities for the 2018 Community Health Needs Assessment and applies only to the random sample. Two weighting adjustments were made to enhance consistency between the survey sample and the characteristics of the hospital's service population. The first was a base weight adjustment to account for unequal probabilities of selection within the household. The second was a post-stratification adjustment to U.S. Census Bureau 2012-2016 American Community Survey five-year population estimates. The two weighting adjustments were multiplied to calculate a preliminary final weight for each hospital's catchment area. These preliminary weights were then trimmed and scaled so that the final weights summed to the number of respondents in each catchment area.

Survey Response Patterns

Regarding the random sample, 18,106 households received recruitment materials by mail. Of those households, a total of 2,234 returned a completed survey. The response rate for Gibson General Hospital's survey was thus 12.34%. Table 33 provides an overview of the weighted sample with the number of completed surveys received from each county and their corresponding % of the total sample.

Table 33. Summary of Completed Surveys Received by County (Random Sample)

SERVICE COUNTIES	COMPLETED SURVEYS (N = 2,234)	% OF TOTAL SAMPLE
BENTON	59	2.7
CARROLL	129	5.8
CLINTON	213	9.5
FOUNTAIN	109	4.9
JASPER	215	9.6
MONTGOMERY	236	10.6
NEWTON	97	4.4
TIPPECANOE	810	36.2
WARREN	59	2.7
WHITE	152	6.8
Other	7	0.3
Not Provided	142	6.4

Regarding the convenience sample, North Central Health Services and partner organizations in the service area collaborated to collect 542 surveys from individuals engaged in care and services. Table 34 summarizes surveys received by county in the convenience sample.

Table 34. Summary of Completed Surveys Received by County (Convenience Sample)

SERVICE COUNTIES	COMPLETED SURVEYS (N = 542)	% OF TOTAL SAMPLE
BENTON	0	0.0
CARROLL	11	2.0
CLINTON	0	0.0
FOUNTAIN	4	0.7
JASPER	4	0.7
MONTGOMERY	3	0.6
NEWTON	1	0.2
TIPPECANOE	509	93.9
WARREN	2	0.4
WHITE	8	1.5

Data Analyses

Data analyses were conducted by Measures Matter, LLC, a research consulting group with expertise in community-based participatory research. Prior to analyses, Measures Matter staff consulted with the hospital to develop a preliminary plan for the analysis of data and the presentation of results.

To retain the integrity of the phase one random sample and the methodological rigor offered by that sample, analyses were conducted separately for the phase one random sample and the phase two convenience sample.

Survey Results

The summary of the survey results primarily reflects the phase one random sample unless otherwise stated. Throughout the summary, descriptions of participants in the phase two convenience sample are also included where appropriate. In those cases, selected data are presented in shaded boxes.

Description of Participants

A total of 2,234 participants returned a completed survey from the phase one random sample. Additionally, a total of 542 individuals completed a survey during the convenience sample phase of the project. In this section of the survey, the primary presentation of results includes those 2,234 individuals from the random sample. Where appropriate, commentary is provided in each section to highlight similarities and differences between the random and convenience sample data. Throughout, additional comparisons are presented based on gender or the extent to which the participants were characterized as living in poverty.

County of Residence. Of the 2,234 participants, 95.2% (n = 273) indicated that their primary residence was located in the area served by the Hospital. Although all households receiving the survey were located in the service area, some participants (6.7%, n = 149) either refused to provide their county of residence or indicated that it was located in an adjacent county. Figure 2 provides an overview of the participants' reported county of residence.

Those in the convenience sample represented nine of the ten counties in the NCHS service area. The vast majority were from Tippecanoe County (93.9%, n = 509). Carroll County was represented by 2.0% of the sample (n = 11) and White County was represented by 1.5% of the sample (n = 8). Six of the counties were represented by less than one percent of the total sample each (Fountain, Jasper, Montgomery, Newton, and Warren).

Adults and Children in Household. Participants were asked to indicate the number of adults (18 years and over) and children (under 18 years) who lived in their households. Of the participants providing data related to adults in the home, 79.9% (n = 1,785) indicated that two or fewer adults lived in the household. Of those responding to the question about children in the household, the majority (62.7%, n = 1,400) indicated no children under the age of 18 years in the home. Some participants did report children in the home, with most (25.8%, n = 578) indicating two or fewer children and the remainder (8.3%, n = 120) reporting three or more children in the home. Figure 3 provides a summary of this data.

Participants in the convenience sample were largely similar to those in the random sample regarding adults in the household, however, there were differences with regard to children. In the convenience sample, 50% (n = 271) of the participants indicated having a child under the age of 18 in the home, with 28.3% having two or fewer children and 18.1% (n = 105) reporting three or more children.

Gender. Participants were asked to report their gender. More women participated in the survey than did men, and few refused to respond to the question about gender. Figure 4 provides an overview of participant gender. Most participants in the convenience sample were also women.

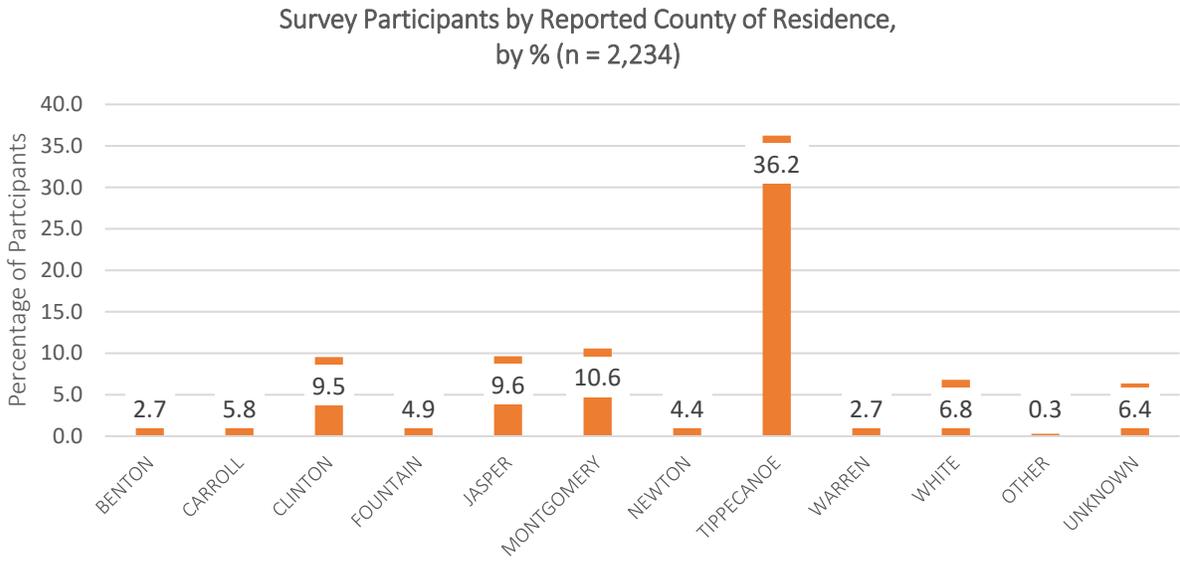


Figure 2. Participant’s Reported County of Residence, by % of Participants

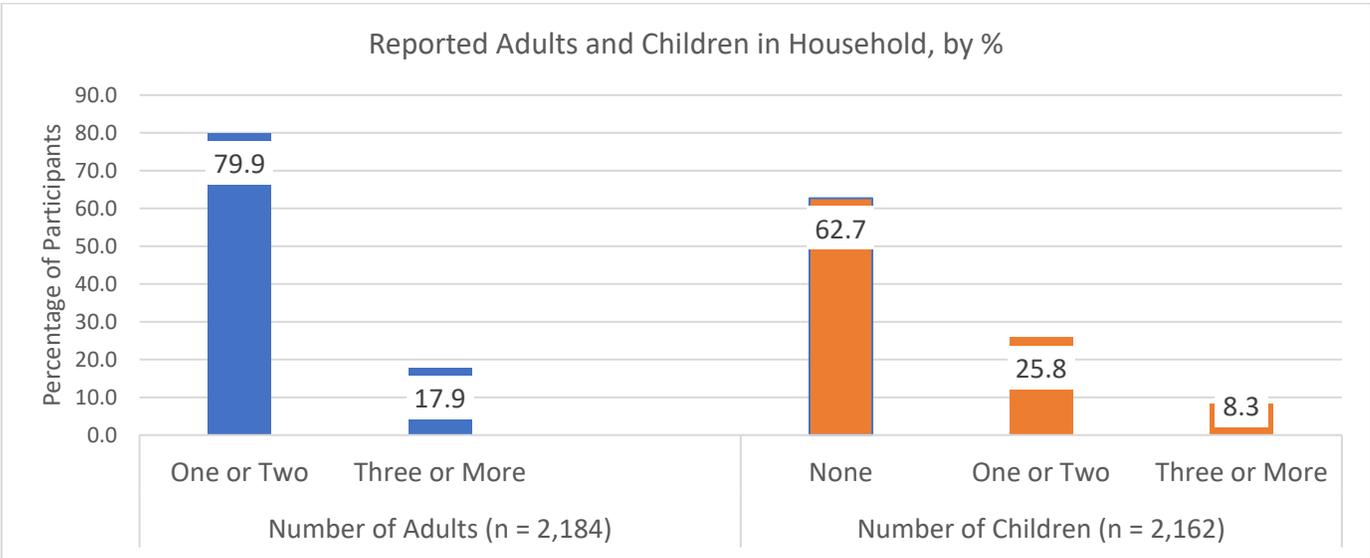


Figure 3. Reported Adults and Children in Household, by % of Participants

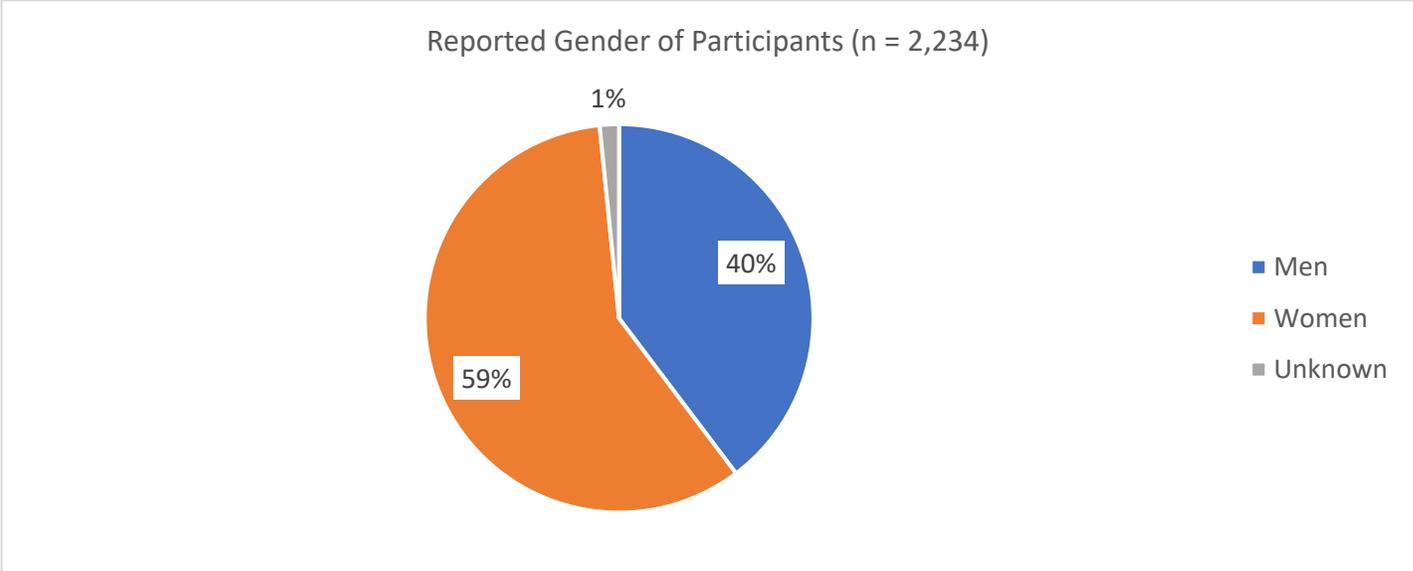


Figure 4. Reported Gender of Survey Participants, by % of Participants

Participants in the convenience sample were similar to those in the random sample in terms of reported gender, with 71.6% (n = 388) being female and 25.8% (n = 140) being male. Slightly more participants in the convenience sample chose not to report a gender (2.6%, n = 14). The age distribution of those participants in the convenience sample was largely similar to that of those in the random sample with no notable differences.

Age. Participants were asked to provide the year in which they were born. Those data were subsequently analyzed to compute the estimated age of the individual at the time the survey was returned. Figure 5 provides a categorical overview of the age of participants.

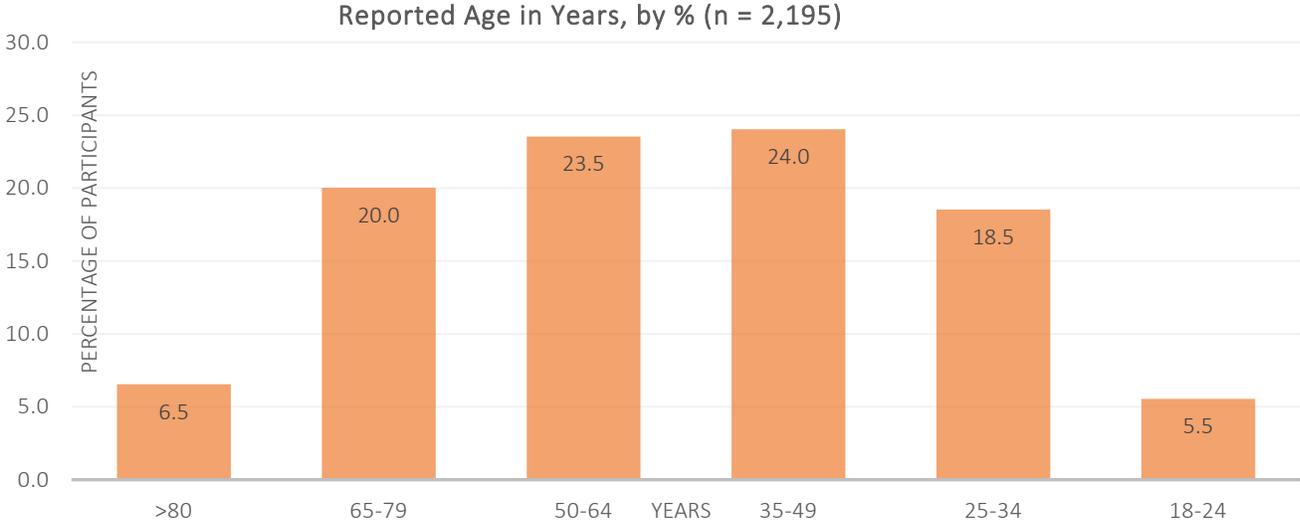


Figure 5. Reported Age of Participants, by % in Years

Race. Participants were asked to respond to a question regarding the race with which they identify. Participants were invited to select more than one race. The vast majority (94.3%, n = 2,107) indicated that they were of “Caucasian/White” race, with participants choosing other races in smaller proportions, including “Black or African-American” (0.8%, n = 17), “American Indian or Alaska Native” (0.7%, n = 15), and “Asian” (2.0%, n = 44). Some participants chose to indicate “other” as their race (2.2%, n = 49).

Ethnicity. Participants were asked whether they were of Hispanic, Latino, or Spanish origin. A small proportion of participants (2.8%, n = 63) responded in the affirmative. A small portion of participants (2.1%) chose not to respond to the question about ethnicity. Figure 6 provides an overview of participant responses to race and ethnicity items.

There were important differences between the random sample and the convenience sample with regard to ethnicity and race. Of those in the convenience sample, 11.3% reported their ethnicity as Hispanic (n = 61). Eighteen of those individuals completed the survey in Spanish when given the opportunity (all of whom were from Tippecanoe County). Participants in the convenience sample were also more diverse in terms of reported race. Approximately three-fourths (74.0%, n = 401) reported their race as White or Caucasian, 18.3% reported their race as Black or African American (n = 99), thirty-one participants reported their ethnicity as Asian, Native Hawaiian or Pacific Islander, or American Indian or Alaska Native (5.7%) and an additional number of participants chose to describe their race in other terms (3.3%, n = 18).

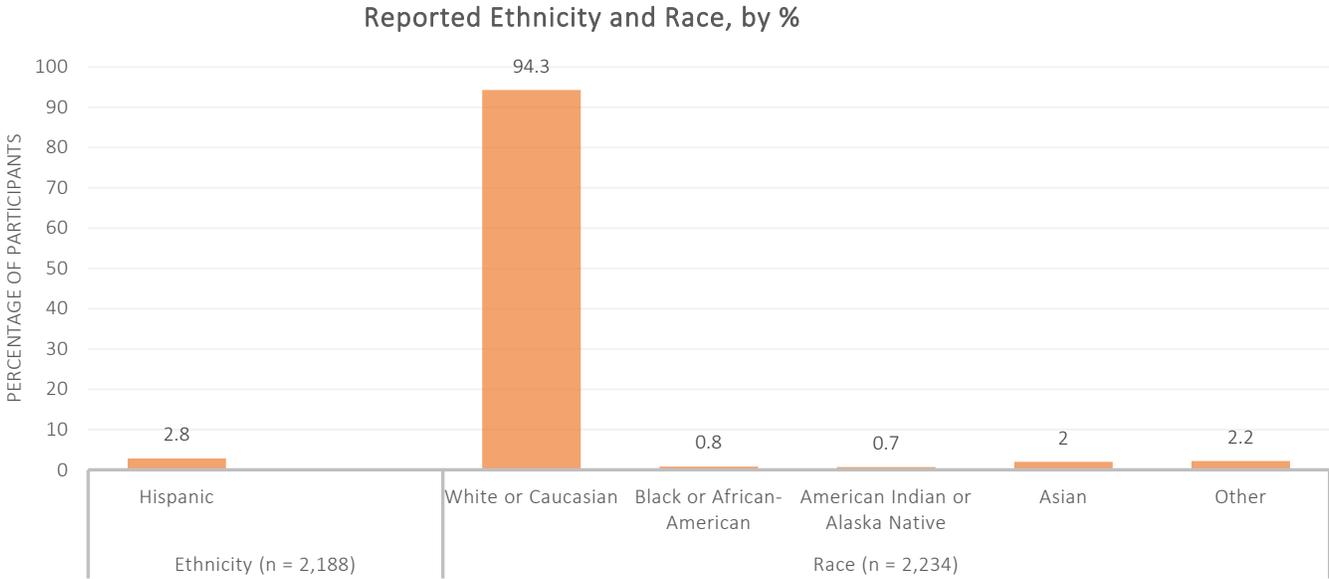


Figure 6. Reported Ethnicity and Race of Survey Participants, by Category %

Household Income. Participants were asked to respond to a question regarding the total income of the household in which they lived (including all sources). One hundred three participants did not respond to this question. Slightly more than one-tenth of the participants indicated that their total household income was less than \$25,000 (13.5%, n = 300). These individuals were further categorized into a category of “poverty” for specific analyses that are included later in this summary.

In total, 22.9% (n = 488) reported total household income of less than \$35,000.00, approximately one-third (32.7%, n = 730) reported income of between \$35,000.00 and \$74,999.00, with the largest percentage of participants (39.8%, n = 913) reporting total household income of over \$75,000.00. Figure 7 provides a categorical summary of the reported household income of participants.

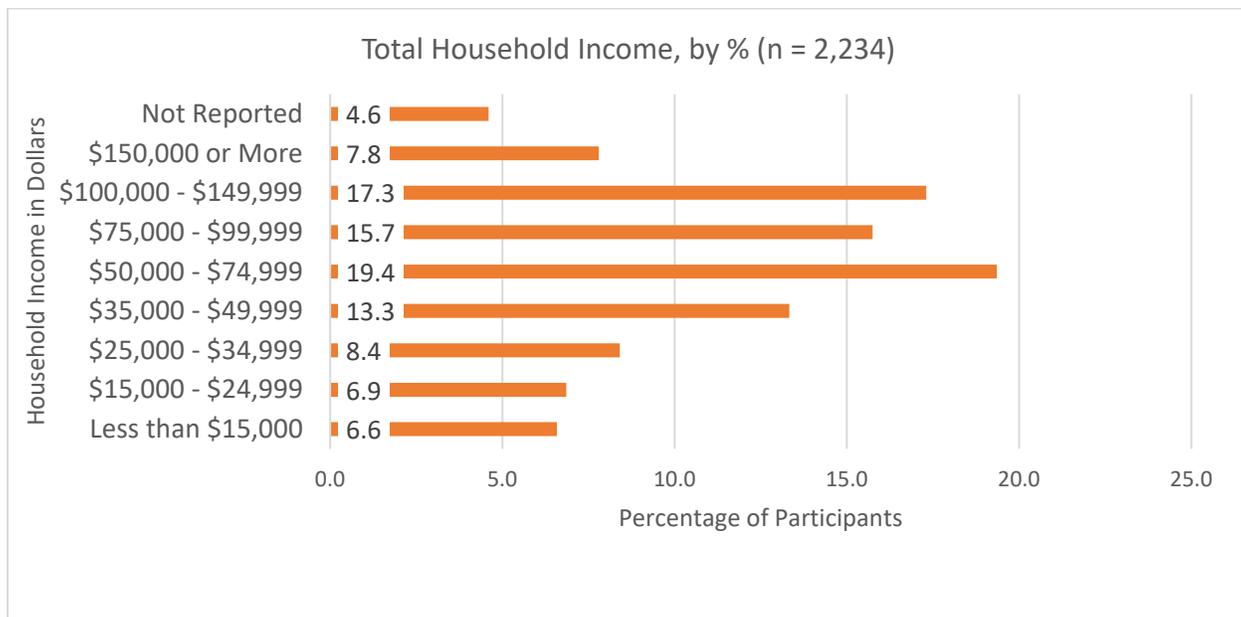


Figure 7. Reported Total Household Income, by Category %

Reported household income among those in the convenience sample was markedly lower, with 69.4% of those in the sample (n = 376) reporting their income as less than \$25,000 per year, with over half of the total sample reporting their income as less than \$15,000 per year (51.7%, n = 280). Accordingly, fewer participants reported incomes in the other income categories, with only 11% (n = 60) reporting an income over \$75,000.

Employment Status. Participants were asked to select from categories of employment or unemployment and given the option to select more than one category. The majority of participants indicated that they were employed, with 50.4% (n = 1,125) reporting that they work full time and 9.0% (n = 202) reporting part-time employment. Some participants indicated that they were unemployed (6.1%, n = 135), and others reported their status as retired (24.0%, n = 536), or as being a student (2.3%, n = 52) or a homemaker (4.8%, n = 108). Seventy-five participants (4.0%) reported multiple employment categories or chose not to respond to the item. Figure 8 provides a summary of this data.

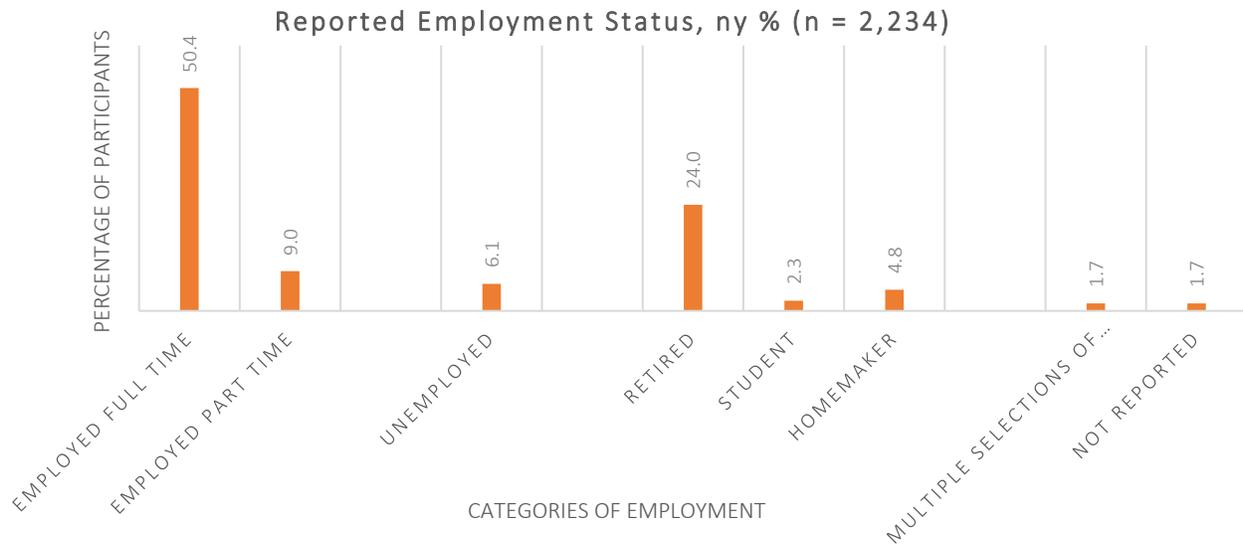


Figure 8. Reported Employment Status of Participants, by Category %

Significantly more participants in the convenience sample described themselves as being unemployed (36.9%, n = 200).

Level of Education. Participants were asked to report their highest level of attained education based on specific categories. Approximately one-third of participants (31.3%, n = 698) reported having completed an associate’s or bachelor’s degree from a college or university and 20.8% (n = 465) reported having attained a graduate or professional degree. A small proportion of participants (6.1%, n = 137) indicated that they had a diploma or certificate from a technical or vocational school or completed some college. In larger proportions, 19.6% (n = 438) reported having received a high school diploma or GED, and only 2.1% (n = 47) reported that they had some high school education but had not graduated. Approximately 6% of individuals (n = 126) chose “other” without useful clarification, marked multiple categories, or chose not to respond to the question. Figure 9 provides a summary of this educational level data.

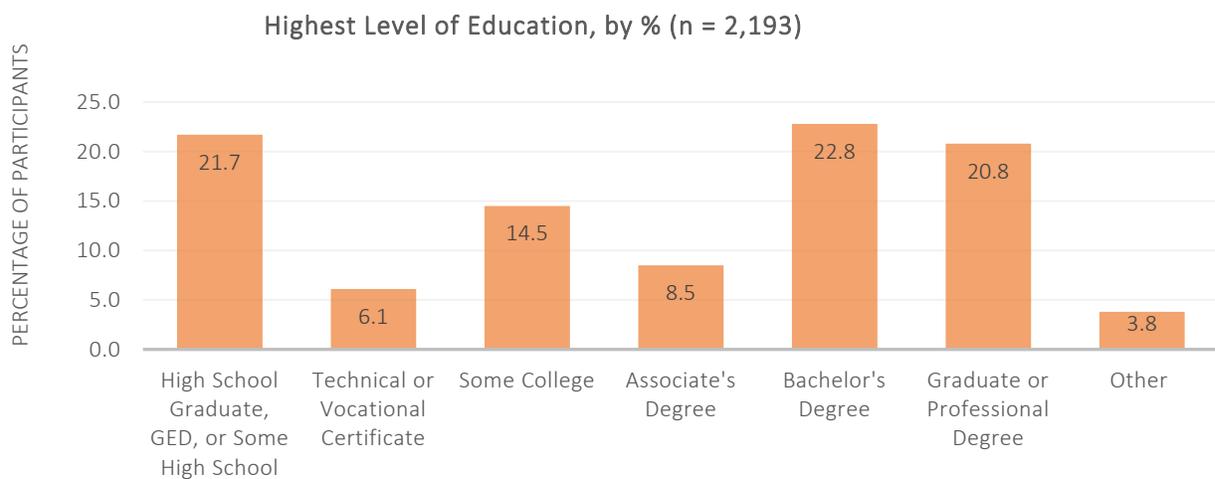


Figure 9. Reported Highest Level of Education, by Category%

Close to half of the participants in the convenience sample (46.2%, n = 250) described their highest level of education as being a high school graduate or less. Only 11.8% reported having a bachelor's degree (n = 64), and fewer reported a graduate or professional degree (5.7%, n = 31).

Participants' Perceptions of Health and Well-Being

Participants were asked to respond to four questions that sought to capture their perceptions of their current health status. Participants were asked to provide an assessment of their overall health, their physical health, their mental health, and their social well-being. Additionally, participants were asked about their overall life satisfaction and their level of stress. While responses to each area assessed are described below, Figures 10, 11, 12, and 13 summarize the participant responses.

Overall Health. Participants were asked, "Would you say that in general, your overall health is..." with five response options ranging from poor to excellent. Some participants did not respond to this question or marked multiple responses (2.6%). The vast majority of participants rated their overall health as very good (38.5%, n = 861), excellent (11.7%, n = 262), or good (32.5%, n = 726). The remainder assessed their overall health as being fair (11.8%, n = 263) or poor (2.7%, n = 61).

Physical Health. Participants were asked, "Would you say that in general, your physical health is..." with five response options ranging from poor to excellent. Only five participants opted not to respond (0.2%). Despite the vast majority who reported their overall health as being positive, participants differentiated their level of health more when being specific to their physical health. Less than half of individuals collectively rated their physical health as very good (14.3%, n = 319) or excellent (3.6%, n = 80). The largest proportion of participants rated their health as good (36.4%, n = 814), with the remaining participant perceiving their health as being fair (35.0%, n = 783) or poor (10.4%, n = 232).

Mental Health. Participants were asked, "Would you say that in general, your mental health is..." with five response options ranging from poor to excellent. Twenty-four participants did not respond to this question (1.0%). The majority of participants rated their overall health as very good (40.5%, n = 905), excellent (20.9%, n = 467), or good (27.4%, n = 611). The remainder assessed their overall health as fair (8.7%, n = 195) or poor (10.4%, n = 232).

Social Well-Being. Participants were asked, "Would you say that in general, your social well-being is..." with five response options ranging from poor to excellent. Only eight participants did not respond to this question (0.9%). The majority of participants perceived their overall social well-being to be less than good, with the largest proportion of all participants responding fair (41.8%, n = 935) and approximately 1/5th of participants (19.6%, n = 437) responding with poor. Approximately 1/3rd of participants rated their social well-being as good (27.8%, n = 621), with the remainder responding with very good (8.6%, n = 191) or excellent (1.4%, n = 30).

Participants in the convenience sample perceived their overall health and physical health as being "good to excellent" in higher proportions than did those in the random sample, which could be a reflection of the fact that they were engaged in some health or social service at the time of the data collection. Participants in the convenience sample also tended to rank their social well-being as better than those in the random sample, perhaps also related to their connection to a service. However, those in the convenience sample were more likely to report their mental health as worse than those in the random sample.

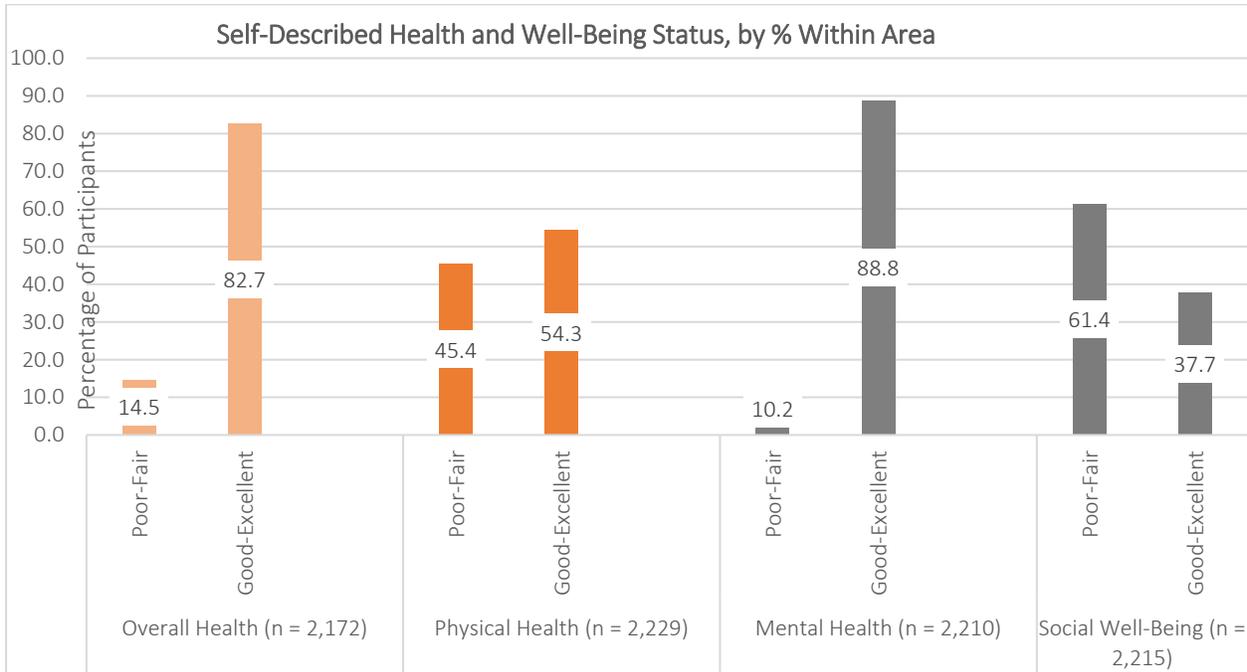


Figure 10. Participants’ Perceptions of Health and Well-Being

Interesting trends were present in the self-described health and well-being of those in the convenience sample. In terms of overall health, twice as many participants described it as being “poor or fair” (28.1%, n = 152); however, participants in the convenience sample rated their physical health as being better than those in the random sample, with about half as many (24.9%) describing it as “poor or fair.” About twice as many participants in the convenience sample did rate their mental health as being “poor or fair” (28.6%, n = 155), yet far fewer in the convenience sample described their social well-being as “poor or fair” (36.4%, n =197).

Poverty and Perceptions of Health. Because poverty is often associated with individuals' personal perception of their health and well-being, data were further considered to assess relations between poverty and these measures. Individuals whose total combined household income was less than \$25,000.00 were categorized as the “poverty” group and compared to those with all other incomes. For all analyses, those participants for whom an income was not provided were excluded from the analyses.

Analyses indicated that poverty did share some associations with participants’ rankings of their health and well-being. As is summarized in Figure 11, those in the poverty category are approximately three times more likely to report their overall health as being “fair” or “poor” than their higher-income counterparts. The same was the case with mental health. Those in the poverty category rated it as “fair” or “poor” in significantly higher proportions than those in the higher income category. On the other hand, those in the poverty category reported their physical health and social well-being as more positive than those in the higher income categories. Figure 11 provides an overview of this data.

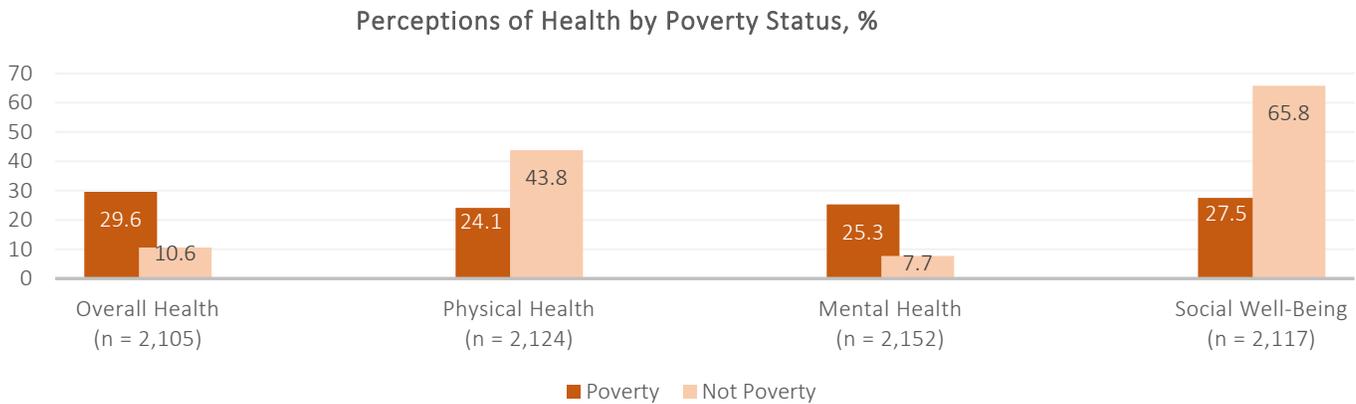


Figure 11. Perceptions of Health by Poverty Status

Overall Life Satisfaction. Participants were asked to respond to a single question that asked them to respond to the statement “overall I am satisfied with my life” with five response options ranging from strongly disagree to strongly agree. Only eight participants refused an answer to this question (0.4%). The majority of participants agreed with the statement, with 42.4% (n = 947) responding “strongly agree” and 34.5% (n = 772) responding “agree.” Some participants (7.8%, n = 174) responded “neutral.” Those indicating less overall life satisfaction responded with “somewhat disagree” (8.1%, n = 180) or “strongly disagree” (6.8%, n = 153). Figure 12 provides an overview of responses to this item.

Level of Life Stress. Participants were asked to rank their current level of life stress by responding to a single item “Please rank yourself on a scale of 1 to 10 where 1 means you have “little or no stress” and 10 means you have “a great deal of stress.” The majority of participants (53.3%, n = 1,190) responded with scores in the top half of the options (a score of six or higher). Over one-quarter (26.8%, n = 598) responded with a score in the top third of possible responses (eight or higher), indicating that a relatively significant proportion of the participants identify with what would be considered an elevated (or greater) level of stress. Figure 13 provides the percentage of respondents who ranked themselves on this measure.

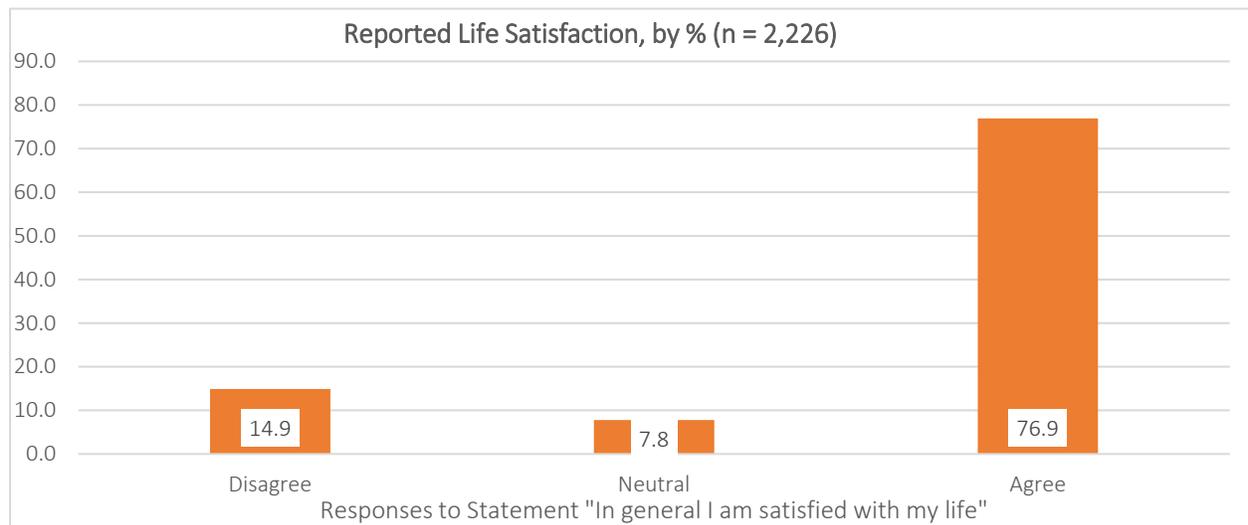


Figure 12. Participants Agreement with Life Satisfaction Item

Participants in the convenience sample reported higher levels of stress similar to those in the random sample; yet more were in the top quarter of high stress (43.2%, n = 234) and also tended to disagree more (26.0%, n = 141) that they are generally satisfied with their life.

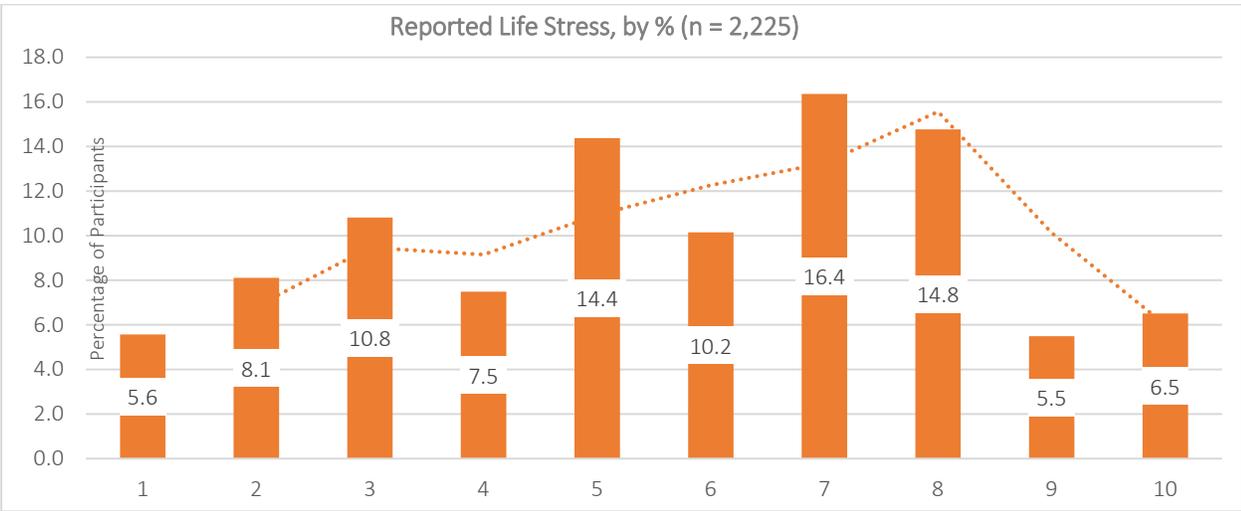


Figure 13. Ranking of Level of Life Stress (1 = Low Level of Stress; 10 = Great Deal of Stress)

Health Care Access and Engagement

Participants were asked to respond to a range of questions related to their current level of healthcare coverage and also asked to describe the types of engagement they had with the health care system in their community within the 12 months prior to the survey. Also assessed was whether participants had found themselves in situations within the past year that made it necessary to forego some level of health care based on a lack of financial resources or because they had to prioritize other matters.

Insurance or Health Care Coverage. Participants were asked, “do you currently have insurance or coverage that helps with your healthcare costs?” Of the participants, the vast majority (95.5%, n = 2,133) reported having such coverage or insurance. In comparison, 4.1% (n = 91) responded “no” and two participants (0.1%, n = 2) indicated that they were “unsure” about such coverage. A small portion of participants (0.4%, n = 8) did not respond to this item.

Current Personal Provider. Participants were asked, “do you currently have someone that you think of as your doctor or personal healthcare provider?” Most participants indicated that they had such a personal provider (80.9%, n = 1,807). In comparison, 17.8% (n = 398) responded “no,” and twenty-six participants (1.2%) indicated that they were “unsure” as to whether they had such a personal provider. Only three participants did not provide a response to this question (0.1%, n = 3).

These items were further analyzed by the poverty status category, and no significant differences were found. While there were slightly fewer individuals in the poverty category who reported having insurance or healthcare coverage (93.3%), it was the case that slightly more individuals in the poverty category (83.4%) reported having a personal healthcare provider. Figure 14 provides an overview of the responses to the questions about insurance or healthcare coverage and the presence of a personal healthcare provider.

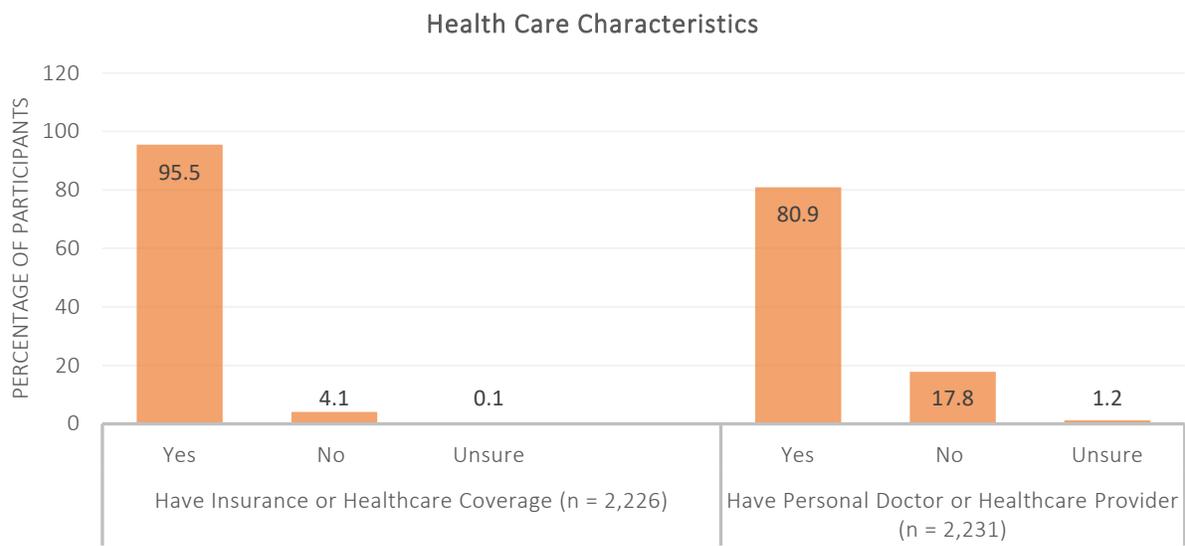


Figure 14. Participants’ Reported Insurance and Personal Provider Characteristics

Of those participating in the convenience sample, higher proportions of participants (14.6%, n = 79) reported a lack of insurance or other health care coverage and also a lack of a personal healthcare provider (24.5%, n = 133).

Healthcare Engagement. Participants were provided with a list of 14 health-related services and types of healthcare engagement and asked whether they had received or utilized each of those within the past 12 months. Table 35 summarizes the participants’ responses to this question in the random sample which provides a more rigorous assessment of the extent to which the overall population utilizes various services.

These figures were also analyzed by gender and poverty status for the random sample. Regarding poverty status, there were some minor differences (e.g., those in the poverty category reported slightly elevated rates of family planning care and chronic disease care and reported slightly lower rates of dental care), yet none were at a level of significance. Figure 15 also provides a comparison of the types of health care services reported between genders. Women reported significantly higher rates of access for four types of care, including filling a prescription, receiving dental care, and receiving care at an acute care or urgent care facility.

Table 35. Participants' Reported Types of Health Care Engagement (n = 2,234)

Health Care Engagement (n = 2,234)	% Received	% Not Received
Filled Prescription	69.8	30.2
Physical Exam	59.4	40.6
Dental Care	59.1	40.9
Immunizations or Preventive Care	38.0	62.0
Acute Care	25.6	74.4
Urgent Care	21.4	78.6
Chronic Care	17.7	82.3
Care at Emergency Room	16.9	83.1
Screened for Anxiety or Depression	11.4	88.6
Mental Health Treatment	9.7	90.3
Hospital Inpatient Care	9.1	90.9
Prenatal Care	4.5	95.5
Family Planning Care	4.1	95.9
Addiction Treatment	1.2	98.8

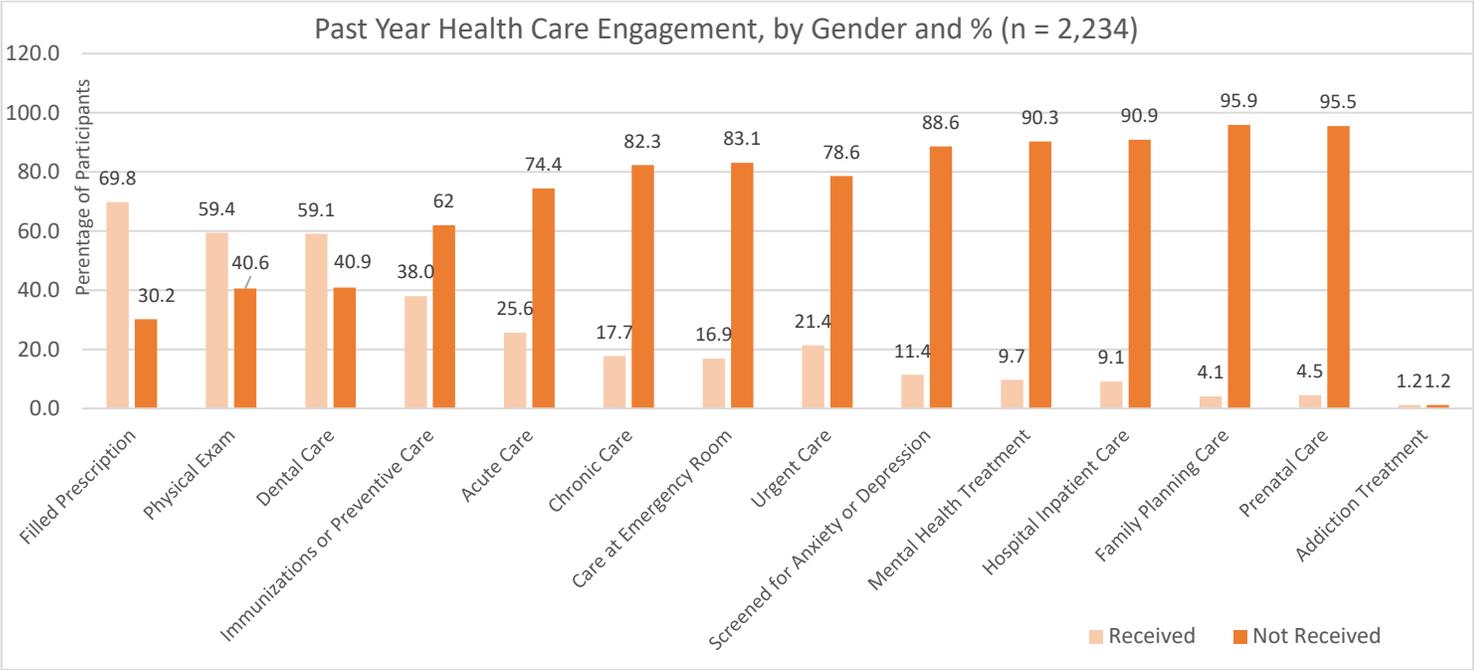


Figure 15. Health Care Engagement by Gender

Resources and Healthcare Engagement. Participants were provided a list of three types of healthcare engagement needs, including seeing a provider, filling a prescription, and finding transportation for care,

and asked to indicate whether there had been a time within the past 12 months that they could not act upon that need because “they couldn’t afford it or had to prioritize spending money on something else.” Less than 20% of participants indicated that it had been the case that they prioritized something over their healthcare across the three types assessed.

Regarding **seeing a medical provider**, 19.3% of participants (n = 430) indicated that they had a need to see a provider but did not due to other needs, and 1.0% (n = 22) indicated that they were unsure whether that had been the case. Most participants (76.2%, n = 1,702) reported that they had not found themselves in a situation to avoid seeing a provider, and a small number of participants (3.5%, n = 79) chose not to respond to this question.

Regarding **needing to fill a prescription**, 14.7% (n = 329) indicated that they needed to avoid filling a prescription due to other needs, and a small number (1.0%, n = 22) indicated that there were unsure whether that had been their situation. Most participants (80.6%, n = 1,801) reported that they had not found themselves in a situation to avoid filling a prescription due to a lack of resources, and a small number of participants (3.7%, n = 82) chose not to respond to this question.

Regarding **needing transportation for healthcare**, only 6.1% of participants (n = 135) indicated that they had not been able to access transportation due to other needs. A small number (1.0%, n = 23) indicated that they were unsure. The vast majority of participants (88.0%, n = 1,966) reported that they had not found themselves in this situation while 4.9% of participants (n = 110) chose not to respond to this question.

Across all three areas, participants in the convenience sample reported a higher incidence of needing to forego care due to prioritizing other resources. Over one-third 38.2%, (n = 207) reported foregoing seeing a provider, 36.0% (n = 195) reported not filling a prescription, and 28.6% (n = 155) reported foregoing transportation for care due to other needs. Being in the poverty category was strongly influential on these resource challenges. Over 75% of those making less than \$25,000 reported the need to forego each of these, and 100% of those making less than \$15,000 report the same.

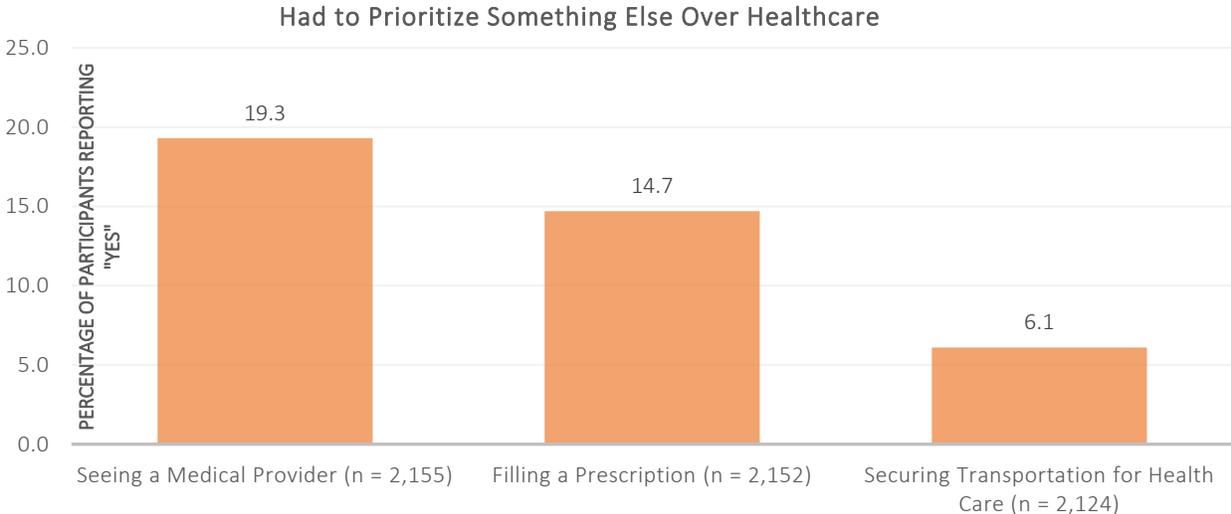


Figure 16. Participants’ Reports of Resource Challenges and Health Care

Further analyses were conducted to assess the extent to which those in the poverty category (when compared to those in the higher income category) reported the need to prioritize something else over care. For all three types of care, individuals in the poverty category reported elevated rates of foregoing care. Figure 17 provides a summary of these comparisons.

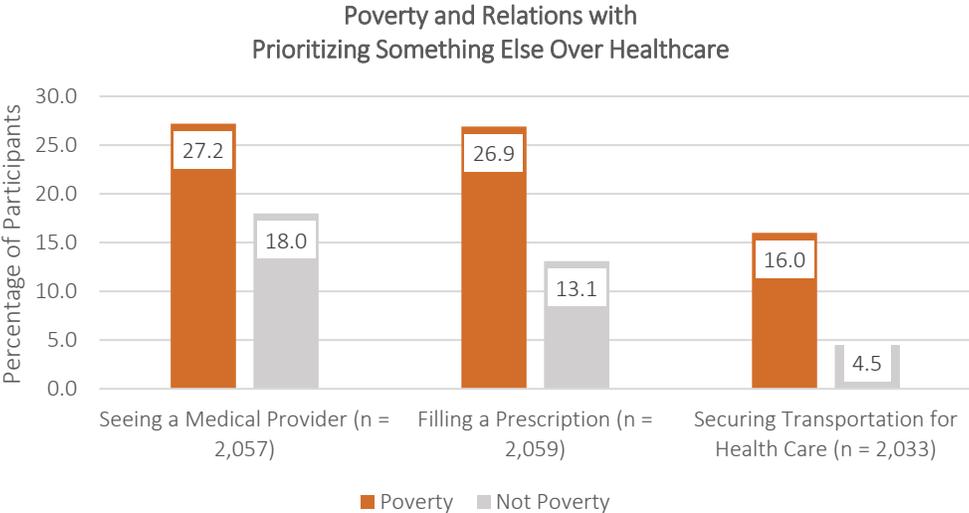


Figure 17. Poverty Status and Need to Prioritize Something Over Healthcare

Personal Health-Related Behaviors

NCHS and River Bend Hospital were interested in a general understanding of the extent to which participants had participated in certain behaviors within the past 30 days. Of particular interest were behaviors that were conceptualized as health promoting (e.g., behaviors perceived by the hospital to be supportive of one’s health and well-being) or health challenging (e.g., behaviors perceived by the hospital to be challenging to one’s health and well-being).

Given that some health-related programs focused on behavior tend to differentiate services between men and women, the data are presented by gender in Figure 18 (health promoting behaviors) and Figure 19 (health challenging behaviors).

Self-Reported Health Promoting Behaviors, by Gender and % (n = 2,234)

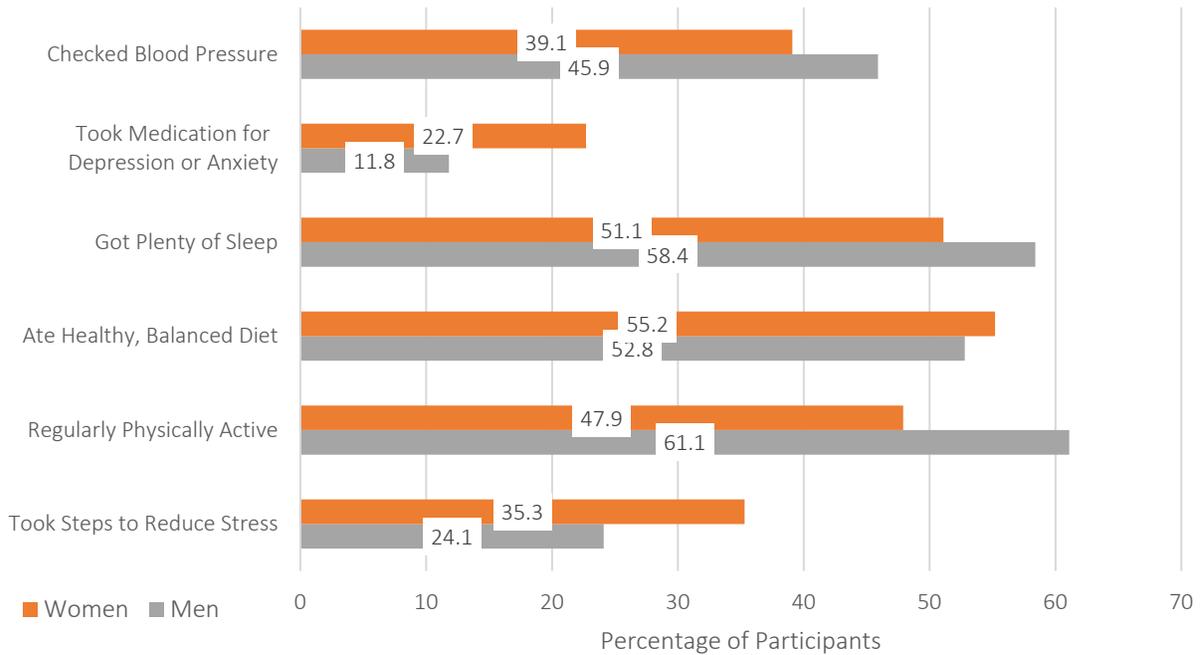


Figure 18. Self-Reported Health Promoting Behaviors, by Gender

Self-Reported Health Challenging Behaviors, by Gender and % (n = 2,234)

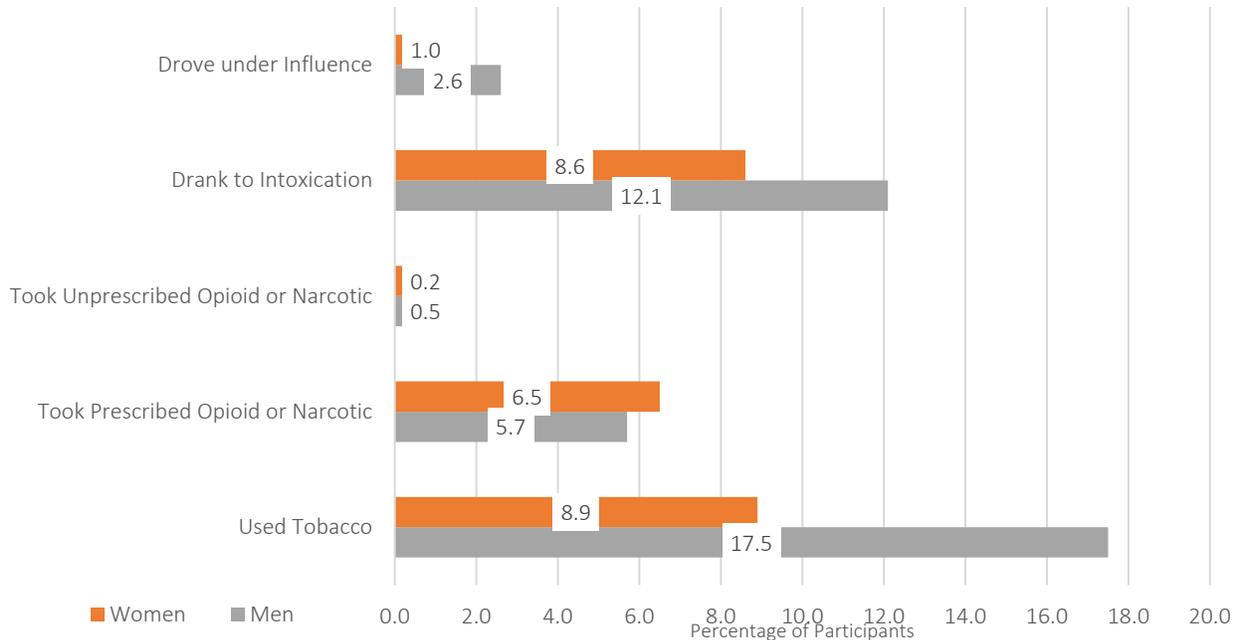


Figure 19. Self-Reported Health Challenging Behaviors, by Gender

There were some differences between reports of both health-promoting and health challenging behaviors when compared across the random and convenience samples. Table 36 provides a side-by-side comparison of the two samples by gender.

Table 36. Comparison of Random and Convenience Samples on Health Behavior Items

Health Behaviors	Random Sample (n = 2,234)		Convenience Sample (n = 542)	
	Men %	Women %	Men %	Women %
<i>Health Promoting</i>				
Took Steps to Reduce Stress	24.1	35.3	27.9	31.7
Regularly Physically Active	61.1	47.9	41.4	41.2
Ate Healthy, Balanced Diet	52.8	55.2	31.4	39.4
Got Plenty of Sleep	58.4	51.1	33.6	39.9
Took Medication for Depression or Anxiety	11.8	22.7	20.7	25.5
Checked Blood Pressure	45.9	39.1	32.1	38.7
<i>Health Challenging</i>				
Used Tobacco	17.5	8.9	47.1	31.7
Took Prescribed Opioid or Narcotic	5.7	6.5	11.4	10.1
Took Unprescribed Opioid or Narcotic	0.5	0.2	2.9	1.5
Drank to Intoxication	12.1	8.6	12.1	5.9
Drove under Influence	2.6	1.0	1.4	1.8

Social Determinants of Health

NCHS and River Bend Hospital were particularly interested in a better understanding whether participants perceived that certain social issues (often considered to be determinants of health status) were impacting their lives. Participants were provided with a list of 10 statements and asked to report the extent to which that statement applied to them. Each statement reflected a particular social determinant of health.

The purpose of these items was to assess the extent to which participants “felt” specific characteristics of social factors known to influence health outcomes. To assess these, some items were worded positively. For example, “I feel safe in the place where I live” is a positively worded item, and those reporting “never” or “seldom” to that item are among those who have identified a social factor that could be acted upon in the health and social services infrastructure to work with an individual to has concerns about their housing situation. Negatively worded items like “I worry about being able to pay my rent or mortgage” are considered at the other end of the response options, with those responding “sometimes,” “often,” or “always” being among those who might benefit from economic or employment assistance in ways to reduce the impact on health.

Because social determinants are among those items more likely to be assessed among lower-income populations (particularly in care and social service settings), these items were also analyzed by poverty category. Table 37 provides a summary of the overall sample responses and those compared by poverty category.

Table 37. Participants’ Reports of Felt Social Determinants

Social Determinant	Item Assessed	Total Sample Responses	Responses by Poverty Status	
			Poverty (14.1%)	Non-Poverty (85.9%)
Positively Worded Social Determinant Items			Percent Reporting "Never" or "Seldom" Applies to Me	
Social Ecology (n = 2,186)	I feel those around me are healthy	4.9	4.4	4.5
Education (n = 2,211)	I am satisfied with my education	10.1	19.0	8.4
Community Cohesion (n = 2,188)	I make efforts to get involved in my community	31.6	46.3	30.0
Policy (n = 2,193)	I vote when there is an election in my town	16.5	31.0	14.6
Environment (n = 2,202)	I feel that my town's environment is healthy (air, water, etc)	9.2	16.4	7.9
Housing (n = 2,200)	I feel safe in the place where I live	2.8	8.3	1.9
Psychosocial (n = 2,156)	I try to spend time with others outside of work	14.8	19.7	14.1
Transportation (n = 2,203)	I have access to safe and reliable transportation	2.2	7.3	1.1
Negatively Worded Social Determinant Items			Percent Reporting "Sometimes," "Often" or "Always" Applies to Me	
Economy (n = 2,211)	I worry about my utilities being turned off for non-payment	10.7	25.9	7.9
Employment (n = 2,211)	I worry about being able to pay my rent or mortgage	18.2	39.7	13.6

Those in the convenience sample responded to the social determinant items in ways that differed substantially from those in the random sample. On every item except for one (community cohesion), those in the convenience sample responded at levels that were twice as high in terms of the extent to which they could be considered challenging social determinants. In Table 38, a summary of the data from the convenience sample is presented, and highlighted boxes of scores indicate that the proportion of participants in the convenience sample felt this determinant at a rate that was at least twice as high as those in the random sample.

Table 38. Convenience Sample Participants' Reports of Felt Social Determinants

Social Determinant	Item Assessed	Total Sample Responses
Positively Worded Social Determinant Items		Percent Reporting "Never" or "Seldom" Applies to Me
Social Ecology (n = 517)	I feel those around me are healthy	12.2
Education (n = 502)	I am satisfied with my education	21.8
Community Cohesion (n = 508)	I make efforts to get involved in my community	33.4
Policy (n = 504)	I vote when there is an election in my town	37.6
Environment (n = 509)	I feel that my town's environment is healthy (air, water, etc)	20.5
Housing (n = 509)	I feel safe in the place where I live	9.8
Psychosocial (n = 499)	I try to spend time with others outside of work	22.9
Transportation (n = 510)	I have access to safe and reliable transportation	11.9
Negatively Worded Social Determinant Items		Percent Reporting "Sometimes," "Often" or "Always" Applies to Me
Economy (n = 506)	I worry about my utilities being turned off for non-payment	35.5
Employment (n = 510)	I worry about being able to pay my rent or mortgage	44.0

Importance of Community-Based Health and Social Service Programs

Participants were asked to provide their perspectives on the extent to which health and social service programs are important to their local community. During the survey, participants were provided with a list of 20 different programs that are often present in many communities. Participants were inconsistent with regard to the extent to which they provided an assessment of each program type.

Results from the 2,234 participants were used to calculate rankings of program endorsement, although the number of participants responding to the items varied throughout the list. Of the twenty programs, 100% were ranked as either moderately or very important by more than 50% of participants. While these results do provide some insight into the types of programs perceived as most important in their local community, across the board, this information suggests that most community members perceive the general network of health and social service programs to be important on the whole. Table 39 provides a list of the extent to which participants rated a program type as “moderately” or “very” important, presented in order of highest to lowest endorsement. Responses from the convenience sample also indicated strong support for all of the programs reflected in the list.

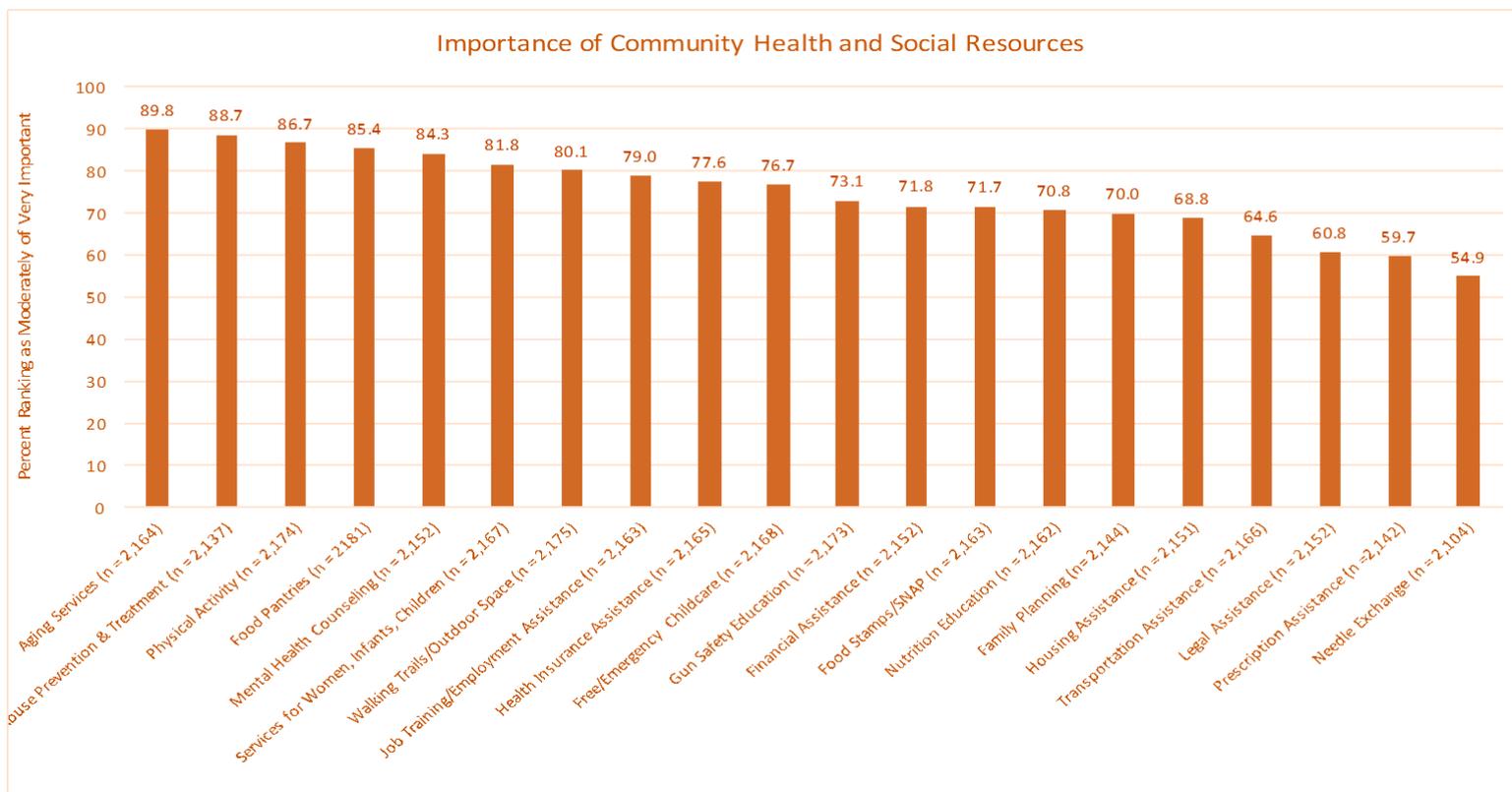


Figure 20. Participant Ratings of the Importance of Community Resources

However, given the strong general endorsement of these programs, the data presented in Figure 20 may offer less insight than may be helpful for community-based health providers given that the two highest importance categories were combined. Therefore, to better illustrate those services with the strongest endorsement of importance, the data are further characterized by differentiating between “moderately

important” and “very important.” Those distinctions are presented in Table 39. In this table, further highlighted are the items for which there were stronger endorsements in the “very” category than the “moderate” category.

Table 39. Breakdown of Intensity of Importance Rating of Community Resources

Community Programs	Moderately/Very Important %	Moderately Important %	Very Important %
Aging Services (n = 2,164)	89.8	43.1	46.7
Substance Abuse Prevention & Treatment (n = 2,137)	88.7	25.2	63.5
Physical Activity (n = 2,174)	86.7	45.7	41.0
Food Pantries (n = 2181)	85.4	38.8	46.6
Mental Health Counseling (n = 2,152)	84.3	36.6	47.7
Services for Women, Infants, Children (n = 2,167)	81.8	43.4	38.4
Walking Trails/Outdoor Space (n = 2,175)	80.1	35.7	44.4
Job Training/Employment Assistance (n = 2,163)	79.0	44.8	34.2
Health Insurance Assistance (n = 2,165)	77.6	42.4	35.2
Free/Emergency Childcare (n = 2,168)	76.7	35.6	41.1
Gun Safety Education (n = 2,173)	73.1	36.7	36.4
Financial Assistance (n = 2,152)	71.8	48.4	23.4
Food Stamps/SNAP (n = 2,163)	71.7	42.0	29.7
Nutrition Education (n = 2,162)	70.8	49.9	20.9
Family Planning (n= 2,144)	70.0	42.6	27.4
Housing Assistance (n = 2,151)	68.8	46.8	22.0
Transportation Assistance (n = 2,166)	64.6	42.1	22.5
Legal Assistance (n = 2,152)	60.8	42.6	18.2
Prescription Assistance (n =2,142)	59.7	40.0	19.7
Needle Exchange (n = 2,104)	54.9	30.6	24.3

Participants in the convenience sample similarly rated 100% of the community programs to be among those they perceived as important to their community. However, the level of endorsement among those in the convenience sample was stronger than those in the random sample on each program; for every program over 40% of participants in the convenience sample rated it as “very important” to their community. Some programs were rated as “very important” by those in the convenience sample at very high levels, including free/emergency childcare (59.0%), food pantries (65.1%), food stamps or SNAP (58.7%), services for women, infants, and children (57.9%), insurance assistance (55.7%), housing assistance (58.5%), mental health counseling (64.2%), and substance abuse prevention and treatment (63.1%).

Community Perceptions of Priority Health Needs

Vital to the development of the CHNA and its subsequent Implementation Plan was to assess the local health issues that community members perceived to be important. The hospital developed a list of 21 health needs common in many communities similar to those in the service area. Survey participants were asked to select five of those community health issues they perceived to be among the most important for the hospital and its partners to address.

Accompanying the list of health issues was a statement that guided survey participants in their selection. The statement read, “Below is a list of health issues present in many communities. Please pick the five that you think pose the greatest health concern for people living in your community.”

Data related to priority health needs are presented first for those in the random sample. At the end of this section, additional tables are provided that offer comparison of selected data between the random sample and the convenience sample.

While participants were able to select from the full list of 21 health issues during the survey, the priority issues were narrowed down to the top 50% during the community prioritization session. Figure 21 provides a graphical presentation of the top health issues shared during community meetings to inform future initiatives.

Table 40 summarizes the extent to which each health issue was selected as one of the top five issues by survey participants.

Table 40. Priority Health Issues Selected by Participants as Being Among the Top 5 Most in Need of Attention in the NCHS and River Bend Hospital Service Population (n = 2,234)

Health Issue	% Selecting Issue as One of Top 5 Needing Attention
Substance use or abuse	68.5
Obesity	52.8
Chronic diseases like diabetes, cancer, and heart disease	42.4
Mental health	36.6
Aging and older adult needs	35.8
Poverty	33.7
Alcohol use or abuse	31.9
Food access, affordability, and safety	26.1
Tobacco use	25.8
Disability needs	15.7
Assault, violent crime, and domestic violence	14.8
Injuries and accidents	13.9
Homelessness	11.2
Environmental issues	10.5
Suicide	9.7
Dental care	9.6
Sexual violence, assault, rape, or human trafficking	7.3
Reproductive health and family planning	6.7
Infectious diseases like HIV, STDs, and hepatitis	4.7
Child neglect and abuse	2.7
Infant mortality	0.5

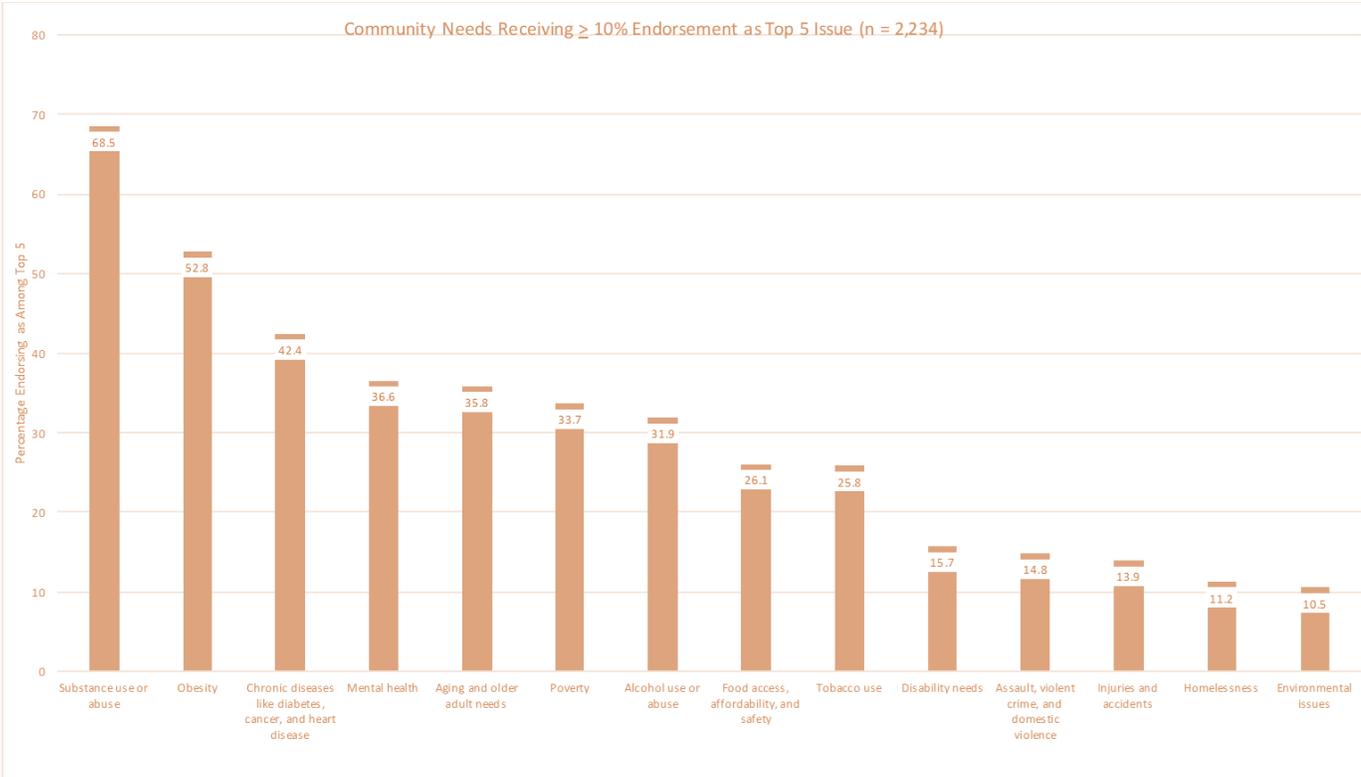


Figure 21. Most Frequently Endorsed Health Issues as Priority for Action

Those in the convenience sample selected many of the same priority needs as those in the random sample. However, important patterns to note included those participants in the convenience sample ranked substance abuse, alcohol use, mental health, poverty, and suicide in much higher proportions than those in the random sample. Additionally, those in the convenience sample ranked assault and violence as being among their top 10 issues.

Community Perceptions of Health Issues Needing Priority Resource Allocation

In addition to assessing the extent to which participants perceived specific needs as being among the most important for action in their community, participants were also asked to provide their perceptions of the extent to which those same 21 issues were also priorities for the allocation of resources in the local community. Participants were given a statement to consider prior to indicating their perceptions. The statement read, “Previously you were asked to pick issues that pose the greatest health concern in your community. If you had \$3 and could give \$1 to help solve some of these, which are the three to which you would give \$1?” Table 41 provides a summary of the extent to which participants selected an issue as one of the top three for the allocation of resources.

Table 41. Ranking of Health Issues Selected by Participants as Being Among the Top 3 to Which They Would Allocate Resources (n = 2,234)

Health Issue	% Selecting Issue as Priority for Resource Allocation
Substance use or abuse	39.9
Mental health	29.1
Child neglect and abuse	28.2
Food access, affordability, and safety	26.9
Aging and older adult needs	25.6
Chronic diseases like diabetes, cancer, and heart disease	24.6
Poverty	20.8
Obesity	18.6
Alcohol use or abuse	10.4
Disability needs	10.2
Homelessness	10.0
Suicide	7.8
Assault, violent crime, and domestic violence	7.3
Tobacco use	7.0
Sexual violence, assault, rape, or human trafficking	6.4
Environmental issues	6.1
Reproductive health and family planning	6.0
Dental care	4.3
Injuries and accidents	4.0
Infectious diseases like HIV, STDs, and hepatitis	1.8
Infant mortality	1.0

As was the case with the health issues selected as priorities for action, these were narrowed down to the top 50% during the community prioritization session. Figure 22 provides a graphical presentation of the top-ranked issues that survey participants selected as priorities for allocating resources.

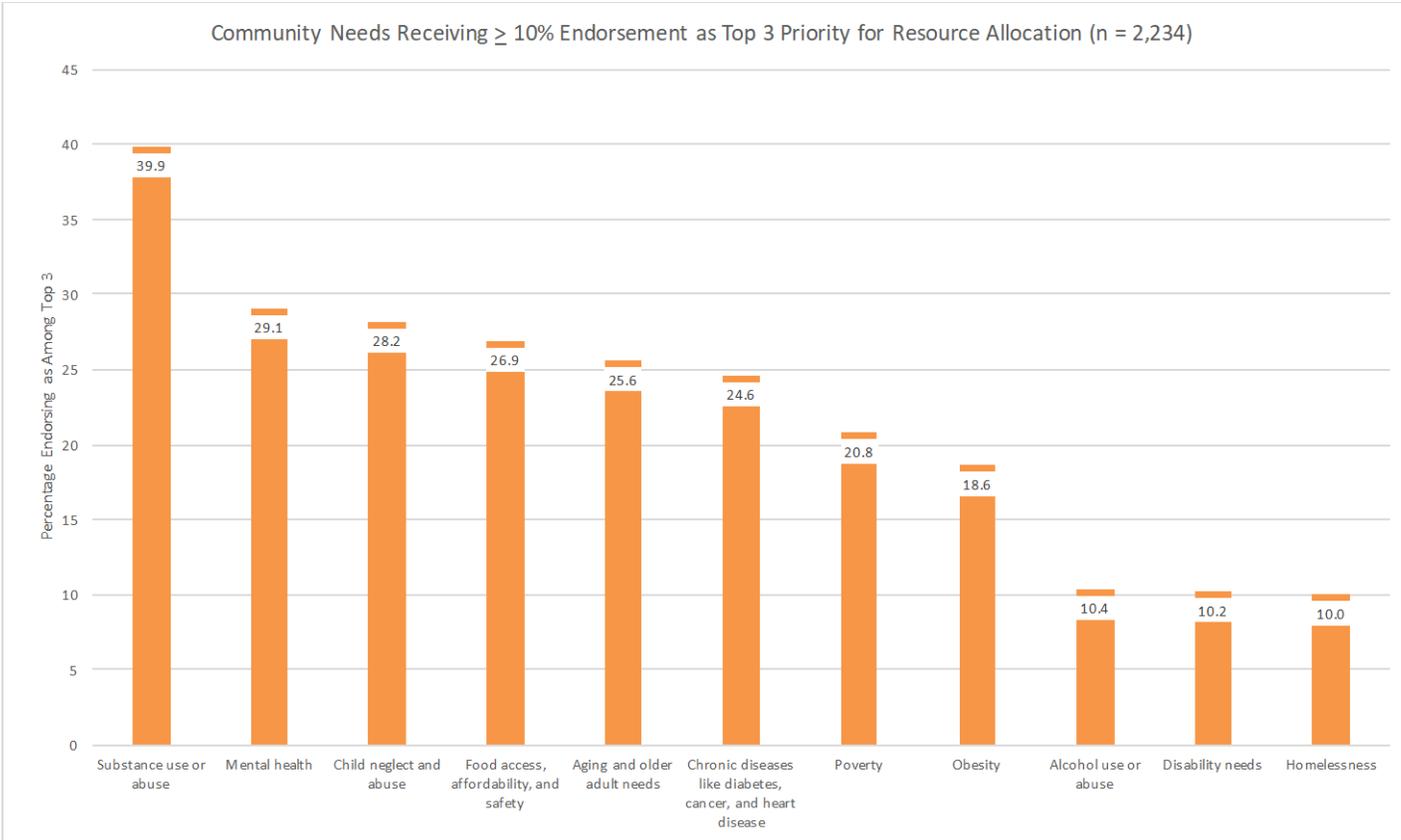


Figure 22. Most Frequently Endorsed Health Issues as Priority for Resource Allocation

Comparison of Needs and Resource Priorities

While participants were asked to assess priority needs and priorities for resource allocation as separate survey items, a comparison of those priority rankings provides helpful insights into the extent to which there is consistency between the two. Figure 23 provides such a comparison and highlights some inconsistency between health issues that community members believed were a priority needing to be addressed and those that they believe should be a priority for the allocation of resources.

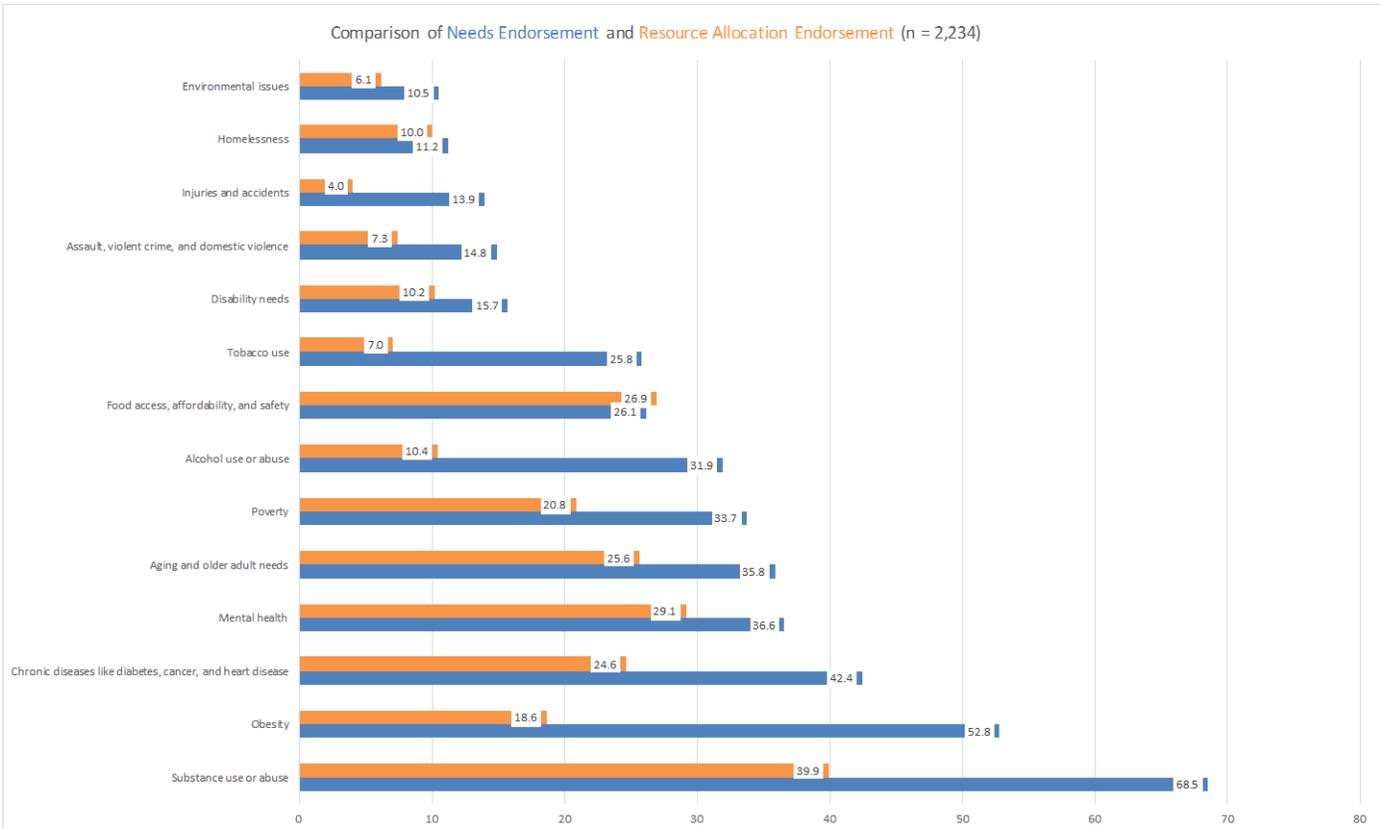


Figure 23. Comparison of Priority Needs and Resource Priorities

Priority Needs and Resources: A Comparison of the Random and Convenience Samples

Participants in the convenience sample were also asked to provide their perceptions of the health issues that were of priority for attention by the health infrastructure in their community and the extent to which those same issues were among the priorities for the allocation of resources. Table 42 provides a side-by-side comparison of how participants in each sample responded to these items.

Table 42. Comparison of Needs and Allocation Priorities by Random and Convenience Samples

Health Issue	% Selecting Issue as One of Top 5 Needing Attention		% Selecting Issue as Priority for Resource Allocation	
	Random Sample (n = 2,342)	Convenience Sample (n = 542)	Random Sample (n = 2,342)	Convenience Sample (n = 542)
Substance use or abuse	68.5	49.8	39.9	23.8
Obesity	52.8	23.6	29.1	26.8
Chronic diseases like diabetes, cancer, and heart disease	42.4	20.5	28.2	23.1
Mental health	36.6	38.0	26.9	40.8
Aging and older adult needs	35.8	15.3	25.6	8.7
Poverty	33.7	27.9	24.6	10.7
Alcohol use or abuse	31.9	24.4	20.8	18.1
Food access, affordability, and safety	26.1	43.9	18.6	10.9
Tobacco use	25.8	21.8	10.4	8.3
Disability needs	15.7	21.0	10.2	13.1
Assault, violent crime, and domestic violence	14.8	26.8	10.0	28.0
Injuries and accidents	13.9	4.6	7.8	13.7
Homelessness	11.2	38.4	7.3	11.6
Environmental issues	10.5	10.1	7.0	5.4
Suicide	9.7	19.9	6.4	12.9
Dental care	9.6	14.9	6.1	2.8
Sexual violence, assault, rape, or human trafficking	7.3	15.5	6.0	2.4
Reproductive health and family planning	6.7	4.4	4.3	6.1
Infectious diseases like HIV, STDs, and hepatitis	4.7	9.6	4.0	0.7
Child neglect and abuse	2.7	24.9	1.8	3.9
Infant mortality	0.5	2.2	1.0	2.4

THE RESILIENT YOUTH INITIATIVE SURVEY

As a component of this CHNA's activities, North Central Health Services (NCHS) considered the results of a survey conducted as a component of the evaluation of NCHS' Resilient Youth Initiative program.

NCHS funded the Resilient Youth Initiative (RYI) to help school corporations and schools in western Indiana select, implement, and sustain evidence-based social-emotional learning and substance abuse prevention programs. As part of the RYI evaluation, students in participating RYI schools completed the Web-based survey *Assessment of Liability and EXposure to Substance use and Antisocial behavior, Revised*© (ALEXSA-R). Developed with funding from the National Institutes of Health, the ALEXSA-R survey system has been widely validated and used in varied settings and for many purposes: prevention program evaluation, school-based risk factor evaluation, individual psychological assessment, and longitudinal child development research.

The purpose of the ALEXSA-R survey for the RYI was to evaluate the impact of curricula to help students avoid behavior problems and substance use, provide skills for thoughtful problem solving, increase support for one another, and develop healthy behaviors and habits. Students in RYI schools completed the ALEXSA survey in the 2019–2020 academic year before program implementation and participated in a follow-up survey in spring 2021.

These surveys provided us with baseline and follow-up levels of the factors that the prevention programs were designed to affect. Over the next few years, this information will help us gauge students' responses to the programs. However, these surveys also can provide insight into the challenges that students in different districts are currently facing.

This section of the CHNA includes data from the baseline (preintervention) ALEXSA-R student survey, completed by students between September 2019 and February 2020, and the initial follow up survey conducted in spring 2021. RTI International, the RYI evaluator, analyzed the baseline survey data and created summary tables to share with RYI grantees and NCHS. The tables provide data organized by grades 2–5, 6–8, and 9–12. Some of the survey questions differ for elementary school students (grades 2–5) and middle and high school students (grades 6–12). For example, students in grades 6–12, but not younger students, were also asked about substance use and delinquency. (Note: In some instances, students in grades 6–12 completed the elementary school version of the survey instead of the middle/high school version; for those students, data are not available this year for the delinquency, substance use, and suicidal ideation questions. RTI will follow up with school corporations to prevent this occurrence next year.)

The ALEXSA- survey asked about a variety of risk and protective factors related to mental health and risk behaviors. In the attached tables, most of the results present subscale scores that combine several survey items related to a particular mental health or behavioral concept, such as "Planning." In some cases, multiple related subscales combine to form larger domains. For example, the subscales of "Planning," "Concentration," and "Problem Solving" together compose the domain of "Self-Management."

The other domains in this survey are Disinhibition, School Protection, Perceived Risk of Behaviors, and Social Contagion. The ALEXSA Youth Risk Index is one subscale that measures elementary and middle school students' risk for substance use and conduct problems; it has been used for clinical screening of risk. Finally, the tables also present results for individual survey items that are not part of a scale—for example, the total "Percentage of Students Reporting Zero Friends."

For each domain, subscale, or survey item with numerical data, the table provides the mean, standard deviation (a measure of the dispersion of the values), and range of values. For individual survey items with categorical data (e.g., yes or no questions), the results are presented as percentages, such as the percentage of students who reported engaging in a specific risk behavior.

Tables 43 - 46, present summaries of the survey results with comparisons between the baseline and the 2021 follow-up.

Table 43. ALEXSA–R BASELINE STUDENT SURVEY—INITIATIVE-LEVEL RESULTS GRADES 2–3

Number of surveys submitted: 5,137 (2019); 4,471 (2021)
 Time periods: October 2019–February 2020; February 2021–May 2021

Domains and Subscales	Scale Range	All Students (RYI Recipients and Nonrecipients)		
		2019 Mean (Standard Deviation) or Percentage	2021 Mean (Standard Deviation) or Percentage	Effect Size (Cohen’s <i>d</i> for Mean or <i>w</i> for Proportion) ^a
Disinhibition	0–52	13.08 (7.95)	14.36 (8.19)	0.16
Anger Coping	0–1.64	0.43 (0.42)	0.48 (0.42)	0.12
Distractibility	0–3	0.94 (0.64)	1.06 (0.66)	0.18
Impulsivity	0–3	0.95 (0.66)	1.02 (0.66)	0.11
Self–Management	0–39	22.90 (5.58)	22.06 (5.58)	-0.15
Concentration	0–3	1.97 (0.76)	1.86 (0.77)	-0.14
Problem Solving	0–3	1.59 (0.57)	1.52 (0.56)	-0.12
School Protection				
School Atmosphere: Adults	0–3	1.62 (0.64)	1.55 (0.62)	-0.11
Other Subscales				
Depression	0–3	1.03 (0.67)	1.10 (0.7)	0.10
Aggression	0–1	54.13%	60.19%	<i>w</i> =0.06

These results reflect statistically significant change at the 95% level of confidence. Because of the large sample size, very small changes will often be statistically significant, but may not be meaningful in magnitude. Cohen’s *d* provides an effect size when comparing means, with .2 generally considered a small effect, .5 a medium effect, and .8 a large effect; 0 indicates no change between 2019 and 2021. For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large.

Table 44. ALEXSA–R BASELINE STUDENT SURVEY—INITIATIVE-LEVEL RESULTS GRADES 4-5

Number of surveys submitted: 5,103 (2019); 4,559 (2021)
 Time periods: October 2019–February 2020; February 2021–May 2021

Domains and Subscales	Scale Range	All Students (RYI Recipients and Nonrecipients)		
		2019 Mean (Standard Deviation) or Percentage	2021 Mean (Standard Deviation) or Percentage	Effect Size (Cohen’s <i>d</i> for Mean or <i>w</i> for Proportion) ^a
Disinhibition	0–52	14.84 (8.26)	15.78 (8.53)	0.11
Distractibility	0–3	1.11 (0.67)	1.19 (0.68)	0.12
Impulsivity	0–3	1.03 (0.62)	1.09 (0.63)	0.10
Self–Management	0–39	21.63 (5.62)	20.65 (5.61)	-0.17
Planning	0–3	1.79 (0.63)	1.72 (0.61)	-0.11
Concentration	0–3	1.85 (0.72)	1.74 (0.73)	-0.15
Problem Solving	0–3	1.48 (0.52)	1.42 (0.51)	-0.12
School Protection	0–27	16.27 (3.92)	15.65 (3.99)	-0.16
School Bonding	0–3	1.88 (0.59)	1.78 (0.58)	-0.17
Perceived Risk of Behaviors				
Tolerance of Deviance	0–1	50.3%	56.68%	<i>w</i> =.06
Perceived Safety of Drugs	0–3	0.79 (0.67)	0.90 (0.69)	0.16
Peer Pressure Susceptibility	0–1	4.53%	7.98%	<i>w</i> =.07
Other Subscales				
Depression	0–3	0.91 (0.66)	1.05 (0.73)	0.20
Attitudes Toward Substance Use	0–3	0.15 (0.46)	0.24 (0.60)	0.17
School Atmosphere: Students	0–3	2.38 (0.43)	2.43 (0.44)	0.11

^a These results reflect statistically significant change at the 95% level of confidence. Because of the large sample size, very small changes will often be statistically significant, but may not be meaningful in magnitude. Cohen’s *d* provides an effect size when comparing means, with .2 generally considered a small effect, .5 a medium effect, and .8 a large effect; 0 indicates no change between 2019 and 2021. For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large.

Table 45. ALEXSA–R BASELINE STUDENT SURVEY—INITIATIVE-LEVEL RESULTS GRADES 6-8

Number of surveys submitted: 7,867 (2019); 6,663 (2021)
 Time periods: October 2019–February 2020; February 2021–May 2021

Domains and Subscales	Scale Range	All Students (RYI Recipients and Nonrecipients)		
		2019 Mean (Standard Deviation) or Percentage	2021 Mean (Standard Deviation) or Percentage	Effect Size (Cohen's <i>d</i> for Mean or <i>w</i> for Proportion) ^a
Self-Management	0–39	19.89 (5.62)	19.15 (5.55)	-.13
Concentration	0–3	1.67 (.72)	1.56 (.73)	-.15
Problem Solving	0–3	1.36 (.51)	1.30 (.50)	-.11
School Protection	0–27	13.44 (4.0)	12.66 (4.01)	-.19
School Atmosphere: Adults	0–3	1.35 (.54)	1.28 (.54)	-.14
School Bonding	0–3	1.44 (.57)	1.36 (.57)	-.15
School Commitment	0–3	1.78 (.69)	1.67 (.69)	-.15
Perceived Risk of Behaviors	0–24	5.47 (4.15)	6.68 (4.57)	.28
Perceived Safety of Drugs	0–3	.83 (.63)	.92 (.64)	.14
Social Contagion				
Peer Pressure Susceptibility	0–1.2	.41 (.37)	.47 (.39)	.15
Other Subscales				
Depression	0–3	.99 (.75)	1.06 (.78)	.10
Anxiety	0–3	.72 (.54)	.78 (.59)	.10
Attitudes Toward Substance Use	0–3	.36 (.67)	.48 (.75)	.16

These results reflect statistically significant change at the 95% level of confidence. Because of the large sample size, very small changes will often be statistically significant, but may not be meaningful in magnitude. Cohen's *d* provides an effect size when comparing means, with .2 generally considered a small effect, .5 a medium effect, and .8 a large effect; 0 indicates no change between 2019 and 2021. For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large.

^b Sixth graders who inadvertently completed the elementary school version of the survey in 2019 were excluded from the aggression subscale in this table because those questions differed.

Individual Survey Items	All Students at Baseline, 2019, %	All Students, 2021, %	Effect Size (w for Proportion)
Suicidal Ideation			
During the past 12 months, did you ever... Feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	26.40	31.98	w=.06

Table 46. ALEXSA–R BASELINE STUDENT SURVEY—INITIATIVE-LEVEL RESULTS GRADES 9-12

Number of surveys submitted: 5,033 (2019); 4,871 (2021)
 Time periods: October 2019–February 2020; February 2021–May 2021

Domains and Subscales	Scale Range	All Students (RYI Recipients and Nonrecipients)		
		2019 Mean (Standard Deviation) or Percentage	2021 Mean (Standard Deviation) or Percentage	Effect Size (Cohen’s <i>d</i> for Mean or <i>w</i> for Proportion) ^a
Self-Management	0–39	20.58 (5.39)	19.98 (5.4)	-0.11
Concentration	0–3	1.62 (0.67)	1.50 (0.71)	-0.17
School Protection	0–27	12.06 (3.81)	11.42 (3.91)	-0.17
School Bonding	0–3	1.22 (0.54)	1.16 (0.54)	-0.12
School Commitment	0–3	1.76 (0.67)	1.63 (0.69)	-0.19
Perceived Risk of Behaviors	0–24	8.45 (4.63)	9.76 (4.89)	0.27
Tolerance of Deviance	0–12	1.15 (1.23)	1.40 (1.46)	0.18
Perceived Safety of Drugs	0–3	1.21 (0.66)	1.31 (0.68)	0.15
Social Contagion				
Peer Pressure Susceptibility	0–1.2	0.56 (0.4)	0.62 (0.4)	0.14
Other Subscales				
Depression	0–3	1.03 (0.77)	1.11 (0.78)	0.10
Anxiety	0–3	0.70 (0.54)	0.77 (0.59)	0.13
Aggression	0–1	63.58%	57.41%	<i>w</i> =-.06
School Atmosphere: Students	0–3	2.01 (0.6)	2.15 (0.61)	0.23

^a These results reflect statistically significant change at the 95% level of confidence. Because of the large sample size, very small changes will often be statistically significant, but may not be meaningful in magnitude. Cohen’s *d* provides an effect size when comparing means, with .2 generally considered a small effect, .5 a medium effect, and .8 a large effect; 0 indicates no change between 2019 and 2021. For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large.

	Scale Range	All Students (RYI Recipients and Nonrecipients)		
		2019 Mean (Standard Deviation)	2021 Mean (Standard Deviation)	Effect Size (Cohen's <i>d</i> for Mean) ^a
Number of Friends That Ever Used:				
Cannabis	0–5	1.88 (2.12)	1.66 (2.05)	-.11
Hard drugs	0–5	.61 (1.35)	.47 (1.18)	-.11

^a Cohen's *d* provides an effect size when comparing means, with .2 generally considered a small effect, .5 a medium effect, and .8 a large effect; 0 indicates no change between 2019 and 2021. Because of the large sample size, very small changes will often be statistically significant, but may not be meaningful in magnitude.

	All Students at Baseline, 2019, %				All Students, 2021, %				Effect Size (<i>w</i> for Proportion) ^a
	Never	Once in a While	Most Days	Every Day	Never	Once in a While	Most Days	Every Day	
Current Frequency of Use:									
Tobacco	91.83	5.16	1.26	1.74	92.54	3.75	1.12	2.60	<i>w</i> =.05

^a For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large. Note that the change in patterns for frequency of tobacco use are mixed.

Individual Survey Items	All Students at Baseline, 2019, %	All Students, 2021, %	Effect Size (<i>w</i> for Proportion)
Suicidal Ideation			
During the past 12 months, did you ever... Feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	34.07	40.15	<i>w</i> =.06

^a For proportions, the effect size is measured by *w*, where .1 is typically considered a small effect, .3, medium, and .5, large.

2021 COMMUNITY CHNA FOCUS GROUP DISCUSSIONS

To provide for additional opportunities for community members to provide valuable insights into the decisions made during the 2021 CHNA process, North Central Health Services (NCHS) and River Bend Hospital, in collaboration with partner organizations and hospitals, held a series of focus group discussions.

These focus group discussions provided opportunities to gather community members, providers of local health and social services, and other stakeholders to review information, have open conversations about local health needs, and to offer suggestions for priority health topics that should be considered as NCHS and River Bend Hospital make decisions about their priorities and subsequent implementation plan. This section of the CHNA provides an overview of the focus group discussions and the recommendations emerging from those discussions.

Focus Groups

On eight different dates in April 2021, seven focus group discussions were held. Those discussions were held in five counties in the hospital’s service area, including Benton County, Clinton County, Carroll County, Tippecanoe County, and White County.

Participants

A total of 59 community members participated in the focus group discussions. Additionally, each focus group included facilitators from the hospitals and other organizations convening the meetings. Below is a summary of the number of participants and observers for each focus group discussion, by the county of interest for each.

County	Community Members	Observers/Facilitators
Benton County	3	3
Carroll County	5	3
Clinton County	17	4
Tippecanoe County	15	3
White County	19	4

Methods

To conduct the focus group discussions, the facilitators applied a great deal of consistency in both the approach, process, and types of information shared with the community members. The process for the focus group discussions included the following activities:

- Introductions
- A description of the purpose of the discussion and ground rules
- A presentation of secondary data and existing indicators related to health issues within the county. An open discussion of the data by participants, including opportunities to clarify any data

points and to discuss county-specific factors related to the health and well-being of the communities in the county.

- The development of a list of health needs that the community members perceived as priorities based upon the data presented.
- An expansion of the list of health needs derived from the data presented, in order to ensure the inclusion of health needs and other issues perceived as important by the community members.
- A voting process that sought to provide insight into the relative priority of each of the health issues from the perception of community members.

Outcomes

Each focus group discussion led to a final list of recommended priorities that are described below.

Benton County. After the discussion and voting process in Benton County, the participants identified the following as the top health needs for that county:

- Mental health providers
- Child abuse
- Uninsured
- Substance use, long commutes, and severe housing problems (tied for 4th place)

Clinton County. After the discussion and voting process in Clinton County, the participants identified the following as the top health needs for that county:

- Substance abuse and treatment
- Mental health
- Cultural awareness/language barriers
- Transportation
- ACEs/child abuse

Carroll County. After the discussion and voting process in Carroll County, the participants identified the following as the top health needs for that county:

- Mental health
- Internet access
- Transportation
- Severe housing
- Primary care providers

Tippecanoe County. After the discussion and voting process in Tippecanoe County, the participants identified the following as the top health needs for that county. Different groups ranked them in varying orders, so they are listed below in random order:

- Mental health
- Substance use
- Child abuse
- Food security
- Housing
- Transportation
- Uninsured

White County. After the discussion and voting process in White County, the participants identified the following as the top health needs for that county:

- Mental health
- Substance use
- Teen births
- Transportation
- ACEs/child abuse

Regional Outcomes

Based on the outcomes of the five focus groups, there were leading issues for which there was a great deal of consistency in terms of their endorsement as priorities for further consideration during the CHNA process. As is described later in this document, these regional consistencies were described and incorporated into the priority setting process conducted for this CHNA (see Report Section 8). Table 46 summarizes the extent to which there was consistency for the prioritization of particular health issues across the five counties.

Table 47. Priority Areas Established by County via Focus Group Discussions

Health Issues	Prioritization by County				
	Benton	Carroll	Clinton	Tippecanoe	White
Mental Health	X	X	X	X	X
Transportation-Related Factors	X	X	X	X	X
Substance Use and Abuse	X		X	X	X
Child Abuse & Adverse Childhood Experiences (ACES)	X		X	X	X
Access to Care Factors	X	X	X	X	
Housing		X		X	

PRIORITIZATION PROCESS AND ESTABLISHED PRIORITIES

Based on consistencies across the data considered during the 2021 CHNA, three priority areas will be recommended for consideration by the Board of Directors at the November 18, 2021, meeting. Subsequent to the acceptance of these recommendations, the Board will participate in a brainstorming session to infuse bold and creative initiatives into the Implementation Plan that will be developed by the NCHS and River Bend Hospital staff following the meeting.

Three priorities will be recommended based on the extent to which there is consistency across the data considered during the 2021 CHNA. These three priorities include:

- Mental Health and Adverse Childhood Experiences (ACES)
- Substance Use and Abuse
- Overall Health & Well-Being

Table 48 provides an overview of the extent to which these priorities share consistency across the CHNA data types.

Table 48. Priority areas by CHNA data category.

Health Issues	Existing Data	Stakeholder Survey	Community Survey	RYI Survey	Focus Groups
Mental Health & Adverse Childhood Experiences (ACES)	X	X	X	X	X
Substance Use and Abuse	X	X	X	X	X
Overall Health & Well-Being	X	X	X	X	X
Transportation-Related Factors	X				X
Housing					X

APPENDIX A CHNA PARTNERS

Individuals from a wide variety of organizations and communities participated in the interview process, community meetings and surveys. Participants included representatives from the following organizations:

Community Meeting Partners

- Anthem
- Bauer Family Resources
- Benton Community School Corporation
- Benton County Health Department
- Boswell Public Library
- Central Catholic Schools
- City of Monticello
- Community Foundation of White County
- Delphi Schools
- Food Finders Food Bank, Inc.
- Four County
- Healthy Communities of Clinton County Coalition
- Hartford House Child Advocacy Center
- Home with Hope, Inc.
- IU Health
- IU Health Arnett
- IU Health Frankfort
- IU Health Quality Board
- IU Health West Central Region
- Indiana Professional Management Group (IPMG)
- Junior Achievement
- Lafayette Adult Resource Academy
- Lafayette Family YMCA
- Lafayette School Corporation
- LTHC Homeless Services
- Mental Health America Wabash Valley Region
- Meridian Health Services
- Monticello Fire Department
- Monticello Spring Corporation
- Monticello-Union Township Public Library
- NAMI West Central Indiana
- North Central Health Services
- North Central Nursing Clinic
- North White School Corporation
- Nurse-Family Partnership
- Phoenix Paramedic Solutions
- Purdue Extension
- Purdue North Central Nursing Clinics
- Otterbein Public Library
- Purdue Extension
- Riggs CHC
- River City Community Center
- Saving Grace Harm Reduction
- SHIP of Indiana
- 6th Alarm Peer Support
- Terra Drive Systems
- Tippecanoe County Health Department
- Tippecanoe County Sheriff's Office
- Twin Lakes School Corporation
- United Way of Greater Lafayette
- Valley Oaks Health
- White County Government
- White County Boys and Girls Club
- White County Council on Aging
- White County Economic Development
- White County Health 4 All Coalition
- White County Health Department
- White County Sheriff's Office
- White County United Way
- Willowstone Family Services

APPENDIX B CHNA PRIORITIZATION SESSION ATTENDEES

Representatives of NCHS and River Bend Hospital participated in a meeting on November 18, 2021, to review data collected for the CHNA. A list of attendees is included below.

NCHS Corporate Board

Rick Davis, Chair

James Schoen, Vice Chair

David Cooper, Treasurer

David McGaughey, Secretary

Jeffrey P. Brown, M.D.

Gary Lehman

Marjorie T. Roberts

Lori Rogers, M.D.

Stephanie Long, President & CEO

NCHS Grants Board

Jeffrey Kessler, Chair

Tony Albrecht, Secretary/Treasurer

Ashley Bice

Brad Cohen

Brenda Clapper

Steve Habben

Gregory Kapp

David Rollock, Ph.D.

Julie Schleck, M.D.

NCHS Staff

Jamie Segó, CFO

Michelle Kreinbrook, Director of Community Benefit and Outreach

Measures Matter, LLC

Michael Reece, Principal Consultant

APPENDIX C CHNA PRIORITIZATION PRESENTATION

Representatives of NCHS and River Bend Hospital participated in a meeting to review data collected for the CHNA. A copy of the slides used during the presentation of data is below.



1



2



3



4



5



6

Review of Existing Indicator Data Included:

- Mortality and Morbidity Data
- Infectious Diseases
- Health Rankings
- Health Outcomes & Health Behaviors
- Clinical Care Characteristics
- Social & Economic Factors and Physical Environment Factors
- Mental Health
- Substance Abuse

7

Service Region Health Rankings

County	Health Outcomes Rank	Health Factors Rank
Benton	25	27
Carroll	13	46
Clinton	52	38
Fountain	51	66
Montgomery	38	25
Tippecanoe	11	8
Warren	4	29
White	39	21

8

Status Review of Indicators

- Review of indicator data led to determination of "risk" level for the service area.
- Risk determination: prevalence/incidence, co-morbidity factors, situational and structural considerations, health infrastructure considerations, and variance across the counties in the service area.

Reduced	Green
Critical for Monitoring	Yellow
Urgent	Red

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Status Review of Primary Indicators

Morbidity	Indicator	Color
	Asthma	Green
	Diabetes	Yellow
	Heart Disease	Red
	High Blood Pressure	Red
	High Cholesterol	Red
	Infectious Disease	Yellow
	STI	Yellow

Mortality	Indicator	Color
	Cancer and Cardiovascular Disease	Red
	Preventable Factors Known	Green

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Status Review of Primary Indicators

Health Outcomes	Indicator	Color
	Length of Life	Yellow
	Poor Physical Health Days	Yellow
	Poor Mental Health Days	Red
	Poor Overall Health	Red
	Quality of Life	Yellow
	Low Birth Weight	Green

Health Behaviors	Indicator	Color
	Smoking	Red
	Physical Inactivity	Red
	Obesity	Yellow
	Drug Overdose	Yellow
	Excessive Drinking	Red
	Alcohol Drinking Deaths	Red
	Food Insecurity	Red
	Teen Births	Red

Clinical Care	Indicator	Color
	Costs of Care	Green
	Uninsured Adults	Yellow
	Uninsured Children	Red
	Primary Care Providers	Yellow
	Mental Health Providers	Red
	Dental Care Providers	Yellow
	Preventable Hospital Stays	Red
	Diabetes Monitoring	Yellow
	Mammography Screening	Yellow

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Status Review of Primary Indicators

Substance Abuse	Indicator	Color
	Drug Overdose	Yellow
	Treatment	Yellow
	Alcohol Density	Red
	Meth Lab Seizures	Red
	Opioid Dispensations	Red

Mental Health	Indicator	Color
	Poor Mental Health Days	Yellow
	Frequent Mental Distress	Yellow
	Mental Health Providers	Red
	Suicide	Yellow
	Suicide Attempts/Hospitalizations	Yellow

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13

2018 CHNA Feedback

- Implemented Survey to Solicit Feedback
- Recruited Organizational Stakeholders and Community Members via email
- Feedback: 2018 Priorities and Applicability for 2021 & Implications of Implementation Plan
- 20 Participants

2018 Priority Area	% Positive or High Priority for 2021	Counties Served	Number	Percent
Increase number of mental health providers	100%	Benton	7	35.0
Expand access to mental health care	90%	Carroll	8	40.0
Expand access to suicide prevention and crisis intervention programs	80%	Clinton	9	45.0
Expand mental health care and resource organizations to specialty building	70%	Fountain	8	40.0
Improve access to substance use disorder treatment, prevention, and recovery	70%	Montgomery	9	45.0
Increase access to resources to prevent, identify and preventable chronic diseases	60%	Tippecanoe	13	65.0
Advance resources to address the social determinants of health	60%	Warrick	8	40.0
Increase access to health care within underserved communities	60%	White	8	40.0

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Focus Group Discussions

- Focus Group Discussions Held in Benton, Clinton, Carroll, Tippecanoe and White Counties
- Total of 59 community participants
- Reviewed Health Indicator Data
- Discussed Data and Health Factors
- "Voted" to Identify Priority Issues

Health Issues	Prioritization by County				
	Benton	Carroll	Clinton	Tippecanoe	White
Mental Health	X	X	X	X	X
Transportation-Related Factors	X	X	X	X	X
Substance Use and Abuse	X		X	X	X
Child Abuse & Adverse Childhood Experiences (ACEs)	X		X	X	X
Access to Care Factors	X	X	X	X	
Housing		X		X	

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CHNA Community Survey

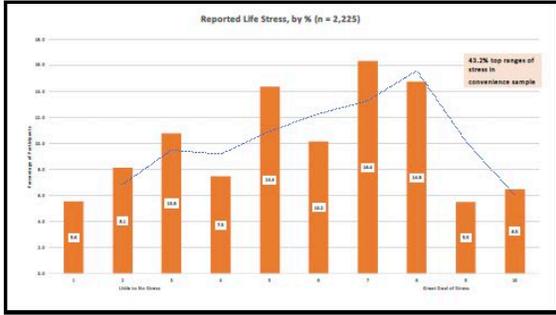
Survey conducted by NCHS in collaboration with other hospitals throughout Indiana.

Researchers from Indiana University Bloomington and the University of Evansville helped to design the survey and the survey process.

Data were collected in early 2018 by the IU Bloomington Center for Survey Research.

Given the recency of the data, the rigor of the methods, and COVID-19, we opted to use this data and not do another large community survey.

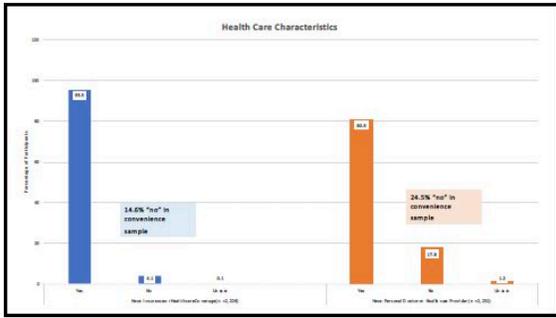
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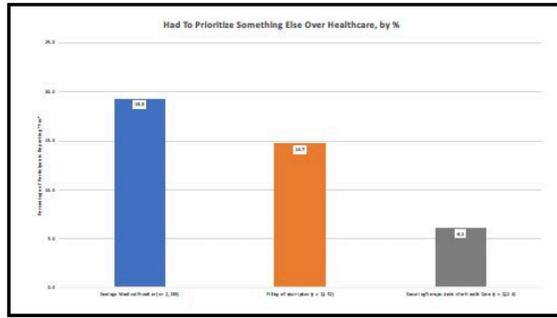
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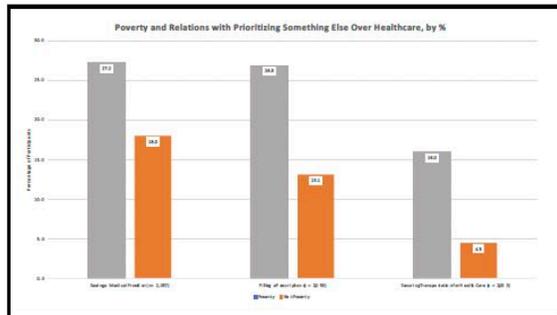


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Convenience Sample:
Prioritizing
Other

- Skipped Seeing a Provider 38.2%
- Didn't Fill a Prescription 36.0%
- No Transportation 28.6%

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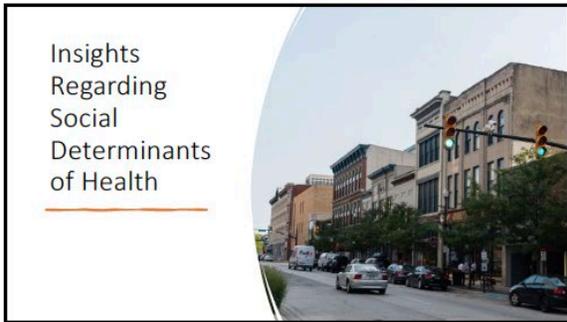


Reported Health Behaviors

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Health Behaviors	Random Sample (n = 2,234)		Convenience Sample (n = 542)	
	Men %	Women %	Men %	Women %
Health Promoting				
Took Steps to Reduce Stress	24.1	35.3	27.9	31.7
Regularly Physically Active	61.1	47.9	41.4	41.2
Ate Healthy, Balanced Diet	52.8	55.2	31.4	39.4
Got Plenty of Sleep	58.4	51.1	33.6	39.9
Took Medication for Depression or Anxiety	11.8	22.7	20.7	25.5
Checked Blood Pressure	45.9	39.1	32.1	38.7
Health Challenging				
Used Tobacco	17.5	8.9	47.1	31.7
Took Prescribed Opioid or Narcotic	5.7	6.5	11.4	10.1
Took Unprescribed Opioid or Narcotic	0.5	0.2	2.9	1.5
Drank to Intoxication	12.1	8.6	12.1	5.9
Drove under Influence	2.6	1.0	1.4	1.8

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Insights Regarding Social Determinants of Health

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Social Determinant	Item Assessed	Total Sample Responses
Positively Worded Social Determinant Items		
		Percent Reporting "Never" or "Seldom" Applies to Me
Social Ecology (n = 517)	I feel those around me are healthy	12.2
Education (n = 502)	I am satisfied with my education	21.8
Community Cohesion (n = 508)	I make efforts to get involved in my community	33.4
Policy (n = 504)	I vote when there is an election in my town	37.6
Environment (n = 509)	I feel that my town's environment is healthy (air, water, etc)	20.5
Housing (n = 509)	I feel safe in the place where I live	9.8
Psychosocial (n = 499)	I try to spend time with others outside of work	22.9
Transportation (n = 510)	I have access to safe and reliable transportation	11.9
Negatively Worded Social Determinant Items		
		Percent Reporting "Sometimes," "Often" or "Always" Applies to Me
Economy (n = 506)	I worry about my utilities being turned off for non-payment	35.5
Employment (n = 510)	I worry about being able to pay my rent or mortgage	44.0

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Perceptions of Community-Based Health & Social Services

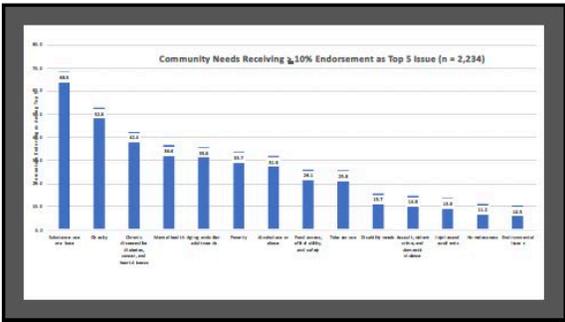
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Community Programs	Moderately/Very Important %	Moderately Important %	Very Important %
Aging Services	89.8	43.1	46.7
Substance Abuse Prevention & Treatment	88.7	25.2	63.5
Physical Activity	86.7	45.7	41.0
Food Pantries	85.4	38.8	46.6
Mental Health Counseling	84.3	36.6	47.7
Services for Women, Infants, Children	81.8	43.4	35.4
Walking Trails/Outdoor Space	80.1	35.7	44.4
Job Training/Employment Assistance	79.0	44.8	34.2
Health Insurance Assistance	77.6	42.4	35.2
Fire/Emergency Childcare	76.7	35.6	41.1
Gun Safety Education	73.1	36.7	36.4
Financial Assistance	71.8	48.4	23.4
Food Stamps/SNAP	71.7	42.0	29.7
Nutrition Education	70.8	40.9	28.9
Family Planning	70.0	42.6	27.4
Housing Assistance	68.8	46.8	22.0
Transportation Assistance	64.6	42.1	22.5
Legal Assistance	62.8	42.6	18.2
Prescription Assistance	59.7	40.0	19.7
Needle Exchange	54.9	30.6	24.3

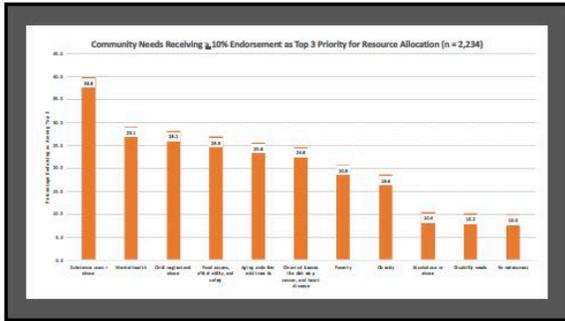
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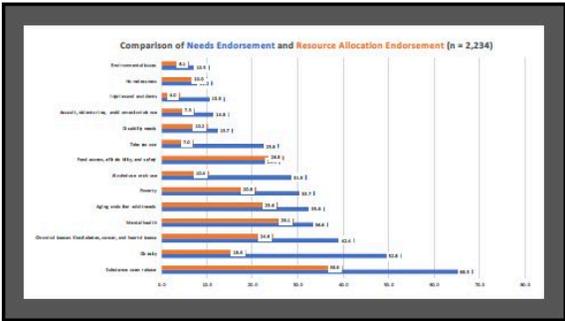
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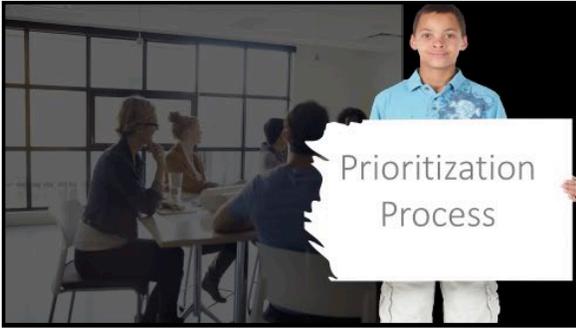


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Resilient Youth Initiative Data (Baseline 2019-2020)

- Baseline data align with community and stakeholder perceptions of the need for attention to mental health issues among youth and adolescents throughout development.
- Data indicate needs to be addressed in critical areas, particularly:
 - Self-management
 - Substance use
 - Suicidal ideation

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The Prioritization Process

- ✓ **Goal:** Reach consensus on recommended priorities
- 📄 Priorities are broad umbrellas that offer latitude to staff and partners in the development of an implementation plan.
- 👑 **Step One:** Discuss Priorities and Reach Consensus on 3-5 Priorities
- 👥 **Step Two:** Brainstorm of creative, unique, and innovative approaches that will inform the staff's development of the implementation plan.

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Priorities Across All Data Sources

Health Issues	Existing Data	Stakeholder Survey	Community Survey	RHI Survey	Focus Groups
Mental Health & Adverse Childhood Experiences (ACEs)	X	X	X	X	X
Substance Use and Abuse	X	X	X	X	X
Overall Health & Well-Being	X	X	X	X	X
Transportation-Related Factors	X				X
Housing					X

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Brainstorm Session for Implementation Plan

Brainstorm of creative, unique, and innovative approaches that will inform the staff's development of the implementation plan.

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Next Steps

- ✓ Community health needs assessment report reviewed and posted online | December 2021
- 👥 Implementation strategy plan presented to the board for approval | January 2022
- 👑 Implementation strategy outlined by the staff | December 2021

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APPENDIX D 2018 CHNA IMPACT

This appendix discusses the impact of community benefit activities taken by NCHS to address the significant community health needs identified by the 2018 NCHS and River Bend Hospital Community Health Needs Assessment (CHNA). The expected and achieved impacts of each activity are listed below.



Mental & Behavioral Health Care

Objective: Support mental and behavioral health initiatives in workforce development, capacity building, crisis intervention, and/or access to care.

Crisis & Suicide Intervention Program Expansions. NCHS awarded funding to address the need for youth crisis and suicide intervention and prevention by expanding the Mental Health America Wabash Valley Region SAFE2TALK crisis texting service, crisis phone service, and ASIST and QPR suicide prevention training throughout the NCHS service area. From 2018-2021, SAFE2TALK served 1,353 callers and texters from Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, and White counties. Seven hundred individuals in 2018 and 546 individuals in 2019, and 1,539 in 2020 and 148 in 2021 to date were trained in QPR suicide prevention in Benton, Carroll, Clinton, Fountain, Tippecanoe, Warren, and White counties.

Psychiatry Residency Program Expansion. NCHS awarded funding to address mental health workforce development gaps by helping to sustain the expansion of the Indiana University School of Medicine's general psychiatry residency program, triple board (psychiatry, child-adolescent psychiatry, pediatrics) residency program, and child and adolescent psychiatry, addictions psychiatry, geriatric psychiatry, and consultation-liaison fellowships. In this first year of the grant, nine general residents and five fellows were matched, and NCHS funding sustained the program's rural psychiatric resident rotation. In 2019, the program matched 19 residents and fellows; established the first consult-liaison psychiatry fellowship in Indiana; provided addictions fellow care at Valley Oaks and Adult & Child Community Mental Health Centers; and rotated residents through Franciscan Health in Crawfordsville, the Purdue Student Health Center, and IU Health Arnett. In 2020, the program matched 19 residents and fellows.

Psychiatric-Mental Health Nurse Practitioner Program Launch. NCHS awarded funding to address mental health workforce development gaps by launching a Psychiatric-Mental Health Nurse Practitioner Program at the Purdue University School of Nursing. When the program reaches full capacity, it will nearly double the number of psychiatric-mental health nurse practitioners trained annually in Indiana. Already, the community has responded to the new program's availability; North Central Nursing Clinics has allocated funding to support one provider at each of 4 rural sites to complete the program, which will significantly enhance medical and mental health integration and expand mental health accessibility for Family Health Clinic patients in Carroll and White counties. In 2019, two PMHNP students graduated from the certificate program and elected to practice in Indiana, and 18 new students enrolled. In 2020, eight PMHNP students graduated, five MS, and three certificate students. Seven students have positions in Indiana. Ten Students graduated in 2021; Six PMHNP certificate students graduated in Spring of 2021; Four of Purdue's master's program students graduated in Spring of 2021; Seven out of ten graduates work in Indiana; Ten PMHNP graduates passed the ANCC certification exam. Thirteen students are in the graduating class of 2022.

Psychiatry Residency Program Launch. NCHS awarded funding to address mental health workforce development gaps by launching a new psychiatry residency program at Community Health Network (CHN), now one of only two such programs in the state. NCHS grant funding supports the placement and

education of psychiatry residents in Indiana. Since the program's launch, Community Health Network has matched 15 psychiatric residents with strong Midwest and Indiana ties. The first resident cohort completed their residency in 2020, two stayed at CHN, and one returned to Illinois. The 2020/21 new cohort includes four students. The program's 2nd cohort graduated in Spring of 2021. All four residents will practice in the Indianapolis area. The 21/22 complete cohort includes: 12 psychiatry residents (4-PGY3, 4-PGY2, 4-PGY1, 4 – New Interns).

Mental Health Nursing Scholarship. NCHS awarded funding to Lafayette Daybreak Rotary to provide Mental Health Nursing Scholarships. This will provide scholarships to assist with education for the Purdue School of Nursing program.

Purdue School of Nursing Scholarships to create Mental Health/Substance Use treatment community asset map. Three scholarships to undergraduate students in the College of Health and Human Sciences were made available to participate in a community-engaged research project to update the Substance Use and Mental Health Pathways map used by the Tippecanoe County Resiliency and Recovery Network to guide their work in our community.

Mental Health Care Single-Point-of-Entry Program Pilot. NCHS awarded funding to improve mental health service coordination through a three-year Mental Health Navigator pilot program at Mental Health America Wabash Valley Region. The program provides a single-entry point for seven partnering mental healthcare organizations for high-risk individuals and families seeking mental health care. In the first pilot year, the program served 88 unduplicated clients and has grown to serve 616 unduplicated clients in 2019 and 888 individuals in 2020; in 2021 they have served 919 to date. 56% of the clients secured an appointment with a mental health professional through the Navigator. 48% of the clients attended their appointment with a mental health professional. 24% of clients did not respond following the initial appointment. 4% of clients chose to remain with their current mental health provider. 8% were connected to supportive services. 8% were no longer in need of mental health services.

Mental Health Care for Individuals with Intellectual or Developmental Disorders. NCHS awarded funding to expand mental health care and after-school programming for individuals with intellectual or developmental disorders through the new Grant's House facility's purchase and renovation. The project will expand dedicated program space from just a few classrooms to 44,000 square feet and impact approximately 500 children annually. The Grant's House facility opened in the fall of 2019 and is already serving children and young adults through three GLASS classrooms, the older youth program, and the after-school program.

Behavioral Health Services Renovation. NCHS awarded funding to address the need to increase access to mental health care by assisting in the renovation of space to house new offices for Riggs Community Health Center's expanding behavioral healthcare services. The project helps Riggs Community Health Center better serve more than 1,000 unique behavioral healthcare patients annually.

Mental Health Resource Awareness Support. NCHS awarded sponsorships to Mental Health America Wabash Valley Region and the National Alliance on Mental Illness West Central Indiana to bolster the organizations' resources to sustain mental health resource awareness services. The organizations each conduct approximately 3,000 service hours annually.

Mental Health Summit. NCHS awarded funding to increase awareness of mental health resources through support for Mental Health America Wabash Valley Region's annual Mental Health Summit (formerly the

Child Psychiatric Conference) for professionals who work with individuals with mental health needs, including physicians, nurses, school personnel, juvenile justice personnel, and therapists. The 2018 summit served 72 attendees. The 2019 conference had 85 attendees. The conference was held virtually in 2020 with six panelists. The plans are for a virtual conference in 2021 that will focus on addiction.

Mental Health Resource Professional Leadership Development. NCHS awarded funding for two professionals from Mental Health America Wabash Valley Region and the National Alliance on Mental Illness West Central Indiana to complete the IUPUI Lilly Family School of Philanthropy Nonprofit Executive Leadership Certificate Program in 2018.

Suicide Prevention. Request for Application was sent to all regional schools in September 2021. Community Partnership Grants will be awarded in December 2021. NCHS is partnering with the Education Development Center (EDC) to provide an opportunity for school and district teams to focus on integrating mental health within the tiers of the education system to ensure that school communities are part of an effort to address and enhance suicide prevention school-wide, building on a solid foundation of social-emotional learning and life skills.

This multi-tiered approach includes 6 key components:

- 1) Written protocols for helping students at risk of suicide
- 2) Written protocols for the response after a suicide
- 3) Developing community partnerships to ensure students receive necessary support and services
- 4) Identification of youth at-risk for suicide
- 5) Promoting protective factors that enhance students' well-being
- 6) Engaging key stakeholders, including parents and school leadership, in suicide prevention messaging, planning, and training



Substance Abuse

Objective: Support initiatives in substance use disorder prevention, treatment, and/or recovery.

Resilient Youth Initiative. NCHS launched the Resilient Youth Initiative request for proposals to prevent substance use and improve mental well-being among youth. The initiative supports school corporations in researching and implementing evidence-based substance use prevention and social-emotional learning curriculums. Nineteen school corporations were awarded planning and implementation grant funding, technical assistance, in-person training, and program evaluation. By 2022, evidenced-based social-emotional learning and substance use prevention programs are expected to reach approximately 33,000 K-12 students across seven counties annually. In 2019/2020, about 22,000 students completed the web-based survey Assessment of Liability and EXposure to Substance use and Antisocial behavior, Revised© (ALEXSA-R). The purpose of the ALEXSA-R survey for the RYI is to evaluate the impact of curricula to help students avoid behavior problems and substance use, provide skills for thoughtful problem solving, increase support for one another, and develop healthy behaviors and habits. Despite COVID-19, schools were able to complete planned implementation in 20/21. The final year 21/22, will consist of finalizing and approval of sustainment plans.

Prescription Drug Safety Course. To prevent prescription drug misuse and abuse among adolescents, NCHS sponsored the Prescription Drug Safety Course, an online module available to any interested middle and high schools in the NCHS service area to educate students on prescription drug safety. In year one, over 500 students completed the course across eight schools in the NCHS service area. During the 19/20 school year, 514 students accessed the digital learning experience across eleven schools. In the final year

of our three-year commitment to making the digital Prescription Drug Safety course available to any high school in the NCHS service area, eleven schools delivered the course to 574 students. Over the three years, the program reached 1,585 students and 16 schools. North Central Health Services students' assessment scores increased by 33% (from 69 to 92 out of 100).

Substance Abuse Education. To support education in substance abuse prevention, treatment, and/or recovery, NCHS awarded funding to purchase and install televisions to show videos related to addiction, mental health, and recovery at Lafayette Urban Ministries.

Recovery Housing. NCHS awarded funding to Home with Hope | Meridian Health to support recovery housing and treatment to provide: 29-bed highly structured recovery home for men services; 28 beds as 2-bedroom units with four women/furnished apartments for women in recovery and a Maternal Treatment program. The Maternal treatment program will provide support for substance abuse treatment, Individual and group therapy focusing on trauma, child development, & positive pregnancy.



Objective: Support initiatives that improve overall health and well-being.

Children's Opportunities for Active Living. To increase access to evidence-based active living interventions and outdoor recreation, NCHS awarded funding to capital projects of the Boys & Girls Club of Montgomery County, the Clinton County Boys & Girls Club, Lyn Treece Boys & Girls Club, Hanna Community Center, Right Steps Child Development Centers and Sagamore Council Boy Scouts of America. The Boys & Girls Clubs serve approximately 300 children daily, Hanna Community Center serves 100 after-school children daily, Right Steps provides early learning and care to 481 children daily, and the Sagamore Council Boy Scouts of America facilities serve approximately 4,200 children annually.

Opportunities for Active Living. NCHS awarded funding to the Wabash River Enhancement Corporation for long-term planning, land acquisition, development, and research aligned with the Master Plan for the Wabash River Urban Corridor to increase access to evidence-based active living interventions. Four studies are underway, and one property has been acquired.

Safe and Accessible Walking Paths. NCHS awarded funding to the Historic Landmarks Foundation of Indiana to establish a new trail on the Monon High Bridge in Carroll County to enhance access to physical activity opportunities.

Fetal/Infant Mortality Review. To address the high rate of fetal/infant mortality across West Central Indiana, NCHS awarded funding to establish the West Central Indiana Fetal/Infant Mortality Review.

Rural Health Provider Education. NCHS awarded funding for rural healthcare staff to attend the Indiana Rural Health Association annual conference; 21 scholarships have been awarded from 2018 through 2021.

Parish Nurse Training. NCHS awarded scholarship funding for ten volunteers to be trained and certified as parish or faith community nurses to increase access to health care among underserved populations.

Food Security. To enhance food security in the NCHS service area, NCHS awarded funds to expand the Food Finders Food Bank Food Resource and Education Center's parking capacity and expand the serving

capacity of the Carroll County Council on Aging congregate meal program. NCHS also provided funding to enhance the Food Bank in White County to serve the clients more safely.

Coordinated Homeless Services. To improve access to health care for the homeless and enhance opportunities for coordination and collaboration among the organizations that serve them, NCHS awarded funding to LTHC Homeless Services to acquire land and build a 21,000-square-foot coordinated entry, multi-agency engagement center. When the center opens, it is expected to provide 13 partner organizations with service space and serve over 1,300 clients annually.

Medical Respite for the Homeless. To increase access to health care among the homeless, NCHS awarded funding for two LTHC Homeless Services staff to attend the National Health Care for the Homeless Council's Medical Respite Training Symposium and complete training that will inform the launch of the LTHC Engagement Center multi-agency medical respite program. In 2021, NCHS funded the Implementation of the HealthCall EMR to provide a centralized point of communication for all health services at LTHC. LTHC has served approximately 50 people since April 2020 in the respite program.

Housing for Homeless Families. To increase access to services for individuals with chronic housing stability barriers such as mental illness, NCHS awarded funding to Pam's Promise Transitional Housing Center to purchase a transitional housing facility for Montgomery County families.

Expansion of Services for the Underserved in Montgomery County. NCHS awarded funding to the Mountie Mission to expand access to services for low-income families, including food, school supplies, after-school activities, clothing. The funding aligns with our commitment to healthy communities and enables the organization to purchase the adjacent building, expanding services.

Access to Transportation. To increase access to transportation and reduce social isolation for individuals with mobility impairments, NCHS awarded capital funding for two new wheelchair-equipped 14 passenger vehicles for use in providing on-demand transportation. This transportation will provide access to essential resources, like medical visits, in our community.

Housing for Individuals with Intellectual or Developmental Disorders. NCHS awarded funding to help expand housing for individuals with intellectual or developmental disorders by funding the Abilities Services, Inc building project in Clinton County. This fully ADA-accessible home will be built by Clinton Central, Clinton Prairie, Rossville, and Frankfort students.

Access to the Internet. To enable students to have adequate Internet access at home to support their e-learning needs, NCHS awarded funding for a three-year e-learning project to Wabash Heartland Innovation Network. This project will provide internet service to rural areas and those economically disadvantaged and unable to access the internet while at home for e-learning.

Serving more children and community members in Carroll and surrounding counties. NCHS awarded funding to expand dining to meet current demand and for future growth for up to 500 guests/campers and enhance conference space for the regional community. The prevalence of mental health concerns, the lack of outside play, and increasing medication and dietary restrictions are some of the most pressing needs that will be incorporated into this new Camp Tecumseh Dining Hall.