

2021 | Community Health Needs Assessment



iuhealth.org/in-the-community

December 2021



White Memorial Hospital

A handwritten signature in black ink that reads "David Hummels".

David Hummels
Chair of IU Health White Memorial Hospital
Board of Directors

10/06/21
Approval date

Indiana University Health (IU Health)

Community Health Needs Assessment team members

IU Health team

Brenda Chamness Biggs, MS, MCHES®

- Director, Community Health, Community Outreach and Engagement

Melissa Dexter, MA

- Program Manager, Community Outreach and Engagement, IU Health West Central Region

Evan Hall

- Senior Analyst, Market Analytics and Insight

Marcie Memmer, MPH, CHES®

- Program Manager, Community Benefit, Community Outreach and Engagement

Brad Moore, MBA, PMP

- Program Manager, Community Benefit, Community Outreach and Engagement

Brian Parks

- Project Coordinator, Community Benefit, Community Outreach and Engagement

Brisco Wood

- Analyst, Information Services, Decision Support and Analytics

Non-IU Health partners

Carin McBroom

- Graphic Designer, Kern Graphic Design

Keith Hearle, MBA

- Founder and President, Verité Healthcare Consulting

Alex Wallace

- Senior Associate, Verité Healthcare Consulting

Table of contents

Executive summary 5

 Introduction..... 5

 Community definition 5

 Significant community health needs..... 5

Data and analysis 6

 Definition of community assessed 6

 Secondary data summary..... 7

 Demographics 7

 Economic indicators 7

 Local health status and access indicators 7

 Ambulatory Care Sensitive Conditions..... 8

 Community Need Index..... 8

 Food deserts..... 8

 Medically Underserved Areas and Populations 8

 Health Professional Shortage Areas 8

 Relevant findings of other community health needs assessment..... 8

 Significant indicators..... 8

 Primary data summary 10

 Community meetings – White County 10

Other facilities and resources in the community..... 11

 Federally Qualified Health Centers 11

 Hospitals..... 11

 Local Health Departments..... 11

 Other community resources 11

Appendix A – Objectives and methodology 12

 Regulatory requirements 12

 Methodology 12

 Collaborating organizations..... 12

 Data sources..... 12

 Health equity 13

 Information gaps..... 13

Table of contents

Appendix B – Secondary data assessment	14
Demographics.....	14
Economic indicators	17
People in poverty	17
Unemployment	18
Insurance status.....	18
Crime	19
Local health status and access indicators.....	20
County Health Rankings	20
Indiana Department of Health	23
Behavioral Risk Factor Surveillance System	25
Ambulatory Care Sensitive Conditions or Preventative Quality Indicators.....	26
Community Need Index	27
Food deserts	28
Social Vulnerability Index	28
Medically Underserved Areas and Populations.....	29
Health Professional Shortage Areas.....	29
Findings of other community health needs assessments.....	30
Indiana State Health Assessment and Improvement Plan	30
Coronavirus disease (COVID-19) pandemic and vaccine.....	32
Appendix C – Community meeting and survey participants	34
Appendix D – Impact of actions taken since the previous community health needs assessment.....	34
Access to care: Workforce development.....	34
Behavioral health: Mental health.....	34
Behavioral health: Substance use.....	35
Behavioral health: Tobacco	35
Health and social services for seniors.....	36
Appendix E – Consultant qualifications.....	36

Executive summary

Introduction

This Community Health Needs Assessment (CHNA) was conducted to identify significant community health needs and to inform development of an Implementation Strategy that addresses them.

Indiana University Health White Memorial Hospital is a critical access hospital located in Monticello, Indiana, and serves the residents of White County and the surrounding area. It offers a comprehensive array of inpatient and outpatient healthcare services, including specialties such as cancer care, orthopedics and neurology. IU Health White Memorial Hospital is a Pathway to Excellence designated facility.

The hospital is part of Indiana University Health (IU Health), the largest and most comprehensive health system in the state of Indiana. IU Health, in partnership with Indiana University School of Medicine, one of the nation's leading medical schools, gives patients access to leading-edge medicine and treatment options that are available first, and often only, at IU Health. Additional information about IU Health is available at: iuhealth.org/.

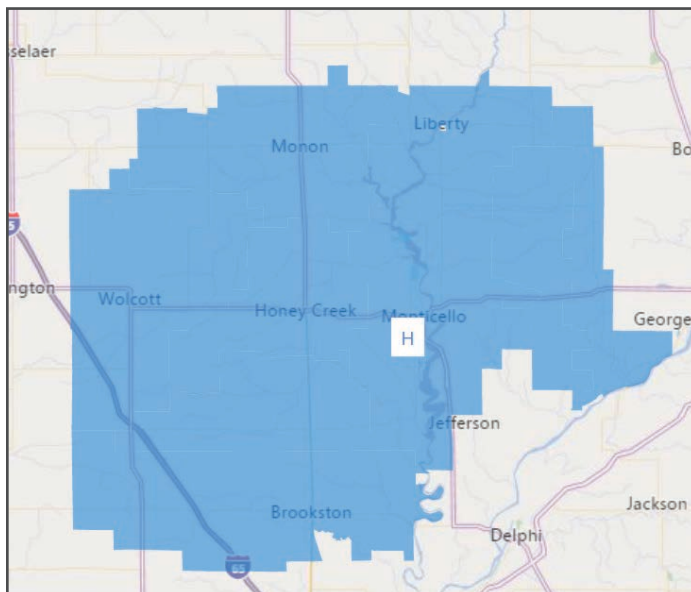
Each IU Health hospital is dedicated to the community it serves. Each hospital conducts a CHNA to understand current community health needs and to inform strategies designed to improve community health, including initiatives designed to address social determinants of health. The CHNAs are conducted using widely accepted methodologies to identify the significant needs of a specific community. The assessments also are conducted to comply with federal laws and regulatory requirements that apply to tax-exempt hospitals.

IU Health invites community members to review the community health needs assessments and provide comments to communitybenefit@iuhealth.org.

For copies of each IU Health CHNA report and implementation strategy, visit: iuhealth.org/in-the-community/community-benefit. Updated implementation strategies for each IU Health hospital are scheduled to be published by May 15, 2022.

Community definition

For purposes of this CHNA, IU Health White Memorial Hospital's community is defined as White County, Indiana. The county accounted for 86 percent of the hospital's inpatient cases in 2019. The estimated population of this community in 2019 was 24,133. The following map portrays this community.



Source: Power BI and IU Health, 2021

Significant community health needs

Identifying significant community health needs is an important element of CHNAs. Several data sources were assessed to identify those needs, including:

- Secondary data (i.e., data collected by another entity or for a different purpose), including demographics, health status and access to care indicators;
- Findings from other community health assessments of areas served by the hospital; and
- Input obtained from individuals who participated in one or more community meetings or surveys.

Access to healthcare services

- Compared to Indiana and national averages, White County had significantly lower rates of primary care physicians, dentists and mental health providers. The county ranked in the bottom half of Indiana counties for each of these provider types (Exhibits 20 and 21).
- Portions of White County have been designated as Medically Underserved Areas (MUA) (Exhibit 33).
- White County has been designated as a primary care and mental health care Health Professional Shortage Areas (HPSA) (Exhibit 34A and 34C).
- The uninsured rate in White County was significantly above state and national averages (Exhibit 18A).
- Community meeting participants identified access to healthcare services and resources, as well as access to mental health services, as significant needs. Additionally, the COVID-19 pandemic was believed to have made it more difficult to access healthcare services (Community meetings).
- Other assessments identified access to health services as a significant need, including access to services for seniors and the need for more home and community-based services (Other assessments).

Food insecurity and healthy eating

- Census tracts in the south of the community have been designated as food deserts (Exhibit 31).
- Other assessments described food insecurity, nutrition and wellness as significant issues (Other assessments).

Maternal and infant health and child wellbeing

- Child abuse, Adverse Childhood Experiences (ACE), and youth suicide ideation were identified by focus group participants as significant needs in White County. Participants also believed the COVID-19 pandemic was impacting child development and learning (Community meetings).
- Several maternal and infant health indicators were unfavorable in White County, including breastfeeding, teen births, preterm births and mothers who smoked during pregnancy (Exhibit 26).
- White County ranked 73rd of 92 Indiana counties for teen births (Exhibit 23). Community meeting participants identified teen births as a significant issue (Community meetings).

Mental health

- All community meetings identified issues with mental health as significant concerns, including mental health needs, youth suicide ideation, access to mental health services and the impacts of COVID-19 and isolation on mental health (Community meetings).
- White County has been designated as a mental health HPSA as part of the Region 30 Mental Health Catchment Area (Exhibit 34C)."
- The rate of mental health providers in White County is significantly below state and national averages (Exhibit 24).

Social determinants of health

- Poverty rates are particularly high for Black and Hispanic (or Latino) residents in White County and Indiana (Exhibit 15).
- Health disparities and inequities are seen in Indiana-wide data for various racial and ethnic minorities, as well as for low-income residents (Exhibit 27A). Other health assessments identified health disparities as a concern in White County (Other assessments).
- White County ranked 80th out of 92 Indiana counties for high school graduation (Exhibit 20). The percent of the population with any post-secondary education was lower than the state average and national average (Exhibit 21).
- Several census tracts in White County ranked in the bottom half nationally for housing type and transportation vulnerability (Exhibit 32). Transportation was identified as a need in community meetings and follow-up surveys (Community meetings).
- Other assessments identified a variety of social determinants of health factors as significant concerns, including housing, transportation and food access (Other assessments).

Data and analysis

Definition of community assessed

The community assessed by IU Health White Memorial Hospital was defined by the geographic origins of the hospital's discharges. In 2019, this geographic area was identified as White County, Indiana.

Residents from this county accounted for 86 percent of the hospital's 2019 inpatient discharges (Exhibit 1).

Exhibit 1: IU Health White Memorial Hospital inpatient discharges by county, 2019

County	Percent of inpatients
White County	86.0%

Source: Analysis of IU Health Discharge Data, 2019

The estimated population of this county in 2019 was 24,133 persons (Exhibit 2).

Exhibit 2: Local community population, 2019

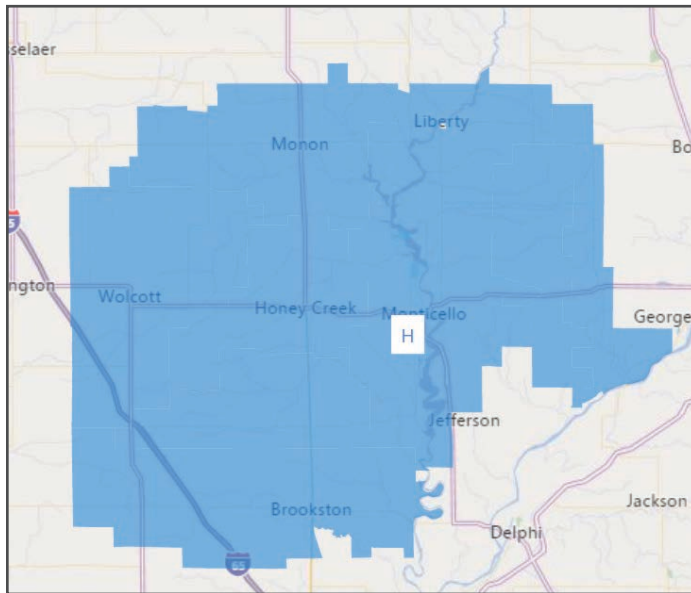
County	Estimated population
White County	24,133

Source: State of Indiana by the Indiana Business Research Center, 2019

The hospital is located in the city of Monticello, Indiana, ZIP code 47960.

Exhibit 3 portrays the community. The map shows county and ZIP code boundaries. Some ZIP codes could overlap one or more counties. The "H" logo marks the location of this hospital on the map.

Exhibit 3: IU Health White Memorial Hospital community



Source: Power BI and IU Health, 2021

Secondary data summary

The following section summarizes findings from secondary data analysis for White County. See Appendix B for more detailed information.

Demographics

Population characteristics and trends directly influence community health needs. The total population of White County is expected to decrease by 1.1 percent from 2020 to 2025 (approximately 260 people). The largest increase in population is projected in the northwest corner of the county, surrounding the town of Monon.

While the total population is expected to decrease between 2020 and 2025, the population aged 65 years and older is projected to grow by 12.2 percent during the same period. This should contribute to a growing need for health services, since older individuals typically need and use more services than younger persons.

Variations in racial and ethnic diversity are seen throughout the identified ZIP codes. In 2019, no ZIP code had a proportion of Black residents greater than three percent. The proportion of residents that are Hispanic (or Latino) was highest in ZIP code 47959, near Monon, above 25 percent.

Residents with a disability are more prevalent than the state and national average. Residents experiencing linguistic isolation are more prevalent in the county than in Indiana as a whole.

Economic indicators

Many health needs have been associated with poverty, as those in low-income households typically are less healthy than those in more prosperous areas. At 9.2 percent (over the 2015-2019 time period), White County's poverty rate has been below the Indiana and national averages. Poverty rates for Asian and Hispanic (or Latino) residents in White County were more than double the poverty rate of White residents.

Between 2015 and 2019, unemployment rates decreased in the county, state and nationally. In recent years, White County's unemployment rates have been below both Indiana and national averages. Due to the COVID-19 pandemic, it is anticipated that unemployment rates will rise in the 2020 data. The rise in unemployment is likely to affect numerous health-related factors, such as access to employer-based health insurance and access to health services.

The percentage of people uninsured in White County is above both state and national averages.

Crime rates in White County are below the Indiana averages for all indicators.

Local health status and access indicators

In the 2019 *County Health Rankings*, White County ranked 26th for overall health outcomes and 24th for overall health factors out of 92 counties in Indiana.

White County had 10 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, two were in the bottom quartile – teen births and high school graduation. The ratio of population to primary care physicians, dentists and mental health providers were significantly worse than state and national averages.

According to the Indiana Department of Health (IDOH), mortality rates were above state averages in White County for cardiovascular diseases, heart disease and cancer.

The overall cancer mortality and incidence rates were higher in White County than the Indiana averages, with significantly higher incidence rates of oral cavity and pharynx and thyroid cancers.

Rates of communicable disease in White County were below Indiana averages for all indicators.

Several maternal and infant health indicators were unfavorable in White County, including unfavorable rates of mothers breastfeeding, teen births, preterm births and mothers who smoked during pregnancy.

For the state of Indiana, Behavioral Risk Factor and Surveillance System (BRFSS) data indicates that on all but

one measure presented, risk factors were higher for Black residents than for White residents (and for lower-income residents than those with higher incomes). Hispanic (or Latino) residents have experienced higher uninsured, physical inactivity and occasional smoking rates.

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSC) include 14 health conditions (also referred to as Preventative Quality Indicators, or “PQI”) “for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹ These conditions include diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, pneumonia, urinary tract infection and asthma.

The rates of admissions for ACSCs in White County were below state averages for all ACSC indicators.

Community Need Index

Dignity Health, a California-based hospital system, developed and published a Community Need Index™ (CNI) that measures barriers to healthcare access. The index is based on five social and economic indicators:

- The percentage of elders, children and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

A CNI score is calculated for each ZIP code. Scores range from “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0).

The weighted average CNI score for White County was 2.4 – well below the national median of 3.0. One ZIP code (47959) scored in the “highest need” category.

Food deserts

The U.S. Department of Agriculture’s Economic Research Service identifies census tracts that are considered “food deserts” because they include lower-income persons without supermarkets or large grocery stores nearby.

One census tract in the southern area of the community has been designated as a food desert.

Medically Underserved Areas and Populations

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration (HRSA) based on an “Index of Medical Underservice (Index).” The Index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. Areas with a score of 62 or less are considered “medically underserved.”

White County has not been designated as MUA/Ps.

Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care or mental health care professionals is found to be present.

The entirety of White County has been designated as a primary care and mental health care HPSA.

Relevant findings of other CHNAs

This CHNA also considered the findings of other recent, available assessments or reports conducted by community-based organizations or agencies, Local Health Departments (LHD) and the state of Indiana. These other assessments consistently identified the following needs as significant for the community served by IU Health White Memorial Hospital.

- Substance use disorders (including opioids and alcohol)
- Chronic disease and chronic disease management
- Vulnerable populations (seniors)
- Social determinants of health
 - Housing
 - Food insecurity
 - Transportation

Significant indicators

Exhibit 4 presents many of the indicators discussed in the above secondary data summary. An indicator is considered significant if it varies materially from a benchmark level (e.g., an average for Indiana or the United States). For example, the percent of White County residents with a disability was 16.6 percent. A comparable statistic for Indiana as a whole was 13.7 percent. For the IU Health White Memorial Hospital community, the population with a disability is considered significant. The last column of Exhibit 4 identifies where more information regarding the data sources can be found in this report. The benchmarks include Indiana averages and national averages.

¹ Agency for Healthcare Research and Quality – AHRQuality Indicators™. (n.d.) Prevention Quality Indicators Overview. Retrieved from https://qualityindicators.ahrq.gov/Modules/pqi_resources.aspx#techspecs

Exhibit 4: Significant indicators

Indicator	Area	Value	Benchmark	Exhibit
Population change, 2020-2025	White County	-1.1%	2.2% – Indiana	9
65+ population change, 2020-2025	White County	12.2%	15.0% – Indiana	9
Population with a disability	White County	16.6%	13.7% – Indiana	13
Poverty rate, Asian, 2015-2019	White County	27.3%	18.0% – Indiana	15
Poverty rate, Hispanic, 2015-2019	White County	22.7%	22.4% – Indiana	15
Adult obesity	White County	33.3%	29.0% – U.S.	21
Percent of adults age 20 and over reporting no time for physical activity	White County	30.2%	22.0% – U.S.	21
Percent of population with adequate access to exercise opportunities	White County	64.8%	84.0% – U.S.	21
Uninsured	White County	11.6%	9.5% – Indiana	21
Population per primary care physician	White County	2,667:1	1,330:1 – U.S.	21
Population per dentist	White County	3,455:1	1,460:1 – U.S.	21
Population per mental health provider	White County	2,418:1	440:1 – U.S.	21
Some college	White County	58.8%	65.0% – U.S.	21
Teen birth rate	White County	37.5%	25.0% – U.S.	21
Injury deaths	White County	80.7	67.0 – U.S.	21
Percent of workers that commute more than 30-minutes to work	White County	34.3	30.7 – Indiana	21
Mortality rate (all cancers)	White County	186.3	163.3 – Indiana	23
Mothers on Medicaid percent	White County	39.9%	38.5% – Indiana	26
Smoked during pregnancy percent	White County	15.4%	11.8% – Indiana	26
Admissions for diabetes long-term complications (ACSC)	White County	137.4	116.6 – Indiana	28

Source: IU Health Analysis

Primary data summary

IU Health White Memorial Hospital obtained community input through focus groups of community stakeholders, as well as an additional survey issued to stakeholders who were unable to attend the community meetings.

See Appendix C for a list of organizations and community members who participated in the community input process.

Two community meetings were held in 2021 to receive input from stakeholders regarding the health needs in White County – one on April 13 and another on April 19. Secondary data and a preliminary list of community health need priorities was presented at both meetings. Each group was then asked questions about the preliminary list, including their reactions, additions to the proposed needs, thoughts regarding the causes, impacts of the COVID-19 pandemic and others.

After these discussions, participants were given the opportunity to make additional comments before being asked to vote on the significant needs in the county. Participants were asked to choose three to five significant health needs in a poll during the meeting until each group was able to reach some consensus regarding the priority needs.

Preliminary needs identified include a wide array of topics, including teen births, high school graduation, access to exercise opportunities, access to care (primary, dental and mental health) and a lack of social associations and organizations.

In addition to these topics, participants focused discussion on child mental health and add Adverse Childhood Experiences (ACEs), child sexual abuse, mental health training, prenatal care, birth control, transportation, substance abuse, accessing care and a lack of knowledge around available resources, health insurance and others.

From this process, participants from the April 13 community meeting identified the following needs as most significant for White County:

- Mental health, including youth suicide ideation and access to mental health providers
- Transportation
- Substance abuse
- Child abuse and ACEs

Participants from the April 16 community meeting identified the following needs as most significant for White County:

- Mental health
- Substance abuse
- Teen births

In discussing the impacts of the COVID-19 pandemic on health, participants focused on isolation and its impacts on mental health, impacts on child development and learning, increased substance abuse and a lack of preventive care as people did not go to providers outside of emergencies.

An additional community survey was issued to stakeholders unable to attend community meetings, asking them to identify priority needs. Among 19 responses, the following issues were identified as the most significant:

- Mental health
- Access to healthcare services and resources
- Substance abuse
- Transportation

The survey also asked about the impacts of the COVID-19 pandemic. Issues most often selected as significant impacts include:

- Social isolation and loneliness
- Poverty
- Lack of access to healthcare services
- Learning and development impacts among children

Other facilities and resources in the community

This section identifies other facilities and resources available in the community served by IU Health White Memorial Hospital that are available to address community health needs.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHC) are established to promote access to ambulatory care in areas designated as “medically underserved.” These clinics provide primary care, mental health and dental services for lower-income populations. FQHCs receive enhanced reimbursement for Medicaid and Medicare services and most also receive federal grant funds under Section 330 of the Public Health Service Act.

There are currently two FQHC sites operating in the IU Health White Memorial Hospital community (Exhibit 5).

Exhibit 5: Federally Qualified Health Centers, 2021

County	Facility
White	Family Health Clinic of Monon (Monon)
White	Family Health Clinic of Wolcott (Wolcott)

Source: HRSA, 2021

Hospitals

IU Health White Memorial Hospital is the only hospital located in the community (Exhibit 6).

Exhibit 6: Hospitals, 2021

County	Facility
White	IU Health White Memorial Hospital (Monticello)

Source: Indiana Department of Health, 2021

Local Health Departments

Exhibit 7 presents information on Local Health Departments (LHD) that provide services in the IU Health White Memorial Hospital community.

Exhibit 7: Local Health Departments, 2021

Public Health Department
White County Health Department (Monticello)

Source: Indiana Department of Health, 2021

Other community resources

A wide range of agencies, coalitions and organizations that provide health and social services, is available in the region served by IU Health White Memorial Hospital. Indiana 211 is a free service that helps Indiana residents find health and human service agencies and resources in their local community. Indiana 211 is a division of the Indiana Family and Social Services Administration (FSSA). To get help, residents can visit the website, (www.in211.org), call 2-1-1 or 1-866-211-9966 (available 24/7) or text their zip code to 898-211 (available Monday – Friday 8 am – 5 pm).

The other organizations and resources accessible through Indiana 211 provide the following types of services and resources:

- Housing and utilities
- Food, clothing and household items
- Summer food programs
- Healthcare and disability services
- Health insurance and expense assistance
- Mental health and counseling
- Substance abuse and other addictions
- Support groups
- Tax preparation assistance
- Legal, consumer and financial management services
- Transportation
- Employment and income support
- Family support and parenting
- Holiday assistance
- Disaster services
- Government and community services
- Education, recreation and the arts
- Donations and volunteering

In addition to Indiana 211, IU Health White Memorial Hospital, along with other hospitals and organizations in the community, use Aunt Bertha to connect patients and the community with local organizations and resources that can help address their healthcare and social needs, including food, housing, transportation, health, clothing, household items, education and legal and employment services.

IU Health’s branded Aunt Bertha public platform, *IU Health Connect*, is a free service found at www.iuhealthconnect.org.

Appendix A – Objectives and methodology

Regulatory requirements

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.² In conducting a CHNA, each tax-exempt hospital facility must:

- Define the community it serves;
- Assess the health needs of that community;
- Solicit and take into account input from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is adopted for the hospital facility by an authorized body of the facility; and
- Make the CHNA report widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined;
- A description of the methodology used to determine the health needs of the community; and
- A prioritized list of the community's health needs.

Methodology

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?
- **What** are the unique health status and/or access needs for these populations?
- **Where** do these people live in the community?
- **Why** are these problems present?

The focus on who is most vulnerable and where they live is important to identifying groups experiencing health inequities and disparities. Understanding why these issues are present is challenging, but is important to designing effective community health improvement initiatives. The question of how each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

² IRS. (Aug. 3, 2021). *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501(r)(3)*. Retrieved from: <https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>

Federal regulations allow hospital facilities to define the community they serve based on “all of the relevant facts and circumstances,” including the “geographic location” served by the hospital facility, “target populations served” (e.g., children, women or the aged) and/or the hospital facility’s principal functions (e.g., focus on a particular specialty area or targeted disease).³

This assessment was conducted by IU Health in collaboration with Verité Healthcare Consulting, LLC. See Appendix E for consultant qualifications.

Data from multiple sources was gathered and assessed, including secondary data published by others and primary data obtained through community input. See Appendix B for an assessment of secondary data. Input from the community was received through community meetings and a community survey.

The informants participating in the community input process represented the broad interests of the community and included individuals with special knowledge of or expertise in public health. See Appendix C.

Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.

Certain community health needs were determined to be “significant” if they were identified as problematic in at least two of the following four data sources:

- Secondary data (i.e., data collected by another entity or for a different purpose), including demographics, health status and access to care indicators;
- Findings from other community health assessments of areas served by the hospital; and
- Input obtained from individuals who participated in one or more community meetings.

Collaborating organizations

For this assessment, IU Health White Memorial Hospital collaborated with other Indiana health systems on the community meetings.

Data sources

Community health needs were identified by collecting and analyzing data from multiple sources. Statistics for numerous community health statuses, healthcare access and related indicators were analyzed, including data provided by local, state and federal government agencies,

³ *Ibid.*

local community service organizations and IU Health. Comparisons to benchmarks were made where possible. Findings from recent assessments of the community's health needs conducted by other organizations (e.g., local health departments) were reviewed as well.

Input from persons representing the broad interests of the community was taken into account through community meetings. Participants included: individuals with special knowledge of or expertise in public health; local public health departments; agencies with current data or information about the health and social needs of the community; representatives of social service organizations; and leaders, representatives and members of medically underserved low-income and minority populations.

Health equity

The CHNA process is an opportunity to research and expand health equity work for IU Health. Identifying significant community health needs involves continuing to recognize and understand every factor that impacts optimal health for all in a community. According to the Centers for Disease Control and Prevention (CDC), "Health equity is achieved when every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances." Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability and death; severity of disease; and access to treatment."⁴ These differences, or health disparities, may be seen by race/ethnicity, age, gender, income, insurance status, education, geographic location and other factors. A community's most vulnerable and marginalized populations experience health disparities more than others. Eliminating these disparities is key to achieving health equity.

Overall health and health disparities are strongly influenced by "the conditions in the environment where people are born, live, learn, work, play, worship and age."⁵ These conditions, also referred to as social determinants of health, may have a greater impact on health outcomes than healthcare. Also, addressing social determinants of health reduces health disparities, thus advancing health equity in communities. Examples of social determinants of health include poverty, food insecurity, housing, social isolation, transportation, racism and other forms of discrimination. Healthy People 2030 groups social determinants of health into five domains: economic stability; education access and quality; healthcare access and quality; neighborhood and built environment; and

social community context.⁶ Determining the existence and extent of these conditions within a community is as important as knowing the health outcomes within a community.

Through the CHNA process, several steps were taken to work towards a better understanding of inequities in the community including analyzing data sources by demographic factors (if available) to identify disparities; inviting and engaging community members and community-based organizations representing certain populations or that offer services to certain populations to participate in the primary data collection process; and including social determinants of health data in the analysis.

Information gaps

This CHNA relies on multiple data sources and community input gathered in January through June of 2021. Several data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, mortality data and others) exist only at a county-wide level of detail. Those data sources do not allow the assessment of health needs at a more granular level of detail, such as by ZIP code or census tract.

Secondary data, upon which this assessment relies, measures community health in prior years and may not reflect current conditions. The impacts of recent public policy developments, changes in the economy and other community developments are not yet reflected in those data sets.

Not all existing data can be stratified by demographic indicators to identify health disparities and patterns of inequity. Often no or limited demographic data is collected as part of the surveillance process for some data sources. When health disparities are identified, the data may not provide a clear understanding of why they exist and may be beyond the scope of this CHNA. This CHNA does not capture the policies, laws, systems, environments, nor practices that cause health inequities. Additional data, analysis and community engagement are needed to identify the root causes of health disparities to best advance health equity in the community.

The availability of data sources, including indexes, capturing social determinants of health indicators and their impact on health continues to grow and may not all be reflected in this CHNA.

Relevant findings from other assessments or reports

⁴ Centers for Disease Control and Prevention. (March 11, 2020). *Health Equity*. Retrieved from: <https://www.cdc.gov/chronic-disease/healthequity/index.htm>

⁵ Healthy People 2030. (n.d.). *Social Determinants of Health*. Retrieved from: <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

⁶ *Ibid*.

conducted by community-based organizations, agencies or LHDs may not be available for every county in the defined community. If available, assessments may have focused on the overall health and well-being of the county or region; specific health conditions, health behaviors or social determinants of health; or the health and well-being of certain populations in the community.

The findings of this CHNA may differ from those of others that assessed this community. Differences in data sources, geographic areas assessed (e.g., hospital service areas versus counties or cities), interview questions and prioritization processes can contribute to differences in findings.

Appendix B – Secondary data assessment

This section presents an assessment of secondary data regarding health needs in the IU Health White Memorial Hospital community. IU Health White Memorial Hospital's community is comprised of White County, Indiana.

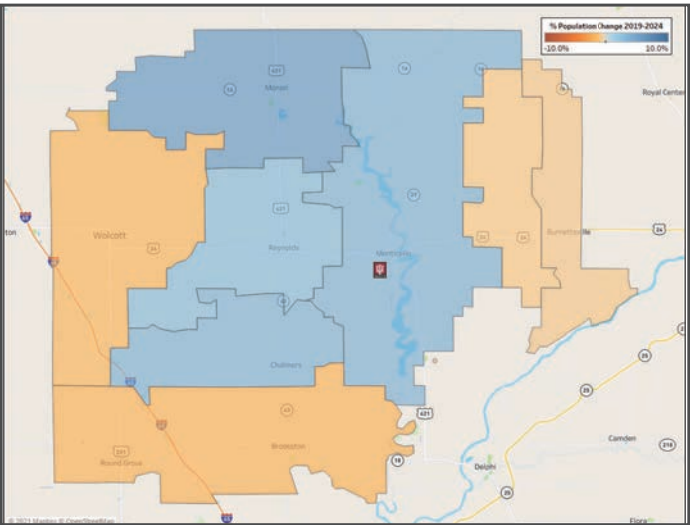
Demographics

Exhibit 8A: Percent change in community population by county, 2020-2025

County	Estimated population 2020	Estimated population 2025	Percent change 2020-2025
White County	23,810	23,549	-1.1%
Indiana Total	6,738,573	6,889,552	2.2%

Source: State of Indiana by the Indiana Business Research Center, February 2021

Exhibit 8B: Percent change in community population by ZIP code, 2020-2025



Source: Advisory Board, 2020

Description

Exhibit 8A shows the total population White County in 2020 and projections to 2025. Exhibit 8B maps the percent change in population by ZIP code between 2020 and 2025 for each ZIP code in the community.

Observations

- The White County population is expected to remain relatively unchanged between 2020 and 2025.
- The largest increase in population is projected in the northwest corner of the county surrounding the City of Monon.

Exhibit 9: Percent change in population by age/sex cohort, 2020-2025

Age/sex cohort	Estimated population 2020	Projected population 2025	Percent change 2020-2025
White County	23,810	23,549	-1.1%
0-17	5,980	6,002	0.4%
Male, 18-44	3,177	2,991	-5.9%
Female, 18-44	3,061	2,859	-6.6%
45-64	6,379	5,846	-8.4%
65+	5,213	5,851	12.2%
Indiana State	6,738,573	6,889,552	2.2%
0-17	1,754,443	1,786,582	1.8%
Male, 18-44	1,093,860	1,100,228	0.6%
Female, 18-44	1,080,537	1,088,697	0.8%
45-64	1,695,267	1,632,008	-3.7%
65+	1,114,466	1,282,037	15.0%

Source: State of Indiana by the Indiana Business Research Center, February 2021

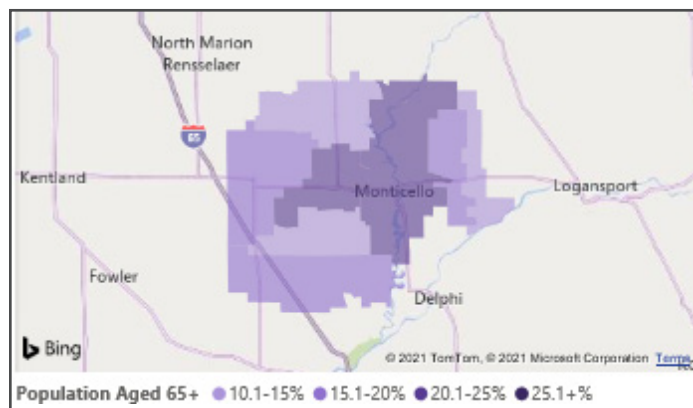
Description

Exhibit 9 shows the community's population for certain age and sex cohorts in 2020, with projections to 2025.

Observations

- The number of persons aged 65 years and older is projected to grow by 12.2 percent in White County and 15.0 percent in Indiana between 2020 and 2025.
- The growth of older populations is likely to lead to growing need for health services, since an overall per-capita basis, older individuals typically need and use more services than younger persons.

Exhibit 10: Percent of population aged 65+ by ZIP code, 2019



Source: U.S. Census American Community Survey (ACS) 2019 5-year estimates and Power BI

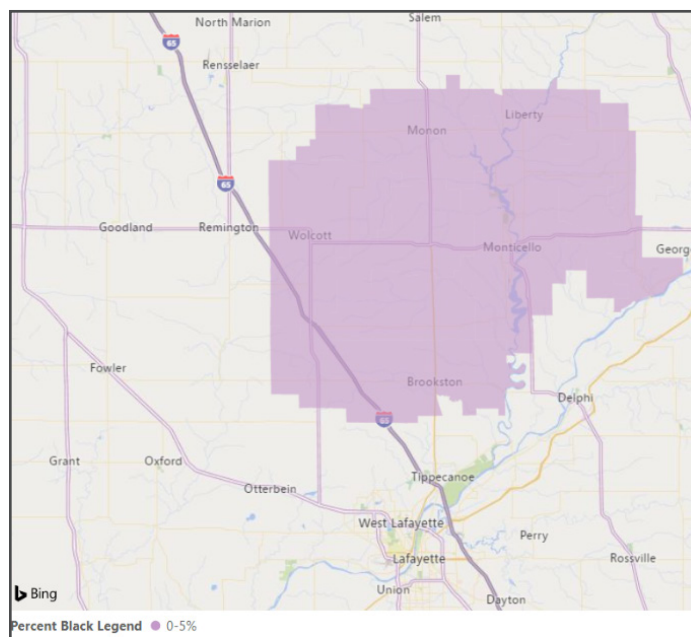
Description

Exhibit 10 portrays the percent of the population 65 years of age and older in the community by ZIP code.

Observations

- ZIP codes 47960 and 47980 (surrounding Monticello) have the highest proportion of the population aged 65 and older in the community, above 20 percent.

Exhibit 11: Percent of population – Black, 2019



Source: U.S. Census ACS 2019 5-year estimates and Power BI

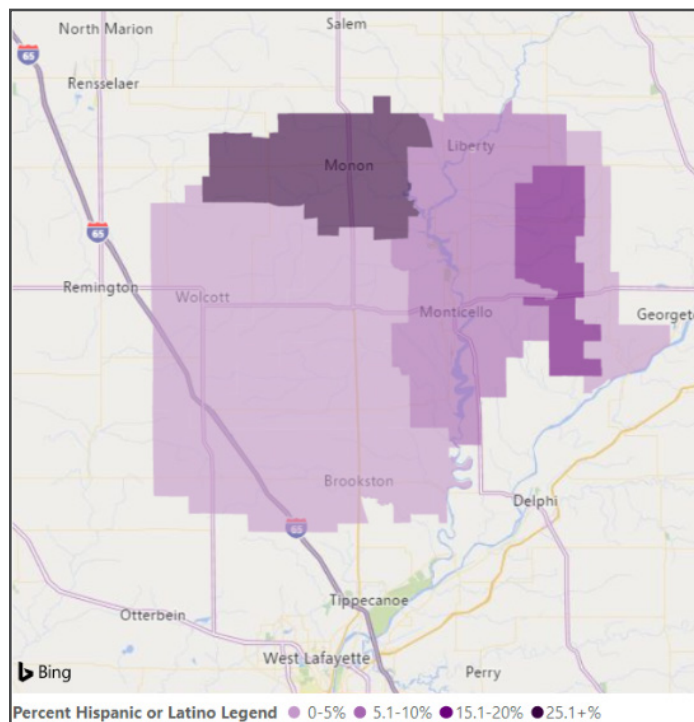
Description

Exhibit 11 portrays locations where the percentages of the population that are Black were highest in 2019.

Observations

- The Black population of White County is under 3 percent in all ZIP codes.

Exhibit 12: Percent of population – Hispanic (or Latino), 2019



Source: U.S. Census ACS 2019 5-year estimates and Power BI

Description

Exhibit 12 portrays locations in the community where the percentages of the population that are Hispanic (or Latino) were highest in 2019. The diversity of the community is important to recognize given the presence of health disparities and barriers to healthcare access experienced by different racial and ethnic groups.

Observations

- The proportion of residents that are Hispanic (or Latino) is highest in White County ZIP code 47959 near Monon at over twenty-five percent in 2019.

Exhibit 13: Other socioeconomic indicators, 2015-2019

Measure	Population with a disability	Population 25+ without high school diploma	Population linguistically isolated
White County	16.6%	11.2%	3.2%
Indiana	13.7%	11.8%	3.1%
United States	12.6%	12.0%	8.2%

Source: U.S. Census, ACS 5-year estimates, 2020

Description

Exhibit 13 portrays the percent of the population with a disability, aged 25 years and above without a high school diploma and linguistically isolated.

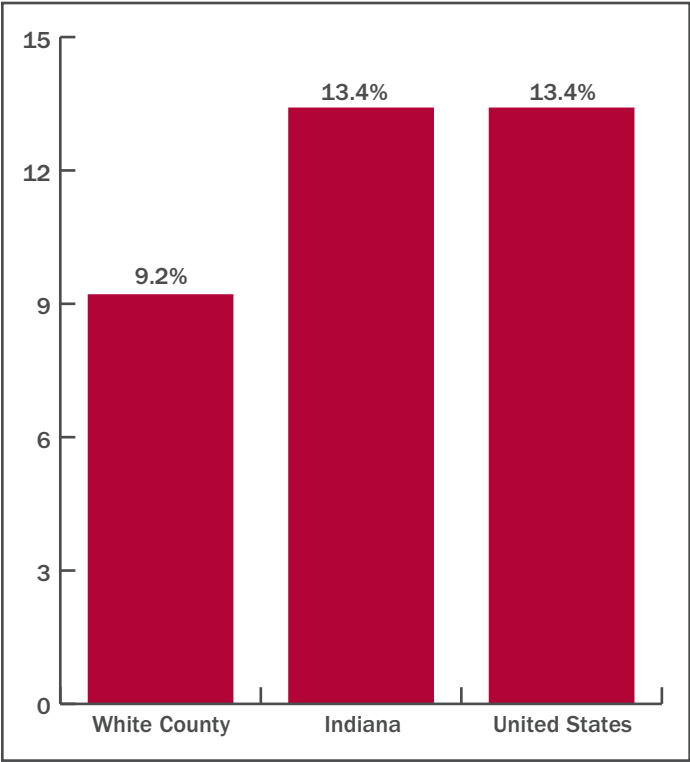
Observations

- White County had a higher percentage of the population with a disability compared to Indiana and U.S. averages.
- White County had a lower percentage of residents aged 25 years and older without a high school diploma than Indiana and U.S. averages.
- Compared to Indiana, White County had an equal proportion of the population that is linguistically isolated. Linguistic isolation is defined as residents who speak a language other than English and speak English less than “very well.”

Economic indicators

People in poverty

Exhibit 14: Percent of people in poverty, 2015-2019



Source: U.S. Census, ACS 5-year estimates, 2020

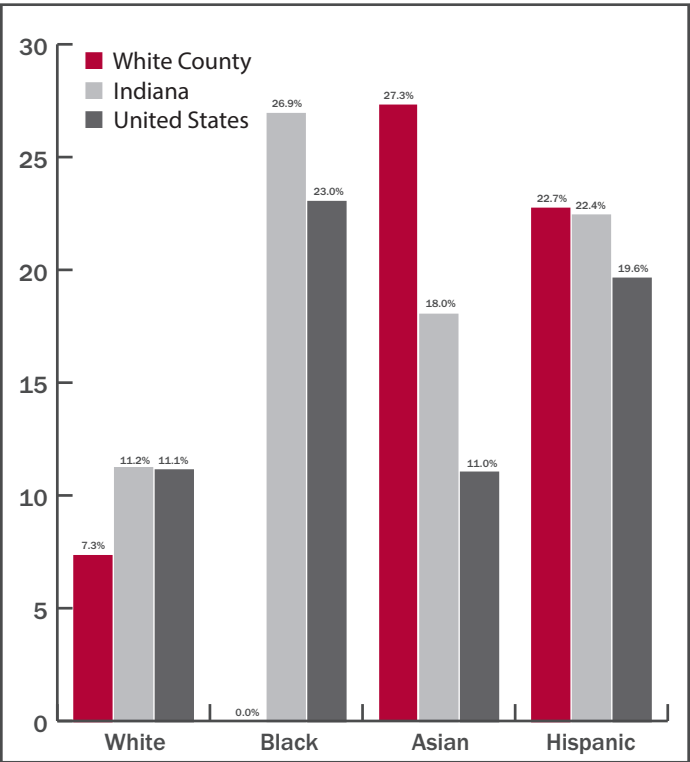
Description

Exhibit 14 portrays poverty rates in White County, Indiana and the U.S.

Observations

- The poverty rate in White County was below Indiana and national averages from 2015-2019.

Exhibit 15: Poverty rates by race and ethnicity, 2015-2019



Source: U.S. Census, ACS 5-year estimates, 2020

Description

Exhibit 15 portrays poverty rates in White County, Indiana and the U.S. by race and ethnicity.

Observations

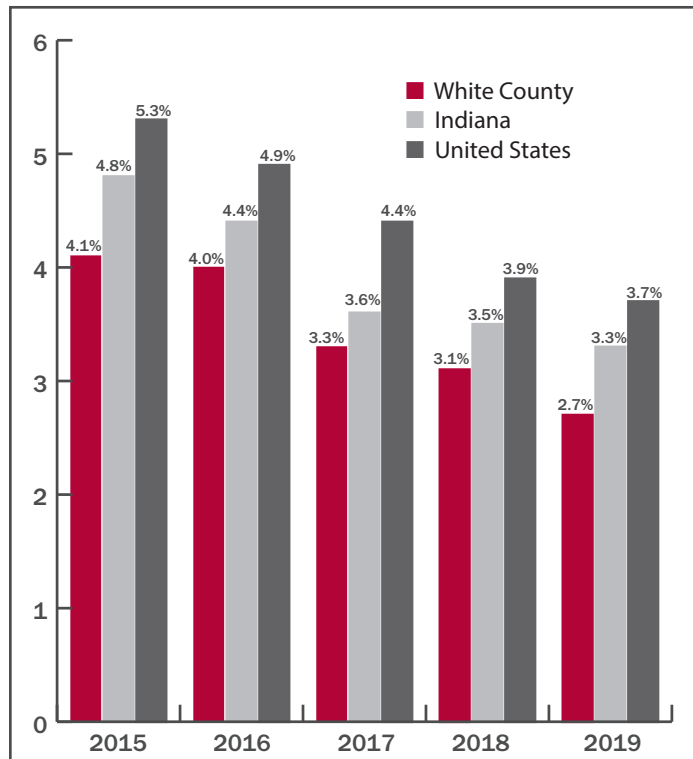
- Poverty rates for the Asian and Hispanic (or Latino) populations in White County were higher than both Indiana and U.S. averages.
- Over one-quarter of Asian residents in White County were in poverty.

Exhibit 16: Low income census tracts, 2021

No census tracts in the White County community are designated by HUD as low income.

Unemployment

Exhibit 17: Unemployment rates, 2015-2019



Source: U.S. Bureau of Labor Statistics, 2020

Description

Exhibit 17 shows unemployment rates for 2015 through 2019 for White County, with Indiana and national rates for comparison.

Observations

- Between 2015 and 2019, unemployment rates at the local, state and national levels declined significantly.
- Unemployment rates in White County were below Indiana and U.S. averages for the time period.

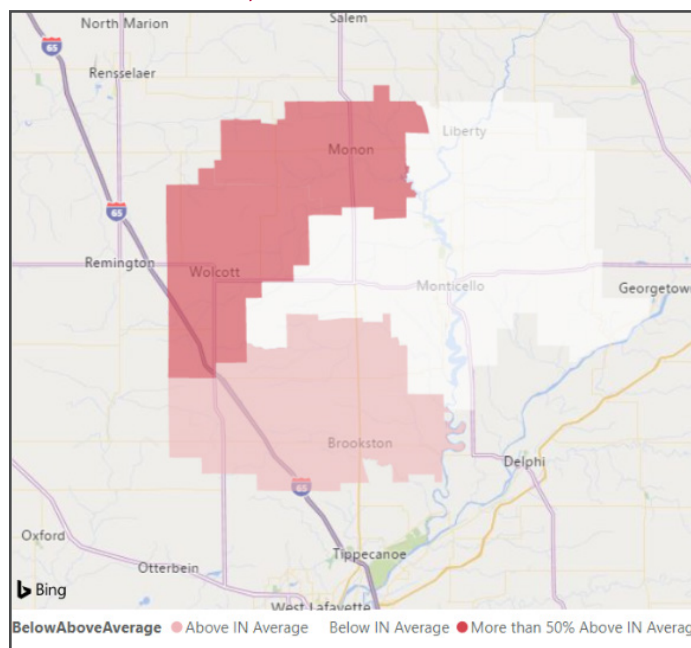
Insurance status

Exhibit 18A: Percent of the population without health insurance, 2019

County	Population	Population uninsured	Percent uninsured
White County	19,053	2,201	11.6%
Indiana	5,474,844	532,695	9.7%
United States	319,706,872	28,248,613	8.8%

Source: U.S. Census, Small Area Health Insurance Estimates (SAHIE), 2019

Exhibit 18B: Percent of the population without health insurance, 2019



Source: U.S. Census, Small Area Health Insurance Estimates (SAHIE), 2019

Description

Exhibit 18A presents the estimated percent of people uninsured in White County and Indiana in 2019. Exhibit 18B maps the 2019 uninsured rates by ZIP code.

Observations

- The percent of population without health insurance in White County is above both state and national averages.
- In 2019, the uninsured rates were 50 percent higher than the Indiana rates in White County ZIP codes 47959 and 47995.
- Subsequent to the Affordable Care Act's passage, a June 2012 Supreme Court ruling provided states with discretion regarding whether or not to expand Medicaid eligibility. Indiana was one of the states that expanded Medicaid. Across the U.S., uninsured rates have fallen in most states that decided to expand Medicaid.⁷

Crime

Exhibit 19: Crime rates by type and jurisdiction, per 100,000, 2019

Indicator	White County	Indiana
Aggravated assault	50.4	499.5
Arson	4.2	10.8
Burglary	84.0	664.2
Homicide	-	10.6
Larceny	105.0	2,992.9
Motor vehicle theft	21.0	423.7
Property crime	210.0	4,080.9
Rape	-	79.4
Robbery	-	160.8
Violent crime	50.4	750.2

Source: Federal Bureau of Investigation, 2020

Description

Exhibit 19 provides crime statistics.

Observations

- Crime rates in White County were well below Indiana averages.

⁷ Assistant Secretary from Planning and Evaluation, Office of Health Policy. Issue Brief No. HP-2021-13. Health Coverage Under the Affordable Care Act: Enrollment Trends and State Estimates. Retrieved from: https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/200776/ASPE%20Issue%20Brief-ACA-Related%20Coverage%20by%20State.pdf.

Local health status and access indicators

Exhibit 20: County Health Rankings, 2019

Measure	White County
Health outcomes	26
Health factors	24
Length of life	24
Premature death	24
Quality of life	29
Poor or fair health	32
Poor physical health days	21
Poor mental health days	10
Low birthweight	49
Health behaviors	17
Adult smoking	10
Adult obesity	38
Food environment index	12
Physical inactivity	75
Access to exercise opportunities	46
Excessive drinking	19
Alcohol-impaired driving deaths	31
Sexually transmitted infections	43
Teen births	73
Clinical care	43
Uninsured	39
Primary care physicians	57
Dentists	63
Mental health providers	64
Preventable hospital stays	19
Mammography screening	15
Social and economic factors	42
High school graduation	80
Some college	30
Unemployment	34
Children in poverty	40
Income inequality	11
Children in single-parent households	20
Social associations	48
Violent crime	13
Injury deaths	51
Physical environment	19
Air pollution	42
Severe housing problems	18
Driving alone to work	23
Long commute – driving alone	50

Source: County Health Rankings, 2019

Description

Exhibit 20 presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation, which incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” Health factors consists of summary composites that are grouped into the following categories: health behaviors, clinical care, social and economic factors and physical environment. Health outcomes consist of summary composites that are grouped by the categories of length of life and quality of life.⁸ *County Health Rankings* are updated annually. *County Health Rankings 2019* relies on data from 2007 to 2019.

The exhibit presents 2019 rankings for each available indicator category. Rankings indicate how the county ranked among all 92 counties in Indiana, with 1 indicating the highest (most favorable) ranking and 92 the lowest (least favorable).

Light grey shading indicates rankings in the bottom half of Indiana counties; dark grey shading indicates rankings in bottom quartile of Indiana counties.

Observations

- In 2021, White County had 10 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, two were in the bottom quartile: teen births and high school graduation.

⁸ County Health Rankings and Roadmaps. (2021). *County Health Rankings Model*. Retrieved from: <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

Exhibit 21: County Health Rankings data compared to Indiana and U.S. averages, 2019

Indicator category	Indicator	White County	Indiana	U.S.
Health outcomes				
Length of life	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	7,105.6	8,237.5	6900.0
Quality of life	Percentage of adults reporting fair or poor health (age-adjusted)	15.8	17.7	16.0
Quality of life	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.7	3.9	3.7
Quality of life	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.8	4.3	3.8
Quality of life	Percentage of live births with low birthweight (<2500 grams)	7.6	8.1	8.0
Health factors				
Health behaviors				
Adult smoking	Percentage of adults who are current smokers	17.5	21.1	17.0
Adult obesity	Percentage of adults that report a BMI of 30 or more	33.3	32.8	29.0
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.6	7.1	7.7
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity	30.2	25.1	22.0
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	64.8	75.2	84.0
Excessive drinking	Percentage of adults reporting binge or heavy drinking	16.7	18.6	18.0
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement	15.2	20.8	29.0
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	345.8	466.0	497.3
Teen births	Number of births per 1,000 female population ages 15-19	37.5	28.4	25.0
Clinical care				
Uninsured	Percentage of population under age 65 without health insurance	11.6	9.5	10.0
Primary care physicians	Ratio of population to primary care physicians	2,667:1	1,495:1	1,330:1
Dentists	Ratio of population to dentists	3,455:1	1,810:1	1,460:1
Mental health providers	Ratio of population to mental health providers	2,418:1	669:1	440:1
Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	3,889.0	5,023.0	4520.0
Mammography screening	Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	44.0	40.0	41.0
Flu vaccinations	Percentage of Medicare enrollees who receive an influenza vaccination	49.0	47.0	45.0
Social and economic factors				
High school graduation	Percentage of ninth-grade cohort that graduates in four years	85.5	83.8	85.0
Some college	Percentage of adults ages 25-44 with some post-secondary education	58.8	62.4	65.0
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	3.3	3.5	4.4
Children in poverty	Percentage of children under age 18 in poverty	16.3	17.8	18.0
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	3.5	4.4	4.9
Children in single-parent households	Percentage of children that live in a household headed by single parent	25.1	33.6	33.0

Exhibit 21: County Health Rankings data compared to Indiana and U.S. averages, 2019 (continued)

Indicator category	Indicator	White County	Indiana	U.S.
Social associations	Number of membership associations per 10,000 population	13.8	12.3	9.0
Violent crime	Number of reported violent crime offenses per 100,000 population	61.7	385.1	386.0
Injury deaths	Number of deaths due to injury per 100,000 population	80.7	74.1	67.0
Physical environment				
Air pollution	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	11.7	11.8	8.6
Severe housing problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	9.9	13.7	18.0
Driving alone to work	Percentage of the workforce that drives alone to work	82.0	83.0	76.0
Long commute – driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes	34.3	30.7	35.0

Source: County Health Rankings, 2019

Description

Exhibit 21 provides data for each underlying indicator of the composite categories in the *County Health Rankings*.⁹ The exhibit also includes Indiana and national averages. Light grey shading highlights indicators found to be worse than the Indiana average; dark grey shading highlights indicators more than 50 percent worse than the Indiana average.

Observations

- The following indicators (presented alphabetically) compared particularly unfavorably across White County:
 - Ratio of population to dentists
 - Ratio of population to mental health providers
 - Ratio of population to primary care physicians

⁹ County Health Rankings provides details what each indicator measures, how it is defined and data source at <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

Exhibit 22: Selected causes of death, age-adjusted rates per 100,000 population, 2019

Indicator	White County	Indiana
Major cardiovascular diseases	257.5	237.5
Diseases of heart	210.0	178.7
Cancer	186.3	163.3
Other diseases of circulatory system	<10	80.7
Other diseases of heart	<10	72.6
Chronic lower respiratory diseases	52.8	56.1
All other and unspecified accidents and adverse effects	34.3	45.3
Cerebrovascular diseases (stroke)	<10	41.5
Alzheimer's disease	<10	31.7
Diabetes mellitus	<10	25.0
Nephritis, nephrotic syndromes and nephrosis (kidney disease)	<10	17.1
Intention self-harm (suicide)	<10	14.1
Influenza and pneumonia	<10	11.6
Motor vehicle accidents	<10	12.6
Chronic liver disease and cirrhosis	<10	12.0
Hypertensive heart disease with or without renal disease	<10	13.1
Essential hypertension and hypertensive renal disease	<10	10.4
Assault (homicide)	<10	7.2
Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)	<10	6.0
Certain conditions originating in the perinatal period	<10	3.6
Congenital malformations, deformations and chromosomal abnormalities	<10	4.0
All other external causes	<10	2.4
Atherosclerosis	<10	2.3
Pregnancy, childbirth and the puerperium	<10	0.9
Sudden infant death syndrome (SIDS)	<10	0.7
Peptic ulcer	<10	0.7

Source: Indiana Department of Health, 2019

Description

Exhibit 22 provides age-adjusted mortality rates for selected causes of death in 2019. Light grey shading highlights indicators worse than the Indiana average. The Indiana Department of Health does not provide rates when total deaths for that particular cause of death is <10 in that county.

Observations

- Selected causes of death for White County exceeded the state average for cancer, diseases of heart and major cardiovascular diseases.

Exhibit 23: Age-adjusted cancer mortality rates per 100,000 population, 2019

Indicator	White County	Indiana
All cancers	186.3	163.3
Breast	<10	10.6
Cervix uteri, corpus uteri and ovary	<10	7.0
Colon, rectum and anus	<10	15.0
Leukemia	15.2	14.5
Non-Hodgkin's lymphoma	20.5	18.3
Other forms of cancer	71.2	51.5
Pancreas	<10	11.8
Prostate	<10	7.9
Stomach	<10	2.4
Trachea, bronchus and lung	48.7	42.9
Urinary tract	<10	8.5

Source: Indiana Department of Health, 2019

Description

Exhibit 23 provides age-adjusted mortality rates for selected forms of cancer in 2019. Light grey shading highlights indicators worse than the Indiana average. The Indiana Department of Health does not provide rates when total cases of that particular type of cancer are <10 in that county.

Observations

- Cancer mortality rates in White County for all cancers, Non-Hodgkin's lymphoma, other forms of cancer and trachea, bronchus and lung were higher than the Indiana averages.

Exhibit 24: Age-adjusted cancer incidence rates per 100,000 population, 2013-2017

Indicator	White County	Indiana
All cancers	467.6	459.3
Bladder	24.3	21.7
Brain and ONS	<10	6.5
Breast	122.2	122.9
Cervix	<10	8.2
Childhood (ages <15)	<10	16.2
Colon and rectum	46.1	42.6
Esophagus	<10	5.5
Kidney and renal pelvis	16.9	19.0
Leukemia	15.2	13.7
Liver and bile duct	<10	7.2
Lung and bronchus	66.8	72.2
Melanoma of the skin	19.0	21.7
Non-Hodgkin's lymphoma	20.5	18.6
Oral cavity and pharynx	20.3	12.7
Ovary	<10	10.4
Pancreas	13.3	13.3
Prostate	70.0	94.2
Stomach	<10	5.9
Thyroid	20.3	12.5
Uterus	36.1	28.2

Source: Centers for Disease Control and Prevention, 2017

Description

Exhibit 24 presents age-adjusted cancer incidence rates in the community. Light grey shading highlights indicators worse than the Indiana average; dark grey shading highlights indicators more than 50 percent worse than the Indiana average. The CDC does not provide rates when total cases of that particular type of cancer are <10 in that county.

Observations

- Cancer incidence rates in White County for all cancers, bladder, colon and rectum, leukemia, Non-Hodgkin's lymphoma and uterus were higher than the Indiana averages.
- Oral cavity and pharynx and thyroid cancer rates in White County were 50 percent worse than the Indiana average.

Exhibit 25: Communicable disease incidence rates per 100,000 population, 2019

Indicator	White County	Indiana
Chlamydia	344.4	526.3
Gonorrhea	74.7	177.1
HIV/AIDS	82.9	189.9
Primary and secondary syphilis	<5	5.0

Source: Indiana Department of Health, 2019

Description

Exhibit 25 presents incidence rates for various communicable diseases.

Observations

- White County had lower communicable disease rates than the Indiana averages in 2019.

Exhibit 26: Maternal and child health indicators, 2019

Indicator	White County	Indiana
Breastfeeding	79.4%	82.0%
Infant mortality rate (per 1,000 live births)	0.0	6.5
Low birthweight	7.4%	8.2%
Mothers on Medicaid	39.9%	38.5%
Mothers under 19 (per 1,000 mothers)	22.3	20.7
Prenatal care	76.5%	68.9%
Preterm births	12.2%	10.1%
Smoked during pregnancy	15.4%	11.8%
Unmarried mothers	44.7%	44.5%

Source: Indiana Department of Health, 2019

Description

Exhibit 26 presents various maternal and infant health indicators. Light grey shading highlights indicators worse than the Indiana average. Values of 0.0 were listed for rates so low that they could not be reported by the IDOH.

Observations

- In White County, breastfeeding, mothers on Medicaid, mothers under 19, preterm births, smoked during pregnancy and unmarried mothers percent were worse than the Indiana averages.
- Only low birthweight and prenatal care percent were better than the Indiana averages.

Exhibit 27A: Behavioral Risk Factor Surveillance System, Indiana data by race/ethnicity, 2019

Indicator	Black	White	Hispanic	Indiana
Angina or coronary heart disease	3.8%	4.9%	1.6%	4.6%
Asthma	17.6%	14.6%	8.9%	14.5%
Diabetes	17.9%	12.1%	9.0%	12.4%
No health coverage	10.8%	8.9%	33.1%	10.9%
No physical activity	33.9%	30.3%	38.0%	30.9%
Obese (based on BMI)	43.5%	33.3%	29.3%	33.6%
Smoke everyday	36.8%	31.9%	20.7%	31.9%
Smoke some days	17.4%	10.0%	29.7%	11.5%

Source: Behavioral Risk Factor Surveillance System and Centers for Disease Control and Prevention, 2019

Exhibit 27B: Behavioral Risk Factor Surveillance System, Indiana data by income and education level, 2019

Indicator	< \$15,000	\$15-\$24,999	\$25-\$34,999	\$35-\$49,999	\$50-\$74,999	≥ \$75,000	No High School Diploma	Indiana
Angina or coronary heart disease	6.0%	7.1%	6.5%	4.7%	3.7%	2.3%	7.1%	4.6%
Asthma	19.8%	18.3%	16.9%	14.4%	14.6%	11.7%	16.8%	14.5%
Diabetes	18.7%	20.0%	13.4%	11.1%	10.3%	7.8%	16.1%	12.4%
No health coverage	19.0%	18.1%	13.6%	11.1%	8.0%	4.5%	22.8%	10.9%
No physical activity	46.2%	44.4%	35.1%	31.6%	25.0%	19.4%	47.6%	30.9%
Obese (based on BMI)	39.8%	36.7%	35.4%	34.3%	34.3%	28.6%	33.9%	33.6%
Smoke everyday	44.0%	40.8%	34.4%	32.2%	29.6%	22.2%	43.5%	31.9%
Smoke some days	17.1%	15.3%	9.5%	12.9%	9.2%	6.4%	14.0%	11.5%

Source: Behavioral Risk Factor Surveillance System and Centers for Disease Control and Prevention, 2019

Description

The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) gathers data through a telephone survey regarding health measures. Data are collected for the entire United States. Analysis of BRFSS data can identify localized health issues, trends, and health disparities, and can enable county, state, or nation-wide comparisons.

Exhibits 27A and 27B depict BRFSS data for the state of Indiana by race/ethnicity, income level, and for those without a high school diploma. Light grey shading highlights indicators worse than the Indiana average; dark grey shading highlights indicators more than 50 percent worse than the Indiana average.

Observations

- The BRFSS data indicate that on all but one measure presented, risk factors were higher for Black residents of Indiana than for White residents (and for lower-income residents than those with higher incomes). Hispanic (or Latino) residents have experienced higher uninsured, physical inactivity and occasional smoking rates.
- BRFSS indicators for residents without a high school diploma were worse than average when compared to Indiana for all indicators presented in this exhibit. Additionally, those with lower income levels compare unfavorably to those with higher income levels for all indicators.

Ambulatory Care Sensitive Conditions or Preventative Quality Indicators

Exhibit 28: PQI (ACSC) rates per 100,000, 2019

Indicator	White	Indiana	U.S.
Diabetes short-term complications	48.6	90.3	58.3
Diabetes long-term complications	81.1	116.6	104.1
COPD or asthma in older adults	290.1	467.9	493.8
Hypertension	27.0	56.7	60.0
Heart Failure	210.8	455.7	413.0
Community acquired pneumonia	189.2	248.3	158.8
Urinary tract infection	59.5	149.1	141.3
Uncontrolled diabetes	37.8	39.2	43.0
Asthma in younger adults	–	27.2	30.3
Lower extremity amputation with diabetes	16.2	30.2	29.3
Prevention overall composite	859.4	1,465.9	1,306.3
Prevention acute composite	248.6	397.4	300.1
Prevention chronic composite	610.8	1,068.7	1,006.4
Prevention diabetes composite	173.0	257.4	218.8

Source: IU Health, 2019 – Note: Rates are not age-sex adjusted

Description

Exhibit 28 provides 2019 ACSC (PQI) rates (per 100,000 persons) for ZIP codes in the IU Health White Memorial Hospital community compared to Indiana and U.S. averages.

ACSCs are health “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹⁰ As such, rates of hospitalization for these conditions can “provide insight into the quality of the health care system outside of the hospital,” including the accessibility and utilization of primary care, preventative care, and health education. Among these conditions are: asthma, diabetes, chronic obstructive pulmonary disease

(COPD), hypertension, congestive heart failure, urinary tract infection, and prevention overall, acute and chronic composites.

Disproportionately high rates of discharge for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventative services and can suggest areas for improvement in the health care system and ways to improve outcomes.

Observations

- For White County, the rates of admissions for ACSC were below the Indiana averages for all 14 conditions.

¹⁰ Ibid, 8.

Exhibit 29: Ratio of ACSC rates for IU Health White Memorial Hospital community and Indiana, 2019

Indicator	White County	Indiana	Ratio: White/Indiana
Uncontrolled diabetes	37.8	39.2	1.0
Community acquired pneumonia	189.2	248.3	0.8
Diabetes long-term complications	81.1	116.6	0.7
Prevention diabetes composite	173.0	257.4	0.7
COPD or asthma in older adults	290.1	467.9	0.6
Prevention overall composite	859.4	1,465.9	0.6
Prevention acute composite	248.6	397.4	0.6
Prevention chronic composite	610.8	1,068.7	0.6
Diabetes short-term complications	48.6	90.3	0.5
Hypertension	27.0	56.7	0.5
Heart failure	210.8	455.7	0.5
Lower extremity amputation with diabetes	16.2	30.2	0.5
Urinary tract infection	59.5	149.1	0.4
Asthma in younger adults	–	27.2	–

Source: IU Health, 2019 – Note: Rates are not age-sex adjusted

Description

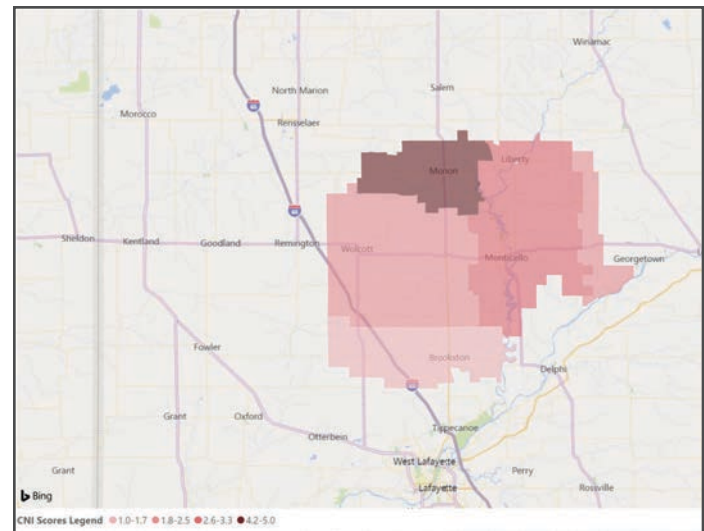
Exhibit 29 provides the ratio of Ambulatory Care Sensitive Conditions (ACSC) also referred to as Preventative Quality Indicators (PQI) rates in the IU Health White Memorial Hospital community compared to Indiana averages. Conditions where the ratios are highest (meaning that the PQI rates in the community are the most above average) are presented first.

Observations

- In White County, ACSC rates for all indicators were below the Indiana average.

Community Need Index, Food deserts and Social Vulnerability Index

Exhibit 30: Community Need Index, 2020



Source: Power BI and Dignity Health, 2020

Description

Exhibit 30 presents the *Community Need Index*™ (CNI) score for each ZIP code in the community. Higher scores (e.g., 4.2 to 5.0) indicate higher levels of community need. The national median score is calibrated to 3.0.

Dignity Health, a California-based hospital system, developed and published the CNI as a way to assess barriers to health care access. The index, available for every ZIP code in the United States, is derived from five social and economic indicators:

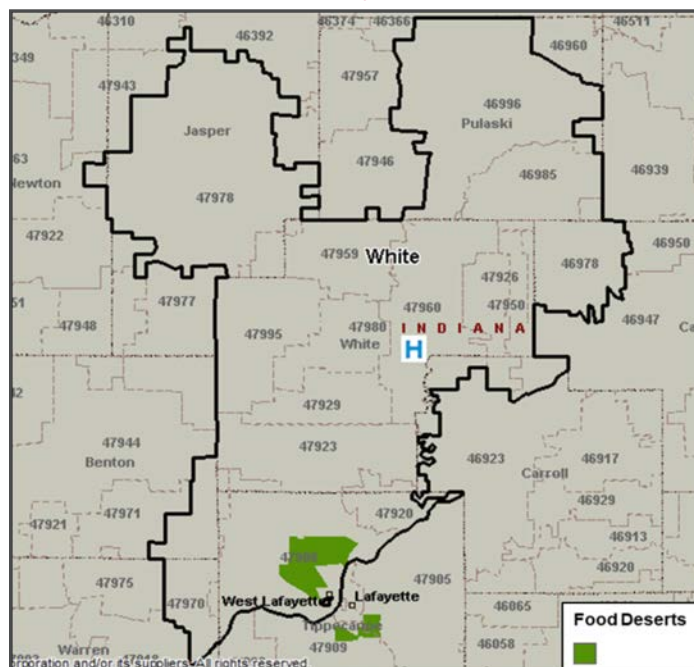
- The percentage of elders, children and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

CNI scores are grouped into “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0) categories

Observations

- White County scored a 2.4 on the CNI scale, which is below the national average of 3.0.
- One White County ZIP code (47959) scored in the “highest need” category.

Exhibit 31: Food deserts, 2017



Source: Microsoft MapPoint and U.S. Department of Agriculture, 2017

Description

Exhibit 31 shows the location of “food deserts” in the community.

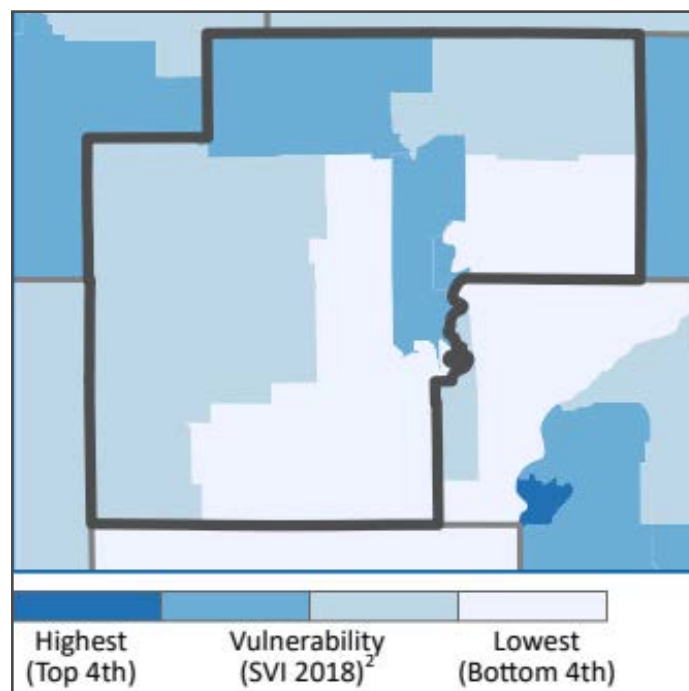
The U.S. Department of Agriculture’s Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these areas.

Observations

- One census tract in the IU Health White Memorial Hospital community has been designated as a food desert.

Exhibit 32: Social Vulnerability Index, housing type and transportation theme, 2018

White County housing type/transportation



Source: Centers for Disease Control and Prevention, 2018

Description

Exhibit 32 portrays Social Vulnerability Index (SVI) scores (for the housing and transportation theme only) for census tracts throughout White County. The SVI is derived from U.S. census data. Variables are grouped into four themes, including: socioeconomic status, household composition, race/ethnicity/language and housing/transportation.¹¹ The maps in this exhibit display the housing and transportation theme of SVI in the community.

Observations

- None of White County’s census tracts ranked in the bottom quartile nationally.

¹¹ Agency for Toxic Substances and Disease Registry. (Aug. 30, 2021). CDC/ATSDR SVI Fact Sheet. Retrieved from: https://www.atsdr.cdc.gov/placeandhealth/svi/fact_sheet/fact_sheet.html

Medically Underserved Areas and Populations

Exhibit 33: Medically Underserved Areas, 2021

Description

White County has not been designated as a Medically Underserved Area or Population (MUA/Ps), so there is no exhibit.

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration (HRSA) based on an “Index of Medical Underservice (IMU).” The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level and percentage of the population age 65 or over.¹² Areas with a score of 62 or less are considered “medically underserved.”

Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. If a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides.”¹³

Observations

- No locations within White County have been designated as medically underserved.

Health Professional Shortage Areas

Exhibit 34A: Primary care Health Professional Shortage Areas, 2021

County	HPSA	Type
White	White County	HPSA Geographic

Source: HRSA, 2021

Description

Exhibit 34A lists the locations of federally designated primary care Health Professional Shortage Areas (HPSA).

A geographic area can receive a federal HPSA designation if a shortage of primary medical care, dental care or mental health care professionals is found to be present. In addition to areas and populations that can be designated as HPSAs, a healthcare facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental or mental health services. HPSAs can be: (1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision) and is a rational area for the delivery of health services; (2) a population group; or (3) a public or nonprofit private medical facility.¹⁴

Observations

- White County has been designated as a primary care HPSA.

¹² Health Resources & Services Administration. (Feb. 2021). *What is Shortage Designation?* Retrieved from: <https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation>

¹³ *Ibid.*

¹⁴ *Ibid.*

Exhibit 34B: Dental care Health Professional Shortage Areas, 2021

White County has not been designated as a dental care HPSA, so there is no exhibit.

Description

Exhibit 34B lists the locations of federally designated dental care HPSA areas.

Observations

- No locations within the IU Health White Memorial Hospital community have been designated as dental care HPSAs.

Exhibit 34C: Mental health care Health Professional Shortage Areas, 2021

County	HPSA	HPSA
White	Region 30 Mental Health	HPSA Geographic

Source: HRSA, 2021

Description

Exhibit 34C lists the locations of federally designated mental health HPSA areas.

Observations

- White County has been designated as a mental health HPSA as a part of the Region 30 Mental Health catchment area.

Findings of other community health needs assessments

Indiana State Health Assessment and Improvement Plan

A State Health Assessment and Improvement Plan (SHA) was published in 2018 by the Indiana Department of Health.¹⁵ The SHA was conducted in collaboration with over 100 partner organizations, key informants and health experts to identify and address Indiana's greatest health challenges.

The Indiana Health Improvement Partnership (IHIP) met three times during 2017 and early 2018 to develop key components of the SHA, including values, forces of change analysis and assessment of strengths, weaknesses, opportunities and threats. The process involved five steps:

1. Conducting a community health status assessment;
2. Assessing and analyzing prior assessments;
3. Reviewing other agency and coalition plans;
4. Interviewing key informants and gathering qualitative data; and
5. Identifying health needs.

State Health Assessment. The SHA had the following conclusions regarding state health needs:

- After reviewing local health assessments around the state, the IHIP observed that ten needs were most often identified as priorities:
 - Access to care
 - Mental and behavioral health
 - Obesity
 - Substance abuse disorders
 - Nutrition and physical activity
 - Diabetes
 - Tobacco use
 - Heart disease
 - Cancer
 - Maternal and infant health
- The initial prioritization of health needs by the IHIP steering committee focused on the following areas:
 - Social determinants of health and health equity
 - Improving public health infrastructure (funding and culture/equality of public health practices)
 - Improving health and reducing health disparities, particularly in the areas of chronic disease, birth outcomes and infant mortality, reduced injury and death due to opioid exposure, and improved access to mental health services
- When asked about barriers to achieving optimal health in their communities, key informants indicated that low staffing levels, low funding levels, not being able to break cultural barriers, increases in drug use, poverty and

¹⁵ Indiana Department of Health. (May 2018). *Indiana Health Assessment and Improvement Plan, May 2018 – December 2021*. Retrieved from: http://www.isdh.state.in.us/NewIntranet/pdfs/OPM/Indiana_State_Health_Plan_I-SHIP.pdf

apathy, lack of free clinics, unaffordable healthcare and medications, lack of available affordable housing, provider billing and limited local resources as major limitations.

- Social determinants of health were recognized as a key component to achieving optimal health in Indiana, with a recognition to improve population health, “the public health system must expand to include non-traditional partners such as transportation, workforce development, and housing.”

Related data points from the assessment supporting the above conclusions have not been included in this report. The data points in the report no longer reflect the most recent year of data available. The current SHA and Indiana State Health Improvement Plan (ISHIP) will sunset at the end of 2021. A committee was convened in the summer of 2021 to coordinate an update to the plan that will span 2022-2026; however, the process was not far enough along to provide updates for this CHNA.

State Health Improvement Plan. After the finalization of the state health assessment, the ISHIP was drafted to address the final priorities. These priorities were:

- Improve birth outcomes and reduce infant mortality
- Address the opioid epidemic
- Reduce rates of chronic disease
- Improve the public health infrastructure

Since the publication of the ISHIP, the priorities of the plan have not changed though some of the approaches to addressing the priorities have evolved according to the Indiana Department of Health. The SHA and ISHIP annual report did not have current targets on objectives. The annual report can be found on the Indiana Department of Health website at <https://www.in.gov/health/phpm/tracking-public-health-performance/state-health-improvement-plan/>.

Exhibit 35: Significant needs identified in other assessments or reports

Prioritized Need	Frequency
Drug and substance abuse	1
Access to health services	1
Maternal, infant and child Health	1
Home and community-based services	1
Housing	1
Transportation	1
Nutrition and wellness	1
Public health infrastructure	1
Chronic disease	1

Source: Analysis by IU Health, 2021

Description

Several other assessments and reports conducted by community-based organizations or agencies, local health departments (LHDs) and the state of Indiana were reviewed. Significant needs identified in these assessments are presented in Exhibit 35.

Observations

- The following indicators were often identified as significant in other CHNAs that assessed IU Health White Memorial Hospital's community:
 - Substance use disorders (including opioids and alcohol)
 - Chronic disease and chronic disease management
 - Vulnerable populations (seniors)
 - Social determinants of health
 - Housing
 - Food insecurity
 - Transportation

Coronavirus disease (COVID-19) pandemic and vaccine

COVID-19 is a very contagious virus that has become a major threat to the health and well-being of all people around the world. In March 2020, the Indiana Department of Health confirmed the first case of COVID-19 in Indiana

and the first reported death.^{16,17} The coronavirus outbreak was declared a state, national and international public health emergency.^{18,19,20} It has had tremendous health and economic impacts on Indiana and its residents. There have been 806,094 total positive cases of COVID-19 and 13,743 total deaths from COVID-19 in the state of Indiana (Exhibit 36). The virus has spread to every county in Indiana.

Exhibit 36: COVID-19 indicators – counties, Indiana and United States – results as of August 16, 2021

Indicator	White	Indiana	United States
Total positive cases	3,490	806,094	36,951,181
Total case rate per 100,000	14,480.1	11,934.0	11,273.0
Total deaths	54	13,743	620,493
Total death rate per 100,000	224.0	210.0	187.0
Total population vaccinated	10,033	3,019,608	168,689,357
Percent of population	49.1	51.5	50.8

Source: Indiana Department of Health Indiana COVID-19 Dashboard and Map, 2021; Centers for Disease Control and Prevention COVID Data Tracker, 2021; Indiana Department of Health COVID-19 Vaccination Dashboard, 2021; COVID-19 Data Tracker – Vaccinations in the United States, 2021.

Certain groups are particularly vulnerable to the effects of COVID-19 and are at greater risk of severe illness and outcomes, including hospitalization and death. The Centers for Disease Control and Prevention continues to review and update information on the groups most at risk.²¹ The current groups, of which some are listed below, can all be found in communities throughout Indiana, including those served by IU Health hospitals. Of particular concern is that some of the underlying conditions and risk factors are significantly prevalent in Indiana.

- People aged 65 and older – risk increases with age
- Many racial and ethnic minority groups who have long been impacted by health and social inequities
- Adults with underlying medical conditions including:
 - Cancer
 - Cerebrovascular disease
 - Chronic kidney disease
 - Chronic lung disease, including COPD (chronic obstructive pulmonary disease) and asthma
 - Dementia or other neurological conditions
 - Diabetes
 - Down Syndrome

- Heart conditions
- HIV infection
- Immunocompromised state (weakened immune system)
- Liver disease
- Overweight and obesity
- Pregnancy and recent pregnancy
- Sickle cell disease or thalassemia
- Smoking, current and former
- Solid organ or blood stem cell transplant
- Stroke or cerebrovascular disease
- Substance use disorders
- Children with underlying medical conditions including:
 - Children with medical complexity, with genetic, neurologic, metabolic conditions or with congenital heart disease
 - Obesity
 - Diabetes
 - Asthma or chronic lung disease
 - Sickle cell disease
 - Immunosuppression

The above conditions and risk factors were not the only threats to the health and well-being of people. Many lost jobs or income in 2020 because of temporary or permanent

¹⁶ Indiana Department of Health. (March 6, 2020). Press Release. State Health Department Confirms 1st Case of COVID-19 in Hoosier with Recent Travel. Retrieved from: <https://events.in.gov/event/state-health-department-confirms-1st-case-of-covid-19-in-hoosier-with-recent-travel/>

¹⁷ Indiana Department of Health. (March 6, 2020). Press Release. Health Department Announces 1st COVID-19 Death in Indiana. Retrieved from: <https://events.in.gov/event/isdh-news-release-health-department-announces-1st-covid-19-death-in-indiana>

¹⁸ State of Indiana, Executive Department Indianapolis. (March 6, 2020). Executive Order 20-02. Declaration of Public Health Emergency for Coronavirus Disease 2019 Outbreak. Retrieved from: <https://www.in.gov/gov/files/20-02ExecutiveOrderDeclarationofPublicHealthEmergencyforCOVID-19FINAL.pdf>

¹⁹ U.S. Department of Health and Human Services. Public Health Emergency (Jan. 31, 2020). Determination that a Public Health Emergency Exists. Retrieved from: <https://www.phe.gov/emergency/news/healthactions/phe/Pages/2019-nCoV.aspx>

²⁰ World Health Organization. (March 1, 2020). WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. Retrieved from: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-11-march-2020>

²¹ Centers for Disease Control and Prevention. (Aug. 20, 2021). People with Certain Medical Conditions. Retrieved from: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

business closures due to stay-at-home orders or shutdowns to help reduce the spread of COVID-19 (e.g., Governor Holcomb issued a “Stay-at-Home” order that went into effect on March 24, 2020).²² This made it difficult for individuals and families to cover the expenses for basic needs, such as food, housing, childcare and healthcare services. The Indiana unemployment rate in the first few months of 2020 averaged 3.2 percent but rose significantly in April 2020 to 16.9 percent.²³ The rate remained higher than the beginning of the year for the rest of 2020. The number of people unemployed in Indiana increased from 111,373 in March 2020 to 544,935 in April 2020, which was the highest for the year.²⁴ However, the number of people unemployed in Indiana from April to the end of 2020 never fell as low as March 2020. The Indiana Department of Workforce Development processed 7.8 million unemployment insurance (UI) claims in 2020 compared to about 1 million claims in 2019.²⁵

Employment is just one factor influencing social determinants of health. In April 2020, the U.S. Census Bureau started measuring household experiences across the nation during the coronavirus pandemic through an experimental data system called the Household Pulse Survey.²⁶ These measures represent how people were managing across a range of social determinants of health. Below is a selection of metrics specific to Indiana, mostly from the period of April 23, 2020, to May 5, 2020 – shortly after COVID-19 was confirmed in Indiana.

- 37.8 percent of adults reported symptoms of anxiety or depressive disorder. This peaked at 43.7 percent later in 2020.
- 11.9 percent of adults reported they were uninsured. This peaked at 13.5 percent later in 2020.
- 34.2 percent of adults reported delaying or not getting

medical care because of the COVID-19 pandemic in the last four weeks. This peaked at 44.9 percent later in 2020.

- 9.4 percent of adults reported there was either sometimes or often not enough to eat in the last seven days. This peaked at 13.2 percent in 2021.
- 21.2 percent of adults missed last month's rent or mortgage payment or were not confident they could pay next month's rent or mortgage on time. This peaked at 29.3 percent in 2020.
- 46.1 percent of adults reported the likelihood of eviction or foreclosure (period – August 19 – 31, 2020). This peaked at 54.0 percent almost a year later in 2021.
- 32.8 percent of adults reported that it was somewhat or very difficult to pay for usual household expenses in the last seven days (period – August 19 – 31, 2020). This peaked at 36.8 percent later in 2020.

There are multiple steps people can take to protect themselves from the virus, including getting a vaccine. Though people may not be able to receive a vaccine due to age, weakened immune system or underlying medical condition, it is widely available to people 12 years of age or older. In December 2020, the first vaccinations for COVID-19 were received and administered in Indiana. Out of an estimated 5.7 million people who are eligible for the vaccine in Indiana, as of August 16, 2021, 3,019,608 (51.5 percent) are fully vaccinated for COVID-19 (Exhibit 36).²⁷ In Indiana, 16.1 percent of those aged 18 and over reported being hesitant about receiving a COVID-19 vaccine when compared to 10.5 percent of the United States (data as of August 2, 2021).²⁸ The main reasons reported for the hesitancy in Indiana include concerned about side effects, don't trust the government and don't trust COVID-19 vaccines. These are the same top reasons reported across the U.S.²⁹

²² State of Indiana, Executive Department Indianapolis. (March 23, 2020). Executive Order 20-08. Directive for Hoosiers to Stay at Home. Retrieved from: https://www.in.gov/gov/files/Executive_Order_20-08_Stay_at_Home.pdf

²³ Hoosiers by the Numbers. (n.d.). Local Area Unemployment Statistics (LAUS) – Seasonally Adjusted. Retrieved from: http://www.hoosierdata.in.gov/dpage.asp?id=54&view_number=2&menu_level=&panel_number=2

²⁴ Ibid.

²⁵ Indiana Department of Workforce Development. 2021. 2021 State of the Indiana Workforce Report – Responding to the Pandemic. Retrieved from: <https://www.in.gov/dwd/files/2021-State-of-the-Indiana-Workforce-Report.pdf>

²⁶ U.S. Census Bureau, Household Pulse Survey. (n.d.). Retrieved from: <https://www.census.gov/data-tools/demo/hhp/#/>

²⁷ Indiana Department of Health. (n.d.). Indiana COVID-19 Vaccination Dashboard. Retrieved from: <https://www.coronavirus.in.gov/vaccine/2680.htm>

²⁸ U.S. Census Bureau. (n.d.). Household Pulse Survey COVID-19 Vaccination Tracker – Vaccine Hesitancy. Retrieved from: <https://www.census.gov/library/visualizations/interactive/household-pulse-survey-covid-19-vaccination-tracker.html>

²⁹ Ibid.

Appendix C – Community meeting and survey participants

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

- Bauer Family Resources
- City of Monticello
- Community Foundation of White County
- Four County
- Heartford House Child Advocacy Center
- IU Health
- IU Health Quality Board
- IU Health White Memorial Hospital
- Indiana Professional Management Group (IPMG)
- Mental Health America Wabash Valley Region
- 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
- Purdue Extension White County
- Purdue North Central Nursing Clinics
- Saving Grace Harm Reduction
- Terra Drive Systems
- Twin Lakes School Corporation
- 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

Appendix D – Impact of actions taken since the previous CHNA

This appendix discusses the impact of community health improvement actions taken by IU Health White Memorial Hospital to address significant community health needs since its last CHNA report was conducted. The impacts (both expected and achieved) of each community health program are described below.

Access to care – Workforce development

- **Same-day appointment utilization** at IU Health White Memorial Hospital increased by 15-20 percent in June of 2019. All clinics began sharing patients within each practice and within each specialty for acute related illnesses. The number of Standardized Appointment Types for Primary Care were reduced from 27 to 11 with Cerner implementation. In 2020, there were 5,105 same-day or next day appointments and 2,533 virtual visits. In 2021, there were several same-day visits and 3,703 virtual visits. The IU Health White Memorial Hospital walk-in clinic saw 6,515 patients in 2019 and 3,690 patients in 2020.
- **The Med Surg unit** hosted an average of 24 students throughout each year in 2019-2021, spending more than 2,300 hours onsite with the students.

Behavioral health: Mental health

- **Mental Health America – Wabash Valley Region** received an annual grant from 2019-2021 from the West Central Region of IU Health Community Outreach and Engagement (COE). This funding supported the crisis center and additional community trainings in the region. In 2019, the crisis center received 997 total contacts (904 calls and 93 text messages). The top age ranges for calls were 25-34 years, 18-24 and 45-54. The top age ranges for texts were undisclosed age, 13-17 and 0-12 years. In 2020, the crisis center received 1,021 total contacts (919 calls and 102 text messages). The top age ranges for calls were 25-34, 18-24 and 35-44 years. The top age ranges for texts were 13-17 and 18-24 years. In January through September of 2021, the crisis center received 9,487 total contacts (9,302 distinct calls and 185 distinct text messages). The top age ranges for calls were 18-24, 25-34 and 13-17 years. The top age ranges for texts were 18-24 and 13-17 (tied), 34-44 and 55-64 years. In January through September of 2021, White County received 56 calls and 7 texts during the same time period.

- **Virtual behavioral health services** were offered at IU Health White Memorial Hospital for patients in the emergency department. In 2019, 15 patients were referred to the virtual psychiatric services. In 2020, 147 patients were referred to the virtual psychiatric services. In 2021, 109 patients were referred to the virtual psychiatric services. The top behavioral health diagnosis was suicide ideation.
- **National Alliance on Mental Illness (NAMI)** and IU Health COE continued to strengthen its relationship. The United Council on Opioids has reached out to NAMI and plans to host Peer to Peer and Family to Family facilitator trainings. Once these facilitators are trained, they will be able to offer free support groups in White County. IU Health White Memorial Hospital could be a host site for these support groups if necessary.
- **Healthy Communities of Clinton County Coalition, the Monon Family Clinic and the Monon Food Pantry** partnered with IU Health White Memorial Hospital in 2020 to implement the Community Health Grant: Mental Health Continuum of Care in White County. This grant provided onsite mental health assessments using the PHQ-9 at the Monon Food Pantry. Around 80 assessments were provided, along with some wrap around services. However, due to COVID-19 restrictions, the food pantry went to a drive-thru format and assessments were no longer feasible. The grant also increased the local mental health resources by purchasing books and printing brochures about mental health. These were donated to all four White County libraries. The White County school corporations also received See Your Strength decals for their schools. North White High School had student athletes featured in a mental health awareness campaign that strived to reduce the stigma.
- **North Central Health Services (NCHS)** awarded grant funding in the region. Of these, one school was in White County. COE provided a supplemental grant opportunity for these awardees to help cover costs not allowed through NCHS. In White County, Roosevelt Middle School received a grant from COE to provide additional professional development to staff.
- **White County HEALTH 4 All Coalition** expanded its scope to encompass mental health. The COE program manager serves on the mental health work team, working to recruit additional members to serve on the mental health team.

Behavioral health: Substance use

- **Virtual peer recovery coaches for emergency department patients** were offered at IU Health White Memorial Hospital. In 2019, there were 32 episodes of treatment for 28 patients. More than 93 percent of referred patients accepted peer recovery care. There were a total 111 peer recovery sessions, with more than 70 percent successful follow-ups. More than 18 percent of patients were sober on their last follow-up session. Peer recovery coaches

spent 1,159 minutes with patients at IU Health White Memorial Hospital. In 2020, the crisis center received 22 total episodes of treatment for 21 patients. More than 90 percent of referred patients accepted peer recovery care. There were a total 61 peer recovery sessions, with more than 71 percent successful follow-ups. Almost 15 percent of patients were sober at their last follow-up session. Peer recovery coaches spent 726 minutes with patients at this hospital. In 2021, there were 32 episodes of treatment for 28 patients. More than 93 percent of referred patients accepted peer recovery care. There were a total 111 peer recovery sessions, with more than 70 percent successful follow-ups. More than 18 percent of patients were sober on their last follow-up session. Peer recovery coaches spent 1,159 minutes with patients at IU Health White Memorial Hospital.

- **Seven NaloxBoxes** were purchased by IU Health COE in 2021 to be distributed throughout White County. They were placed in the following locations: Monticello Public Library, Monon Family Health Clinic, Wolcott Family Health Clinic, Jordan Manufacturing, Crafty Plum, Monon Park and the White County Probation Office. Ten people were trained on when and how to administer naloxone.
- **IU Health White Memorial Hospital was awarded a grant from the IU Health Foundation to install a drug take-back box** in the hospital in 2020.
- **IU Health White Memorial Hospital continues to work on the Indiana Communities Advancing Recovery Efforts (INCAREs) ECHO grant** from the Indiana Department of Health. The White County Spokes team supported billboard/poster/TV campaigns around prevention and recovery, including an educational campaign about Aaron's Law and Indiana's Good Samaritan Law. The grant helped create www.WhiteCountyCares.org, a website with information about local prevention, treatment and recovery resources for educators, community members, students, parents and town leaders.
- **The North Central Quick Response Team (QRT)** saw a total of 36 clients in White County in 2019. The QRT team saw 92 total clients in White County in 2020 and 36 clients in 2021.

Behavioral health: tobacco

- **Population Health received a grant for smoking cessation.** Training took place in 2019. The virtual smoking cessation classes kicked off in Lafayette in January of 2020 and Frankfort and Monticello in February of 2020. The beginning of the program started with 68 participants. After completing the initial assessment and at least two sessions, 38 people dropped out of the program. Seven participants quit smoking and are no longer using nicotine replacement therapy. Twelve of the participants completed all of the classes and either quit, are using nicotine replacement therapy or combination NRT and weaning down. Twelve participants continue to receive telephonic outreach. Four participants continued

to join classes for support after completing their training.

- **Traveling “In My Room” exhibit** was purchased by Healthy Communities of Clinton County in 2019 using grant funds from the IU Health COE. This exhibit can be set up to look like a bedroom or classroom and shows parents and teachers examples of how young people are hiding tobacco and substance paraphernalia in plain sight. Most of the events in 2020 and 2021 were canceled. Healthy Communities of Clinton County utilized space at IU Health White Memorial Hospital in 2019 and 2020 to administer the Baby and Me Tobacco Free (BAM) program in White County.
- **IU Health White Memorial Hospital Cardiopulmonary led a COPD support group** and hosted Harmonicas for Health classes before the COVID-19 pandemic interruptions.

Health and social services for seniors

- **Trauma Services provided outreach with Stepping On and fall prevention classes.** There were 112 Stepping On and fall prevention participants in 2019 and 2021. In 2020, all these classes were canceled due to the COVID-19 pandemic.

Appendix E – Consultant qualifications

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Alexandria, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted numerous needs assessments for hospitals, health systems and community partnerships nationally since 2010.

The firm also helps hospitals, hospital associations and policy makers with community benefit reporting, program infrastructure, compliance and community benefit-related policy and guidelines development. Verité is a recognized, national thought leader in community benefit and Community Health Needs Assessments.



White Memorial Hospital