

2021 | Community Health Needs Assessment



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Bloomington Hospital



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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 Bloomington Hospital serves patients in Bloomington, Indiana, and the surrounding counties. It offers a comprehensive array of inpatient and outpatient healthcare services covering a multitude of specialties. The hospital has a focus on innovation and excellence in care, education and research. IU Health Bloomington Hospital is a Magnet-designated hospital recognized by the American Nurses Credentialing Center for demonstrating excellence in nursing services and high-quality clinical outcomes for patients.

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.

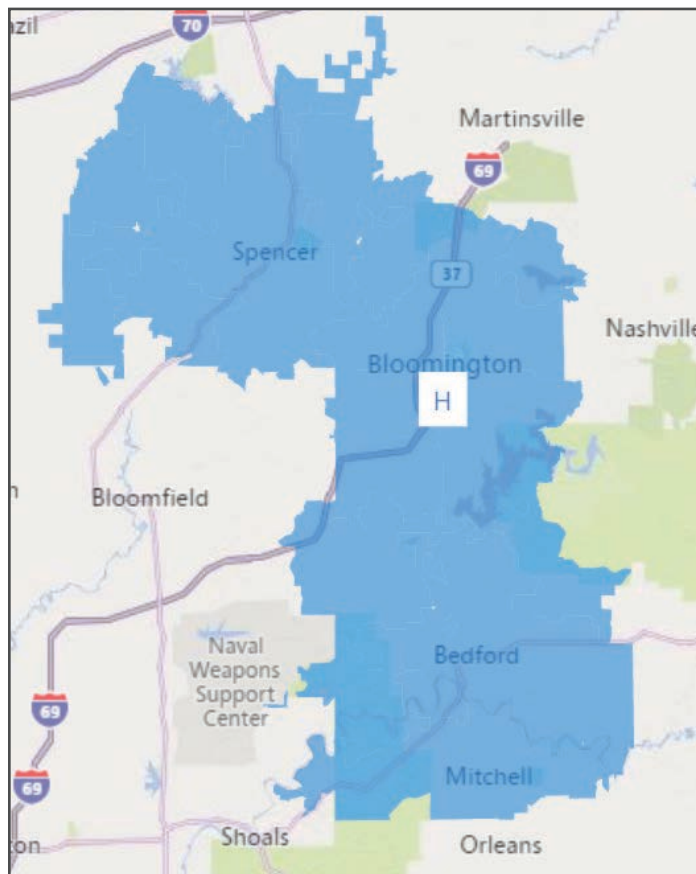
IU Health invites community members to review the community health needs assessments and provide comments to communitybenefit@iuhealth.org.

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 Bloomington Hospital's community is defined as Lawrence, Monroe and Owen counties, Indiana. These three counties accounted for 75

percent of the hospital's inpatient cases in 2019. The estimated population of this community in 2019 was 385,633. 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, interviews or surveys.

Access to healthcare services

- Monroe County, Owen County and the low-income population of Lawrence County have been designated as a Medically Underserved (Exhibit 33).
- Owen County and the low-income population of Lawrence County have been designated as Primary Care Health Professional Shortage Areas (HPSAs) and all three counties have been designated in their entirety as Mental Health HPSAs (Exhibits 34A and 34C).
- The ratio of population to primary care physicians, dentists and mental health providers in all counties

are in general higher than state and national averages (Exhibit 21).

- The uninsured rates in Monroe and Owen counties are above state and national average, and the rate in Lawrence County is above the national average (Exhibits 21).
- Community meeting participants identified access to healthcare services as a significant need, including both availability and timeliness of services. Barriers to accessing healthcare services were also identified, including poverty, transportation, technology barriers (“digital divide”), health literacy and cultural stigma against seeking preventive care (Community meetings, Surveys).
- Other assessments identified access to healthcare services as a significant need, as well as barriers to access including poverty and internet access (Other assessments).

Aging population and needs of seniors

- The number of persons aged 65 years and older in the identified community is projected to grow by 14.9 percent between 2020 and 2025, a much greater rate than the 2.5 percent expectation for the total population (Exhibit 10).
- Areas within Monroe and Lawrence counties have proportions of the population aged 65 and older in excess of 25 percent (Exhibit 10).
- The aging of the population and needs of elderly populations – particularly the need for resources to age in place and cognitive issues among seniors – were identified as significant needs. Additionally, barriers to accessing health services such as transportation and technology barriers were thought to disproportionately affect elderly residents (Community meetings).

Chronic disease and chronic disease management

- Mortality rates for a variety of chronic conditions – including cardiovascular disease, heart disease and cancer – were higher in two or more identified communities than Indiana averages. Additionally, the diabetes mortality rate was significantly above the Indiana rate in Lawrence County (Exhibit 22).
- Several cancer indicators were unfavorable across community counties. Rates of cancer mortality in Lawrence and Owen counties were above average and incidence in Owen County was also high. The rate of mammography screening in Owen County was below state and national averages (Exhibits 21 and 24).
- Monroe County ranked in the bottom quartile in Indiana for sexually transmitted infections (Exhibit 20).
- Chronic disease issues were identified as significant in community counties, including diabetes and obesity-related conditions (Other assessments).

Drug and substance abuse (including opioids and alcohol)

- Substance abuse and addiction were identified by stakeholders in each community county as significant concerns, including the use of opioids, the abuse of alcohol and access to behavioral health services (Community meetings).
- Monroe County ranked last among Indiana counties for

excessive drinking, with the county's rate above state and national averages. Owen County was in the bottom half of Indiana counties for excessive drinking (Exhibits 20 and 21).

- Other recent assessments identified substance use as a significant need as well as the need to reduce overdose deaths (Other assessments).

Food insecurity and healthy eating

- Monroe County ranked in the bottom quartile of Indiana counties for food environment index, and Lawrence County ranked in the bottom half (Exhibit 20).
- Census tracts throughout Monroe and Lawrence counties – including in areas proximate to the hospital in Bloomington – are designated as food deserts (Exhibit 31).
- Other assessments described access to healthy, affordable, local food as a significant community need and contributing to conditions such as obesity and diabetes (Other assessments).

Maternal and infant health and child wellbeing

- All three counties compared unfavorably for mothers who smoked during pregnancy, with the rate in Lawrence County more than double the state average (Exhibit 26).
- Preterm births are higher than average in Monroe County, and the percent of mothers who breastfeed in Lawrence County is lower than average (Exhibit 26).
- Lawrence County ranked in the bottom quartile of Indiana counties for teen births and in the bottom half of Indiana counties for low birthweight (Exhibit 20).
- Owen County ranked in the bottom quartile of Indiana counties for children in poverty, and Lawrence and Monroe counties were in the bottom half (Exhibit 20).
- Other local health assessments identified infant and maternal health as a significant issue. Teen smoking was also highlighted as a concern (Other assessments).
- Community meeting and survey participants identified several needs related to child health and wellbeing, including health literacy, education access and the impacts of the COVID-19 pandemic on learning and development in children (Community meetings, Surveys).

Mental health

- Mental health concerns and access to affordable mental health services and resources were identified by community meeting participants as all community counties as a significant need. Participants also believed the issue had worsened due to the COVID-19 pandemic and isolation (Community meetings).
- All three counties have been designated as a Mental Health Care Health Professional Shortage Areas (HPSAs), and the rate of mental health providers was significantly below state and national averages in Lawrence and Owen counties (Exhibits 21 and 34C).
- Monroe County was in the bottom quartile of Indiana counties for poor mental health days (Exhibit 20).
- Mental healthcare was identified in a community health assessment as a significant need (Other assessments).

Obesity, diabetes and physical inactivity

- Lawrence and Owen counties compared unfavorably to Indiana and United States averages for adult obesity, physical inactivity and access to exercise opportunities (Exhibit 21).
- Mortality due to diabetes was significantly higher than the Indiana average in Lawrence County. Mortality rates due to other chronic conditions associated with obesity were also unfavorable in Lawrence and Owen counties, including cardiovascular and heart disease (Exhibit 22).
- Obesity, diabetes and physical inactivity were identified as significant community health issues, as well as nutrition through access to healthy foods (Other assessments).

Smoking, tobacco use and exposure to secondhand smoke

- Rates of adult smoking in Lawrence, Monroe and Owen counties exceeded the national smoking rate. Owen County ranked in the bottom half of Indiana counties for adult smoking (Exhibits 20 and 21).
- The mortality rates for chronic lower respiratory disease in Owen County and lung cancer in Lawrence County were above state averages (Exhibit 22). Incidence rates of lung cancer were higher than state averages in Lawrence and Owen counties (Exhibits 23 and 24).
- All three counties compared unfavorably for mothers who smoked during pregnancy with the rate in Lawrence County more than double the state average (Exhibit 26).
- Other health assessments identified smoking and tobacco concerns, including teen smoking and smoking while pregnant, as significant needs (Other assessments).

Social determinants of health

- The overall poverty rates in Monroe and Owen counties are above state and national averages. Rates for Black and Hispanic (or Latino) residents are generally higher in all areas. Low-income census tracts are located in both Lawrence and Monroe counties (Exhibits 14-16).
- Unemployment rates have been higher than state averages in recent years across all community counties. Lawrence and Owen counties ranked in the bottom quartile of Indiana for unemployment and Monroe County ranked in the bottom half (Exhibits 17 and 20).
- Compared to the Indiana average, less adults had at least some post-secondary education in Lawrence and Owen counties (Exhibit 21).
- Monroe County ranked last in Indiana for severe housing problems and the percent of the population experiencing severe housing problems was nearly double the Indiana average (Exhibits 20 and 21).
- Several census tracts in each county were in the bottom quartile nationally for housing and transportation vulnerability (Exhibit 32).
- Community meeting and survey participants identified multiple issues with social determinants of health as significant, including poverty, basic needs, housing, homelessness, transportation, employment technology barriers, education access and quality, economic stability,

disparities in health access for certain populations and social connectivity (Community meetings, Surveys).

- Other assessments identified a variety of social determinants of health factors as significant concerns, including food insecurity, housing, basic needs, transportation and college education (Other assessments).

Data and analysis

Definition of community assessed

The community assessed by IU Health Bloomington Hospital was defined by the geographic origins of the hospital's discharges. In 2019, this geographic area was identified as Lawrence, Monroe and Owen counties, Indiana.

Residents from these three counties accounted for 75 percent of the hospital's 2019 inpatient discharges (Exhibit 1).

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

County	Percent of inpatients
Lawrence County	15.0%
Monroe County	51.0%
Owen County	9.0%
Total Community	75.0%

Source: Analysis of IU Health discharge data, 2019

The estimated population of these counties in 2019 was 385,633 persons (Exhibit 2).

Exhibit 2: Local community population, 2019

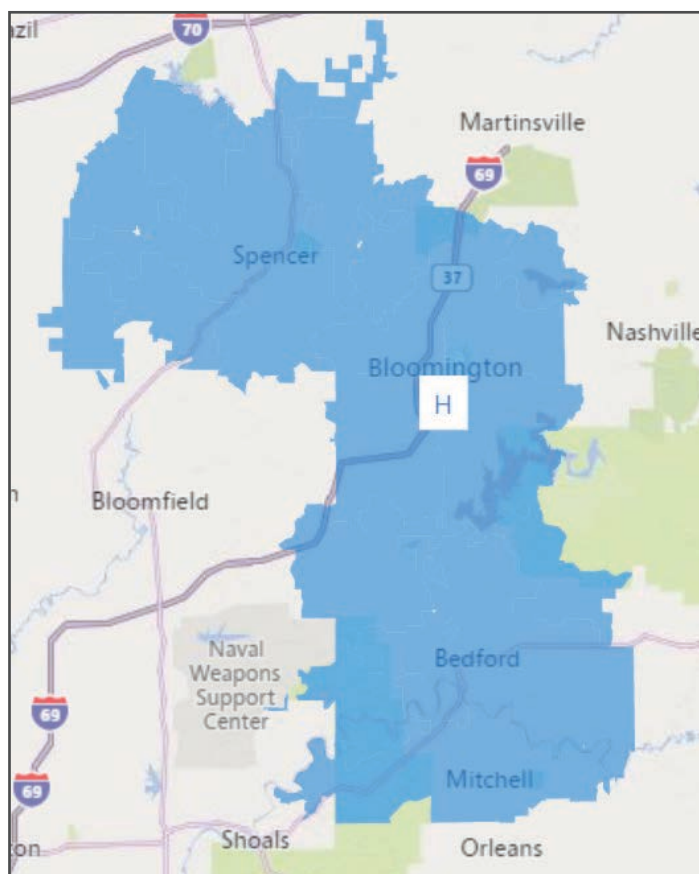
County	Estimated population	Percent of total community population
Lawrence County	45,668	21.4%
Monroe County	146,917	68.9%
Owen County	20,799	9.7%
Total Community	213,384	100.0%

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

The hospital is located in Monroe County (city of Bloomington, Indiana, ZIP code 47403).

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 Bloomington Hospital community



Source: Power BI and IU Health, 2021

Secondary data summary

The following section summarizes findings from secondary data analysis for the IU Health Bloomington Hospital community. See Appendix B for more detailed information.

Demographics

Population characteristics and trends directly influence community health needs. The total population of all identified communities is expected to grow 2.5 percent from 2020 to 2025. This growth is due to an expected 4.0 percent growth in Monroe County, while Lawrence and Owen counties are both expected to lose population between 2020 and 2025.

At 14.9 percent, the population aged 65 years and older is projected to grow at a significantly faster rate than the population as a whole across all identified communities. The population aged 65 years and older in each county is expected to grow by at least 10 percent. This should contribute to a growing need for health services, since older individuals typically need and use more services than younger persons.

Variation in racial and ethnic diversity is seen throughout

the identified ZIP codes. In 2019, ZIP code 47403 (near Bloomington) had the highest proportion of the population that was Black in 2019, above five percent. The proportion of residents that are Hispanic (or Latino) is highest in Monroe County ZIP code 47403, also above five percent.

In Lawrence and Owen counties, the percent of residents with a disability is higher than state and national averages. Owen County residents were less likely to have a high school diploma than state and national averages. The population that was linguistically isolated was higher in Monroe County than the Indiana average.

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 23.5 percent (over the 2015-2019 time period), Monroe County's poverty rate has been significantly above the Indiana and national averages. The rate in Owen County (15.4 percent) also exceeds the state and national averages. Poverty rates for Black and Hispanic (or Latino) residents throughout the identified communities and in Indiana were generally above the poverty rate of White residents. Low-income census tracts are prevalent in Monroe and Lawrence counties.

Between 2015 and 2019, unemployment rates decreased in the counties, state and nationally. In recent years, the identified community's unemployment rates in Lawrence and Monroe counties have been above state averages. Due to the COVID-19 pandemic, it is anticipated that unemployment rates will rise in 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 Monroe and Owen counties is above both state and national averages, and the rate in Lawrence County is above the national average.

Crime rates in the identified communities are lower than Indiana averages for all crime types.

Local health status and access indicators

In the 2019 *County Health Rankings*, Lawrence County ranked 47th for overall health outcomes and Owen County ranked 64th, both in the bottom half of the 92 Indiana counties. Monroe County ranked 19th.

Lawrence County had 19 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, six were in the bottom quartile, including physical inactivity, teen births, high school graduation, unemployment, physical environment and driving alone to work.

Monroe County had 17 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, nine were in the bottom quartile, including poor physical health days, poor

mental health days, food environment index, excessive drinking, sexually transmitted infections, uninsured, income inequality, social associations and severe housing problems.

Owen County had 24 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, 14 were in the bottom quartile, including health factors, length of life, premature death, adult obesity, access to exercise opportunities, primary care physicians, dentists, social and economic factors, some college, unemployment, children in poverty, social associations, injury deaths and long commute – driving alone.

Rates of primary care physicians, dentists and mental health providers were below state and national averages in all three community counties (except for mental health providers in Monroe County).

The percent of households with severe housing problems in Monroe County was significantly above Indiana and national averages.

According to the Indiana Department of Health (IDOH), mortality rates for major cardiovascular diseases and cancer in Lawrence and Owen counties were above Indiana averages. Mortality rates were significantly higher than state averages in Lawrence County for diabetes, influenza and pneumonia, motor vehicle accidents and essential hypertension.

The overall cancer mortality rate was higher in Lawrence and Owen counties than the Indiana averages, and the incidence rate was higher in Owen County. All three counties compared unfavorably for prostate cancer incidence.

Rates of communicable disease in community counties were below Indiana averages for all indicators except for chlamydia in Monroe County.

The percent of mothers who smoked during pregnancy was above the state average in all community counties and more than double the rate in Lawrence County. The rates of mothers breastfeeding in Lawrence County and preterm births in Monroe County were also unfavorable.

For the state of Indiana, Behavioral Risk Factor 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 (ACSCs) include 14 health conditions (also referred to as Preventative Quality Indicators, or “PQIs”) “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 across identified communities were below state averages for all 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).

For a weighted average CNI score, Monroe County scored 3.3, above the national median of 3.0. Both Lawrence and Owen counties scored 2.6, below the national median. One Monroe County ZIP code (47404) 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.

Census tracts in Monroe and Lawrence counties have been designated as food deserts, including areas near the hospital in Bloomington.

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

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.”

Monroe and Owen counties were designated as MUAs, and the low-income population of Lawrence County was designated as a MUP.

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.

Owen County and the low-income population of Lawrence County were designated as Primary Care HPSAs. Owen, Monroe and Lawrence counties were all designated as Mental Health Care HPSAs.

Relevant findings of other CHNAs

This CHNA also considered the findings of other recent, available assessments conducted by other

community-based organizations or agencies, Local Health Departments (LHDs) and the state of Indiana. These other assessments consistently identified the following needs as significant for the community served by IU Health Bloomington Hospital.

- Substance use disorders
- Maternal and child health
- Chronic disease and chronic disease management
- Health disparities
- Social determinants of health
 - Food insecurity
 - Housing

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, while Indiana's poverty rate (percent of people at or below 100 percent of the Federal Poverty Level) was 13.4 percent, the rate in Monroe County was 23.5 percent. For the IU Health Bloomington Hospital community, the overall poverty rate 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.

Exhibit 4: Significant indicators

Indicator	Area	Value	Benchmark	Exhibit
Population change, 2020-2025	Monroe County	4.0%	2.2% – Indiana	9
65+ population change, 2020-2025	Monroe County	17.5%	15.0% – Indiana	9
Population with a disability	Lawrence County	18.6%	13.7% – Indiana	13
Population 25+ without high school diploma	Owen County	14.6%	11.8% – Indiana	13
Poverty rate, 2015-2019	Monroe County	23.5%	13.4% – Indiana	14
Poverty rate, Black, 2015-2019	Lawrence County	37.2%	26.9% – Indiana	15
Poverty rate, Asian 2015-2019	Monroe County	50.0%	18.0% – Indiana	15
Poverty rate, Hispanic, 2015-2019	Owen County	46.7%	22.4% – Indiana	15
Percent of children in poverty	Owen County	22.1%	17.8% – Indiana	21
Potential life lost before age 75 per 100,000	Owen County	10,251.70	6,900.0 – U.S.	21
Adult obesity	Owen County	36.4%	29.0% – U.S.	21
Food environment index	Lawrence County	8.0	7.1 – Indiana	21
Percent of population with adequate access to exercise opportunities	Owen County	50.4%	84.0% – U.S.	21
Injury death rate per 100,000 population	Owen County	101.2	67.0 – U.S.	21
Population per primary care physician	Owen County	20,840:1	1,330:1 – U.S.	21
Population per dentist	Owen County	6,946:1	1,460:1 – U.S.	21
Population per mental health provider	Lawrence County	1,575:1	440:1 – U.S.	21
Income inequality	Monroe County	6.3	4.4 – Indiana	21
Teen birth rate	Lawrence County	39.8%	25.0% – U.S.	21
New chlamydia cases per 100,000	Monroe County	581.90	466.0 – Indiana	21
Severe housing problems	Monroe County	22.0%	13.7% – Indiana	21
Social associations	Monroe County	9.8	12.3 – Indiana	21
Mortality rate (all cancers)	Owen County	193.7	163.3 – Indiana	23
Smoked during pregnancy percent	Lawrence County	25.9%	11.8% – Indiana	26

Source: IU Health analysis

Primary Data Summary

IU Health Bloomington Hospital obtained community input through focus groups of community stakeholders, additional surveys issued to stakeholders who were unable to attend the community meetings and focus groups done by others to identify significant needs.

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

Lawrence County

In collaboration with Ascension St. Vincent, four community meetings were held in 2021 to receive input from stakeholders regarding the health needs in Lawrence County – two on April 14 and two on May 6. Secondary data and a preliminary list of community health need priorities was presented at all meetings. Each group was then asked questions about the preliminary list, including additions to the proposed needs, thoughts regarding the causes of each issue, which health services are difficult to access, populations that have disproportionate access issues, the impacts of the COVID-19 pandemic and others.

From this process, participants from community meetings identified the following needs as significant for Lawrence County:

- Substance abuse, including opioids and alcohol
- Mental health and access to mental health services
- Transportation as a barrier to health services and basic needs
- Health insurance restrictions and uninsured populations
- Technology barriers and the “digital divide”
- Elderly needs including aging in place and cognitive issues
- Homelessness
- Health literacy and a cultural stigma against seeking preventive care

In discussing the impacts of the COVID-19 pandemic on health, participants focused on the delaying of healthcare due to fears of seeing providers, mental health impacts and isolation, impacts on children due to learning delays and social isolation, food insecurity, divisions due to political and health beliefs and increasing obesity due to people staying home.

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

- Education access and quality
- Economic stability
- Access to quality healthcare services
- Disparities in health access for certain populations

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

- Social isolation and loneliness
- Learning and development in children
- Digital divide (lack of Internet or device access)

Monroe County

Six community meetings were held throughout April and May 2021 to receive input from stakeholders regarding the health needs in Monroe County. Each group was asked questions regarding their definition of quality of life, barriers to having a high-quality life, the most important health needs in Monroe County, what they would like decision makers to know and the impacts of the COVID-19 pandemic.

In regard to definitions of quality of life, participants focused discussion on access to basic needs (including food, housing and healthcare services), social connectivity, mental health quality, self-value, equal opportunities (regardless of income, race and others), preventative care, balancing life, community and personal safety, outdoor recreation and exercise, nutrition, affordable care and providers who are available and listen.

Describing barriers to achieving a high-quality life, issues around income and work constraints, pollution, stress, adequate sleep, personal effort, stigma around mental health and substance abuse, COVID-19, limited transportation, housing shortages, technology barriers and digital divides, safe infrastructure, childcare, navigating a complicated healthcare system, language barriers and effects of trauma were all described.

Through these discussions, participants identified the following needs as most significant for Monroe County:

- Mental health and access to mental health providers and resources
- Access to affordable housing and homelessness
- Access to healthcare services broadly due to a variety of barriers
- Substance abuse and addiction
- Poverty and access disparities in healthcare and basic needs for low-income populations

In regard to the COVID-19 pandemic and its impacts, residents described issues around mental health impacts from isolation and fear, impacts on children due to virtual school, physical inactivity due to staying home, burnout among workers, job losses and financial impacts, food insecurity, social service organizations unable to meet demand and technology barriers and a digital divide.

In addition to community meetings held by IU Health, *Community Voices for Health in Monroe County* hosted small group discussions with more than 150 community

members to enhance understanding of health concerns. The issues mentioned most frequently by participants included:

- Health insurance access, coverage limits and challenges using insurance
- Access to quality health services, including both availability and timeliness of services
- Social and economic barriers, including:
 - Costs of healthcare
 - Navigating social services
 - Employment
 - Housing
 - Food insecurity
 - Transportation
 - Decision makers being aware of issues
 - Health education
 - Stigmas surrounding mental health
 - Inequity, discrimination and bias in health services
 - Community and public safety

Owen County

Two community meetings were held in 2021 to receive input from stakeholders regarding the health needs in Owen County – May 25 and May 27. Each group was asked questions regarding their definition of quality of life, barriers to having a high-quality life, the most important health needs in Owen County, what they would like decision makers to know and impacts of the COVID-19 pandemic.

In regard to definitions of quality of life, participants focused discussion on quality time outside of obligations, access to basic needs (including transportation, food and housing), inclusivity and equity, safety, health education, nutrition, connectivity and health in all aspects (physical, mental, emotional and financial).

Describing barriers to achieving a high-quality life, issues around adverse childhood experiences (ACEs), technology barriers and a digital divide, transportation, lack of places to exercise, lack of education, lack of sense of community and distance from services were described.

Through these discussions, participants identified the following needs as most significant for Owen County:

- Elderly needs and an aging population
- Housing shortages and affordability
- Mental health and access to affordable mental healthcare
- Education about and navigation of available community resources
- Substance abuse
- Social connectivity
- Support for caregivers

In regard to the COVID-19 pandemic and its impacts, residents highlighted issues around mental health impacts from isolation and impacts on child learning and development due to virtual schooling.

Other facilities and resources in the community

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

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) 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 4 FQHC sites operating in the IU Health Bloomington Hospital community (Exhibit 5).

Exhibit 5: Federally Qualified Health Centers, 2021

County	Facility
Lawrence	IHC – Owen County (Spencer)
Monroe	Bloomington Health and Dental Center (Bloomington)
Monroe	Centerstone Health Services (Bloomington)
Monroe	HealthNet (Bloomington)

Source: HRSA, 2021

Hospitals

Five hospitals (including IU Health Bloomington Hospital) are located in the community (Exhibit 6).

Exhibit 6: Hospitals, 2021

County	Facility
Lawrence	Ascension St. Vincent Dunn (Bedford)
Lawrence	IU Health Bedford Hospital (Bedford)
Monroe	Bloomington Meadows Behavior Health Facility (Bloomington)
Monroe	IU Health Bloomington Hospital (Bloomington)
Monroe	Monroe Hospital (Bloomington)

Source: Indiana Department of Health, 2021

Local Health Departments

Exhibit 7 presents information on LHDs that provide services in the IU Health Bloomington Hospital community.

Exhibit 7: Local Health Departments, 2021

Public Health Department
Lawrence County Public Health Department (Bedford)
Monroe County Public Health Department (Bloomington)
Owen County Public Health Department (Spencer)

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 Bloomington 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 Bloomington 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/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;
- Input obtained from individuals who participated in one or more community meetings; and
- Input obtained from individuals who were interviewed.

Collaborating organizations

For this assessment, IU Health Bloomington 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, 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.

⁴ Centers for Disease Control and Prevention. (March 11, 2020). *Health Equity*. Retrieved from: <https://www.cdc.gov/chronicdisease/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*.

³ *Ibid*, 14.

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 measure 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 conducted by community-based organizations, agencies or local health departments (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 Bloomington Hospital community. IU Health Bloomington Hospital's community is comprised of Lawrence, Monroe and Owen counties, Indiana.

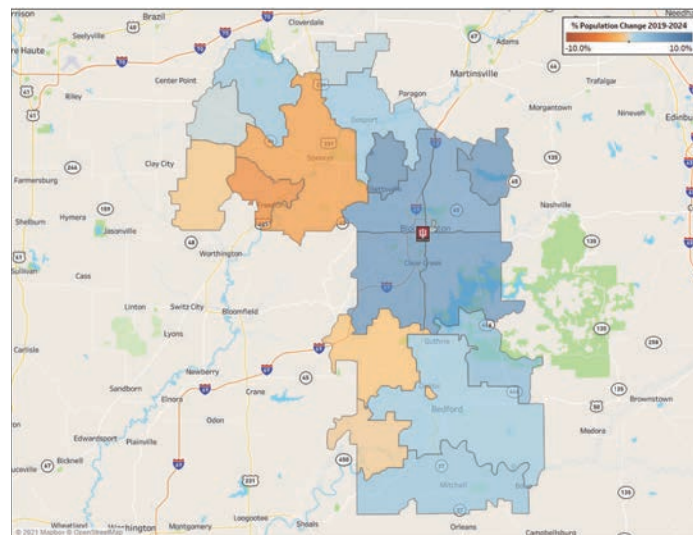
Demographics

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

County	Estimated population 2020	Estimated population 2025	Percent change 2020-2025
Lawrence County	45,075	44,879	-0.4%
Monroe County	150,620	156,689	4.0%
Owen County	20,160	19,707	-2.2%
Total community	215,855	221,275	2.5%
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 for each community 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

- An increase in population is projected for Monroe County between 2020 and 2025.
- The population in Lawrence and Owen counties is expected to remain relatively unchanged between 2020 and 2025.

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
Lawrence County	45,075	44,879	-0.4%
0-19	10,639	10,577	-0.6%
20-44 male	6,394	6,242	-2.4%
20-44 female	6,243	6,055	-3.0%
45-64	12,467	11,708	-6.1%
65+	9,332	10,297	10.3%
Monroe County	150,620	156,689	4.0%
0-19	34,920	35,607	2.0%
20-44 male	34,538	35,193	1.9%
20-44 female	32,083	33,412	4.1%
45-64	28,543	28,349	-0.7%
65+	20,536	24,128	17.5%
Owen County	20,160	19,707	-2.2%
0-19	4,600	4,330	-5.9%
20-44 male	2,728	2,669	-2.2%
20-44 female	2,595	2,546	-1.9%
45-64	6,034	5,451	-9.7%
65+	4,203	4,711	12.1%
Total community	215,855	221,275	2.5%
0-19	50,159	50,514	0.7%
20-44 male	43,660	44,104	1.0%
20-44 female	40,921	42,013	2.7%
45-64	47,044	45,508	-3.3%
65+	34,071	39,136	14.9%
Indiana State	6,738,573	6,889,552	2.2%
0-19	1,754,443	1,786,582	1.8%
20-44 male	1,093,860	1,100,228	0.6%
20-44 female	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

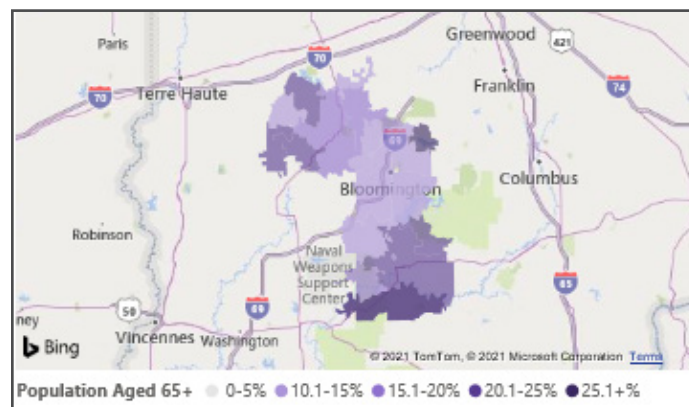
Description

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 14.9 percent in the total community (all 3 counties) 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 on 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

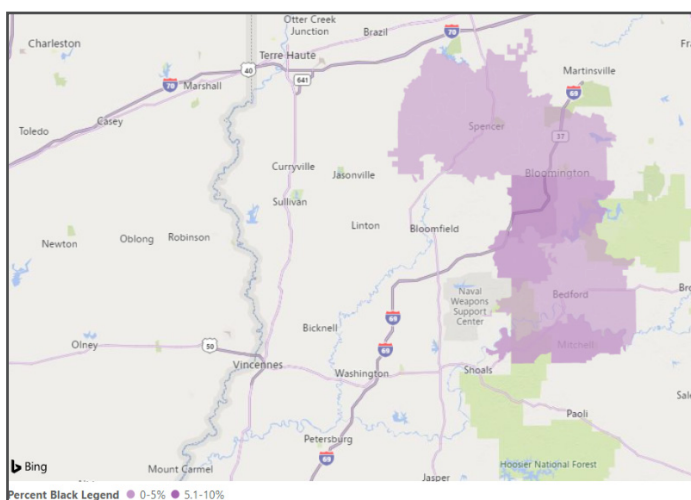
Description

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

Observations

- All 3 counties within the IU Health Bloomington Hospital community have at least one ZIP code that will increase by at least 20 percent.
- ZIP code 47437 (Huron, Indiana, south of Bloomington) has the highest proportion of the population aged 65 and older in the community, above 25 percent.

Exhibit 11: Percent of population – Black, 2019



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

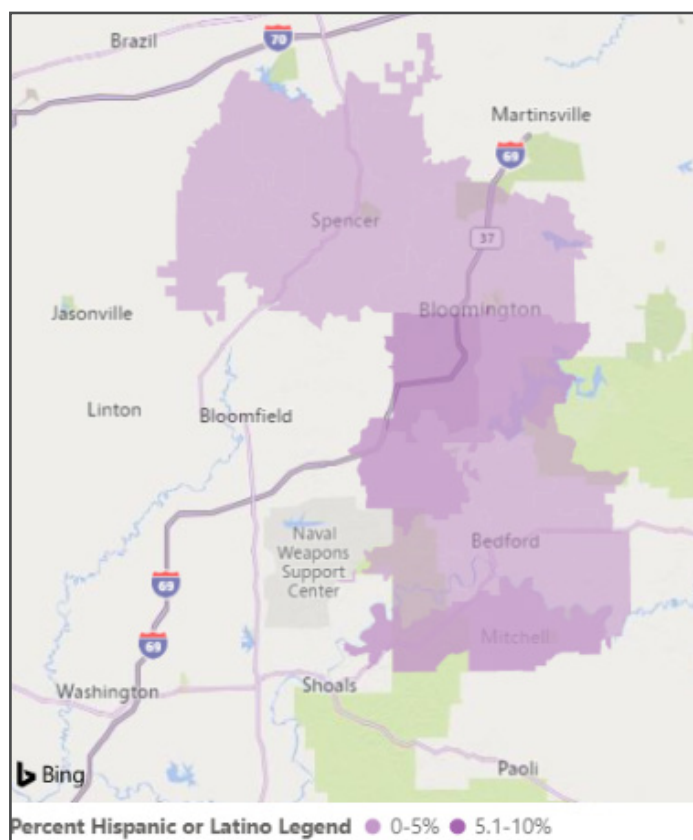
Description

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

Observations

- ZIP code 47403 (near Bloomington) had the highest proportion of the population that was Black in 2019, above five percent.

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 Monroe County ZIP code 47403 near Bloomington at five to ten percent in 2019.

Exhibit 13: Other socioeconomic indicators, 2015-2019

Measure	Population with a disability	Population 25+ without high school diploma	Population linguistically isolated
Lawrence County	18.6%	11.7%	0.8%
Monroe County	11.1%	7.2%	3.7%
Owen County	18.2%	14.6%	1.5%
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.

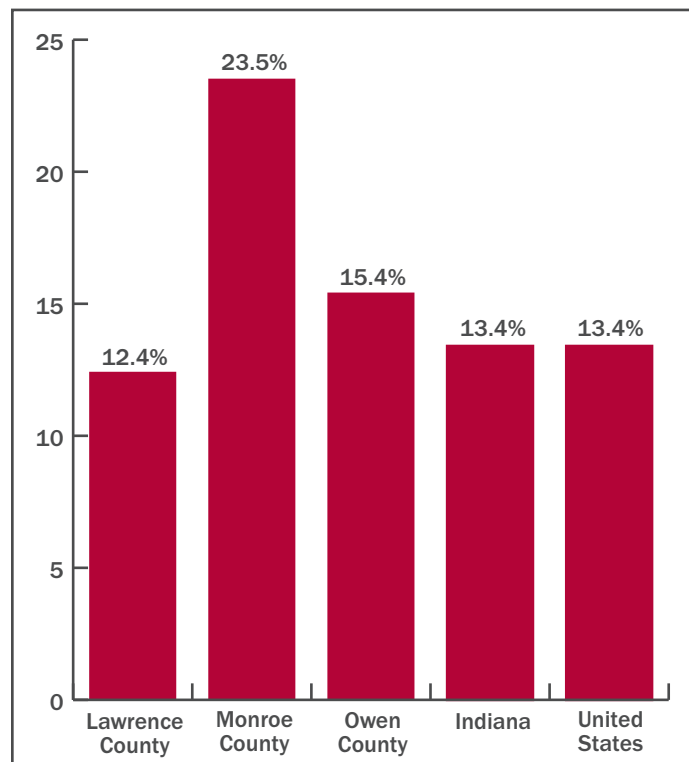
Observations

- Both Lawrence and Owen counties had a higher percentage of the population with a disability compared to Indiana and U.S. averages.
- Owen County had a higher percentage of residents aged 25 years and older without a high school diploma than Indiana and U.S. averages.
- Compared to Indiana, Monroe County had a higher 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

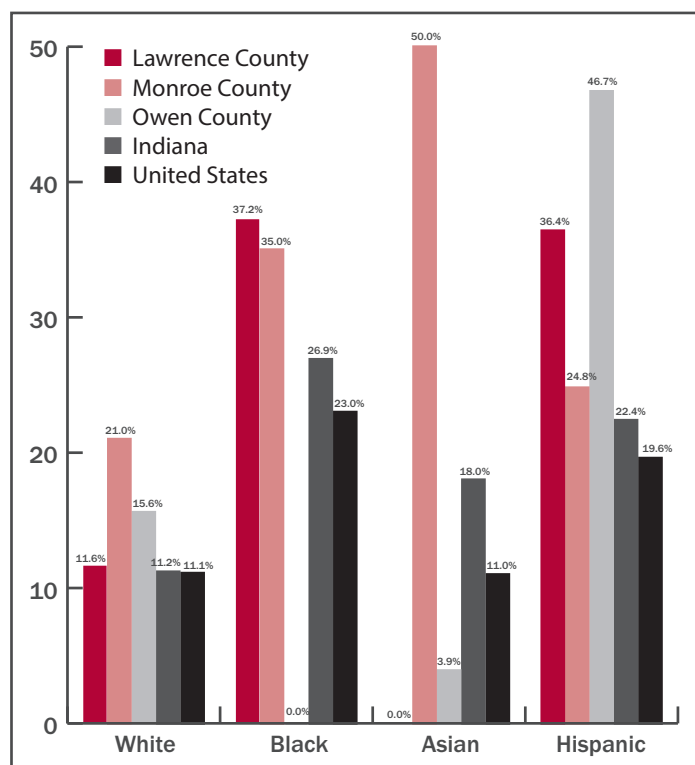
Description

Exhibit 14 portrays poverty rates in Lawrence, Owen and Monroe counties in addition to Indiana and the U.S.

Observations

- The poverty rate in Lawrence County was below Indiana and national averages from 2015-2019.
- The poverty rates in Monroe and Owen counties were above both Indiana and U.S. averages from 2015-2019.

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



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

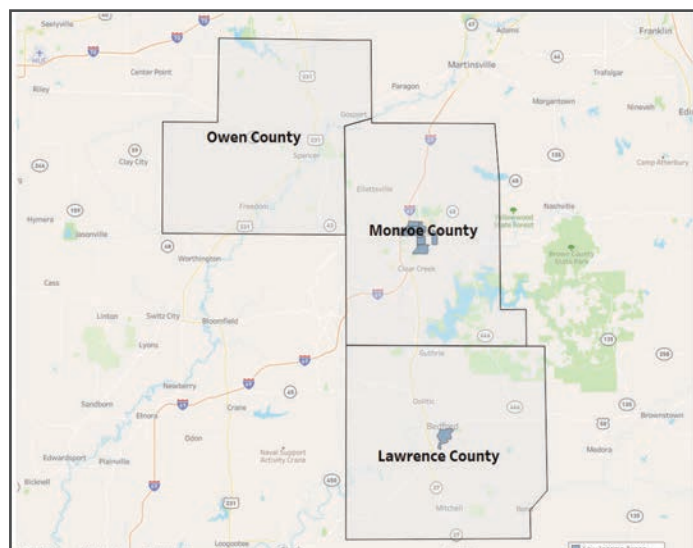
Description

Exhibit 15 portrays poverty rates in Lawrence, Monroe and Owen counties, Indiana and the U.S. by race and ethnicity.

Observations

- The Hispanic (or Latino) poverty rate was higher in all three counties than the Indiana and U.S. averages.
- Poverty rates for the Black and Hispanic (or Latino) populations were higher than the White population in Lawrence and Monroe counties.
- Poverty rates in Monroe County have been higher than national averages for all populations.
- No data was available for the Black population in Owen County and the Asian population in Lawrence County.

Exhibit 16: Low-income census tracts, 2021



Source: U.S. Department of Housing and Urban Development (HUD), Qualified Census Tracts, 2021

Description

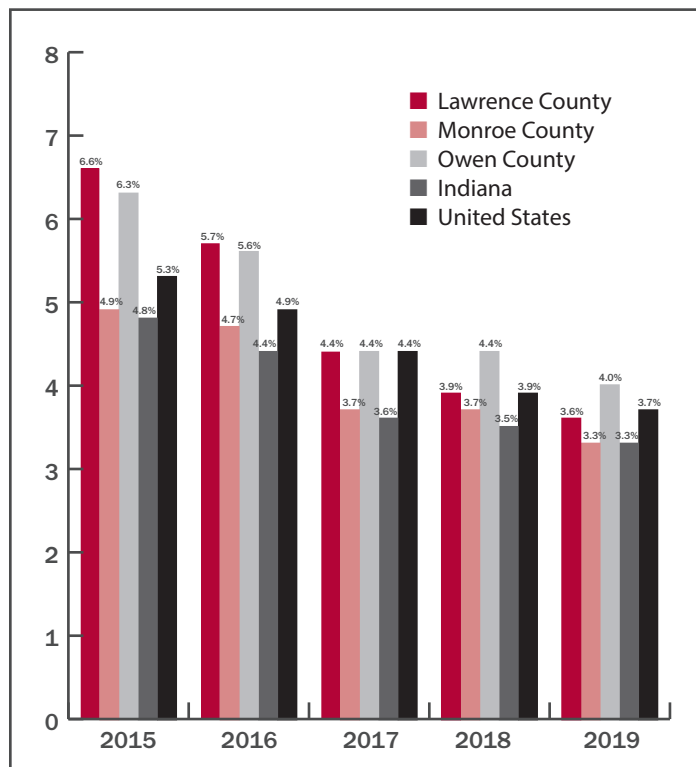
Exhibit 16 portrays the location of federally designated low-income census tracts.

Observations

- Low-income census tracts are present throughout the IU Health Bloomington Hospital community.

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 Lawrence, Monroe and Owen counties, 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 Lawrence, Monroe (except 2019) and Owen counties were above Indiana averages for the time period.

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

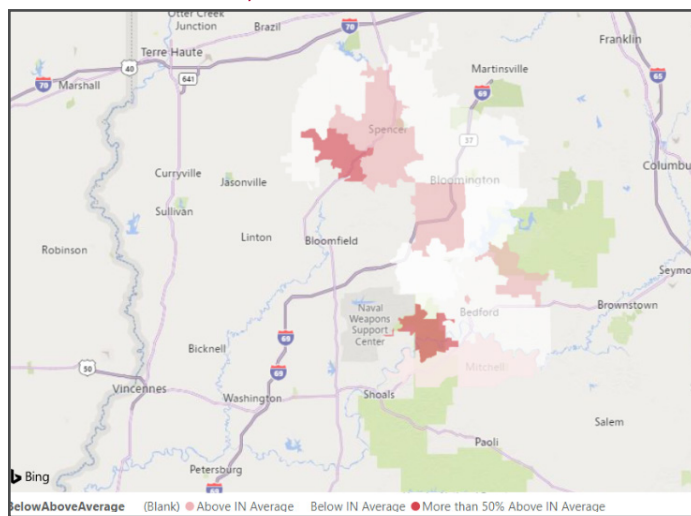
Insurance status

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

County	Population	Population uninsured	Percent uninsured
Lawrence County	36,060	3,362	9.3%
Monroe County	113,404	11,133	9.8%
Owen County	16,620	1,763	10.6%
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 by county in 2019. Exhibit 18B maps the 2019 uninsured rates by ZIP code.

Observations

- The percent of population without health insurance in Monroe and Owen counties is above both state and national averages.
- In 2019, the uninsured rates were 50 percent higher than the Indiana rates in Lawrence County ZIP code 47470 and Owen County ZIP code 47431.
- 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	Monroe County	Lawrence County	Indiana
Aggravated assault	256.9	88.7	499.5
Arson	6.6	–	10.8
Burglary	238.4	197.5	664.2
Homicide	2.0	–	10.6
Larceny	1,138.6	645.6	2,992.9
Motor vehicle theft	94.9	122.0	423.7
Property crime	1,471.9	965.1	4,080.9
Rape	35.2	8.9	79.4
Robbery	43.8	24.4	160.8
Violent crime	351.2	122.0	750.2

Source: Federal Bureau of Investigation, 2020

Description

Exhibit 19 provides crime statistics. No data were available from the Federal Bureau of Investigation for Owen County.

Observations

- Crime rates in Monroe and Lawrence Counties were well below Indiana averages.

Local health status and access indicators

Exhibit 20: County Health Rankings, 2019

Measure	Lawrence County	Monroe County	Owen County
Health outcomes	47	19	64
Health factors	56	16	71
Length of life	41	5	81
Premature death	41	5	81
Quality of life	57	55	41
Poor or fair health	38	53	48
Poor physical health days	58	77	63
Poor mental health days	33	83	38
Low birthweight	64		32
Health behaviors	35	16	62
Adult smoking	35	36	58
Adult obesity	52	1	78
Food environment index	49	84	28
Physical inactivity	77	4	47
Access to exercise opportunities	30	3	72
Excessive drinking	14	92	47
Alcohol-impaired driving deaths	31	39	22
Sexually transmitted infections	45	85	22
Teen births	83	2	45
Clinical care	19	7	63
Uninsured	9	84	28
Primary care physicians	43	16	88
Dentists	33	27	84
Mental health providers	50	4	32
Preventable hospital stays	8	4	7
Mammography screening	19	12	51
Social and economic factors	68	56	79
High school graduation	85	61	45
Some college	58	3	76
Unemployment	83	57	82
Children in poverty	50	47	73
Income inequality	31	92	17
Children in single-parent households	47	51	45
Social associations	20	83	81
Violent crime	53	52	N/A
Injury deaths	38	4	84
Physical environment	82	7	14
Air pollution	9	1	2
Severe housing problems	39	92	61
Driving alone to work	74	2	24
Long commute - driving alone	45	2	82

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 the bottom quartile of Indiana counties.

Observations

- In 2019, Lawrence County had 19 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, six were in the bottom quartile: physical inactivity, teen births, high school graduation, unemployment, physical environment and driving alone to work.
- Monroe County had 17 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, nine were in the bottom quartile: poor physical health days, poor mental health days, food environment index, excessive drinking, sexually transmitted infections, uninsured, income inequality, social associations and severe housing problems.
- Owen County had 24 out of 41 indicators ranked in the bottom half of Indiana counties. Of those, 14 were in the bottom quartile: health factors, length of life, premature death, adult obesity, access to exercise opportunities, primary care physicians, dentists, social and economic factors, some college, unemployment, children in poverty, social associations, injury deaths and long commute – driving alone.

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	Lawrence County	Monroe County	Owen County	Indiana	U.S.
Health outcomes						
Length of life	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	8,023.9	5,756.9	10,251.7	8,237.5	6,900.0
Quality of life	Percentage of adults reporting fair or poor health (age-adjusted)	16.1	16.9	16.7	17.7	16.0
Quality of life	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.9	4.1	3.9	3.9	3.7
Quality of life	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.0	4.4	4.0	4.3	3.8
Quality of life	Percentage of live births with low birthweight (<2500 grams)	8.2	6.8	7.1	8.1	8.0
Health factors						
Health behaviors						
Adult smoking	Percentage of adults who are current smokers	19.2	19.2	20.4	21.1	17.0
Adult obesity	Percentage of adults that report a BMI of 30 or more	34.2	25.4	36.4	32.8	29.0
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.0	7.1	8.3	7.1	7.7
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity	30.6	20.0	27.4	25.1	22.0
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	71.0	89.8	50.4	75.2	84.0
Excessive drinking	Percentage of adults reporting binge or heavy drinking	16.4	20.9	17.5	18.6	18.0
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement	12.8	13.6	15.4	20.8	29.0
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	200.0	581.9	206.0	466.0	497.3
Teen births	Number of births per 1,000 female population ages 15-19	39.8	8.4	30.5	28.4	25.0
Clinical care						
Uninsured	Percentage of population under age 65 without health insurance	8.9	9.2	11.0	9.5	10.0
Primary care physicians	Ratio of population to primary care physicians	3,035:1	1,712:1	20,840:1	1,495:1	1,330:1
Dentists	Ratio of population to dentists	2,175:1	2,100:1	6,946:1	1,810:1	1,460:1
Mental health providers	Ratio of population to mental health providers	1,575:1	426:1	1,158:1	669:1	440:1
Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	3,441.0	2,509.0	3,432.0	5,023.0	4520.0
Mammography screening	Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	43.0	45.0	38.0	40.0	41.0
Flu vaccinations	Percentage of Medicare enrollees who receive an influenza vaccination	45.0	49.0	44.0	47.0	45.0
Social and economic factors						
High school graduation	Percentage of ninth-grade cohort that graduates in four years	84.3	90.8	92.1	83.8	85.0
Some college	Percentage of adults ages 25-44 with some post-secondary education	57.7	77.4	49.0	62.4	65.0

Indicator category	Indicator	Lawrence County	Monroe County	Owen County	Indiana	U.S.
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	4.4	3.6	4.4	3.5	4.4
Children in poverty	Percentage of children under age 18 in poverty	17.6	17.2	22.1	17.8	18.0
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	3.8	6.3	3.6	4.4	4.9
Children in single-parent households	Percentage of children that live in a household headed by single parent	30.3	31.1	30.1	33.6	33.0
Social associations	Number of membership associations per 10,000 population	16.5	9.5	9.6	12.3	9.0
Violent crime	Number of reported violent crime offenses per 100,000 population	315.0	307.4	N/A	385.1	386.0
Injury deaths	Number of deaths due to injury per 100,000 population	71.9	48.5	101.2	74.1	67.0
Physical environment						
Air pollution	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	11.1	10.4	10.8	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	11.2	22.0	12.6	13.7	18.0
Driving alone to work	Percentage of the workforce that drives alone to work	86.2	72.5	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	32.5	16.6	46.2	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 the three counties in the community:
 - Ratio of population to dentists
 - Ratio of population to primary care physicians
- The following indicator compared particularly unfavorably for Lawrence and Owen counties:
 - Ratio of population to mental health providers

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	Lawrence County	Monroe County	Owen County	Indiana
Major cardiovascular diseases	273.0	197.6	266.2	237.5
Diseases of heart	197.9	152.9	201.0	178.7
Cancer	172.5	123.2	193.7	163.3
Other diseases of circulatory system	<10	8.2	<10	80.7
Other diseases of heart	76.5	75.5	67.5	72.6
Chronic lower respiratory diseases	38.0	37.5	67.4	56.1
All other and unspecified accidents and adverse effects	27.8	34.6	<10	45.3
Cerebrovascular diseases (stroke)	<10	<10	<10	41.5
Alzheimer's disease	24.8	20.2	<10	31.7
Diabetes mellitus	37.5	12.8	<10	25.0
Nephritis, nephrotic syndromes and nephrosis (kidney disease)	17.8	12.4	<10	17.1
Intention self harm (suicide)	<10	<10	<10	14.1
Influenza and pneumonia	17.3	10.2	<10	11.6
Motor vehicle accidents	23.1	9.0	<10	12.6
Chronic liver disease and cirrhosis	<10	9.8	<10	12.0
Hypertensive heart disease with or without renal disease	<10		<10	13.1
Essential hypertension and hypertensive renal disease	16.7	<10	<10	10.4
Assault (homicide)	<10	<10	<10	7.2
Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)	<10	<10	<10	6.0
Certain conditions originating in the perinatal period	<10	<10	<10	3.6
Congenital malformations, deformations and chromosomal abnormalities	<10	<10	<10	4.0
All other external causes	<10	<10	<10	2.4
Atherosclerosis	<10	<10	<10	2.3
Pregnancy, childbirth and the puerperium	<10	<10	<10	0.9
Sudden infant death syndrome (SIDS)	<10	<10	<10	0.7
Peptic ulcer	<10	<10	<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; dark grey shading highlights any indicators more than 50 percent worse than the Indiana average. The IDOH does not provide rates when total deaths for that particular cause of death is <10 in that county.

Observations

- Selected causes of death for Lawrence County exceeded the state average for cancer, diseases of heart, major

cardiovascular diseases, nephritis, nephrotic syndromes and nephrosis and other diseases of heart.

- Mortality rates in Lawrence County for diabetes mellitus, essential hypertension and hypertensive renal disease, influenza and pneumonia and motor vehicle accidents were more than 50 percent worse than the Indiana average.
- Selected causes of death for Monroe County exceeded the state average for other diseases of heart.
- Selected causes of death for Owen County exceeded the state for cancer, chronic lower respiratory diseases, diseases of heart and major cardiovascular diseases.

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

Indicator	Lawrence County	Monroe County	Owen County	Indiana
All cancers	172.5	123.2	193.7	163.3
Breast	<10	7.4	<10	10.6
Cervix uteri, corpus uteri and ovary	<10	<10	<10	7.0
Colon, rectum and anus	15.9	8.5	<10	15.0
Leukemia	11.3	12.0	<10	14.5
Non-Hodgkin's lymphoma	18.3	16.5	20.3	18.3
Other forms of cancer	46.9	34.3	74.7	51.5
Pancreas	12.8	9.4	<10	11.8
Prostate	<10	6.5	<10	7.9
Stomach	<10	<10	<10	2.4
Trachea, bronchus and lung	45.7	36.6	37.3	42.9
Urinary tract	<10	<10	<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 Lawrence County for all cancers, colon, rectum and anus, pancreas and trachea, bronchus and lung were higher than the Indiana averages.
- Cancer mortality rates in Owen County for all cancers, breast, Non-Hodgkin's lymphoma and other forms of cancer were higher than the Indiana averages.
- Cancer mortality rates in Monroe County were lower than the Indiana averages for all indicators.

Exhibit 24: Age-Adjusted Cancer Incidence Rates per 100,000 Population, 2013-2017

Indicator	Lawrence County	Monroe County	Owen County	Indiana
All cancers	455.1	430.3	472.4	459.3
Bladder	19.3	15.4	18.3	21.7
Brain and ONS	<10	5.8	<10	6.5
Breast	104.1	119.3	110.3	122.9
Cervix	<10	7.9	<10	8.2
Childhood (ages <15)	<10	20.6	<10	16.2
Colon and rectum	43.4	38.3	43.2	42.6
Esophagus	5.2	4.2	<10	5.5
Kidney and renal pelvis	16.6	17.0	25.9	19.0
Leukemia	11.3	12.0	<10	13.7
Liver and bile duct	7.0	9.4	<10	7.2
Lung and bronchus	77.4	57.6	84.3	72.2
Melanoma of the skin	23.3	23.9	20.1	21.7
Non-Hodgkin's lymphoma	18.3	16.5	20.3	18.6
Oral cavity and pharynx	11.4	12.3	14.2	12.7
Ovary	9.9	10.3	<10	10.4
Pancreas	12.3	13.9	<10	13.3
Prostate	96.8	119.7	106.4	94.2
Stomach	<10	4.1	<10	5.9
Thyroid	14.4	10.1	<10	12.5
Uterus	32.0	23.4	24.9	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. 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 Lawrence County for colon and rectum, lung and bronchus, melanoma of the skin, prostate, thyroid and uterus were higher than the Indiana averages.
- Cancer incidence rates in Monroe County for childhood (ages <15), liver and bile duct, melanoma of the skin, pancreas and prostate were higher than the Indiana averages.
- Cancer incidence rates in Owen County for all cancers, colon and rectum, kidney and renal pelvis, lung and bronchus, Non-Hodgkin's lymphoma, oral cavity and pharynx and prostate were higher than the Indiana averages.

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

Indicator	Lawrence County	Monroe County	Owen County	Indiana
Chlamydia	260.1	620.5	240.4	526.3
Gonorrhea	97.0	121.9	101.0	177.1
HIV/AIDS	70.1	161.3	81.6	189.9
Primary and secondary syphilis	<5	4.0	<5	5.0

Source: Indiana Department of Health, 2019

Description

Exhibit 25 presents incidence rates for various communicable diseases. Light grey shading highlights indicators worse than Indiana averages.

Observations

- Lawrence and Owen counties had lower communicable disease rates than the Indiana averages in 2019.
- The chlamydia rate in Monroe County was worse than the Indiana average.

Exhibit 26: Maternal and child health indicators, 2019

Indicator	Lawrence County	Monroe County	Owen County	Indiana
Breastfeeding	76.6%	87.1%	84.3%	82.0%
Infant mortality rate (per 1,000 live births)	0.0	0.0	0.0	6.5
Low birthweight	5.7%	7.1%	6.0%	8.2%
Mothers on Medicaid	39.0%	12.9%	23.6%	38.5%
Mothers under 19 (per 1,000 mothers)	22.2	6.4	27.1	20.7
Prenatal care	73.5%	81.6%	78.7%	68.9%
Preterm births	7.5%	11.1%	9.3%	10.1%
Smoked during pregnancy	25.9%	12.9%	19.0%	11.8%
Unmarried mothers	38.0%	30.9%	44.9%	44.5%

Source: Indiana Department of Health, 2017

Description

Exhibit 26 presents various maternal and infant health indicators. Light grey shading highlights indicators worse than the Indiana average; dark grey shading highlights indicators more than 50 percent 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 Lawrence County, breastfeeding, mothers on Medicaid and mothers under 19 were worse than the Indiana averages and the smoked during pregnancy percent was 50 percent worse than the Indiana average.
- In Monroe County, preterm births percent and smoked during pregnancy percent were worse than the Indiana averages.
- In Owen County, mothers under 19, smoked during pregnancy and unmarried mothers percent were worse 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 is 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	Lawrence	Monroe	Owen	Bloomington community	Indiana	U.S.
Diabetes short-term complications	56.0	39.1	84.9	60.0	90.3	58.3
Diabetes long-term complications	112.1	34.3	54.6	67.0	116.6	104.1
COPD or asthma in older adults	240.5	190.5	346.1	259.0	467.9	493.8
Hypertension	53.2	8.7	36.4	39.5	56.7	60.0
Heart failure	263.4	233.2	533.8	343.4	455.7	413.0
Community acquired pneumonia	215.7	131.8	230.5	192.7	248.3	158.8
Urinary tract infection	75.6	51.9	121.3	83.0	149.1	141.3
Uncontrolled diabetes	19.6	12.0	36.4	22.7	39.2	43.0
Asthma in younger adults	9.0	7.3	20.3	12.2	27.2	30.3
Lower extremity amputation with diabetes	30.8	7.2	18.2	18.7	30.2	29.3
Prevention overall composite	972.2	625.2	1,352.6	983.3	1,465.9	1,306.3
Prevention acute composite	291.4	183.7	351.8	275.6	397.4	300.1
Prevention chronic composite	680.8	441.6	1,000.8	707.7	1,068.7	1,006.4
Prevention diabetes composite	196.1	89.4	182.0	155.8	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 Bloomington Hospital community compared to Indiana and U.S. averages. Light grey shading highlights indicators worse than Indiana 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 healthcare system and ways to improve outcomes.

Observations

- For Lawrence County, the rates of admissions for ACSC exceeded Indiana averages for one of fourteen conditions: lower extremity amputation with diabetes.
- For Monroe County, the rates of admissions for ACSC were below the Indiana averages for all 14 conditions.
- For Owen County, the rates of admissions for ACSC exceeded Indiana averages for one of fourteen conditions: heart failure.

¹⁰ *Ibid*, 9.

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

Indicator	Bloomington community	Indiana	Ratio: Bloomington/Indiana
Heart failure	343.4	455.7	0.8
Community acquired pneumonia	192.7	248.3	0.8
Diabetes short-term complications	60.0	90.3	0.7
Hypertension	39.5	56.7	0.7
Prevention overall composite	983.3	1,465.9	0.7
Prevention acute composite	275.6	397.4	0.7
Prevention chronic composite	707.7	1,068.7	0.7
Diabetes long-term Complications	67.0	116.6	0.6
COPD or asthma in older adults	259.0	467.9	0.6
Urinary tract infection	83.0	149.1	0.6
Uncontrolled diabetes	22.7	39.2	0.6
Lower extremity amputation with diabetes	18.7	30.2	0.6
Prevention diabetes composite	155.8	257.4	0.6
Asthma in younger adults	12.2	27.2	0.4

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

Description

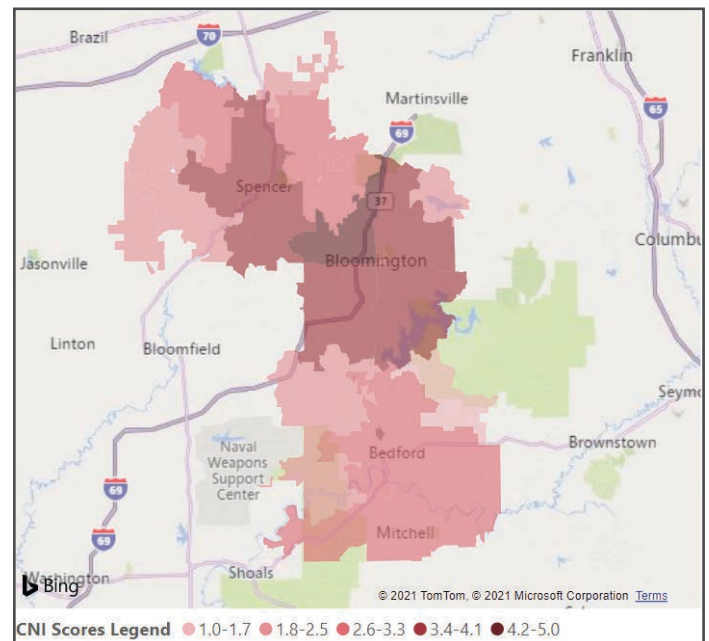
Exhibit 29 provides the ratio of Ambulatory Care Sensitive Conditions (ACSC) also referred to as Preventative Quality Indicators (PQI) rates in the IU Health Bloomington Hospital community compared to Indiana averages. Conditions where the ratios are highest (meaning that the PQI rates in the community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

Observations

- In the community, 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 healthcare access. The index, available for every ZIP code in the United States, is derived from five social and economic indicators:

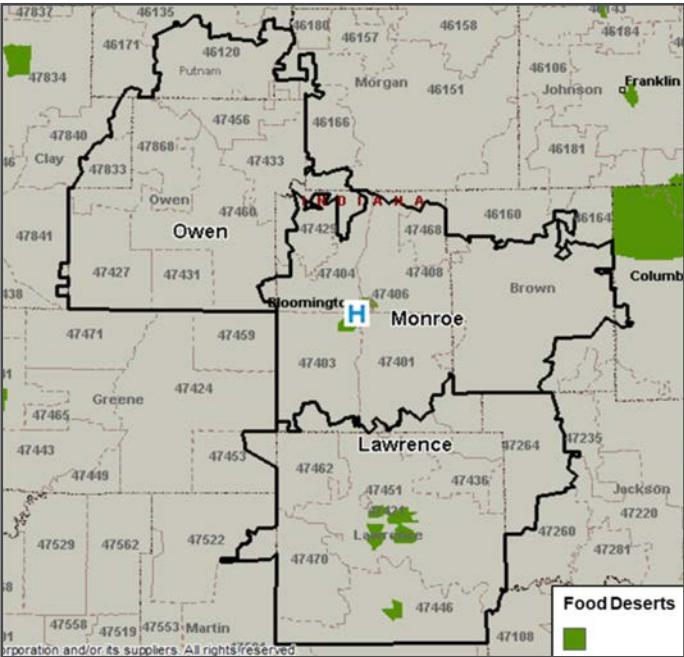
- The percentage of elders, children and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured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

- Lawrence County scored a 2.6, Monroe County scored a 3.3, and Owen County scored a 2.6 on the CNI scale.
- One Monroe County ZIP code (47404) 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.

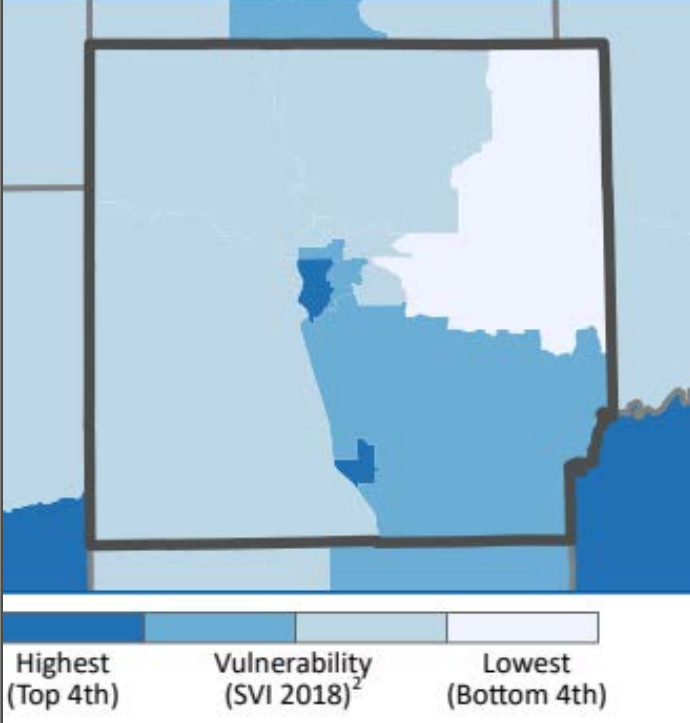
The U.S. Department of Agriculture’s Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase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

Observations

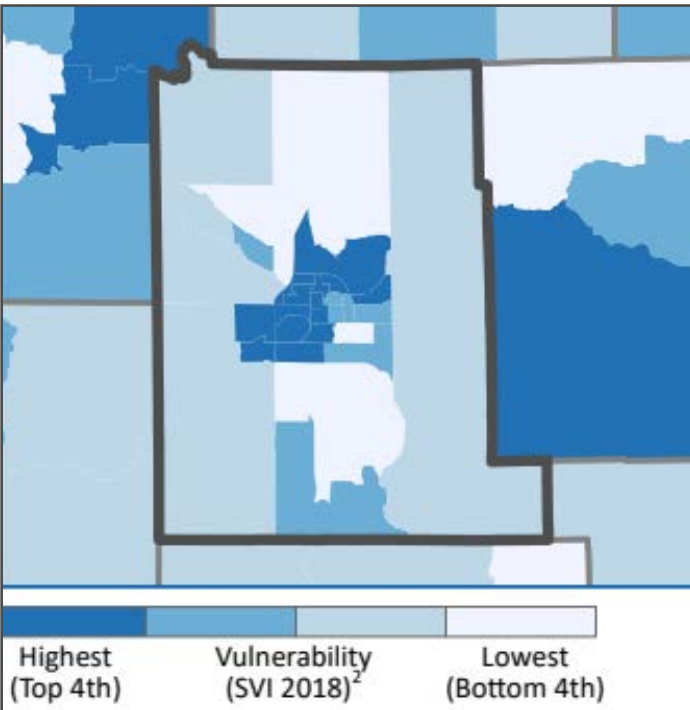
- Several census tracts in the IU Health Bloomington Hospital community have been designated as food deserts.

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

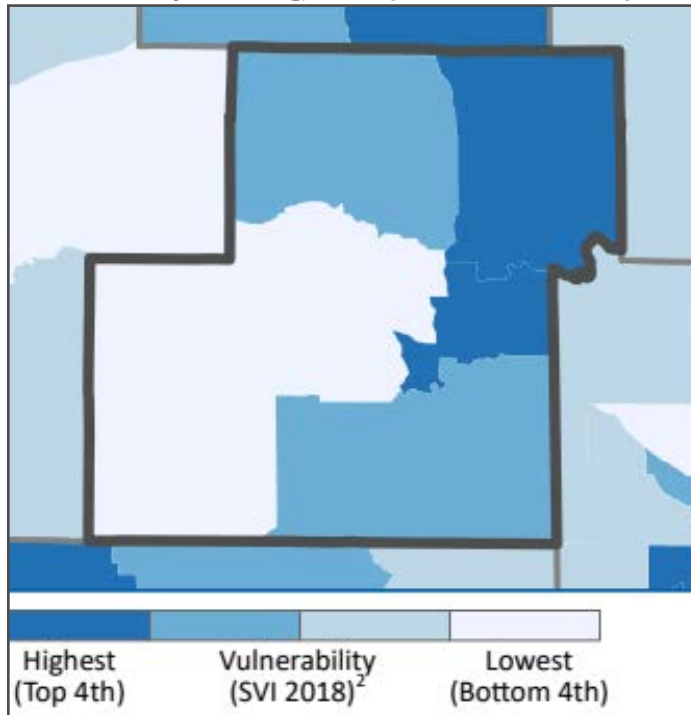
Lawrence County housing/transportation SVI map



Monroe County housing/transportation SVI map



Owen County housing/transportation SVI map



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 Lawrence, Monroe and Owen counties. 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 for each county in the community.

Observations

- Two (2) of Lawrence County's 10 census tracts (20.0 percent) ranked in the bottom quartile nationally. Those 2 census tracts make up 14.9 percent of the county's population.
- Thirteen (13) of Monroe County's 31 census tracts (41.9 percent) ranked in the bottom quartile nationally. Those 13 census tracts make up 44.8 percent of the county's population.
- One (1) of Owen County's 5 census tracts (20.0 percent) ranks in the bottom quartile nationally. That 1 census tract makes up 18.7 percent of the county's population.

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

County	Designated area	Medically Underserved designation type
Lawrence	Low Income – Lawrence County	Medically Underserved Population
Monroe	Monroe County	Medically Underserved Area
Owen	Owen Service Area	Medically Underserved Area

Source: HRSA, 2021

Description

Exhibit 33 lists the location of Medically Underserved Areas (MUAs) in the community.

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

- The low-income population in Lawrence County has been designated as a Medically Underserved Population.
- Monroe and Owen counties have been designated as a Medically Underserved Areas.

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

¹³ Ibid.

Health Professional Shortage Areas

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

County	HPSA	Type
Owen	Owen County	HPSA Geographic
Lawrence	Low Income – Lawrence County	HPSA Population

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

- The low-income populations of Lawrence County and the entirety of Owen County have been designated as primary care HPSAs.
- Monroe County has not been designated a primary care HPSA.

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

Lawrence, Monroe and Owen counties have not been designated as dental care HPSAs, 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 Bloomington Hospital community have been designated as dental care HPSAs.

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

County	HPSA	Type
Owen	Mental Health Catchment Area 23	HPSA Geographic High Needs
Monroe	Mental Health Catchment Area 23	HPSA Geographic High Needs
Lawrence	Mental Health Catchment Area 23	HPSA Geographic High Needs

Source: HRSA, 2021

Description

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

Observations

- Each county in the IU Health Bloomington Hospital community has been designated as a mental health HPSA as a part of the Mental Health Catchment Area 23.

¹⁴ Ibid, 53.

Findings of other community health needs assessments

Indiana State Health Assessment and Improvement Plan

A State Health Assessment and Improvement Plan (SHA) was published recently by the Indiana State 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 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 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 Indiana State Health Improvement Plan (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

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_ISHIP.pdf

Exhibit 35: Significant needs identified in other assessments or reports

Prioritized needs	Frequency
Substance use disorders	4
Food insecurity	3
Built environment	2
Diabetes	2
Health disparities	2
Housing	2
Maternal and child health	2
Obesity	2
Physical inactivity	2
Tobacco use	2
Access to healthcare services	1
Aging population and needs of seniors	1
Asthma	1
Basic needs	1
Cardiovascular health	1
Chronic disease	1
College education	1
Mental healthcare	1
Public health infrastructure	1
Screenings for cancer	1
Transportation	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 most often were identified as significant in other CHNAs that assessed IU Health Bloomington Hospital's community
 - Substance use disorders
 - Maternal and child health
 - Chronic disease and chronic disease management
 - Health disparities
 - Social determinants of health
 - Food insecurity
 - Housing

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	Lawrence	Monroe	Owen	Indiana	United States
Total positive cases	5,490	13,073	2,390	806,094	36,951,181
Total case rate per 100,000	12,100.5	8,807.5	11,490.9	11,934.0	11,273.0
Total deaths	132	182	60	13,743	620,493
Total death rate per 100,000	290.9	122.6	288.5	210.0	187.0
Total population vaccinated	17,928	76,963	7,745	3,019,608	168,689,357
Percent of population vaccinated	45.6	57.8	42.8	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 CDC 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:

- Alzheimer's and Dementia Community Resource Service
- Amethyst House
- Area 10 Agency on Aging
- Ascension St. Vincent
- Bedford Chamber of Commerce
- Bedford Farmers Market
- Bedford Public Library
- Bloomington Economic Development Center
- Bloomington Health Foundation
- Boys and Girls Club of Bloomington
- Center Stone Community Mental Health
- City of Bedford Community Development
- Community Justice and Meditation Center
- Community Voices for Health in Monroe County
- Cornerstone Information Systems
- Habitat for Humanity
- Health Net
- Hoosier Uplands
- Indiana University Bloomington
- IU Health
- IU Health Bloomington Hospital
- IU Health Dementia Network
- IU Health South Central Region
- Lawrence County Health Department
- Life Designs
- Local Council of Women
- Monroe County Health Department
- Monroe County Public Health Clinic
- Nurse Family Partnership
- Owen County Community Foundation
- Owen County Health Department
- Owen County System of Care
- Purdue Extension
- Salvation Army
- United Way of Monroe County
- WIC Family Services
- YMCA of Owen County

Appendix D – Impact of actions taken since the previous CHNA

This appendix discusses the impact of community health improvement actions taken by IU Health Bloomington 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 healthcare

- **Medical neighborhood and team-based care** approach to healthcare. Staff who participated in work to define and develop a scoring tool to measure work developing the Medical Neighborhood learned the importance of thinking outside the hospital and clinic walls to develop support for clients and patients within the community. Members of Community Health and members of the Regional Academic Health Center planning groups supported this work. This number totaled over 75 team members in 2019. Community partners total five (Wheeler Mission, Redeemer Congregation, Purdue Extension, Boys and Girls Club and Monroe County EMS). Work continues to decrease median lag time to primary care provider appointments. Care maps were designed to guide clinical teams in care for chronic conditions such as COPD, hypertension and diabetes. This map supports referral to ancillary services such as pharmacy, dietitians and health educators. The South Central Region (SCR) worked to redesign primary care, setting each clinic up with needed support to provide state of the art care and increase access to services. Community Health partnered in these initiatives and oriented new primary care providers to the available services.
- **Community access portal was supported by IU Health through findhelp.org or iuhealthconnect.org.** The SCR led the efforts of the system to roll this out to community partners, engaging them in uploading information about their free or reduced cost programs and services to support those in need. [Iuhealthconnect.org](https://iuhealthconnect.org) was a helpful site for team members and community members to find the appropriate healthcare resources. Community Health partnered with the IU School of Public Health to analyze the greatest needs of patients and to determine if they received the appropriate services.
- **Faith-based partnership between IU Health and two Bloomington churches.** Redeemer Church was the first of two faith-based organizations. In 2019, two community clinics were held at this church. In the summer, the event hosted over 200 people and in the fall over 350 attended. The service supported an onsite clinic, screenings, referral to care, a food pantry and navigation to care. Providers

blocked time in their schedules the following week to take care of those identified in this community clinic and Community Health staff helped out. The second partner was Faith Lutheran Church, which provides space for the IU Health childhood obesity program, GOAL (Get Onboard Active Living). In addition, they joined the weekly walking group that ran between April and October in 2019. This activity at Faith Lutheran had 15 to 18 members join each week. This congregation also supported the shoe drive for families in need in the Crestmont area of Bloomington. In 2020, Community Health provided support for a drive through flu clinic in October vaccinating 88 people at Redeemer Church. This was open to the community and helped reach those who were unable to come to the IU Health site.

Behavioral health: Senior health

- **Alzheimer's Resource Services (ARS) provided 10 Care Giver University education programs** in Lawrence County in 2019. There are 12 formal partnerships in Lawrence County adding to the support the county receives for those living with or caring for a loved one with some form of dementia. Dementia Friendly training was developed and offered in the community. In 2019, 100 trainings were held using a train the trainer model. At this point, there are 80 trainers. Monroe County is well supported in terms of these services. In-person interaction slowed down in 2020. ARS received a HRSA grant that led to the opening of new services in Lawrence and Orange counties. Much of the work was done virtually including Dementia Friendly Training of the community and partners in 2020. By July of 2021 the community of Bedford had over 30 companies complete the Dementia Friendly training level one with two companies set to begin level two training. IU Health Bedford Hospital supported this training for their team members and committed to level one certification by the end of 2021.
- **A partnership exists to support the Memory Clinic within the IU Health Southern Indiana Physicians Neurology Office in Bloomington.** On Wednesday mornings, the staff from the Alzheimer's Resource Services attends the clinic. The provider schedules new patients on this day, so the majority are receiving a diagnosis of some form of dementia. Following the appointment with the provider, a meeting with the ARS staff follows the debriefing, and then a referral to community services and support. This provides wrap around care for the patient and family and enables the provider to move to the next patient. This not only adds a layer of support for the families, but supports access to care. In 2019, 61 patients were seen in this clinic. In 2020, there were 75 patients and the satisfaction scores for this service were at 100 percent both years.

Behavioral health: Substance use disorder

- **Family Vitality Program** began in 2019 and referred 22 at risk pregnant women to care the 1st year. Partnerships exist with Centerstone, Indiana Center for Recovery, Fresh Start and IU Health Behavioral Health to enroll pregnant women into recovery or treatment programs. Within the IU Health Bloomington Hospital, the Women and Children's department provided education and support to new parents. Safe Sleep Education, Car Seat resources, and Eat, Sleep and Console are a few of the resources clients receive. Other supports provided by this program include four new processes built in OB/GYN offices that connect a client at risk to care by following early identification and referral process to Centerstone or to care by a provider who will prescribe and follow a MAT prescription. Another process alerted the pediatric office when a baby was born with Neonatal Abstinence Syndrome (NAS). Once discharged, a call is initiated to schedule the pediatric visits. If these visits are not attended, the pediatric staff will follow up with the parents. In 2019 there were 82 babies born with NAS at IU Health Bloomington. Fourteen of these babies were adopted or entered foster care outside of the area. Sixty-eight were followed through the protocol above. Work continues to ensure these families keep up with their pediatric appointments. In 2020, the COVID-19 pandemic brought more attention to this program from referral sources and increased participant referrals. The additional HRSA grant funding allowed this program to reach more rural areas such as Lawrence and Orange counties.
- **A Drug Take Back Program** is located in the IU Health Bloomington Hospital lobby and is available 24/7. Community partners include Centerstone, Law Enforcement and EMS. In Monroe County, 780 pounds of medication were turned in through the program at IU Health Bloomington Hospital in 2019. In 2019, 773 pounds in Morgan County, 160 pounds in Lawrence County and 160 pounds in Orange County were collected, totaling 1,871 pounds through IU Health facilities in the SCR. In Monroe County in 2020, there were 692.5 pounds of medication turned in through this program. A total of 324 pounds of medication were turned in through January-June of 2021.
- **Behavioral Health access for Positive Link clients** is an active program. The partnership with Volunteers of America ended in 2020. They were unable to hire the needed team members. This was offered virtually through the IU Health Bloomington Hospital Behavioral Health Department in 2021.

Chronic disease: Obesity and diabetes

- The IU Health Diabetes and Medical Nutrition Center served 211 clients in an outpatient setting in 2019 and 975 patients with 281 being seen virtually in 2020. The comparison of pre-education and post education A1C testing showed an average decrease of 1.15-1.2 percent

in A1C levels in 2019-2020. The impact: for every 1 percent reduction in A1C we see a 37 percent decrease in microvascular disease. This would include risks to eyes, kidney and other nerve issues. IU Health Southern Indiana Primary Care partners developed a care map for Type 2 diabetes in Primary Care. The pathway was put into place in 2020 and increased access to dietitians and certified Diabetes Educators providing evidence-based education and care. IU Health Bloomington Hospital provided a Certified Diabetic Educator to its Endocrinology practice that was available two-days per week to support the most complicated patients. Through this work those patients in care saw an average decrease of 1.9 percent in their A1C. 165 clients were seen from January-June of 2021. For every one percent reduction in A1C, patients saw a 37 percent decrease in microvascular disease.

- **Prediabetes screenings** were held for 103 people with 48 referrals to care due to high risk levels of A1C. Collaborations with community partners for this service totaled seven. The screenings were held in the community reaching those most at risk. There was no charge for this service. These in person screenings were cancelled in 2020 due to the COVID-19 pandemic.
- **Getting Onboard Active Living program (GOAL)** served 21 children and their families in a 12-week program in 2019. Community partners have grown to ten, enabling this program to continue to be offered at no charge to families. GOAL University served 1,200 elementary school children across the state in 45 after school-based programs through a partnership with IUPUI School of Nursing, Purdue Timmy Foundation and IU School of Nursing and School of Public Health. There were 1,000 college students who received practical information about self-esteem and nutrition. Students in all programs report an increase in fruits and vegetables consumed, decrease in screen time and increased activity levels. GOAL changed to virtual groups in 2020. The referral process continued with initial education by the dietitian and group meetings/classes happening through Zoom. Videos were filmed and sent to families to learn how to cook from their pantry and how to make three ingredient pancakes and more. In June of 2021, IU Health held its largest virtual class. In addition to GOAL, Community Health also supported GOAL University, which implements an afterschool program at multiple schools in Monroe County.
- **Monroe County Tobacco Coalition** met nine times in 2019 with an average of six members attending. The Quit Now Indiana was promoted in Bloomington with 67 people referred. Partnerships with the school system exists to support tobacco education. When students on school campus are found to have tobacco products, the students are enrolled in the Teens Beat Tobacco class. This program provides monthly education about risks of tobacco use and e-cigarettes. This class is held monthly. IU Health also offered free community-based tobacco cessation classes. There were six classes per year using an eight-week curriculum. Fifty clients attended the class in 2019 with 20 reported being tobacco free at the end of the program. Monroe County Tobacco Coalition met 11

times in 2020 with an average of six members attending when able to meet in person. For this initiative the virtual option that COVID-19 provided helped grow the participation to an average of 12 virtual participants. IU Health began offering in person tobacco cessation classes again in May of 2021 and saw an average of five attendees.

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.



Bloomington Hospital