

Community Health Needs Assessment

November 26, 2018



<https://iuhealth.org/in-the-community>



Bloomington Hospital

A handwritten signature in black ink, which appears to be "Dan Peterson".

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TABLE OF CONTENTS

- EXECUTIVE SUMMARY 5
 - Introduction..... 5
 - Community Definition..... 5
 - Significant Community Health Needs..... 5

- DATA AND ANALYSIS..... 7
 - Definition of Community Assessed..... 7
 - Secondary Data Summary..... 7
 - Demographics 7
 - Economic Indicators 7
 - Local Health Status and Access Indicators 8
 - Ambulatory Care Sensitive Conditions..... 8
 - Community Need Index..... 8
 - Food Deserts 9
 - Medically Underserved Areas and Populations 9
 - Health Professional Shortage Areas 9
 - Relevant Findings of Other CHNAs 9
 - Significant Indicators..... 9
 - Primary Data Summary 11
 - Community Meetings – Monroe County & Owen County..... 11
 - Community Meetings – Lawrence County 12
 - Key Stakeholder Interview 12
 - Interviews – Monroe County 12
 - Interviews – Lawrence County..... 13
 - Community Survey..... 13

- OTHER FACILITIES AND RESOURCES IN THE COMMUNITY 17
 - Federally Qualified Health Centers 17
 - Hospitals..... 17
 - Local Health Departments (LHDs) 17
 - Other Community Resources..... 17

- APPENDIX A – OBJECTIVES AND METHODOLOGY 18
 - Regulatory Requirements..... 18
 - Methodology 18
 - Collaborating Organizations 18
 - Data Sources 19
 - Community Survey Methodology 19
 - Information Gaps 19

TABLE OF CONTENTS

APPENDIX B – SECONDARY DATA ASSESSMENT.....	20
Demographics.....	20
Economic Indicators	22
People in Poverty	22
Unemployment	24
Insurance Status	24
Crime	25
Local Health Status and Access Indicators	25
County Health Rankings	26
Community Health Status Indicators	30
Indiana State Department of Health.....	31
Behavioral Risk Factor Surveillance System.....	34
Ambulatory Care Sensitive Conditions.....	35
Community Need Index™ and Food Deserts.....	36
Dignity Health Community Need Index.....	36
Food Deserts	37
Medically Underserved Areas and Populations.....	37
Health Professional Shortage Areas (HPSA)	38
Findings of Other Community Health Needs Assessments.....	39
APPENDIX C – INTERVIEWEES AND COMMUNITY MEETING PARTICIPANTS	41
APPENDIX D – IMPACT OF ACTIONS TAKEN SINCE THE PREVIOUS CHNA	41
Obesity and Chronic Disease	41
Infant Health Factors	42
Behavioral Health.....	43
Substance Abuse.....	43
Senior Health	43
APPENDIX E – CONSULTANT QUALIFICATIONS	44

EXECUTIVE SUMMARY

Introduction

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

Indiana University Health Bloomington Hospital's (IU Health Bloomington Hospital or "the hospital") mission is to improve the health of our patients and community through innovation, and excellence and care, education, research and service. The hospital serves South Central Indiana and offers a comprehensive array of inpatient and outpatient healthcare services. Accredited by The Joint Commission, the facility is a Magnet-designated hospital.

The hospital is part of Indiana University Health (IU Health), the largest and most comprehensive health system in the state of Indiana. Indiana University 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: <https://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.

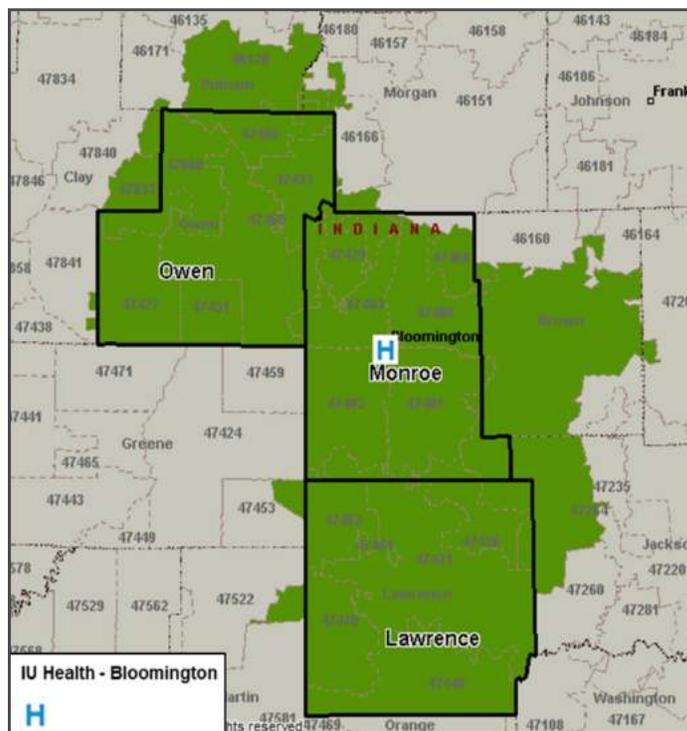
For copies of each IU Health CHNA report and also for associated implementation strategies, visit: <https://iuhealth.org/in-the-community>. Updated implementation strategies for each IU Health hospital are scheduled to be published by May 15, 2019.

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

76 percent of the hospital's inpatient cases in 2016. The estimated population of this community in 2015 was 210,551.

The following map portrays this community. The map shows county and ZIP code boundaries. Specific ZIP codes are included in analyses if any portion of the ZIP code overlaps with one or more counties.



Source: Microsoft MapPoint and IU Health, 2018

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 data¹ 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,
- Input obtained from one or more key stakeholders who were interviewed, and
- A community survey conducted in collaboration with other Indiana health systems.

Based on the assessment of the above data sources, the following community health needs have been identified (listed in alphabetical order) as significant in the community served by IU Health Bloomington Hospital. References are made below to exhibits and findings presented in this report.

¹ "Secondary data" refers to data published by others, for example the U.S. Census and the Indiana State Department of Health.

Access to Health Care Services

- Lawrence, Monroe, and Owen counties have an under-supply of primary care providers compared to both Indiana and national rates (**Exhibit 24**).
- Monroe and Owen counties have been designated as Medically Underserved Areas (**Exhibit 36**).
- Primary Care Health Professional Shortage Areas (HPSAs) are present in Lawrence and Owen counties. Mental Health HPSAs are present throughout the community (**Exhibit 37**).
- Health insurance is difficult to access for many in the community, leading to inadequate access of health care services (**Exhibit 21, 25, Interviews**).
- Access to healthcare and the cost of adequate care were both identified as primary concerns in community input (**Community Meetings, Interviews**).

Chronic Disease and Chronic Disease Management

- The community has high rates of mortality for a variety of cardiovascular diseases, heart diseases, stroke, and diabetes (**Exhibit 26**).
- Cancer incidence rates are high in both Lawrence and Owen counties, and cancer mortality in Owen County also compares unfavorably (**Exhibits 27, 28**).
- Monroe and Owen counties compare unfavorably to the Indiana average for average number of physically unhealthy days (**Exhibit 24**).
- Chronic disease was identified by community members as a significant issue (**Community Meetings, Community Survey, Interviews**).

Drug and Substance Abuse (Including Opioids and Alcohol)

- The opioid crises, other forms of drug and substance abuse, and alcohol use and abuse, were identified by community members as particularly significant (**Community Meetings, Community Survey, Interviews**).
- Monroe County compared unfavorably in excessive and binge drinking, while Lawrence County compared unfavorably in driving deaths with alcohol involvement (**Exhibits 24, 25**).
- Drug and substance abuse also has been identified as a top concern in the community and across the region in other assessments, including Indiana's State Health Improvement Plan (**Other Assessments**).

Mental Health

- Mental health status and access to mental health care were identified by community members as significant problems (**Community Survey, Other Assessments, Community Meetings**).
- Monroe County compared unfavorably to the Indiana average and to peer counties in the average number of mentally unhealthy days (**Exhibits 24, 25**).
- Lawrence and Owen counties have an under-supply of mental health providers compared to both Indiana and national rates (**Exhibit 24**).

- Mortality rates for suicide are higher in all three counties in the community than the Indiana average (**Exhibit 26**).
- Lawrence, Monroe, and Owen counties have been designated as a Mental Health Care Health Professional Shortage Areas (HPSAs) (**Exhibit 37C**).

Obesity, Diabetes, and Physical Inactivity

- Individuals providing input identified obesity and a lack of physical activity as primary concerns (**Community Meetings, Community Survey, Interviews**).
- Both the percent of adults who are obese and the percent that are physically inactive in Lawrence and Owen counties are comparatively high (**Exhibits 24, 25**).
- The mortality rates for diabetes and other conditions related to obesity (such as heart disease) are comparatively high (**Exhibit 26**).
- Other assessments identified obesity, diabetes, and lack of physical exercise as significant issues across the community (**Other Assessments**).

Social Determinants of Health

- Poverty rates in Monroe County are particularly high, and low income census tracts are present in each county in the community (**Exhibits 18, 19**). Indiana University's student population could contribute to a higher than average poverty rate for the county as a whole.
- Unemployment rates in Lawrence, Monroe, and Owen counties have been above Indiana averages in recent years (**Exhibits 20, 24**).
- Lawrence and Owen counties compares unfavorably in both high school graduation rates and college education (**Exhibits 16, 24, 25**).
- Monroe County has a higher percentage of households with severe housing problems than both the Indiana average and peer county average (**Exhibits 24, 25**).
- Community input identified issues such as poor access to affordable housing, homelessness, basic needs insecurity, and lack of workforce and education opportunities (**Community Meetings, Interviews**).
- Other community assessments identified housing issues and homelessness as issues in the community (**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 2016 this geographic area was identified as Lawrence, Monroe, and Owen counties, Indiana.

Residents from these three counties accounted for 76 percent of the hospital's 2016 inpatient discharges (Exhibit 1).

Exhibit 1: IU Health Bloomington Hospital Inpatient Discharges by County, 2016

County	Percent of Inpatients (2016)
Lawrence County	15.7%
Monroe County	51.7%
Owen County	8.7%
Total Community	76.0%

Source: Analysis of Indiana University Health Discharge Data, 2016

The estimated, total population of these counties in 2015 was 210,551 persons (Exhibit 2).

Exhibit 2: Community Population, 2015

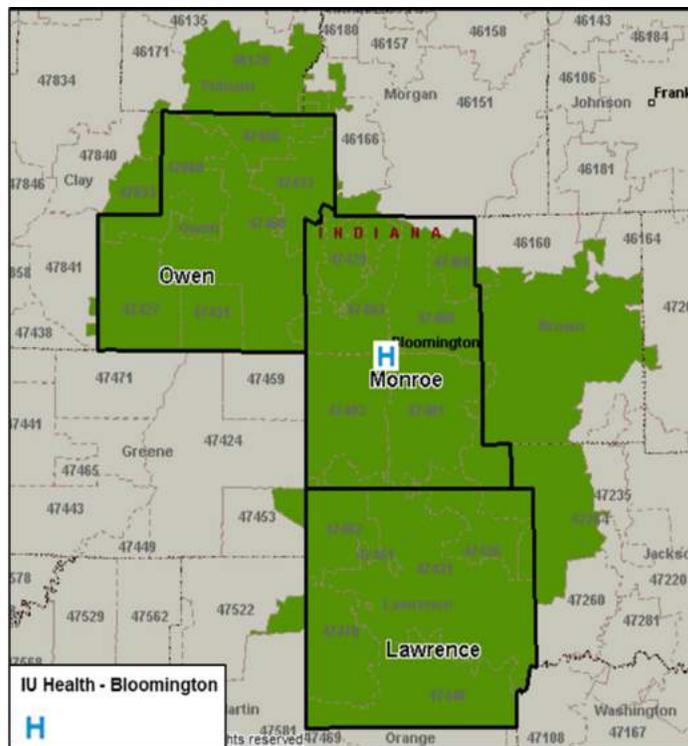
County	Estimated Population 2015	Percent of Total Community Population
Lawrence County	45,485	21.6%
Monroe County	144,257	68.5%
Owen County	20,809	9.9%
Total Community	210,551	100.0%

Source: State of Indiana by the Indiana Business Research Center, March 2018

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. Specific ZIP codes are included in the assessment if any portion of the ZIP code overlaps with one or more of the counties.

Exhibit 3: IU Health Bloomington Hospital Local Community



Source: Microsoft MapPoint and IU Health, 2018

Secondary Data Summary

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

Demographics

Population characteristics and trends directly influence community health needs. The total population in the IU Health Bloomington Hospital community is expected to grow 2.5 percent from 2015 to 2020. Between 2016 and 2021, 19 of the 24 ZIP codes in the IU Health Bloomington Hospital community are projected to gain population.

The number of persons aged 65 years and older is projected to grow at a much faster rate (17.4 percent). This should contribute to growing need for health services, since older individuals typically need and use more services than younger persons.

Economic Indicators

Many health needs have been associated with poverty. At 25 percent, Monroe County's poverty rate has been above both the Indiana and U.S. averages. Poverty rates for Black, Asian, and Hispanic (or Latino) residents in Monroe County are significantly higher than the poverty rate for White residents. Low income census tracts are prevalent in IU Health Bloomington Hospital's community.

Unemployment rates in Lawrence, Monroe, and Owen counties have been consistently above the Indiana average, rates for the three counties have improved and while still higher than the Indiana average, rates are now below or consistent with national averages. The reasons for this are varied and unclear.

The percentage of people uninsured has declined in recent years due to two primary factors:

- In recent years, unemployment rates have decreased significantly. Many receive health insurance coverage through their (or a family member's) employer.
- In 2010, the Patient Protection and Affordable Care Act (PPACA) was enacted, and Indiana was among the states that expanded Medicaid eligibility.

Local Health Status and Access Indicators

Indiana has 92 counties. In the 2018 *County Health Rankings* for overall health outcomes, Lawrence County ranked 70th, Monroe County ranked 18th, and Owen County ranked 56th.

Lawrence County had 28 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 14 were in the bottom quartile, including: health outcomes, health factors, length of life, premature death, low birth weight, adult obesity, physical inactivity, alcohol-impaired driving deaths, teen births, social and economic factors, high school graduation, unemployment, physical environment, and driving alone to work.

In Monroe County, 17 out of 42 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, percent uninsured, income inequality, social associations, and severe housing problems.

In Owen County, 27 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 15 were in the bottom quartile, including: health factors, adult obesity, access to exercise opportunities, percent uninsured, primary care physicians, access to dental care, mammography screening, social and economic factors, percent with some college, unemployment, children in poverty, social associations, injury deaths, severe housing problems, and long commute – driving alone.

In the 2018 *Community Health Status Indicators* (which compares community health indicators for each county with those for peers across the United States), the following indicators appear to be most problematic:

- Primary care physician rate
- Social association rate
- Average Daily PM2.5 (the average daily density of fine particulate matter in micrograms per cubic meter, a measure of air quality and pollution)

- Percent with severe housing problems
- Percent of smokers
- Percent uninsured
- Percent mammography screening
- Percent unemployed

According to the Centers for Disease Control and Prevention (CDC), higher than average mortality rates for intentional self-harm (suicide) and congenital malformations were a commonality across all three counties in the IU Health Bloomington Hospital community. Major cardiovascular diseases, diseases of the heart, all other diseases, ischemic heart diseases, chronic lower respiratory diseases, cerebrovascular diseases (stroke), diabetes mellitus, influenza and pneumonia, motor vehicle accidents, and symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS) were a commonality between two of the three counties in the IU Health Bloomington Hospital community. Other diseases of the circulatory system, all other external causes, and atherosclerosis were a commonality between two of the three counties in the IU Health Bloomington Hospital community that were significantly worse than the Indiana average.

Rates of communicable disease in Lawrence, Monroe, and Owen counties, were lower than the than Indiana averages for all diseases except chlamydia.

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSCs) include thirteen 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."² Among these conditions are: angina without procedure, diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

The ACSC rate for perforated appendix in the IU Health Bloomington Hospital community exceeded the Indiana average.

Community Need Index

Dignity Health, a California-based hospital system, developed and published a *Community Need Index™* (CNI) that measures barriers to health care 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

² Agency for Healthcare Research and Quality (AHRQ) *Prevention Quality Indicators*.

- The percentage of uninsured and unemployed residents
- The percentage of the population renting houses

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

The weighted average CNI score for Lawrence County was 3.0 – consistent with the national median of 3.0. The weighted average of Monroe County was 3.0 and Owen County was 3.1, both equal to or higher than the national median of 3.0. One ZIP code in the IU Health Bloomington Hospital community, Monroe 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.

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

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.”

Both Monroe and Owen counties in their entirety were designated as medically underserved areas.

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.

Areas throughout IU Health Bloomington Hospital’s community have been designated as Primary Care and Mental Health HPSAs.

Relevant Findings of Other CHNAs

This CHNA also has considered the findings of other recent, available assessments conducted by other hospital facilities, local health departments (LHDs), and the State of Indiana. These other assessments consistently have identified the following needs as significant for the community served by IU Health Bloomington Hospital.

- Drug/substance abuse
- Mental/behavioral health
- Access to basic/primary health care
- Housing issues/homelessness
- Obesity
- Transportation

Significant Indicators

Exhibit 4 presents many of the indicators discussed in the above secondary data summary. An indicator is considered significant if it varies materially from a benchmark level (e.g., an average for Indiana or the United States). For example, while Indiana’s percent poverty rate (percent of people at or below 100 percent of the Federal Poverty Level) was 15 percent, the rate in Monroe County was 25 percent. For IU Health Bloomington Hospital, the overall poverty rate is thus considered significant. The last column of **Exhibit 4** identifies where more information regarding the data sources can be found.

The benchmarks include Indiana averages, national averages, and in some cases averages for “peer counties” from across the United States. In the *Community Health Status Indicators* data source, peer counties are defined as being similar in terms of population density, household incomes, and related characteristics.

Exhibit 4: Significant Indicators

Indicator	Area	Value	Benchmark	Exhibit
Population change, 2015-2020	Monroe County	4.4%	1.9% - Indiana	12
65+ Population change, 2015-2020	Total Community	17.4%	2.5% - Total Community Population	12
Population without high school diploma	Owen County	15.8%	11.9% - Indiana	16
Poverty rate, 2012-2016	Monroe County	25.0%	15.0% - Indiana	17
Poverty rate, Asian, 2012-2016	Monroe County	53.3%	25.0% - Monroe County, Total	18
Poverty rate, Hispanic, 2012-2016	Lawrence County	43.3%	12.2% - Lawrence County White	18
Percent unemployed	Lawrence County	4.4%	3.5% - Indiana	20
Percent of adults with some college education	Owen County	49.7%	65.0% - U.S.	24
Percent of households with severe housing problems	Monroe County	21.9%	14.0% - Indiana	24
Violent crime rate	Lawrence County	300	155 - Peer counties	25
Community Needs Index	Monroe County	3.5	3.0 - U.S. Median	34
Years of potential life lost rate	Lawrence County	9,231	7,794 - Indiana	24
Average number of mentally unhealthy days	Monroe County	4.4	3.9 - Peer counties	25
Injury death rate	Owen County	94.1	79.8 - Peer counties	25
Percent of adults obese	Lawrence County	35.5%	32.0% - Indiana	24
Percent of adults physically inactive	Lawrence County	33.1%	26.8% - Indiana	24
Mortality rate (diabetes)	Owen County	39.1	26.0 - Indiana	26
Percent of adults reporting binge drinking	Monroe County	20.9%	18.6% - Indiana	24
Percent driving deaths with alcohol involvement	Lawrence County	35.9%	22.4% - Indiana	24
Population per primary care provider	Owen County	20,872	1,320 - U.S.	24
Population per mental health provider	Lawrence County	1,821	470 - U.S.	24
Percent of adults who smoke	Monroe County	19.2%	17.4% - Peer counties	25
Percent mothers smoked during pregnancy	Owen County	32.3%	15.6% - Indiana	30
Percent births low birth weight	Lawrence County	8.5%	7.3% - Peer counties	25
Mortality rate (sudden infant death syndrome)	Owen County	6.7	0.5 - Indiana	26
Teen birth rate	Lawrence County	42.3	29.9 - Peer counties	25
Percent births low birth weight	Lawrence County	8.5%	7.3% - Peer counties	25
Admissions for low birth weight births (ACSC) per 1,000 births	Owen County	8,154.5	6,174.2 - Indiana	33
Mortality rate (suicide)	Monroe County	20.5	15.4 - Indiana	26
Mortality rate (motor vehicle accidents)	Owen County	39.1	26.0 - Indiana	26
Mortality rate (cancer)	Owen County	208.1	172.5 - Indiana	27
Cancer incidence rate (all types)	Lawrence County	454.3	445.2 - Indiana	28
Chlamydia rate	Monroe County	583.7	465.0 - Indiana	29

Source: Verité Analysis

Primary Data Summary

Primary data were gathered in three different methodologies for this assessment: Community Meetings, Key Stakeholder Interviews, and a Community Survey.

Community Meetings – Monroe County & Owen County

On May 8, 2018, a meeting of the Community Health Sub-Committee of the IU Health South Central Region Board of Directors was held in Bloomington, the county seat of Monroe County. The meeting was attended by 16 individuals.

Through this meeting, IU Health sought a breadth of perspectives on the community's health based needs. The specific organizations represented at the meeting are listed below.

Organizations Represented at Community Meeting

- Bloomington Economic Development Center
- Bloomington Health Foundation
- Bloomington North High School
- IU Health
- IU Health Bloomington Hospital
- IU Health South Central Region
- Local Council of Women
- Monroe County Health Department
- Slodagraff and Niehoff
- United Way of Monroe County

The meeting began with a presentation that discussed the goals and status of the CHNA process and the purpose of the community meeting. Then, secondary data were presented, along with a summary of the most unfavorable community health indicators. For the community served by IU Health Bloomington Hospital, those indicators were (in alphabetical order):

- Cardiovascular diseases and related mortality
- Drug and substance abuse
- Motor vehicle accidents and drunk driving
- Physically and mentally unhealthy days
- Poverty and un-employment
- Severe housing problems
- Smoking, including during pregnancy
- Supply of primary care physicians and mental health providers

Meeting participants then were asked to discuss whether the identified, unfavorable indicators accurately identified the most significant community health issues and were encouraged to add issues that they believed were significant. Several issues were added, such as: childhood poverty, transportation needs, infant mortality, sexually transmitted diseases, obesity, patient compliance, and chronic disease. In addition, the group decided it would be best to split poverty and un-employment into two distinct needs.

After discussing the needs identified through secondary data and adding others to the list, each participant was asked through a voting process to identify “three to five” they consider to be most significant. From this process, the group identified the following needs as most significant in the community served by IU Health Bloomington Hospital:

- Drug and substance abuse
- Chronic disease
- Smoking, including during pregnancy
- Obesity
- Physically and mentally unhealthy days

In addition to the aforementioned meeting, two open focus groups were conducted at local schools in Monroe County and a third open focus group was conducted at the Owen County YMCA. A member of the Owen County Health Board attended the Owen County YMCA focus group. In total, 18 individuals participated in these focus groups. Individual interviews were conducted with people experiencing or recently experiencing homelessness and the Bloomington Commission on Aging.

The top health issues identified through these activities were:

- Homelessness
- Lack of mental healthcare providers
- Transportation to healthcare appointments for those without vehicles
- Food insecurity
- Substance use
 - HIV/AIDs
 - IV drug use/needle sharing
- Children and infants in need
- Housing
 - High cost
 - Long wait list for Section 8 housing
- Healthcare
 - Not enough emphasis on chronic illness management
 - Not enough emphasis on prevention
 - Lack of access to routine care
 - Getting plugged into healthcare (getting insurance/ finding provider)
 - Exclusion from healthcare if you don't know how
 - Finding a PCP accepting new patients

Other topics discussed related to quality of life included:

- Resource access
- Substance use
- Food insecurity
- Importance of side-walks for community building, transportation, and recreation
- Healthcare
- Basic needs
- Homelessness
- Childhood conditions
- Understanding self – sense of belonging to community
- Transportation
- Social connections
- Insurance

- High cost of housing
- Care of older adults in the community
- Mental health

After comparing the data gathered from the meetings and interviews, the following needs were noted as most significant for the community served by IU Health Bloomington Hospital:

- Drug and substance abuse
- Chronic disease
- Smoking, including during pregnancy
- Obesity
- Mental health

Community Meetings – Lawrence County

On April 10, 2018, a meeting of community representatives was held at IU Health Bedford Hospital in Bedford, the county seat of Lawrence County. The meeting was attended by eight community members invited by IU Health because they represent important community organizations and sectors such as: non-profit organizations, local business, health care providers, local policymakers, parks and recreation departments, and schools.

Through this meeting, IU Health sought a breadth of perspectives on the community's health needs. The specific organizations represented at the meeting are listed below.

Organizations Represented at Community Meeting

- Bedford Public Library
- Bedford Chamber of Commerce
- City of Bedford
- City of Bedford Parks and Recreation
- IU Health
- Purdue Extension
- Stone City Products

The meeting began with a presentation that discussed the goals and status of the CHNA process and the purpose of the community meeting. Then, secondary data were presented, along with a summary of the most unfavorable community health indicators. For Lawrence County, those indicators were (in alphabetical order):

- Chronic disease management and mortality
- Low birthweight and teen birth rates
- Mental illness and supply of mental health providers
- Mortality from motor vehicle accidents and other injuries
- Obesity and physical inactivity
- Smoking and smoking during pregnancy
- Unemployment and economic factors

Meeting participants then were asked to discuss whether the identified, unfavorable indicators accurately identified the most significant community health issues and were encouraged to add issues that they believed were significant. Several issues were added, such as: substance abuse and treatment, access to and pricing of healthcare, collaboration in the community on health needs, and healthy food access and knowledge.

During the meeting, a range of other topics was discussed, including:

- Hospital admissions that are preventable
- Skills gap in local area compared to job opportunities
- Mental illness stigma
- Smoking policies
- Limited resources in community
- Lack of awareness of existing programs/resources
- Population patterns in the world and in rural communities

After discussing the needs identified through secondary data and adding others to the list, each participant was asked through a voting process to identify “three to five” they consider to be most significant. From this process, the group identified the following needs as most significant in Lawrence County:

- Substance abuse and treatment
- Obesity and physical inactivity
- Access to and pricing of healthcare
- Unemployment and economic factors/workforce training and education
- Mental illness and supply of mental health providers

Key Stakeholder Interview

Interviews also were conducted with representatives of the Monroe and Lawrence County Health Departments. An interview was not conducted with a representative from the Owen County Health Department; however a member of the Owen County Health Board attended the Owen County YMCA focus group. The interviews were conducted to assure that appropriate and additional input was received from governmental public health officials. The individual that was interviewed for Monroe County did not attend a community meeting; whereas, the individual that was interviewed for Lawrence County participated in the community meeting. Accordingly, the results of the community meetings were discussed and insights were sought regarding significant community health needs, why such needs are present, and how they can be addressed.

The interviews were guided by a structured protocol that focused on opinions regarding significant community health needs, describing why such needs are present, and seeking ideas for how to address them.

Interviews – Monroe County

- The interviewee concurred that the top issues identified via the community meetings were all issues, including:
 - Drug and substance abuse
 - Chronic disease
 - Smoking, including during pregnancy
 - Obesity
 - Physically and mentally unhealthy days
- Overall, services for mental health and substance abuse treatment were considered some of the most significant needs. Substance abuse continues to be a major issue and seems to have increased in recent years despite many efforts to curb the epidemic.

- While obesity has improved in recent times in Monroe County, it is still an issue and leading to chronic diseases such as heart disease and diabetes.
- Early childhood trauma and early adult trauma were identified as contributing factors for many of these issues as it was thought that many who experience traumatic events do not learn coping skills to carry on later into life.
- Access to health care and health services is a need. Although Monroe County has an abundance of resources, it is often difficult to get economically disadvantaged populations to affordable providers.
 - There is a need for more mental health providers, particularly those that use medication-assisted treatment.
 - Navigating the healthcare system in Monroe County is very difficult for many residents, especially those on fixed incomes or in high economic need.
- Basic needs insecurity is an issue for certain residents, and affects many aspects of health.
 - True affordable housing is difficult to ensure, as minimum wage is often not high enough to support rent.
 - Many single mothers stay on social services instead of pursuing employment opportunities due to the high cost of child care.
- Encouraging vaccinations in the community is an important need, as conditions like mumps, measles and others seem to have been revitalized.
- Public health funding is a major need, as funding opportunities are typically for new programs while previously established programs have difficulty maintaining their effectiveness without continued funding.

Interviews – Lawrence County

- The interviewee confirmed that the top needs identified by the community meeting group were some of the most significant. These needs were:
 - Substance abuse and treatment
 - Obesity and physical inactivity
 - Access to and pricing of healthcare
 - Unemployment and economic factors/workforce training
 - Mental illness and supply of mental health providers

- Factors that influence many of the health needs include financial issues, information dissemination and availability, and transportation options.
- Access to affordable health insurance was identified as an issue, with the challenges of navigating the bureaucracy of health insurance difficult for many residents.
- Substance abuse was identified as a significant issue with many contributing factors, including the need for other activities and employment opportunities for young residents.
 - Support groups were thought to be available, but the need for local treatment centers and education programs about substance abuse in schools were identified as needs in the county.
- The need for a health educator was identified as significant, with immunization education and substance abuse education highlighted as particularly important.
- An increase in communicable disease, particularly with Hepatitis, has been noted in the community and tied to the substance abuse prevalence.
- There is concern among residents about adequate access to healthcare, and some residents fear that due to consolidation in healthcare that inpatient units may be on the decline as provider options in the community.

Community Survey

To inform the CHNA, a community survey was conducted by the Indiana Hospital Collaborative.³

Across Indiana, 9,161 completed questionnaires were received by all participating hospitals in the Indiana Hospital Collaborative, for an overall response rate of 11.6 percent; 5,030 questionnaires were received from the 17 Indiana counties served by one or more IU Health hospitals. For IU Health Bloomington Hospital, surveys were received from 855 community households. According to the responses, these households included 1,600 adults.

Exhibit 5 portrays the community health needs considered most significant by survey respondents from IU Health Bloomington Hospital's community.

³ For more information on the survey methodology, see Appendix A.

Exhibit 5: Community Survey – Significant Health Needs

Community Health Need	IU Health Bloomington Hospital Number of Responses	IU Health Bloomington Hospital Percent of Respondents
Substance use or abuse	621	72.7%
Obesity	428	50.1%
Poverty	364	42.5%
Mental health	347	40.5%
Chronic diseases, like diabetes, cancer, and heart disease	317	37.1%
Alcohol use or abuse	280	32.8%
Homelessness	280	32.7%
Aging and older adult needs	227	26.6%
Child neglect and abuse	217	25.4%
Tobacco use	212	24.8%
Food access, affordability, and safety	195	22.8%
Assault, violent crime, and domestic violence	163	19.1%
Sexual violence, assault, rape, or human trafficking	108	12.6%
Disability needs	87	10.2%
Reproductive health and family planning	70	8.2%
Infectious diseases, like HIV, STDs, and hepatitis	67	7.8%
Dental care	62	7.3%
Environmental issues	62	7.3%
Injuries and accidents	58	6.8%
Suicide	41	4.8%
Infant mortality	5	0.6%

Source: Community Survey

The community survey indicates that substance use or abuse, obesity, poverty, and mental health represent top concerns in the community served by IU Health Bloomington Hospital.

Exhibit 6 arrays survey responses regarding health factors across demographic and socioeconomic characteristics. The exhibit includes findings from all adults living in homes where a survey questionnaire was returned in one of the 17 counties served by IU Health.

Exhibit 7 summarizes survey responses regarding health behaviors across demographic and socioeconomic characteristics. As frequently found in community health data, physical and mental health status (and tobacco use) tends to be worse for lower-income individuals and for those without a high school diploma. Opioid misuse also appears to be more prevalent in these populations.

Exhibit 6: Community Survey – Health Factors

Measure	Total	Female	Male	White	Black	Asian	Hispanic	\$0 – \$25k	\$25 – \$75k	\$75k+	No High School Diploma
Total Number of Responses	8,885	5,694	3,137	8,487	133	111	148	1,480	3,659	3,328	329
Fair or Poor Health	16.6%	16.4%	16.8%	16.6%	33.1%	6.3%	18.2%	39.4%	16.7%	5.9%	39.2%
Physical Health – Fair or Poor	42.6%	42.8%	42.5%	42.7%	27.1%	60.4%	46.6%	17.4%	36.8%	60.8%	18.8%
Mental Health – Fair or Poor	8.2%	8.6%	7.5%	8.2%	18.0%	4.5%	5.4%	22.2%	8.0%	2.4%	20.4%
Social Well-being – Fair or Poor	61.2%	61.5%	61.2%	61.1%	52.6%	79.3%	62.2%	33.9%	57.8%	77.7%	37.4%
Are not satisfied with life	12.8%	12.3%	13.9%	12.6%	15.0%	23.4%	10.1%	19.0%	12.1%	11.2%	14.6%
Without Health Insurance	4.2%	4.2%	4.0%	4.1%	7.5%	0.9%	10.1%	6.6%	5.3%	2.1%	7.9%
Without Primary Care Physician	11.0%	10.5%	11.9%	10.9%	10.5%	20.7%	23.0%	11.2%	11.0%	12.0%	15.8%

Exhibit 7: Community Survey – Health Behaviors

Measure	Total	Female	Male	White	Black	Asian	Hispanic	\$0 – \$25k	\$25 – \$75k	\$75k+	No High School Diploma
Total Number of Responses	8,885	5,694	3,137	8,487	133	111	148	1,480	3,659	3,328	329
Smoked cigarettes or used other tobacco	9.9%	8.8%	12.0%	9.9%	8.3%	1.8%	9.5%	17.9%	11.3%	5.6%	20.4%
Physically active on regular basis	52.9%	50.3%	57.9%	52.8%	45.1%	54.1%	52.7%	37.3%	51.0%	62.3%	37.7%
Ate a healthy balanced diet	57.5%	57.9%	57.0%	57.6%	41.4%	62.2%	59.5%	42.2%	54.7%	67.6%	34.0%
Got plenty of sleep	56.2%	55.5%	57.8%	56.8%	39.1%	36.9%	46.6%	46.8%	57.1%	59.7%	43.2%
Took an opioid or narcotic that was prescribed to me	8.3%	8.9%	7.4%	8.4%	7.5%	0.0%	2.7%	15.3%	9.0%	5.0%	12.8%
Took an opioid or narcotic that was not prescribed to me	0.6%	0.6%	0.4%	0.5%	0.0%	0.9%	0.0%	1.2%	0.5%	0.4%	0.0%
Took a medication for anxiety, depression, or other mental health challenge that was prescribed to me	18.2%	22.9%	9.6%	18.4%	15.8%	4.5%	10.8%	26.4%	17.4%	16.0%	19.8%
Had blood pressure checked	48.0%	46.4%	50.9%	48.3%	38.3%	32.4%	31.8%	53.7%	52.1%	40.8%	52.0%
Drank alcohol to the point of intoxication	6.1%	4.8%	8.5%	6.1%	7.5%	1.8%	12.2%	2.9%	5.5%	8.9%	1.8%
Drove while under the influence of alcohol or drugs	1.0%	0.7%	1.6%	1.1%	0.0%	0.0%	0.7%	1.0%	1.1%	1.1%	0.3%
Took steps to reduce level of stress	27.9%	32.2%	20.2%	27.8%	33.8%	25.2%	27.7%	24.1%	24.1%	34.5%	20.4%

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 currently is one FQHC site operating in the IU Health Bloomington Hospital community (**Exhibit 8**).

Exhibit 8: Federally Qualified Health Centers, 2018

County	Facility
Owen	IHC-Owen County (Spencer)

Source: HRSA, 2018

Hospitals

Five hospitals (including IU Health Bloomington Hospital) are located in the community (**Exhibit 9**).

Exhibit 9: Hospitals, 2018

County	Facility
Lawrence	Indiana University Health Bedford Hospital (Bedford)
Lawrence	St Vincent Dunn Hospital Inc. (Bedford)
Monroe	Bloomington Meadows Behavior Health Facility (Bloomington)
Monroe	Indiana University Health Bloomington Hospital (Bloomington)
Monroe	Monroe Hospital (Bloomington)

Source: Indiana State Department of Health, 2018

Local Health Departments (LHDs)

Exhibit 10 presents information on local health departments (LHDs) that provide services in the IU Health Bloomington Hospital community.

Exhibit 10: Local Health Departments, 2018

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

Source: Indiana State Department of Health, 2018

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 Partnership, Inc. is a nonprofit 501(c) 3 organization that provides the Indiana 2-1-1 information and referral service. By calling 2-1-1 or (866) 211-9966 (available 24/7), individuals receive referrals to service providers 24 hours a day. Individuals also can search for services using the organization’s website, <https://www.in211.org/>.

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

- Housing and utilities
- Food, clothing, and household items
- Summer food programs
- Health care 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

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.⁴ 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.

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”

⁴ Internal Revenue Code, Section 501(r).

(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).⁵

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

Data from multiple sources were gathered and assessed, including secondary data⁶ 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 key informant interviews, 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 five data sources:

- Secondary data⁷ 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,
- Input obtained from individuals who were interviewed, and
- A community survey conducted in collaboration with other Indiana health systems.

Collaborating Organizations

For this assessment, IU Health Bloomington Hospital collaborated with all IU Health hospitals and also with other Indiana health systems on the community survey.

⁵ 501(r) Final Rule, 2014.

⁶ “Secondary data” refers to data published by others, for example the U.S. Census and the Indiana State Department of Health. “Primary data” refers to data observed or collected from first-hand experience, for example by conducting interviews.

⁷ “Secondary data” refers to data published by others, for example the U.S. Census and the Indiana State Department of Health.

Data Sources

Community health needs were identified by collecting and analyzing data from multiple sources. Statistics for numerous community health status, health care access, and related indicators were analyzed, including data provided by local, state, and federal government agencies, local community service organizations, and Indiana University 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 key informant interviews. Interviewees 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.

Community Survey Methodology

To inform the CHNA, a community survey was conducted. The survey was sponsored by a cooperative of Indiana hospital systems, under contract with the University of Evansville and the Indiana University School of Public Health-Bloomington. Researchers from Indiana University and University of Evansville contracted with the Center for Survey Research at Indiana University to administer the survey.

The survey was conducted in two phases, with Phase 1 conducted as a paper survey mailed to an address-based sample, and Phase 2 administered by some of the hospitals to a convenience sample they selected. IU Health participated in Phase 1.

A questionnaire was developed, with input provided by the Indiana hospital systems, and included a number of questions about general health status, access and utilization of services, personal behaviors, social determinants of health, and also respondent demographic information (e.g., ZIP code, income level, employment status, race and ethnicity, household size, gender, and age). The survey was mailed to approximately 82,000 households, and the "field period" was April 2, 2018 through June 29, 2018. The process included two mailings to each address; a postcard mailing also took place to encourage responses.

Overall, 9,161 completed questionnaires were received by all participating hospitals in the Indiana Hospital Collaborative, for an overall response rate of 11.6 percent; 5,030 questionnaires were received from the 17 Indiana counties served by one or more IU Health hospitals. A

dataset was created from the IU Health survey responses, and the responses were adjusted for two factors:

- The number of adults in each household (i.e., a survey from a household with two adults received a base weight of "2" and a survey from a household with one adult received a base weight of "1").
- A post-stratification adjustment designed to make the results more representative of the population in each community (i.e., female and older adults were overrepresented among survey respondents when compared to census data, and the adjustment made corrections).

For IU Health Bloomington Hospital, surveys were received from 855 community households. According to the responses, these households included 1,600 adults.

Information Gaps

This CHNA relies on multiple data sources and community input gathered between February 2018 and August 2018. Several data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, Community Health Status Indicators, mortality data, and others) exist only at a county-wide level of detail. Those data sources do not allow assessing 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.

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.

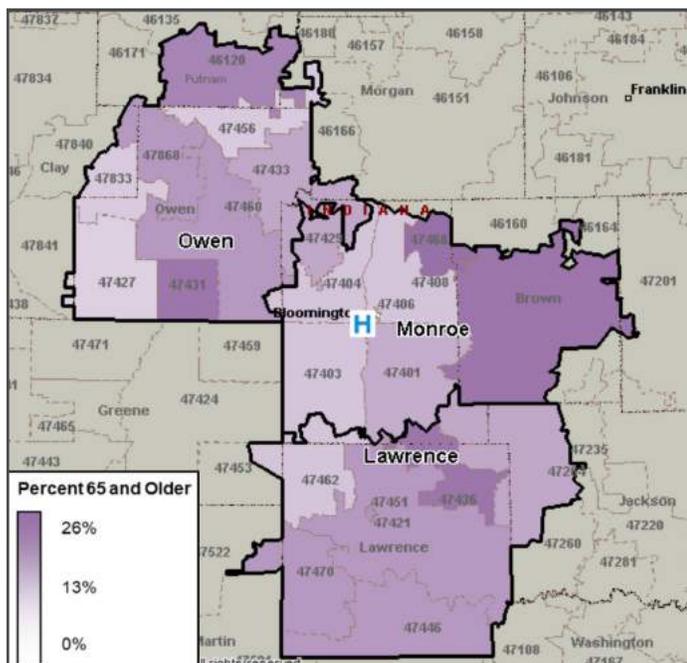
Description

Exhibit 12 shows the community's population for certain age and sex cohorts in 2015, with projections to 2020.

Observations

- The number of persons aged 65 years and older is projected to increase by 17.4 percent between 2015 and 2020. This growth rate exceeds that projected for that of Indiana as a whole (15.4 percent).
- 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 13: Percent of Population Aged 65+ by ZIP Code, 2015



Source: U.S. Census ACS 2016 5-year estimates and Microsoft MapPoint

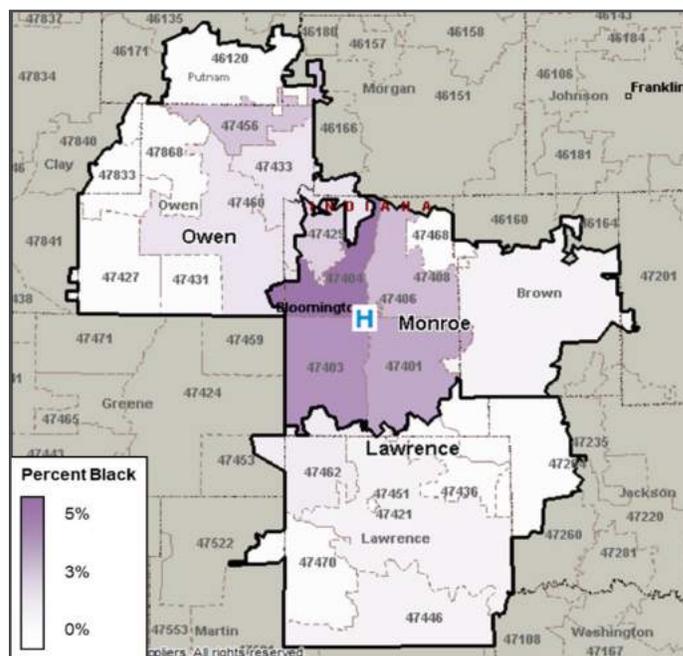
Description

Exhibit 13 portrays the percent of the population 65 years of age and older in Marion County by ZIP code.

Observations

- All counties within the IU Health Bloomington Hospital community have at least one ZIP code that will increase by at least 20 percent.

Exhibit 14: Percent of Population – Black, 2015



Source: U.S. Census ACS 2016 5-year estimates and Microsoft MapPoint

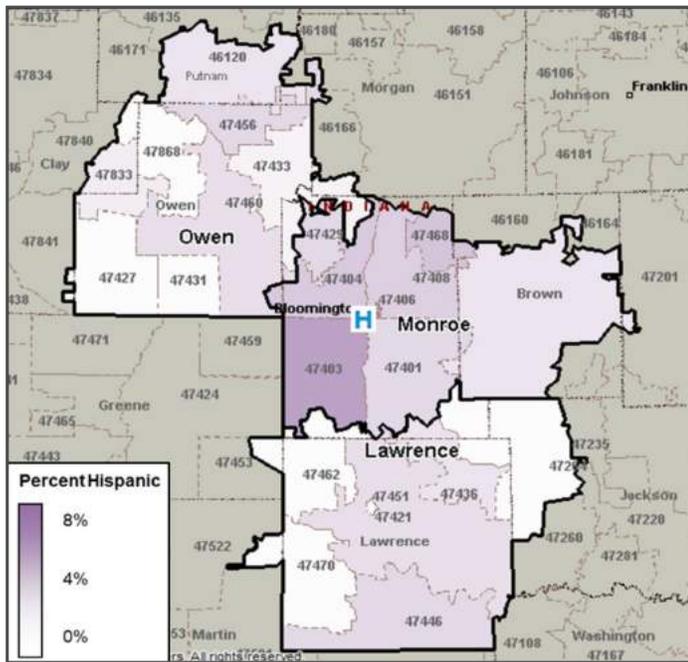
Description

Exhibit 14 portrays locations where the percentages of the population that are Black were highest in 2015.

Observations

- Nearly 14 percent of residents of ZIP code 47404 in 2015 were Black.
- In 2015, the percent of residents that were Black was under two percent in 18 of the community's 24 ZIP codes.

Exhibit 15: Percent of Population – Hispanic (or Latino), 2015



Source: U.S. Census ACS 2016 5-year estimates and Microsoft MapPoint

Description

Exhibit 15 portrays locations in the community where the percentages of the population that are Hispanic (or Latino) were highest in 2015. The diversity of the community is important to recognize given the presence of health disparities and barriers to health care access experienced by different racial and ethnic groups.

Observations

- The percentage of residents that are Hispanic (or Latino) was highest in ZIP codes 47405 (a small ZIP code in the City of Bloomington), 47403, and 47406.

Exhibit 16: Other Socioeconomic Indicators, 2012-2016

Measure	Lawrence County	Monroe County	Owen County	Indiana	United States
Population 25+ without High School Diploma	11.6%	7.7%	15.8%	11.9%	13.0%
Population with a Disability	16.9%	10.6%	17.5%	13.6%	12.5%
Population Linguistically Isolated	0.9%	4.3%	0.9%	3.2%	8.5%

Source: U.S. Census, ACS 5-Year Estimates, 2017

Description

Exhibit 16 portrays the percent of the population (aged 25 years and above) without a high school diploma, with a disability, and linguistically isolated, by county.

Observations

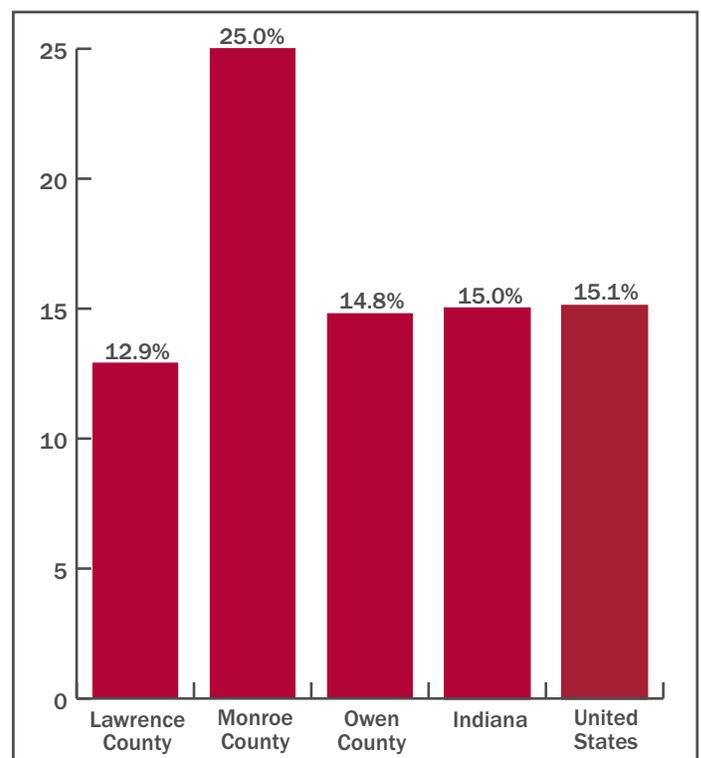
- Lawrence and Monroe counties had a lower percentage of residents aged 25 years and older without a high school diploma than the Indiana average, Owen County had a higher percentage of residents without a high school diploma than both the state and national averages.
- Monroe County had a lower percentage of the population with a disability, while Lawrence and Owen counties had a higher percentage of adults with a disability than both the Indiana and the national 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

The following economic indicators with implications for health were assessed: (1) people in poverty; (2) unemployment rates; (3) insurance status; and (4) crime rates.

People in Poverty

Exhibit 17: Percent of People in Poverty, 2012-2016



Source: U.S. Census, ACS 5-Year Estimates, 2017

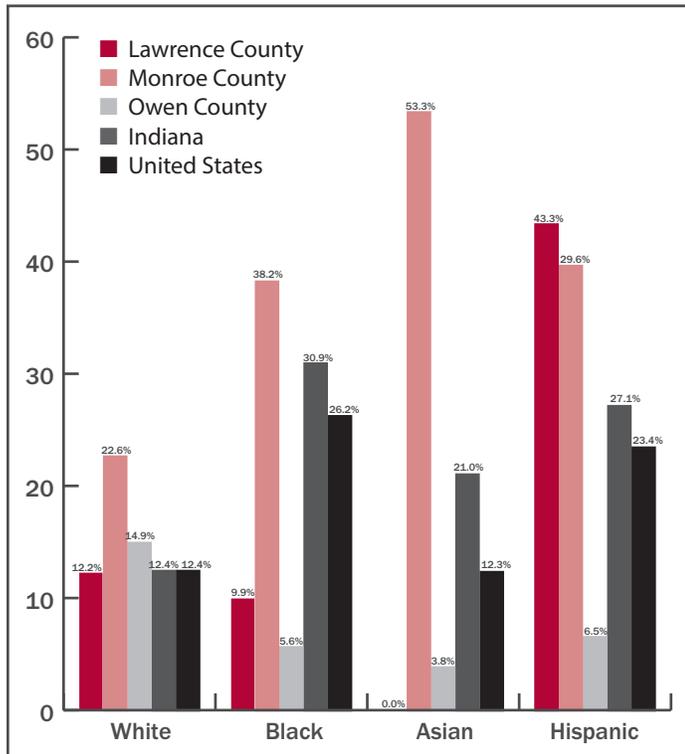
Description

Exhibit 17 portrays poverty rates by county.

Observations

- The poverty rate in Monroe County was significantly higher than the Indiana and national averages. The student population at Indiana University could contribute significantly to the above-average poverty rate for Monroe County as a whole.
- The poverty rate in Lawrence and Owen counties are both below Indiana and U.S. averages from 2012-2016.

Exhibit 18: Poverty Rates by Race and Ethnicity, 2012-2016



Source: U.S. Census, ACS 5-Year Estimates, 2017

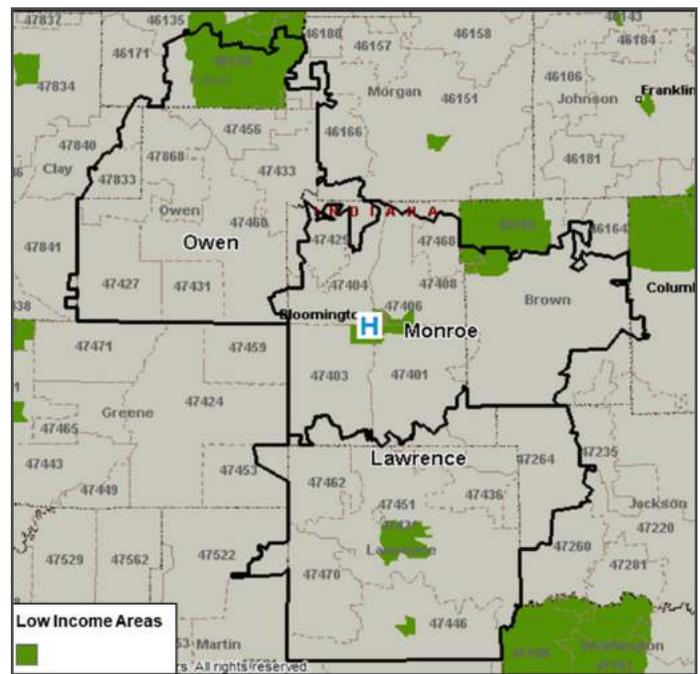
Description

Exhibit 18 portrays poverty rates by race and ethnicity.

Observations

- Poverty rates in Monroe County have been higher than the Indiana average.
- Poverty rates for Black, Asian, and Hispanic (or Latino) residents of Monroe County were significantly higher than the rates for White residents.

Exhibit 19: Low Income Census Tracts, 2017



Source: US Department of Agriculture Economic Research Service, ESRI, 2017

Description

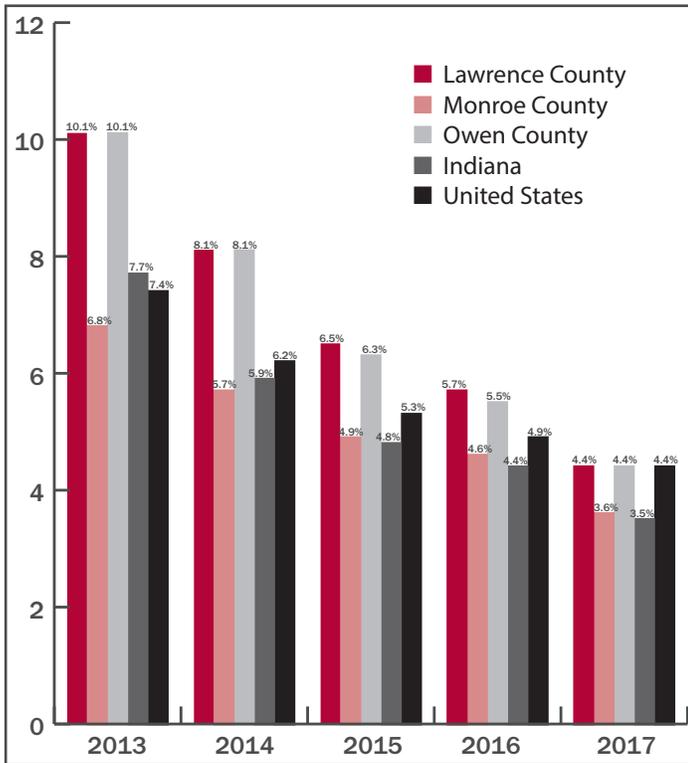
Exhibit 19 portrays the location of federally-designated low income census tracts.

Observations

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

Unemployment

Exhibit 20: Unemployment Rates, 2013-2017



Source: Bureau of Labor Statistics, 2018

Description

Exhibit 20 shows unemployment rates for 2013 through 2017 for the IU Health Bloomington Hospital community, with Indiana and national rates for comparison.

Observations

- Between 2013 and 2017, unemployment rates at the local, state, and national levels declined significantly.
- Unemployment rates in the IU Health Bloomington Hospital community have been higher than the Indiana averages.

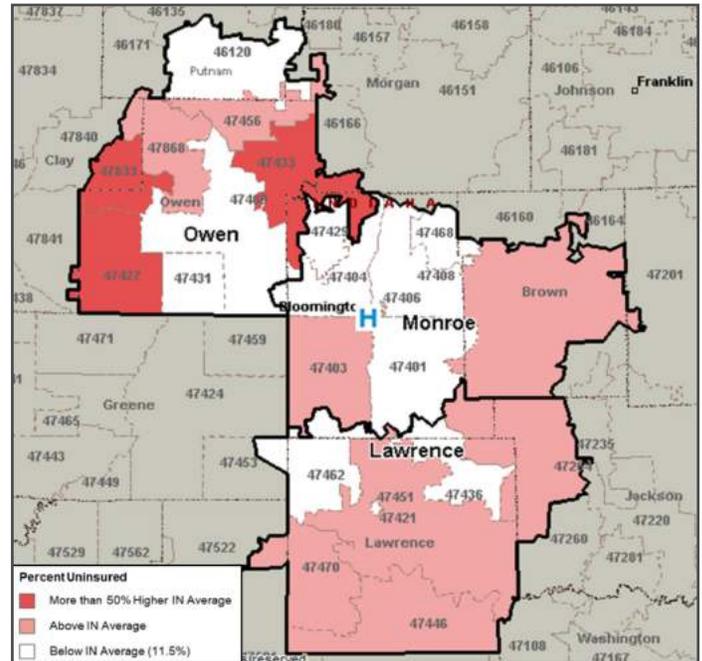
Insurance Status

Exhibit 21A: Percent of the Population without Health Insurance, 2015-2020

County	Population	Population Uninsured	Percent Uninsured
Lawrence County	45,047	5,455	12.1%
Monroe County	142,313	13,948	9.8%
Owen County	20,879	2,658	12.7%
Total Community	208,239	22,061	10.6%
Indiana	6,490,256	747,942	11.5%
United States	313,576,137	36,700,246	11.7%

Source: U.S. Census, ACS 5-Year Estimates, 2017

Exhibit 21B: Percent of the Population without Health Insurance, 2015-2020



Source: U.S. Census, ACS 5-Year Estimates, 2017

Description

Exhibit 21A presents the estimated percent of people uninsured by county in 2015, with a projection to 2020. Exhibit 21B maps the 2015 uninsured rates by ZIP code.

Observations

- In 2015, the highest uninsured rates were observed in ZIP codes within Owen County.
- Subsequent to the ACA'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 United States, uninsured rates have fallen most in states that decided to expand Medicaid.⁸

⁸ See: <http://hrms.urban.org/briefs/Increase-in-Medicaid-under-the-ACA-reduces-uninsurance.html>

Crime

Exhibit 22: Crime Rates by Type and Jurisdiction, Per 100,000, 2016

Indicator	Lawrence (County)	City of Bloomington (Monroe)	City of Ellettsville (Monroe)	Indiana
Violent crime	282.3	445.9	333.0	407.4
Murder	-	2.4	-	6.7
Rape (revised definition)	-	54.3	-	38.0
Rape (legacy definition)	10.9	-	-	28.1
Robbery	4.4	82.6	45.4	111.2
Aggravated assault	267.0	306.7	287.6	251.5
Property crime	483.6	3,188.6	1,513.5	2,606.5
Burglary	155.4	644.1	348.1	517.4
Larceny - theft	262.6	2,372.2	998.9	1,865.5
Motorvehicle theft	65.7	172.2	166.5	223.5

Source: Federal Bureau of Investigation, 2017

Description

Exhibit 22 provides crime statistics.

Observations

- 2016 crime rates in Lawrence County were lower than the Indiana averages for all types of crime except aggravated assault.
- 2016 crime rates in the City of Bloomington were higher than Indiana averages for all types of crime except murder, robbery, and motor vehicle theft

Local Health Status and Access Indicators

This section assesses health status and access indicators for the IU Health Bloomington Hospital community. Data sources include: (1) County Health Rankings, (2) the Indiana State Department of Health, and (3) the CDC's Behavioral Risk Factor Surveillance System.

Throughout this section, data and cells are highlighted if indicators are unfavorable – because they exceed benchmarks (e.g., Indiana, peer group, or U.S. averages). Where confidence interval data are available, cells are highlighted only if variances are unfavorable and statistically significant.

County Health Rankings

Exhibit 23: County Health Rankings, 2015 and 2018

Measure	Lawrence County 2015	Lawrence County 2018	Monroe County 2015	Monroe County 2018	Owen County 2015	Owen County 2018
Health Outcomes	80	70	14	18	40	56
Health Factors	67	70	7	16	77	69
Length of Life	72	78	8	6	43	62
Premature death	72	78	8	6	43	62
Quality of Life	80	66	29	60	35	42
Poor or fair health	79	38		53	39	48
Poor physical health days	55	58	28	77	68	63
Poor mental health days	55	33	48	83	38	38
Low birth weight	82	80	32	28	25	34
Health Behaviors	45	61	3	12	90	56
Adult smoking	18	35	8	36	88	58
Adult obesity	75	75	1	1	77	75
Food environment index	66	52	85	82	26	30
Physical inactivity	53	83	2	2	36	45
Access to exercise opportunities	21	21	5	12	68	77
Excessive drinking	12	14	56	92	79	47
Alcohol-impaired driving deaths	84	84	58	41	23	39
Sexually transmitted infections	60	60	85	87	67	28
Teen births	83	83	1	2	53	48
Clinical Care	43	39	11	8	46	59
Uninsured	65	64	66	72	68	69
Primary care physicians	62	64	28	18	85	89
Dentists	38	37	21	25	83	84
Mental health providers	44	53	4	4	30	39
Preventable hospital stays	44	35	3	1	8	20
Diabetes monitoring	18	19	14		7	3
Mammography screening	29	40	38	31	80	75
Social & Economic Factors	75	76	23	51	74	80
High school graduation	68	77	36	32	55	34
Some college	64	37	2	2	70	74
Unemployment	88	85	16	57	69	82
Children in poverty	52	62	26	45	71	67
Income inequality	77	64	92	92	23	45
Children in single-parent households	48	48	41	46	37	30
Social associations	21	22	85	82	87	88
Violent crime	49	58	62	56	N/A	N/A
Injury deaths	77	49	14	4	66	84
Physical Environment	73	69	71	49	59	20
Air pollution	74	4	73	2	76	4
Severe housing problems	56	45	92	92	77	71
Driving alone to work	80	74	2	2	3	25
Long commute - driving alone	57	44	3	2	88	78

Source: County Health Rankings, 2018

Description

Exhibit 23 presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation that 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.” Indicators and composites are grouped into the following categories: health behaviors, clinical care,⁹ social and economic factors, and physical environment.¹⁰ *County Health Rankings* is updated annually. *County Health Rankings 2018* relies on data from 2006 to 2017, with most data from 2011 to 2016.

The exhibit presents 2015 and 2018 rankings for each available indicator category. Rankings indicate how the county ranked among all 92 counties in the Indiana, with 1 indicating the highest (most favorable) ranking and 92 the lowest (least favorable).

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

Observations

In the 2018 County Health Rankings for overall health outcomes, Lawrence County ranked 70th, Monroe County ranked 18th, and Owen County ranked 56th.

- Lawrence County had 28 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 14 were in the bottom quartile, including: health outcomes, health factors, length of life, premature death, low birth weight, adult obesity, physical inactivity, alcohol-impaired driving deaths, teen births, social and economic factors, high school graduation, unemployment, physical environment, and driving alone to work
- In Monroe County, 17 out of 42 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, percent uninsured, income inequality, social associations, and severe housing problems.
- In Owen County, 27 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 15 were in the bottom quartile, including: health factors, adult obesity, access to exercise opportunities, percent uninsured, primary care physicians, access to dental care, mammography screening, social and economic factors, percent with some college, unemployment, children in poverty, social associations, injury deaths, severe housing problems, and long commute – driving alone.

⁹ A composite measure of Access to Care, which includes the percent of the population without health insurance and ratio of population to primary care physicians, and of Quality of Care, which includes the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

¹⁰ A composite measure that examines Environmental Quality, which includes the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which includes access to healthy food and recreational facilities and the percent of restaurants that are fast food.

Exhibit 24: County Health Rankings Data Compared to Indiana and U.S. Averages, 2018

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)	9,231	5,491	8,532	7,794	6,700
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)	8.5	7.1	7.2	8.0	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	35.5	22.7	35.5	32.0	28.0
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.9	7.1	8.2	7.0	7.7
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity	33.1	20.5	29.0	26.8	23.0
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	76.3	82.6	50.0	76.6	83.0
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	35.9	20.0	19.2	22.4	29.0
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	291.0	496.0	200.3	437.9	478.8
Teen births	Number of births per 1,000 female population ages 15-19	42.3	9.7	33.9	30.5	27.0
Clinical Care						
Uninsured	Percentage of population under age 65 without health insurance	12.0	12.3	12.2	11.3	11.0
Primary care physicians	Ratio of population to primary care physicians	3033:1	1,626:1	20,872:1	1,505:1	1,320:1
Dentists	Ratio of population to dentists	2,396:1	2,049:1	6,947:1	1,852:1	1,480:1
Mental health providers	Ratio of population to mental health providers	1,821:1	444:1	1,303:1	701:1	470:1
Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	54.2	28.1	47.8	56.8	49.0
Diabetes monitoring	Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	88.6	89.5	90.4	84.7	85.0
Mammography screening	Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	61.7	63.1	54.8	62.1	63.0
Social and Economic Environment						
High school graduation	Percentage of ninth-grade cohort that graduates in four years	87.1	92.9	92.5	87.2	83.0
Some college	Percentage of adults ages 25-44 with some post-secondary education	57.3	77.5	49.7	62.0	65.0

Exhibit 24: County Health Rankings Data Compared to Indiana and U.S. Averages, 2018 (continued)

Indicator Category	Indicator	Lawrence County	Monroe County	Owen County	Indiana	U.S.
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	5.7	4.6	5.5	4.4	4.9
Children in poverty	Percentage of children under age 18 in poverty	20.8	17.6	21.6	19.1	20.0
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.1	6.2	3.9	4.4	5.0
Children in single-parent households	Percentage of children that live in a household headed by single parent	31.2	30.9	27.0	33.7	34.0
Social associations	Number of membership associations per 10,000 population	16.7	9.7	8.6	12.3	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	300.0	276.7	0.0	356.2	380.0
Injury deaths	Number of deaths due to injury per 100,000 population	73.9	47.7	94.1	69.9	65.0
Physical Environment						
Air pollution – particulate matter ¹	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	10.6	10.4	10.6	11.1	8.7
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	11.9	21.9	13.8	14.0	19.0
Driving alone to work	Percentage of the workforce that drives alone to work	86.4	71.3	82.2	83.0	76.0
Long commute – driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes	33.2	16.1	43.7	30.5	35.0

Source: County Health Rankings, 2018

Description

Exhibit 24 provides data for each underlying indicator of the composite categories in the County Health Rankings.¹¹ 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:
 - Percentage of population aged 16 and older unemployed but seeking work.
 - Percentage of population under age 65 without health insurance.
 - Ratio of population to dentists.
 - Ratio of population to primary care physicians.

¹¹ County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

Community Health Status Indicators

Exhibit 25: Community Health Status Indicators, 2018

Indicator	Lawrence County	Monroe County	Owen County
Years of Potential Life Lost Rate			
% Fair/Poor Health			
Physically Unhealthy Days			
Mentally Unhealthy Days			
% Low Birth Weight			
% Smokers			
% Obese			
Food Environment Index			
% Physically Inactive			
% With Access to Exercise Opportunities			
% Excessive Drinking			
% Driving Deaths Alcohol-Impaired			
Chlamydia Rate			
Teen Birth Rate			
% Uninsured			
Primary Care Physicians Rate			
Dentist Rate			
Mental Health Professionals Rate			
Preventable Hospitalization Rate			
% Receiving HbA1c Screening			
% Receiving Mammography Screening			
High School Graduation Rate			
% Some College			
% Unemployed			
% Children in Poverty			
Income Ratio			
% Single-Parent Households			
Social Association Rate			
Violent Crime Rate			
Injury Death Rate			
Average Daily PM2.5			
% Severe Housing Problems			
% Drive Alone to Work			
% Long Commute – Drives Alone			

Source: County Health Rankings and Verité Analysis, 2018.

Description

County Health Rankings has organized community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control's (CDC) *Community Health Status Indicators Project* (CHSI), County Health Rankings also publishes lists of "peer counties," so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

This *Community Health Status Indicators* analysis formerly was available from the CDC. Because comparisons with peer counties (rather than only counties in the same state) are meaningful, Verité Healthcare Consulting rebuilt the CHSI comparisons for this and other CHNAs.

Exhibit 25 compares Lawrence, Monroe, and Owen counties to their respective peer counties and highlights community health issues found to rank in the bottom half and bottom quartile of the counties included in the analysis. Light grey shading indicates rankings in the bottom half of peer counties; dark grey shading indicates rankings in the bottom quartile of peer counties.

Observations

- The CHSI data indicate that the IU Health Bloomington Hospital community counties rank unfavorably in the average primary care physician rate, social association rate, average daily PM2.5 (the average daily density of fine particulate matter in micrograms per cubic meter, a measure of air quality and pollution), percent with severe housing problems, percent of smokers, percent uninsured, percent mammography screening, and percent unemployed.

Exhibit 26: Selected Causes of Death, Age-Adjusted Rates per 100,000 Population, 2016

Indicator	Lawrence County	Monroe County	Owen County	Indiana
Major cardiovascular diseases	259.9	188.9	296.6	237.4
Diseases of heart	191.0	142.1	209.6	180.6
Cancer	170.1	153.8	208.1	172.5
All other diseases	190.8	174.9	166.6	171.3
Ischemic heart diseases	117.5	60.3	144.1	102.2
Other diseases of heart	67.2	77.3	51.7	68.3
Chronic lower respiratory diseases	70.5	40.6	75.7	54.6
All other and unspecified accidents and adverse effects	14.3	31.4	24.7	40.1
Cerebrovascular diseases (stroke)	42.1	32.4	42.2	39.5
Alzheimer's disease	45.3	32.5	31.2	34.9
Diabetes mellitus	31.7	13.9	39.1	26.0
Nephritis, nephrotic syndrome and nephrosis (kidney disease)	15.7	16.9	23.5	18.4
Intentional self-harm (suicide)	17.9	20.5	19.3	15.4
Influenza and pneumonia	9.6	17.2	24.0	12.6
Motor vehicle accidents	16.2	7.7	31.2	12.4
Chronic liver disease and cirrhosis	10.8	18.7	5.4	11.2
Hypertensive heart disease with or without renal disease	6.2	4.5	13.8	10.2
Essential hypertension and hypertensive renal disease	15.3	7.8	8.3	10.0
Assault (homicide)	0.0	3.3	10.4	7.6
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)	0.0	6.3	11.3	6.2
Other diseases of circulatory system	11.5	4.4	20.8	6.2
Certain conditions originating in the perinatal period	11.7	3.1	0.0	4.9
Congenital malformations, deformations and chromosomal abnormalities	7.2	4.5	6.7	3.9
All other external causes	8.3		8.7	2.6
Atherosclerosis	0.0	2.2	15.7	1.1
Pregnancy, childbirth and the puerperium	0.0	0.0	0.0	0.8
Sudden infant death syndrome (SIDS)	0.0	0.0	6.7	0.7
Peptic ulcer	0.0	1.1	0.0	0.5

Source: Indiana State Department of Health, 2017

Description

Exhibit 26 provides age-adjusted mortality rates for selected causes of death in 2016. 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.

Observations

- High mortality rates for congenital malformations and intentional self-harm (suicide) were commonalities among selected causes of death for Lawrence, Monroe,

and Owen counties. These indicators were 50 percent worse than the Indiana average.

- High mortality rates for major cardiovascular diseases, diseases of the heart, all other diseases, ischemic heart diseases, chronic lower respiratory diseases, cerebrovascular diseases (stroke), diabetes mellitus, influenza and pneumonia, motor vehicle accidents, and symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS) were a commonality between two of the three counties in the IU Health Bloomington Hospital community.

Exhibit 27: Age-Adjusted Cancer Mortality Rates per 100,000 Population, 2016

Indicator	Lawrence County	Monroe County	Owen County	Indiana
All Cancers	170.1	153.8	208.1	172.5
Stomach	4.3	1.3	0.0	2.7
Colon, rectum and anus	13.5	16.0	2.8	14.9
Pancreas	5.7	11.0	6.7	11.9
Trachea, bronchus and lung	51.8	33.4	94.8	49.2
Breast	16.6	17.8	8.5	11.6
Cervix uteri, corpus uteri and ovary	5.4	10.5	11.3	8.2
Prostate	2.6	7.2	16.0	7.6
Urinary tract	6.6	4.8	5.2	8.8
Non-Hodgkin's lymphoma	10.7	7.2	6.7	6.4
Leukemia	11.4	4.0	0.0	6.7
Other forms of cancer	41.6	40.8	56.1	44.6

Source: Indiana State Department of Health, 2017

Description

Exhibit 27 provides age-adjusted mortality rates for selected forms of cancer in 2016. 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

- Cancer mortality rates for stomach, lung, breast, prostate, non-Hodgkin's lymphoma, and leukemia were significantly higher than the Indiana averages in the IU Health Bloomington Hospital community.

Exhibit 28: Age-Adjusted Cancer Incidence Rates per 100,000 Population, 2010-2014

Indicator	Lawrence County	Monroe County	Owen County	Indiana
All cancers	454.3	417.9	447.9	445.2
Breast	105.3	115.9	94.7	120.1
Prostate	91.4	93.8	82.1	95.7
Lung and bronchus	81.0	64.4	80.1	72.8
Colon and rectum	52.8	43.8	46.9	43.2
Uterus	30.4	21.2	24.7	27.0
Bladder	20.8	10.9	15.3	21.0
non-Hodgkin lymphoma	12.0	20.5	15.2	19.0
Melanoma of the skin	26.3	27.6	25.6	18.1
Kidney and renal pelvis	16.7	17.9	23.5	17.8
Childhood (Ages <15)	N/A	17.5	N/A	16.1
Leukemia	9.7	9.3	N/A	13.2
Pancreas	11.7	14.1	N/A	12.7
Thyroid	12.4	8.4	12.8	11.8
Oral cavity and pharynx	12.6	12.7	14.4	11.7
Ovary	N/A	10.1	N/A	11.1
Cervix	N/A	7.2	N/A	7.6
Brain and ONS	9.7	7.4	N/A	6.9
Liver and bile duct	5.8	6.0	N/A	6.5
Stomach	N/A	3.9	N/A	5.7
Esophagus	N/A	3.3	N/A	5.4

Source: Centers for Disease Control and Prevention, 2014.

Description

Exhibit 28 presents age-adjusted cancer incidence rates in the community. Light grey shading highlights indicators worse than Indiana averages.

Observations

- In Lawrence County, all cancers, lung and bronchus, colon, uterus, melanoma, thyroid, oral cavity and pharynx, and brain cancer incidence rates were higher than the Indiana averages.
- In Monroe County, colon, Non-Hodgkin's lymphoma, kidney and renal pelvis, childhood, pancreas, oral cavity

and pharynx, and brain cancer incidence rates exceeded the Indiana averages. Further, melanoma incidence rates were 50 percent worse than Indiana averages in Monroe County.

- In Owen County, the incidence rates of all cancers, lung, colon, melanoma, kidney and renal pelvis, thyroid, and oral cavity and pharynx was higher than the Indiana averages.
- In the IU Health Bloomington Hospital community, cancer incidence rates were higher for colon, melanoma, and cancer of the oral cavity and pharynx.

Exhibit 29: Communicable Disease Incidence Rates per 100,000 Population, 2016

Indicator	Lawrence County	Monroe County	Owen County	Indiana
HIV/AIDS*	80.0	143.0	95.0	188.0
Chlamydia	200.1	583.7	206.6	465.0
Gonorrhea	52.8	133.1	52.9	142.5
Primary and Secondary Syphilis	0.0	3.6	N/A	5.0

*Note: Data from 2014

Source: Indiana State Department of Health, 2016.

Description

Exhibit 29 presents incidence rates for various communicable diseases. Light grey shading highlights indicators worse than Indiana averages; dark grey shading highlights indicators more than 50 percent worse than Indiana averages, if any.

Observations

- Lawrence and Owen counties had lower communicable disease rates than the Indiana averages in 2016.
- The incidence rate of chlamydia in Monroe County was higher than the state average.

Exhibit 30: Maternal and Child Health Indicators, 2011-2015

Indicator	Lawrence County	Monroe County	Owen County	Indiana
Infant Mortality Rate (per 1,000 Live Births)	4.6	6.0	4.5	7.2
Low Birthweight Percent	8.1%	7.2%	6.3%	8.0%
Preterm Births Percent	9.6%	9.2%	9.2%	9.7%
Early Prenatal Care Percent	76.2%	79.5%	72.8%	68.1%
Smoked During Pregnancy Percent	28.5%	16.3%	32.3%	15.6%
Unmarried Mothers Percent	41.5%	31.0%	42.7%	43.2%
Breastfeeding Percent	72.7%	87.9%	78.4%	77.4%
Mother on Medicaid Percent	51.8%	33.9%	50.1%	44.3%
Teen Birth Rate (15-17)	16.3	8.6	11.7	13.6
Teen Birth Rate (15-19)	42.7	9.5	32.9	30.4

Source: Indiana State Department of Health, 2016

Description

Exhibit 30 presents various maternal and infant health indicators. Light grey shading highlights indicators worse than Indiana averages.

Observations

- Rates of smoking during pregnancy were higher than

the Indiana average in each county within the IU Health Bloomington Hospital community.

- Within the IU Health Bloomington Hospital community, the infant mortality rate, percentage of preterm births, percent who receive preterm care, and percentage of unmarried mothers represent indicators that fell below Indiana averages.

Exhibit 31A: Behavioral Risk Factor Surveillance System, Indiana Data by Race/Ethnicity, 2016

Indicator	White	Black	Hispanic	Indiana
Current Smokers	21.0%	23.0%	17.8%	21.1%
Adults without Health Care Coverage	10.8%	17.1%	39.4%	13.6%
Obese (based on BMI)	32.1%	42.1%	26.8%	32.5%
Diabetes	11.4%	16.2%	8.8%	11.5%
Angina or Coronary Heart Disease	5.1%	4.2%	2.2%	4.9%
No Physical Activity in Past Month	26.3%	27.5%	32.9%	26.8%
Asthma	9.8%	15.9%	6.3%	10.2%

Source: Behavioral Risk Factor Surveillance System, 2016

Exhibit 31B: Behavioral Risk Factor Surveillance System, Indiana Data by Income and Education Level, 2016

Indicator	<\$15,000	\$15-\$24,999	\$25-\$49,999	\$50-\$74,999	≥\$75,000	No High School Diploma	Indiana
Current Smokers	38.5%	30.0%	25.3%	16.6%	10.3%	38.1%	21.1%
Adults without Health Care Coverage	23.7%	25.3%	16.3%	7.6%	3.6%	33.1%	13.6%
Obese (based on BMI)	36.5%	35.3%	34.1%	34.6%	28.7%	34.0%	32.5%
Diabetes	18.7%	17.4%	11.9%	9.3%	6.5%	15.4%	11.5%
Angina or Coronary Heart Disease	8.3%	6.5%	5.1%	3.0%	3.0%	6.3%	4.9%
No Physical Activity in Past Month	42.5%	38.0%	28.6%	20.8%	13.7%	41.2%	26.8%
Asthma	20.4%	12.6%	9.5%	7.5%	7.1%	15.6%	10.2%

Source: Behavioral Risk Factor Surveillance System, 2016

Description

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

Exhibits 31A and 31B 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 Whites (and for lower-income residents than for those with higher incomes). Hispanic (or Latino) residents have experienced higher uninsured and physical inactivity rates.
- BRFSS indicators for residents without a high school diploma and those earning \$24,999 or less were worse than average for all indicators presented.

Ambulatory Care Sensitive Conditions (ACSC) also referred to as Preventative Quality Indicators (PQI)

Exhibit 32: PQI (ACSC) Rates per 100,000, 2017

County	Diabetes Short-Term Complications	Perforated Appendix	Diabetes Long-Term Complications	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	Hypertension	Heart Failure	Low Birth Weight
Lawrence County	28.4	700.0	90.8	634.1	73.8	363.4	7,554.7
Monroe County	13.5	806.5	14.4	339.3	24.4	205.7	4,867.6
Owen County	59.7	600.0	53.7	541.5	53.7	304.2	8,154.5
Bloomington Community	21.5	760.9	35.0	444.9	38.1	249.9	5,978.0
Indiana	59.0	632.7	110.2	664.1	63.3	434.8	6,174.2
United States	68.9	351.4	101.6	480.9	49.2	321.6	N/A

Source: IU Health, 2018 - Note: Rates are not age-sex adjusted

County	Dehydration	Community-Acquired Pneumonia	Urinary Tract Infection	Uncontrolled Diabetes	Asthma in Younger Adults	Lower-Extremity Amputation Among Patients with Diabetes
Lawrence County	73.8	215.8	167.5	25.6	9.3	111.3
Monroe County	46.0	53.2	41.5	14.4	12.4	19.4
Owen County	95.4	83.5	161.1	11.9	-	75.3
Bloomington Community	57.1	91.5	81.1	16.6	11.0	37.1
Indiana	138.5	184.5	148.2	40.6	32.0	82.4
United States	130.1	249.7	155.6	13.2	41.1	17.2

Source: IU Health, 2018 - Note: Rates are not age-sex adjusted

Description

Exhibit 32 provides 2017 ACSC (PQI) rates (per 100,000 persons) for ZIP codes in the IU Health Bloomington Hospital community – with comparisons to Indiana and U.S. averages. Light grey shading highlights indicators worse than Indiana averages; dark grey shading highlights indicators more than 50 percent 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.”¹² 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, preventive care and health education. Among these conditions are: angina without procedure, diabetes, perforated appendixes, chronic

obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

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

Observations

- For the Bloomington community, the rates of admissions for ACSC exceeded Indiana averages for one of thirteen conditions: perforated appendix.

¹² Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

Exhibit 33: Ratio of ACSC Rates for IU Health Bloomington Hospital Community and Indiana, 2017

County	Bloomington Community	Indiana	Ratio: Bloomington/Indiana
Perforated Appendix	760.9	632.7	1.2
Low Birth Weight	5,978.0	6,174.2	1.0
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	444.9	664.1	0.7
Hypertension	38.1	63.3	0.6
Heart Failure	249.9	434.8	0.6
Urinary Tract Infection	81.1	148.2	0.5
Community-Acquired Pneumonia	91.5	184.5	0.5
Lower-Extremity Amputation Among Patients with Diabetes	37.1	82.4	0.5
Dehydration	57.1	138.5	0.4
Uncontrolled Diabetes	16.6	40.6	0.4
Diabetes Short-Term Complications	21.5	59.0	0.4
Asthma in Younger Adults	11.0	32.0	0.3
Diabetes Long-Term Complications	35.0	110.2	0.3

Source: IU Health, 2018 - Note: Rates are not age-sex adjusted

Description

Exhibit 33 provides the ratio of ACSC (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.

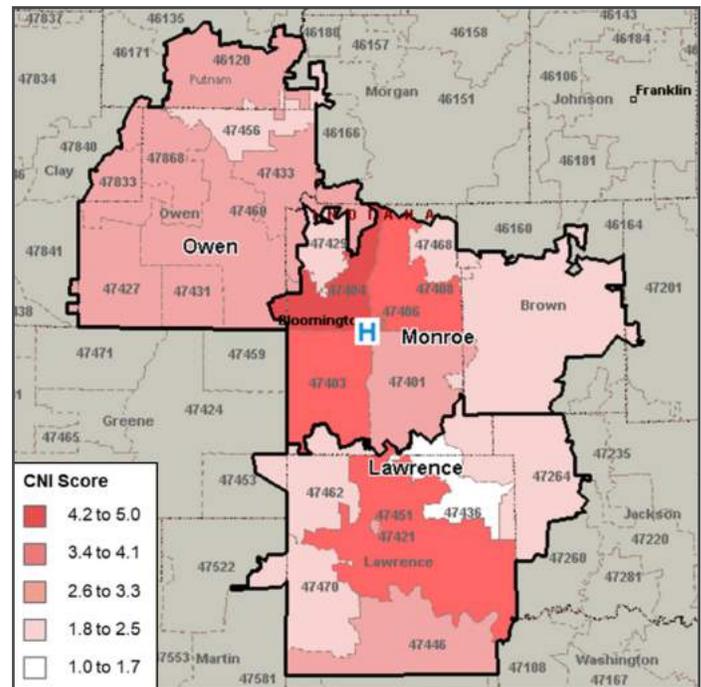
Observations

- In the IU Health Bloomington Hospital community, ACSC rates for perforated appendix were 20 percent higher than the Indiana average.
- ACSC rates for low birth weight are near the state average and exceed the state average in both Lawrence and Owen counties.

Community Need Index™ and Food Deserts

Dignity Health Community Need Index

Exhibit 34: Community Need Index, 2017



Source: Microsoft MapPoint and Dignity Health, 2017

Description

Exhibit 34 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.

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

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

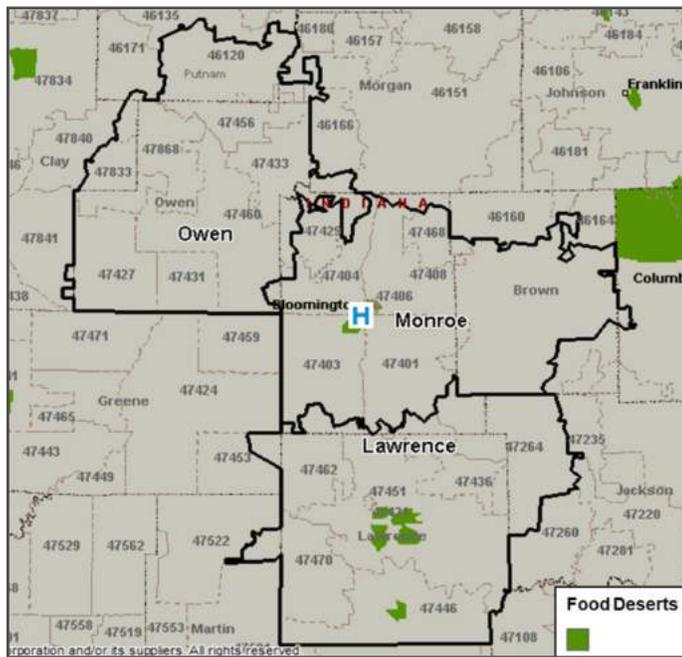
CNI scores are grouped into “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0) categories

Observations

- Lawrence County scored a 3.0, Monroe County scored a 3.5, and Owen County scored a 3.1 on the CNI scale.
- The Monroe County overall score (3.5) indicates higher than average need exists in the county.
- One ZIP code in the IU Health Bloomington Hospital community, Monroe County ZIP code 47404, scored in the “highest need” category.

Food Deserts

Exhibit 35: Food Deserts, 2017



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

Description

Exhibit 35 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.

Medically Underserved Areas and Populations

Exhibit 36: Medically Underserved Areas, 2017

County	MUA/P Service Area Name	Designation Type
Monroe	Monroe County	Medically Underserved Area
Owen	Owen Service Area	Medically Underserved Area

Source: Microsoft MapPoint and HRSA, 2017

Description

Exhibit 36 illustrates 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.” 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.¹³ 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.”¹⁴

Observations

- Monroe and Owen counties have been designated as Medically Underserved Areas.

¹³ Heath Resources and Services Administration. See <http://www.hrsa.gov/shortage/mua/index.html>

¹⁴ Ibid.

Health Professional Shortage Areas (HPSA)

Exhibit 37A: Primary Care Health Professional Shortage Areas, 2018

County	HPSA Name	HPSA Type Description
Lawrence	Low Income - Lawrence County	HPSA Population
Owen	Owen County	HPSA Geographic

Source: Health Resources and Services Administration, 2018

Description

Exhibit 37A depicts the locations of federally-designated primary care HPSA 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. In addition to areas and populations that can be designated as HPSAs, a health care 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 which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility.”¹⁵

Observations

- Owen County and low-income populations of Lawrence County have been designated as Primary Care HPSAs.
- Monroe County has not been designated to be a Primary Care HPSA.

Exhibit 37B: Dental Care Health Professional Shortage Areas, 2018

Description

Exhibit 37B shows the locations of federally-designated dental care HPSA areas.

Observations

- The counties within the IU Health Bloomington Hospital community have not been designated as dental care HPSAs.

Exhibit 37C: Mental Care Health Professional Shortage Areas, 2018

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

Source: Health Resources and Services Administration, 2018

Description

Exhibit 37C lists the locations of federally-designated mental health care HPSA areas.

Observations

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

¹⁵ U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). Health Professional Shortage Area Designation Criteria. Retrieved 2012, from <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html>

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.¹⁶ 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 assessments from local health assessments around the state, ten needs were most often prioritized:
 - 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, 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.”
- Income inequality was identified as a social determinant of health need, with the top 20 percent of households in Indiana having an income 13.5 times higher than the bottom 20 percent.
- Indiana residents report different health status based on their location in the state, largely due to access to affordable healthcare. Mid-sized population areas report the lowest number of poor or fair health days, while rural areas report the highest.
- Indiana introduced expanded insurance options for lower income residents through the Healthy Indiana Plan (HIP) 2.0 in 2015. Over 1.4 million residents are enrolled in Medicaid in the state, with more than 20,000 of these enrollees being pregnant women.
- Language barriers and cultural competency of services were identified as major obstacles to receiving healthcare and social services in Indiana.
- Heart disease, cancer, and stroke were identified as the top causes of mortality in Indiana, and identified as significant needs in the community.
- Indiana was the tenth most obese state in the nation, with over two-thirds of adults being overweight and almost a third being obese. Obesity disproportionately affects low-income, rural, and African American populations.
- Poor nutrition contributed to four of the top ten causes of death in Indiana: cardiovascular disease, stroke, diabetes, and cancer.
- Over 21 percent of Indiana adults were current smokers, the tenth highest rate in the nation and contributing to five of the top ten leading causes of death (cardiovascular disease, stroke, diabetes, chronic lower respiratory disease, and cancer). Smoking rates are disproportionately high for low income adults, those with a high school education or less, and those identifying as LGBT.
- Infant mortality has been an Indiana health priority since 2014. The national rate of infant deaths is 5.9 deaths per 1,000 live births. In Indiana, this rate was 7.5 in 2016. Additionally, Healthy People 2020 established a goal of 6.0 deaths by 2020.
- Drug overdose and opioid-related deaths increased by 500 percent between 1999 and 2016. More than 1,500 residents died of drug overdoses in 2016, with 785 of these overdoses being from opioids. This increase in opioid-related deaths represents a 1,725 percent increase since 1999.

¹⁶ Available at: <https://www.in.gov/isdh/18888.htm>

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

Exhibit 38: Significant Needs Identified in Other CHNAs

Prioritized Need	Frequency
Drug/substance abuse	3
Mental/behavioral health	3
Access to basic/primary health care	2
Housing issues/homelessness	2
Obesity	2
Transportation	2
Access to mental health services	1
Access to resources	1
Chronic conditions	1
Community engagement and building	1
Diabetes	1
Education	1
Food insecurity	1
Funding for health services	1
Infrastructure	1
Nutrition/access to healthy food	1
Personal safety	1
Physical inactivity/lack of exercise	1
Suicide	1
Tobacco use during pregnancy	1
Unemployment	1

Source: Analysis of Other CHNA Reports by Verité, 2018

Description

Several other needs assessments conducted by hospital facilities were reviewed. Significant needs identified by these facilities are presented in Exhibit 38. The reviewed assessments include the following:

- Hoosier Uplands Community Needs Assessment
- Monroe County Community Health Assessment 2015-18
- St. Vincent Dunn Hospital CHNA 2016

Observations

- The following indicators most often were identified as significant in other hospital CHNAs that assessed IU Health Bloomington Hospital's community:
 - Drug/substance abuse
 - Mental/behavioral health
 - Access to basic/primary health care
 - Housing issues and homelessness
 - Obesity
 - Transportation

APPENDIX C – INTERVIEWEES AND COMMUNITY MEETING PARTICIPANTS

Individuals from a wide variety of organizations and communities participated in the interview process and/or community meetings (**Exhibit 39**).

Exhibit 39: Interviewee and Community Meeting Participant Organizational Affiliations

- Bedford Public Library
- Bedford Chamber of Commerce
- Bloomington Economic Development Center
- Bloomington Health Foundation
- Bloomington North High School
- City of Bedford
- City of Bedford Parks and Recreation
- IU Health
- IU Health Bloomington Hospital
- IU Health South Central Region
- Lawrence County Health Department
- Local Council of Women
- Monroe County Health Department
- Owen County Health Department
- Owen County YMCA
- Purdue Extension
- Slodagraff and Niehoff
- Stone City Products
- United Way of Monroe 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.

Obesity and Chronic Disease

- **Partner with Active Living Coalition.** IU Health Bloomington Hospital partnered with the Active Living Coalition, which is made up of 53 community partners in order to promote a Community Health Fair in conjunction with a Farmer's Market. Staff time was utilized to facilitate organization along with a website for partner use. The goal of the partnership was to increase networking opportunities focusing on obesity rates and associated chronic disease rates. The engaged partners continue to grow each year. An Active Living Health Fair is held in the spring of each year at the Farmer's Market providing needed education and links to services to community members.
- **G.O.A.L. (Getting Onboard Active Living).** G.O.A.L. is a free, family-focused community approach to encouraging healthy lifestyles for children and their families through nutrition, behavior, and physical activity education. There are three cohorts of the G.O.A.L. program per year. G.O.A.L. 2.0 and G.O.A.L. personal training were developed to continue engagement of clients and families. IU Health Bloomington Hospital staff time is utilized for this program as the core G.O.A.L. program team is made up of two individuals from IU Health Bloomington Hospital. Specifically, a Program Manager who oversees G.O.A.L., coordinates and teaches weekly behavior sessions, and assists with physical activity and goal-setting. A Registered Dietitian assesses the child's pre-G.O.A.L. diet, sets weekly nutrition goals, checks food logs and teaches weekly nutrition education sessions. In addition, food is provided for demonstrations and tasting sessions. Time was also spent by staff developing partnerships with the IU School of Public Health-Bloomington to offer the add-ons after the families complete the original G.O.A.L. program. The goals of the program were to decrease screen time, increase activity time, decrease sugar sweetened beverages, and increase fruits and vegetable intake among the participants. An increase in the program participant's activity levels was noted. G.O.A.L. is not structured to be a weight loss program but has shown a decrease in BMI of attendees

on average of -1.4 and an average loss in weight of 3.1 lbs. The program continues to show that the participants decreased intake of sugar sweetened beverages as well.

- **G.O.A.L. University Serving After-School Programs.** G.O.A.L. University served afterschool programs in Indianapolis, Bloomington, and Lafayette. Staff time was utilized as part of this program. 300 student nurses from IU, IUPUI, and Purdue were trained to provide the curriculum. 2,080 kids participated in the afterschool programs. The goal of the program was to increase the activity and healthy eating habits of the students that participated.
- **Positive Link.** A program of Indiana University Health Community Health, Positive Link is the preeminent provider of comprehensive prevention and holistic social services for those impacted by HIV in Indiana. A continuum of services is provided to the community to address the health and well-being of those living with or at risk for HIV. Our service region encompasses 49 counties throughout Indiana. While not all programming is available in all counties, we are able to link community members with additional providers as needed and appropriate in the applicable geographic area. Over 2,000 HIV tests are completed each year. There are 325 clients in the Care Coordination services and 83.2% of these clients are virally suppressed.
- **Coordinated School Health.** To help improve the health of students throughout south central Indiana, IU Health Bloomington Hospital is a main partner in the Coordinated School Health initiative. A full-time staff person is on staff at IU Health Bloomington Hospital and is paid through a partnership with community agencies. The schools in the county where this initiative is ongoing are made up of over 11,000 students. The goals of the program include increasing health knowledge, attitudes and skills; increasing positive health behaviors and health outcomes; improving education outcomes; and improving social outcomes. Healthy food items have been added to the lunch line in MCCSC schools. Run clubs have been developed and continue in 13 of the 14 elementary schools as an after school program that culminates in a 1 mile and 5K run at the end of the school year for 2018.
- **Medical Nutrition Therapy and Diabetes Education.** Clients are referred by providers for diabetes education and nutrition therapy. These activities are supported by reimbursement and some hospital support for Registered Dietitians and Registered Nurses in this department. The goal is to increase educational opportunities for community members. The A1C levels of participants decreased significantly from the beginning of the program to the end of the program. These programs have been recognized as Community Benefit Subsidized Services.
- **Walking Program.** IU Health Bloomington Hospital provided support for a walking program. The program was also supported by the Monroe County YMCA and the City of Bloomington Parks and Recreation. The goal was to help the participants improve their fitness level. 100

participants took part in the program throughout the summer. The program begins in April of each year and ends at the end of October. This partnership has existed for 5 years.

- **Stroke Support Group.** This support group meets the first Thursday of each month and is facilitated by a Registered Nurse who specializes in stroke education.

Infant Health Factors

- **Safe Sleep.** Each year, over 2,000 infants are delivered at IU Health Bloomington Hospital. All families in need are provided with a pack-n-play and an education session on safe sleep. The new Nurse Family Partnership program and staff from Monroe County Public Health Clinic assist with the Safe Sleep program. These activities provide infants a safe sleep place during their first year of life. In 2017 we provided 189 education resources and cribs to families in need of a safe place for their infant to sleep. Work was also done with the fire department to train them in Direct on Site Education (DOSE) increasing the reach into the community for safe sleep.
- **Baby and Me Tobacco Free.** Moms are identified by WIC, Pediatric and O/B offices, etc. to participate in the Baby and Me Tobacco Free program. The program is an evidence based, smoking cessation program created to reduce the burden of tobacco on the pregnant and postpartum population. It is run by IU Health staff in partnership with the Monroe County Health Department. The goal is to reduce tobacco use among pregnant women and their spouse or partner. Since the inception of this program we have served over 50 family members.
- **Nurse Family Partnership Program.** The IU Health Bloomington Hospital Nurse-Family Partnership program is focused on helping families in the community have healthy pregnancies and healthy, thriving mothers and children. Services are offered at no cost to eligible females throughout pregnancy and continue through the child's second birthday. The program pairs first-time moms with a personal registered nurse to offer education and support through home visits. IU Health Bloomington Hospital Community Health supports this program in Monroe, Lawrence, Orange, Greene and Owen counties through grant funding from ISDH. This model is based on over 30 years of evidence-based research. The program began with enrollment of clients in 2018, but the work to develop community partners in the five county area began in 2017 setting the program up for success in 2018.
- **Car Seat Safety Checks.** Safety checks are provided at no charge. Car seats can be purchased at reduced rates and installed by an IU Health technician at time of purchase.
- **Riley Hospital for Children IU Health Bloomington Safety Store.** The store offers low cost child and senior adult safety products and injury prevention education.

Behavioral Health

- **Mental Health Task Force.** IU Health Bloomington Hospital collaborates with 30 community partners as part of a Mental Health Task Force. The goal of the task force is to increase awareness of need and decrease stigma. Staff time is utilized to lead and to participate in the task force. Through networking, the community agencies have increased communication and decreased barriers to care for clients.
- **Opioid Summit.** In September 2017, community partners including IU Health Bloomington Hospital hosted the First Annual South Central Opioid Summit. The purpose of the summit was to bring together the people of Monroe County and surrounding areas to collaborate on the worsening opioid epidemic. Staff time was utilized to attend planning meetings and the summit itself. In addition, IU Health-Bloomington was one of the sponsors of the event. Over 600 community members attended the summit. Planning continues for this now annual event.
- **Peer Recovery Coaches in ER.** Operating on the premise that it takes someone with lived experience to understand an addict, peer recovery coaches reach out to those who have abused or overdosed on opiates and offer recovery options. Peer recovery coaches typically have been in recovery themselves, so they can more effectively relate to patients struggling with addiction. Staff time is utilized to work with Centerstone, our community behavioral health provider, to support individuals identified that are in need of assistance. In addition, space is allocated in the emergency room for the peer recovery coach. The use of the peer recovery coach has increased and is being expanded to the inpatient setting

Substance Abuse

- **Tobacco Cessation Classes.** Educators provide tobacco cessation classes to the community to support those individuals that want to quit using tobacco. IU Health Bloomington Hospital Community Health works with Monroe County Health Department and Volunteers in Medicine to provide these classes free of charge to participants. The classes run over the course of eight weeks throughout the year, and five to six participants typically take part in each session. Staff time and Nicotine Replacement Therapy resources are provided by IU Health Bloomington Hospital via a budget of \$5,000. The goals are to reduce adult tobacco rates along with associated chronic disease rates. A total of 45 clients have taken part of these classes and have quit smoking. While the numbers may seem small having this important resource available in our community serves those who are not able to quit on their own.
- **Teen Tobacco Cessation Program.** IU Health Bloomington Hospital partners with the local school sys-

tem in order for the school to send referrals to a teen tobacco cessation program in lieu of expulsion. The goals of the program are to educate teens on the risks of all forms of tobacco and contribute to an increase in cessation rates of teens using tobacco. Due to the introduction of E-Cigarettes marketed as Vape by tobacco companies, referrals have more than doubled to this program. Staff time was utilized to integrate fax referral tools and to meet with the teens referred to the program. This monthly program meets during the school year and sees about 5-6 teens per class. The most impactful piece recently seen is the knowledge that e-cigarettes (called vaping by tobacco companies) is not a safe alternative to cigarettes. With this knowledge the teens have decreased use of these products.

Senior Health

- **Dementia Resource Identification and Support Group.** IU Health Bloomington Hospital works to support those living with dementia and their caregivers through resource identification and support groups. Staff, facilities, equipment, and supplies are provided in order to offer these services. The goals are to increase the number of those attending Virtual Dementia Tours and work with Car Fit staff to support the decision regarding driving privileges for clients. The Virtual Dementia Tours served over 60 participants. Fifteen referrals came from Car Fit to staff to have that important but tough conversation about driving privileges.
- **Dementia Capable Training.** IU Health Bloomington Hospital works with community partners to educate on awareness and identification of individuals living with dementia and how best to support them. For example, what services can a community partner modify to make their service(s) easier to use for this clientele and the clientele's family. Staff time was utilized to implement this program. In 2017, 15 companies were certified including restaurants, businesses, and hospital departments.
- **State Health Insurance Assistance Program (SHIP).** Certified SHIP counselors provide free and objective advice about Medicare and supplemental insurance for seniors.

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 more than 60 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