

# Community Health Needs Assessment

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November 15, 2018



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IU Health  
Blackford  
Hospital

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



Blackford Hospital

  
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For the 2018 Community Health Needs Assessment, Indiana University Health conducted the community survey data collection in collaboration with Indiana University, University of Evansville and an Indiana Hospital Collaborative, including Community Health Network, Franciscan Alliance, St. Vincent Health and other hospital partners.

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# EXECUTIVE SUMMARY

## Introduction

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

Indiana University Health Blackford Hospital (IU Health Blackford Hospital or “the hospital”) serves the needs of area residents. The facility provides unsurpassed care to the people of Blackford County and boasts a specialty clinic, outpatient surgical services and a paramedic-level ambulance service. At IU Health Blackford Hospital, patients and their families can experience superior care in a familiar community atmosphere.

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

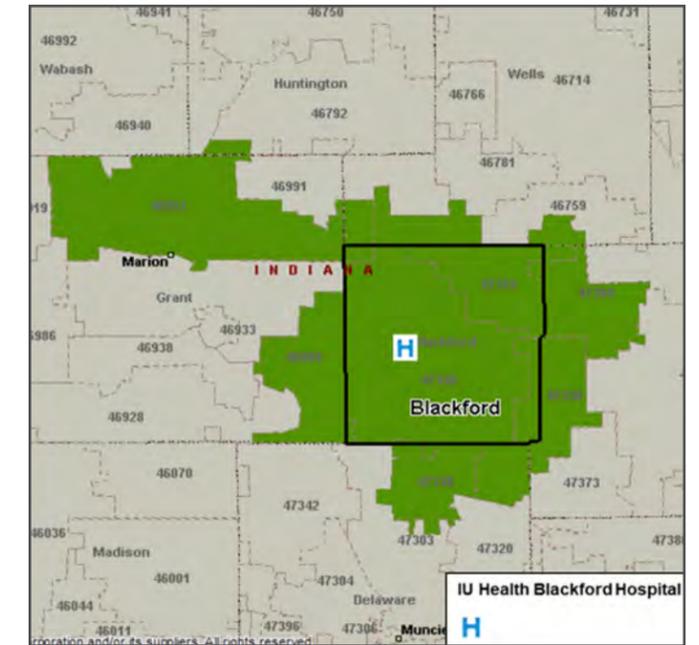
IU Health invites community members to review the Community Health Needs Assessments and provide comments to [communitybenefit@iuhealth.org](mailto:communitybenefit@iuhealth.org).

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 Blackford Hospital’s community is defined as Blackford County, Indiana. This county accounted for 74.4 percent of the hospital’s inpatient cases in 2016. The total population of this community in 2015 was 12,287.

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 data<sup>1</sup> 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,
- 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 as significant (listed in alphabetical order) in the community served by IU Health Blackford Hospital. References are made below to exhibits and findings presented in this report.

<sup>1</sup> “Secondary data” refers to data published by others, for example the U.S. Census and the Indiana Department of Health.

### Access to Health Care Services

- Above average rates of preventable hospitalizations and ambulatory care sensitive conditions (ACSCs) indicate potential access problems in the community (Exhibits 24, 33).
- Other assessments in Blackford County identified access to care as a significant need in the community (Other Assessments).
- Blackford County has an under-supply of primary care, dental, and mental health providers compared to both Indiana and national rates (Exhibit 24).
- The low income residents of Blackford County have been designated as a Medically Underserved Population (Exhibit 36).
- Health Professional Shortage Areas (HPSAs) are present in the community for primary care, dental care, and mental health care (Exhibit 37).

### Aging Population and Needs of Seniors

- Blackford County compared unfavorably to both Indiana and peer counties in older adult preventable hospitalizations (Exhibits 24, 25).
- The rate of Alzheimer's disease mortality is higher for Blackford County than the Indiana average (Exhibit 26).
- Individuals providing input identified the needs of aging and senior populations as issues throughout the community (Community Survey).

### 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).
- Blackford County compared unfavorably to Indiana and peer counties in driving deaths with alcohol involvement (Exhibits 24, 25).

### Maternal and Infant Health and Child Wellbeing

- Blackford County compared unfavorably to Indiana for the percentage of children in poverty and percent of children in single-parent households (Exhibit 24).
- The county also compared unfavorably to Indiana rates for low birthweight births, preterm births, expectant mothers who smoke during pregnancy, mothers who breastfeed, and teen birth rate (Exhibit 30).
- ACSC discharge rates for low birth weight in Blackford County are 30 percent higher than the state rate (Exhibit 33).
- Individuals providing input identified parental factors (including a lack of participation in programs designed to address household issues) and child neglect and abuse as significant concerns in Blackford County (Community Meetings, Community Survey).

### Mental Health

- Mental health, including the shortage of mental health workers and psychiatrists, was identified by many

community members as a significant issue in the community (Community Meetings).

- Blackford County has an under-supply of mental health providers compared to Indiana and peer counties (Exhibits 24, 25).
- Blackford County also compared unfavorably to peers in average number of mentally unhealthy days (Exhibit 25).
- The mortality rate for intentional self-harm (suicide) is higher in Blackford County than the Indiana rate (Exhibit 26).
- The county is designated as a Mental Health Care Health Professional Shortage Areas (HPSA) (Exhibit 37).

### Obesity and Diabetes

- Individuals providing input and other assessments identified obesity and diabetes as top concerns in Blackford County (Community Survey, Other Assessments).
- Blackford County compared unfavorably to both Indiana and peer counties in adult obesity rates (Exhibits 24, 25).
- Mortality rates for diabetes and ACSC admission rates for lower-extremity amputation among patients with diabetes were higher in Blackford County than Indiana (Exhibits 26, 32).
- Physical inactivity and a lack of access to exercise opportunities are contributing factors. Blackford County compared unfavorably to Indiana and peer counties for physical inactivity and access to exercise opportunities (Exhibits 24, 25).

### Smoking and Tobacco Usage

- Blackford County compares unfavorably to peers in adult smoking rates (Exhibit 25).
- Rates of lung cancer mortality and incidence are significantly higher in Blackford County than Indiana averages (Exhibits 27, 28).
- The percent of expectant mothers who smoked during pregnancy in Blackford County was nearly double the state average (Exhibit 30).
- Other health assessments conducted in the community identified smoking and tobacco use as issues in the community (Other Assessments).

### Social Determinants of Health

- Unemployment rates in Blackford County have been well above Indiana averages in recent years (Exhibit 20).
- Blackford County compared unfavorably to Indiana averages for percent of the population with a high school diploma and percent of adults with any college education (Exhibits 16, 24).
- Poverty was identified by members of the community as a significant need (Community Survey, Other Assessments).
- Blackford County was in the bottom quartile compared to its peers in percent of households experiencing severe housing problems and violent crime rate (Exhibit 25).

## DATA AND ANALYSIS

### Definition of Community Assessed

The community assessed by IU Health Blackford Hospital was defined by the geographic origins of the hospital's discharges. In 2016 this geographic area was identified as Blackford County, Indiana.

Residents from this county accounted for 74.4 percent of the hospital's 2016 inpatient discharges (Exhibit 1).

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

County	Percent of Inpatients (2016)
Blackford County	74.4%

Source: Analysis of Indiana University Health Discharge Data, 2016

The estimated, total population of this county in 2015 was 12,287 persons (Exhibit 2).

### Exhibit 2: Community Population, 2015

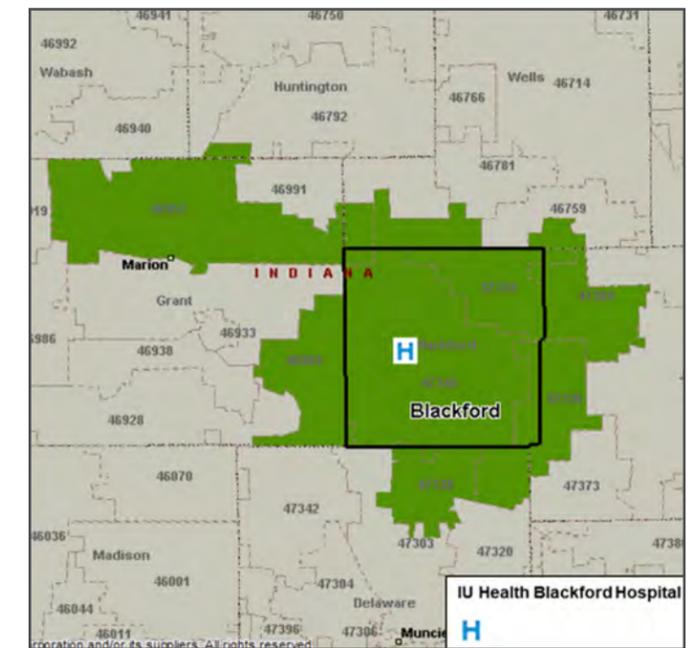
County	Estimated Population 2015
Blackford County	12,287

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

The hospital is located in Blackford County (Hartford City, Indiana, ZIP code 47348).

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 counties.

### Exhibit 3: IU Health Blackford Hospital 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 Blackford Hospital community is expected to decrease by 4.3 percent from 2015 to 2020. Between 2016 and 2021, three of the seven ZIP codes in the IU Health Blackford Hospital community are projected to gain population while four ZIP codes are projected to lose population.

While the overall population is expected to decline between 2015 and 2020, the number of persons aged 65 years and older is projected to grow 6.7 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 12.0 percent, Blackford County's poverty rate has been below both the Indiana and U.S. averages. Low income census tracts are prevalent throughout Blackford County.

Unemployment rates for Blackford County have been steadily improving and are consistent with national averages, but above Indiana averages. Crime rates in

Blackford County have been lower than the Indiana averages for all crime.

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, Blackford County ranked 86th.

Blackford County had 31 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 19 were in the bottom quartile, including: health outcomes, health factors, length of life, premature death, quality of life, poor physical health days, poor mental health days, low birth weight, adult obesity, teen births, clinical care, dentists, mental health providers, preventable hospital stays, mammography screening, unemployment, children in poverty, children in single-parent households, and injury deaths.

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 for the IU Health Blackford Hospital community:

- Years of potential life lost rate
- Percent low birth weight
- Percent smokers
- Percent obese
- Percent physically inactive
- Teen birth weight
- Dentist rate
- Mental health professionals rate
- Preventable hospitalization rate
- Percent receiving mammography screening
- Income ratio
- Violent crime rate
- Injury death rate
- Percentage with severe housing problems

According to the Centers for Disease Control and Prevention (CDC), mortality rates for major cardiovascular diseases, diseases of the heart, cancer, ischemic heart disease, Alzheimer's disease, diabetes mellitus, nephritis, intentional self-harm (suicide), chronic liver disease, and symptoms, signs and abnormal laboratory findings, not elsewhere classified (excluding sudden infant death syndrome (SIDS)) were all higher than the Indiana averages for Blackford County. Mortality rates in Blackford County were more than 50 percent higher than Indiana averages for all other unspecified accidents and adverse events, motor vehicle ac-

cidents, and other diseases of the circulatory system than the state averages.

Rates of communicable disease in Blackford County were lower than the Indiana averages.

#### 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."<sup>2</sup> 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 rates for Chronic Obstructive Pulmonary Disease (COPD) or asthma in older adults, hypertension, low birth weight, urinary tract infection, and lower-extremity amputation among patients with diabetes in the IU Health Blackford Hospital community exceeded the Indiana averages.

#### 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
- 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 Blackford County was 3.0 – aligned with the national median of 3.0.

#### 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 Blackford Hospital community have been designated as food deserts.

<sup>2</sup> Agency for Healthcare Research and Quality (AHRQ) *Prevention Quality Indicators*.

#### 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."

The low income population of Blackford County has been designated as medically underserved.

#### 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 and populations throughout Blackford County have been designated as Primary Care, Dental 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 Blackford Hospital.

- Access to basic/primary health care
- Obesity
- Physical inactivity/lack of exercise
- Poverty
- Preventive care (immunizations, screenings, etc.)
- Tobacco use/smoking

#### Significant Indicators

Exhibit 4 presents many of the indicators discussed in the above secondary data summary. An indicator is considered significant if it varies materially from a benchmark level (e.g., an average for Indiana or the United States). For example, the percent of Blackford County residents with a disability was 20.5 percent. A comparable statistic for Indiana as a whole was 13.6 percent. For the IU Health Blackford Hospital community, residents with a disability 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
65+ Population change, 2015-2020	Blackford County	6.7%	-4.3% – Total Community Population	12
Population with a disability	Blackford County	20.5%	13.6% – Indiana	16
Population without high school diploma	Blackford County	13.0%	11.9% – Indiana	16
Unemployment rate	Blackford County	4.0%	3.5% – Indiana	20
Percent of adults with some college education	Blackford County	52.8%	65.0% – U.S.	24
Years of potential life lost rate	Blackford County	10,422	7,794 – Indiana	24
Injury death rate per 100,000 population	Blackford County	108.4	69.9 – Indiana	24
Percent driving deaths with alcohol involvement	Blackford County	28.6%	22.4% – Indiana	24
Percent adults obese	Blackford County	37.3%	32.0% – Indiana	24
Percent adults physically inactive	Blackford County	30.6%	26.8% – Indiana	24
Percent with adequate access to exercise opportunities	Blackford County	60.1%	76.6% – Indiana	24
Population per dentist	Blackford County	6,075	1,480 – U.S.	24
Population per mental health provider	Blackford County	4,050	470 – U.S.	24
Older adult preventable hospitalizations rate	Blackford County	91.6	56.8 – Indiana	24
Percent of adults who smoke	Blackford County	19.9%	17.8% – Peer counties	25
Mothers who smoked during pregnancy	Blackford County	31.5%	15.6% – Indiana	30
Teen birth rate (15-19)	Blackford County	39.3	30.5 – Indiana	24
Low birthweight births	Blackford County	9.3%	8.0% – Indiana	30
Percent of children in single-parent households	Blackford County	36.9%	32.7% – Peer counties	25
Mortality rate (motor vehicle accidents)	Blackford County	42.4	12.4 – Indiana	26
Mortality rate (suicide)	Blackford County	16.8	15.4 – Indiana	26
Mortality rate (diabetes)	Blackford County	31.0	26.0 – Indiana	26
Mortality rate (cancer)	Blackford County	190.4	172.5 – Indiana	26
Mortality rate (lung cancer)	Blackford County	81.1	49.2 – Indiana	27
Cancer incidence rate (all types)	Blackford County	504.1	445.2 – Indiana	27
ACSC admissions rate for urinary tract infections	Blackford County	322.9	148.2 – Indiana	32

Source: Verité Analysis

## Primary Data Summary

Primary data were gathered in two different methodologies for this assessment: Community Meetings and a Community Survey.

### Community Meetings

On May 24, 2018, a meeting of community representatives was held at the City Hall Building in Hartford City, the county seat of Blackford County. The meeting was attended by 24 community members invited by IU Health because they represent important community organizations and sectors such as: local health departments, police/fire departments, non-profit organizations, local business, health care providers, mayors/local policymakers, faith-based organizations, 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

- 3M Hartford City
- AMVETS Post 23
- Blackford Community Foundation
- Blackford County Health Department
- Blackford County Schools
- Blackford County Sheriff's Department
- Blackford Economic Development
- Hartford City
- Hartford City Kiwanis Club
- Hester Hollis Concern Center
- IU Health
- IU Health Blackford Hospital
- Indiana State Government
- LifeStream
- Mayor's Office, Hartford City
- Meridian Health Services
- Plexus Worldwide
- Purdue Extension

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 Blackford Hospital, those indicators were (in alphabetical order):

- Air pollution
- Cancer incidence and mortality rates
- Maternal and Child Health: Low birthweight births, preterm births, and smoking during pregnancy
- Mental health and supply of mental health providers
- Motor vehicle accidents
- Obesity and physical inactivity
- Preventable hospital admissions
- Teen pregnancy

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: transportation challenges, substance abuse and overdoses, and the needs of seniors.

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

- The need to enhance services for seniors, including transportation options
- The community's need for more primary care physicians
- Whether air pollution has contributed to comparatively high rates of lung (and other types of) cancer
- The undersupply of options for indoor exercise and recreation
- Concerns regarding the projected population decrease and the need to keep young people in the community
- The need for a collective impact model to collaborate and provide a central resource for accessing information about health and services

- The importance of learning directly from community members about their needs, rather than developing services based on what could be inaccurate assumptions

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 Blackford Hospital:

- Substance abuse
- Mental health, including the shortage of mental health workers and psychiatrists
- The need to provide health education to enhance health literacy
- The need to reduce or eliminate barriers to collaboration among community organizations, including the lack of sharing information about available resources to residents and other organizations
- Parental factors, including a lack of participation in available programs designed to address a variety of social and health-related issues in households

### Community Survey

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

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 Blackford Hospital, surveys were received from 296 community households. According to the responses, these households included 530 adults.

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

<sup>3</sup> For more information on the survey methodology, see Appendix A.

**Exhibit 5: Community Survey – Significant Health Needs**

Community Health Need	IU Health Blackford Hospital Number of Responses	IU Health Blackford Hospital Percent of Respondents
Substance use or abuse	245	82.9%
Obesity	137	46.3%
Chronic diseases, like diabetes, cancer, and heart disease	129	43.5%
Poverty	125	42.3%
Aging and older adult needs	108	36.6%
Child neglect and abuse	101	34.3%
Alcohol use or abuse	96	32.3%
Food access, affordability, and safety	90	30.2%
Tobacco use	75	25.4%
Disability needs	54	18.4%
Environmental issues	53	17.8%
Mental health	49	16.6%
Suicide	29	9.7%
Reproductive health and family planning	24	8.0%
Assault, violent crime, and domestic violence	23	7.7%
Sexual violence, assault, rape, or human trafficking	20	6.6%
Infectious diseases, like HIV, STDs, and hepatitis	16	5.4%
Dental care	15	5.2%
Homelessness	13	4.3%
Injuries and accidents	12	4.0%
Infant mortality	0	0.0%

Source: Community Survey

The community survey indicates that substance use and abuse, obesity, chronic diseases, and poverty represent top concerns in the community served by IU Health Blackford Hospital.

**Exhibit 6** arrays survey responses regarding health factors across demographic and socioeconomic characteristics. The exhibit includes findings from surveys returned by adults living in 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%

## Exhibit 7: Community Survey – Health Behaviors (continued)

Measure	Total	Female	Male	White	Black	Asian	Hispanic	\$0 – \$25k	\$25 – \$75k	\$75k+	No High School Diploma
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 Blackford 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 are no FQHC sites operating in the IU Health Blackford Hospital community, so there is no **Exhibit 8**.

### Hospitals

One hospital (IU Health Blackford Hospital) is located in the community (**Exhibit 9**).

#### Exhibit 9: Hospitals, 2018

County	Facility
Blackford	IU Health Blackford Hospital (Hartford City)

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 Blackford Hospital community.

#### Exhibit 10: Local Health Departments, 2018

County	Public Health Department
Blackford	Blackford County Health Dept. (Hartford City)

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 Blackford 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

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” (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).<sup>5</sup>

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 data<sup>6</sup> published by others and primary data obtained through community input. See Appendix B for an assessment of secondary data. Input from the community was received through community meetings and a community survey.

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

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

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

- Secondary data<sup>7</sup> 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,
- A community survey conducted in collaboration with other Indiana health systems.

### Collaborating Organizations

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

<sup>5</sup> 501(r) Final Rule, 2014.

<sup>6</sup> “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 community meetings.

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

## 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.<sup>4</sup> 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

<sup>4</sup> Internal Revenue Code, Section 501(r).

### 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 community meetings. Participants included: individuals with special knowledge of or expertise in public health; local public health departments; agencies with current data or information about the health and social needs of the community; representatives of social service organizations; and leaders, representatives, and members of medically underserved, low-income, and minority populations.

### 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 the IU Health Blackford Hospital community, surveys were received from 296 community households. According to the responses, these households included 530 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), questions, and prioritization processes can contribute to differences in findings.

## APPENDIX B – SECONDARY DATA ASSESSMENT

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

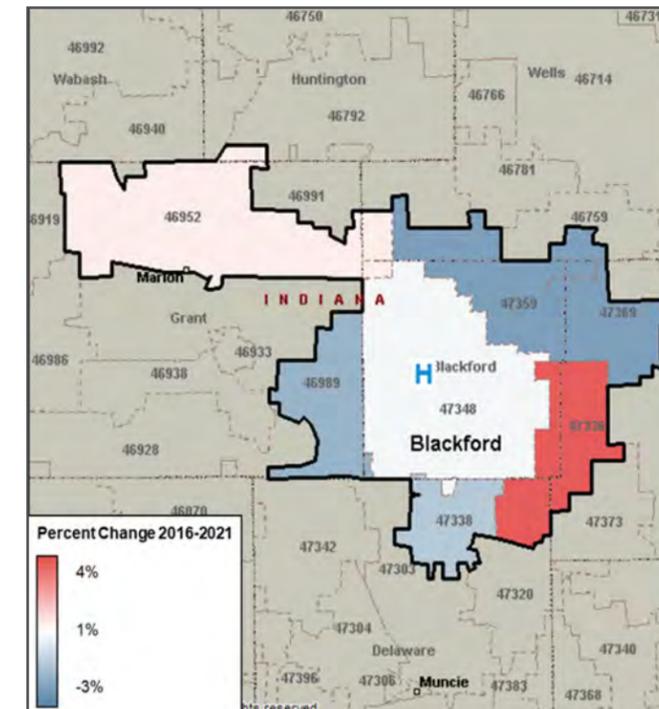
### Demographics

#### Exhibit 11A: Percent Change in Community Population by County, 2015-2020

County	Estimated Population 2015	Estimated Population 2020	Percent Change 2015-2020
Blackford County	12,287	11,759	-4.3%
Indiana Total	6,612,768	6,738,573	1.9%

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

#### Exhibit 11B: Percent Change in Community Population by ZIP Code, 2016-2021



Healthcare Advisory Board, 2017

### Description

Exhibit 11A shows the total population for Blackford County in 2015 and projections to 2020. Exhibit 11B maps the percent change in population by ZIP code between 2016 and 2021 for each ZIP code in the community.

### Observations

- A decrease in population is projected in Blackford County between 2015 and 2020.

#### Exhibit 12: Percent Change in Population by Age/Sex Cohort, 2015-2020

Age/Sex Cohort	Estimated Population 2015	Projected Population 2020	Percent Change 2015-2020
Blackford County	12,287	11,759	-4.3%
0-17	2,706	2,591	-4.2%
Male, 18-44	1,819	1,659	-8.8%
Female, 18-44	1,808	1,653	-8.6%
45-64	3,464	3,198	-7.7%
65+	2,490	2,658	6.7%
Indiana State	6,612,768	6,738,573	1.9%
0-17	1,578,079	1,571,356	-0.4%
Male, 18-44	1,178,486	1,187,607	0.8%
Female, 18-44	1,160,314	1,169,877	0.8%
45-64	1,729,765	1,695,267	-2.0%
65+	966,124	1,114,466	15.4%

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

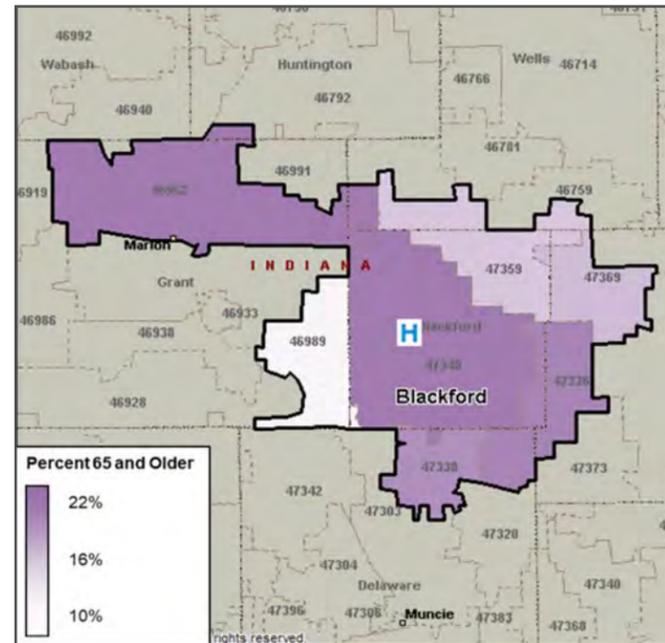
### Description

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 6.7 percent between 2015 and 2020.
- 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

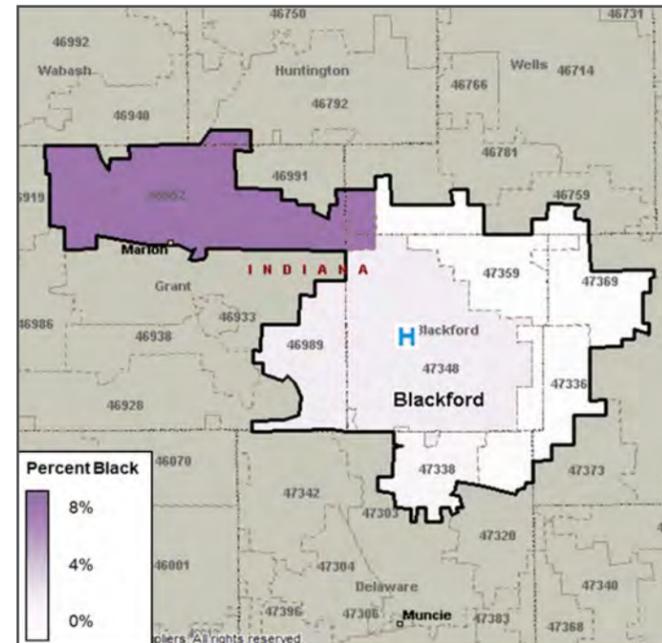
**Description**

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

**Observations**

- ZIP codes 46952 and 47348 have the highest proportion of the population aged 65 and older in the community, each above 20 percent.

**Exhibit 14: Percent of Population – Black, 2015**



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

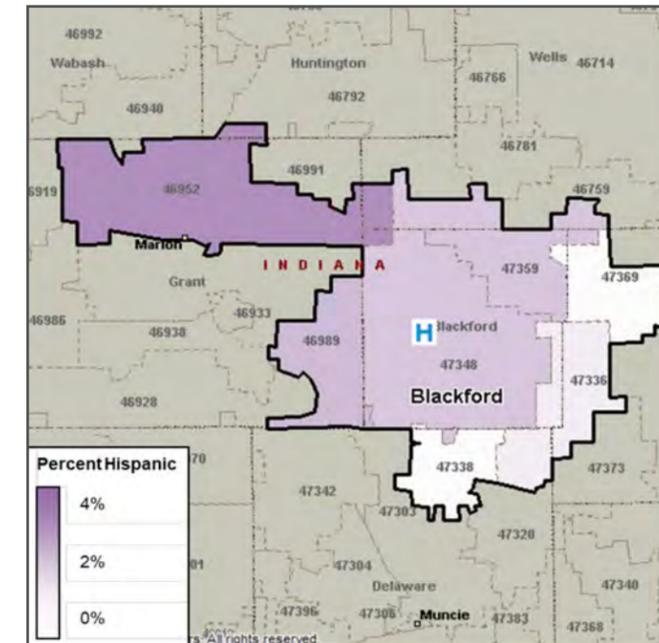
**Description**

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

**Observations**

- Blackford County had one ZIP code that had over five percent of the population that was Black in 2015 (46952).

**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 Blackford County ZIP code 46952 (3.1 percent).

**Exhibit 16: Other Socioeconomic Indicators, 2012-2016**

Measure	Blackford County	Indiana	United States
Population 25+ without High School Diploma	13.0%	11.9%	13.0%
Population with a Disability	20.5%	13.6%	12.5%
Population Linguistically Isolated	1.0%	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**

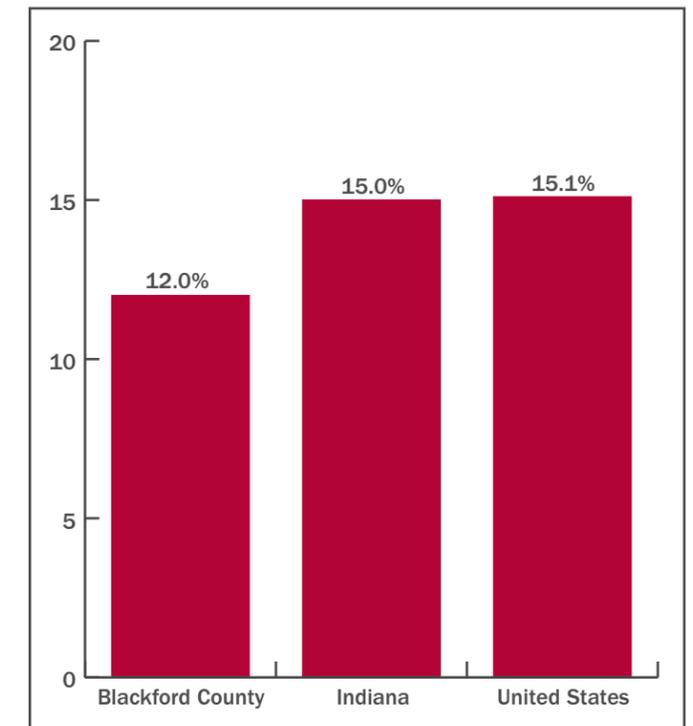
- Blackford County had a higher percentage of residents aged 25 and older without a high school diploma than the Indiana average.
- Blackford County had a higher percentage of residents with a disability than both the Indiana and U.S. averages.

**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

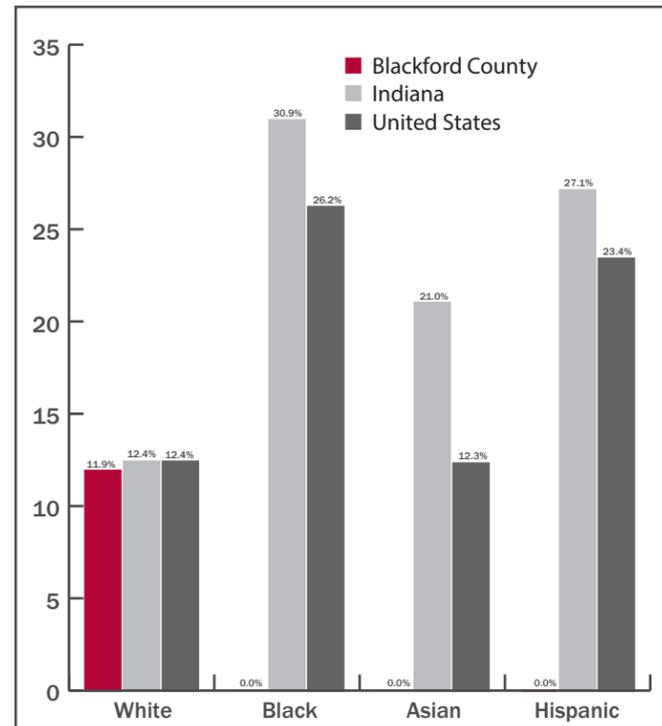
**Description**

Exhibit 17 portrays poverty rates by county.

**Observations**

- The poverty rate in Blackford County was well below Indiana and national averages from 2012-2016.

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



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

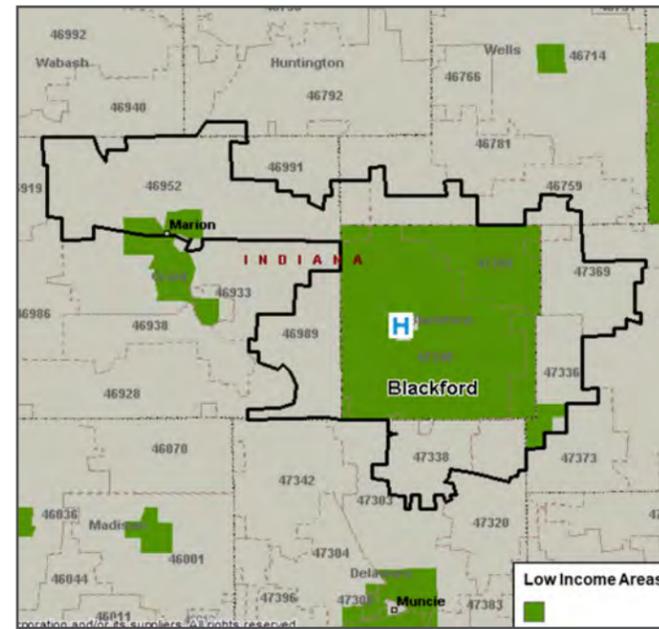
**Description**

Exhibit 18 portrays poverty rates by race and ethnicity.

**Observations**

- Due to small samples of various population cohorts living in Blackford County, various demographic cohort poverty rates are reported as 0 percent.
- Poverty rates for the White population in Blackford were below both Indiana and U.S. averages.

**Exhibit 19: Low Income Census Tracts, 2017**



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

**Description**

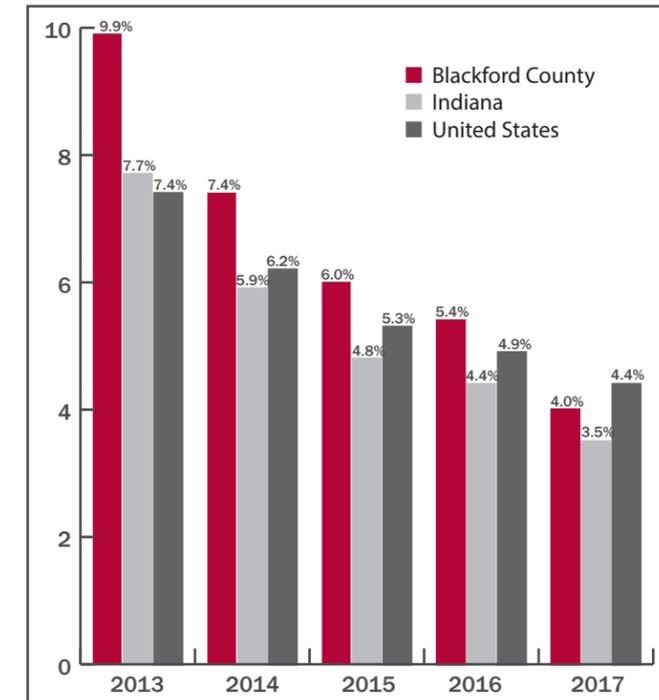
Exhibit 19 portrays the location of federally-designated low income census tracts.

**Observations**

- Low income census tracts are present throughout areas of the IU Health Blackford 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 Blackford County, with Indiana and national rates for comparison.

**Observations**

- Between 2013 and 2017, unemployment rates at the local, state, and national levels declined.
- The unemployment rates in Blackford County have recently been above Indiana averages, but below national averages.
- Numerous factors can contribute to changes in unemployment rates, including the number of people seeking employment. This assessment did not research such factors.

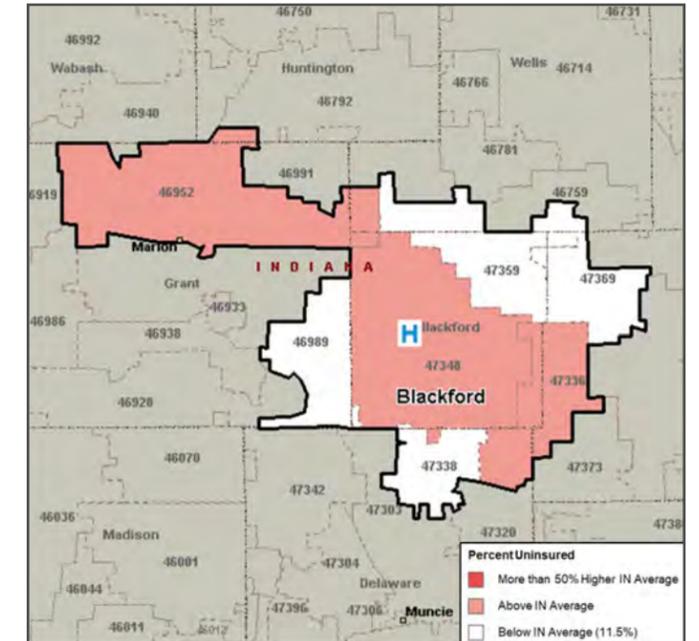
**Insurance Status**

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

County	Population	Population Uninsured	Percent Uninsured
Blackford County	12,199	1,633	13.4%
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**

- The uninsured rates in three Blackford County ZIP codes were higher than the Indiana average (46952, 47336, and 47348).
- 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.<sup>8</sup>

<sup>8</sup> 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	Blackford	Indiana
Violent crime	8.1	407.4
Murder	-	6.7
Rape (revised definition)	-	38.0
Rape (legacy definition)	-	28.1
Robbery	-	111.2
Aggravated assault	8.1	251.5
Property crime	242.6	2,606.5
Burglary	56.6	517.4
Larceny – theft	177.9	1,865.5
Motorvehicle theft	8.1	223.5

Source: Federal Bureau of Investigation, 2017

#### Description

Exhibit 22 provides crime statistics.

#### Observations

- Crime rates for Blackford County were well below Indiana averages.

## Local Health Status and Access Indicators

This section assesses health status and access indicators for the IU Health Blackford 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 (typically, Indiana 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	Blackford County 2015	Blackford County 2018
<b>Health Outcomes</b>	86	86
<b>Health Factors</b>	78	73
<b>Length of Life</b>	75	88
Premature death	75	88
<b>Quality of Life</b>	90	73
Poor or fair health	88	51
Poor physical health days	86	73
Poor mental health days	84	68
Low birthweight	76	72
<b>Health Behaviors</b>	81	64
Adult smoking	82	49
Adult obesity	90	89
Food environment index	52	30
Physical inactivity	74	62
Access to exercise opportunities	64	57
Excessive drinking	31	16
Alcohol-impaired driving deaths	1	66
Sexually transmitted infections	59	8
Teen births	80	73
<b>Clinical Care</b>	86	84
Uninsured	30	32
Primary care physicians	55	25
Dentists	68	81
Mental health providers	83	79
Preventable hospital stays	91	89
Diabetes monitoring	64	28
Mammography screening	79	79
<b>Social &amp; Economic Factors</b>	70	66
High school graduation	13	34
Some college	89	59
Unemployment	80	79
Children in poverty	70	71
Income inequality	5	16
Children in single-parent households	90	77
Social associations	1	4
Violent crime	32	12
Injury deaths	79	90
<b>Physical Environment</b>	40	45
Air pollution	37	32
Severe housing problems	33	55
Driving alone to work	61	66
Long commute – driving alone	55	49

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, which incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” Indicators and composites are grouped into the following categories: health behaviors, clinical care,<sup>9</sup> social and economic factors, and physical environment.<sup>10</sup> *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 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

- Blackford County had 31 out of 42 indicators ranked in the bottom half of Indiana counties. Of those, 19 were in the bottom quartile, including: health outcomes, health factors, length of life, premature death, quality of life, poor physical health days, poor mental health days, low birth weight, adult obesity, teen births, clinical care, dentists, mental health providers, preventable hospital stays, mammography screening, unemployment, children in poverty, children in single-parent households, and injury deaths.

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

Indicator Category	Indicator	Blackford County	Indiana	U.S.
<b>Health Outcomes</b>				
Length of life	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	10,422	7,794	6,700
Quality of life	Percentage of adults reporting fair or poor health (age-adjusted)	16.9	17.7	16.0
Quality of life	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	4.1	3.9	3.7
Quality of life	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.2	4.3	3.8
Quality of life	Percentage of live births with low birthweight (< 2500 grams)	8.2	8.0	8.0
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult smoking	Percentage of adults who are current smokers	19.9	21.1	17.0
Adult obesity	Percentage of adults that report a BMI of 30 or more	37.3	32.0	28.0
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.2	7.0	7.7
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity	30.6	26.8	23.0
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	60.1	76.6	83.0
Excessive drinking	Percentage of adults reporting binge or heavy drinking	16.6	18.6	18.0
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement	28.6	22.4	29.0
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	153.2	437.9	478.8
Teen births	Number of births per 1,000 female population ages 15-19	39.3	30.5	27.0

<sup>9</sup> 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.

<sup>10</sup> 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 (continued)**

Indicator Category	Indicator	Blackford County	Indiana	U.S.
<b>Clinical Care</b>				
Uninsured	Percentage of population under age 65 without health insurance	10.4	11.3	11.0
Primary care physicians	Ratio of population to primary care physicians	1,757:1	1,505:1	1,320:1
Dentists	Ratio of population to dentists	6,075:1	1,852:1	1,480:1
Mental health providers	Ratio of population to mental health providers	4,050:1	701:1	470:1
Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	91.6	56.8	49.0
Diabetes monitoring	Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	87.6	84.7	85.0
Mammography screening	Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	54.2	62.1	63.0
<b>Social and Economic Environment</b>				
High school graduation	Percentage of ninth-grade cohort that graduates in four years	92.5	87.2	83.0
Some college	Percentage of adults ages 25-44 with some post-secondary education	52.8	62.0	65.0
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	5.4	4.4	4.9
Children in poverty	Percentage of children under age 18 in poverty	22.4	19.1	20.0
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	3.6	4.4	5.0
Children in single-parent households	Percentage of children that live in a household headed by single parent	36.9	33.7	34.0
Social associations	Number of membership associations per 10,000 population	21.1	12.3	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	59.3	356.2	380.0
Injury deaths	Number of deaths due to injury per 100,000 population	108.4	69.9	65.0
<b>Physical Environment</b>				
Air pollution – particulate matter <sup>1</sup>	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	11.0	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	12.4	14.0	19.0
Driving alone to work	Percentage of the workforce that drives alone to work	85.3	83.0	76.0
Long commute – driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes	34.1	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*.<sup>11</sup> 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 for Blackford County:
  - Number of deaths due to injury per 100,000 population
  - Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees
  - Ratio of population to dentists
  - Ratio of population to mental health providers

<sup>11</sup> 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](http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf)

**Community Health Status Indicators**

**Exhibit 25: Community Health Status Indicators, 2018**

Indicator	Blackford 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 Hosp. Rate	
% Receiving HbA1c Screening	
% 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 Blackford County to its 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 Blackford County rank unfavorably in: the years of potential life lost rate, percent low birth weight, percent smokers, percent obese, percent physically inactive, teen birth weight, dentist rate, mental health professional rate, preventable hospitalization rate, percent receiving mammography screening, income ratio, violent crime rate, injury death rate, and percentage with severe housing problems.

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

Indicator	Blackford County	Indiana
Major cardiovascular diseases	251.3	237.4
Diseases of heart	181.0	180.6
Cancer	190.4	172.5
All other diseases	160.6	171.3
Ischemic heart diseases	118.7	102.2
Other diseases of heart	62.3	68.3
Chronic lower respiratory diseases	51.6	54.6
All other and unspecified accidents and adverse effects	68.2	40.1
Cerebrovascular diseases (stroke)	38.5	39.5
Alzheimer's disease	37.8	34.9
Diabetes mellitus	31.0	26.0
Nephritis, nephrotic syndrome and nephrosis (kidney disease)	20.9	18.4
Intentional self-harm (suicide)	16.8	15.4
Influenza and pneumonia	5.6	12.6
Motor vehicle accidents	42.4	12.4
Chronic liver disease and cirrhosis	13.4	11.2
Hypertensive heart disease with or without renal disease	0.0	10.2
Essential hypertension and hypertensive renal disease	18.2	10.0
Assault (homicide)	0.0	7.6
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)	8.4	6.2
Other diseases of circulatory system	13.6	6.2
Certain conditions originating in the perinatal period	0.0	4.9
Congenital malformations, deformations and chromosomal abnormalities	0.0	3.9
All other external causes	0.0	2.6
Atherosclerosis	0.0	1.1
Pregnancy, childbirth and the puerperium	0.0	0.8
Sudden infant death syndrome (SIDS)	0.0	0.7
Peptic ulcer	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**

- Selected causes of death for Blackford County exceeded the state average for major cardiovascular disease, diseases of the heart, cancer, ischemic heart disease, Alzheimer's disease, diabetes mellitus, nephritis, intentional self-harm (suicide), chronic liver disease and cirrhosis, and symptoms, signs and abnormal clinical findings, not elsewhere classified (excluding Sudden Infant Death Syndrome (SIDS)).
- All other and unspecified accidents and adverse events, motor vehicle accidents, essential hypertension, and other diseases of the circulatory system were 50 percent worse than the Indiana average.

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

Indicator	Blackford County	Indiana
All Cancers	190.4	172.5
Stomach	0.0	2.7
Colon, rectum and anus	10.8	14.9
Pancreas	0.0	11.9
Trachea, bronchus and lung	81.1	49.2
Breast	4.6	11.6
Cervix uteri, corpus uteri and ovary	5.6	8.2
Prostate	4.6	7.6
Urinary tract	27.0	8.8
Non-Hodgkin's lymphoma	21.3	6.4
Leukemia	5.0	6.7
Other forms of cancer	30.6	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 in Blackford County for all cancers exceeded the state average.
- Cancer mortality rates in Blackford County for trachea, bronchus, and lung, urinary tract, and non-Hodgkin's lymphoma were more than 50 percent worse than the state averages in 2016.

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

Indicator	Blackford County	Indiana
All cancers	504.1	445.2
Breast	120.7	120.1
Prostate	107.3	95.7
Lung and bronchus	84.7	72.8
Colon and rectum	53.1	43.2
Bladder	29.4	21.0
non-Hodgkin lymphoma	25.8	19.0
Melanoma of the skin	25.3	18.1
Kidney and renal pelvis	25.8	17.8
Leukemia	19.0	13.2

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**

- Cancer incidence is higher in Blackford County for all cancer types than the Indiana state averages.

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

Indicator	Blackford County	Indiana
HIV/AIDS*	67.0	188.0
Chlamydia	333.7	465.0
Gonorrhea	48.8	142.5
Primary and Secondary Syphilis	0.0	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**

- Blackford County had lower communicable disease rates than the Indiana averages in 2016.

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

Indicator	Blackford County	Indiana
Infant Mortality Rate (per 1,000 Live Births)	N/A	7.2
Low Birthweight Percent	9.3%	8.0%
Preterm Births Percent	11.2%	9.7%
Early Prenatal Care Percent	72.7%	68.1%
Smoked During Pregnancy Percent	31.5%	15.6%
Unmarried Mothers Percent	53.5%	43.2%
Breastfeeding Percent	69.5%	77.4%
Mother on Medicaid Percent	59.9%	44.3%
Teen Birth Rate (15-17)	17.3	13.6
Teen Birth Rate (15-19)	40.5	30.4

Source: Indiana Department of Health, 2016

**Description**

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

**Observations**

- In Blackford County, all Maternal and Child Health Indicators were higher the Indiana averages in 2016, except for expectant mothers who received early prenatal care.

**Exhibit 31A: Behavioral Risk Factor Surveillance System, 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, Income, 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 were worse than average for all indicators presented.

**Ambulatory Care Sensitive Conditions**

**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
Blackford County	9.8	500.0	97.8	992.5	88.1	273.9	8,264.5
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
Blackford County	107.6	146.8	322.9	39.1	-	112.0
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 Blackford Hospital community – with comparisons to Indiana and US 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.”<sup>12</sup> 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 Blackford County, ACSC rates for chronic obstructive pulmonary disease (COPD) or asthma in older adults, hypertension, low birth weight, urinary tract infection, and lower-extremity amputation among patients with diabetes exceeded the Indiana average.

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

Indicator	Blackford County	Indiana	Ratio: Blackford/Indiana
Urinary Tract Infection	322.9	148.2	2.2
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	992.5	664.1	1.5
Hypertension	88.1	63.3	1.4
Lower-Extremity Amputation Among Patients with Diabetes	112.0	82.4	1.4
Low Birth Weight	8,264.5	6,174.2	1.3
Uncontrolled Diabetes	39.1	40.6	1.0
Diabetes Long-Term Complications	97.8	110.2	0.9
Community-Acquired Pneumonia	146.8	184.5	0.8
Perforated Appendix	500.0	632.7	0.8
Dehydration	107.6	138.5	0.8
Heart Failure	273.9	434.8	0.6
Diabetes Short-Term Complications	9.8	59.0	0.2
Asthma in Younger Adults	-	32.0	-

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

<sup>12</sup> Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

**Description**

Exhibit 33 provides the ratio of ACSC (PQI) rates in the IU Health Blackford 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.

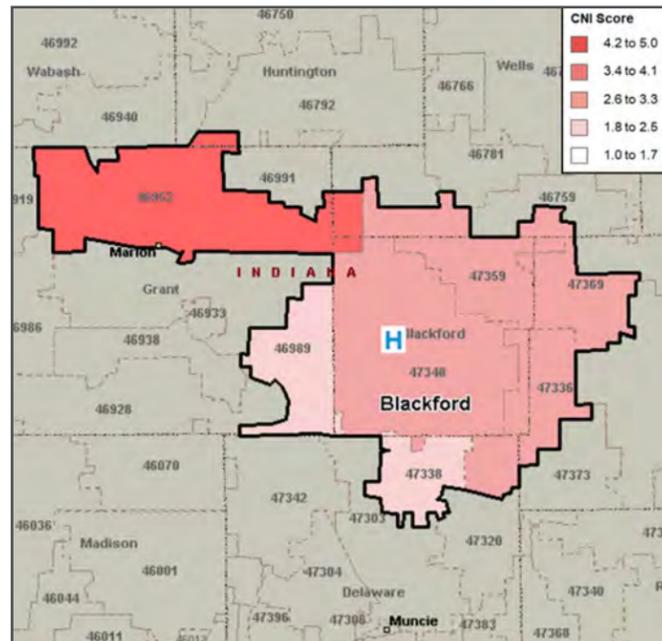
**Observations**

- In Blackford County, the ACSC rate for urinary tract infections was more than double the Indiana average. Rates for COPD, hypertension, and lower-extremity amputation among patients with diabetes were also at least 40 percent higher than state averages.

**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.

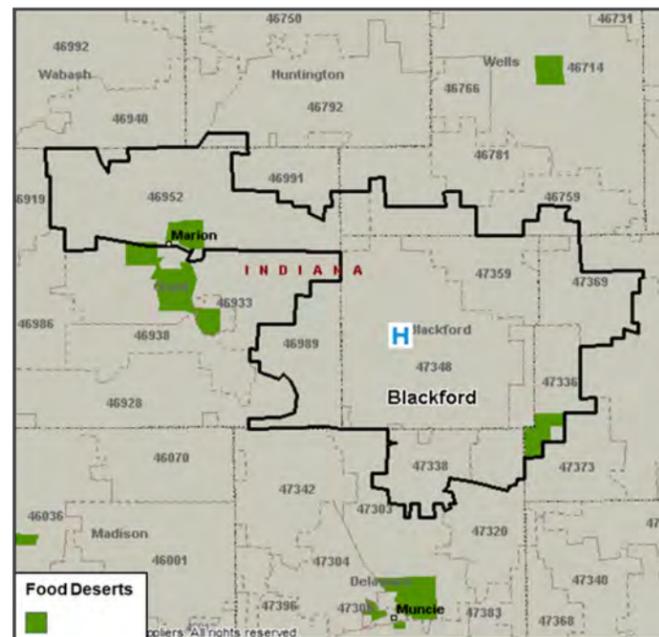
CNI scores are grouped into “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0) categories

**Observations**

- The weighted average CNI score for Blackford County was 3.0 – aligned with the national median of 3.0.

**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 Blackford 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
Blackford	LI-Blackford County	Medically Underserved Population

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.<sup>13</sup> 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.”<sup>14</sup>

**Observations**

- The low income population of Blackford County has been designated as a Medically Underserved Population.

**Health Professional Shortage Areas (HPSA)**

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

County	HPSA Name	HPSA Type Description
Blackford	Low Income – Blackford County	HPSA Population

Source: Health Resources and Services Administration, 2018

**Description**

Exhibit 37A depicts the locations of federally-designated primary care HPSA areas.

<sup>13</sup> Health Resources and Services Administration.

See <http://www.hrsa.gov/shortage/mua/index.html>

<sup>14</sup> Ibid.

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.”<sup>15</sup>

**Observations**

- The low-income population of Blackford County has been designated as a primary care HPSA.

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

County	HPSA Name	HPSA Type Description
Blackford	Low Income – Blackford County	HPSA Population

Source: Health Resources and Services Administration, 2018

**Description**

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

**Observations**

- Within the IU Health Blackford Hospital community, low-income populations have been designated as a dental care HPSA.

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

County	HPSA Name	HPSA Type Description
Blackford	East Central Indiana	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**

- Blackford County has been designated as a Mental Health Care HPSA as a part of the East Central Indiana region.

<sup>15</sup> 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.<sup>16</sup> 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, not being able to break cultural barriers, increases in drug use, poverty and apathy, lack of free clinics, unaffordable healthcare

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

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.

**State Health Improvement Plan.** After the finalization of the state health assessment, a state health improvement plan (SHIP) 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
Access to basic/primary health care	1
Obesity	1
Physical inactivity/lack of exercise	1
Poverty	1
Preventive care (immunizations, screenings, etc.)	1
Tobacco use/smoking	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:

- Jay County Hospital CHNA 2015

#### Observations

- The following indicators most often were identified as significant in other hospital CHNAs that assessed IU Health Blackford Hospital's community:
  - Access to basic and primary health care
  - Obesity
  - Physical inactivity/lack of exercise
  - Poverty
  - Preventative care (immunizations, screenings, etc.)
  - Tobacco use/smoking

## APPENDIX C – COMMUNITY MEETING PARTICIPANTS

Individuals from a wide variety of organizations and communities participated in the community meeting (Exhibit 39).

### Exhibit 39: Community Meeting Participant Organizational Affiliations

- 3M Hartford City
- AMVETS Post 23
- Blackford Community Foundation
- Blackford County Health Department
- Blackford County Schools
- Blackford County Sheriff's Department
- Blackford Economic Development
- Hartford City
- Hartford City Kiwanis Club
- Hester Hollis Concern Center
- IU Health
- IU Health Blackford Hospital
- Indiana State Government
- LifeStream
- Mayor's Office, Hartford City
- Meridian Health Services
- Plexus Worldwide
- Purdue Extension

## APPENDIX D – IMPACT OF ACTIONS TAKEN SINCE THE PREVIOUS CHNA

This appendix discusses the impact of community health improvement actions taken by IU Health Blackford Hospital to address significant community health needs since its last CHNA report was conducted. IU Health Blackford Hospital and IU Health Ball Memorial Hospital share identical CHNA priority needs and strategies. Many of the IU Health Blackford Hospital strategies are developed and funded by IU Health Ball Memorial with the intent of also benefiting persons in Blackford County. The impacts (both expected and achieved) of each community health program are described below.

### Nutrition and Active Living (Obesity Prevention)

- **Healthy Community Alliance.** The Healthy Community Alliance is a broad-based health coalition that includes over 100 community organizations who, through collective impact, have the potential to reach more than 50,000 residents of Delaware and Blackford Counties. The goal of the program is to reduce obesity rates and risks associated with chronic disease through information sharing that improves nutrition and increases physical activity. IU Health Blackford Hospital supports this program as a Partner organization and utilizes staff time to organize and support community workgroups and produce educational resources. IU Health Blackford Hospital believes the program has enabled Partner organizations to create programming, policies and environments that influence reduced obesity rates compared to levels that would have occurred without the program.
- **IU Health Bucks Families at the Farmers Market.** The IU Health Bucks Families at the Farmers Market is a nutrition education program targeted to underserved population. The program aims to increase the integration of fruits and vegetables into family mealtimes among participants. The program served 8 families in 2017. IU Health supports this program through the time and expertise of staff members, as well as through direct funding of the IU Health Bucks; four community partners help to facilitate the program. A survey of program participants indicates that behavior change has occurred.
- **Promote Strong Schools (for Obesity Prevention).** The Strong Schools program provides funding to area schools for obesity prevention programming, such as fitness competitions. Over 100 students in the Blackford school system participated in the IU Health Blackford

Hospital-supported physical activity programming during 2015-2017. IU Health Blackford Hospital believes that the increase in physical activity has helped reduce childhood obesity rates compared to levels that would have occurred without the program.

- **Afterschool Childhood Obesity Prevention.** With financial support from IU Health Blackford Hospital, YMCA staff provide afterschool healthy lifestyles programming at three area elementary schools. Between 25-40 students at three area elementary schools participate annually. Pre and post testing has confirmed improvements in healthy lifestyles knowledge.
- **Local School and Park Playground Improvements.** IU Health Blackford Hospital funded and supplied volunteers for the physical activity-related improvements to one local school and two local parks. This initiative increased opportunities regarding physical activity to community members by installing fitness equipment at the local school and renovating .75 miles of walking paths at local parks.
- **Walking Initiatives.** IU Health Blackford Hospital supports numerous walking initiatives, including Walk Indiana. Funds are provided to keep entry rates low and provide free entries for resource-limited participants. IU Health Blackford Hospital staff helps to promote events and conduct walking groups. The goal of these initiatives is to change sedentary behaviors and improve fitness levels of community residents. Over 500 people participate annually in a regional walking marathon.

### Infant Health Factors

- **Fetal Infant Mortality Review Program and Community Action Teams.** The Fetal Infant Mortality Review Program meets regularly to identify root causes of infant mortality (e.g., unsafe sleep habits and poor parental habits) and to provide increased interventions by Community Action Teams for at-risk women. IU Health Blackford Hospital supports this activity with staff member expertise and other resources, including funding for specialized software. IU Health Blackford Hospital believes these activities improve outcomes for infants.
- **Safe Sleep Practices.** IU Health Blackford Hospital does not provide labor and delivery services. Each year, 1,500 infants are delivered at nearby hospital IU Health Ball Memorial Hospital, which includes patients in the IU Health Blackford Hospital service area. A collaboration of IU Health Ball Memorial Hospital and IU Health Blackford Hospital allow all families to be provided safe sleep instruction, a free halo sleep sack and, if needed, a free portable crib. In addition to funding for portable cribs, IU Health staff members help to develop programming, such as the text message initiative. The Community Action Team also has established a texting program for expectant mothers to receive timely messages about healthy living, having a healthy pregnancy, and caring for babies during the first

- year of life. These activities lead to improved outcomes for infants through reduced incidence of co-sleeping.
- **Obstetric Services.** Many community members from the IU Health Blackford Hospital service area seek obstetric services at Open Door Health Services, a local Federally Qualified Health Center in Muncie, IN. IU Health subsidizes two Family Medicine physicians and one resident to provide services at Open Door. These providers increase the FQHC's capacity to serve low income residents, including those from the Blackford County area, increasing access to care and helping to reduce infant mortality risks.

### Behavioral Health

- **SBIRT Screening.** The IU Health Ball Family Medicine residency program provides SBIRT, an early intervention and treatment model for people with substance use disorders and those at risk of developing these disorders. The goal of the program is to increase identification and treatment of individuals with substance abuse disorders. In 2016, 2,582 patients were screened, some of them from Blackford County. IU Health Blackford Hospital believes more individuals have been identified and received services through this program.
- **Improved Behavioral Health Assessment and Treatment Planning.** IU Health Ball's Family Medicine residency behavioral health initiative also provides assessments and treatment planning for patients with pain disorders and weight-related medical problems. In 2016, thirty resident physicians received training and tools and processes for patient interactions. These physicians provide approximately 12,000 patient visits per year. IU Health provided funding for assessment tools and for staff training, and believes these investments have provided mental health services needed by area patients, including those from Blackford County.
- **Collaborative Activities.** IU Health Blackford Hospital provides exposure at its annual health fair to local organizations seeking to address mental health issues in the community. Examples include the Meridian Health Services and Mental Health Association of Blackford County. IU Health Blackford Hospital believes the support has helped increase community awareness of mental health needs.

### Smoking and Tobacco

- **Smoking Cessation.** This activity provides 1-800-Quit-Now<sup>17</sup> tobacco toolkits to residents, providers, and staff members who participate in the Tobacco Free Delaware County Coalition. Efforts are supported by the Healthy Community Alliance program, a broad-based health

coalition that includes over 100 community organizations who serve as Alliance Partners, who have the potential to reach an audience of more than 50,000 residents of Delaware and Blackford Counties. The goal of this Smoking Cessation activity is to decrease tobacco use in the community. Over 200 toolkits were distributed in the first year of operation. IU Health contributes staff member time and expertise, as well as resources to design, print, and distribute tobacco cessation toolkits. IU Health Blackford Hospital believes this program has contributed to a lower smoking rate in the community than would have occurred without the program.

- **Provider Training and Community Publicity.** IU Health Blackford Hospital provides training regarding tobacco interventions and the availability of 1-800-Quit-Now resources. IU Health Ball also widely publicizes these resources to patients and families, and provides handouts specific to certain populations, e.g. parents with newborns. These activities have increased awareness and utilization of 1-800-Quit-Now.

### Access to Care

- **Insurance Eligibility Assistance.** The Hospital Presumptive Eligibility (HPE) program screens uninsured patients for eligibility for governmental insurance through HIP 2.0, Medicaid, or children's health insurance programs. In 2016, IU Health Blackford Hospital screened 78 patients through a streamlined process. This program improved access to care for individuals found eligible for coverage.
- **Cancer Screenings.** IU Health Blackford Hospital offers free skin cancer screenings. The goal is identify cancers at early stages. Individuals with a cancer diagnosis are referred for follow-up diagnosis and treatment. IU Health Blackford Hospital contributes resources to provide these cancer screenings. Additionally, community health fairs offered in 2016 and 2017 had special exhibits regarding colon cancer to raise awareness about this disease.
- **Navigation Services for High-Risk Patients.** High-risk patients at community screenings are provided with information that describes how to gain access to local health services. The goal of this activity is improved patient outcomes for chronic disease states. In 2017, over 200 cards with information were distributed in Delaware and Blackford counties. IU Health contributed staff time to develop materials, as well as resources to print and distribute the information materials. IU Health Blackford Hospital believes this program has helped high-risk patients navigate available clinical resources.
- **Same Day Appointments.** A 1-800 Same Day appointment program enables residents to schedule an appointment with IU Health Ball's Family Medicine Residency and Internal Medicine Residency physicians. IU Health Blackford Hospital believes implementing this program has enhanced access to primary care physicians.

<sup>17</sup> Operated by the National Cancer Institute and supported by the Centers for Disease Control. See: [https://www.cdc.gov/tobacco/quit\\_smoking/cessation/pdfs/1800quitnow\\_faq.pdf](https://www.cdc.gov/tobacco/quit_smoking/cessation/pdfs/1800quitnow_faq.pdf)

- **Subsidized Primary Care Services.** Some community members from the IU Health Blackford Hospital service area seek primary care services at Open Door Health Services, a local Federally Qualified Health Center in Muncie, IN. IU Health subsidizes two Family Medicine physicians and one resident to provide services at Open Door. These providers increase the FQHC's capacity to serve low income residents, including those from the Blackford County area, increasing access to primary care.

## APPENDIX E – CONSULTANT QUALIFICATIONS

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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.



Blackford Hospital